

Air Corps
News
Letter



— ISSUED BY —
OFFICE CHIEF OF AIR CORPS
WAR DEPARTMENT
WASHINGTON, D.C.

TABLE OF CONTENTS

---oOo---

	<u>Page</u>
Mail Transfer from Airship to Train.	244
Air Corps Grows in Popularity among West Point Graduates	244 - 245
Changes at Rockwell Field, Calif.	245
Professor Junker's Attitude toward the Transoceanic Flights.	246 - 247
Graduates of the Balloon and Airship School.	247
The Flight of Army Entry No. 1 in the National Elimination Balloon Race	248 - 250
Representative James Resumes Inspection of Military Posts.	250
Lieut. Nelson Resigns from the Army.	251 - 252
Storm Creates Havoc at Bolling Field	252 - 254
New Class at the Advanced Flying School.	254
Air Corps Planes Assist at Capital Pageant	254
Lieut. Ent's Report on Accident in Balloon Race.	255 - 257
Commendation for Master Sergeant Wm. J. Bennett.	257
Lieut. Bleakley's Altitude Flight.	258 - 260
Mexican Ace Makes One-Stop Flight to Washington.	260 - 261
Kelly Field Students Graduate from Advanced School	261 - 262
Loose Motor Cowling Causes Airplane Crash.	262
Lieut. B.S. Thompson Makes Notable Flight.	262
Graduation of Officers from Air Corps Tactical School.	262 - 263
War Department Orders Affecting Air Corps Officers	263 - 264
Colombian Pilot Arrives at Bolling Field	264
Large Parachute Tested at Wright Field	264
Air Corps Wins International Balloon Race.	264 - 265
Detail of West Point Graduates to Air Corps.	265
Notes from Air Corps Fields.	266

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel of the Regular Army, Reserve Corps, National Guard and others connected with aviation.

---oOo---

MAIL TRANSFER FROM AIRSHIP TO TRAIN ✓

By the Scott Field Correspondent

Probably the first attempt that has ever been made to effect the transfer of mail from air to train was carried out at Scott Field, Belleville, Ill., on June 15th last. Lieut.-Colonel John A. Paegelow, Commandant of Scott Field, directed the test, the ship being flown by Lieuts. Karl S. Axtater and Edward H. White. The attempt was made in cooperation with the Illinois Central Railroad authorities, Mr. F. E. Hatch, General Superintendent; Mr. J. F. Umshler, Trainmaster, and Mr. J. Morgan, shop foreman. There was practically no advance preparation other than as to setting the time of the attempt and the place, one of the purposes of the test being to demonstrate the possibility of intercepting a train in an emergency and transferring mail or passengers from airship to train while both are in motion.

The train, a fast traveling express, left Belleville, Illinois, at 7:21 a.m. for New Orleans at approximately the same time Colonel Paegelow received the mail bag on the airship with orders to intercept the express and transfer the mail. The train was intercepted several miles out of Belleville, traveling between thirty and forty miles an hour. The speed of the airship was then synchronized as closely as possible to that of the train, with the ship flying directly above the train.

Due to block signals and cross wires at frequent intervals along the track, it was found extremely difficult to descend to the top of the train in the short spaces between obstructions. At one time when the train passed between wooded sections on both sides of the track the car of the airship and the train were completely hidden from an accompanying airship carrying a photographer. A cross wind made it difficult to keep the ship, which is 210 feet long, in a position parallel to the train and there was danger of fouling the rudder in the telephone lines along the track. On one occasion the rudder surface dropped below the top of the car, between the train and telephone wires, and it was necessary to drop several bags of ballast.

The greatest difficulty experienced was in synchronizing the speed of the airship with that of the train. The engineer on the train, endeavoring to assist to the best of his ability, slowed down the train on two occasions just as contact was about to be made, and as a result the ship overshot the mail coach. However, when the misunderstanding was corrected the speed of the train was kept constant and on the next attempt the ship cruised directly over the train and when an open stretch of track was reached dipped down to the top of the train, the bag of mail was handed to the mail clerk on the train, and the ship soared off and returned to Scott Field.

The test demonstrated the feasibility of not only transferring mail from airship to train, but also transferring passengers, and it is hoped that such an attempt will be made in the near future.

---oOo---

AIR CORPS GROWS IN POPULARITY AMONG WEST POINT GRADUATES ✓

Of the 260 students of the United States Military Academy, West Point, N.Y., who graduated on June 9th last, 76 have elected to cast their lot with the Air Corps, or approximately 29%. Under orders recently issued by the War Department, these 76 newly commissioned 2nd Lieutenants are detailed to the Air Corps, effective September 8, 1928, and they have been directed to proceed, upon the expiration of their present leave of absence, to the Primary Flying School at Brooks Field, San Antonio, Texas, for training. None of the members of the graduating class were commissioned in the Air Corps for the reason that the Air

Corps Act, approved July 2, 1926, prohibits officers being permanently commissioned in the Air Corps unless they qualify as flying officers.

The following tabulation shows the number of graduates assigned to the various branches of the service, also the number from each branch detailed to the Air Corps:

<u>Branch of Service</u>	<u>Regularly Assigned</u>	<u>Detailed to Air Corps</u>
Corps of Engineers	24	2
Signal Corps	11	4
Cavalry	25	7
Field Artillery	48	15
Coast Artillery Corps	33	12
Infantry	116	34
Quartermaster Corps	3	2
Total	260	76

Members of the graduating class detailed to the Air Corps are enumerated below, as follows:

Albert L. Alexander, Jr.	Corps Engrs.	Paul A. Leahy	C.A.C.
John C. Banta,	"	Roger M. Ramey	Inf.
Donald B. Smith,	Infantry	Harold Brown	"
John S. Mills	Field Art.	Forrest G. Allen	"
George W. Mundy	"	John T. Murtha, Jr.	"
Alfred R. Maxwell	C.A.C.	George W. Baker	"
Paul H. Johnson	C.A.C.	Ralph J. Butchers	"
Roscoe C. Wilson	Field Art.	Samuel E. Anderson	C.A.C.
William H. Hennig	C.A.C.	Joseph A. Bulger	"
Bryant L. Boatner	Field Art.	Frank R. Maerdian	Inf.
Nathan B. Forrest, Jr.	Cavalry	George F. Smith	"
Robert F. Tate	"	Allen W. Reed	"
Karl G.E. Gimmmler	Field Art.	Arthur W. Moehan	"
Samuel R. Brentnall	"	Walter G. Staley	"
Henry F. Beaumont, 4th, Jr.	Cavalry	Thomas J. Moran	"
Clayton J. Mansfield	"	Truman H. Landon	C.A.C.
Paul D. Peery	C.A.C.	Richard R. Middlebrooks	Inf.
Frank F. Everest, Jr.	Field Art.	Charles F. Howard	"
John J. Morrow	C.A.C.	Hampden E. Montgomery, Jr.	"
Frank J. Coleman	Sig. Corps	Maurice C. Bisson	"
John B. Allen	"	Harry E. Wilson	"
Norris B. Harbold	Field Art.	Robert W. Warren	"
George R. Bienfang	"	August W. Kissner	"
Charles G. Goodrich	"	LaVerne G. Saunders	"
Alvord V.P. Anderson, Jr.	Cavalry	Frank L. Skeldon	"
Robert J. Dwyer	Field Art.	Emmett O'Donnell, Jr.	"
Frederick L. Anderson	Cavalry	Donald W. Titus	"
Thayer S. Olds	C.A.C.	Emmett F. Yost	"
Robert F. Travis	Field Art.	Robert K. Taylor	"
Thomas J. Cody	Sig. Corps	James M. Ivy	"
Carl H. Sturies	"	Alfred B. Denniston	Q.M.C.
William H. Tunner	Field Art.	James W. Brown, Jr.	Inf.
Ralph E. Koon	Cavalry	Edward F. Shepherd	Q.M.C.
Oren R. Meacham	C.A.C.	Samuel H. Lane	Inf.
Howard G. Bunker	"	James F. Olive, Jr.	"
Henry L. Flood	Infantry	Edgar A. Sirmyer, Jr.	"
Stuart G. McLennan	Field Art.	Robert Wiesenauer	"
John A. Samford	"	Thomas W. Steed	"

---oOo---

CHANGES AT ROCKWELL FIELD, CALIF.

Major A. L. Sneed, Air Corps, who has been in command of the Rockwell Air Depot, Coronado, Calif., since November 15, 1927, was relieved of that assignment and has assumed command of Rockwell Field, where the Headquarters 7th Bombardment Group, the 11th Bombardment Squadron and the 95th Pursuit Squadron are being reconstituted. Major J. H. Houghton, Air Corps, has assumed command of the Rockwell Air Depot, and 1st Lieut. Oliver P. Gothlin, Jr., Air Corps, appointed as Chief Engineer Officer of the Rockwell Air Depot.

PROFESSOR JUNKER'S ATTITUDE TOWARD THE TRANSOCEANIC FLIGHTS ✓

Professor Junkers stated that his works stood in no other relation to the Kohl-Hunefeld project than that of airplane supplier. He had no participation in this project either financially or organizationally, even indirectly through other navigation or air traffic enterprises, as was wrongly supposed. Professor Junkers then explained that it was incorrect and unjust to characterize the attempt at a transoceanic flight as a sporting nuisance without any practical value or even as a veiled attempt at suicide, as has been done. "We can distinguish," continued Professor Junkers, "the action of two fundamentally different but interdependent types of men in all fields of human and political endeavor: the conservative man whose efforts in economic life aim at mass production without risk; in other cases, at the office-holder's career, extensively insured as it is against external disturbances; on the other hand, the opposite of this man, the pioneer, the man who stakes all on one card, the man of great risks. This type is the man of progress, the road-forgor, sometimes also the revolutionary. He is the one who raises new problems and tries to solve them, and who concedes the freest right of operation to every personal initiative. These men broaden the boundaries of human energy and human action. We need these two types in all fields of human activity. They create tension, urge and healthful obstruction; in a word, development.

"It must, of course, not be concluded from this that every venture has a moral value simply because it is a venture. That would be a much too far-reaching conclusion. It goes without saying that the venture is also subject to criticism and one must condemn every venture when the object is not great enough to justify the risk, or when the degree of probability of success is too small. This measure is somewhat elastic, and history has revised many a judgment that contemporaries have passed. When we look back from the standpoint of our stage of technical development, we may say with good reason that the history of the development of communications consists at first only of a series of attempts with unsuitable means. Just consider with what kinds of ships Columbus and Magellan made their discoveries. Think of the passionate fights against the railroad and of the history of the auto's development. That is what I mean when I say that history has often revised the opinion of contemporaries; it has made dare-devils into martyrs of an idea and great discoveries.

"The development of aviation would not have been possible at all without the type of man who takes upon himself a great risk. The further development of aviation will also not be able to do without cultivating courage and resolution. A stake for an ideal object has never yet been in vain, even if the one or the other could not gain a name by the loss of his life. The individual may perish, but the movement itself is driven forward by these ready-to-venture men who, in their urge for progress and accomplishment, do not flinch at danger.

"I have really said about all there is to say about the main points: It is unjust to condemn men who have set the crossing of the ocean as their goal simply because the attainment of their goal is connected with danger to their life. Do we condemn the mountain climber, the jockey, the motorcyclist, the automobilist, who often sacrifice their life to sport without having a great goal before them? Hence, more justice for the ocean fliers!

"The problem they have assigned themselves is a great one. That is a fact that cannot be disputed. Success today in the age of sport is a gain in national renown. But it would be quite wrong to deny the ocean attempts any practical value. They give the constructor of motor and machine problems which promote technical development more strongly in a few months than the easy-going work of much greater spans of time can do under other circumstances. We were able to observe this very well during the preparation of our record flights and later, while we were preparing the flight of the "Bremen" and "Europa." It is always the great problem that produces the exceptional accomplishment. Striving toward a goal, in aviation just as everywhere else, bears its fruits.

"The objection has been raised that they should wait with the ocean flight attempts until a more suitable machine is available. Persuasive as this objection appears, it is psychologically and practically incorrect. It lies in the nature of every development of communications that the intermediated stage of pure venture cannot be skipped. Nothing shows this more clearly, for example, than the development of aviation thus far. In ocean navigation they did not wait for the twin-screw steamer with watertight bulkheads, nor for the steam compound

locomotive in land transportation. The means, the instrument, always remained somewhat behind the object, and it was precisely this tension what brought development and progress.

"As regards the risk, it does not seem to me so great that it cannot be borne. It is chiefly a weather risk. The solution of these problems must naturally be left to the pilot and the meteorologists. The other question, land airplane or hydroplane, in the present stage of technique can only be answered in favor of the land plane. As long as ocean flight is predominantly a motor question as long as not only a proper supply of gasoline but, in addition to that, a large fuel reserve must be carried to travel such vast distances, the land plane, which possesses a greater range of flight than the hydroplane owing to the more favorable aerodynamic conditions, will stand in the foreground. The assumption that there will in the near future be types of airplanes with which one can make emergency landings at any place on the ocean and in any weather and wait for help is not shared by all professional circles. I believe that we will sometime have large airplanes weighing 100 tons with perhaps 40 percent useful load. But the road in that direction is still long."

Professor Junkers then reverted to a detailed discussion of the reasons why the Dessau works declined all cooperation with the persons preparing for ocean flights. "The problem in itself," said Professor Junkers, "would certainly be tempting and it lies partly in our line, since we have always done a great deal in little cultivated fields of science with great pleasure and enthusiasm in keeping with the research character of my works. But, precisely in view of the research purpose of my works, we have, on the other hand, more important things to do, problems that can only be solved by the concentration of all our forces. There is, to mention only one example, the problems of the airplane engine, which are fundamental for aviation.

"For these reasons we see our duty with regard to transoceanic flight problem only in the role of adviser. In full recognition of the principle of freedom for individual initiative, we warn against rashness and contribute our part to limiting the risk as much as possible wherever the requisites of success appear to be present. I gladly betray to you the secret that, by foregoing a large number of business advantages, we have, through our refusal, prevented ocean flights which we had to assume originated from men who in our opinion were not equal to this task. But wherever the personal requirements are fulfilled, we do not believe we would be serving aviation if we withheld our advice and experience from these daring men and abandoned them to the reproaches of the general public."

Professor Junkers then spoke of the American air traffic, which he said would soon outstrip the European air traffic, and concluded his remarks with the observation that, precisely from the standpoint that struggle and contest alone guarantee human progress, he most heartily welcomed the fact that the world endurance record formerly held by the Junkers fliers Edvard and Ristiez had again reverted to the Americans. He expected that this feat would have a stimulating and fruitful effect upon the German industry which, on its part, would by no means give up sport competition.

---oOo---

GRADUATES OF THE BALLOON AND AIRSHIP SCHOOL

Graduation exercises for the Air Corps Balloon and Airship School, Scott Field, Belleville, Ill., Class of 1927-28, were held at the Officers' Club on June 29th. Lieut.-Col. John A. Paegelow introduced the speaker of the evening, Mr. J. Lyon Woodruff, of East St. Louis, who delivered a very interesting and amusing address. This was followed by the more serious part of the program, the presentation of the graduation certificates. Chaplain Charles F. Graesser, presented the invocation and benediction.

The graduates of this year's class are:

Lt.-Col. Jacob W.S. Wuest, A.C.	Staff Sgt. James E. Hunton
Capt. J.C. Bryan, Air Corps Reserve	Flying Cadet Matthew H. Cannon
1st Lieut. William R. Turnbull, A.C.	Flying Cadet Howard Edwards
2nd Lieut. John P. Kirkendall, A.C.	Flying Cadet Louis H. Enos
2nd Lieut. Howard H. Couch, A.C.	Flying Cadet Clarence C. Mitchell
2nd Lieut. Ralph E. Holmes, A.C.	
2nd Lieut. Fred A. Ingalls, A.C.	

THE FLIGHT OF ARMY ENTRY NO. 1 IN THE NATIONAL ELIMINATION BALLOON RACE

Lieut. William O. Eareckson, Aide to Captain William E. Kepner, pilot of the U.S. Army Entry No. 1 in the 1928 National Elimination Balloon Race, tells the following interesting story of their experiences on this flight:

On May 30th, at exactly 5:00 p.m., Eastern Standard Time, a great throbbing sigh, followed by a ringing cheer, went up from the multitudinous assemblage gathered at Bettis Field, Pa., for it was then that, in the words of the program, the first racing balloon "leapt into space."

Einstein was evidently right on this relativity stuff. Everything is relative to something else, and it all depends on the point of view. Thus, quite contrary to the words of the enthusiastic program scribe, one heavier-than-air Superman was heard to mutter, as this racing balloon soared overhead at the spanking clip of eight miles per hour, "My Gawd, is that thing racing? Hey, buddy, don't come too low, you might get run over by a snail!"

These two opinions being so diverse, perhaps a few words in explanation of a balloon race would be appropriate. As it was in the case of Aesop's fable of the Tortoise and the Hare, the victory is not always for the speedy. There are other elements to consider. Of course, in order to have any well founded expectations of winning a race, it is prerequisite that the team in the balloon be top notch in the actual handling of their craft. But, in addition, they should know as much as possible of meteorology, especially that phase of it called aerology; they should have an intimate knowledge of navigation, the theory of gases, aerostatics, and quite often geography is essential. If radio is carried they should be up on that; at times it is well to have a channel record under one's belt; and by the way, while we are dwelling on that region whose equator is the belt, perhaps the prime essential above all others is an excellent grade of good old-fashioned "guts". Unexpected things happen on any long free balloon flight, and it is well to be so constituted that you can always expect the worst with a tranquil mind, and be grinning when it happens.

The winner of a balloon race is the balloon which, when all the contestants have landed, is the farthest from the point of take-off, the distance being measured on the arc of a great circle between the point of the take-off and the point of landing. But I digress. My enthusiasm leads me from the subject, namely, this particular race from Pittsburgh.

The weather all day had been cloudy with occasional showers, accompanied by some mild thunder and lightning, and it was with a feeling of relief that we saw old Sol break through the cumulous canopy and smile down from his azure setting about a half hour prior to the starting of the race.

Beginning at 5:00 p.m., the balloons took off at five-minute intervals until all 14 entrants were in the air and heading in a general easterly direction, the lower ones going a bit north of east, the higher ones a bit south of east. Our balloon, the Army Entry No. 1, being in ninth position, took off at 5:45 p.m., and flying low headed up towards New England. We had hardly left the ground when we saw that directly ahead of us and about ten miles distant was a high piled cumulous cloud from which issued ominous rumblings, flashes of lightning and, as we found out later, rain, hail, death and destruction. Having been in storms before, we were not dismayed and even decided to stay low in order to save gas, run into the storm to gain speed and stay with it until night caused it to dissipate.

We had not long to wait. In about forty minutes our speed had picked up from eight miles an hour to twenty. We were directly under the cloud and starting to rise with the rising convection current that fed the cloud. Wishing to stay low, we valved, but continued to rise even more rapidly as the current became stronger. We reached our pressure height at 1,000 feet and continued rising at a rate of from 800 to 2,000 feet per minute, spilling gas from the appendix as we went until at about 5,000 feet we began to descend as rapidly as we had climbed. And with us came the rain in gobs and scads, rivulets and small oceans, while we whirled, eddied, jostled and spun in the most violent set of cross currents I have ever encountered, meanwhile being shocked when the lightning sizzle and jolted when the thunder roared.

More or less expecting to be struck by lightning, we put on our parachutes when we entered the clouds and, figuring that if we were we might be only knocked out rather than killed, we took this precaution. Sitting on the edge of the basket with our centers of gravity well out in space, we tied strings from our rip ring to the basket suspension ropes so that in case we were knocked out we

would fall out of the balloon, our parachutes would open and we would descend in one piece, rather than with the unmanned and probably burning balloon.

Thus we rose and descended until we left the cloud and saw the earth 1500 feet below. Then we got busy checking the descent of our craft. Alternately we poured sand, bag after bag, until we had poured twelve bags and checked our downward velocity to 800 feet per minute. Then we cut loose our drag rope so that it hung down below us, and waited for the earth to fly up and spank us.

While waiting I had a chance to look around and saw balloons all about us, some of them performing the most undignified stunts and all of them showing the loss of from a third to one-half of their gas. Northeast of us the Pittsburgher chased the Army Entry No. 2, piloted by Lieuts. Everts and Ent, up a valley; north of us Capt. Honeywell sat like a huge stationary mushroom in a small terrestrial depression; while from above Van Orman and Morton started down, caught up with us and flashed past us in a shower of sand as they cut bag after bag in a vain attempt to check their descent. We watched them strike, and up they came again like a rocket, disappearing in the cloud above.

Then we hit. And how! And hardly had we hit than the ground wind had us in its clutches, racing us over the ground, sometimes at velocities of from 50 to 60 miles per hour while our static heaviness caused us to kiss Ma Earth every three or four hundred yards. There is nothing on earth more exhilarating than hedge-hopping in a free balloon at a high rate of speed. We crashed through trees, fences, telegraph lines, always keeping the balloon statically heavy so that we would lag behind the central fury of the storm by our friction over the earth until, as we sped over a small rise, we found ourselves face to face with the worst menace to free ballooning - a high tension power line.

With about 30,000 cubic feet of very inflammable hydrogen gas only a bare ten feet above our heads, with every stitch of our clothing and equipment soaking wet and oozing water, standing knee deep in sand, instruments, water, angel cake ham sandwiches and bananas (all this chaos due to our violent contact with terrestrial obstacles) we sped at the rate of 50 miles per hour toward six power lines, each carrying about 50,000 volts of most excellent electricity and so placed that they would strike us just about three feet above the load ring. We knew that the instant any two wires were short circuited there would be spark enough to fire a year-old Dunhill lighter, and that even the smallest spark would ignite the gas, thereby causing all young officers below us to gain two files on the promotion list. Ruth Snyder and Judd Gray stepping through the little green door had nothing on the occupants of Army Entry No. 1.

What people do at times like that is interesting. Vogue would have had us light a Mirad. But we were too wet for that and, besides, we hadn't any Mirads. Possibly we should have read a chapter of the scripture, picked a lily and reclined in a pose suitable for marble slab decoration purposes. What we actually did was call a certain famous biblical character most familiarly by his two first names, grab a handful of wet hemp, and set ourselves for the shock, be it dynamic, electrical or thermal.

It was none of the three. Just then Lady Luck tossed a horseshoe at the seats of each of our soggy trousers and we went through the power lines like Charlie Paddock through a yarn thread. Allah alone knows why, but there was no spark as we broke all six wires and kept moving toward where a railroad ran in the shade of a twelve-wire telegraph line. Comparatively, that telegraph line was as harmless as a garter snake beside a rattler. It was less venomous but it was stronger. We hit it, crashed through eight wires, slid along the remaining four until we hit a pole, lifted the pole out of the ground, went on a few yards with the pole wedged firmly between two suspension cables and came to a halt in a grove of trees on the edge of a stream. "And there we were ketched," and thrashing around like a tom cat in a croaker sack.

But our apparent misfortune was our salvation. The storm we were riding, though violent, was small, typically Napoleonic, and the five minutes we used in extricating ourselves from the spreading arms of the pole's cross piece was sufficient to allow the storm to pass on. By the time we were free the storm had left us and was already abating.

Free of the pole, our next problem was the trees, and this solved, we yet had to make ourselves statically light enough to float in the air. This was accomplished in a rather unique manner. Around our basket we had placed, prior to the take-off, a rubberized fabric envelope, so that in case we landed in water - the Great Lakes, Chesapeake Bay or what have you - our basket would become a boat in which we could float for a time and remain dry. The rain reversed the process

by placing the water inside the basket cover so that there we stood ankle deep in about 400 pounds of water. This water had replaced the sand we expended during the storm and gave us a superfluity of ballast besides. We knew that if we lost all the water, literally "the sky would be the limit" of our altitude. But we must lose some, the superfluity, or stay put. What we did was this: Very carefully with a large sheath knife we cut a small slit in the envelope, well over in one corner of the basket. Then we stood over that hole, our weight tilting the basket that way until enough water had drained out to make us sufficiently light to take off. As we started to rise we walked to the opposite corner, tilting the basket in the other direction, and our theory worked. The hole was above the remaining water, which accompanied us as ballast.

Now that we were satisfied that we could fly, our attention turned to ourselves whom we found as pathetic spectacles as Chester Conklin in the Fire Chief. Soaked to the skin, our food a total loss, we faced the already lowering night, which bid fair to be rather chilly, without too much enthusiasm. The balloon, shedding water a bit faster than the contracting gas, due to increasing cold, lost lift, needed no attention, but continued to gradually rise and slowly drift in a southeasterly direction. This gave us a chance to take off and ring our clothing which, being the driest we had, we put back on.

By this time we were at 5,000 feet and our speed to the southeast had increased to fifteen miles per hour. But, Oh Boy, it was cold. Our hands were shrivelled from being wet, our lips were blue, and our teeth chattered like two skeletons with inflammatory rheumatism having congested chills on a tin roof. At 5200 feet it started to snow, and at 7400 feet, our maximum altitude, ice began to form on the rigging, in our drinking water and on our clothing. But our speed steadily increased until it reached about thirty miles per hour, and our spirits accordingly rose.

All through the night, which was alternately moonlit and overcast, depending whether we were above or below the clouds, we froze and thawed. Freezing as we rose, thawing as we reached the warm strata of air which extended to about 500 feet above the tree tops. As the night passed we entertained each other by recalling experiences during which we had been the hottest.

The flight continued like Briggs' dialogue of Mr. and Mrs., "far, far into the night." The application of our knowledge of navigation rather lost itself by the wetness of our maps and our more or less natural mental apathy and physical inertia. Besides, when we moved our bodies found previously untouched areas in our clothing that, due to lack of contact, were surprisingly cold. Our navigation, then, consisted in an occasional compass check of our direction and conjecture, from our general knowledge of the country, of what town that patch of lights might be or what river that silver ribbon was.

And so on unendingly till morning when, just as the dawn broke, we drifted out over the Rappahannock river and became sufficiently alarmed to find the least sodden map and accurately check our location.

Our flight ended due to the proximity of the Atlantic Ocean, and the very commendable hesitancy on our part to dim Lindbergh's glamor by making a trans-Atlantic flight in a free balloon. For these reasons, then, we landed at Weems, Va., rolled and packed our balloon, and the flight of the Army Entry No. 1 was over. Having located and voraciously attacked large quantities of heat-cured groceries, we hied us to a most generously proffered bed and hauled down the mental curtain for a long intermission.

It was not until we awoke some hours later that we learned about the storm-caused disaster, or that we had won the race. And as one counteracted the other, our elation at winning was overshadowed by our sorrow of having lost the friendship of two real heroes, two regular buddies - Evert and Morton.

---oOo---

REPRESENTATIVE JAMES RESUMES INSPECTION OF MILITARY POSTS

Representative W. Frank James, of Michigan, ranking member of the House Military Affairs Committee, left Washington June 13th, piloted by Lieut. Harry A. Dinger, A.C., in the Fokker Transport, to inspect housing conditions at military posts. Major-General James E. Fehet, Chief of the Air Corps, piloted by Lieut. Elwood R. Quesada, left the following day in the General's new Douglas O2-J, to join Representative James at some of the Air Corps posts.

Norton, Chamute, Scott and Selfridge Fields have been visited to date, and Mr. James' itinerary calls for visits to Fort Brady, Michigan, and Fort Snelling, Minn.

LIEUT. NELSON RESIGNS FROM THE ARMY

Through the acceptance by the President of the resignation of Lieut. Erik H. Nelson, effective June 30th, the Army Air Corps lost one of its most experienced and competent pilots, an expert aeronautical engineer and a man of colorful personality. Lieut. Nelson is best known as one of the Army pilots who encircled the globe by air. Incidentally, his return to civilian life after a span of ten years in the Air Corps, which were punctuated all along with outstanding achievements and service of a high order of merit, leaves in that branch of the service at the present time only one of the six Army airmen who flew around the world in 1924 - Captain Lowell H. Smith, leader of the flight.

Lieut. Nelson leaves the service to become affiliated with the Boeing Aircraft Company, manufacturers of the Army pursuit plane, two of which were recently flown a distance of over 3800 miles from France Field, Panama Canal Zone, to Washington, D.C., by Lieuts. Douglass and Parker, Air Corps.

Lieut. Nelson was born in Stockholm, Sweden, June 12, 1888. After finishing high school he pursued a course of instruction for two years in a technical school in Stockholm. Of a roving disposition in his early years, he shipped upon a German sailing vessel, and in the five years that followed sailed under almost every flag and in all parts of the seven seas. Relatives prevailed upon him to cease his roving and complete his education. He took up engineering work, spent a short time in the automobile business, and then affiliated himself with the Curtiss Aeroplane Co., as aviation mechanic. He became a naturalized American citizen November 16, 1914.

During the World War Lieut. Nelson enlisted in the Aviation Section, Signal Corps, and was sent to Cornell University for his ground school training. Upon graduation he was sent to Ellington Field, Houston, Texas, for flying training. Qualifying as a Reserve Military Aviator, he was commissioned a 2nd Lieutenant on April 22, 1918. He remained on duty at Ellington Field as flying instructor, and on more than one occasion was commended for the excellent performance of his duties. Lieut. Nelson was considered to be the best DH4 pilot in the Air Corps. He has, however, flown over 20 different types of airplanes during his Army career.

Among the many notable flying achievements to his credit were the following:

In January, 1919, Lieut. Nelson flew a plane over the Grand Canyon of the Colorado, and enabled a photographer to take aerial photographs of it for the first time. This 4,000-mile trip was known as the Flight from the Gulf to the Pacific and return, and was the beginning of extensive cross-country flying in America.

Late in the summer of that year Lieut. Nelson with a squadron of four planes visited 32 different cities, crossed nearly every State in the Union and flew a total of 7,000 miles in the interest of recruiting work. He was the chief engineering officer of this flight, but piloted his own plane and returned to his home station with a record of not a single forced landing.

In the Spring of 1920, when the Air Corps decided to attempt that difficult project of a flight from New York to Nome, Alaska, and return, Lieut. Nelson was chosen as engineering officer of the expedition. On one occasion during this flight, a "hop" of 5½ hours over the mountains of British Columbia, he spent part of the time riding in the freezing cold wind astride the fuselage in order to balance the nose-heaviness of the plane. Frozen and blinded by the icy blasts from the propeller, he stuck it out to the end. As the plane landed, the landing gear, caught in the rough terrain, was wiped off and Lieut. Nelson was catapulted clear over the top wing and far ahead of the ship onto the frozen ground. When the other pilots in the flight saw this and hastily landed they found him a little stiff but hard at work repairing the damaged landing gear.

It was this quality in his make-up, together with his marvelous understanding of motors, which resulted in his selection as a member of the Porto Rican Flight and the Around-the-World Flight. According to the Commander of the Alaskan Flight Captain St. Clair Streett, Lieut. Nelson's services as engineering officer were responsible for the success of the expedition, stating that his expert knowledge of motors particularly and airplanes generally was of unlimited value, and his knowledge of aerial navigation was indispensable.

In 1922 in the International Air Races at Detroit, Mich., Lieut. Nelson was the winner of the Detroit News Aerial Mail Trophy Race, piloting a Martin Bomber

at a speed averaging 110 miles an hour.

In the Porto Rican Flight in 1923, in which 12 Army airmen participated, utilizing six DeHaviland planes, Lieut. Nelson increased the good reputation he had already earned as pilot and engineer. Upon its completion the Secretary of War, in a letter commending his services, stated in part:

"The fact that this flight of nearly 6,000 miles was completed on schedule time is evidence of good flight organization and is a tribute to your technical ability and mechanical knowledge which enabled you to continually keep your airplanes in excellent flying condition. Constant diligence and high esprit were necessary to perform frequently such hazardous over water flights as this expedition required."

Lieut. Nelson is given the credit of being one of the first to propose that American aviators be sent around the world. Designated to consult with the designer of the World Cruiser, Mr. Donald W. Douglas, as to various changes to be made in this plane to meet the service which would be required of it on such a project, Lieut. Nelson had extensive conferences with him and recommended the purchase of a trial plane by the Air Corps. He worked closely throughout the construction of this airplane, and flew it east after only two or three hours in the air at Santa Monica, Calif. It was tested as a land plane at Dayton, Ohio, and as a seaplane at Langley Field, Va., and met with the highest approval of all pilots and Air Corps engineers. Later the four cruisers, which set forth in April, 1924, on the famous world voyage, were built - duplicates of the trial plane.

How the World Flight was carried to a successful conclusion is now history, as is also the wonderful reception accorded the flyers by their admiring countrymen. Lieut. Nelson was one of three of the World Flyers who was advanced 500 files on the promotion list by an Act of Congress in recognition of his achievements on this flight. As a member of the flight he was also awarded the Distinguished Service Medal and received permission from Congress to receive decorations from foreign countries. One of these decorations was from the King of Sweden, who conferred upon him the Royal Order of the Sword as an expression of the esteem and admiration of the people of Sweden. Another decoration was that of Chevalier of the Legion of Honor from France. Tufts College conferred upon him the honorary degree of Master of Science.

Following the World Flight Lieut. Nelson was assigned to duty as Air Corps representative at the Douglas Aircraft Factory at Santa Monica, Calif.

His resignation from the military service is a distinct loss to the Air Corps and the Army.

---oOo---

-STORM CREATES HAVOC AT BOLLING FIELD

By the News Letter Correspondent

Sweeping down upon the airdrome at 100 miles an hour, a thunder-squall struck Bolling Field on Saturday afternoon, June 18th, at 4:13 p.m., unroofing two hangars and leaving in its wake a field littered with wrecked and battered airplanes. The damage to equipment is estimated at approximately \$200,000.

A total of eleven planes, eight of which were on the line and three in one of the hangars, were damaged and tossed about like leaves by the gale. Some of the planes on the field were blown more than 200 yards through the air before crashing to earth in a battered heap. One of these, an old DH, landed full upon an ambulance with three occupants, bowling it over and wrecking the body.

Lieut. Ford L. Fair, who had just landed in a Martin Bomber from Langley Field, was a passenger in the ambulance, and was knocked unconscious when thrown clear of the vehicle and buried beneath the DH. Private Eugene Tully, who was driving, and Capt. W. P. Finley, another occupant, escaped without injury.

The blast struck the field at exactly 4:15 p.m., and lasted only 2½ minutes, but it was some 2½ minutes. Just five minutes before the squall reached the post, the Hon. F. Trubee Davison, Assistant Secretary of War in Charge of Aviation, took off from the field for New York. He was piloted by Captain Ira C. Baker, who flew with him on his Panama inspection trip.

Lieut. H.F. Brown, en route to San Francisco in an O2, had just left his plane "on the line" after a flight from Langley Field, when the gale struck. He had walked about 200 feet, he said, when the squall lifted his ship and hurled it after him. By running he got out of its path, and the O2 brought up against an O2-A, wrecking both beyond hope of repair.

Aircraft quartered in hangar No. 8 was showered with tin and cellulose sheets, when the squall unroofed the structure. Four ships escaped injury, but three suffered minor damages. They were a Loening O1B, an O1-C Curtiss and a Douglas O2-E. A Curtiss F1, resting between hangar 7 and Hangar 8 was not disturbed.

At least two planes en route to Bolling Field from Langley Field successfully "rode through" the storm. One of these ^{was} an O2, occupied by Lieut. R.W. Douglass, Jr. and Lieut. James E. Parker, ^{who} changed their course after running into the storm, landing some ten minutes later. Lieut. Elwood Quesada was another to weather the gale.

"It was rather bumpy," he said on landing, "but I didn't know how bad it really was until I reached here. When I saw planes strewn all over the field I thought two formations had run into each other."

Lieut. Quesada's automobile, a heavy coupe, which was parked on the reservation, was blown 100 yards before it brought up against Hangar No. 7, and a Douglas Transport C1C, which was being taxied to the hangar by Corporal J.G. Moran, was picked up by the gale and dropped down on the roof of the vehicle. Moran escaped uninjured, but the automobile and plane received considerable damage.

Although last November's tornado followed approximately the same path as yesterday's squall, the Naval Air Station caught the full force of that gale, and Bolling Field escaped scott free. In this case it was the reverse. Only minor damages were reported at the Naval Air Station. A porch was blown from the administration building there, and a Vought Corsair plane in one of the hangars was cut by glass from shattered windows.

Planes damaged on the field, according to the inventory conducted by Major Davidson, included the DH that collided with the ambulance; a light Travelair commercial ship which was blown into a Martin Bomber; two O2 ships that crashed to earth together; an O1 that was entirely destroyed; a F1, slightly damaged; the Douglas Transport C1 that was dropped upon Lieut. Quesada's car, and Lieut. Fair's bomber.

Unroofing Hangar 8, the freak wind swept skyward over Hangars 6 and 7, swinging earthward again to carry away the iron roofing on Hangar 5. This structure, which was badly burned in a fire at the field some months ago, had only recently been rebuilt, and workmen had just completed laying the steel roof.

Lieut. Floyd A. Lundell, who was on duty as officer of the day when the storm arrived, immediately swung a cordon of guards about the field to keep back all visitors. Newspaper men and others viewing the wreckage were not allowed to smoke. A number of the ships were soaked in gasoline from their own battered tanks, and officers at the post wore "taking no chances." Witnesses were interviewed by Capt. Robert E. Ellis, who collected material for a written report.

According to the story told Capt. Ellis by Pvt. Tully, who was driving the ambulance when the storm struck, the vehicle was being used to transport the luggage of Lieut. Fair and Capt. Finley, who had just landed in the bomber. Lieut. Fair and Capt. Finley were aboard. When the DH hit the ambulance Tully said he was hurled clear. He got quickly to his feet and ran for the Operations Office to avoid the flying debris, he said. Capt. Finley and Lieut. Fair were buried in the wreckage, but only the latter suffered even minor injuries.

Private 1st Cl. Gilbert M. King, a mechanic who was sitting in a Crissy Field plane with the motor running, waiting to taxi into the hangar, gives the following account of his first solo flight:

"I was seated in a Crissy Field Douglas O2 airplane at the end of the concrete runway between Hangars seven and eight when it started raining. I thought nothing of it at first until the wind started to blow real hard when I kicked the rudder pointing the plane's nose into the approaching storm, after which I sank down into the cockpit out of the rain to await the housing of a Douglas C1-C with which another mechanic obstructed my entrance to the hangars.

I heard a roar and howl as the cyclone struck with full force - the plane which I was in suddenly rose from the ground tail foremost and instead of dropping to the earth again kept rising until it was about fifteen or twenty feet up and started traveling backwards at no small rate of speed. In the meantime several other planes that had occupied positions on the line were flying around this way and that to the tune of cracking wings, grinding tail skids, and the deep bellowing of the storm.

One plane in particular, an O2 especially built for General Fechet when he

was Asst. Chief of the Air Corps, looked as if it was a rat grasped in the jaws of some huge hound, being whipped along the ground until it landed on the right wing of the plane I occupied.

I had cut the switches in the plane when it left the ground to prevent fire and it finally crashed approximately 300 feet from where it had left the concrete runway."

After the storm had passed the balance of the afternoon and all day Sunday were spent in clearing away the wreckage and taking stock of the damage.

---oOo---

NEW CLASS AT THE ADVANCED FLYING SCHOOL

The new class at the Air Corps Advanced Flying School, Kelly Field, Texas, is scheduled to begin July 9th. Organizations on the field are engaged in overhauling planes and getting other equipment in shape for another busy term of four months of questionable landings and wobbly take-offs. The shortage of equipment is almost as acute as heretofore, although nine AT-3's and several O-11's have been received within the past month. The AT-4 situation is worse than at any time since AT's were adopted for use in pursuit training. These ships have been going, via complete washout, for the past three months. At first it was an unusual thing to lose one plane; now they are disappearing two at a time. With only eleven AT-4's and three AT-3's left, and with 40 prospective students for the July class, the senior instructor of the Pursuit Section is engaged in a lot of "contemplation" these days. Within two weeks, according to the latest reports, a "large number" of these little ships are expected to arrive from the factory and from Langley Field - whether they actually will be delivered is yet a matter of conjecture.

A flight of nine NBS-1's arrived this week from Langley Field, thereby offering the Bombardment Section a possibility of continuing training for the next class.

---oOo---

AIR CORPS PLANES ASSIST AT CAPITAL PAGEANT

By Bolling Field Correspondent

On June 3rd a pageant was staged in Washington to celebrate the centennial of the opening of the Chesapeake and Ohio Canal.

The wooded ravines above Chain Bridge in historic Georgetown reverberated to the songs of the past and echoed the voices of men long dead, as time harked back a hundred years to the day when President John Quincy Adams turned a spade of earth and opened the Potomac River to carriers of commerce. The actors in the Pageant were placed on canal barges at the Fletcher wharf, but those who made the arrangements had not counted on the traditional disposition of Army mules, selected from the Fort Myer stables, to do the towing.

The first barge moved away slowly, smoothly and with little ado, but the second encountered trouble on the towpath from the start. The two mules attached to its tow lines defied the soothing ministrations of their Fort Myer drivers and ever threatened to break their traces and gallop away into the woods. They ended it all by jumping into the canal.

For half an hour the team swam up and down in the canal, ever eluding those who sought to recapture them until finally the passengers of the second barge were compelled to transfer to the first one which carried the chorus. Meanwhile, Army, Navy and Marine Corps planes roared overhead - possibly they helped to scare the mules.

The planes withdrew and the ceremonies proceeded. After the turning of the earth and other ceremonies incident to the pageant, the planes returned and gave an inspiring exhibition of pursuit and acrobatic flying.

All types of aerial transportation were represented in this formation, the Navy furnishing two single-seat and one two-place Vought planes, and the Army sending out Capt. Robert E. Ellis in a PW-9; Captain Donald P. Muse in an O-11 with Mr. John Arnold Cannon, Chairman of the Aircraft Committee for the Pageant, as passenger; Lieut. Elwood R. Quesada with a mechanic in an OA-10, and Lieut. Bob E. Noeland, Operations Officer of Bolling Field, with four passengers in a C-1 Transport.

LIEUT. ERT'S REPORT ON ACCIDENT IN BALLOON RACE

Lieut. U. G. Ert, Air Corps, who miraculously escaped death when the ill-fated Army Balloon No. 3, shortly after the start of the National Elimination Balloon Race from Bettis Field, Pittsburgh, Pa., May 30th last, was struck by lightning, resulting, unfortunately, in the death of Lieut. Paul Evert, the pilot, submitted the following official report on the flight:

1. The U.S. Army Balloon #3 (Goodyear bag #35-242) had a capacity of 35,000 cu. ft. and was filled with hydrogen gas, which was about 98% pure, giving a total life of about 2450 lbs. The weight of the balloon and equipment was about 800 lbs., the Pilot and Aide 360 lbs, 14 bags of sand 700 lbs, instruments, food, and other necessary equipment about 540 lbs., with a surplus lift of about 50 lbs.

2. It may be well to explain in general two experiments which were to be tried in this balloon. First, direction finding by radio, on which no comment will be made other than that two loop antennae were used on one set; second, the balloon was to be flown under pressure. To accomplish this, the appendix was tied shut, a manometer gland and tube were fastened to the balloon and connected with a manometer in the basket. This experiment had been tried by noted balloonists in previous flights, with indifferent success. Lieut. Evert was of the opinion that it was a sound idea and would greatly conserve gas by enabling the pilot to quickly reach an equilibrium point without overcontrol. It was decided to fly at one inch of water pressure on the manometer, estimating that the pressure at the top of the balloon would be two and one-half times as great, this would be well within the bounds of safety.

3. The other instruments used were: statoscope, altimeter, barograph, compass, and rate of climb indicator. In addition, pioneering equipment, food, water, and two cylinders of helium were carried in the basket.

4. A passing comment on the weather will suffice. Conditions at Bettis Field, prior to the race were unsettled with threatening thunder showers. The sun was shining at the time of the take-off, and there were no immediate indication of a storm.

5. The Army Balloon #3 took off in the #3 position at 5:15 p.m., Eastern Standard Time. With a southwest wind it was necessary to take off 50 pounds light to clear the crowd.

6. The Balloon ascended at about 300 feet a minute to 2100 feet, where equilibrium was established with one inch of pressure. Clouds were forming, the alternate effect of sun and clouds caused the balloon to oscillate up and down considerably. A direction almost due East was taken while the two previous balloons were considerably to the North. About 30 minutes after the take-off, a thunder shower became apparent and parachutes were fastened on by the pilot and aide. The balloon was immediately caught in an up current which took it to 6,000 feet, the maximum rate of ascent was about 1500 - 2000 feet per minute. At 6,000 feet the clouds were dense, hail and some snow were encountered. It was decided to get under the storm if possible and without further warning the balloon started down through the clouds, which were constantly illuminated by lightning flashes.

A maximum rate of descent of 1500 feet per minute was reached and the balloon was checked beneath the clouds at about 1000 feet. The advisability of using the drag rope was discussed, and it was agreed that this was the safest course. In getting closer to the ground a down current was encountered which was not sufficiently checked and the basket hit the ground, tearing off the loop antennae of the radio set. The set was of no further use, so it was thrown for ballast. About this time Lieut. Evert called attention to a balloon which dropped out of the clouds at a terrific rate and disappeared behind a hill. The drag rope was now touching the ground and this position was maintained with the exception that the basket was several times thrown into trees and other obstacles, once scraping the roof of a farm house.

About this time a parachute appeared out of the clouds followed by a balloon entirely deflated parachuting perfectly with what appeared to be the figure of a man hanging over the side. Instructions were given by Lieut. Evert to a farmer on the ground to immediately pick up these men. Shortly after this the drag rope shorted two high tension wires with an accompanying spark. At this time we were nearing a small town, and the drag rope took a half hitch around a large telephone cable and held the balloon. The equivalent of two bags of ballast were dropped to jerk the rope free, without success. A crowd quickly congregated and

with instructions from the balloon cut the rope free. The balloon was fast about ten minutes. During this time the advisability of landing or flying until darkness was discussed and the latter course decided upon. When the balloon was released, it gained an altitude of about 1200 feet before it could be checked. At this point a heavy explosion was heard and Lieut. Evert collapsed, Lieut. Ent was knocked off his feet and fell on Lieut. Evert. (From this point a report will be made in the first person.)

My left leg and right arm were paralyzed temporarily by the shock. I got to my feet and was aware the balloon was on fire at the top from the smoke and the commotion from the crowd below on the ground. Efforts to revive Evert were ineffective, but feeling his pulse, I thought he was alive. My first thought was to throw him over the side and trip the parachute, but considered this not practical, due to the type of chute. I decided to jump, but after getting on the side of the basket changed my mind. The balloon was falling at about 200 feet per minute, but accelerating. It was not possible to valve, due to the danger of an explosion. The maximum rate of fall was about 700 feet per minute. To check this, avoid landing near some building, and to try to land in a small creek, all available ballast was thrown. The balance of the gas burned quickly at an altitude of about 15 feet. The net was apparently slipping on the bag and the basket landed on the bank of the stream with little jar. The burning bag fell away from the basket toward the stream and continued to burn. With the aid of bystanders, Lieut. Evert's body was removed and artificial respiration applied. Dr. H. A. McMurray, of Youngwood, Pa., was on the scene of the accident about three minutes after the landing and pronounced Lieut. Evert dead. Before leaving I put the basket and equipment under the guard of the Youngwood Fire Chief, who had it removed and prevented the theft of the remaining property.

7. Lieut. Evert's body was taken to Greensburg, where an inquest was held, and it was found that the death had resulted from an electrical shock. The landing was made at Foxdale, Pa., 1 mile south of Youngwood, Pa.

9. In my opinion lightning did not strike the balloon. I believe that a heavy charge of static was responsible for Lieut. Evert's death and the subsequent fire and that this charge may have been generated around the valve by the escaping gas. I am not sufficiently an expert to advance more of a theory than above.

10. In my opinion, an explosion or quick combustion of the balloon and the basket was prevented because of the fact that the appendix was tied and there was no possible means of the air mixing with the gas. I believe that if the appendix line had been released and the bottom of the balloon had been free to rise that the increased pressure on the gas in the bottom of the balloon would have increased the rate of combustion and may have caused an explosion. * * * * "

The Commanding Officer of Langley Field, Va., in his indorsement forwarding Lieut. Ent's report to the Chief of Air Corps, states:

" * * * Second Lieut. Ent, Air Corps, showed great presence of mind, fortitude and bravery in bringing to successful landing the balloon in question when same was on fire and liable at any time to explode. Lieut. Ent could have jumped with his parachute, but not knowing for sure whether any life still existed in the body of Lieut. Evert, he chose to remain with the balloon and bring same to a safe landing, thereby recovering the body of Lieut. Evert and being able to administer first aid treatment.

The accident recorded above marks the second time in the history of the Air Corps that lightning proved fatal to Air Corps participants in balloon races, the first accident of that kind occurring on September 23, 1923, during the Gordon-Bennett International Balloon Race which started from Brussels, Belgium, and which resulted in the death of 1st Lieuts. Robert Olmstead and John W. Shoptaw, pilot and aide, respectively, of the Army Balloon S-6.

Lieut. Evert was born at Sparta, Wisconsin, August 8, 1895. He graduated from the La Crosse Normal School in 1916. During the War he attended the Field Artillery Training Camp at Houston, Texas, and was commissioned a 2nd Lieutenant of Field Artillery August 15, 1917. Ordered to duty overseas, he served for nine months with the 78th Field Artillery, in the course of which he attended a school for aerial observers in France. He resigned from the service on November 11, 1919, but reentered the Army on July 6, 1921, when he was appointed a 1st Lieutenant in the Air Corps. He completed his primary flying training at

Carlstrom Field, Arcadia, Fla., and his advanced training at Post Field, Fort Sill, Oklahoma, being rated an Airplane Pilot on June 21, 1922. He was assigned to duty with the 12th Observation Squadron at El Paso, Texas.

On September 17, 1925, Licut. Evert graduated from the Balloon and Airship School at Scott Field, Ill., and was rated Balloon Observer and Airship Pilot on September 28th of that year. He was then assigned to duty as student at the Communications School, Chamute Field, Rantoul, Ill., graduating in June, 1926, and being assigned to duty at Langley Field, Va.

The death of Licut. Evert is keenly regretted by his many friends in and out of the service. The News Letter sends its condolences to his bereaved family.

---oOo---

COMMENDATION FOR MASTER SERGEANT WM. J. BENNETT

The Chief of Air Corps in a recent letter to Master Sergeant Wm. J. Bennett, Air Corps, stationed at the Fairfield, Ohio, Air Depot, paid tribute to his character and ability as a balloon pilot and commended him most highly for the courage and thoughtfulness displayed by him on the occasion of the recent National Elimination Balloon Race which started from Bettis Field, Pittsburgh, Pa.

Sergeant Bennett was authorized by the War Department to pilot one of the contesting balloons, the "Sun-Telegraph Pittsburgher". His Aide was Mr. Walter Chambers, Aviation Editor of the Pittsburgh "Sun-Telegraph," who was then making his first free balloon flight. This balloon was one of the number which encountered the severe storm shortly following the start of the race.

The conduct of Sergeant Bennett is best described in a letter which Mr. Chambers addressed to General Fechet, and which reads as follows:

"You recall, no doubt, that at my special request Master Sergeant Wm. J. Bennett, Wright Field, Dayton, Ohio, was allowed to participate in the National Balloon Races as pilot of the "Sun-Telegraph Pittsburgher". As Sgt. Bennett's aide in the flight which came to so disastrous an end I wish to pay a humble tribute to the character of the man and the ability of the Sergeant.

Sgt. Bennett's every thought throughout the period which I now know to have been deadly dangerous was for my safety, and it being my first balloon flight I was sublimely ignorant of the danger through which we passed. Even in that last moment before we finally crashed thru the trees, with the valve and the rip-cord lines hopelessly fouled, with the jolts knocking him repeatedly to the bottom of the basket, he told me repeatedly to "keep your head under the basket." Our balloon finally came to rest, clinging to the side of a precipitous mountain.

I am proud of an Army that has enlisted men of such high caliber, and I wish that it were within my power to have him cited to his commanding officer for the unexampled bravery and unselfishness with which he faced what everyone now deems was the almost certainty of death. I repeat that until within ten seconds of our final stop, when I realized that perhaps I would be dead in another minute, I was entirely ignorant of the danger into which we had been thrown.

You will pardon my verbosity, but I feel that Sgt. Bennett's heroic conduct warrants my telling you that as we entered this storm he made me put on my parachute without telling me what we were getting into, and that in less than eleven minutes we had been swept to an altitude of 7000 feet and hurled again to the ground. Finally, looking after me and throwing ballast from the balloon which went up instead of down, Sgt. Bennett offered to sacrifice himself for my safety."

Master Sergeant Bennett, who holds a commission as 2nd Lieut. in the Air Corps Reserve, as well as the rating of Junior Airship Pilot, is a graduate of Tufts College Engineering School, Class of 1924. During the War he enlisted in the Aviation Section, Signal Corps. He advanced through various noncommissioned grades to Master Signal Electrician, receiving that appointment Sept. 16, 1918. All of Sergeant Bennett's service in the Army has been in connection with lighter-than-air activities. While on detached service at the Goodyear Tire and Rubber Co., Akron, Ohio, January to July, 1919, he received instruction in the construction, erection and maneuvering of airships. In the latter part of that year he was licensed a dirigible balloon pilot by the Aero Club of America. From January to July, 1922, he was on duty at the Balloon School, Ross Field, Arcadia, Calif., and for six months in 1923 he was on duty at Chamute Field, Rantoul, Ill., in charge of organizing the airship mechanics course. Since that time the major portion of his service was at Dayton, Ohio.

LIEUT. BLEAKLEY'S ALTITUDE FLIGHT

By A. M. Jacobs

Once more the Materiel Division XCO-5, with which Lieut. Macready repeatedly climbed to great heights, has been, under the able pilotage of Lieut. W. H. Bleakley, been adventuring into the scenes of old triumphs. Equipped with the same high lift wings (Joukowsky ST_{ae}-27-A), there have been installed for testing a new Form F-1A supercharger, designed to give sea level pressure up to 30,000 feet, against 20,000 feet with the old Form F, and a duralumin propeller with adjustable pitch.

On June 16th Lieut. Bleakley went aloft, reaching an indicated altitude of 38,000 feet. The liquid oxygen apparatus used was a new Materiel Division type, with container and vaporizing elements separate. A gage in front of the pilot registered the amount of superpressure on the liquid inside the container. Twenty-four pounds, or an amount equivalent to about sixteen bottles of gaseous oxygen, was carried. Two auxiliary bottles of gaseous oxygen, containing 500 liters each, were installed for emergency purposes. A pair of experimental goggles with the lenses electrically heated were worn.

Lieut. Bleakley kept the plane at its high mark for 18 minutes hoping to coax it higher, but when the engine began to overheat and miss, he decided it was time to come down.

His experience as a pilot has been one of the most unique in the Air Corps. Born in County Cavan, Ireland, he is said to be the first native-born Irishman to learn to fly. At the age of fourteen he came to the United States, saw a Curtiss take the air at the St. Paul fair grounds in 1908, and the course of his life was settled. In 1909 he gave up motorcycle racing and boxing, and a position with the Bell Telephone Company, and as did a later hero came to St. Louis to pursue the flying game. There he went into the shops of the Benoist Company. The Benoist Flying School was the third in the country to be opened, having been preceded only by the Wright and Curtiss Schools. The planes were the early stick and wire open models with the pilot perched with his controls out in the air. In January, 1910, he received his pilot's license at the hands of A.B. Lambert, representing the Aero Club of America.

I made my first flight of any considerable length in Lincoln," says Lieut. Bleakley with a grin. "I flew eight miles over the city from the amusement park to the home of William Jennings Bryan, with whom I shook hands. From 1910 to 1913 he traveled over the country by plane, part of the time working with the Pathe Moving Picture Company. In 1916 he came to Mineola, Long Island, as chief civilian flying instructor for the Army. He was commissioned at Brooks Field in October, 1918. He took part in the Hartford Air Meet in 1922; in the bombing of the ice gorges of the Delaware River at Fort Jervis, New York, in 1922; in the International Air Races in 1923, and many other events of note.

Few pilots can match Lieut. Bleakley's service in length of time, number of hours flown, variety of planes used, and unique air experiences. There are few who have been on the inside of the flying game through such radical changes in its history. Further tests are contemplated for the XCO-5 before Lieut. Bleakley departs for his detail of foreign service.

On his attempt on June 16th to break the existing record for altitude flight, Lieut. Bleakley, according to the calculations of the U.S. Bureau of Standards, reached 36,509 feet. On that venture into the upper air regions, he used liquid oxygen and, apparently, was in no way affected by his flight. Prior to this flight, however, on May 31st, Lieut. Bleakley made a practice altitude flight, using oxygen gas, and it was over two weeks before he finally shook off the after effects.

Captain M.G. Healy, M.C., Flight Surgeon at the Fairfield, Ohio, Air Depot, and Captain Eugen G. Reinartz, M.C., Flight Surgeon at Wright Field, Dayton, O., collaborated in making a thorough physical examination of Lieut. Bleakley both before and after his last altitude flight.

On the day prior to this flight Captain Healy reported Lieut. Bleakley to be in excellent condition. Examining him subsequent to the flight, Captain Reinartz stated that Lieut. Bleakley responded well in all physical fields to the stresses and strains to which his economy had been subjected, even though he reported having remained at his maximum altitude (38,000 feet indicated) for a

period of 22 minutes. "In the examinations I made," Captain Reinartz continued, "I could find no evidences of marked physical changes, and except for such changed responses to the physical indices, Lieut. Bleakley was in no way affected by his flight.

"This flight demonstrates the feasibility of using liquid oxygen, and by its use relieves the pilot of the necessity of watching the ever decreasing supply in his various tanks, were gas oxygen under pressure to be used. It also proves that a pilot may attain the higher reaches without the use of electrically heated suits, with fair comfort, except possibly for the numbing of hands and feet. Except for statistical purposes, the results obtained during the flight were most satisfactory, both from the physical reactions of the pilot and the functioning of his oxygen apparatus."

The physical effects experienced by Lieut. Bleakley on the altitude flights alluded to above may be gained from the following interview Capt. Reinartz had with him:

Q. Lieut. Bleakley, will you tell of your experience, from a physical standpoint, experienced on your altitude flight of June 16?

A. Yes, on the morning of June 16 I prepared for an altitude flight hoping to break the world's altitude record in the XC05. I was clothed as follows: two suits of heavy wool underwear, five pairs of silk and wool socks, two wool sweaters, one blanket-lined leather flying suit and two silk mufflers and one pair of silk gloves and one pair of heavy fur gloves, one pair of moccasins, one chamois suit and one pair chamois blanket-lined trousers and one fur-lined helmet and face mask combined. I left the ground at 10:04:52. I was using liquid oxygen which was turned on before I left the ground and as the altitude increased it brought up its own pressure to fourteen pounds at a ceiling of 38,000 feet. I felt no ill effects at any time during the entire flight. As I passed 30,000 ft. I felt quite a sudden change in temperature and noticed that the strut thermometer dropped 10°C. The change was gradual from 34,000 ft to 38,000 ft., reaching a minimum of -52°C.

I had difficulty with my electrically heated goggles which fogged up on me on the right eye, permitting me to see out of one eye only. This trouble occurred at 28,000 feet as I was ascending and remained so until I had again descended to an altitude of 25,000 ft. I was unable to see through the right eye.

I felt quite cold and uncomfortable, especially my hands and feet during the last forty minutes of my flight.

Q. Did you use gas oxygen under pressure at any time?

A. The only oxygen used was liquid oxygen.

Q. How satisfactory do you believe liquid oxygen to be for such flights?

A. To my estimate it was very satisfactory.

Q. Did you experience any difficulty with the oxygen?

A. No.

Q. Did you at any time consciously feel a loss of any of your mental faculties?

A. No, not consciously.

Q. Was there any period, during the time in which you were at your maximum altitude, that you felt any sensation, except that of cold, that you do not ordinarily experience on the ground?

A. I felt a slight slowing up of muscle action.

Q. Describe your sensation with regard to the slowing up of your muscle action.

A. I attempted on two occasions to write but found that I was not clearly able to perform this act and my vision was slow in reading instruments. My faculties were not keen. I felt as though my body were slightly swollen, experiencing difficulty in closing or opening my hands or moving any parts of my body.

Q. Did you at any time notice a shortness or a shallowness of your breathing?

A. I had a tendency to take longer breaths more frequently than normal.

Q. When you took these breaths did you feel the sense of satisfaction?

A. No. My idea was that I didn't quite get enough; I would like to have some more although I did not feel uncomfortable.

Q. Did you at any time during your flight have an opportunity to examine your pulse beat?

A. No.

Q. Did you at any time during your flight experience a pounding in your head?

A. No.

Q. Ringing in your ears?

A. No.

Q. A sense of fullness in your chest or abdomen?

A. Yes, slightly here as if my clothes seemed to be a little tight for me; I wanted to move around a little bit and relax.

Q. How long did you remain at your maximum altitude?

A. About 22 minutes.

Q. Would you tell me what transpired on the practice altitude flight on May 31, 1928?

A. On May 31, 1928, I left the ground in the XCO-5 at 8 a.m., using gas oxygen which I turned on at an altitude of 15,000 feet. I had with me two bottles of this oxygen which I thought was sufficient for at least two hours. This flight was for the purpose of a test between 31,000 to 34,000 feet. This test is known as a 'Saw Tooth'. As I reached an altitude of 31,000 feet I encountered cirrus clouds which caused the weather at that altitude to be very rough. As I climbed to 34,000 feet it became so rough that I was forced to cut my test a little short and being so intent on my work I had forgotten to watch my oxygen gauge. As I felt very tired flying the machine in the rough weather I decided to take my last readings and come down. I read my strut thermometer, altitude gauge, oil pressure, water temperature and engine altitude and my last reading was my oxygen gas which showed me that at 32,000 feet I had five pounds of pressure left. Knowing this would only last a minute or so I placed myself in a position so that should I "pass out" I would have the control stick set forward. I placed my elbow against my body and my hand on the control stick, leaning forward and dropping my head. At that moment I had my hand on the shutter control. As I descended to 32,000 feet I decided to take my hand off the shutter control and place it on the throttle control so as to throttle down my motor. However, I found I was unable to move my hand and after several efforts gave up. I tried to raise my head which was slightly dropped forward but found I was unable to raise it. The machine was slowly descending and I kept a close watch on the second hand of the clock in front of me and tried to count the seconds so as to assure myself as best I could that I was still conscious. As best I know I was fully conscious but unable to move any muscle in my body. I felt as though I were paralyzed. My breathing was very difficult and I felt as though every second seemed an hour. Knowing that I should not move or exert myself in any manner I tried to keep quiet. I remained so until I reached an altitude of 25,000 feet. My vision was very much blurred. My hearing was very distant and my tongue seemed about four times its size. As I reached 25,000 feet coming down, I immediately felt a sudden change and found that my muscles were back again to what I believed to be their normal. I had the strength to raise my hand off the shutter control and place it on the throttle, though with some difficulty. Then I found I had the use of my legs and feet on the rudder, and generally felt stronger. As I descended I became a little stronger. As I landed and taxied up to the line I tried to move but found I had very little strength left to move around. The mechanics helped me out of the machine and as I stood on the ground I felt all tired out and did not want to move. My feet and hands felt very heavy and I felt as though I would like to rest or lie down.

After I had my clothes removed, by mechanics, I thought I could walk to the Operations Office which was about fifty yards distant, but found I was unable to get there without assistance. During the next eight days I felt tired, sleepy and thirsty all the time. I felt tired standing, sitting, or lying down, unable in any position to be at rest. My sleep was very irregular and a gastric disturbance developed which remained with me for over two weeks. My general condition improved very slowly but on the date of my attempted altitude record flight I was examined by the flight surgeons and found to be in excellent physical condition for the attempted record flight.

---oOo---

MEXICAN ACE MAKES ONE-STOP FLIGHT TO WASHINGTON

By the Bolling Field Correspondent

Captain Emilio Carranza, Mexican cross-country flyer, arrived at Bolling Field at 5:14 p.m., June 12th, from Mooresville, N.C., where he had been forced down earlier in the day by dense fog.

Making a perfect landing, he taxied to a point in front of the stand, which had been erected for the occasion, and was there met by Major Howard C. Davidson,

J. A. Davidson

Post Commander, who reached into the cabin and shook hands with the daring young aviator amid the cheers of the small but enthusiastic crowd.

After shutting off his motor, Captain Carranza climbed out of his plane feet first and, accompanied by Major Davidson, proceeded to the stand, where he was presented to Secretary Davison, Secretary McCracken, Ambassador Tellez of Mexico, and General Summerall, Chief of Staff.

Captain Carranza left Mexico City at 9:10 a.m., Washington time, in an attempt to make a non-stop flight to Washington, D.C., to return the good will flight of Colonel Charles A. Lindbergh from Bolling Field to Mexico City. Flying straight along the course he had decided on, at an average speed of 100 miles an hour, everything appeared to be in favor of the Captain's safe arrival, but fog, the aviator's greatest menace, was settling down towards the earth as the Ryan monoplane winged its way northwards into the night.

Reported over Atlanta, Georgia, at twenty minutes after midnight, and over Spartanburg, S.C., at 1:45 a.m., the increased speed of the Good Will flyer indicated that he would arrive in Washington between 5:30 a.m. and 6:00 a.m., but those who were on duty at Bolling Field receiving reports and plotting positions realized from the weather reports received from Richmond, Va., and Greensboro, N.C., that the Captain would need the kindly aid of the Goddess of Luck, in addition to all his skill as an aviator, to overcome the almost insurmountable difficulties in his path.

Finally, after an anxious wait of two hours, without any message, word was received from the Department of Commerce Radio Station that Captain Carranza had been forced to land at the emergency air-mail field at Mooresville, N.C., on account of heavy fog.

Major Davidson, Post Commander, when interviewed by newspaper men, stated that the Mexican Ace had used rare judgment in landing, although by so doing he failed in his original intention of making a non-stop flight.

After several hours' sleep, during which time the fog rolled away, Capt. Carranza took off from Mooresville at 1:15 p.m., and after an uneventful flight landed at Bolling Field at 5:14 p.m., June 12th.

Remaining in Washington for a few days for rest and the welcoming festivities, Captain Carranza left Bolling Field for Mitchel Field, N.Y., at 7:00 a.m., in his Ryan plane, escorted by Major Howard C. Davidson, Capt. Robert E. Ellis and Lieut. Robert L. Brookings in three Curtiss Pursuit planes, landing there at 9:05 a.m.

---oOo---

KELLY FIELD STUDENTS GRADUATE FROM ADVANCED SCHOOL

The first class to graduate from the Advanced Flying School under the Plan "B" system of training at Kelly Field passed "from possibility to actuality" on Monday, June 24th. Unlike classes in the past, in which a large number reported to Kelly Field and few received their wings, every student who reported to Kelly - with the exception of two who were killed - was graduated.

The graduation exercises were preceded by an aerial review, flown by the entire class, consisting of 45 planes. Major Ryan, the ranking student of the regular class, led the review in a P1-B, followed closely, in turn, by 15 AT-4's and 5's, 29 DH's and O2's of the Observation Section, and 9 NBS-1's of the Bombardment Class. The reviewing party was composed of Brigadier-General Albert J. Bowley, Commanding General of the 8th Corps Area; Major James E. Chaney, Commandant of the Air Corps Advanced Flying School; and Major Clarence L. Tinker, Assistant Commandant of Kelly Field.

The graduation program took place at 11:00 o'clock at the Kelly Field Aviation Club. It consisted of - Music by the Air Corps Training Center Band; Invocation by Chaplain John H. McCann; Introductory remarks by Major Chaney; and an address by General Bowley. After his address, General Bowley presented the certificates of graduation to both the regular class graduates and the special observers. Major Chaney presented reserve commissions to the graduating flying cadets. Major Tinker presented pilot's and observer's wings. Chaplain McCann offered the benediction.

The graduates of the regular course are: Major William O. Ryan; 1st Lieut. James F. Phillips; 2nd Lieuts. James S. Stowell, George V. Holloman, Edward H. Porter; 2nd Lieuts., Air Corps Reserve, Lawrence J. Chiappino, Howard B. Cock, Frederick E. Glantzberg, Leroy Hudson, Eugene H. Rice, Paul Shanahan, Lloyd H. Tull; Lieuts., Peruvian Air Corps, Guillermo Concha and Manuel E. Escalante;

Flying Cadets Joseph S. Bartles, Charles E. Bradshaw, Donald Edwin Broughton, Leland C. Brown, Ralph O. Brownfield, Kenneth A. Cool, Paul L. Foster, Edwin Donald French, Alfred F. Kalberer, Trevor Kenyon, Joel E. Mallory, Isaac W. Ott, James N. Payton, Frederick A. Pillet, Robert E. L. Pirtle, Joel G. Pitts, George C. Price, William A.R. Robertson, Kenneth A. Rogers, Douglas M. Swisher, Cassius H. Thomas, Charles S. Vaughn, Ronald R. Walker, Roger V. Williams, Stuart P. Wright, Paul B. Wurtsmith, Myron E. Zeller; and Technical Sergeant Paul B. Jackson.

The officers who graduated from the Special Observers' Course are: Majors William C. McChord and Norman W. Peek; Captains Arthur W. Brock, Jr., Ray A. Dumm and John I. Moore; 1st Lieuts. William J. Flood, William A. Hayward, Arthur G. Hamilton, Thomas W. Blackburn, Jasper K. McDuffie, Odas Moon, Newton Longfellow, Walter B. Hough, Paul C. Wilkins; and Warrant Officer Leland D. Bradshaw.

---oOo---

LOOSE MOTOR COWLING CAUSES AIRPLANE CRASH

By Kelly Field Correspondent

While on the way to Flagstaff, Arizona, recently, Lieut. Harvey L. Boyden, of Kelly Field, crashed his O-2 in the mesquite nine miles east of Comstock, Texas. Lieut. Boyden and Lieut. T.S. Sims had started in separate planes to attend a celebration of the opening of a new airport at Flagstaff. When about ten miles east of Comstock the motor cowling of Boyden's plane in some manner became loose and was thrown up against the center section brace wires and upper wings. It flattened out in such manner that the pilot was unable to see ahead and the flat surface presented to the wind was so large that the plane immediately stalled, even though the motor was wide open. The ship began to settle, at an air-speed of 65 miles an hour, and Boyden was unable to reach a small field ahead of him. The plane struck a tree at the edge of the field.

The field was so small that Lieut. Sims considered it inadvisable to attempt a landing, and he cut his motor and told his mechanic to jump and rescue the pilot and mechanic of the wrecked O-2. At that moment, however, Boyden and his mechanic crawled out from beneath the wreckage. Sims immediately dived down and looked the wreck over, then turned back to Fort Clark for assistance.

Lieut. Boyden found a ranch house close by and, with transportation procured from the rancher, eventually reached Comstock. He met the wrecking truck there and superintended the loading and removing of the plane.

Lieut. Sims continued on toward Flagstaff that afternoon. At El Paso a connecting rod began to give trouble and he returned to Kelly Field the following day.

---oOo---

LIEUT. B. S. THOMPSON MAKES NOTABLE FLIGHT

Lieut. B.S. Thompson, who will be remembered as a member of the Pan American Flight team, on June 23rd flew a new A-3 from the factory at Buffalo to Kelly Field, between the hours of 6:00 a.m., Buffalo daylight saving time, and 8:30 p.m. Central Standard Time. Lieut. Thompson took off from Buffalo under threatening weather, and for the first 350 miles flew through rain and fog. After that time, however, the clouds lifted and the weather was excellent. A head wind beset him during the entire flight, which explains the length of time required - 15:30. The first landing was made at Chamute Field at 10:00 a.m. Central Standard Time. Servicing of the plane was accomplished hurriedly, and within fifteen minutes he was in the air again. He landed at Muskogee, Oklahoma, at 3:20, and was in the air again at 3:40. He reached Kelly Field after dark and landed at 8:30 p.m.

---oOo---

GRADUATION OF OFFICERS FROM AIR CORPS TACTICAL SCHOOL

A total of 24 officers graduated June 30th from the Air Corps Tactical School, Langley Field, Va., of which number 13 were Air Corps officers, as follows: Majors Frank M. Andrews, George H. Brett, Roy S. Brown, John F. Curry, Junius W. Jones, Arnold N. Krogstad, H.H.C. Richards, Martin F. Scanlon, Robert L. Walsh, Captains Richard H. Ballard, Willis H. Hale, Robert Oldys and Lawrence F. Stone;

Of the remaining 11 officers, Captains Francis P. Mulcahy and James E. Davis are from the Marine Corps, Capt. Wm. V. Wise, Chemical Warfare Service; Capt. Thomas R. Phillips, Coast Artillery Corps; Major Charles H. Cunningham, Corps of

Engineers; Major George E. Arnesen, Field Artillery; Capt. Stuart Cutler, Inf.; Captain Raymond C. Blatt, Cavalry; Major Oscar Morales, Guatemalan Army; and Lieut. Edgardo Bonnet, Argentine Navy.

Major James E. Fechet, Chief of the Air Corps, was the principal speaker at the graduation exercises.

---oOo---

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS

Changes of Station: Following officers to duty in the Philippines, sailing about September 28th: Capt. Benjamin F. Giles, Ft. Leavenworth, Kansas; 1st Lt. Clarence C. Wilson, Crissy Field, Calif.; 1st Lieut. James L. Grisham, March Field; 1st Lieut. Wm. A. Hayward, Kelly Field - Sailing about September 5th, 1st Lieut. Charles W. Steinmetz, Office Chief of Air Corps; 2nd Lieut. George A. Whatley, Maxwell Field, Ala.; 1st Lieut. Gilbert S. Graves, Mitchel Field; 1st Lieut. Edward M. Morris, Langley Field; 1st Lieut. Bob E. Nowland, Bolling Field.

Following officers, upon completion of tour of duty in Philippines, to duty at stations indicated: 1st Lieut. John D. Corkille to Wright Field, Dayton, Ohio; 1st Lieut. Corley P. McDarment to Langley Field, Va.; 1st Lieut. Lawrence J. Carr to St. Paul, Minn., as Instructor Minnesota National Guard; 1st Lieut. Robert M. Webster to Hartford, Conn., as instructor Air Corps, Connecticut National Guard.

Major George H. Peabody, Univ. of Calif., Berkeley, Calif., to Langley Field, Va., for duty as student Air Corps Tactical School.

1st Lieut. Virgil Hine from duty with Organized Reserves, Bowman Field, Ky., to Selfridge Field, Mich.

1st Lieut. Francis B. Valentine, from United States Military Academy, West Point, N.Y. to Rockwell Field, Calif., for duty with 11th Bomb. Squadron.

1st Lieut. Thomas L. Gilbert and 2nd Lieut. Cornelius W. Cousland, 12th Obs. Squadron, Ft. Sam Houston, Texas, to 88th Squadron, Fort Sill, Oklahoma.

1st Lieut. Gerald E. Ballard to Brooks Field, Texas, upon completion of tour of foreign service instead of Middletown Air Depot, Pa.

1st Lieuts. Clarence E. Crumrine and Reuben C. Moffatt, Wright Field, to duty in Hawaiian Dept., sailing from New York about Sept. 5th; 1st Lieut. Junius A. Smith, Ft. Sam Houston, Texas, to Hawaii, sailing from San Francisco about September 26th.

Upon completion of tour of duty in Panama, 1st Lieut. James C. Cluck to Wright Field, Dayton, O.; 2nd Lieut. Walter E. Richards to Selfridge Field, Mich.

1st Lieut. Edwin F. Carey, Mitchel Field, to Panama Canal Zone, sailing about November 28th.

1st Lieut. Dache McC. Reeves, Office Chief of Air Corps, and 1st Lieut. Harry G. Montgomery, Wright Field, Dayton, O., to Kelly Field, Texas, to take Observers course of instruction at Advanced Flying School, upon completion of which, former to proceed to Philippines, sailing about Nov. 30th; latter to Hawaiian Department, sailing about December 1st.

1st Lieut. Eugene C. Batten from Walter Reed Hospital to Wright Field, Ohio.

Major Harvey S. Burwell, 91st Obs. Sqdn. Crissy Field, to duty at University of California, Berkeley, Calif.

1st Lieut. Lucas V. Beau, relieved from Fitzsimmons Gen. Hospital, Denver, Colorado, and detailed as Instructor, Colorado National Guard, Denver, Colo.

1st Lieut. Peter E. Skanse, Bolling Field, detailed as Instructor, Air Corps, Minnesota National Guard, St. Paul, Minn.

1st Lieut. Eugene B. Bayley, Burgess Field, Pa. to Bolling Field, D.C.

1st Lieut. Charles G. Breneman, from duty with Colorado National Guard, Denver, to March Field, Riverside, Calif.

2nd Lieut. James A. Ellison, Selfridge Field, to duty with Organized Reserves, 5th Corps Area, station at Bowman Field, Louisville, Ky.

2nd Lieut. Robert L. Brookings, Bolling Field, to duty at U.S.M.A., West Point, N.Y. Orders assigning him to Rockwell Field revoked.

Brigadier-General Wm. E. Gillmore, in addition to present duties as Chief of Materiel Division, designated as Commandant, Air Corps Engineering School.

Relieved from detail to Air Corps: 2nd Lieuts. Thomas E. Binsford and Kenneth V. Treacy to Hawaiian Dept., for duty with Field Artillery; 2nd Lieuts. Leif Neprud and Ralph Finch to Infantry, 2nd Division, Ft. Sam Houston, Texas.

Promotions: Major Henry C. Pratt to Lieut.-Colonel, rank from June 20, 1928.
1st Lieut. Victor H. Strahm to Captain, rank from June 16, 1928.
1st Lieut. Ira R. Koenig to Captain, rank from June 19, 1928.
1st Lieut. Neal Creighton to Captain, rank from June 2, 1928.
1st Lieut. Alonzo M. Drake to Captain, rank from June 9, 1928.
2nd Lieut. John M. Weikert to 1st Lieut., rank from June 2, 1928.
2nd Lieut. Wm. L. Scott, Jr., to 1st Lieut., rank from June 18, '28

Resignation: 1st Lieut. Erik H. Nelson, June 30, 1928.

Reserve Officers to Active Duty to June 30, 1928: 1st Lieut. Murray Clarke Woodbury, Jacksonville, Fla., to Maxwell Field, Ala.; 1st Lieut. Wm. E. Bleakley, Oklahoma City, Okla., to Post Field, Fort Sill, Okla.; 1st Lieut. Harold Harvey Hunter, Maxwell Field, to Mitchel Field, N.Y.; 1st Lieut. Joseph R. Hargrove, Los Angeles, Calif., to Crissy Field, Calif.; 2nd Lieut. John Wm. Persons, Montgomery, Ala., to Maxwell Field, Ala.; 1st Lieut. Charles Wm. Childress, Fort Worth, Texas, to Fort Crockett, Texas; 2nd Lieut. Stuart P. Wright, Kelly Field, Texas, to Selfridge Field, Mich.; 2nd Lieut. Joseph Ray Reed, Lawton, Okla., to Post Field, Okla.; 2nd Lieut. Reginald Heber to Fort Crockett, Texas.

Transfers: 2nd Lieut. Frank G. Irvin, Infantry, to Air Corps, June 12, 1928.

Detail to Air Corps and to Brooks Field July 1st for training: 1st Lieut. Walter R. Hensey, Jr., Field Artillery.

---oOo---

COLOMBIAN PILOT ARRIVES AT BOLLING FIELD

Flying a biplane of Swiss manufacture, equipped with a 9-cylinder Jupiter radial air-cooled motor, Lieut. Camilo Daza, Colombian Army pilot, arrived at Bolling Field at 12:25 p.m., July 3rd, from Mitchel Field, N.Y.

Lieut. Daza is making a flight by easy stages to Bogota, Colombia, and will leave for Langley Field, Va., when repairs and adjustments have been made on his "Wild X" airplanes. Lieut. Daza, who is a member of a wealthy South American coffee-growing family, plans to make fourteen stops before reaching his native land, visiting Mexico City and the capitals of all the Central American countries. He has had more than 1500 hours flying time, and learned to fly in Miami, Fla., in 1918.

Major Howard C. Davidson, Post Commander, welcomed the flier on his arrival. Lieut. Daza, who speaks very little English, had some difficulty in explaining what work he wanted done on his plane, until Staff-Sergeant Germaine A. Visbal, of the Photo Section, who was taking pictures of the flier, announced himself as a native Colombian and acted as interpreter.

---oOo---

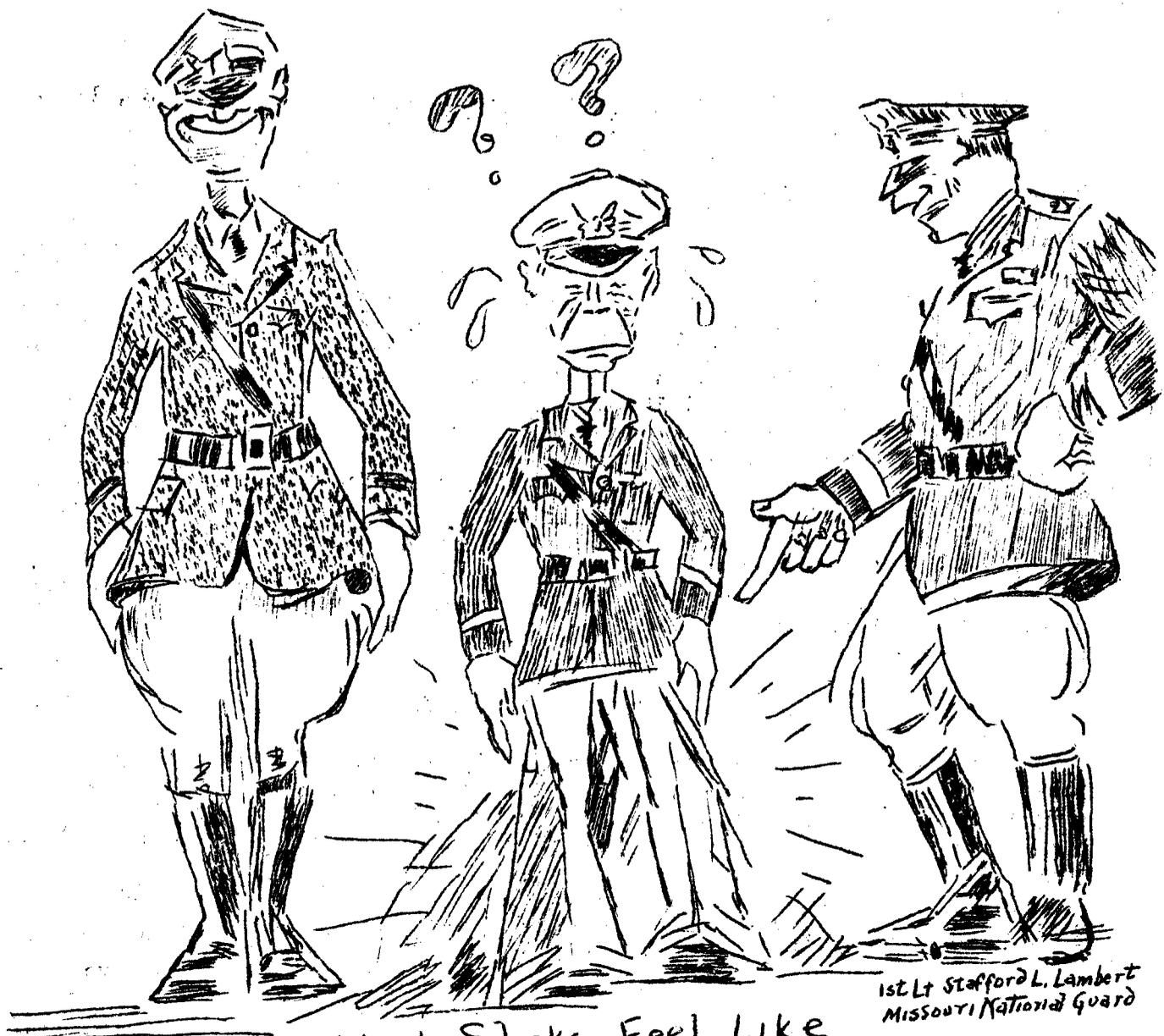
LARGE PARACHUTE TESTED AT WRIGHT FIELD

The 84-foot parachute was recently drop-tested at Wright Field, Dayton, O., with a 1600-pound bomb as weight and with a quick-release mechanism to insure the weight against being dragged by the chute upon landing. The parachute opening was smooth and almost instantaneous. The quick-release mechanism, which in an airplane drop would be operated by the pilot an instant prior to coming to the ground, was pulled after the bomb had landed and, relieved of the weight of the bomb, the great parasol, which had more the appearance of the side of a circus tent, deflated. The release mechanism operated perfectly. A Brinell dynamometer was attached for this drop to measure the force applied to the parachute with bomb weight at the moment of opening. Calibration showed this to be 4800 pounds as against 2000 pounds for the man-carrying parachute with man-weight.

---oOo---

AIR CORPS WINS INTERNATIONAL BALLOON RACE

The team of Captain Wm. E. Kepner, pilot, and Lieut. Wm. O. Eareckson, aide, representing the Army Air Corps, won the International Balloon Race, which started from Detroit, Mich., on June 30th. This makes the third consecutive time an American free balloon team won this annual international event, and the United States, therefore, retains permanent possession of the Trophy. The Army team covered 460.9 miles.



What Slacks Feel Like at INSPECTION.

The team of Hugo Kaulen, pilot, and Hugo Kaulen, Jr., aide, representing Germany, won second place, having traversed a distance of 459.4 miles. Charles Dollfus, pilot, and Georges Carmier, aide, representing France, won third place by covering 447.9 miles. It will thus be noted that the race this year was exceedingly close.

Unless a new trophy is put up with the purpose in view of perpetuating the annual free balloon race, it means the end of this international lighter-than-air sporting classic. It is not likely that lovers of free ballooning will permit the untimely demise of an event which has attained such wide world popularity.

---oOo---

DETAIL OF WEST POINT GRADUATES TO AIR CORPS

Nearly a third of the class which graduated from the United States Military Academy, West Point, N.Y., last month, were detailed to the Air Corps and directed to take flying training at Brooks Field, Texas. Since 1922, a total of 294 West Point graduates were detailed to the Air Corps. The number detailed each year is shown below, as follows:

<u>Year</u>	<u>Number of Graduates</u>	<u>Detailed to Air Corps</u>	<u>Percentage</u>
1922	132	16	12.1%
1923	261	51	19.5%
1924	406	61	15.0%
1925	245	42	17.1%
1926	306	18	5.8%
1927	203	30	14.7%
1928	261	76	29.1%

NOTES FROM AIR CORPS FIELDS

---oOo---

San Antonio Air Depot, Duncan Field, Texas, June 16.

First Lieut. Merrick G. Estabrook, Jr., A.C., of the Middletown Air Depot, was on temporary duty at this Depot from June 3d to June 6th, in connection with a study of shop practices and methods used in reconditioning aeronautical supplies and equipment.

On June 2d Warrant Officer Albert Bloom was retired from active service at this Depot, after more than thirty years' service. He was assigned to duty at this Depot in March, 1921, on transfer from the former Aviation Repair Depot at Dallas, Texas, upon its consolidation with this Depot, and since then served continuously at this Depot. Warrant Officer Bloom is accompanied by the best wishes of this command upon the termination of his long and honorable period of active service.

Lieut. Frederic B. Wieners returned to duty at this Depot on June 7th from a thirty days' leave of absence.

Major Frank D. Lackland, Commanding Officer of the Third Attack Group, Fort Crockett, and formerly Commanding Officer of this Depot, paid us a visit on June 15th, viewing the activities of the Depot and getting in touch with his many old friends here.

Major Douglas B. Netherwood, of the Office of the Chief of the Air Corps, afforded this Depot the pleasure of a visit on June 15th.

During the month of May the Engineering Department of the San Antonio Air Depot overhauled and repaired the following airplanes and engines:- Airplanes: 7 PT-1, 2 NBS-1, 1 AT-4, 4 DH-4M-1, 2 DH-4M-1T, 1 DH-4M-2T, 1 O2-A, 1 O2-D, 1 AT-5, Total, 20 airplanes: Engines:- 15 Liberty, 23 Wright E, 3 Curtiss D-12, Total, 41 engines.

Kelly Field, San Antonio, Texas, June 20.

In spite of the fact that most of them are "school teachers", the Kelly Field delegation at the Annual Machine Gun and Bombing Matches at Langley Field won several of the "choicest" places in the meet just passed.

Lieutenants Whiteley and Lanagan, came away with the high score, which rumor places as the highest score ever to be recorded at a competition match. Lieut. Partridge won the first place in the Observation machine gun matches, and he and Lieut. Andrew won the match for their team for fixed and flexible guns. Every member of the delegation from Kelly Field did good work. One field cannot be expected to win everything.

43d Squadron: Tech. Sgt. McKibbin, Sgt. Allison and Pvt. Hester were discharged and re-enlisted this month.

Staff Sgts. Wentzell and Collins, Sgt. McFadden, Cpl. Patrick and Pvt. Cabble are slated for discharge later in the month. Sgt. McFadden will be re-enlisted for service in Panama.

Staff Sgt. Jones, Pvts. Edwards, Graham, Harnevious, Jackson, Minnex, and Pippin returned from furlough during the first part of this month.

We will have another member of the organization not on the pay roll since Private Baum attached unto himself a wife. He was married on May 12th.

Pvt. Couch was discharged on the 11th but the following day found him holding up his hand for another hitch. Henry, the Air Corps isn't so bad after all, is it?

Pvts. Losey and Sidell are back from the West Point Prep. School at Ft. Sam Houston. Losey is off for a forty-five day furlough.

Pvt. Beathard is off on a sixty day furlough.

Pvts. Hudson and Gray transferred to the organization from the Infantry. Pvt. Hudson was a sergeant in Company H, 1st Infantry, Ft. D.A. Russel; and Gray was a corporal in Company F, 23d Infantry, Ft. Sam Houston. Evidently the boys are getting tired of walking.

Rockwell Field, Coronado, Cal., June 26.

Maj. S.W. FitzGerald, A.C., former Commanding Officer of Rockwell Air Depot is at present a visitor at this field, having driven overland, by motor, from Brooks Field, Texas. Major FitzGerald will fly as far as El Paso, Texas, with

Lieut. Gothlin, who is to ferry an O2-H plane to Ft. Riley, Kansas.

Maj. H. B. Clagett, Air Officer, Ninth Corps Area, with passenger, was a visitor at Rockwell Field on June 12th, and departed for Yuma, Arizona, the same day.

Lieut. C. E. Grumrine, A. C., arrived from Wright Field June 14th, on inspection tour of proposed plans for permanent construction at Rockwell Field.

Lieut. Virgil Hine, A. C., former popular adjutant of Rockwell Field, was a visitor for the past few weeks. The commissioned and civilian personnel of Rockwell Field are glad to greet Lieut. Hine again.

Lieut. Ray H. Clark, A. C., departed June 21st, via air for Pearson Field, Vancouver Barracks, Wash., to ferry a PT-1 plane to that station. He returned to Rockwell Field, by rail, June 24th.

On June 26th, Capt. C. E. Giffin, 1st Lieuts. E. M. Robbins and Ray H. Clark, departed via air, for Pearson Field, to ferry three PT-1 planes to that station. These officers will return by rail to their proper station.

Capt. Edw. C. Black and 1st Lieut. R. Baez, Jr., who arrived for duty at Rockwell Field were assigned to the 11th Bombardment Squadron.

A total of 92 enlisted men from March Field, Cal., arrived at this station June 25th. They comprise the first increment of the organizations being re-constituted at Rockwell Field, viz:

Hq. 7th Bombardment Group,
95th Pursuit Squadron,
11th Bombardment Squadron.

These men were transported to Rockwell Field by rail, motor and aerial transportation.

Camp was completed to house these troops, consisting of boarded-up tents, kitchens and mess halls, with gas, light and modern plumbing fixtures, also shower baths and toilets.

Lieuts. A. W. Marriner and Wentworth Goss arrived from Crissy Field on June 25th, in Amphibian plane for purpose of cooperative work with the Commandant, 11th Naval District and Commanding General, 6th Brigade Headquarters, Ft. Rosecrans.

Colonel William Elliott, Q. M. C., Corps Area Quartermaster, inspected the Quartermaster activities at Rockwell Field on June 25th.

Lieut. Lee Schoenhair, Air-Res., with Harry Tucker, left Rockwell Field at 1:20 P. M., June 7th, on a non-stop flight to New York City, in Lockheed Plane No. X4769, equipped with Pratt-Whitney motor. However, on account of heavy fog, pilot was forced to land at Columbus, Ohio. This plane, with pilot and passenger, returned to Rockwell Field June 15th, and departed for Los Angeles, June 16th.

Air Depot, Middletown, Pa., July 2.

"Knee deep in June."

Yes, it is rather hard to keep the old eye on the apple these balmy days, with birds singing, flowers flowering and bees beeing. The post looks mighty attractive, what with a new coat of paint on quarters and warehouses, the old family roses climbing up the porch, the ice man singing a round-dé-lay as he toils happily from box to box -- So on and on.

Capt. Christine's hard working suppliers here during the month shipped two hangars to Langley Field by hand. Don't misunderstand me! Both Depot cranes were condemned by the Government Inspector -- The Hangars were needed at Langley -- Result, 12 men + 10 days = 13 carloads of heavy structural steel.

It was further necessary to inspect 601 Liberty motors in order to get 500 with heavy cases to ship to contractor for overhaul. Say, when are we going to get to the bottom of that pile of Liberties?

A few cross-country trips to break up the monotony:-

Capt. DeFord and Lieut. McGregor drove two puttering PTs to Langley, June 8th, both badly needed by West Point Cadets there.

June 13th Lieut. Harris flits to Bolling, to make recommendations as to disposition of wreckage washed up along the hangar line from their usual week-end storm.

June 14th Capt. DeFord, Lieut. McGregor and Lieut. O'Neal catch the night boat for Langley and then bring three supercharged DHs back for overhaul. Boys ain't them clams delicious?

June 16th Capt. DeFord and Lieut. McGregor repeat with palpitating PTs to Langley.

June 25th Capt. DeFord, Lieut. Harris and Lieut. O'Neal steam to Hampton and fetch back worn O2s to be rejuvenated in the shops.

On the 14th inst. Lieut. Estabrook upt anchor and shoved on a month's leave. Our loss is Boston's gain.

Lieut. Harry Mills came back from a short but pleasant vacation spent in Ward #8, at Walter Reed. He reports several successful hours of indoor flying there.

Capt. DeFord journeyed to Carlisle the other evening and, after making a short but snappy speech before the Chamber of Commerce at that place, they voted unanimously to have an airport, selecting a committee to work on same.

Our engineers during June polished off 20 Liberty and 6 Curtiss D-12 engines.

Planes to the number of 14 were overhauled, as follows:

PT-1	3
P-1	2
DH-4M-2K	1
OA-1A.	1
O1	2
O-11	1
O-2.	4.

Wright Field, Dayton, Ohio, June 26.

Brigadier-General William E. Gillmore lectured on June 29, before a meeting of the American Society of Mechanical Engineers, the subject of his talk being, "The Activities of the Materiel Division". The meeting was held in Detroit, Mich. Lieut. Carl F. Greene spoke at the morning session on "An Introduction to the Problem of Wing Flutter".

Maj. J.E. Fickel, Capt. Reinartz, Lieuts. A.F. Hegenberger, A.J. Lyon and several other officers, flew to Rochester, Minn. to assist in the dedication and formal opening of the new airdrome.

Capt. O.P. Echols departed for Buffalo, N.Y., to ferry a Consolidated O-17 airplane to National Guard Headquarters at Spokane, Wash.

Lieut. R.C. Zettel, Lawrence J. Eyler and Clem C. Trimback attended the Gunnery Maneuvers held at Langley Field from June 1 - 10. While there, they studied the problems arising in connection with the service and use of armament equipment and demonstrated recently developed flexible gun equipment for airplanes.

Capt. A.W. Stevens left for Washington, Philadelphia and New York City for conferences and inspection duty concerning aerial cameras and chemicals for quick-work photography.

Capt. Theos Tillinghast was married on June 23d to Miss Margaret Dodds, of Cincinnati, Ohio. The wedding ceremony was performed at the Holy Trinity Episcopal Church of Cincinnati.

Boston Airport, East Boston, Mass.

The past month was a tough period for flying at Boston, as six different ships had forced landings on or near the Airport. The first one to get into trouble was a Travel-Air, piloted by a civilian, "Red Chandler". The ship went into a spin at 500 feet and crashed across the Narrow Gauge Railroad 200 yards from the Airport. The passenger, a civilian mechanic, was killed, and pilot badly injured.

The next accident was another civilian ship, carrying two girls as passengers. Ship was forced down on account of motor trouble. Neither pilot nor passengers were hurt, and very little damage to ship.

Lieut. Dexter, from Bolling Field, flying a PW-9, was next to encounter trouble. He was spending the week-end of May 26th and 27th at Boston. On the 28th when taking off, and immediately after leaving the ground, the motor apparently cut out. He tried to turn back to the field, just making the outer edge of the runway. The ship crashed, turned over on its back, pinning the pilot under it in the seat. Mechanics who rushed to his assistance had to lift the plane in order to get the Lieutenant out from under the wreck. He was not seriously injured, but suffered a few cuts and bruises. Major Cummings, the Flight

Surgeon, administered first aid and sent him to the hospital at Fort Banks, where he remained for a few days. The ship was badly damaged and was shipped to Middletown to see what can be done to it. It is believed, however, that the ship is beyond repair.

This crash is really the most fortunate accident your correspondent has ever witnessed (if crashes should be themed fortunate.). In the first place, the pilot either did not have time or failed to cut his switches. The gas tanks burst, saturating the pilot and the wreck with gasoline. What is meant by the fortunate part of accidents is that the ship did not catch fire, in which case the pilot would have burned up with the ship before anyone could help him. We are all thankful that it happened as it did, and, as Lieut. Duke says: "The open exhaust stack saved Dexter".

On June 1st, one of our PT-1 planes, piloted by 2nd Lieut. Horace White, A.C. Res., landed just off the runway at the edge of the water. Lt. White claims that motor quit, but some claim that he forgot to turn his gas on his second tank. At any rate, neither pilot nor ship was hurt, so we will let it go at that. But the following day a PT-1, flown by Lt. George Lusk, A.C.-Res., had motor trouble and disaster followed. In trying to make the field the pilot fell short about 100 feet and landed in the mud flats. The plane turned over and was damaged to such an extent that it was also sent to the Middletown Air Depot. Lieut. Lusk and Sergeant Rutledge, Enlisted Reserve, who was riding as passenger, sustained a few scratches, but nothing serious.

Last Sunday morning a brand new Travel-Air went in the bay 300 yards off shore, where it remained for two days before getting it out. That, of course, is ruined from the salt water.

What we need here is a boat to get to ships forced to land in waters surrounding the field. Personnel in such ships would drown before help could reach them without a boat should the ship turn over and pin them underneath.

On May 27th General Preston Brown, Commanding 1st Corps Area, with Lieut. Duke, A.C., pilot, in the A-3 assigned to General Brown, left Boston for St. Louis, Mo., where the General attended a re-union of his old division, of which he was Chief of Staff during the war. During the trip they stopped in Buffalo, Dayton, Lexington, Louisville and Leavenworth, Kans. On their way back east they made one hop from St. Louis to Washington, which is the longest single flight the General has made since he started flying, and of which he is very proud. Both General Brown and Lieut. Duke were much pleased with the trip, being enthusiastically received everywhere. Good weather prevailed throughout the trip.

We are now equipped for night flying, having installed a B.B.T. Flood Light, donated by Mr. Chandler Hovey of Boston, who also paid for the installation. Too much praise cannot be given Mr. Hovey for the financial help and moral assistance he has rendered for the improvement of the Airport, only I do say that there are too few of his type. Speaking of lighting facilities for night flying, the light was tested recently. Lieuts. Duke and Cobb flew for thirty minutes, making several landings, and found the light just what we needed; so anyone flying to Boston need not worry about getting here after dark. All we need now is a light for the wind cone.

During the first part of June, four PT-1s and the Vought flew to Barnes Airport at Westfield, Mass. to participate in the dedication of that field. During the three days we were there it rained every day; consequently, the meet did not prove very successful. An Airport was also opened at Lowell, Mass. and the dedication no doubt a huge success according to the number of planes which passed through here for Lowell, including Army, Navy and Civilian Aircrafts. The Boston Airport had an exhibition of Motors, Parachutes, Maps, etc., while Lieut. Gale from Mitchel Field was there with a photographic exhibit. The weather was good, and the field they dedicated is O.K., though not the best in New England, as they advertised it. Of course, all of our planes participated and four mechanics were on duty there during the three-day period. Next week, June 28, 29 and 30th an Airport is being opened at Lucerne, Maine, and we are helping to get them started on those dates.

Capt. Ford arrived from Middletown today in a PT-1 which is assigned here. This ship will give us four planes of that type. Air Corps Reserve Officers of this Corps Area are being assigned to active duty at the Airport for 14 day periods, two being assigned during each period.

Major Kennedy from the Chiefs' Office was here for a few days looking over

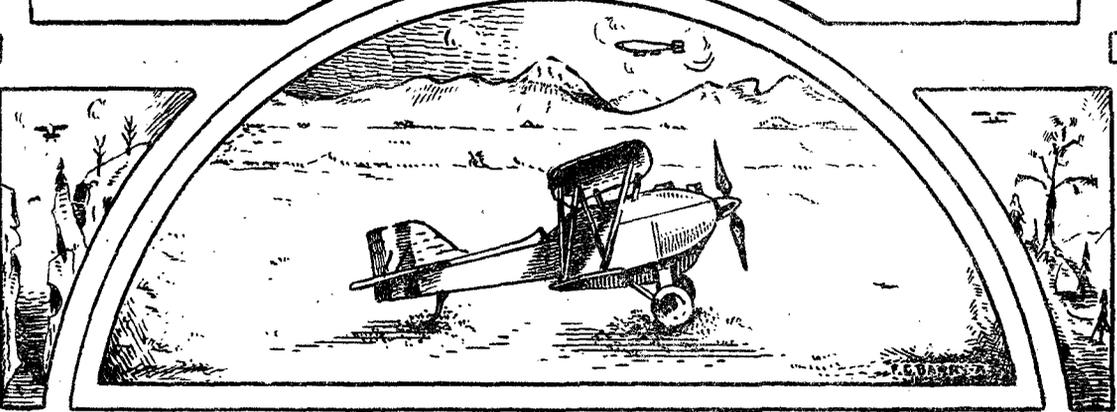
91928
- 3144 -
the situation of either improving this Airport, or taking over part of the Squantum Naval Flying Field for the Army. That will involve the transfer of land from the Navy to the Army and, of course, expenditure of much money to fit a field for flying, and building of hangars and quarters. However, the propaganda the news papers and people of Boston carried on during the past few months seems to be doing some good, as the city is taking this field over and will start improvements within the next two months. First, the hangars will be moved from the center of field to one side, the Army to be located at the southeast corner and Commercial activities at the southwest corner. After buildings are moved, grading and filling will start, so within another year there should be great improvements, and, as often stated, the Boston Airport will be second to none.

The Corps Area Inspector paid us a visit last week, inspected records, equipment and personnel. He found everything in good order; at least, we haven't heard otherwise.

Sergeant Viscik reported for duty today from 1st Obs. Sq. to replace Sgt. Keogh, who could not get acclimated to Boston, nor become reconciled to conditions here, and John is going back to his old love, Mitchel Field. Two privates were recently assigned, one to replace Pvt. Zucchero, discharged, and the second as an additional man. The enlisted personnel now consists of 3 non-commissioned officers, 3 privates, 1st Class, and 8 privates, one of whom is on duty at the Air Office, leaving 13 enlisted men on duty at the Airport.

Corporal Halstead made a trip to St. Johns, N.B. by automobile, taking a three day pass and, with a Sunday added, he made the trip without hurry. Our 1st Sgt. Anderson will be putting in for his retirement in a month or so. We are wondering what Andy will do after he gets out. He will be like a fish out of water and no doubt miss the Army after being in it for 27 years.





Air Corps
 News
 Letter



— ISSUED BY —
 OFFICE CHIEF OF AIR CORPS
 WAR DEPARTMENT
 WASHINGTON, D. C.

745
 577
 410

TABLE OF CONTENTS

---oOo---

	Page
Maps to Aid in Air Navigation	271 - 272
First Graduating Class from March Field	272
March Field Flying Cadets Stage Air Meet.	272
General Lassiter Inspects Kindley Field	272
War Department Theatre at March Field well Patronized	272
A Little News from the Marines in Nicaragua	273
Preparation for U.S. to Sweden Flight.	273
Caterpillar Club a Growing Organization	274 - 276
Photographic Survey of Landing Fields in Panama	276
A New Sort of Trophy in the Air Corps.	276
Retirement of Sergeant Harry Jowett	276 - 277
West Point Cadets Fly in Bombardment Planes	277
Pistol Shooting in the Panama Canal Zone.	277
Chief of Staff Inspects the Boston Airport.	277
Departure of Major Arnold from Marshall Field	277 - 278
Pursuiters in Philippines Handy with the Pistol	278
Mapping Operations in the Philippines	278
No Place Like the Good Old U.S.A.	278
Photographing Some Rough Scenery in Philippines	279
Two More Members Join the Caterpillar Club.	279
Gunnery Expedition of Advanced Flying School Students	279 - 280
Rest Room for Aviators at the Carlton Hotel	280
Airmen Swim Through Shark-Infested Waters	280
Two New Airports Dedicated in California.	280
Radio Experiments on Airships	281
Ford Reliability Tourists Visit San Antonio	281 - 282
Air Corps Technical Construction and Housing.	282
Parachute Jumping at March Field.	282
Development of Safety Devices for Flying.	283 - 284
Army Pilot Has Strenuous Flight Through Storm	284
Aviation Information Bureau at Little Rock, Ark.	284
War Department Orders Affecting Air Corps Officers.	284 - 285
Chanute Field May Be Air Mail Terminal.	285
Secretary Davison Pays Brief Visit to Chanute Field	285
R.O.T.C. Students in Training at Crissy Field	285
New Hangar for National Guard Airmen at Cleveland	285
Cartoon	286
Accommodations for Officers at Santa Monica, Cal.	286
Notes from Air Corps Fields	287

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel of the Regular Army, Reserve Corps, National Guard and others connected with aviation.

---oOo---

MAPS TO AID IN AIR NAVIGATION ✓

By A.M. Jacobs

Our first acquaintance with maps is usually in the elementary schools, when they are mysterious highly colored affairs from which we must learn things almost beyond comprehension. No one breathes to us then that the earth as it appears in the flat picturizations in our geographies is not actually as presented there. If they did, we'd probably lose a faith, none too well established, in education without more ado and forswear it forever -- if we only could.

It is usually later, when a Lindbergh in flying from New York to Paris goes north, touching Newfoundland, then drops south, touching Paris, and tells us that he is flying the straightest line that can be drawn between the two points, that we begin to worry. Then we get out the old globe and stretching a bit of tape tightly across from New York to Paris find it strangely true. The impossibility of presenting accurately a curved surface on a plane surface, which has been parrot information all our lives, begins to possess reality and meaning, and since it isn't a matter of education or even of anyone's caring whether we know anything about them or not, we inadvertently pick up an interest in maps.

Maps! There are more kinds and of greater variety than we ever dreamed. We stumble across some ancient ones, drawn up before Columbus apprised the world that it was round. Flat maps could have been studied by the children without deceit in those days of a flat earth -- if there had been schools, of course. And as late as 1507, America was tacked on to eastern Asia by the chart makers, only gradually being shoved off, first by a narrow strait and finally by an ocean.

We become familiar with the word "projections". Once the world has become round, it can be presented on a flat surface only by projections from the globe, for the flat surface can touch the globe but at one point, of course. Mercator, we learn, got around this fact by wrapping a piece of paper about the globe in the form of a cylinder, touching at the equator and making projections for all points north and south. The parallels and meridians were at right angles to each other. The result is a map of such accuracy for all central parts of the earth, that is above and below the equator, that it is used today almost entirely for marine navigation. Approaching the top and bottom of the earth, however, since the longitudinal lines keep inhospitably parallel on the flat Mercator map, not drawing together as they actually would toward the poles, distortions are pronounced, and, except to present a general idea of the earth's topography, it is practically useless.

There are many other projections; the Polyconic, the Great Circle, the Stereoscopic, etc. In that some of them are good for some things, some good for others, but none of them perfect in all respects, they are strangely like people. Some show the countries as long, thin areas, others as short fat ones, as people are distorted in certain types of mirrors. All, however, are accurate and serviceable for the purpose for which they are plotted, which is to show either the distance, area, direction, or shape of the earth, or a given part of it. One, sometimes two of these properties can be authentically given on a plane surface, but never all of them for any great portion of the sphere.

It was some time before the over-ocean flights of last summer that we began to hear of the Great Circle course in connection with flying, but it is only since long flights have become the order of the day that the problem of air navigation has been acknowledged of the foremost aviation importance. And it was in connection with this air navigation problem that the radio beacon came into existence. The radio beacon supplies directional guidance for a flyer journeying away from or toward the transmitting beacon tower. The radio waves naturally follow the shortest distance between the beacon tower and the point for which they have been set. In other words, they travel the Great Circle

course. So that flying by the beacon signals, the pilot is relieved of the worry of maps or compasses. To obtain for him however this surety of navigation, the beacon waves must have been set to travel in exactly the proper direction. And to get this correct angle of setting has been rather a difficult thing with the maps at hand. Existing great circle projections which give accurate beacon paths do not give accurate longitude and latitude angles from which to obtain settings for those paths.

This explains the appearance of a new map, the work of Bradley Jones and R.K. Stout of the Instrument and Navigation Unit of the Materiel Division, and "equi-distant zenithal projection" which as the name implies is a projection on a flat surface of points taken as from a zenith above Wright Field. From the angles on this map, the radio engineer can get the correct angle for directional setting for any point within 1000 miles of the Wright Field radio beacon, whether it be Fort Crook, Nebraska, Bellfonte, Pa., or Oscoda, Michigan. This type of map, it is thought, will be an extremely useful adjunct to directional radio guidance, and like ones will no doubt be charted for the new radio beacon units being established by the Department of Commerce.

---oOo---

FIRST GRADUATING CLASS FROM MARCH FIELD

The first class of Flying Cadets to complete the eight months' course at the Primary Flying School at March Field, Riverside, Calif., graduated on June 28th. The 29 students who successfully completed the course were sent to the Advanced Flying School at Kelly Field, San Antonio, Texas.

The graduation exercises opened with an aerial review led by the graduating class. The presentation of diplomas was held in the Officers' Club immediately following the review.

---oOo---

MARCH FIELD FLYING CADETS STAGE AIR MEET

An airplane field meet for the upper class of flying cadets was held at March Field, Riverside, Calif., on July 13th. The class was divided into eight teams of eight men each, with a commissioned officer as coach. The events participated in consisted of: Hurdles; Combination; Turn on Pylon; Small Field Landing; Message Dropping; Race over Triangular Course and Relay Race.

Major M. F. Harmon, 1st Lieuts. R.C.W. Blessley and Morton H. McKinnon acted as judges; 1st Lieuts. Fred C. Nelson and Y. A. Pitts were umpires, and 1st Lieut. D. W. Norwood acted as Field Marshall.

Reporting at the March Field Primary Flying School for the July 1, 1928, Class, were 123 embryo pilots. The first two weeks of the school term was taken up with the various physical and orientator tests. Actual training started on July 16th.

---oOo---

GENERAL LASSITER INSPECTS KINDLEY FIELD

The outstanding event of the month at Kindley Field, Fort Mills, P.I., was the visit to Corregidor, on May 23rd, via amphibian plane, of Major-General William Lassiter, U.S. Army, the new Department Commander, who arrived in the Philippine Islands on the April transport. Three amphibians, piloted by Lieuts. Meloy, Hodges and Watkins, Air Corps, were flown in formation to Camp Nichols, where General Lassiter, his aide and Major W.G. Kilner were picked up. General Hatch, commanding the Harbor Defenses of Manila and Subic Bays, met General Lassiter at Kindley Field and accompanied him throughout his inspection tour.

---oOo---

WAR DEPARTMENT THEATRE AT MARCH FIELD WELL PATRONIZED

The interest evinced in the entertainment offered by the War Department Theatre at March Field, Calif., was indicated by statistics submitted for the Annual Report. A total of 36,377 paid admissions during the period Sept. 1 to June 30th for 153 shows is ample evidence of the high quality of entertainment offered. Fanchon and Marco recently completed arrangements for the showing of their Varieties one night a week.

A LITTLE NEWS FROM THE MARINES IN NICARAGUA

A new correspondent has joined the ranks of contributors to the News Letter. He hails from an entirely unexpected locality -- Managua, Nicaragua, where Uncle Sam's Marines manage to keep warm, and how? Our correspondent has cautioned us not to mention his name, and to keep on his good side his wishes will be respected. His sole topic of conversation in this first contribution centers around 1st Lieut. Pardoe Martin from France Field, Panama Canal Zone and several former members of the Air Corps, and he goes on to say:

"As our guest as observer for the Army in our pacification of our "Little Brown Brothers", it might be of interest to your publication to get a line on Mr. Martin.

"Sixty-seven hours and 45 minutes, only one hour and 10 minutes of which is observer time, is Lieut. Martin's flying time for his first month in Nicaragua. Landing with the squadrons on the 15th of May, he has been muchly "up in the air" during his short stay here.

"Not being one of the "International Police", he is a non-combatant and is not permitted to carry bombs or loaded guns on his plane, but he has flown on many fighting plane missions as an escort and is getting an eyeful of information on the methods and tactics as used in coping with Sandino and his brush-jungle guerrillas. "Under the wing" of our Commanding Officer, Major Ross E. Rowell, Mr. Martin has undergone a thorough indoctrination by actual application and has proved himself a very apt pupil, indeed. To date he has flown two independent missions to the Honduran border without escort, and is making himself "handy" wherever possible.

"Though he does not get to actually participate in our little 'racket' with Sandino, his tennis racquet has won him the undisputed championship of Nicaragua, and he has met with some stiff opposition. At re-call every day, the rainy season permitting, he is off for the courts of the Tropical Radio or the Campo de Marte and plays until dark, taking on all comers. It has been said that the lieutenant even rises early in the morning and practices his Tilden 'twists' and kills 'wallops'.

"Lieut. Martin's pleasing personality has made him friends with all the officers and enlisted men in Marine aviation, and the Army Air Corps is to be congratulated on its pick of Lieut. Martin.

"On his arrival here he found that some of his old charges from Brooks Field, San Antonio, Texas, had strayed from the fold and were glad to see him. Mr. Martin was Adjutant at Brooks Field when the writer was a cadet in the Primary Flying School, with Colonel Lindbergh as a classmate. We had to get some connection with Lindbergh in this 'yarn'.

"Gunnery Sergeant Morris Kurts was one time mess sergeant in the old Attack Group at Kelly Field. Sergeant Bob Wence, whose heroic climbing out on the ~~tail~~ the Fokker over the Caribbean and fixing an oil line on the flight from the States recently, is an ex-Army 'bird' from Kelly Field. PFC Martin Kolbe, an ex-sergeant from the 47th Squadron, Brooks Field, is in charge of the machine shop here, with only a year in the Corps.

"Sergeant Carl Long, who is now in Pensacola taking flight training, did a few months at Kelly Field in the 62nd Squadron, and PFC Charles J. Long, one time 'pill-roller' at the field hospital at Brooks Field, is now rolling acetylene gas drums here in this welding shop. Sergeant Laurens Claude, once a 1st Lieutenant at Brooks Field and one of the Marine Corps leading Naval Aviation Pilots, is a member of VO6-M. Claude recently did a 'chop chop' with the Leathernecked Flyers in China, coming here last month.

"So you can see for yourself that your Mr. Martin does not get lonesome for someone to 'shoot' the 'Old Army breeze' with."

And now, having concluded the broadcasting, there will be a pause until our muchly welcomed contributor from the ranks of the "Leathernecks" goes on the air again which, it is hoped, will be soon.

---oOo---

PREPARATION FOR U.S. TO SWEDEN FLIGHT

Mr. Parker D. Cramer, Divisional Inspector, of the Aeronautics Branch of the Department of Commerce, was a recent visitor at the San Antonio Air Depot and called on the Commanding Officer to discuss various matters of aeronautical interest. Mr. Cramer arrived in San Antonio by air, accompanied by Mr. Bert Hassell, of Rockford, Illinois, pilot, who expects to fly his Stinson-Detroit monoplane, "Greater Rockford", on a Transatlantic Flight from Rockford, Ill., to Stockholm, Sweden, in the near future. Mr. Cramer and Mr. Hassell departed from San Antonio the following day making a non-stop flight in this plane from San Antonio to Los Angeles, Cal., the same day, preparatory to putting the plane through tests prior to the flight to Stockholm.

✓
CATERPILLAR CLUB A GROWING ORGANIZATION

Membership in that exclusive organization, called the "Caterpillar Club", continues to increase by leaps and bounds. As a matter of fact, however, it is bound to increase by "leaps". The growth of this organization is naturally to be expected, for accidents are destined to happen, regardless of the mode of transportation used.

It is safe to say that in most cases accidents are due to the human element involved. The automobile driver has a careless moment; the track-walker overlooks a faulty rail; one of those rare mix-ups occurs with regard to sidetracking the local train for the fast express; the airplane pilot does something in an unguarded moment contrary to all rules of flying or takes unwarranted risks in flying under unfavorable weather conditions.

While Army Air Corps regulations require every occupant of an Army plane to wear the parachute, no one relishes the thought of being compelled to make use of it. In the extreme emergency, however, the parachute is a mighty handy piece of equipment to have around. In fact, it is the only means at hand which gives the man in the air whose life is imperiled a chance to reach the ground safely. As an aerial life preserver the parachute is well worth the time and effort expended in its development.

At this writing, as far as known, a total of 87 candidates were duly initiated into the mysteries of the mythical Caterpillar Club and declared members in good standing. The number of life-saving parachute jumps made, however, total 92. The man who is foremost in aeronautical circles in this country, if not the entire world, Colonel Charles A. Lindbergh, is also the most outstanding member of the Caterpillar Club, for on no less than four occasions he used the parachute to save his life. Captain Frank O'D Hunter, Air Corps, is a second degree member of the club, as was also the late Lieut. Eugene H. Barksdale, both of these officers jumping twice.

Over five years have passed since the first emergency jump with a parachute from an airplane was made by Lieut. Harold R. Harris, then an Air Corps officer and now engaged in commercial aviation. This jump was made on October 20, 1922. The first time an Army type parachute was utilized in the extreme emergency in this country was on August 24, 1920, but in this instance the jump, made by Mr. O'Connor, was premeditated, and the Army chute was used by him when his own privately manufactured chute failed to function.

In addition to Mr. O'Connor, the parachute saved 2 lives in 1922, 10 in 1924, 13 in 1925, 16 in 1926, 35 in 1927 and 15 thus far this year, total 92. It is by no means certain that the figures given above are correct. While it is possible to keep an accurate check on the parachute jumps made in the military and naval air services, no reliable tab can be kept on those made by commercial and private flyers. The roster of the membership of the Caterpillar Club is given below. Anyone knowing of emergency jumps made which are not included in this list will confer a favor upon the Air Corps Information Division by sending in the necessary facts, since it is desired to maintain as complete a roster of the Caterpillar Club as possible.

MEMBERSHIP OF THE CATERPILLAR CLUB

<u>Date</u>	<u>Name</u>	<u>Rank</u>	<u>Place of Jump</u>
1920			
August 24	William O'Connor	Civilian	McCook Field, Dayton, Ohio
1922			
October 20	Harold R. Harris	1st Lt. Air Corps	McCook Field, Dayton, Ohio
November 11	Frank B. Tyndall	1st Lieut. Air Corps	Seattle, Washington.
1924			
April 23	Mr. Bottonfield	Civilian	Kelly Field, Texas.
May 13	Eugene H. Barksdale	1st Lt. Air Corps	Fairfield, Ohio.
June 5	W. W. White	2nd Lt. Air Corps	Kelly Field, Texas.
June 13	Walter Lees	Lieut. A.C. Reserve	Dayton, Ohio.
June 18	John A. Macready	1st Lt. Air Corps	Dayton, Ohio.
July 11	A. R. Crawford	2nd Lt. Air Corps	Kelly Field, Texas.
August 29	L. L. Koontz)	1st Lt. Air Corps	Bolling Field, D.C.
	W. E. Coggin)	Private, Air Corps	Bolling Field, D.C.
October 16	W. M. Coles	Gunner, U.S. Navy	Coronado, Calif.
November 4	W. E. Lynd	Captain, Air Corps	Kelly Field, Texas.

<u>Date</u>	<u>Name</u>	<u>Rank</u>	<u>Place of Jump</u>
1925			
March 5	C. D. McAllister	2nd Lt. Air Corps	Kelly Field, Texas.
March 5	Charles A. Lindbergh	Cadet, Air Corps	Kelly Field, Texas.
March 20	Frank O'D. Hunter	1st Lt. Air Corps	Dayton, Ohio.
April 6	C. V. Mix	Sgt. Marine Corps	Quantico, Va.
April 10	J. Thad Johnson	1st Lt. Air Corps	Eaglesmere, Penna.
May 22	C. H. Schildhauer	Lieut. U.S. Navy	Lakehurst, N.J.
June 2	Charles A. Lindbergh	2nd Lt. A.C. Reserve	St. Louis, Mo.
July	Mrs. Irece McFarland	Civilian	Cincinnati, Ohio.
August 17	Kirtley J. Gregg	2nd Lt. Air Corps	Lavernia, Texas.
October 1	F. O. Rogers	1st Lt. Marine Corps	Langley Field, Va.
October 10	Fred C. Nelson	1st Lt. Air Corps	St. Louis, Mo.
November 11	Leonard S. Flo)	2nd Lt. A.C. Res.	Wright Field, Ohio.
	John McGlynn)	Private, Air Corps	Wright Field, Ohio.
1926			
March 5	Frank O'D. Hunter	1st Lt. Air Corps	Selfridge Field, Mich.
March 24	E. H. Barksdale	1st Lt. Air Corps	McCook Field, Dayton, O.
May 10	Horace M. Hickam	Major, Air Corps	Langley Field, Va.
May 10	Harold Geiger	Major, Air Corps	Langley Field, Va.
June 2	S. E. Ingersoll	Lieut. U.S. Navy	Pensacola, Fla.
June 17	J. T. Hutchinson)	1st Lt. Air Corps	McCook Field, Dayton, O.
	Paul Stanley)	Civilian	McCook Field, Dayton, O.
July 5	Walter M. Williams)	Capt. Nat'l Guard	Nashville, Tenn.
	John W. MacKenzie)	2nd Lt. Nat'l Guard	Nashville, Tenn.
July 24	V. E. Bertrandias	1st Lt. Air Corps	Baltimore, Md.
August 8	John I. Moore	1st Lt. Air Corps	Austin, Texas.
Sept. 16	Charles A. Lindbergh	Air Mail Pilot	Ottawa, Illinois.
Sept. 17	C. L. Williams	1st Lt. Air Corps	Hawaii
November 3	Charles A. Lindbergh	Air Mail Pilot	Covell, Illinois.
November 12	Charles E. Widmer	Air Mail Pilot	Hollywood Hills, Calif.
December 23	Warren D. Williams	Air Mail Pilot	Bowling Green, Ohio.
1927			
January 18	Roderic M. Krider)	Cadet, Air Corps	Kelly Field, Texas.
	George T. Shlepper)	Cadet, Air Corps	Kelly Field, Texas.
February 3	Lawrence C. Craigie)	1st Lt. Air Corps	Brooks Field, Texas.
	Fabian L. Pratt)	Capt. Med. Corps	Brooks Field, Texas.
February 15	Carl G. Ashley	Private, Air Corps	Galveston, Texas.
February 27	Herbert A. Dargue)	Major, Air Corps	Buenos Aires, Argentina
	Ennis C. Whitehead)	1st Lt. Air Corps	Buenos Aires, Argentina
April 15	Stephen A. McClellan	Lt. Marine Corps	Bolling Field, D.C.
February 24	O. M. Darling	Lieut. U.S. Navy	San Diego, Calif.
March	E. B. Wilkins	Lieut. U.S. Navy	Augusta, Ga.
March	G. F. Lawhon	A.M.M., U.S. Navy	Augusta, Ga.
April 27	Stewart W. Towle	1st Lt. Air Corps	Champaign, Ill.
May 4	Hawthorne C. Gray	Capt., Air Corps	Scott Field, Ill.
May 13	George G. Finch,	1st Lt. Air Corps	Edwards, Miss.
May 28	Lewis H. Brereton)	Major, Air Corps	Reynoldsburgh, Ohio.
	B. A. Bridget)	2nd Lt. Air Corps	Reynoldsburgh, Ohio.
	Clyde M. Taylor,)	Master Sgt. A.C.	Reynoldsburgh, Ohio.
	Fred P. Miller)	Staff Sgt. Air Corps	Reynoldsburgh, Ohio.
June 20	Eldo Peterman)	1st Lt. Nat'l Guard	Los Angeles, Calif.
	H. J. Cooper)	Capt. Med. Corps	Los Angeles, Calif.
July 10	Art Smertz	Civilian	Salt Lake City, Utah.
July 13	C. B. Whitney)	Lieut. A.C. Reserve	Salt Lake City, Utah.
	Paul L. Woodruff)	Staff Sgt. A.C.	Salt Lake City, Utah.
July 15	Benj. W. Craycraft	ROTC Student	Chamute Field, Ill.
August 18	Robert G. Fry	Tech. Sgt. U.S.M.C.	Camp McMurray, China.
Sept. 16	Valentine Gephart	Civilian	Grampion, Pa.
October 5	A.H. Gilkeson	Major, Air Corps	Edgewood Arsenal, Md.
October 25	Frank C. Sutton	Lieut. U.S. Navy	San Diego, Calif.
October 27	J. D. Cleveland)	Cadet, Air Corps	Kelly Field, Texas.
	E. A. Sanborn)	Cadet, Air Corps	Kelly Field, Texas.
November 9	G. H. Stewart)	Lt. A.C. Reserve	Norfolk, Va.
	F.F. Miller)	Radio Operator	Norfolk, Va.
	J. T. Jewell)	Radio Machinist	Norfolk, Va.

<u>Date</u>	<u>Name</u>	<u>Rank</u>	<u>Place of Jump</u>
October 23	Charles R. Bowman	Civilian	
December 12 1928	George W. Hansen	Cadet, Air Corps	Brooks Field, Texas.
January 22	Gene Althoff	Civilian, A.C.	Dayton, Ohio.
February 15	Louis M. Bourne	Major, Marine Corps	Reidsville, Va.
March 27	Walter C. Greene	Lieut. USN Reserve	
March 27	Samuel G. Colwell	Lieut. USN Reserve	
April 6	Barnett T. Talbott	Lieut. U.S. Navy	Washington, D.C.
April 23	Douglas M. Swisher	Cadet, Air Corps	Kelly Field, Texas.
	Edward Dickson	Civilian	Dubuque, Iowa.
May 27	Al Wilson	Civilian	Hollywood, Calif.
May 25	Stanley Umstead	1st Lt. Air Corps	Mitchel Field, N.Y.
May	Lawrence J. Carr	1st Lt. Air Corps	Clark Field, D.I.
May 31	Carl K. Wollam	Civilian	Westmoreland City, O.
June 8	Maxwell Balfour)	1st Lt. Air Corps	Mitchel Field, N.Y.
	John A. McCormick)	1st Lt. Sig. Corps	Mitchel Field, N.Y.
June 28	Lemuel T. Cleaves	Ensign, U.S. Navy	
July 2	William L. Campbell	Capt. A.C. Reserve	Kansas City, Mo.

As far as known, there are at present 80 living members of the Caterpillar Club, five of its members having died in subsequent airplane accidents, viz: Sgt. Mix, Lieuts. J. Thad Johnson, E.H. Barksdale, C.L. Williams, Major Harold Geiger, one, Lieut. John W. MacKenzie, succumbing several days after his jump due to severe burns received when the plane in which he was a passenger caught fire in the air, and one, Captain Hawthorne C. Gray, meeting an untimely end during a free balloon altitude flight when he ascended higher than any human being.

---oOo---

PHOTOGRAPHIC SURVEY OF LANDING FIELDS IN PANAMA ✓

Lieut. George C. McDonald, with Staff Sergeant George W. Edwards as photographer, and Lieut. Robert B. Williams as accompanying pilot, all of the Air Corps, and stationed at France Field, Panama Canal Zone, are engaged in making a photographic survey of all Panamanian landing fields, standard and potential. This project calls for a mosaic map and oblique photographs of each field, taken with a plane on the ground to indicate the best landing area, and the size of the area by comparison with the plane.

The frequent storms prevalent during the "wet season", which is now in full swing, are a great hindrance to the execution of these missions, but the work is progressing favorably in spite of climatic obstacles.

---oOo---

A NEW SORT OF TROPHY IN THE AIR CORPS ✓

Recommendations have been made to the proper authorities; according to the News Letter Correspondent from France Field, Panama Canal Zone, for the transfer of the "fur-lined gaboon", last held by Major Paul Bock for landing an amphibian plane on the airdrome with the wheels up, to 1st Lieut. Clarence Welch. No definite information is at hand indicating the exact nature of this trophy, decoration, prize, or what have you, but we have our suspicions.

Lieut. Welch won the right to the custody of the sacred treasure by going up on a radio mission and trying to tune in his set, equipped with only an ordinary helmet. His remarks as he landed were to the effect that he had at last found a way to absolutely wash out spark-plug interference. He stated that the set was the quietest he had ever heard. The transfer of the coveted trophy will be accomplished with the usual ceremonies.

---oOo---

RETIREMENT OF SERGEANT HARRY JOWETT

Members of the 7th Observation Squadron, France Field, Panama Canal Zone, bemoan the loss of First Sergeant Harry Jowett who is about to go on the retired list. The News Letter Correspondent states: "For thirty years he (Sergeant Jowett) has given his best to the Army, and he has honorably won the right to

rest. His retirement will cause a hole in the outfit that will be hard to fill. By his untiring efforts and efficient work he has set a standard for the other Noncommissioned Officers to follow. The organization wishes him long life and happiness, and will always remember him with pride."

----oOo----

WEST POINT CADETS FLY IN BOMBARDMENT PLANES

During two weeks in the month of June, 300 West Point Cadets reported for training in Bombardment planes at Langley Field, Va. These missions were flown successfully.

During the second week of the stay of the Cadets at Langley, a number of flights were made by personnel of the 19th Airship Company for the purpose of demonstrating to them lighter-than-air aviation. Previous to the flights, Capt. Charles P. Clark took the cadets through the hangars and shops, explaining the functions of the various departments. The News Letter Correspondent expresses the hope that the Cadets will be back again next year.

----oOo----

PISTOL SHOOTING IN THE PANAMA CANAL ZONE ✓

In a pistol match recently held at France Field, Panama Canal Zone, and in which eight teams competed, the France Field Pistol Team, composed of Lieuts. Crocker and Williams, Sergeants Sorenson and Lucy, and Private Kerner, drew second place. The scores of the contestants follow.

<u>Team</u>	<u>Score</u>
Cristobal Gun Club	472.6
France Field	468.63
Submarine Base	458.12
Balboa Gun Club	464.2
Balboa Police	463.71
Cristobal Police	459.55
2nd Field Artillery	458.18
Fort Davis	458.12

The individual high scores go to Lieut. Jones, Fort Davis, C.Z., with an average of 98.23; Mr. Girkout, Cristobal Gun Club, with 98.13; and Lieut. Crocker, France Field, with 97.73. The match was considered to be the best ever held on the Isthmus of Panama.

----oOo----

CHIEF OF STAFF INSPECTS THE BOSTON AIRPORT

General Summerall, Chief of Staff, U.S. Army, recently paid a visit to Boston and with General Preston Brown and Lieut. Donald G. Duke inspected personnel, buildings and equipment. General Summerall was much pleased and somewhat surprised at the amount of work being accomplished at the Airport with such a limited number of men.

According to the News Letter Correspondent, the General was, however, not so elated about the congested condition of the flying area, which is really too small considering the number of ships flying from the Airport. There are between 40 and 50 planes at the field, besides many visiting planes every day. General Summerall stated that great credit is due the Commanding Officer and Army personnel on duty at the Boston Airport, upon whom falls the responsibility for safeguarding the operations of all these airplanes and for the efficiency he noted in the safe flying and few accidents under such conditions in a small and cramped area.

----oOo----

DEPARTURE OF MAJOR ARNOLD FROM MARSHALL FIELD

A great deal of regret has been expressed at Marshall Field, Fort Riley, Kansas, from all quarters due to the departure of Major E.H. Arnold, who has been in command of the 16th Observation Squadron since April, 1926. Says the News Letter Correspondent - "We believe it is safe to say that Major Arnold has built up the Squadron to such a point that the efficiency is nowhere surpassed, and probably not equalled by any other squadron in the country. We hope, however,

to see the Major often, since he will be stationed at Fort Leavenworth, Kansas, for one year with the General Staff School.

---oOo---

PURSUITERS IN PHILIPPINES HANDY WITH THE PISTOL

The 3rd Pursuit Squadron, stationed at Clark Field, Camp Stotsenburg, P.I., finished the dismounted pistol course with an excellent record, due largely to the patience of Lieut. Crawford, the instructor. With a total enlisted strength of 117 men, 113 fired the course without interference with other activities. The qualification order shows that 39 made expert, 28 sharpshooter and 37 marksman; total qualifying, 104. "This record," says the News Letter Correspondent, "is typical of the way our men go after everything they do. Since about a year ago when we put manually operated water release valves on our PW's, we have not had a forced landing. Considering the fact that every officer takes the air every morning, except Sunday, this is the kind of a record that gives a pilot confidence in his ship and crew."

---oOo---

MAPPING OPERATIONS IN THE PHILIPPINES

The 6th Photo Section, Air Corps, completed a large mapping project of the northeastern coast of Luzon during the month of May. Two DH planes and one Martin Bomber took off from Camp Nichols, Rizal, P.I., at 9:00 a.m., May 2nd, and arrived at Aparri at 12:15 p.m. The personnel were as follows: Lieuts. Goddard and Wells, Master Sergeant Kelly, pilots; Technical Sergeant Stockwell and Staff Sergeant Patterson, photographers; Corporal Budsinski and Private Covington, mechanics. Mr. LaVoy, of the Pathe News, accompanied the expedition, and Mr. Yost, of the Bureau of Lands, joined them at Aparri.

Clouds hung over the mountains continually which tended to retard the progress of the work to a considerable extent. Lieuts. Goddard and Wells, flying the photo planes, mapped approximately 3,000 square miles of the northeast coast and vicinity. Mr. LaVoy obtained some valuable air and ground movies.

After returning from a three-hour flight with Master Sergeant Kelly in the Martin Bomber, Mr. Yost stated that he had seen more of this territory than he would see in fifteen years of normal observation.

The expedition returned May 15th, and a good lot of tropical experience was had by all. One of the most difficult operations experienced was taking a shower bath with a tomato can.

---oOo---

NO PLACE LIKE THE GOOD OLD U.S.A.

The little bit of interesting information comes to us that Mess Sergeant Wirth, Air Corps, a member of the 4th Composite Group Detachment, stationed at Camp Nichols, Philippine Islands, has applied for transfer to the States after fifteen years in the Philippines. Our Correspondent asks - "What is the matter, Sergeant, are you getting homesick?"

Let's see: 15 years ago was back in the good old days. What a flood of pleasant recollections they bring to mind! Traffic cops were practically non-existent; the workman carried his dinner pail to his place of toil - now he drives his car; Walter Johnson, Tris Speaker and Ty Cobb were in their prime; free lunch counters were liberally patronized; that American institution, the hot dog, only set one back a jitney; staying up until the wee hours of the morning to tune in distance through a lot of static was undreamed of; Lindbergh was probably playing leap frog with his kid playmates on the back lot; it didn't require a year's savings to spend two or three days at an ocean resort - but why go on?

We can imagine the Sergeant exclaiming, upon touching his native soil again, "My! How things have changed! Not being personally acquainted with him, however we don't know whether some of the words of that once popular song "He walked right in, turned around and walked right out again," would apply in his case.

On the other hand, however, fifteen years from now we may be, if we live that long, look back on the good old days of the present.

PHOTOGRAPHING SOME ROUGH SCENERY IN PHILIPPINES ✓

For the purpose of photographing the rough and unexplored region in the vicinity of Casiguran Bay, Island of Luzon, P. I., three amphibians, with Lieuts. Goddard and Wells, of Camp Nichols, and Lieuts. Watkins, Patrick, Technical Sgt. Lee and Private Nichols, of Kindley Field, took off from Camp Nichols recently. The course was east over the mountains to the coast, thence north along the coast line to the objective, where a landing was made in the Bay. While floating in the Bay, awaiting the arrival of the boat which was to be the headquarters for Lieuts. Goddard and Wells, the party was entertained by the continuous chatter of monkeys from the forest that skirted the shore. Lieut. Goddard did his best to reply in their native language, and it was quite a monkey business.

Lunch was had aboard the boat, and the two planes piloted by Lieuts. Watkins and Patrick returned to Corregidor. Heavy rains around Polilio Island necessitated a change in course involving sixty miles above rough mountainous country. The mountains are precipitous, densely wooded and of about 4,000 feet altitude. Landslides and other evidences of earthquakes were clearly visible.

Lieut. Patrick had the thrill of his life when just over the divide his motor cut out intermittently and continued to grow worse. He landed at Nichols with a sigh of relief to find both heads full of oil and one connection loose. Vince Meloy's description of the same country, from his own prior experience, cannot be printed.

---oOo---

TWO MORE MEMBERS JOIN THE CATERPILLAR CLUB ✓

Elsewhere in this issue of the News Letter there appears an article on the Caterpillar Club, wherein a tabulation is included of the membership of this organization of airmen who owe their lives to the efficiency of the parachute. Since this article was mimeographed word has come that two more flyers were "let down easy" from plane to ground.

While flying cross-country near San Juan Capistrano, Calif., Flying Cadet William R. Shephard, undergoing training at the Primary Flying School at March Field, Riverside, Calif., encountered dense fog between two high mountain ranges. With no visible way of getting out, he decided to let his DH continue the trip by itself. Stepping over the side of the cockpit, he pulled the rip cord of his chute and made a safe landing from an altitude of 400 feet.

On July 19th Flight Lieut. E. E. Ewen, of the Naval Air Station, Pensacola, Fla., was saved from death by his parachute when he leaped from his Curtiss Hawk plane, after its tail controls had been carried away in a collision with a plane piloted by Lieut. T. J. McQuade, of the U. S. Marine Corps. The planes were flying in formation maneuvers. Lieut. Ewen landed safely a half mile from where his plane crashed in the Frisco Railway yards. Lieut. McQuade's plane was not damaged, and he landed safely at Corry Field.

The score at this writing is 94 life-saving jumps and 89 lives saved, five jumps being repeaters.

---oOo---

GUNNERY EXPEDITION OF ADVANCED FLYING SCHOOL STUDENTS ✓

Under the command of Major Clarence L. Tinker, Air Corps, 23 permanent officers, 28 student officers and 27 Flying Cadets left Kelly Field recently for the gunnery expedition at Fort Crockett, Galveston, Texas, held every four months.

Although three weeks were the contemplated duration of the expedition, most of the work was accomplished within two weeks, and everyone but the bombardment instructors and student personnel returned to Kelly Field after a stay of 14 days.

On the third day of ground target firing, an enlisted man who was working on a ground target was shot in the leg by Cadet Pirtle. The latter failed to observe that the red flag was up and dived upon the target. He had fired seven shots before he saw that the range was closed for firing. The victim of the accident was shot just above the ankle, the bullet breaking both bones of his leg. He was brought to San Antonio the following day in the airplane ambulance and is now rapidly recovering.

The Pursuit Section of the Gunnery Expedition suffered the loss of two of

their AT-4's when Cadet Brown pulled up from a target and cut the tail off Lt. Tull's plane. Fortunately, both planes were near the ground when the accident occurred. Tull's plane, out of control, turned over on its back and crashed into the ground. Brown's ship fell into the ground on a wing. The wing took the shock and Brown was only slightly injured. Tull, however, was seriously injured, and for some time there was doubt as to his recovery. He is at this time out of danger and will graduate with his class.

---oOo---

REST ROOM FOR AVIATORS AT THE CARLTON HOTEL ✓

For the convenience of Army and Navy aviation officers visiting Washington, the Carlton Hotel at 16th and K Streets, N.W., has equipped two rooms at the hotel as rest rooms. One of these rooms is to be equipped with chairs, lounges, reading material, weather maps and other aeronautical data. The other room will be equipped as a writing room. The Carlton Hotel has extended an invitation to all visiting Air Corps officers to make this place their headquarters while in Washington. This will make an excellent place for officers, when in town for only a day or two, to meet their friends and transact their business. There will also be bathrooms for the use of officers desiring to change their clothes.

In addition to this, the Carlton Hotel has offered a 25% discount on rooms for officers. Under this arrangement, rooms with bath may be obtained from \$4.25 up.

All Air Corps officers desiring to take advantage of this opportunity, should present their identification cards. These have been sent out to all Air Corps officers by the Carlton Hotel. In the event that any officer has not received his card, application therefor should be made to Mr. Clem W. Gerson, Manager, Carlton Hotel, 16th and K Streets, N.W., Washington, D.C.

---oOo---

AIRMEN SWIM THROUGH SHARK-INFESTED WATERS ✓

Lieuts. Watkins and Technical Sergeant James Lee, pilots, with Captain White and Lieut. Park Holland, recently left Kindley Field, Fort Mills, P.I., via amphibians, for Culion and Mindoro. Dr. Wade, Laboratory Chief of Culion, and Dr. Victor Heiser, Far Eastern Representative of the Rockefeller Foundation, filled the vacant seats. After a two-hour trip the Island of Culion came into view.

The Leper Colony being duly inspected and the luncheon provided by Dr. Wade demolished, a fishing trip was planned, but a superabundance of water in the hull of Lieut. Watkins' plane changed the plans. After taking aboard a thirty-pound Tanguini and leaving Dr. Wade at Culion, the party shoved off for Mindoro. Dodging rainstorms, Lieut. Watkins, with Dr. Heiser and Captain White, made a landing on Sinclair Field at Mindoro. Sergeant Lee and Lieut. Holland were not so lucky, however, for they came to rest as darkness fell, just off St. Augustine Beach, without gas. They claim that swimming 150 yards in the dark through shark-infested waters has a thrill all its own. At 10:00 p.m., clad in BVD's, they joined the rest of the party some miles away for a late dinner. Next day, after some stirring events culminating in the pumping of a ton of water from the anchored ship, a quick return was made to Corregidor.

---oOo---

TWO NEW AIRPORTS DEDICATED IN CALIFORNIA. ✓

A formation of planes, with Lieuts. Chandler, Pitts, Lawrence and Davies, of March Field, Riverside, Calif., as pilots, flew to Brawley, Calif., recently to participate in the dedication of a new airport at that city. Another formation from March Field, with Captain Davidson and Lieuts. Kincaid, Hornsby and Patrick as pilots, assisted in the opening of the new airport at Bakersfield, Calif.

Captain Quinn and Lieuts. Liggett and Henry were members from March Field who participated in an aerial exhibition at Crissy Field, Presidio of San Francisco, Calif., for the benefit of the Army Relief Association.

RADIO EXPERIMENTS ON AIRSHIPS ✓
By Scott Field Correspondent.

Radio experiments on airships during the past year have met with considerable success. Previous experience with Signal Corps sets demonstrated the feasibility of excellent transmission, but no results were obtained for reception, the principal trouble being interference caused by the motor ignition. During the past year, however, with the cooperation of the local Atwater Kent representatives, the Brown-Hall Supply Company, satisfactory results were obtained in reception aboard airships with an Atwater-Kent, Model 50, shielded seven tube set. The installation in its present form is crude, but it has proven very satisfactory.

Some of the troubles which were encountered in the first experiments were traced out, and it was discovered that by the use of a ten-foot counterpoise and 100 to 125 feet of aerial trailing from opposite sides of the ship and insulated from the ship by means of rubber mats, practically all of the interference from the motor ignition was eliminated.

The airship had been fairly bonded before the experiments were made, and a Navy Type reel with a special bracket to fasten the reels to the side of the ship was used, but interference was picked up through the wood of the ship and the reel and brought into the set. This interference was eliminated by insulating the bracket from the wooden side of the car by a rubber mat. The set and batteries were placed in one container and suspended from the sides of the ship by shock absorbers. Further vibration of the tubes was prevented by the use of caps with kapok pads surrounding each group of tubes. Practically all of the experiments were conducted on the TC type of ship and no attempt was made to transmit from the local station until the principal difficulties of reception were eradicated. With the use of ear phones commercial broadcast was received from Cincinnati, Chicago, Des Moines and other stations of equal distance during afternoon flights. The most distant stations came in very powerfully. Later on communication was established from the ground to the ship with the use of the SCR 134, and perfect reception was experienced. The head phones were placed on the altitude pilot's head and the ship controlled without a single failure and with no repetition of orders from the radio laboratory on the field.

The set was also used on the semi-rigid airship, RS-1, with a loud speaker and operated in conjunction with an SCR-134. Communication was established and conducted for three or four hours on one flight and no trouble was experienced by members of the crew in the control cabin in hearing every word broadcasted from the station. The reception at the station was very satisfactory also.

Further experiments are contemplated along these lines and refinement of the installation will be effected principally to cut down the weight involved. Experiments to be conducted in the future will determine the practicability of the set for use in tactical work.

It is also proposed to experiment with the standard Signal Corps sets and apply the results of our experiments with the Atwater Kent sets with the hope of eradicating some of the present difficulties now experienced in the use of standard Signal Corps equipment.

The conclusions reached at present indicate that a shielded set is most desirable and that the use of counterpoise, rather than a ground which has been used previously will give more satisfactory results.

The hearty and willing cooperation of the Atwater Kent representatives and engineers have contributed largely to the success of the experiments.

---oOo---

FORD RELIABILITY TOURISTS VISIT SAN ANTONIO

Saturday afternoon, July 7th, marked the arrival at Winburn Field, the municipal airport of San Antonio, of the contestants in the National Air Tour (the Ford Reliability Tour). Saturday and Sunday were gala days for aviation in San Antonio, the populace turning out in crowds to give these redoubtable flyers an enthusiastic and demonstrative welcome during their stop at the Alamo City. The San Antonio Air Depot is glad to have been of such assistance as was possible for it to extend in connection with this event. Among other officers representing the military, on the official Reception Committee which greeted the Tour, was the Commanding Officer at the Depot, Lieutenant-Colonel Mars. On the fore-

noon of Saturday, the 7th, Lieut. Frank B. Tyndall, A.C., of Langley Field, participating in the Tour in an Army Fokker Tri-motored Monoplane, notified the San Antonio Depot by wire of his requirement of several items of equipment and repair for his plane. As he arrived late Saturday afternoon, this necessitated rapid action and special overtime effort on the part of the Depot (being a civilian Post). On Sunday morning, a special force of Depot personnel swung into the job and completed it, so that on Monday morning, the 9th, Lieut. Tyndall was enabled to continue on the Tour in due time.

---oOo---

AIR CORPS TECHNICAL CONSTRUCTION AND HOUSING

A total sum of \$4,144,000 is at present available, \$1,300,000 from Fiscal Year 1928 appropriations and \$2,844,000 from Fiscal Year 1929 appropriations for the construction of barracks and quarters, warehouses, hangars, shops, etc., at seven Air Corps fields. The allotment of funds for construction work at March Field, Riverside, Calif., exceeds that of any for the other fields. Contracts have already been placed for the construction at this field of 7 hangars, warehouses and shop buildings; two double barracks for 600 men each; four sets of field officers' quarters; thirty-two company officers' quarters and thirty-six garages. Bids on the remaining officers' quarters will be advertised at a later date. The construction at March Field will be of stucco and tile type of architecture so popular and satisfactory in that part of the country. The work is to be undertaken in the early part of July and will be completed during the Fiscal Year 1929.

Although funds are available to undertake the construction work at Bolling field, D.C., no work will be started pending the acquisition of a new site.

The construction work contemplated for Rockwell Field, Coronado, Calif., will conform in general with the type of permanent construction now existing at that post.

The construction scheduled at Selfridge Field, Mt. Clemens, Mich., and Mitchel Field, Long Island, New York, will follow in general the type of permanent construction completed or in process of completion at these places.

Items making up the total sum of \$4,144,000, referred to above, are listed below, as follows:

<u>March Field, Calif:</u>		<u>Selfridge Field, Mich.:</u>	
2 Barracks of 300 men each	\$550,000	5 sets Officers Quarters	72,000
60 sets officers' quarters	750,000	Hospital	100,000
Photographic laboratory	36,000	6 Hangars	237,000
<u>Bolling Field, D.C.:</u>		1 field shop	81,000
1 Barracks for 300 men	240,000	1 Headquarters Building	20,000
Supply Warehouse	38,000	1 Operations Building	20,000
Administration Building	42,000	1 Radio Building	10,000
<u>Albrook Field, Panama:</u>		1 Parachute Building	10,000
Barracks for 650 men	560,000	<u>Mitchel Field, L.I.:</u>	
26 Sets Officers' Quarters	400,000	2 Hangars	79,000
17 sets married noncommissioned officers' quarters	126,000	1 Field Shop	81,000
<u>Maxwell Field, Alabama:</u>		1 Field Warehouse	38,000
3 sets Officers' Quarters	40,000	Headquarters Building	20,000
<u>Rockwell Field, Calif:</u>		Operations Building	20,000
Barracks for 300 men	240,000	Radio Building	10,000
13 sets Married N.C.O. quarters	78,000	Parachute Building	10,000
16 sets Officers' Quarters	200,000	Photo Laboratory	36,000

---oOo---

PARACHUTE JUMPING AT MARCH FIELD

Six live parachute jumps were made recently by the members of the Parachute Department at March Field, Riverside, Calif. Dropping over the side of PT-3 planes from an altitude of 2,000 feet, all men made safe landings on the flying field. Those who participated in the jumps were: Sergeant G.W. Wehling, Corp. B. Wetzorke, Privates Boots, Graham, Hansen and Lantz.

DEVELOPMENT OF SAFETY DEVICES FOR FLYING

Six radio beacons are soon to be installed at as many Army Air Corps Fields, as aids to pilots who fly in fog or thick weather, according to Assistant Secretary of War, F. Trubee Davison, who has just returned to Washington following an inspection trip which included the Army Air Corps laboratories at Dayton.

"Within the next few months we hope to have installed and in use no less than six radio beacon stations in this country besides one in Panama and one in Hawaii", said Mr. Davison. "These beacons will be at San Francisco, California; San Antonio, Texas; Uniontown, Pennsylvania; Dayton, Ohio; Mitchel Field, Long Island; and Washington, D.C. Six beacons will provide several combinations of airways that will be undisturbed by clouds and proof against fog. The beam of the radio beacon can, like a searchlight, be thrown in any direction and can be made in lengths that vary from less than 100 to nearly 2,000 miles.

"The radio beacon sends three signals which run parallel to each other like fingers extended from a hand. When the pilot is on his exact course he hears the letter 'T'. If he swings to the right or left, it changes to 'N' or 'A'. In other words, if the weather is such that he cannot see, the pilot flies by ear. Any plane equipped with a radio set can hear these signals. The pilot need not even be an expert because the code, once heard, is easily remembered. On my visit to Dayton, I flew on the radio beacon and the steady 'T' buzz-z was easily recognized from the two other signals.

"Army Air Corps engineers are doing all they can to lessen the handicaps of pilots who fly in bad weather. Two important experiments in that connection are the new landing altimeter and a system of leader cables. The new altimeter differs from the old time instrument in that it gives the exact distance between plane and ground objects. The value of this new height recording device becomes apparent when one considers the fix in which pilots have often found themselves when flying or in trying to land in fog or at night. It must be remembered that the old time altimeter works by atmospheric pressure. Its zero is a sea level but a pilot who flies 1,000 feet above that level may actually have only 50 feet clearance between himself and tree tops in high and rolling country. The value of the capacity altimeter is that it tells the pilot exactly how far he is above ground objects. Lift one of these new instruments above a desk and it records exactly the height at which it is held suspended. This instrument is still highly experimental but I believe that it points in the right direction toward defeating fog -- the arch enemy of aviation.

"Experiments are also being conducted with the 'leader' cable, a device designed to reduce dangers in bad weather landings. It has been used in Europe and it is now being tested by Army Air Corps engineers. The leader cable is a series of wires that radiate from the center of the airport like spokes from a wheel. Each cable or spoke sends, at various intervals, signals informing the pilot who is about to make a landing, how to govern his descent and even tells him when to put his wheels on the ground."

Mr. Davison expressed himself as thoroughly satisfied with the results of his inspection trip, which covered several middle and northwestern states and included visits to a number of Regular Army Air Corps stations, as well as fields used by National Guard and Army Air Corps Reserve aviators.

"The new planes used by National Guard and Reserve pilots", he continued, "in place of the antiquated and dangerous 'Jennies'-- all of which were eliminated last year -- are proving highly satisfactory and have done much toward increasing the morale among the members of these highly important units of our air defenses. Another feature that impressed me deeply is the progress made toward improving housing conditions for Army Air Corps pilots and enlisted personnel. Old quarters that were hardly fit to be occupied by human beings are giving way to modern and comfortable buildings, although there is still a long way to go."

As a result of his trip, which was made by air and which covered more than 4,000 miles, Mr. Davison plans to have all Army pilots participate in a nationwide drive to urge localities to mark the roofs of buildings so that they may be identified from the air.

"Splendid airports are being built throughout the country", Mr. Davison observed, "and municipalities are doing all they can to encourage aviation, but the one respect in which they are falling behind is in markings, by means of which a pilot may know exactly where he is. I intend to ask all Army flyers,

Regular as well as National Guard and Reserve, to aid the Department of Commerce in its efforts to make flying easier for pilots by means of city markings. It is highly important that this be done."

---oOo---

ARMY PILOT HAS STRENUOUS FLIGHT THROUGH STORM

Lieut. George R. Geer, stationed at Langley Field, Va., recently landed at Marshall Field, Fort Riley, Kansas, after battling several storms en route. Towards the end of his flight and when only a few miles out from Manhattan, Kansas he was caught in the midst of the most severe storm of his experience. The visibility was very poor, and he was compelled to fly only about 200 feet above the trees. At one time a downward current caught the ship and sent it right into the tree tops. Lieut. Geer gave the engine full throttle and pointed the nose of the plane upward, but without effect. He finally headed directly into the wind and landed without rolling a foot. He then opened the throttle wide and taxied up to a row of trees, where the ship was sheltered from the wind, and telephoned to Marshall Field for help to keep the ship from blowing over.

---oOo---

AVIATION INFORMATION BUREAU AT LITTLE ROCK, ARK. ✓

The Little Rock Chamber of Commerce recently instituted and placed in operation an Aviation Information Bureau. The service which this bureau hopes to render is not restricted to Little Rock, but is intended to cover the entire State, and it is hoped to make it a clearing house of information where pilots, owners of planes and individuals and communities interested in the development of airports can secure definite information.

A questionnaire was sent out to various cities in Arkansas asking for information with reference to their present facilities and contemplated developments, especially with reference to airports. In connection with the operation of the Information Bureau, an Advisory Committee is being organized, comprised largely of experienced pilots and expert operators, who will lend their services gratis to any city or community contemplating the construction of an airport.

---oOo---

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS

Changes of Station: 2nd Lieut. Richard E. Cobb from Boston Airport, Boston, Mass., to Selfridge Field, Mich.

1st Lieut. Charles McK. Robinson, March Field, Cal., to Fort Benning, Ga., not later than Sept. 14th for duty as student, Advanced Officers' course, Infantry School.

1st Lieut. Wm. L. Scott, Jr., from Walter Reed General Hospital, Washington, to Fitzsimmons General Hospital, Denver, Colo., for observation and treatment.

Capt. Floyd E. Galloway, Selfridge Field, Mich., to Washington, D.C., for duty in Office of Assistant Secretary of War.

1st Lieut. Lawrence J. Carr to Selfridge Field, Mich., upon completion of tour in the Philippines.

1st Lieut. Edwin R. Page from Walter Reed General Hospital to his station at Wright Field, Dayton, Ohio.

Capt. Neal Creighton from Walter Reed General Hospital to his station at Scott Field, Ill.

2nd Lieut. Rowland Kieburtz, Scott Field, Ill., to Army and Navy General Hospital, Hot Springs, Ark., for observation and treatment.

Promotions: 1st Lieut. Philip Schneeberger to Captain, with rank from June 27, 1928.

1st Lieut. Karl S. Axtater to Captain, with rank from July 13, 1928.

Resignation: Capt. Robert Gilpin Ervin, effective August 5, 1928.

Detailed to the Air Corps and to Brooks Field, Nov. 1st for training:

2nd Lieut. John M. Reynolds, Infantry.

2nd Lieut. James P. Hill, Infantry.

Reserve Officers to active duty to June 30, 1929:

1st Lieut. Alfred Eli Pratt, San Antonio, to Fort Sam Houston, Texas.

1st Lieut. Grant Cecil Melvin, Columbus, Ohio, to Mitchel Field, N.Y.

2nd Lieut. Joel George Pitts, Oklahoma City, Okla., to Post Field, Okla.
2nd Lieut. Hansford W. Pennington's Tour of duty at Fort Crockett extended.
Relieved from detail to Air Corps:
2nd Lieut. Theodore Kalakuka assigned to Fort Brown, Texas, with 12th Cav.

---oOo---

CHANUTE FIELD MAY BE AIR MAIL TERMINAL

Hopes are expressed by residents of Rantoul, Ill., and vicinity that Chanute Field may become an air mail terminal in the near future, because of the advantages of the new night lighting system being installed there at a cost of \$13,500. Chanute Field is not now on any of the present air mail routes, but rumors from the Department of Commerce infer that night lighting is becoming so necessary that routes may be shifted to include those facilities in some places, and that night lighting will be installed in others.

More and more commercial planes are landing at the field from week to week, the most regular visitors being the Stinson-Detroit cabin monoplanes of the Mid-South Air Lines. Planes belonging to this company ply their passenger and commercial trade between Memphis, Tenn., and other points in the South, and Chicago, and not a week passes but that two or more of the ships land at Chanute.

---oOo---

SECRETARY DAVISON PAYS BRIEF VISIT TO CHANUTE FIELD.

The Hon. F. Trubee Davison, Assistant Secretary of War, recently paid a brief visit to Chanute Field, Rantoul, Ill., landing at 11:00 o'clock and departing at 12:30 for Selfridge Field, Mich. Mr. Davison, was returning to Washington from his annual inspection tour of the airports and encampments in the Middle West.

The pilot of the Secretary's plane, a tri-motored Fokker cabin monoplane, was Capt. Ira C. Eaker. A mechanic was the only other occupant of the plane. During the brief stop at Chanute Field the plane was refueled and minor repairs were made to an instrument. The Secretary lunched with Lieut.-Col. Seth W. Cook, Commanding Officer of Chanute Field, and Major W.C. McChord, Executive Officer and former Commanding Officer.

---oOo---

R.O.T.C. STUDENTS IN TRAINING AT CRISSY FIELD

Since the middle of June, 38 R.O.T.C. students have been undergoing training at Crissy Field, Presidio of San Francisco, Cal. Five planes were used on Monday, Tuesday, Thursday and Friday of each week for aerial instruction of these students. Half days are devoted to aerial work and the balance of the day is used for ground instruction.

---oOo---

NEW HANGAR FOR NATIONAL GUARD AIRMEN OF CLEVELAND

Seven Army airmen recently swooped down on the new National Guard Hangar at the Cleveland, Ohio, Airport and began a series of acrobatics and aerial work never before witnessed over a field in that locality. Ten thousand people watched this Selfridge Field Pursuit Squad on put on their show, which marked the dedication of the new hangar of the 112th Obs. Squadron, 37th Division, State of Ohio.

Visiting pilots from Wright Field, Chanute Field, the Michigan, Indiana and Illinois State Squadrons also participated in the show, and all seven ships of the 112th were kept busy taking visitors up for rides.

The new hangar is of brick and steel construction, 70 x 120 feet. Storage space is available for 12 planes, and large space is allotted for a parts department, repair, supply, etc. A two story building adjoins the hangar to the north and houses the administrative offices, work rooms, radio room, engineering room, heating plant and officers' and enlisted men's lockers and showers. In the rear of the hangar is a building 45 x 100 ft., erected with funds subscribed by the Chamber of Commerce and contributing members, which contains the photographic unit and Medical detachment.

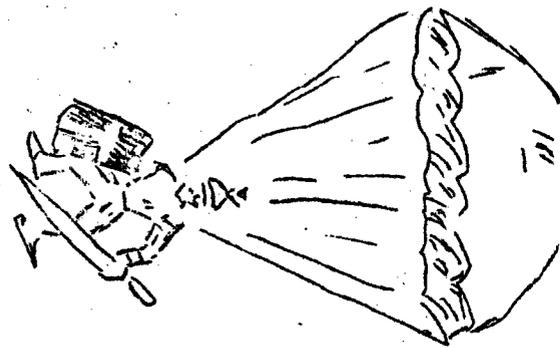
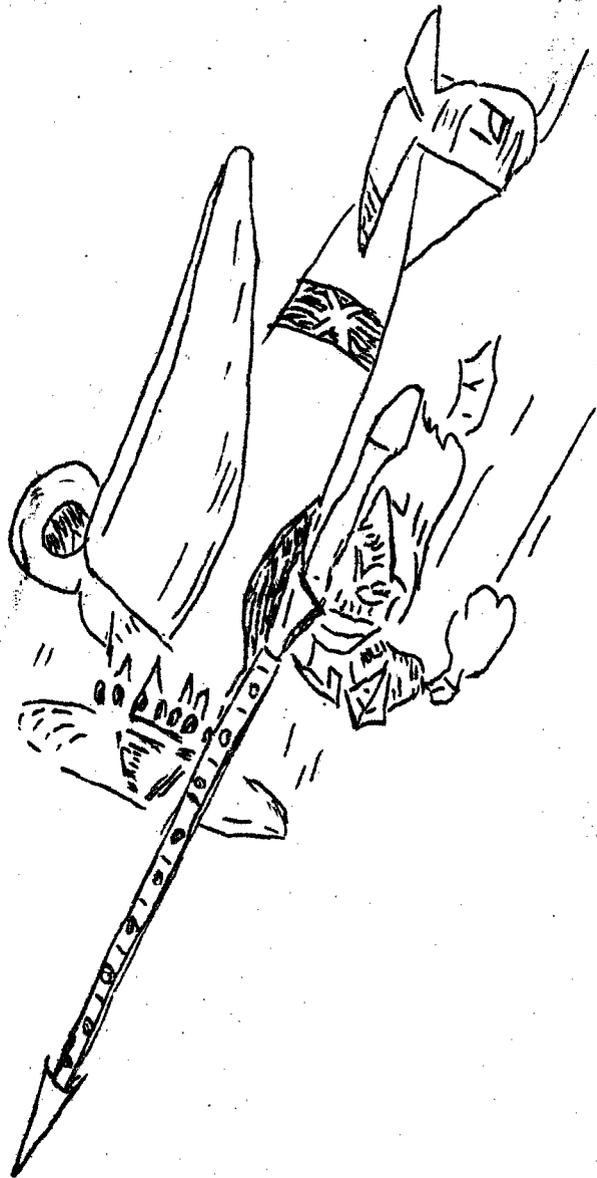
One hundred acres on the southern edge of the municipal field donated by the City of Cleveland, is being improved and rolled for exclusive use of the 112th Squadron and visiting pilots.

From
NATIONAL GUARD
NEWS LETTER

IF SOMEONE
HADN'T INVENTED GUNPOWDER



By Lieut
"Casey" Lambert.



ACCOMMODATIONS FOR OFFICERS AT SANTA MONICA, CALIF.

Officers visiting Santa Monica, California, will be interested in learning that the new Hotel Carmel, recently opened in that city, will grant all U.S. officers a special discount on rooms.

NOTES FROM AIR CORPS FIELDS

oOo---

Langley Field, Va., July 11th.

49th Bombardment Squadron. Seven NBS-1 airplanes from this squadron left on June 13th for Kelly Field, Texas, via Pope Field, Augusta, Ga., Maxwell Field, Monroe, La., and Dallas, Texas. Three other NBS-1 airplanes from the 96th Bombardment Squadron also participated in the flight. The ten airplanes landed at Kelly Field on June 18th. The airplanes were permanently transferred to Kelly Field.

On June 13th three LB-5 and two LB-5-A airplanes were transferred to this squadron. One NBS-1 airplane, which was awaiting transfer to Middletown Air Depot for major overhaul, was transferred to that station on June 20th.

While training West Point Cadets, an LB-5-A airplane, piloted by 2nd Lieut. H.A. Wheaton, A.C., lost the left hand rudder and vertical stabilizer while in the air. The altitude at which the airplane was flying at the time was sufficient to permit a glide to the airdrome where a landing was made. The rudder was picked up by fishermen and returned to the squadron on the same date.

The squadron flying time for the month of June was 79 hours.

The following Air Corps Reserve officers were relieved from duty with this squadron on June 30th, on which date they reverted to inactive status:

Capt. C.R. Blake; 1st Lieuts. E.H. Bassett, E.H. Holterman; 2nd Lieuts. F.G. Richardson and D.H. Stuart.

2nd Lieut. H.A. Wheaton, A.C., was assigned to duty with this squadron on June 20th.

96th Bombardment Squadron. The 96th Bombardment Squadron has been on the Pistol Range for the past week. The highest score, 93.6, was made by Sergeant Kirkpatrick.

2nd Lieut. O.P. Hebert, A.C., pilot, and Cpl. Glass, mechanic, made a navigation and training flight to Miller Field, N.Y., on July 3rd and returned on the 6th.

19th Airship Company. On July 2nd, Colonel C.G. Hall, of the Army War College, and Major J.D. Reardan, of the Chief's Office, made two training flights in the TC-10-254.

Orders were received from the Chief's Office attaching 1st Lieut. R.P. Williams to this organization for flying duty only. He is at present on temporary duty at the U.S. Naval Academy, where he is taking the course in Aerology. Lieut. Williams made three training flights with us on July 2nd and 3rd.

On July 3rd, the TC-5-251 made a demonstration flight over the Nansemond River and Chuckatuck Creek Bridges as part of the program, celebrating the opening of the Bridges.

Two special observation flights were made on July 5th, for the Post Flight Surgeons, Major B.B. Warriner, Capt. I.F. Peak and Capt. H.S. Steenburg.

On the 27th a special observation and coast patrol flight over Fort Monroe, Fort Eustis and the Coast Line of the Peninsula was made for Major Stratemeyer, Air Corps, who was in charge of the West Point Cadets at Langley Field.

Our Baseball Team continues on in its winning way, defeating two old rivals last week in the Hampton A's and the Yorktown Marines. The Marines defeated the strong Apprentice Team the previous day by the score of 5 to 1. This gives us the series with the Marines two games to one. A game was played with the Langley Post Team Monday, but the 19th didn't seem to have the dash and pep that characterized their play throughout the season and they lost out in the final inning. The score was 6 to 3.

Marshall Field, Fort Riley, Kansas.

Things are beginning to look even more lively for Marshall Field with the two classes of Air Corps Reserve Officers who will get their summer training at this station. We are all set for the classes, however, and we feel that the Reserve Officers will be well taken care of, and will get quite a bit of flying as well as other training that will make them more efficient officers.

Seven officers reported to this station for one year's tour of active duty, viz:

1st Lt. Melville G. Robinson, Mt. Clemens, Mich.
 1st Lt. Guy F. Hix, Dayton, Ohio.
 2nd Lt. Wm. Erickson, Omaha, Nebr.
 2nd Lt. D.E. Broughton, Venango, Nebr.
 2nd Lt. Robert E.L. Pirtle, Council Grove, Kansas.
 2nd Lt. R.R. Walker, New Kirk, Okla.
 2nd Lt. Ralph O. Brownfield, Winfield, Kansas.

The four last named officers have just been graduated from the Advanced Flying School at Kelly Field, Texas.

The pilots who are on detached service at Superior, Wisconsin, are going through all kinds of weather, and have had comparatively little trouble so far. Lt. Coppin hit a tree while flying in a fog and, although the ship was damaged considerably, he landed without injury to himself.

The officers who are now on the detail at Superior, Wis., are:
 Lt. Scow (in charge), Lieuts. Coppin, Atkinson, Brown and Rice.

Lt. Erickson left Marshall Field for Superior, Wis., to relieve Lt. Rice, who will return to duty at this station.

The ferrying of PT ships for the summer training camps has been going on this week. Some were brought from Ft. Leavenworth and some from Kansas City.

The credit for the efficiency of our organization does not belong to the officers and pilots altogether by any means. The great amount of work that has been necessary to get the ships in shape for the summer training period has kept the mechanics working early and late with little time off, and they have come through with all the ships in shape.

The enlisted men gave a dinner in honor of Major and Mrs. Arnold, who are leaving the post, on July 4th, at which all officers and their wives were present. It was a very fine dinner and one which does credit to Sgt. Herbert T. Smith, the Mess Sgt. A farewell speech was given by Major Arnold in which he commended the men in the organization for their untiring efforts during his stay at Marshall Field.

Maxwell Field, Montgomery, Ala., July 10th.

During the past 30 days this post has had a considerable number of visiting planes from all points in the United States. On June 15th eight Martin Bombers came in from Langley Field, Va., en route to the Pacific Coast, carrying 14 officers and 10 enlisted men.

Many cross-country trips were made during June and the early part of July to Pensacola, Fla., Atlanta, Ga., New Orleans, La., Birmingham, Ala. and various other points.

The following officers, who have been stationed at Maxwell Field for one year's active duty, successfully passed the examination for commission in the Regular Army:

Lt. Donald D. Arnold	Lt. Frederick W. Ott
Lt. Robt. C. Ashley	Lt. Louis P. Turner.

All of these officers will remain at Maxwell Field, with the exception of Lt. Ott, who was transferred to Rockwell Field, San Diego, Cal.

On the last of June, 21 men and two officers, composing part of the Detachment from the 22nd Observation Squadron on duty at Fort Bragg, were transferred to Maxwell Field.

On July 1st, six new Reserve officers reported for an extended tour of active duty for one year. Twelve Reserve officers also reported for two weeks' summer training. Everyone has been busy getting in their new quarters and renewing old acquaintances made during the World War.

Major Weaver and Mrs. Weaver entertained at tea Sunday afternoon, July 8th, for all officers and their wives, complimenting the new officers and also the Reserve officers here for summer training.

Boston Airport, East Boston, Mass., July 7th.

In spite of adverse weather conditions, this station had 178 pilot hours during the month of June. This includes four Regular Army, four Reserve officers on active duty for 14 day periods and 13 Reserve pilots on inactive duty status flying from here.

The Reserves on active duty were checked out on VE-9 and DH planes and were very much enthused over being given the opportunity of flying other than PTs. Flying, of course, was not their sole function while on active duty. They were instructed in Supply, Maintenance, Engineering and Office work, so after 14 days any of them would be capable of making out requisitions for property and Morning Reports, change spark plugs on Airplane Engines and fly a service type plane (either good or worse). Routing work for Reserves was performed during the mornings, while the afternoons, weather permitting, were devoted to flying training.

The following Reserve officers were on active duty at the Airport:

- 1st Lieut. John A. Langley, Pilot, fr. June 3 to June 16,
- 1st Lieut. Ray C. Van Arsdale, Pilot, fr. June 3 to June 16,
- 2nd Lieut. Horace H. White, Pilot, fr. June 17 to June 30,
- 2nd Lieut. Charles M. Porter, Pilot, fr. June 17 to June 30.

In our last contribution to the News Letter it is believed your correspondent mentioned about the grand opening of the Lowell, Mass. Airport. At any rate, it was considered quite successful, tho the weather was anything but good. Several Army and Navy planes were held up at Boston for 3 and 4 days awaiting favorable flying conditions.

The anticipated opening of Lucerne, Maine, Airport on June 28th was postponed due to wet grounds, and we don't know when they will open it.

Preparations were made to entertain Miss Amelia Earhart and her crew, it being anticipated that the reception accorded them would equal, if not surpass that given Col. Lindbergh when he first visited Boston. This being Miss Earhart's home, efforts were bent to stage a regular TEA PARTY in her honor. The people of Boston and surrounding towns have organized what is known as the Earhart Foundation and are planning to erect a memorial in honor of Miss Earhart for being the first woman to fly across the Atlantic. On June 30th three members of the Earhart Foundation were flown to Rye Beach to spread a little propaganda to Governor Fuller, who is honorary chairman of the project. They played and circled over his summer home and dropped a message of greeting to him.

The Earhart project is to be a control tower 80 feet high, and will be octagonal in shape. It will serve as a beacon for aviators who will be able to see it for many miles. Sounds good, but will it materialize? On the other hand, why not use the money, if any will be spent, to move hangars and buildings away from the center of the flying field to give us more room for flying and breathing space?

The enlisted personnel was increased by two men, which now gives us 13 men on duty here. Two men make a great deal of difference in a small detachment. Sergeant Viscik and Private Russell, from Mitchel Field, reported for duty, replacing Sergeant Keogh, who went back to Mitchel, and Private Zuccherro, who was discharged in May. Private, 1st Class, Campbell was promoted to the grade of Corporal on June 24th.

France Field, Panama Canal Zone, June 28th.

7th Observation Squadron, A.C. Although greatly handicapped by a lack of airplanes, the Seventh Observation Squadron managed to maintain its training schedule and perform all missions assigned to it. A grand total of four Amphibians and one DH constitute the effective and total offensive (or defensive) strength of the organization.

Commanding Officers seem to shift with a kaleidoscopic regularity in the organization, Lieut. McHugo, who commanded in the absence of Captain Skemp, turned over his badge of office to Lieut. Stewart and shook the dust of Panama from his coat tails forever. His loss is a great one and "Mac's" familiar face, as he tinkered with the spark plugs of his faithful Essex, (model 1910) will be greatly missed. The whole outfit wishes him good luck at Langley Field.

24th Pursuit Squadron. This organization has started its aerial gunnery and bombing, and prospects look very bright. The scores this early in the season are equally as good as those of the middle of last season. Six officers of the squadron completed the prescribed pistol course for this year:- five of them making "Expert" and one just a fraction below.

25th Bombardment Squadron, A.C. The 25th Squadron reports one cross-country flight of two NBS-1 planes to David, R. de P., Captain Carl W. Connell and Lieut. R.B. Davidson, pilots; Captains Greep and Logan, of Fort Davis, as

passengers. No remarks. ('Twould seem the dampness has depressed their spirits as well as their activities.)

The France Field Basketball Squad is being whipped into shape under the expert guidance of Lieut. Propst, and shows some very promising material. The first game of the season, with Fort Randolph, resulted in a 44 to 21 score in favor of the France Field team.

San Antonio Air Depot, Duncan Field, Texas, July 3rd.

Capt. O. P. Echols, of the Office of the Chief of the Air Corps, en route ferrying an O2-H from the Douglas Factory at Santa Monica, Cal., to the Texas National Guard, Houston, Texas, was a visitor at this Depot from June 22nd to the 29th, while necessary repairs were made to his plane.

Lieut. Ralph E. Fisher, of March Field, Cal., visited us on June 25th and 26th for the purpose of obtaining and ferrying back a DH-4M-2 to his home station.

Capt. Walter J. Reed, of the Office of the Chief of the Air Corps, called at this Depot on June 30th for a conference with the Commanding Officer in regard to plans for proposed permanent construction at this station.

Lieut. Leland R. Hewitt, Air Corps Instructor with the Arkansas National Guard, arrived here July 1st from Little Rock, to ferry back a plane for the Arkansas National Guard Air Corps.

Lieut. Arthur W. Vanaman, Chief Engineer Officer of the Depot, left here July 2d on a three months' leave of absence, to visit in the East.

Lieut. James E. Duke, Jr., rejoined this Depot June 20th, having ferried an AT-4 from the Fairfield Air Depot to Kelly Field.

Camp Nichols, Rizal, P.I., June 7th.

Flight "B", 2d Observation Squadron. Two new Amphibians were received in this department the early part of the month.

Lieut. Donald Goodrich left for China with all his "war togs" to visit the battle front and other places of interest in that section of the Orient. He will give a complete report of his trip in our next News Letter.

Sgt. George Dooley, during the month, has become the proud wearer of the loop under his chevrons and Pvt. King, our combination Company Sergeant Major and Supply Sergeant, has taken three stripes for sleeve ornaments. The Post Surgeon states that both will pull thru with proper attention.

Headquarters, 4th Composite Group. 1st Lieut. Alfred Lindeburg, A.C., is now in command of the detachment, having relieved Lieut. Goodrich, who has gone to China on leave.

The Camp Nichols Tennis Team, under the management of Pvt. Carr, played Corregidor on the 5th and 6th and Clark Field on the 19th and 20th. They split the doubles and won all singles in both games. The next tournament is with Corregidor on June 3d and 4th. The Manager is trying to get in the Department Meet and, if he succeeds, they hope to make a good showing.

Pvt. Kerr, our very efficient bookkeeper at the Post Exchange, having been promoted to sixth class specialist, has now applied for a commission in the Army Reserve. Some people are never satisfied.

Tech. Sgt. Hopper and Staff Sgt. Hewitt have taken examinations for promotions. Here's hoping they make the grade.

66th Service Squadron. Capt. Lawrence P. Hickey, A.C., was transferred to the 3d Pursuit Squadron, Clark Field, on May 10th.

Lieut. Donald L. Bruner, A.C., who has been sick, returned for duty on May 1st.

The Baguio season is now over and all the men who were on detached service there have returned for duty. They tell of some wonderful happenings in and around Baguio, especially of Sgt. Littlejohn, who took up golfing while there.

The Squadron received 17 new men on the last transport and they have been placed on special duty with the E & R Department. The new E & R building, when completed, will be one of the best in the Philippine Islands. All you men who soldiered at Nichols and who Wouldn't become "sunshiners" better make another trip out and see all the improvements that have taken place at Camp Nichols.

28th Bombardment Squadron. The Squadron received an addition to their ranks in the person of Pvt. Blair, recently transferred from Clark Field.

Lieut. Corley P. McDarment returned to duty from detached service at Baguio and was appointed Squadron Supply Officer.

Pvt. Null was appointed Mess Sergeant, and Pvt. McCartney claims the chow is the best he has had since enlisting in the Army. Mac should know, as he is the first one in the Mess Hall and the last out.

Staff Sgts. Butler, Johnson, MacDermott and Schmolka took the examination for Technical Sergeant, and Tech. Sgt. Hartley for Master Sergeant.

There have been quite a few changes around the squadron, the most important one being the renovation and repainting of the Mess Hall.

The 28th Squadron Basketball Team organized an Athletic Club and the following officers were elected: Sgt. Parker, President; Pvt. Sarver, Vice President; Cpl. Kramer, Secretary; and Pvt. Way, Treasurer. Lieut. Woodruff and 1st Sgt. Hamer were elected Honorary Members.

Clark Field, Camp Stotsenburg, P.I., June 7th.

Major L.A. Walton, who has been in command since October 1926, was transferred to Camp Nichols for the remainder of his tour. Capt. L.P. Hickey has taken command until the arrival of Major Ralph Cousins on the July transport. Major Walton, Lieuts. Heffley, Bobzien and Crawford leave on the next transport. Lieut. Wolf will be the only "sunshiner". We all have a peculiar mixture of feelings about leaving this post -- we hate to leave and yet we are wild to get back to the States.

There was only one subject of conversation during the last week of May -- the Furlow Bill. Speaking of these so-called promotion bills, it is a good thing that "Hope springs eternal", otherwise, most of the old pilots would be forming a line in front of Henry Ford's office.

Organization Day was celebrated on May 14th. Every officer, every man, every lady and every child on the Post were present at an elaborate "Dutch lunch" served in the Mess Hall. Colonel Daniel Hand, at that time commanding the post in the absence of General Hoobrook, was the guest of honor.

Kindley Field, Fort Mills, P.I., June 7th.

Lieut. J.P. Hodges is preparing to clear the post for his return to the United States on the next transport. Lieut. Holland has temporarily taken over the duties as Station Supply Officer.

Another planned departure is that of Capt. Lyle C. White, M.C., who leaves soon for a visit to the States. He expects to join us again, however.

During May, the usual summer resort invitations were extended, and, as a result, week end guests invaded the quarters of all officers here. Among them were Lieut. and Mrs. Carr and Lieut. and Mrs. Bobzein of Clark Field; Lieut. and Mrs. Thomas and Lieut. and Mrs. Perrin of Camp Nichols, and Mr. Wills of Manila.

Our Basketball Team looks good and we expect a very successful season. The Bowling Team will soon get started and we hope they will give us another cup to add to our collection. Our success in athletics, so far, is largely due to the encouragement and assistance given by our Commanding Officer, Lieut. Meloy.

San Antonio Air Depot, Duncan Field, Texas, July 14th.

2nd Lieuts. Charles C. Scott and Harry L. Smith, pilots, of the 36th Division Air Service (Texas National Guard), arrived here on July 9th to ferry back two PT-1s to the National Guard encampment at Camp Palacios, Texas. They left here in these planes on the 10th. Lieut. Smith also returned on the 11th to ferry back an O-17 to the Camp.

Warrant Officer Charles Chester, Cost Officer of the Depot, is taking advantage of a three months' leave of absence, departing on July 5th for an extended visit in Southern California.

The following airplanes and engines were overhauled and repaired by the Engineering Department of the San Antonio Air Depot during June:-- Airplanes -- 4 DH-4M-1, 2 DH-4M-2, 1 DH-4M-2P, 5 DH-4M-2T, 3 PT-1, 1 O1, 3 O2, 1 O2-C, 1 O2-H, 1 C-1-C, 1 NBS-1, 1 A-3, Total, 24: Engines:-- 41 Liberty, 29 Wright E, Total, 70.

March Field, Riverside, Cal., July 10th.

Major Harold A. Strauss and Captain Arthur B. McDaniels were recent visitors to the Field, flying here from the Air Corps Training Center in a Curtiss O-1. The object of their visit was the coordination of the training of the two primary schools.

Lieuts. B. J. (Barney) Toohar and N.F. Twining returned to duty after a month's leave of absence. During the period of their leaves, Lieuts. Toohar and Twining participated in the yacht races to Hawaii.

First Sergeant William Enright, 47th School Squadron, was retired during the past month after the completion of thirty years service. He left for his home in Syracuse, N.Y., following his retirement.

The completion of the annual pistol qualification course by the squadrons showed gratifying results. A total of 138 men qualified as pistol experts; 110 as sharpshooters and 217 as marksmen.

Kelly Field, San Antonio, Texas, July 2nd.

43d Squadron. 1st Sgt. L.O. Funk will take on his last 'hitch' July 5th. Sgt. Funk retires in about a year and a half. He says that he is going back to the Philippine Islands after retirement, to live in the land of tin roofs and dove dreams.

Sgt. Wm. T. McFadden sails for Panama about July 3d, as replacement for Sgt. Dale M. Thomas.

Mr. Sgt. Robert R. Aurand also sails for Panama about August 9th.

Crissy Field, Presidio of San Francisco, Cal., July 9th.

Cooperation with Battery "A", 63d C.A.(A.A.) at Palo Alto, Cal., was continued from previous month up to June 5th. Sound locating and tracking missions were flown during the forenoon and searchlight drill missions at night.

Two O-2 planes, equipped with two-way radio, with Lt. Smith as pilot and Lt. Farran as observer, and Lt. Goss as pilot and Lt. Marriner as observer, cooperated with the 6th C.A.(HM) during the annual battle practice of the San Francisco harbor defenses. The work consisted of spotting for 12" mortars, 12" rifles, 6" rifles and 155 mm G.P.F. guns firing from batteries located at Fort Barry at targets towed by SS "Barrett" and by SS "Armistead".

Lieut. Barber and Staff Sgt. Bush of the 15th Photo Section left station June 7th for Forts Lewis and Lawton, Wash., in connection with photographic work at those places. On account of unfavorable weather conditions the work could not be carried out as originally contemplated as far as Fort Lewis was concerned, but photographs of Fort Lawton were taken as directed by the Commanding General Ninth Corps Area.

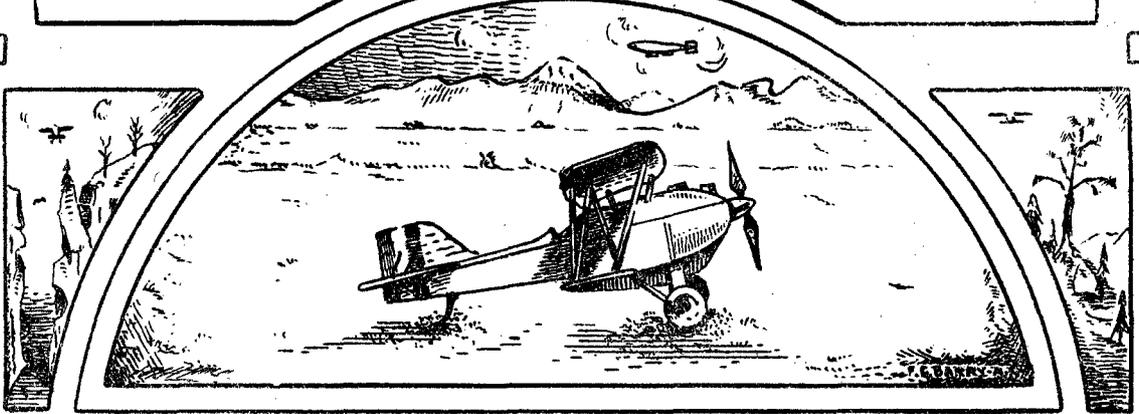
Major Clagett, Air Officer, 9th Corps Area, left station June 11th in a Douglas transport, accompanied by Capt. French, Signal Corps, and Mr. Sgt. Kolinski Air Corps, on a tour of inspection of Signal Corps equipment at Clover Field, Griffith Park, Ross Field, March Field and Rockwell Field, Cal. He also went to Yuma, Arizona, in connection with the installation of a meteorological and radio station.

Lieut. Barber left station June 18th with Col. White of the Forest Reserve for an Aerial Survey of the Lone Pine District, California.

Lieut. Goss, pilot, with Lt. Marriner as observer, left station on June 25th for Rockwell Field, Cal. for the purpose of cooperating with the Navy in Problem I and II of the Army and Navy Air Cooperation missions ordered by the War Department to be held on June 26th.

One O2-A, 1 DH-4 and 1 OAI-C were received during the month as replacement for those of a similar type that were unserviceable.

Lieut. Farran and Dr. C.G. Rossby, of the Guggenheim Foundation, made several trips to different stations in California in connection with the establishing of weather reporting stations.



Air Corps
News =
= **Letter**



— ISSUED BY —
OFFICE CHIEF OF AIR CORPS
WAR DEPARTMENT
WASHINGTON, D. C.

TABLE OF CONTENTS

---oOo---

	Page	
Rates of Descent of a Falling Man	293	- 294
Air Corps Engineering School Reopens.		294
Aeronautical Celebration at San Diego, Cal.		294
Ambulance Planes Perform Good Service		295
Experimental Projects with Airships	295	- 296
Training of West Point Cadets at Langley Field.		296
Parachutes and the Fair Sex		296
New Class at Brooks Field		296
Air Corps Officers on General Staff Eligible List		297
Pilot Searches Potomac River for Body of Suicide.		297
Ferrying Planes Across the Continent.		297
Reserve Officers Receive Training at Langley Field.	297	- 298
Cross-Country Flights from Bolling Field.	298	- 299
The Balloon Jumpers of the World War.	299	- 300
Unusual Parachute Jumping Experience.		301
Brooks Field Students Graduate.		301
Bolling Field Personnel Receive Unexpected Bath	301	- 302
Brooks Field Flyers Pay Homage to the Late Capt. Carranza		302
Captain Macready Receives Distinguished Flying Cross.	302	- 303
Death of Lieut. Charles B. Austin, Air Corps.	303	- 304
A New Motor Balloon	304	- 305
Certain Aspects of Aviation Medicine.	305	- 309
Notes from Air Corps Fields		310

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

---oOo---

RATES OF DESCENT OF A FALLING MAN ✓

By A.M. Jacobs

A most interesting series of tests was recently performed by the Equipment Branch of the Materiel Division, Wright Field, Dayton, Ohio, in which it was attempted to obtain certain and definite information upon the rate of acceleration and limiting velocity of a man falling after he has left an airplane, trusting the course of his future to the reliability of the parachute. No definite data seemed to exist on this subject, and it has frequently been recognized that such knowledge would be of value to the designers, the testers, and finally to the users of parachutes -- both those compelled to get a chute open as quickly as possible at low altitude, and those who, through a delayed opening, might try to clear a falling body or evade enemy gunners in time of war.

The tests were performed at night. The plane used was a Douglas Torpedo (DT Type) equipped with bomb shackles, releases, and dummy bays for dropping parachutes. Two dummies were dropped, one the size of an average man, weighing 180 pounds, complete with dummy pack; the other the same in size but weighing only 115 pounds complete. A 200-pound lead weight, with trailing dummy parachute pack, the assembly so arranged as to simulate the resistance and weight conditions of high speed parachute testing, was also used. The general method of testing was to drop from the plane a dummy with a light attached while a camera placed on the ground took a picture of the fall.

"The lights used in the first four tests," says Serial Report No. 2916, which gives a complete account of the tests with accompanying graphs, "were magnesium flares, commonly employed on wing tips. In the lead weight test, a 12 volt, 35 ampere electric lamp was used. In the dummy tests, the flare was clamped to a short piece of wood which formed an extension to one of the dummy's legs and was lighted by a battery mounted in the airplane. The electric lamp was mounted just beneath the lead weight and received its current from a small battery housed in the dummy parachute pack. In each test the lights were so mounted that they were visible from the camera position before the dummy or weight was released from the airplane."

In the first tests the camera shutter of the ordinary view camera was removed and a pendulum of proper length to swing at one second intervals was suspended in front of the lens. In later tests a "between the lens" shutter was used. This was held open by means of a spring and was closed once each second by a solenoid. The pendulum was removed from in front of the lens and arranged to make contact with a bubble of mercury at the bottom of each swing, thus closing the solenoid and battery circuit. This formed a more convenient and accurate timing device. The camera was set with the axis of the lens horizontal and the film vertical.

"When all was in readiness," again we quote from the report, "the airplane would take off and climb to the prescribed altitude. The pilot signalled with a flashlight when he was starting on the course, which was marked by blinking lights on the ground. The timing pendulum was then started and allowed to swing until the dummy or weight had reached the ground. The pilot maintained his proper altitude with a sensitive altimeter. It was important that he hold closely to the proper altitude and pass not too close to the camera as the image would not then fall on the film. As he approached the first marker light on his course, he switched on the dummy light and a few seconds later released the dummy."

"The data obtained in these tests will assist in clarifying previous records and establishing a basis for future work of this nature", says the Report, in true report form. It does not mention, of course, that a surprise element was brought out in the series of tests which rather played havoc with popular conceptions concerning the cumulative velocity of falling bodies and caused a riveted attention and a most careful checking of photographs on the

part of the engineers.

After the dummy left the plane, the horizontal velocity equaled the speed of the plane. But it was the vertical velocity that was especially under study. The velocity imparted by the plane diminished as the velocity due to gravity, or vertical velocity, increased, so that the resultant acceleration was not very great. The 180 pound dummy with closed parachute pack fell at a maximum rate of between 160 ft./sec. (109 m.p.h.) and 175 ft./sec. (119 m.p.h.) and gained this velocity in every instance in about 12 seconds time, having fallen from 1400 to 1500 feet, the velocity from there on to the ground remaining constant. Tumbling of the dummy diminished the velocity somewhat, the maximum velocity during rapid tumbling being 160 ft./sec. against 175 ft./sec. where it fell straight.

The maximum rate of fall of the 115 pound dummy, which was the same in size as the 180 pound dummy, was reduced from 175 ft./sec. to 125 ft./sec. These tests demonstrated that if a man jumped from an airplane traveling at 120 m.p.h., he would maintain approximately that same velocity until he reached the ground or opened his parachute. If he left an airplane traveling at a higher rate of speed than 120 m.p.h., his speed would rapidly diminish to that amount.

Tests along these lines will continue. It is contemplated with the aid of the moving picture camera to run a series to obtain the exact opening time of the parachute under various conditions. The use of the camera in connection with airplane tests of all kinds has proved a great boon and made possible truer records and more accurate observations than ever were otherwise obtained.

---oOo---

AIR CORPS ENGINEERING SCHOOL REOPENS ✓

After a year of inactivity, 1927-1928, due to the shortage of officers in the Air Corps, the Air Corps Engineering School reopened at Wright Field on July 1st, with Captain Edgar P. Sorenson in charge as Assistant Commandant under Brigadier-General William E. Gillmore, Commandant, and with ten student officers in attendance.

The course, which is an extremely comprehensive one for the year involved includes Applied Physics, Shop Practice, Business Administration, Material Laboratory Work, Electricity, Thermodynamics and Engine Design, and Aeronautical Engineering.

In connection with the course, Captain Sorenson states, the students will get in about 140 hours of flying each. Details concerning requirements for entrance and the work performed under the various departments may be found in Technical Bulletin No. 48, which may be had by interested officers upon application to the Materiel Division, Dayton, Ohio.

The next school year opens in July, 1929, and applications for entrance should be submitted by December next.

The following officers are enrolled in the present class: Major Adlai H. Gilkeson, Captain Hubert V. Hopkins, 1st Lieuts. Harold H. Carr, Muir S. Fairchild, Alfred A. Kessler, Jr.; Clements McMullen, James G. Taylor, 2nd Lieuts. John W. Bowman, Charles H. Caldwell and George F. Schulgen.

The Engineering School is located on the second floor of the Administration Building at Wright Field, Dayton, Ohio.

---oOo---

AERONAUTICAL CELEBRATION AT SAN DIEGO, CALIF.

The City of San Diego, "The Air Capital of the West", is making great preparations for a huge aeronautical celebration for August 16th. It is planned to have four hundred airplanes in the air at one time, making one of the most remarkable dramas of the skies yet witnessed. This celebration will commemorate the 25th anniversary of the Wright Brothers' first successful take-off in a heavier-than-air machine, and will mark the dedication of San Diego's triple "A" airport -- "Lindbergh Field".

It is expected that the country's most celebrated airmen and those interested in aviation will attend this celebration, which the San Diego Chamber of Commerce is sponsoring. It is contemplated that in this celebration the Air Corps will have in all 102 airplanes, as follows: 4 from March Field, 60; Griffith Park, Los Angeles, 6; Reserve Camp, Rockwell Field, 10; Rockwell Air Depot, 6; 95th Pursuit Squadron, 15; and 11th Bombardment Squadron, 5.

AMBULANCE PLANES PERFORM GOOD SERVICE

During the Fiscal Year ending June 30, 1928, the three Army Air Corps ambulance planes in commission performed valuable service, an emergency arising in no less than 22 instances where patients were transported to hospitals via air because other transportation agencies were not available or because it was considered best for the patient's welfare to utilize air transportation on the score of comfort and rapidity of travel. Altogether four planes were utilized as ambulances during the past Fiscal Year, but no more than three were in commission at any particular time.

In transporting the 22 patients, the distance covered totalled 3,755 miles, the flying time 45 hours, and the time saved in transportation by air 320 hours and 40 minutes or, roughly, 17½ days.

Kelly Field, Texas; March Field, Riverside, Calif.; and France Field, Panama Canal Zone, are the Air Corps stations where the ambulance planes are in commission. The performance record of these planes for the past Fiscal Year is as follows:

Station	Type of Airplane	Cases Transported	Distance Covered	Time Taken	Time Saved
Kelly Field	XA-1	9	1760 mi.	19 hrs.	68 hrs. 40 m.
March Field	C-1	4	649 "	7 hr. 30 m.	20 hrs.
France Field	XA-1 & C-1	9	1346 "	18 hr. 30 m.	232 hrs.

The ambulance plane was especially invaluable in the Panama Canal Zone, where transportation facilities are deficient. These aerial ambulance activities, although not extensive, are noteworthy in that they serve to demonstrate beyond a doubt the great value and practicability of the airplane ambulance as a means of transportation of sick and injured.

---oOo---

EXPERIMENTAL PROJECTS WITH AIRSHIPS

Landing on the top of a building; picking up supplies from a moving truck; transporting a relief crew to salvage a wrecked airplane; landing on the deck of a steamer out at sea; conducting a search over Chesapeake Bay for lost flyers, and removing two men from a small boat by means of a rope ladder lowered from the airship were among the many missions performed by the two airships assigned to the 19th Airship Company at Langley Field, Va., during the past fiscal year, in order to test the scope of the airship's use.

These two airships, both of the TC type, were in commission every day during the past fiscal year. With a record of 183 hours and 35 minutes for the month of September and a total time of 1167 ship hours for the entire year, the 19th Airship Company broke all previous records for lighter-than-air training at Langley Field.

The landing on the top of the Newport News High School Building was one of the outstanding experiments of the year. There were three great handicaps to be overcome in order to complete this mission successfully,-- the small landing space available; obstructions on all sides, including power lines and buildings; and the fact that there was no head wind to check the momentum of the airship.

Another outstanding achievement was the landing of the Airship TC-5-251 on a moving steamer, loading a cargo and taking off again without halting the surface vessel. The landing was made on the after deck of the steamer "American Trader", about 3 miles off Ambrose Light, N.Y., on May 10th. The Chairman of the Shipping Board characterized the achievement as a new step in the coordination of air and water transportation.

When three Naval flyers were lost in the Chesapeake Bay, both airships were flown daily in search of them. Very high winds prevailing at the time did not prevent the missions being carried out. Fourteen flights were made for a total aircraft time of 50 hours.

An experiment to test the feasibility of picking up the crews of disabled aircraft from the water was carried out. A free balloon, partially inflated, was towed out into the water and set adrift, with a Langley Field officer as pilot. The airship's part in this mission was merely to proceed to Langley Field to spread the alarm, whereupon two speed boats were dispatched to the scene of the danger, picked up the pilot, and rushed him to the station.

The airships accomplished several photographic missions, cooperated in a

number of missions with the Coast Artillery Corps in connection with observing and correcting artillery fire, were flown on a number of cross-country training flights and cooperated in several problems with the 2nd Bombardment Group at Langley Field.

---oOo---

TRAINING OF WEST POINT CADETS AT LANGLEY FIELD

The training of the 1929 Class of the United States Military Academy was carried on at Langley Field, Va., during the period June 10th to 29th. The class was divided into three groups of approximately 100 cadets each. The three groups were present in turn, and each group was present five working days. Eight dual instructors were furnished from Brooks Field for their training, and the number of PT-1 airplanes at Langley Field was increased to 13. Each cadet was given approximately five hours of flying, of which slightly less than two hours was dual instruction in the PT-1s. In addition, they were given lectures on the Air Corps by instructors from the Air Corps Tactical School and were shown instruction Air Corps motion pictures. Small groups of cadets were taken to the various departments, such as Parachute, Engineering, Machine Shop, Operations, Radio and Supply, where the work of the departments was demonstrated and explained.

---oOo---

PARACHUTES AND THE FAIR SEX

Sometime ago the author of a story on free ballooning facetiously remarked that ladies do not go up in balloons because of the probability at some time or another of being compelled to use a parachute. Well, the fair sex who flew with Colonel Lindbergh over Washington wore the Army parachute and it appears that no fuss was made about it.

In the annual report of the activities at Bolling Field, D.C., for the Fiscal Year ending June 30, 1928, mention is made of the flights Colonel Charles A. Lindbergh made at the field when he took up for sight seeing tours over the Capital City members of Congress and their friends -- mostly friends, the Bolling Field scribe adds. Two airplanes were used in these flights, one a Fokker C-2 Transport from Bolling Field and the other a Fokker Transport from the Naval Air Station, Anacostia, D.C. The motors of these two planes were kept running continuously, and while one machine was in the air the other would be loaded and ready for Colonel Lindbergh to transfer to it.

Army Air Corps rules require that all passengers flying in an Army plane must wear the parachute. It was thought that the ladies would object to this but, on the contrary, they liked it, especially since they looked quite well in the coveralls furnished them. Sometime later one woman expressed a desire to borrow the outfit she wore on her flight, stating that she wished to wear it at a costume ball.

During these flights over one thousand passengers were carried.

---oOo---

NEW CLASS AT BROOKS FIELD

The class of students which started training at the Primary Flying School at Brooks Field, San Antonio, Texas, on March 1, 1928, advanced to the Basic Stage on July 10th last to make way for the incoming class, numbering 119 students. Of this number the Infantry furnished 9 officers; the Field Artillery, 6; Coast Artillery, 3; Cavalry, 3; Quartermaster Corps, 1; total 22 officers. The remaining 97 students were made up of 87 Cadets from civil life and 10 Cadets from enlisted men of the Army.

All students reported in, received their various tests, including the Orientator test, and reported at the Primary Stage for instruction on July 16th.

With the entrance of the present class, the policy of eliminating students as a result of their failure to pass the Orientator test was abolished.

The first academic subject taught is the personal equipment of the pilot, which includes parachutes and all the equipment necessary to the pilot. The last period in this subject consists of demonstrations of parachute jumps on the airdrome, including dummy and live jumps.

AIR CORPS OFFICERS ON GENERAL STAFF ELIGIBLE LIST ✓

The following Air Corps officers were recently placed on the eligible list for detail to the General Staff Corps:

Major-General James E. Fechet	Major Eugene H. Lohman
Lieut.-Colonel C.C. Culver	Major Ira A. Rader
Lieut.-Colonel Charles H. Danforth	Major Ralph Royce
Lieut.-Colonel Ira F. Fravel	Major Albert L. Sneed
Lieut.-Colonel John H. Howard	Major Oscar Westover
Lieut.-Colonel James A. Mars	Capt. Robert C. Candee
Major Follett Bradley	Capt. Wm. B. Farthing
Major Lewis H. Brereton	Capt. Lynwood B. Jacobs

---oOo---

PILOT SEARCHES POTOMAC RIVER FOR BODY OF SUICIDE ✓

Probably the first time the historic Potomac River was ever searched via airplane for the body of a human being occurred on the pet "Jinx" day of them all- Friday, the 13th. On that day in the month of July, Lt. Frederick A. Schauss, Air Corps Reserve, stationed at Bolling Field, D.C., flew Lieut. Edward J. Kelly, head of the police homicide squad, in an O-1 over the Potomac River from Key Bridge to Great Falls, searching for the body of a supposed suicide.

It was the first time the local police had used an airplane in their work and they covered in a few minutes territory which would have required the harbor police launch more than an hour to go over. No trace of the body was found.

Lieut. Schauss on his return noticed the date on the calendar and stated that had he known it was Friday the thirteenth he would never have made a flight for such a purpose.

---oOo---

FERRYING PLANES ACROSS THE CONTINENT ✓

The ferrying of airplanes from place of manufacture to various fields and stations throughout the country still continues to be practiced in the Army Air Corps. During the months of June and July a number of deliveries of O2-H planes were made from the Douglas Aircraft Factory at Santa Monica, Calif. These planes were ferried eastward by Army Air Corps pilots via the Rockwell Air Depot, where they are checked over and serviced before leaving. Officers who recently ferried these planes from the west to the east coast were Lieuts. J.E. Upston, Robert E. Salfy and L.W. Miller, on duty in the Office of the Chief of the Air Corps, Washington; Lieut. G.A. Whatley, of Maxwell Field, Ala., and Lieut. C.W. Cousland of Post Field, Fort Sill, Okla.

One O2-H plane was ferried by Lieut. Miller to Maxwell Field and the remaining four were flown to Bolling Field, Washington, D.C. Riding as a passenger with Lieut. Cousland was Maj. Mason, of the Air Corps Reserve.

Major Albert L. Sneed, Commanding Officer of Rockwell Field, ferried an O2-H plane from the Douglas plant to Edgewood Arsenal, Md., bringing back to Rockwell Field a PW-9D from the Fairfield Air Depot. While in the East Major Sneed paid a visit to the Office of the Chief of the Air Corps.

---oOo---

RESERVE OFFICERS RECEIVE TRAINING AT LANGLEY FIELD

By Lieut. Wilton M. Briney, A.C. Reserve

The 324th Observation Squadron, Organized Reserves, arrived at Langley Field, Va., for two weeks' training on July 8th. The arrival of this active reserve unit caused summer airdrome and academic activities to more nearly resemble the busy Langley Field during the 2nd Bombardment Group training period and the Air Corps Tactical School term.

The thirty Reserve officers arriving in this squadron, commanded by Major Walsey R. Bazley, Captain, Air Reserve, were divided into two flights. Flight leaders assigned were: Reserve Captains Louis T. Barry, Flight "A", and J.J. Feery, Flight "B". The flights functioned on a competitive basis during their training.

An innovation for Reserve training at Langley Field was successfully accomplished through the means of the flight contest. The events of the flight

competition were: A 3-ship formation; a 5 ship formation; an accuracy landing contest; the percentage of the Reserve rated pilots to be soloed in each flight; aerial gunnery; Field Order written by each flight leader to complete the mission assigned in a Field Order written by the squadron commander; flight promptness; appearance of flight quarters; military bearing and neatness of individuals; observation of ground puffs; flight scores on the pistol range; flight observation missions accomplished by flight observers; flight baseball game; flight golf tournament; flight swimming match.

As was expected by the camp executives, this flight contest did not meet with hearty approval of the reserve officers for the first day or two. "More flying, more service type airplanes is what we want", they said.

A marked change of attitude was apparent on the third morning of the training period. The spirit of competition had grown in the two flights until it was the subject of conversation at mess and in the barracks.

Maximum effort was put forth by each officer in each flight to see that his flight won every event of competition, resulting in a happy and beneficial two weeks' training period.

The Rotary Club and three banks of Hampton, Va., furnished cups for the winners.

Great interest was shown by the Reserve officers in a daily publication of their activities, called the "Squad News". Each Reserve officer was permitted to contribute anything he saw fit in this daily "Squad News". It resulted in a printed and bound record of all the squadron's military activities and pertinent remarks concerning its personnel during the two weeks' training.

At the end of the camp each officer was provided a mimeographed "Squad News" complete. To quote from the subhead "Pistol Range": "Yesterday proved one thing, and that was, we are in need of plenty of practice. The officers of this camp looked like a group of Pittsburgh police, who have never been known to hit anything." It may be mentioned here that more than 90% of the 324th Observation Squadron are from Pittsburgh.

Under the sub-head "Our Gesture", a verse appeared each day in the "Squad News". One is submitted here:

Flight "A" had Major Yost,
 "B", Bobb Dake at the post
 They flew and landed to a mark,
 Our only one the flag to park.

When Captain Feery on his side,
 Landed the PT very wide,
 Laedlein for the other flight,
 Certainly gave "B" a fright.

Then came Frank trying his best,
 But not quite up to the rest,
 While Massey proved how it is done,
 His flying for the "B's" had won.

The final score showed 4 feet,
 A small margin for one to beat,
 Now "B" has this and pistol range,
 Ahead of "A" who'll make a change.

Langley Field officers detailed for the Air Corps Reserve Officers Camp, July 8th to 21st, were: Camp Commander, Major Junius W. Jones, Air Corps; Senior Instructor, Captain Ernest Clark, Air Corps; Observation Officer, 1st Lieut. K.N. Walker, Air Corps; Camp Adjutant, 2nd Lieut. Ford L. Fair, Air Corps; Engineering Officer, 1st Lieut. R.W.C. Wimsatt, Air Corps; Recreation and Supply Officer, 1st Lieut. Wilton M. Briney, Air Reserve.

Seven instructors were assigned from the officer personnel of Langley Field, The five PT airplanes used by the Squadron were serviced by the 58th Service Squadron.

---oOo---

CROSS-COUNTRY FLIGHTS FROM BOLLING FIELD

The month of July proved to be a busy one for cross country flying of Air Corps personnel from Bolling Field, D.C. During the first three weeks of the month a total of 61 cross-country flights were made, as follows:

To Langley Field, Va.	8	To Miller Field, N.Y.	2
To Middletown, Pa.	5	To Selfridge Field, Mich.	1
To Mitchel Field, N.Y.	19	To Leesburg, Va.	1
To Wright Field, Ohio	3	To Detroit, Mich.	1
To Philadelphia, Pa.	2	To Teterboro, N.J.	1
To Columbia, S.C.	2	To Indianapolis, Ind.	1
To Altoona, Pa.	3	To Pine Camp, N.Y.	1

To Lancaster, Pa. 3 To Aberdeen, Md. 1
 To Shamokin, Pa. 3 To Herndon, Va. 1
 To Hagerstown, Md. 2 To Groton, Conn. 1
 In addition to the above, a number of local pilots ferried new airplanes
 from different factories to their destinations.

---oOo---

THE BALLOON JUMPERS OF THE WORLD WAR

Much has been written, and will no doubt continue to be written, concerning the Caterpillar Club, that mythical organization of airmen who owe their existence on God's green earth today to the parachute which did not fail them in the time of greatest need.

In the last issue of the Air Corps News Letter a statement was made to the effect that 94 emergency parachute jumps have thus far been made. Since that time another member was added to the fold of the Caterpillar Club, thus making a total of 95 life-saving jumps to date.

Our attention was recently brought to a World War document, known as Report of Balloon Section, Volume 1, which gives a list of American balloon men who jumped to safety with a parachute from balloons which were attacked by enemy aircraft. It appears from this report that a grand total of 117 of such jumps were made in the zone of operations, 108 by officers and 9 by enlisted men. Of these 117 jumps, 59 were made from balloons which had been attacked and set on fire by enemy aircraft and 58 from balloons which were attacked but did not catch fire.

In the tabulation giving the names of officers and enlisted men who made emergency parachute jumps from imperiled balloons there are many repeaters. Of the total of 76 names listed, 26 men are credited with more than one jump.

It would seem appropriate to give the men who jumped for their lives during combat operations with the enemy a different designation from the men who took French leave of their craft in peace time. There is also the distinction that, with two exceptions, all the members of the Caterpillar Club jumped from airplanes, whereas the war time balloon jumpers under discussion made all their hops into space from balloons.

Pending a better suggestion, the title "Balloon Jumpers of the World War" is for the present conferred on the 76 men who made use of the bit of silk in order to live and fight another day.

The outstanding balloon jumper of them all was Lieut. G. Phelps, Air Service, who was credited with five jumps, three from burning balloons and two from balloons not set on fire. Four men on the list are fourth degree members of the new organization, viz: 1st Lieuts. Byron T. Burt, J.A. Higgs, J.A. McDevitt and W.J.R. Taylor, all of the Air Service. Through one of those strange coincidences, the third degree membership is also limited to four men, in the persons of 2nd Lieut. G.D. Armstrong, Field Artillery, 1st Lieuts. G.C. Carroll and Dache M. Reeves, Air Service, and Sergeant H.O. Nicholls, Air Service. There are 17 men upon whom the second degree was conferred.

The membership of the "Balloon Jumpers of the World War" is given below, as follows:

Names	Balloons Burned	Balloons Not Burned	Total Jumps
1st Lieut. F.L. Adams, A.S.	-	1	1
2nd Lieut. J.A. Allen, A.S.	1	1	2
2nd Lt. R.H. Anderson, A.S.	-	1	1
2nd Lt. W.S. Anderson, A.S.	2	-	2
2nd Lt. G.D. Armstrong, F.A.	1	2	3
Captain P. Arthur, F.A.	-	1	1
1st Lt. T.P. Atkinson, F.A.	-	1	1
2nd Lt. W.S. Parker, A.S.	-	1	1
1st Lt. F.R. Barton, A.S.	1	-	1
2nd Lt. L.L. Biche, A.S.	-	1	1
1st Lt. L.G. Bower, A.S.	1	1	2
1st Lt. D.G. Boyd, A.S.	1	-	1
2nd Lt. J.S. Burrell, F.A.	1	-	1
1st Lt. B.T. Burt, A.S.	1	3	4
2nd Lt. R.E. Butcher, F.A.	1	-	1
1st Lt. G.C. Carroll, A.S.	3	-	3

Name	Balloons Burned	Balloons Not Burned	Total Jumps
1st Lt. B.M. Clark, A.S.	-	1	1
1st Lt. S.V. Clarke, A.S.	2	-	2
2nd Lt. A.B. Cole, A.S.	-	1	1
1st Lt. F.D. Cummings, F.A.	1	-	1
1st Lt. R.L. Davis, F.A.	1	-	1
1st Lt. R.L. Dold, F.A.	-	1	1
2nd Lt. P.W. Duell, A.S.	-	1	1
2nd Lt. H.E. Dungan, A.S.	1	1	2
1st Lt. F.J. Durrschmidt, F.A.	-	1	1
1st Lt. L.C. Ferrenbach, A.S.	1	1	2
1st Lt. J.M. Fox, A.S.	1	-	1
2nd Lt. C.C. French, F.A.	-	1	1
2nd Lt. E.M. Gallagher, A.S.	-	1	1
1st Lt. H.H.F. Gossett, F.A.	1	-	1
1st Lt. E.D. Harris, F.A.	-	1	1
2nd Lt. F.M. Henry, A.S.	-	1	1
1st Lt. J.A. Higgs	1	3	4
2nd Lt. H.H. Holland, A.S.	-	1	1
1st Lt. S.I. Howell, A.S.	2	-	2
2nd Lt. H.H. Hudnut, F.A.	1	-	1
1st Lt. S.W. Kellogg, A.S.	-	2	2
2nd Lt. J.W. Lane, A.S.	2	-	2
1st Lt. J.W. Lavers, A.S.	1	-	1
1st Lt. E.R. Likens, A.S.	2	-	2
1st Lt. W.C. MacBrayne, A.S.	-	1	1
1st Lt. J.A. McDevitt, A.S.	1	3	4
2nd Lt. E.S. Montgomery, A.S.	-	1	1
2nd Lt. H.E. Montgomery, A.S.	1	-	1
1st Lt. S.T. Moore, A.S.	-	1	1
2nd Lt. F.M. Morgan, F.A.	1	-	1
1st Lt. L.M. Murphy, A.S.	1	-	1
1st Lt. H.P. Neibling, F.A.	2	-	2
1st Lt. G.R. Nixon, F.A.	2	-	2
1st Lt. R.K. Patterson, A.S.	1	1	2
1st Lt. G. Phelps, A.S.	3	2	5
2nd Lt. G.E. Quisenberry, A.S.	1	1	2
1st Lt. D.M. Reeves, A.S.	2	1	3
2nd Lt. J.B. Rivers, F.A.	1	-	1
1st Lt. P.N.A. Rooney, A.S.	1	1	2
1st Lt. C.J. Ross, A.S.	1	1	2
2nd Lt. M.D. Sapiro, A.S.	-	1	1
2nd Lt. M.A. Sedgwick, A.S.	1	-	1
2nd Lt. W.D.M. Shuman, F.A.	-	1	1
1st Lt. M.R. Smith, A.S.	1	-	1
2nd Lt. A.R. Stubbs, A.S.	1	-	1
1st Lt. L.W. Taylor, A.S.	-	2	2
1st Lt. R.W. Thompson, A.S.	1	-	1
2nd Lt. J.H. Vernon, A.S.	-	1	1
1st Lt. J.H. Wallace, A.S.	1	-	1
2nd Lt. S.E. White, A.S.	1	-	1
2nd Lt. A.J. Zavoyski, F.A.	-	1	1
1st Lt. C.L. Furber, F.A.	1	-	1
Corp. L.S. Balay, A.S.	1	-	1
Sgt. N. Brunell, A.S.	-	1	1
Sgt. S.C. Burnham, A.S.	-	1	1
Sgt. J.L. Cain, A.S.	-	1	1
M.E. Meyer-L. Cohn, A.S.	-	1	1
Sgt. H.O. Nicholls, A.S.	2	1	3
Pvt. Robert Scott, A.S.	-	1	1
Total	59	58	117

UNUSUAL PARACHUTE JUMPING EXPERIENCE ✓

Seven enlisted men stationed at the Primary Flying School at Brooks Field, San Antonio, Texas, recently made their first attempt at a live parachute jump. One of these men went through a most unusual experience. After leaving his plane and pulling the rip cord of the parachute he drifted into a rising air current and, instead of dropping at the normal rate a parachute descends to the ground, between 18 and 27 feet per second from an altitude between 800 and 1,000 feet, according to tests conducted sometime ago by the Air Corps at Dayton, Ohio, he hung practically stationary in the air for a period of two minutes. His rate of descent averaged approximately three feet per second, probably the slowest rate of descent on record anywhere. The jumps were made from a seven-ship formation flying at an altitude of 2,000 feet.

Here is what the SECOND DIVISION REVIEW, San Antonio, Texas, has to say regarding the above incident:

"This may be news rather than humor, but Bill is willing to bet the unspent portion of last month's pay that it was not funny to one man.

"A group of would-be aviators at Brooks Field went up for a parachute jump last week. It was the first jump for all of them, and they were trying to gain confidence. The idea was that once they realized how nice it was they would want to make jumps instead of yachting trips over the week end. One young man, however, may be convinced now that parachuting is safe, but there was a while in which he was willing to exchange the thrills of the air for a little bit of terra firma.

"He stepped overboard at 2,000 feet, counted five, or maybe only three, pulled the ring and waited for developments. He got them. With a loud thump the chute opened and his fall was checked. A beautiful feeling of serenity stole over him. It was joy supreme. The easy glide earthwards was going to be one bit of real pleasure. And then it happened. Instead of falling he began to rise. His parachute was taking him in the general direction of the moon, and it looked for a time as if he were leaving for good. An upward rush of air had caught the lad and he was up higher than the start in almost no time. He finally came back to earth, but at last reports was not volunteering for any more parachute jumps."

---oOo---

BROOKS FIELD STUDENTS GRADUATE

An impressive review featured the graduation exercises for the June class at the Air Corps Primary Flying School at Brooks Field, San Antonio, Texas, on June 29th. The review was followed with an address by the Commanding General of the Air Corps Training Center, General Frank P. Lehm, Air Corps. The exercises were witnessed by about 5,000 people from San Antonio and the immediate vicinity.

The curriculum of the Primary Flying School was changed on July 1, 1927, from five months to eight months' duration, the basic training formerly given at the Advanced Flying School at Kelly Field, Texas, having been included in the curriculum of the Brooks Field School.

It is interesting to note that the number of students who graduated in the last two classes increased approximately 20 percent over that in the preceding classes.

---oOo---

BOLLING FIELD PERSONNEL RECEIVE UNEXPECTED BATH

By the News Letter Correspondent

Lieut. Myron R. Wood, Air Corps, recently gave seven enlisted men from Bolling Field a cold bath when he landed a C-1 in the Potomac River near Alexandria, Va. While flying at an altitude of 2,000 feet, the motor froze and, unable to reach a satisfactory field, the pilot decided to land in the shallow water off shore.

Gliding down as slowly as possible, it seemed as though Lieut. Wood would make a perfect landing, but when about fifty feet above the river the transport fell off and dived straight for the water. Helping members of the crew from the rear cockpit to the wings of the ship, Lieut. Wood dived under the water

in search for Private Standoven, who was rendered unconscious when the plane struck the water. He pulled the injured man to the surface and again dove on a second search of the fuselage.

All members of the crew were badly shaken when the plane struck and, in addition, most of them had cuts or bruises more or less serious. Private Thomas Standoven and Private Joseph A. Droter were taken to Walter Reed Hospital, and the remainder were treated by Major Robert Hale, the Flight Surgeon at Bolling Field, who hastened to the scene of the crash in the Navy speed boat.

Sergeant William B. Brockaway, Sergeant Rudolph J. Lehutta and Privates Frank Lukoville, Oscar E. Johnson and L.A. McCaughey remained with the plane to assist in bringing it in.

On his return to Bolling Field, Lieut. Wood stated that he believed a loose or broken water connection had caused the motor to freeze.

All members of the crew praised the coolness of Lieut. Wood, and the officers of the post declared that only great luck in addition to unusual flying ability on his part saved the lives of the seven men.

---oOo---

BROOKS FIELD FLYERS PAY HOMAGE TO THE LATE CAPT. CARRANZA

A forty-ship formation, consisting of eight 5-ship units, took off from Brooks Field, San Antonio, Texas, at 3:20 P.M., July 19th, to participate in the homage paid Captain Emilio Carranza, noted Mexican flyer, who met an untimely death in an airplane crash while returning to Mexico City from his Good Will Flight to the United States. One 5-ship formation met the train outside of the city limits and escorted it into San Antonio, meanwhile dropping flowers on the car bearing the dead flyers's body. The remains of Captain Carranza were removed from the train and taken to the Municipal Auditorium under military escort. The planes remained aloft rendezvousing over the city while the body was lying in state until 6:30 P.M.

On the following day a 15-ship formation from Brooks Field, led by Lieut. Wendell Brookley, left the airdrome at 5:30 A.M., and proceeded to Laredo, Tex., for the purpose of participating in the services held for Captain Carranza. While the body was being escorted across the International Bridge, the formation from Brooks Field came down to an altitude that permitted the dropping of flowers on the bridge and casket.

---oOo---

CAPTAIN MACREADY RECEIVES DISTINGUISHED FLYING CROSS

By A.M. Jacobs

In the Wright Field Auditorium at 11:30 A.M., July 28th, the "Distinguished Flying Cross", awarded by Congress for outstanding flying accomplishments, was conferred upon John A. Macready, Captain, Air-Res., by Brigadier-General W.E. Gillmore. The ceremony was performed in the presence of "Lieutenant" Macready's family, a group of his friends and the civilian and military personnel of Wright Field.

General Gillmore, in making the presentation, said, "We are gathered here this morning to pay honor to one of the country's most distinguished airmen, one who through his knowledge and skill has proved himself thoroughly deserving of that honor. Twice, Lieutenant Macready has been officially acknowledged as holder of the World's Altitude Record. Many think of that feat as merely getting into a plane and climbing with it as high as it will go. They do not know of the weeks and months of preparation involved, of the physical, technical, professional fitness essential for its successful accomplishment. Lieutenant Macready was also a co-pilot of the Army Transport T-2 in the only non-stop crossing of the continent made to date. He has ever been a hard, keen worker and in every undertaking has brought credit to the Army, to his field, and to himself. The Army was sorry to lose Lieutenant Macready when a few years ago he resigned to take up other work, but it has followed his career with interest and best wishes for his success. And now it is a great pleasure to have the honor to present to him, in the name of the President of the United States, this Distinguished Flying Cross, awarded him by Congress. I will read the official citation."

After reading the citation, General Gillmore pinned on the decoration.

Lieutenant Macready responded by expressing his appreciation of the honor accorded him.

"Though no longer active in aviation circles", said Lieutenant Macready, "I hope to see the time when officers and members of the flying service who have been the backbone of aviation receive the credit due them. Many here today have done work of great importance. Recent advancements in aviation are due to nothing so much as the pioneering development work performed by the trained personnel of this service. I am proud once to have been a member of it."

Senator Simeon D. Fess and Congressman Roy G. Fitzgerald were then called upon by General Gillmore. Senator Fess expressed his faith in the continuing progress of aviation and said the day would come when people would be taking the air routes for safety. He promised every support on the part of the Government in this new development. Congressman Fitzgerald spoke of the new Wright Field and its place in aviation; of his long association with Lieutenant Macready and described in detail a flight made with him over the mountains in storm and a forced landing. He recalled Macready's night parachute jump, the first made in emergency, and finished by characterizing him as the coolest, ablest, cleverest, most courageous person he had ever known.

The new auditorium, large and pleasing to the eye, is an especially fitting place for the conferring of honors, and it is hoped many will find their way through its portals in the time to come. Flyers who have worked hard to have done it chiefly for the joy of the work, not expecting recognition. But unexpected recognition is especially easy to take and the fact of delay would but add savor. How we'd like to see some of the pioneering ventures of flight, daring, colorful and hazardous in the extreme with the old unreliable equipment, take their places in the sun along with the newer successes which an awakened public has been so ready to acknowledge! Some one has said that any flyer on active status through the last ten years and still alive to tell the tale has done "distinguished" flying. Undoubtedly true and all credit to them. And in the annals of some of these distinguished flyers lie certain brilliant flights which have definitely along the early ways marked milestones in aviation advancement. The "cross" would lose nothing in prestige by being diverted backward to help mark these milestones for all time to come, and what an unlimited satisfaction to all concerned it would be to see the pilots of these flights come into their belated rewards!

---oOo---

DEATH OF LIEUT. CHARLES B. AUSTIN, AIR CORPS

The grim reaper has taken away from the ranks of the Air Corps one of its most promising officers -- Lieut. Charles B. Austin, who died on July 27th at the hospital at Fort Monroe, Va., from acute cerebro-spinal meningitis.

For a number of years Lieut. Austin was on duty as instructor at the Air Corps Tactical School at Langley Field, Va. He was slated to attend the Command and General Staff School at Fort Leavenworth, Kansas, for a two-year term starting next September. In being detailed as a student at this school a precedent was created for the Air Corps, if not for the entire Army, for the practice has been to limit details of students to officers not below the rank of Captain. Lieut. Austin's exceptional services at the Tactical School, however, was the factor which weighed heavily in his favor. Unfortunately, he was not fated to be the first junior Air Corps officer to attend this School.

Lieut. Austin was born on July 7, 1891, at Vermilion Grove, Ill. Graduating from the DePauw University, Greencastle, Ind., he served as an instructor in mathematics at this university during his senior year. For four years following his graduation in 1913 he was Secretary and Treasurer of the Avalon Orchard Tract Co. of Kuna, Idaho.

During the World War, Lieut. Austin enlisted in the Aviation Section, Signal Corps, and he received his ground school training at the University of Illinois. Graduating on December 8, 1917, he was transferred to Waco, Texas, for his flying training, received his R.M.A. rating March 30, 1918, and was commissioned a 2nd Lieutenant. From April 10 to August 22, 1918, he was stationed at Ellington Field, Houston, Texas, where he pursued the course for bombing pilots, following which he was ordered to duty overseas. All of his overseas service was in England. Arriving in that country in September, 1918, he served as Commanding Officer of Flight A, 140th Aero Squadron, and later as

Commanding Officer of the 92nd Aero Squadron (Bombardment). He also served as flying instructor on Farmans, BE-2Es and DH-4s.

Upon his return to the United States early in 1919, he was ordered to duty in the Panama Canal Zone, and while there was commissioned a 1st Lieutenant in the Air Corps, Regular Army, on September 18, 1920. In the latter part of that year Lieut. Austin planned a flight from Panama Canal Zone to Washington, D.C., via Kingston, Jamaica; Havana, Cuba; Carlstrom Field, Fla.; and Fayetteville, N.C. He started on this flight on October 6, 1920, but after flying over the ocean for 10½ hours and completing 400 miles, he encountered heavy storms which damaged his propeller and forced him to turn back. The atmospheric conditions were so severe that the entering edges of his wings were worn down so that the linen coverings were practically threadbare. The propeller tips, not having let go simultaneously, had the effect of setting up a tremendous vibration with the consequent imminent danger of engine failure. This continued until the second frayed tip finally let go and the propeller began to balance up. During about 2½ hours of his flight he was flying through a blinding tropical storm of great violence.

Having flown for such an extended period over a wide storm area, with no prospect of issue therefrom, Lieut. Austin felt that his chances of hitting Jamaica were, under the circumstances, decidedly slim, and therefore decided to retrace his steps and return to Colon, Panama, which he reached in due time and managed to make a safe landing.

The concept of this flight, Lieut. Austin's careful and efficient preparations for it, and the daring and consummate skill and resourcefulness which he exhibited during its execution mark it as an outstanding achievement in aeronautics up to the year 1920.

While on duty in Panama, Lieut. Austin served as Flight Commander of the 5th Squadron and as Commanding Officer of the 12th Photo Section. Upon his return to the continental limits of the United States, he was assigned as Engineer Officer of the 14th Squadron at Langley Field, Va.

During the Pulitzer Races in 1922 at Detroit, Mich., Lieut. Austin took second place in the Detroit NEWS Aerial Mail Trophy Race. He was a participant in the flight of six Army planes from the United States to San Juan, Porto Rico, and return, a project which involved a distance of nearly 8,000 miles.

Detailed as a student at the Air Corps Tactical School, Langley Field, for the 1923-24 term, he graduated on June 14, 1924, and shortly thereafter was assigned to duty as an instructor at this school.

---oOo---

A NEW MOTOR BALLOON

By A.M. Jacobs

We have all seen a small potato growing on a very large potato, though we never expected, perhaps, to see the combination take to the air and fly. But we can think of no better way of visualizing a new motor balloon, which recently underwent flight testing at Wright Field, Dayton, Ohio, under the direction of Mr. W.E. Huffman, of the Materiel Division, for the purpose of determining the military value, if any, of this new type of lighter-than-air craft.

Although developed entirely through commercial initiative for advertising purposes, the unique design, simplicity of construction and operation, and low cost attracted the attention of the engineers of the Materiel Division who thought they saw a possibility of utilizing it for observation purposes, an idea which the aforementioned tests rather tended to confirm.

The balloon, which is non-rigid, with an overall length of 70 feet and maximum diameter of 30 feet, is the smallest controlled lighter-than-air craft ever built in this country. Power is furnished by a Henderson 4 cylinder engine. A light car accommodating two flyers hangs beneath the main bag. The unique features, however, lie in the pear shaped main bag and the subsidiary bag (or small potato) attached to the rear. Other airships have invariably had rigid control structures. In the Motor Balloon, this small bag forms the control element it being moved up or down as an elevator or to either side as a rudder, the control lines extending between it and the altitude wheel and rudder bar in the control car. Another feature is its shortness -- it is just twice as long as it is thick -- which permits ground handling and flight at zero pressure. It is easily portable, having been transported five hundred miles to Wright Field on

a trailer in tow of a light passenger car. The rigging is simple and it can be set up, as can the free balloon, in an open field. This is in contrast with present airships which must be rigged in a hangar with a period of days for each inflation. It may be inflated without even the inflation net customarily used with balloons, the load lines serving the same purpose. Also it is easily maneuvered on the ground, all parts being high and clearing nicely during periods of yaw and pitch.

The three test flights of July 18, while demonstrating that the Motor Balloon is still in the experimental status, more than proved its possible value from a military point of view. "Developments thus far have proved", writes Mr. Huffman, "that this type of motor balloon is far more economical, both in the initial cost and in operation, than any type developed in the past. Although complete test flights have not been made, it is believed from observation of flights to date, that an airship of this type properly rigged and provided with ample power would be more highly maneuverable in flight than the conventional type of airship. It has been definitely proved that it is convenient and easy to handle on the ground with a small crew, and that it can be erected in the open with no more difficulty than would be encountered with a free or observation balloon. One of the outstanding features is the low cost. The initial cost of the experimental ship, including design, is understood to be \$5,000.00 With proper care in holding down weights and with correct engine and propeller installation, it is believed that this ship could operate on flights of eight to ten hours with two men at a speed of twenty-five m.p.h. From a cost training point of view, four or five of these ships of helium volume could be used for primary training of airship pilots at about the same initial cost as one standard training ship.

---oOo---

CERTAIN ASPECTS OF AVIATION MEDICINE

In a lecture recently delivered by Lieut.-Colonel Levy M. Hathaway, Medical Corps, Flight Surgeon, on duty in the Office, Chief of the Air Corps, Washington, on the subject of aviation medicine, he stated that whatever were the purposes of the creator and whether created in his present form or evolved from some lower order of life, it must be conceded that man was not primarily fashioned to fly.

When some 25 years ago man made for himself mechanical wings and undertook the conquest of the air, he ventured beyond the confines of an age old racial environment. As a terrestrial organism it might have been anticipated that he would encounter difficulties and undergo stresses in accordance with the degree of his deviation from the physical characteristics of those aerial forms of life which have been specialized by nature in every organ for a particular purpose.

What the birds do naturally and easily, man must accomplish mechanically. Meanwhile, he cannot change his physical makeup to conform to these new requirements; his organs were not primarily fashioned to function perfectly under the conditions imposed by this entirely new environment. The demands on his earthly constitution must be greater than generally realized, since it is to be inferred that such an unaccustomed task must entail stresses and strains in proportion as a man is physically and psychically unspecialized for its performance.

It is true that man has great powers of adaptability, otherwise he could not fly at all, but it is equally true that he is not specialized for flying; if he were he would probably lack that adaptability which makes him what he is. It is a biological law that function precedes structure. Effort precedes development as demand creates supply. It may be that man's physique and personality will eventually undergo profound alteration as a consequence of this, his latest extensive endeavor. When men have been flying as long as they have been walking, future men may develop anatomically and physiologically in conformity with the special requirements of aerial locomotion as practiced by the human race. Meanwhile, man is handicapped to whatever extent his anatomical equipment and physiological processes are inadequate to meet the specific demands.

Although man does not need wings nor feathers, since these he has supplied by material fabrications of his own invention, he needs other things equally important in flying and until by further invention he has devised and improved aids to navigation, he must depend largely upon his natural physical equipment to meet whatever is required in the accomplishment of his undertaking.

We cannot doubt the wisdom of the Creator in adapting special forms of life to their especial needs, nor is it in accordance with the economy of nature to

lavish her endowments indiscriminately without regard to need. The earthworm does not need eyes and it has none. The eyes of the mole are rudimentary, being no longer essential to its mode of life. On the other hand, the eyes of birds are marvelous, greatly superior to our own. Because of their mode of life they needed good vision and they developed it. We do not know how many generations of eagles and their progenitors lived and died before one was hatched which could descry its prey from such enormous heights as to remain itself invisible from the earth below; nor do we know how many generations of owls were bred and born before one could see well enough to fly in the dark. These birds have specialized as pursuit pilots since the world began. Each is fully equipped for his own work, but the eagle rests by night and the owl by day; whereas man, the newcomer, flies both by day and night.

Birds have excellent visual accommodation, eye muscle balance and depth perception. We have seen a hawk fly at a terrific speed among thick shrubbery in pursuit of its equally swiftly dodging prey, while pursued and pursuing alike avoided collision with any obstacle. Wild fowl fly wing to wing in formations which military airmen by conscious attention and unceasing vigilance strive to emulate. Let one of our pilots in such a formation relax for a moment or misjudge the distance to another plane -- the wings touch and the planes fall to earth. Not so the wild fowl equipped by nature for formation flying.

They also have other equipment which we may envy. It would be easier for our pilots if they, like the carrier pigeon, had in their heads some natural equivalent of an earth induction compass combined with a Bank and Turn Indicator which would enable them to find their way through darkness, wind and fog across those trackless skies which separate the continents.

When the earth is obscured by clouds and the horizon invisible, the airman cannot depend upon any inherent sense of equilibrium or of direction. He is inadequate in this respect, as in many others pertinent to flying. Bred on the ground, he is physically adapted only to moderate changes of barometric pressure and equivalent oxygen supply. Deprived of his accustomed alveolar oxygen pressure at high altitudes, his judgment suffers, conscious attention fails, circulation likewise, and unless relieved he perishes. Adjusted to slow locomotion, his organs are none too tightly anchored to resist the violent and sudden changes with relation to gravity and inertia which aerial acrobatics demand. These acrobatics are essential to military maneuvers and combat; the Army pilot must out-fly the enemy or suffer defeat.

In the preceding remarks an attempt was made to indicate that flying is rather a difficult task because it is foreign to man's biological development and alien to his natural experience. Yet all over the world men are flying faster and farther, and none can say what the end of this era will be nor what the cost in health and longevity to be reckoned against their calling by these Argonauts of the air. In this strange new pursuit men are subject as never before to unwonted strain which must and does affect their bodies, not only in visible, tangible ways but doubtless equally so in manners more obscure.

The task of the military airman is particularly strenuous in that it oft-times involves the execution of a difficult and hazardous mission in addition to flying. To him the latter is only a means to an end. During active operations he must watch all parts of the sky incessantly for hostile aircraft and destroy or else escape them. Night flying is extremely fatiguing and bombing in active operations is usually conducted at night. This calls out the pursuit pilots to destroy enemy bombers and pursuit planes. Night flyers habitually suffer from staleness. High altitude flying is often a tactical necessity and is extremely exhausting when long continued.

In general, military flying under active conditions demands a high degree of skill and physical fitness. The military pilot must be able to fly automatically, devoting conscious attention to the performance of his mission and leaving to subconscious processes the operation of an aircraft which in his case may be regarded as only a means of transport and a mount for his gun, camera, radio or bomb.

All this involves strain on the human economy and its effects are manifested in various manners and degrees. Among the more visible and demonstrable effects of flying are those manifested upon the eyes and ears. Eyestrain accompanied by headache is often felt by aviators and mentioned after a long flight. Slight errors in refraction or imperfect goggles increase this eye strain. Physical examinations conducted immediately after a fatiguing flight may disclose eye muscle imbalance which clears up after rest.

Most of these effects are temporary, but the cumulative results of long continued flying appear likely to leave permanent traces. Because of their strict physical examination, military pilots begin with excellent ocular equipment and better than average vision. Since normal eyes wear better than abnormal ones, we may not expect any very startling figures from Army statistics. The figures for the Fiscal Year ending June 30, 1927, show that of 795 Regular Army pilots, there were 51 flying with waivers for defective vision, 9 with defective eye muscle balance and one with defective depth perception.

Defective hearing is common among aviators and is generally considered occupational. Many flyers are slightly deaf though it may not be noticeable except through watch test or audiometer. Deafness tends to progress in flyers. The roar of a 400 horsepower engine is terrific. Conversation is drowned in its presence. Communication is by signals. This noise, together with the effects of rapidly changing atmospheric pressure on the delicate structures of the auditory apparatus soon dulls the sense of hearing. These effects are cumulative, becoming permanent with continued exposure to the cause. Prolonged exposure to cold winds cause and aggravates catarrhal processes in the upper respiratory passages, and these extending to the middle ear produce sclerosis and retraction of the membrana tympani, occasionally resulting in otitis media. The labyrinth is probably badly shaken up on occasions and we do not know how much it may be damaged or deranged by such rough treatment, but the principle changes are probably in the middle ear and its outer wall, the tympanic membrane.

It is unsafe to fly with obstructed eustachian tubes, since the unequal pressure so engendered has caused intense earache, temporary disturbances of vestibular equilibrium, and even resulted in ruptured ear drums. Forced landings have been recorded in such cases.

Aside from minor losses of hearing, only demonstrable by the watch and audiometer, there were at the close of the last fiscal year among 795 pilots, 23 flying with waivers and one disqualified for deafness.

There is a high incidence of neuroses among aviators. These men are especially selected by careful physical examination more rigid in its requirements and standards than for any other arm of the service. It may be taken for granted that man for man they are probably as capable of withstanding nervous tension and shock as well if not better than the average soldier or officer. They certainly like their profession, the vast majority being enthusiastic flyers and only losing this attitude when in ill health or stale from being over-worked and over-flown. Out of 795 pilots on June 30th last, there were 9 physically disqualified for conditions classifiable under "instability of the nervous system". Also 14 pilots were temporarily removed from flying and 438 days lost as a result of neuro-circulatory asthenia. This is a condition generally recognized as occupational in aviators. The rate for N.C.A. for the entire Army is .53, which is approximately 1/27 of the Air Corps rate. It is probable that but for painstaking care by the Corps of Flight Surgeons who are always on the lookout for incipient staleness, the incidence and severity of neuroses would be higher.

When an aviator becomes stale he is unsafe to fly. Definite anxiety neuroses and fatigue neuroses likewise indicate grounding and are regarded as occupational by Flight Surgeons and flyers. In suitable cases a short rest and change often works wonders, and men who display such evidence of nervous strain as worry anxiety, fatigability, insomnia, occupational dreams, increased psychomotor tension, and low Schneider Index are frequently rebuilt by timely rest and reassurance.

When the nervous system is deranged, every organ is deliteriously affected. Gastro-intestinal complaints, slight and serious, are common among aviators and may in many cases be justly attributed to nervous influences which may or may not have been caused by flying. It is the impression of many Flight Surgeons that gastric and intestinal disorders are somewhat more prevalent among flyers than among others, although we have no statistics to establish or disprove this opinion.

No man can doubt the influence of the emotions on the entire systemic economy. We see frequent examples of this influence. Bad news upsets the digestion. We read that eight or ten persons died from the excitement of listening to the broadcasting of a prize fight. The sight of a snake paralyzes some persons, so that they are incapable of flight.

Comparatively little is known of the actual physiology of the emotions. We know, however, that certain ductless glands are vitally concerned in matters relating to the nervous system. Modern psychology is becoming more and more concerned with the effect of the emotions on behavior. Several recent books on this

subject have had a phenomenal circulation, indicating the widespread interest aroused. There is, perhaps, no field of human activity which demands as tight a rein on the emotions as does flying. It is significant that that form of behavior we call fear in an unconditioned (untrained, inexperienced) child, is brought forth by only two stimuli, namely, loud sound and loss of support. This reaction is, then, instinctive, for these two stimuli only, so far as known.

Fear of falling (or aversion to flying) is not only almost universal but is a perfectly natural reaction - instinctive. Rage and love or affection are the only others. The emotions are no longer looked upon as mental states but are way of "behavior" which have to be learned like other habits. They are responses to the numerous varied daily experiences and contacts (conditioned responses to conditioned stimuli) and are elaborations of the three primitive reactions just mentioned. It is interesting to us as Flight Surgeons that experiments now being conducted seem to indicate that unconditioning can be brought about - emotional reactions can be removed as well as implanted. Both claims of psycho-analysts have not, however, been altogether realized.

Modern psychology gives great weight to subconscious influences. Complexes buried in the subconscious, though banished, are not dead. They still strive for expression; subconscious fear, though repressed or even suppressed below the threshold of consciousness, may yet be active and destructive when applied over long periods of time.

Emotional control is essential to meet the frequent emergencies encountered in flying. Never for an instant can a flyer afford to "lose his head". Stability of the nervous system is essential in a pilot. Any nervous weakness is apt to be brought out under the severe strain, constant alertness and feeling of responsibility which this occupation entails.

It has been said that airmen as a class are somewhat temperamental. They are probably not any more so than the general run of humanity. Flyers come from the same sources of population as men who follow other callings. It is possible that as a class they are somewhat more adventurous. The profession of flying demands rather more daring than most ground pursuits and the flyer having to depend upon himself while in the air naturally develops self reliance and individualistic qualities. Any neurotic tendencies are justly attributable to his occupation rather than to temperament. The act of flying demands constant alertness on the part of the pilot. He must constantly realize the fact that something is likely to go wrong and necessitate a forced landing or even a parachute jump. Not only must he watch his instruments but must scan the ground for a possible landing field to be utilized when necessity demands. For him, as in no other arm of the Service during peace, it is always a matter of active operations, as our annual casualties show. During the last calendar year there would have been about 20 more fatalities except for the parachute. The latter is a life saver; nevertheless, it takes considerable nerve to step out into space pull the rip cord and trust the rest to fate.

It is believed that not every man possesses the nervous stability to work daily under this realization and to feel or show no effects. It is not implied that airmen fly in a constant state of dread or nervous tension. On the contrary, they are usually relaxed and at ease. They are trained to relax, and those rare flying students who "freeze the stick" never become pilots.

Among the primary symptoms of fatigue or incipient anxiety neurosis are occupational dreams of air accidents. When the pilot begins to dream of crashes he becomes a fit subject for concern by the Flight Surgeon. The nervous system in flyers is directly or indirectly affected by other factors aside from fatigue and possible subconscious fear. Eyestrain is a potent cause of headaches and asthenopic symptoms common among aviators. As previously said, ocular muscle imbalance is increased by long flights, especially at high altitudes.

The effects of anoxemia are extremely insidious. Low oxygen pressure at first over stimulates the nervous system, producing in many individuals an euphoric condition similar to alcohol; judgment and conscious attention fail, near-muscular coordination is impaired, the cardiovascular system is at first over stimulated and later depressed, and if the condition continues too long death or permanent injury may result. Balloonists have fainted at high altitudes and recovered on descent to lower levels. Many pilots declare that they feel fatigued after a long flight above 5,000 feet than after a similar flight at lower levels. This is natural, as the heart is working over-time and compensatory processes are mobilized to maintain adequate circulation. The effects

... cold are keenly felt at high altitudes, and it is almost impossible to dress comfortably.

The effects of sudden changes in speed and direction concomitant with aerial acrobatics call for compensatory adjustment by the circulatory system. In pulling up from a steep dive, at the rate of 280 miles an hour, there is bound to be some temporary cerebral anemia and corresponding congestion of the splanchic vessels. One who executed the unusual maneuver known as the outside or inverted loop, wherein he dived from an altitude of 8,000 feet, describing a great circle 2,000 feet in diameter, while suspended against gravity and centrifugal force by his safety belt, mentions casually that in this maneuver all loose parts about the plane, including the blood of the pilot, tend to be thrown out. He states that the blood "coming to his head, while not at all dangerous, is most uncomfortable". This pilot's eyes were said to have been blood-shot for a while, but apparently he has suffered no permanent ill effects and is still going strong. It is said that pilots have momentarily fainted and recovered while in the air.

Air sickness is a common phenomenon among beginners and occasionally cannot be overcome. Whether attributed to nervous instability, cardiovascular stresses or to the effects of unaccustomed motion on internal organs, the fact remains that man was not primarily adapted to withstand such great strains and it is, indeed, surprising that he holds together as well as he does. After we have flown for as many years as we have walked the earth we may expect to develop greater powers of resistance and more aptitude for aviation. Until that time comes we may expect to encounter the effects of flying either as occupational neuroses, fatigue neuroses or possibly organic changes in various organs and systems.

Aviation being such a new occupation, there are comparatively few elderly flyers engaged, and statistical data is not yet available to prove or disprove whether flyers as a class fail faster than other men. A prize fighter is "old" at thirty-five. It is generally conceded that the average man begins to feel the effects of advancing age around forty and that at about fifty, more or less, he is no longer able to follow strenuous pursuits. We believe that this applies to airmen, and future statistics will show whether they tend to deteriorate at an earlier age than officers of other arms.

To be Continued.

NOTES FROM AIR CORPS FIELDS

Langley Field, Va., July 25th.

The 2nd Bombardment Group activities, because of this season, are at the minimum.

Coast Artillery Reserve officers on duty at Fort Monroe, Va., were given training flights in Bombers. Reserve officers on two weeks' duty at other Army posts in this vicinity were also taken for practice flights.

Three new Reserve officers who graduated from Kelly Field on June of this year - 2nd Lieuts. James N. Peyton, Charles S. Vaughn and Cassius H. Thomas, reported to Langley Field, July 9th and were assigned to the 49th Bombardment Squadron in the 2nd Bombardment Group.

The several beaches in the vicinity of Langley Field are sources of great pleasure to the officers and their families and the enlisted personnel. Some time ago everyone received their first sunburn and consequently are comfortably tanned for surf bathing.

Captain Sam Browne, Flight Surgeon at Kelly Field, paid a brief visit to the post.

Major Walter H. Frank left July 23rd for Cape May, N.J., to join Mrs. Frank and Miss Helen Frank. They will spend the summer season in the Adirondacks.

19th Airship Company: Colonel C.G. Hall, of the Army War College, and Major J.D. Reardan, of the Chief's Office, recently made two training flights in the TC-10-254.

Orders were received from the Chief's Office attaching 1st Lieut. R.P. Williams to this organization for flying duty only. He is at present on temporary duty at the U.S. Naval Academy, where he is taking the course in Aerology. Lieut. Williams recently made three training flights with us.

The Airship TC-5-251 made a demonstration flight on July 3rd over the Nansemond River and Chuckatuck Creek Bridges as part of the program celebrating the opening of same.

Two special observation flights were made on July 5th for the Post Flight Surgeons, Major B.B. Warriner, Captains I.F. Peak and H.S. Steenberg.

Although our flying activities were slightly hampered by rain during the past week, our schedule of flights was carried out quite successfully. On July 9th and 11th special demonstration and coast patrol flights were made for the Coast Artillery Reserve officers stationed at Fort Monroe, Va.

A flight for observation of Field Artillery fire at Fort Eustis, Va., was made by the TC-10-254 on July 12th. Observations and corrections were made by radio, and the results obtained were highly satisfactory to the Artillery officers. Captain Sharp and 1st Lieuts. Bassett and Roberts, all of the Artillery, were the special observers on this flight.

Lieut. Wm.J. Flood reported for duty July 13th. He completed the Special Observers' course at Kelly Field, Texas, with the class starting March 1st. We are, indeed, glad to have him with us again, as the Lieutenant is very popular with the members of the command.

This year, as in the past, the 19th received a commendation from the General Inspector. The Company Commander, Captain Charles P. Clark, just received a communication from the Inspector's report commending us for the excellent showing of our personnel and equipment.

The Company Baseball Team, Champions of the Post for 1928, was tendered a beach party at Grand View on the afternoon of the 9th. Swimming was indulged in till a late hour when luncheon was served and the "Team" returned home in the Company motor boat at "lights out" tired and happy.

Bolling Field, Anacostia, D.C., August 1st.

Major Howard C. Davidson turned over his duties as Commanding Officer to Captain Donald P. Muse on July 12th and left for Fox Lake, Ontario, Canada, to enjoy a month's vacation. We hope he is having more enjoyable weather than we are.

Lieut. Louis M. Merrick, having arrived here from France Field, Panama Canal Zone, assumed the duties of the Operations Officer, relieving Lieut. Bob E. Nowland, who leaves for San Diego, Calif., en route to the Philippines.

Rockwell Field, Coronado, Calif., July 23rd.

Some changes have been made in commands at Rockwell Field since the last News Letter. Major A.L. Sneed is in command of Rockwell Field and Rockwell Air Depot; Captain H.M. Elmendorf is commanding officer of the 7th Bombardment Group and the 95th Pursuit Squadron; Captain E.C. Black is in command of the 11th Bombardment Squadron, and Captain R.H. Pritchard is in command of Headquarters 7th Bombardment Group as well as the Operations Officer of the field.

The Reserve officers are greatly enjoying their active duty during the annual summer training period and are great boosters for Rockwell Field. Lieut. W.K. Burgess, the popular camp commander, is very active and has the officers under his command extremely busy at all times. The social side is not overlooked and many impromptu affairs are held at the Coronado Hotel.

Major Shepler W. Fitzgerald, who was a recent visitor at Rockwell Field, was taken to El Paso, by Lieut. O.P. Gothlin, Jr., who was ferrying one of the Douglas O2-H airplanes to Fort Riley, Kansas.

Major H.A. Strauss, of Kelly Field, together with Captain A.C. McDaniel of Duncan Field, were recent visitors at Rockwell Field, arriving on July 16th in a Curtiss O-1 and departing the following day.

Major H.B. Clagett, Air Officer of the 9th Corps Area, paid an official visit to the field on July 11th.

Captain E.C. Black left Rockwell Field via rail on July 17th for San Antonio Air Depot, where he took delivery on an O-2 airplane, ferrying same to Rockwell Field on the 22nd and making the trip in a flying time of 11 hours and 45 minutes.

Lieut. W.L. Cornelius left Rockwell Field July 23rd by rail for the San Antonio Air Depot for the purpose of ferrying back a PW-9 plane.

Lieut. C.P. Kane, who recently returned from duty as a language officer in Japan, was detailed as the Depot Supply, Procurement and Property Officer of the Rockwell Air Depot, taking over the duties of Captain C.E. Giffin. Lieut. Kane and family are making their home in La Mesa.

The officers and wives of the Rockwell Air Depot gave a dance on July 14th in honor of the incoming officers and wives of the 7th Bombardment Group, 95th Pursuit Squadron and 11th Bombardment Squadron. The dance was well attended and every one reported an excellent time. The affair was to have been given a week later, but the date was advanced a week to permit Captain and Mrs. C.E. Giffin to attend before their departure for the Hawaiian Department on July 16.

Due to the efforts of Lieut. W.K. Burgess, Doctor Ford A. Carpenter, Staff Corps Specialist Reserve, noted meteorologist and Manager of the Meteorological and Aeronautical Department of the Los Angeles Chamber of Commerce, was induced during the past week to deliver a lecture to all officers of this post.

Brooks Field, San Antonio, Texas, July 26th.

With the publishing of the new pamphlet on Aerial Navigation and the receipt of additional equipment, the course conducted on this subject has become of such interest to the permanent officer personnel that it is predicted a number of the older officers will request Lieut. Holland to conduct lectures on this subject, particularly on the earth inductor compass.

The duplicate bridge tournament held in July at the San Antonio Country Club was won by Lieuts. R. Ott and S. Connell of Brooks Field.

Lieut. H.H. Holland was presented with a six pound girl on July 11th. Lieut. Holland has established what is believed to be a record for his daughter. When only 18 hours old the Lincoln National Life Insurance Company issued an educational policy in her favor.

Lieut. Warren Carter received a Distinguished Aerial Gunnery Medal for winning first place in the Aerial Gunnery Matches held at Langley Field in October, 1925. The presentation was made by Major S.W. Fitzgerald at the officers meeting on July 25th.

Marshall Field, Fort Riley, Kansas, July 27th.

For the past two weeks our schedule has been quite filled with the Reserve Officers' Training Camp and the ferrying of ships and supplies to the Mail Detail at Superior, Wisconsin. The entire training period was completed without trouble or accident of any nature, and we are busy with the training ships getting them ready for the next Reserve Camp starting August 3rd. The last camp

comprised 32 officers, all except two being Air Corps men. The exceptions were Lieut.-Colonel J.W. Leedom, Field Artillery, and 2nd Lieut. R.L. Welpton of the Infantry. The reason for these officers took training with the Air Corps was to enable them to become better acquainted with other branches of the service and hence make them more efficient in their own branches.

One cross-country flight was made to Wichita, Kansas, on July 19th, the airmen returning the following day. Wichita, the Aviation Capital, treated the flyers with the greatest courtesy and tendered them a banquet at the Wichita Country Club. Every one who made the trip reported an enjoyable time.

The following is the list of Reserve officers who attended the camp from July 9th to 22nd:

Lieut.-Col. J.W. Leedom	1st Lt. B.P. Meyen
Capt. R.B. Mosher	1st Lt. H.D. Wentworth
Capt. Henry Schlacter	2nd Lt. F.J. Bassing
Capt. L.V.S. Addington	2nd Lt. K.W. Fischer
Capt. Paul Jones, Jr.	2nd Lt. J.R. Leverett
Capt. W.R. Johnson	2nd Lt. H.S. Smedley
Capt. J.O. Lewis	2nd Lt. J.A. Sturtevant
Capt. M.L. Lawton	2nd Lt. R.L. Lane
1st Lt. R.V. Campbell	2nd Lt. C.E. Cheney
1st Lt. D.B. Ellis	2nd Lt. J.L. Manley
1st Lt. G.J. Thomas	2nd Lt. R.G. Martin
1st Lt. W.B. Warde	2nd Lt. E.C. Pierce
1st Lt. V.E. Williams	2nd Lt. R.R. Randall
1st Lt. O.E. Davies	2nd Lt. T.A. Stratton
1st Lt. E.G. Dixon	2nd Lt. W.R. Weaver
1st Lt. C.B. Geise	2nd Lt. R.L. Welpton
1st Lieut. A.E. Johnson	

Lieut. Homer C. Munson, Air Corps, went to Santa Monica, Calif., to ferry a new O2-H to this station, while Lieut. Robert E.L. Prittle, Air Reserve, took an O-2 to Fairfield to be overhauled.

With seven Reserve officers now on active duty at this station we hope to be able to acquire a few more service type ships in the near future.

Capt. Levy Johnson, our Flight Surgeon, and Lieut. James L. Daniel, Jr. have gone to Superior, Wis., in an O-2-C for the purpose of giving physical examinations to the officers on the mail detail. Lieut. Herbert E. Rice has also gone to Superior to ferry supplies to the detachment.

Lieut. Wilbur Erickson, Air Reserve, is back with us after some unusually hard luck on the trip to Superior. He narrowly escaped injury in two crashes, and had only a bruised nose to show for his experiences.

Wright Field, Dayton, Ohio, August 6, 1928.

The Hon. F. Trubee Davison, Assistant Secretary of War for Aviation, spent several days at the Materiel Division during the week of July 9th for the purpose of conference with General Gillmore. While here he addressed the personnel in the auditorium.

"The past year", said Mr. Davison, "is the best aviation has ever had. This success is the result of years of hard work, devoted service, casualties in pioneering work, research, and much flying. One thing we are in danger of losing sight of is the vital importance of military aviation. Military aviation must be developed, for as in the past so in the future will the greatest military progress come through it to commercial and general aviation."

Lieut. Carl Greene left the Materiel Division recently to make a tour of Detroit, Buffalo, Boston and Washington. In Detroit he presented a paper before the A.S.M.E. on "Wing Flutter"; in Buffalo he attended a conference at the plant of the U.S. Aluminum Company on the "Joint Program on Thin-Gage Dural Sheets Made up of Corrugations of Curved Flat Elements"; in Washington he conferred with the Bureau of Standards on a possible mean for cutting down or eliminating noises from propeller test rigs and torque stands. The trip was made with perfect flying weather, and all schedules were met without obstacle.

Lieut. Guy E. Lawrence, Air Reserve, just completed two weeks of active duty with the Materiel Division. Mr Lawrence is at present with the

Pioneer Instrument Company, New York City. It was good to see Mrs. Lawrence (nee Agnes Knightman) again. She was formerly also with the Materiel Division. Lieuts. F.O. Carroll and R.C. Zettel each ferried an airplane to Bolling Field, July 18th, making the trip in 3 hours and 20 minutes.

General and Mrs. Gillmore will sail on August 22nd for an extended tour of Europe.

Acting Secretary of War Charles B. Robbins was a guest at Wright Field on July 26th. The flight was part of a tour of inspection of various Army Posts in the country.

A.C. Advanced Flying School, Kelly Field, Texas, Aug. 11th.

Major Tien Lai Huang, Chinese Army Air Corps officer who is making a four-month tour of the United States, visited the Air Corps Training Center and Kelly Field on Wednesday, August 1st. Major Huang has been making a study of flying schools in the United States, and carrying forward preparations for a trans-Pacific flight from the coast of California to China, via either Wheeler or Luke Field, in Hawaii.

During his tour of inspection Major Huang expressed the desire that the United States Air Corps send to China competent flying instructors to aid in organizing and perfecting plans of training and flying schools for the Nationalist Air Corps.

"The Nationalist Government is on a stable basis at this time", he said, "and is ready to place several flying schools in operation.

"There is little doubt that the United States is turning out the most efficiently trained flyers in the world today", Major Huang said. "I have visited practically every European country within the past few months and have observed their training methods. From my observation of training methods in your schools here I see that it is only the fittest of the fit that survive the rigorous requirements.

"With the standards of requirements for candidates so high and the intensive twelve months of training the students are compelled to undergo, the product of your flying schools here could be nothing but the most efficient. I am hoping that we may be able to install some such methods without loss of time when our schools are brought into operation."

Major Huang has procured a tri-motored Prudden plane for his contemplated flight, and will be accompanied, if present plans are carried out, by Harold J. Lynch, who was at one time Colonel Lindbergh's instructor.

Major Huang received his university training in the United States. He completed the regular four year course at Syracuse University, later obtaining his degree of PHD from Columbia. He has also studied languages at Harvard, and is an accomplished linguist, speaking English, Japanese, German, Russian and French quite fluently.

Congressman Melvin Maas, representative from Minnesota, arrived at the Air Corps Training Center August 6th for a short tour of inspection of Brooks and Kelly Fields. Congressman Maas is greatly interested in the Air Corps, especially in the various methods used in student training. While here he was taken for flights in several different types of training planes.

On August 8th the Congressman, flown by 1st Lieut. John V. Hart, proceeded to March Field, Riverside, Cal., for further study of the Training Center.

An Athletic council composed of the executive officer, all squadron commanders, the Post Exchange officer and the E & R officer was recently formed for the purpose of sponsoring and promoting athletics of all kinds among the men of Kelly Field. Under the present plan the organizations will compete against each other for points, each man entering an athletic event earning for his organization a certain number of points, or credits. At the end of the season the organization making the highest total number of points from all events is to receive a shield trophy for the all-around 1928-1929 championship in athletics for Kelly Field. 1st Lieut. Stanton T. Smith, the E. & R. officer, has announced the following schedule for the coming year.

(1) Football from August 10 to the end of the season. Each man qualifies by playing in at least one game. 50 points per man.

(2) Swimming meet during first week of September. Speed-distance-diving.

First place	150 points
Second place	100 "
Third place	50 "

- (3) Track and Field Meet about March 15th:
- | | | | |
|----------------------------------|-------|-------|--------|
| First place (plus points earned) | . . . | 300 | points |
| Second place | " " " | . . . | 200 " |
| Third place | " " " | . . . | 100 " |
- (4) Baseball from March 15th to the end of the season:
- | | | | |
|--------------|-----------|-----|---------|
| First place | | 500 | points. |
| Second place | | 300 | " |
| Third place | | 100 | " |
- (5) Boxing once each month, 10 points to each man fighting.
- (6) Wrestling once each month, 10 points to each man matched.

The first boxing match to be held since the Council was organized took place on the evening of August 6th, and consisted of four fast preliminaries, two special events and a special exhibition. The main go, scheduled to be between K.O. Riley, West Side Athletic Club of San Antonio and Kid Broussard of the 40th Squadron, was not fought, due to the failure of Riley to appear. In the special exhibition, Bill Manness of San Antonio won a decision over Gene O'Neill of the 10th School Group in a fight that was characterized by sporadic flashes of speed. Manness weighed in at 158; O'Neill at 150.

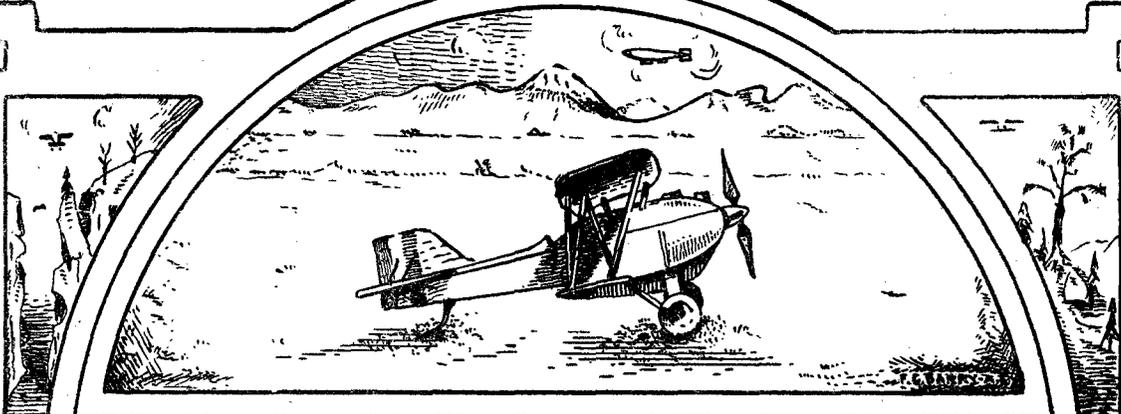
In the special event between Andy Kralosky of the 48th Squadron and Babe Dare of San Antonio, the referee declared the match to be a draw. Weights of the fighters were : Kralosky, 140; Dare, 138.

Corporal Baldwin of the 48th Squadron fought Red Foster of Fort Sam Houston through four rounds that were inclined to be slow and uninteresting. Occasional flashes of color were apparent, however, and twice it seemed that the fighters would stop clinching and fight a little. When the bell stopped the scrap neither man was badly damaged, and the referee announced the fight a draw.

Of the preliminaries, Battling McQuade of the 43rd Squadron and Don Carroll of the 48th put on the outstanding event. These men weighed in at the ringside at 126 pounds. From the first bell until Carroll was knocked out, the fight was full of the fastest action that has been seen in such an event at Kelly Field. Both fighters went out of their corners at the start with instructions from their trainers to rush in and finish the fight in the first round. After one minute and five seconds of mad fighting, and before the spectators could realize exactly what was taking place, McQuade put a hard left hook to Carroll's temple and Carroll fell into the ropes and slid to the floor. He got up immediately, but kept his head down until the referee had counted nine, then rushed back into the fight with as much speed as he had started it. McQuade got in another left jab to Carroll's jaw, and, dazed, Carroll started to shuffle away. Before he could get clear McQuade snapped out a stinging right that connected with Carroll's jaw, and Carroll went down for the count.

Carroll, immediately after the fight, challenged McQuade to a return bout, which will probably be fought on September 6th.

Travelling as a representative of the German Government, Major von dem Hagen German Army, visited Kelly Field and the Air Corps Training Center on August 11th. Since arriving in the United States the Major has visited Wright Field, Selfridge Field, Chanute Field and Scott Field. His present itinerary will take him to Fort Crockett on August 15th, and to Fort D.A. Russell about August 18th.



Air Corps
News =
= **Letter**



— ISSUED BY —
OFFICE CHIEF OF AIR CORPS
WAR DEPARTMENT
WASHINGTON, D. C.

TABLE OF CONTENTS

---oOo---

	<u>Page</u>
Bologna, Balloons and Belligerence - - - - -	315-318
Army Planes Participate in Dedication of Lindbergh Field - - - - -	318
Mooring Mast Removed from Rockwell Field - - - - -	319
Siamese Officers Fly Over Boston Airport - - - - -	319
Brooks Field Personnel Entertained at Colorado Springs - - - - -	319
Secretary of War Visits Rockwell Field - - - - -	319
More Seven-Men Jumps at Brooks Field - - - - -	320
Congressman Maas Inspects Rockwell Field - - - - -	320
Fire Destroys Hangar at Kelly Field - - - - -	320
Motors Changed on Plane in Jig Time - - - - -	320
Airport Dedicated at Shreveport, La. - - - - -	321
Virginia's Executive Flies in Airship - - - - -	321
Aerial Mapping Operations in the Philippines - - - - -	321
Lieut. Brookley has his Inning - - - - -	322
Decorations for Langley Field Men - - - - -	322
The Beginning of Aviation Medicine - - - - -	323-328
AIRSHIP Equipment Tested at Scott Field - - - - -	328
Secretary of War Inspects March Field - - - - -	328
Chinese Aviator Visits San Antonio Air Depot - - - - -	329
Air Corps Planes Escort Carranza Funeral Cortege - - - - -	329
English as She is Writ - - - - -	329
Second Bombardment Group Pilots Fly to California - - - - -	330
Noted British Airmen Inspect Air Corps Activities - - - - -	330
Recreational Advantages at Langley Field - - - - -	330
Study of Aviation in the Public Schools - - - - -	330
Cadet Winn Joins Caterpillar Club - - - - -	330
Report on Panama to Washington to Panama Flight - - - - -	331-334
A Night Flight to New York - - - - -	334
Inspection of National Guard Air Corps Activities - - - - -	334
War Department Orders Affecting Air Corps Officers - - - - -	335
Notes from Air Corps Fields - - - - -	336

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

---oOo---

BOLOGNA, BALLOONS AND BELLIGERENCE ✓

By Lt. W.O. Eareckson, Air Corps

If the man who designed the Tower of Babel could have been in the Detroit Statler Hotel at almost any time during the week prior to July 30th, he would have felt right at home, the reason for this linguistic chaos being that the prize "Balloonatics" of all nations were gathered there for participation in the Twenty-second Annual International Balloon Race for the James Gordon Bennett Trophy.

Since to the uninitiated, the above paragraph may carry about the same amount of idea picture as the Fourth Dimension does to me, I will endeavor by the use of some time, and more ink, to answer a few of the questions which my psychic powers tell me are welling up in the throats of most of the prospective readers of this article; for example, such questions as: Who was James Gordon Bennett? Why is a free balloon? Of what value is it to any one, particularly the Service, etc., are pertinent, obscure and, therefore, worthy of a brief answer.

Be it known, then that a free balloon was the first medium of aerial transportation ever successfully attempted, and chalk up the credit to the Brothers, Montgolfier, who in June, 1783, first found a valid excuse for hot air. It was they who converted this political lubricant into an ascensional force for their crude paper craft, and at Ammonay, France, successfully demonstrated its ability to sustain both physical matter and animal life in a previously unexplored medium -- the air.

Since this first ascension, balloons in one form or another have been used for various purposes. During the French Revolution, the Civil War in America, the Franco-Prussian War and the last European squabble, observation from balloons played quite an important part in the trend of events. And when one stops to think that the Zeppelin of yesterday, the airships of today and the huge rigid air-liners of tomorrow, are merely motorized balloons, one can begin to realize their importance. In the Services, lighter-than-air training is accomplished in free balloons, because, an airship with disabled motors reverts back to a balloon, and it is essential that the pilots be able to handle it as such in this contingency. It will be remembered in this connection that when the "Shenandoah" met its fate, part of it was successfully landed several miles from the scene of the disaster with a consequent saving of thirteen lives.

Balloon racing, however, is a sport, and purely as such has been going on in Europe for years. In 1906 James Gordon Bennett, an American sportsman, offered a cup to go to any nation whose representative balloon team should three consecutive times win the annual international race, this contest to be held in the country whose team had won the race the preceding year. The original trophy was won by Belgium when their star balloonist, Ernest Demuyter, four times won the race. The trophy which the United States acquired this year was one which the Aero Club of Belgium tendered to replace the original James Gordon Bennett cup.

All of which having been duly explained, we may now proceed to Detroit and this year's race. But before we take off, let us first look over the equipment of the various teams, and see where we all stack up before we get beyond the reach of assistance from the Ground. Naturally, the two prime essentials of a racing balloon are lightness and gas tightness. The equipment should be light so that the maximum amount of ballast can be carried, and gas-tight in order that the purity of the gas will not be impaired by leakage and with a consequent loss in lift. From this point of view Captain Kepner and I found ourselves severely handicapped, for, whereas all the other contestants had racing balloons, ranging in weight from 800 to 1000 pounds, complete, our rather ancient service type craft weighed a trifle in excess of 1400 pounds. This meant that we would

take off with approximately 24 hours less ballast than any other contestant and, in the event of slow winds and a long race, would not only stand much less chance of winning than any of our competitors but, in order to make a decent showing, would in all probability have to risk out G.I. issue necks. However, the proximity of the Atlantic coast and the direction of the prevailing wind made it seem to us that meteorology, navigation and skill rather than ballast would count. In other words, we figured that in all probability, barring accident, all of the balloons would land on the Atlantic coast with ballast, and that victory would fall to the lot of the pilot who could so take advantage of local conditions en route that his coastal contact point would be the farthest distance from Detroit.

Our hopes were somewhat chilled, however, when, on the day of the race, the weather map showed light winds from the northwest, which gained velocity with altitude and which bid fair to entirely calm down about 20 to 24 hours from Detroit. This condition definitely gave the advantage to the lighter racing craft, for it undoubtedly meant that the race would be in the nature of an endurance contest. Some folks just naturally can't be made to feel downhearted, however, and so it was that Captain Kepner and I found many opportunities for mirth as we ambled around through the truly spectacular collection of pulchritudinous femininity while we equipped our harnessed bubble for its long aerial trek.

At last the time arrived; partially controlled crowds overran the field. The starter's gun cracked and, amid a volley of German expletives, (which may have been perfectly proper but didn't sound so) the first great bag swung aloft and soared slowly away in the general direction of the rising sun. Every five minutes thereafter another spherical menace to our chances was released, until at 4:45 P.M., we, ourselves, left the ground and severed all earthly ties.

The last five minutes, prior to the take-off, are busy ones at best, and in a race they are the acme of pandemoniumistic chaos. In addition to the normal checking of the various odds and ends which accompany a normal flight, there are many other things to be done. Children who, of course, can never be denied, clamor for autographs; men friends paralyze the hands with fervent good luck clasps; feminine friends, acquaintances and well wishers obscure the view with their own little way. Presents are thrust into the basket (everything from New Testaments to cork screws); and then there is the sponsor proposition.

Be it known that a sponsor is a serious problem. She is usually a proper, but may be an improper noun, feminine gender, singular number -- or maybe not, and if not, hubby is present -- anything from subjunctive to imperative mood, and neither active nor passive voice. She sometimes stands alone, but more often is modified by a local chapter of Beau Brummels, who would like nothing better than to impose a sentence on you, the pilot or aide. This lady, then, when the excitement is greatest, steps up and presents you with a large bouquet of cut flowers worthy of adorning an Italian marble headpiece. Enter the problem! To kiss or not to kiss, that is the question; whether to gallantly gather her girlish garments gently in a genuinely gentlemanly gesture, as did the pilot of the previous balloon, and be slapped for your pains, also as was he, or merely to shake the festive hand, smiling a chaste, silent smile, as did another coy pilot, and try to live down the look of baffled fury and impatient disappointment which accompanied the act. But that is where the aide comes in. His job is to retrieve the honor of his team by being on the alert to rectify any such situation and to smilingly receive the consequent slaps, if any. Having accepted the flowers, the next step is to answer a series of questions, such as: Aren't you afraid to go up in that thing? How long will you be up there? But what will you do when you want to -- that is, when you sleep? Usually, this is the last question, and the starter's gun ends the episode, sending you aloft.

So it was on this last race from Detroit. Our balloon, being a trifle light, began to mount fairly rapidly. As we left the ground, I pulled the breakaway cord used to break the tieoff on the appendix, so that the gas expanding with the decreased pressure of increased altitude will have an outlet, and will not burst the bag as it would if confined. This done, I began to busy myself with straightening up the basket, while Captain Kepner stood the first watch. Some premonition caused me to look up, and the act saved our necks, for I saw that the breakaway cord had not broken the tieoff and that the gas with no means of egress from the bag was causing the appendix to stand

out rigid, showing that the bag was causing the internal pressure was mounting dangerously. There was just one thing to do, and I lost no time in climbing the appendix rope hand over hand and breaking off the tieoff. This was immediately followed by an outrush of suffocating coal gas, which made me slide to the safety of the basket with an agility only to be equalled by my earliest Darwinian ancestors.

Once free of the earth, we started in a general southeasterly direction and rose to 2000 feet, the altitude at which we had decided to fly during the night. We did this, not because the best wind was there, - the fastest wind was at 7000 feet, - but to save gas and ballast, for our aim was to keep that old bag aloft as long as it was humanly possible. The balloon seemed possessed, however. It kept dropping from beneath us, and, over controlled, mounting higher than ever. These oscillations were costly in ballast, and it was almost dark before we got out of the convection currents and stied down to peaceful flying.

Captain Kepner awoke me near midnight as we soared over Cleveland, and I found that our course was more easterly than before, with about the same speed, 10 to 15 miles per hour. The balloon behaved beautifully during the night, and almost no ballast was expended until near noon the next day, when it was necessary to go above the intermittent canopy of cumulus clouds in order to avoid the alternate expansion and contraction of the gas, due to the intermittent superheating effect of the sun's rays. This was near Stubenville, Ohio. All day we flew in plain sight of four other balloons, hanging like tiny toys in the marine blue dome which arched above the icebergs and snowdrifts of this cloud fairyland.

As evening drew on and the sun's rays began to lose their heat, our gas gradually cooled and we began to descend. This, naturally, necessitated an expenditure of ballast. Slowly, then, we settled - so slowly that it took us four hours to descend from 12,000 feet to the treetops, where we rested like a feather on the cool strata of air near the earth's surface. This particular earth belonged to West Virginia, and was decorated by the Blue Ridge Mountains, which reared their impressive heads to an altitude of 5000 feet above our take-off point. Ridge after ridge of these anti-flood sentinels barred our way, but we undulated over them easily without the expenditure of any ballast, following the profile of the mountains and valleys as we rode the ground wind in a more and more southerly direction. As night came on a full moon smiled down from the sky, flooding the countryside with that mellow light which is so justly blamed for June weddings and trips to Reno. The scene was beautiful, with the high wooded hills, one side bathed in moonlight, the other shrouded in sombre shadow, and in the valleys a ghostly gossamer mist bejeweled with myriads of twinkling fireflies, and here and there the steady unwinking light from the cottage window of some sturdy backwoodsman. Romance! It was all I could do to keep from blindfolding myself and trying to neck Kep. However, his thirty hours' beard looked most uninviting.

Near midnight, trapped in an airless valley, we donated half a bag of sand to Erebus, and ascended to 9000 feet where we hung over the same town and shivered until daylight.

As the rising sun gained in warmth, I brought the balloon gently to earth, valving just a trifle more lift than the increasing superheat was causing. This was a wind run, and we found a north wind at about 200 feet above the earth. This we rode until the convection currents began to bother the balloon, when I allowed the sun to lift us to 1000 feet, where we stayed until clouds began to form over us. All this was with the use of no ballast. We had only three bags of sand left, but we had quite a collection of miscellaneous junk, and we considered anything and everything in the balloon as ballast, including our clothing.

Now here is a queer thing. Knowing our balloon to be the heaviest in the race, we naturally considered our chances of winning, nil, and at this time we figured that most of the balloons were far, far ahead of us, yet for some reason, call it pure mulishness if you like, we had every intention of going on until there was nothing left to use for ballast, and regardless of at what altitude that situation might occur.

Since clouds started forming at 1000 feet, I let the balloon slowly rise until we came to rest at 20,000 feet. At this high altitude we found a nice 20 mile wind blowing us southeast, and were accordingly elated. At this time we had been in the air some thirty-nine hours, and consequently were not too

rested; our food had given out many hours before, and visions of luscious steak smothered in Bermuda perfume, worried us. In addition to this, it was cold. Personally, I had on two heavy undershirts, a football jersey, a woolen sweater, a leather jerkin and a fleece lined flying suit, but my teeth still continued to chatter. Besides, the oxygen content of the air is not too great at 20,000 feet. This causes any exertion to greatly multiply itself, so we found ourselves gasping for breath like two goldfish on a parlor rug. But gasp we did. Our lesson in the year before, when at 27,400 feet, I had gone out like a candle, was still fresh in our minds, and we were not to be caught napping again.

All this sounds as though we were pretty miserable. We weren't comfortable, but far from being downhearted. I remember telling Kep about the young married couple in the Pullman. You know, the one where the bride said -- but that I fear is beyond the scope of this text, as they say in the engineering books.

At this time we were using about half a bag of sand an hour, and we knew that our flight was nearing its end. We had decided to use all our sand at pressure height, hold our descent to a moderate rate, say under 1500 feet per minute, with our clothing and equipment, and drop our two parachutes just before we struck. Our confidence in that heavy bag parachuting was not too great. Well so that's what we did. With the last of our sand gone, we waited for the next down trend which would carry us this time to earth, and we were too tired to worry much, how fast. At last it came, and I watched our rate of descent increase gradually to 1000 feet per minute. Then I began to drop over some of the equipment, little by little. Finally we had dropped even the basket lining and had only our clothes and parachutes left. Our speed downward at this time had decreased to 800 feet per minute, and, due to the slight parachuting effect of our bag, remained at that figure. This was the only thing that saved us from landing nude. As it was, we dropped our heavy outer garmets, and, just 100 feet from the ground, our parachutes. We landed with a dull thud in a tobacco field, three miles southeast of Kendridge, Virginia, and the flight was over.

As a matter of course, we shook hands. The race no longer mattered. We had landed and we were satisfied with our performance. We had kept that ancient balloon in the air, forty-three hours and thirty-five minutes - fifteen hours longer than anyone else had ever been able to do. Reviewing our flight, we did not find a single thing that we would have done differently. Naturally, we thought we would be near the last, but what of it? We had done our best and no one would ever understand but us. No alibis, no equivocation, no nothing; let it rest, it was over.

Oh boy! But what a grand and glorious feeling it was when the X² boys and the other technical hombres hashed it out, and we found that we, handicapped as we were, had won their funny race. We are still the most surprised pair on earth, but it is a great feeling.

---oOo---

ARMY PLANES PARTICIPATE IN DEDICATION OF LINDBERGH FIELD ✓

Participating in the dedication flight over Lindbergh Field, San Diego, Calif., at noon on August 16th were 82 Army planes. Rockwell Field was the scene of great activity, this being the first time that so many airplanes were in the air at one time since 1918, when 212 Army planes flew a mass formation over San Diego in celebration of the signing of the Armistice. DH's and PT-3s from March Field; PT-1s from Clover Field; O-2s of the 11th Bombardment Squadron and PW-9s of the 95th Pursuit Squadron, Rockwell Field, made an impressive line extending over a mile along the south side of the airdrome. Six planes of the California National Guard were also included in the array of military aircraft.

At 11:30 A.M., the Army planes started taking off in three-ship formations, echeloned to the right, and turned back along the Silver Strand toward Imperial Beach. The aircraft squadrons of the Battle Fleet, now concentrated at North Island, took off immediately following the Army formations, bringing the total number of planes in the air over San Diego to 222. Due to poor visibility and a low ceiling, the plan for a mass formation of both Army and Navy planes was abandoned, and the various squadrons passed over Lindbergh Field in loose formation. The first element was over the reviewing stand on the field at exactly 12 noon, according to schedule. The planes all landed in their original formations, after passing in review twice.

Not an accident of any kind occurred to detract from the success of the flight.

MOORING MAST REMOVED FROM ROCKWELL FIELD

Acting on a request from the Secretary of War, the Bureau of Naval Operations has ordered the removal of the Navy's mooring mast from Rockwell Field. This will be done as quickly as possible. The foundations and anchors for the guys are to be removed also, and the material stored at the Naval Air Station at North Island. The Navy has been ordered to remove its spotting battery from the Army side of North Island. The battery, consisting of three-inch guns, was used to train flyers in spotting.

---oOo---

SIAMESE OFFICERS FLY OVER BOSTON AIRPORT

Mr. Debavadi, Secretary of the Siamese Legation in Washington; Lieut.-Col. Amara and Major Deves, of the Royal Aeronautical Service of Siam, all of whom were spending their vacation at Gloucester, visited Lieut. Donald G. Duke at the Boston Airport. The visitors were shown the Airport, hangars, barracks, equipment, etc. Colonel Amara and Major Deves, both airplane pilots, were each granted the use of a PT-1 plane in which they flew solo after being checked out by Lieut. Duke. The personnel at the Airport were greatly interested watching them perform a few wing over and make several excellent landings.

The gentlemen from Siam were very much pleased with their visit at the Airport and informed Lieut. Duke that he would see them again.

---oOo---

BROOKS FIELD PERSONNEL ENTERTAINED AT COLORADO SPRINGS

Majors Oldfield and Greene, 1st Lieuts. Kennedy, Duncan, Watson, Rich, Lehman, Staff Sgt. Connors and Privates Carlos and Walker attended the Pike's Peak Air Meet held to dedicate the opening of the municipal airport at Colorado Springs, Colo. The airport consists of one section of land with two steel hangars for storage facilities. It is fully equipped for night flying, the field boundaries being marked with lights and having a beacon mounted on one of the hangars to enable the locating of the field at night.

All of the visiting pilots were the guests of the Chamber of Commerce. On Friday, August 10th, the visiting pilots were entertained with a smoker and boxing bouts by Mr. Cussack at his summer home, 20 miles from Colorado Springs. On Saturday the entertainment committee of the Chamber of Commerce escorted all of the visiting pilots on a trip to the Cave of Winds and the Seven Falls. On Sunday a trip was made to Pike's Peak. This was followed by a dinner at the Broadmoor Country Club and later by a dance at the Broadmoor Hotel. Saturday and Sunday afternoons were occupied by aerial events, participated in by both the visiting civilian and army ships. During their stay all visiting pilots were the guests of the Chamber of Commerce at the Plaza Hotel.

In addition to the entertainment given by the regular committee, individuals tendered invitations to so many affairs that it was a source of embarrassment to the visitors to necessarily decline some of the invitations, it being impossible to be present at several places at the same time.

---oOo---

SECRETARY OF WAR VISITS ROCKWELL FIELD

Rockwell Field was recently honored with a visit from the Secretary of War, the Hon. Dwight F. Davis, who arrived in a Douglas Transport airplane piloted by Lieut. Lester J. Maitland a few minutes before 4:00 o'clock. The Secretary was welcomed by Brig.-General Ralph H. Van Deman, commanding the Sixth Brigade; Major H.B. Clagett, Air Officer of the 9th Corps Area; Major J.H. Houghton, Acting Commanding Officer of Rockwell Field and his staff of officers; and civic leaders, including Mayor Harry Clark of San Diego, Congressman Phil Swing, Mr. Jerry Sullivan, Jr., President of the Chamber of Commerce, and others.

The Secretary made an inspection of Rockwell Field and conferred with Majors Clagett and Houghton with regard to plans for the future development of the field. A salute of 19 guns was fired as the big Douglas Transport touched the ground, after being escorted from Oceanside by a number of PW-9 airplanes which had gone up the coast from Rockwell Field to meet the Secretary. After the inspection the Secretary and his party returned to Los Angeles by air.

MORE SEVEN-MEN JUMPS AT BROOKS FIELD ✓

A previous issue of the News Letter recorded the fact that seven men made parachute jumps from planes flying in formation, and that one of the jumpers, who was caught in a rising air current, descended with his parachute at an average rate of only three feet per second.

On August 18th another wholesale parachute jumping event took place at Brooks Field, but on this occasion the men encountered a descending air current. The parachute jumps were made from a seven ship Vee formation from an altitude of 2,000 feet. The rate of descent was 20 feet per second. The normal rate of descent being only 16 feet per second, a number of inquiries were made at the parachute department regarding the acceleration of the speed of descent. The parachute department attributed the rapid descent as being due to the jumpers being in a descending convection current caused by the cooler weather.

The men making the jumps were Sgt. P.W. Betzenberger, Corporal D.C. Bradford, and Privates E. Bezency, T. Garner, W.R. Herndon, E.A. Vaughn and J.A. Reuter. Parachute jumping from formation is becoming a weekly event, as there are still a number of applicants on file at the Parachute Department requesting permission to make a jump. The residents in the vicinity of Brooks Field never seem to tire of watching the jumps, as all of them are always attended by quite a number of spectators, including transients passing through to the coast.

---oOo---

CONGRESSMAN MAAS INSPECTS ROCKWELL FIELD

Congressman Maas, of St. Paul, Minn., piloted by Lieut. J.V. Hart, Air Corps, recently arrived at Rockwell Field, San Diego, Cal., in an O-2A from Brooks Field, Texas. The Congressman made a thorough inspection of Rockwell Field during his visit. He is very much interested in all phases of aviation, is a World War veteran of the Marine Corps, and holds a commission as Captain in the Marine Corps Reserve at present. He is also a member of the Foreign Affairs Committee.

Congressman Maas and Lieut. Hart departed for March Field several days later and returned to participate in the dedication of the Lindbergh Airport.

---oOo---

FIRE DESTROYS HANGAR AT KELLY FIELD

Fire from an undetermined cause completely destroyed a hangar and six airplanes at the Air Corps Advanced Flying School on Sunday morning, July 29th, at about 9:30 o'clock. The fire was first discovered by Corporal Endicott, 42nd Squadron, who reported it to the fire department and then attempted to open the doors of the hangar. It was thought at first that there was a possibility of saving some of the planes, as only one O-2 was at that time on fire, but before the fire trucks arrived the fire had spread to the other planes and the danger of an explosion made it impossible to enter the building safely. One DH, three O2s, one O-11 and one O2-H, several dollies, one Liberty motor and the normal accessories of the building were completely destroyed.

A board of officers, consisting of Captain Arthur Easterbrook, 1st Lt. William A. Lanagan and 1st Lt. Frank Kuhn (QMC) was appointed to investigate the cause of the blaze, but it is doubtful if the reason can be learned. No one was in the immediate vicinity of the fire at the time of its outbreak, and it was not for some minutes after it had started that Corporal Endicott arrived. It is generally believed, however, that a short circuit in the O-2 which was the first to burn was the cause.

---oOo---

MOTORS CHANGED ON PLANE IN JIG TIME ✓

The News Letter Correspondent from Marshall Field, Fort Riley, Kansas, expresses the belief that the 16th Observation Squadron stationed thereat made a record on changing Liberty motors. On August 4th at 10:00 A.M., an O-2 was flying a mission with the Reserve officers when the motor went bad. Due to the shortage of that type of plane which was needed for the mission and the immediate necessity for using this particular O-2, the motor was changed and on the line running at 1:50 P.M. the same day ready for test. "If anyone has a better record", the News Letter Correspondent adds, "let us hear about it".

AIRPORT DEDICATED AT SHREVEPORT, LA.

Brooks Field personnel comprising Captain Mileau, Lieuts. Cheate, Davasher, Holmes, Lehman, Knapp, Rodeick, Carlson, Barber, Privates Walker, Hurt and Sandlin flew to Shreveport, La., August 4th for the dedication and opening of the Shreveport Airport, sponsored by the Chamber of Commerce of that city. All were guests of this commercial organization and stated upon their return that they were royally entertained by their hosts.

The new airport renders excellent service to visiting pilots, keeping a licensed mechanic on duty 24 hours a day. Transportation is available to and from town any hour of the day or night. Ships are serviced on the field by a specially equipped Mack truck. The gasoline is Government specification, furnished by the Standard Oil Co. of Louisiana. Floodlights and a beacon are being installed for night flying. The airport is equipped with a modern hangar, 80 x 110 feet, with a 16 ft. clearance. Government ships are given hangar storage without charge. The field is well drained and measures approximately 2500 feet north and south by 2,000 feet east and west. Within the next sixty days it is expected that Shreveport will have one of the best equipped airdromes in the south.

---oOo---

VIRGINIA'S EXECUTIVE FLIES IN AIRSHIP

Governor Byrd, of the State of Virginia, was flown recently from Richmond to Camp Byrd, Virginia Beach, in the Airship TC-10, piloted by Lieut. Starkey of the 19th Airship Company, Langley Field, Va. Governor Byrd used the airship for a reviewing stand after his trip to the Camp as he reviewed the 183d Infantry of Virginia. Included in the reviewing party were Colonel C.C. Culver, Commanding Officer of Langley Field; Adjutant General W.W. Sail; Colonel J.F. Bright, Mayor of Richmond; Assistant Adjutant General Willard Newbill, and former Senator E.G. Dodson, of Virginia.

---oOo---

AERIAL MAPPING OPERATIONS IN THE PHILIPPINES

The mapping personnel of the 6th Photo Section, Air Corps, stationed at Camp Nichols, Rizal, P.I., returned to that station June 2d, after having completed a 5000 square mile aerial photographic survey of the unexplored mountainous region of northeastern Luzon.

The northern end of the project was started on May 2d, using the landing field at Aparri as a base. Two DH-4B photographic airplanes were used for the photographic work, and a Martin Bomber, furnished by the 28th Bombardment Squadron, was used for transporting airplane and photographic supplies. It was planned to use the Martin Bomber also for dropping camp and food supplies to photographic personnel in case of a forced landing in the jungle.

Shortly after the arrival of the planes at Aparri, a typhoon signal was hoisted and the project was delayed one week. The photographic work was started on May 10th and continued until the 16th, when all of the planes returned to Camp Nichols.

On May 26th, a Loening Amphibian, equipped for photography, left Camp Nichols for Casiguran Bay to complete the southern end of the project. The U.S. Coast and Geodetic Survey steamer "Fathomer", which was stationed in Casiguran Bay, was used as a base. A number of three and four hour flights at 1,200 ft. were made, and excellent results obtained. The Amphibian, which is the latest type received in the Philippines, functioned perfectly. On a number of flights it took off from a smooth sea with pilot and photographer, 120 gallons of gasoline, three cameras and full emergency equipment, and climbed to 12,000 ft. in 45 minutes. The project was finished on June 2d and the Amphibian, escorted by planes from Corregidor, returned to Camp Nichols.

It is interesting to note that practically all of the photographs taken on this project were made between the hours of six and nine o'clock in the morning. Clouds formed over the mountains after nine o'clock. Over two thousand negatives were made of this area, and the work of printing and assembling required several weeks. Copies of the photographs taken on this project will be furnished the Philippine Department and mapping agencies of the Insular Government, who were financially responsible for its completion.

LIEUT. BROOKLEY HAS HIS INNING

At 4:30 P.M. on a certain Thursday in August a formation of four PT-1 planes from Brooks Field, San Antonio, Texas, was flown over the home of Chaplain Harkins. The ships were in a Vee formation, with the number four position vacant in memory of the departing Lieut. Charlie Myers who was then joining the ranks of the Benedicts. The formation was led by Lieut. Brookley, with Lieuts. Hudson, Craigie and Wheeler filling the 2, 3 and 5 positions.

After circling over the Chaplain's residence a cascade of miniature parachutes were released, carrying dolls, old shoes, tin cans, rice, household utensils, etc. Attached to each parachute was a note stating that the finder would be reimbursed by Lieut. Myers in the sum of 50¢, provided the article was delivered to him at the residence of Chaplain Harkins without delay.

It has been reported that Lieut. Myers will be forced to cut short his honeymoon, as the number of youngsters who gathered for reimbursement was so great that the family exchequer suffered quite a setback.

After noting the above heading one may inquire why Lieut. Brookley is particularly mentioned. It happens that this popular officer was the victim of a similar experience when he joined the ranks of the Benedicts just three years ago. At that time he was on duty at McCook Field, Dayton, Ohio, and on the day of his wedding his well meaning friends scraped together a motley collection of serviceable planes at the field and flew to a certain town near Dayton where the ceremony was scheduled to be performed. At a safe altitude above the public square of that town they started performing various acrobatics calculated to bring the whole populace out on the streets. Their expectation being realized they proceeded to release 15 small parachutes, each one bearing a tag inviting the finder to call on Lieut. Brookley at a specified address and receive the sum of one dollar. Through the above transaction Lieut. Brookley's pocketbook was shy the sum of \$14.00, the unaccounted fifteenth chute being found later tangled up on the tail skid of one of the airplanes.

No prize is being offered to anyone guessing the name of the individual who organized the expedition against Lieut. Myers.

The name of the party of the first (or second) part who participated in the wedding ceremony at San Antonio was Miss Fanabel Hull, of 326 Hollywood Ave.

---oOo---

DECORATIONS FOR LANGLEY FIELD MEN ✓

A Langley Field officer and a Sergeant, both on duty with the 19th Airship Company, were recently honored. Lieut. Uzal G. Ent was recommended for the Distinguished Flying Cross, and same was approved by General Fechet, Chief of the Air Corps. The recommendation by Captain Charles P. Clark, Commanding Officer of the 19th Airship Company, followed Lieutenant Ent's heroic efforts to save the life of Lieut. Paul Evert, which resulted in Lieut. Ent bringing the body of Lieut. Evert safely to the ground.

The free balloon in which both were flying was struck by lightning during the National Elimination Balloon Race. Unknown to Lieut. Ent at the moment, the bolt killed Lieut. Evert. It also caused the balloon to catch fire. Lieut. Ent remained in the burning balloon and so maneuvered its course to the ground as to prevent loss of life or damage to property on the ground. He succeeded in removing Lieut. Evert's body from the basket of the burning balloon. The award now rests with the decision of the War Department.

Sergeant Harry A. Chapman, the outstanding hero of the Roma Disaster, which occurred at the Army Base at Norfolk, February 21, 1922, received the Cheney Award, and has also been recommended for the Flying Cross. The Cheney Award was made to Sergeant Chapman over 18 other recommendations and was presented to him by President Coolidge at the White House. Among those in attendance at the presentation were the Sergeant's wife; Mrs. Streeter, sister of the late Lieut. Cheney; Mrs. Schofield, mother of the young officer in whose honor the memorial was created; General Fechet, Chief of the Air Corps; General Wells of the General Staff, and General Gillmore of the Air Corps.

THE BEGINNING OF AVIATION MEDICINE

By Lt.-Col. Levy M. Hathaway, M.C. ✓

(Concluded)

4

Like other branches of medical art, aviation medicine had premonitory beginnings at an early date. The first handbook on Aeronautics was published in 1786, and its author, although not a doctor, did not neglect the medical aspects of the subject. Captain Mashburn, in a recent article on the Development and Application of the Present Medical Examination for Flying, states that the author of this handbook recommended balloon ascents for convalescents and claimed that "the spirits were raised by the purity of the air and rest in a cheerful composure." All worries and disturbances were said to have disappeared as if by magic. Longevity was promoted. Influenza, neuralgia and tuberculosis were said to have been cured by balloon ascents, and the therapeutic value was thought to be due to the change from "hot, putrid and impure, to cool, pure air, impregnated with invigorating aerial acid."

It seems probable that this old author may have suffered from a degree of anoxemia, which condition raises the spirits about like alcohol. Even yet there are plenty of people who request flights for the cure of deafness, an impression which appears to be rather widely spread and persistent, though quite erroneous and contrary to actual fact, the truth being that deafness is caused and aggravated by flying.

Up until the World War there was little or no sustained interest in the medical aspects of aviation, but during the War it was found that many crashes were attributable to the human element, namely, the pilot, who either lacked the requisite skill and training or proved inadequate in physical, mental or psychic reaction to meet his emergency. It has been stated that at first about 90% of casualties were found due to the human element, the pilot, the balance being the result of other causes such as enemy planes, weather conditions, and failure of the power plant or defect in construction. Such figures are matters of conjecture, but the fact still remains that many crashes were chargeable to the human element.

During active operations on all fronts, many flyers became overflown, suffered from staleness and had to be grounded and sent home for recuperation. In view of these conditions, all nations engaged began to realize that the task of combatant airmen was worthy of medical consideration, and action was independently taken by the various Powers to secure reduction in crashes and better conservation of flying personnel. At the beginning of the World War, Italy required a special physical examination for airmen. As early as 1913 Germany had developed a scheme for conducting physical examinations for flying, and in 1916 issued regulations for the purpose of governing the selection of pilots. Great Britain demonstrated the advantages of such special measures by appointing a board which analyzed the causes of crashes and initiated medical measures calculated to improve methods of selection and upkeep of flyers.

The United States had the advantage of the previous experience of its Allies and was prompt to profit thereby. It was soon realized that the standard methods of examination for other arms of the service were inadequate to meet the needs of the Air Corps and that the requirements and standards for entrance into the Air Corps established in 1912 were insufficient. It was recognized that, in order to keep planes in the air, the medical aspects of aviation must be given special consideration; accordingly, early in 1917 the United States sent a medical commission under General Wilmer to France, and the work of that commission laid the foundation of aviation medicine in our service.

In 1917 the Medical Research Laboratory was established at Mitchel Field, and much valuable information was obtained and supplied by the prominent scientists who constituted the staff of what later became the School for Flight Surgeons. The problem of aviation medicine were thoroughly and carefully studied at this school and, as a result of these studies and of the work of the commission in France above referred to, the present regulations governing physical examination for flying were developed and published in what is basically their present form. It had become apparent that the selection and care of flyers involved special problems in medicine; called for specialized methods and procedures and necessitated a special line of training for medical officers immediately responsible for this work.

The two great problems in Aviation Medicine are the selection and conserva-

tion of flyers. Selection of flying personnel is the primary task of the Flight Surgeon. Since it is generally conceded that flying demands a high type of physical and psychic equipment, and that flying in particular is not the forte of every man who feels the urge to fly; since mistaken selection entails grave possibilities, no effort is too great and no standard too high in this matter of primary selection.

The standards and procedure governing our present physical examination for flying have been carefully worked out by eminent specialists in those subjects which together constitute the specialty of Aviation Medicine, which term embraces elements of all branches of medical science and art, notably Ophthalmology, Otology, Neurology, Cardiology, Physiology, Psychiatry, and even Psychology. Aviation Medicine has as its foundation a good working knowledge of general medicine and surgery, particularly diagnosis. It covers a vast field and offers unlimited possibilities and opportunities for research and development commensurately with the advance and development of aviation.

The procedures, methods and standards governing the present physical examination for flying are fully set forth and described in Army Regulations and require only brief discussion here. Suffice it to say that some such special examination is essential and that the standards required by existing regulations are in accordance with accepted opinions of recognized authorities.

First, a candidate must be physically fit in general, as required for other arms of the service, and there are certain additional requirements which call for special mention. A sound cardiovascular system is, of course, essential, and this is included under general physical fitness. The circulatory efficiency test devised by Professor Schneider is a routine procedure at all examinations. The most important single factor is good vision. This cannot be over-accentuated. There are plenty of men who have a visual acuity of 20/15, but 20/20 is the accepted standard the world over, and the latter figure is none too high for beginners, although experienced flyers can get along with less.

At original examination eyes are refracted under cycloplegia and errors of refraction in excess of one diopter in any meridian are disqualifying. Latent hyperopia is particularly undesirable as it becomes manifest with advancing age or under eye strain, reducing visual acuity, hastening presbyopia and super-inducing asthenopic systems. Visual accommodation is measured in diopters and tenths by the Prince Rule, and should correspond within two diopters of the normal values for age in accordance with the table of Drane. Good eye muscle balance is important in order to assure binocular vision without undue eyestrain. A tendency to diplopia is inherent in latent imbalance, and the pilot cannot afford to see double when flying. Imbalance causes headaches and other nervous symptoms, increasing ocular and general fatigue, decreasing power of attention and diverting nervous energy. Hyperphoria is especially serious in that it cannot be compensated by opposing muscles. Latent squint in other directions is checked against opposing muscular action, the degree of deviation being measured by the Maddox Rods and Risley prisms mounted in the phorometer frame.

In taking off and in landing a plane as well as in flying in formations it is necessary to exercise accurate estimation of distances. This factor is called depth perception, a faculty not only to be developed and improved by practice but primarily dependent upon good binocular vision including acuity and muscle balance. This faculty is measured by the Howard-Dolman Depth Perception apparatus, a simple and ingenious device, the principle of which depends on the binocular parallactic angle. Essentially this apparatus is a box open at the top and containing two parallel rods one c.m. in diameter, one of the rods being movable and the other fixed. There is a millimeter scale alongside the slot in which the movable rod slides in the floor of the box which is illuminated in such manner as to preclude shadows. A window in front of the box, and a white background behind allows the rods to be seen and adjusted by the subject who sits at a distance of twenty feet and endeavors to replace the movable rod to a point opposite the fixed one by manipulating cords. Several trials are given and the results in millimeters are averaged. A man with good eyes should be able to adjust the rods within 25 millimeters. Not only is this test reliable as a means of determining the power of estimating distance, but it is a valuable check on the other ocular tests, and it has been found that men with good eyes and good vision have no difficulty in passing this test while those with ocular defects cannot satisfactorily adjust the rods.

It is sometimes asked why men with high refractive errors and correspondingly poor vision correctible by glasses cannot be accepted for flying in the

military air service and permitted to fly with corrective goggles. Many corrections cannot be ground into the large curved lenses of goggles. An insert to secure bifocal vision blurs a portion of the field and corrects vision only in a small portion thereof. Not only is good central vision necessary but a large field is also essential; blind angles would be disastrous. One cannot wear spectacles under goggles. The latter are sufficiently uncomfortable even when well-fitting and properly adjusted. A leaky goggle is a nuisance. It fogs up, blurs the vision and causes excessive lachrymation.

Normal color vision is necessary in order to recognize signal lights and navigating lights, also for reading maps printed in colors and for recognizing features on the ground. As above said, a good field of vision is essential in order that an aviator may see out of the corner of the eye. When making turns the pilot always looks around first as far as his neck will permit and then turns his eyes still further. Collisions are avoided in this manner.

Normal hearing is required at original examinations, but waivers for deafness are commonly granted to experienced pilots. Inflammatory processes of the upper respiratory passages and in the middle ear are aggravated by flying and therefore are disqualifying at original examination.

Popular conception of the physical examination for flying formerly centered around the Barany Chair. This chair is still used at original examinations, and subsequently whenever indicated for diagnostic purposes, but the inner ear is no longer considered to be the controlling factor in maintaining equilibrium, which must be considered as a function of the whole proprioceptive mechanism; namely, sensations received from the eyes, ears, deep muscles, viscera and skin. They cannot be considered independently but as an integrative whole. Rotation in the chair will bring out disturbances of the vestibular apparatus, but there are other tests that will bring out this as well as disturbances of the other factors concerned in equilibrium. We know that vision is the principal factor in maintaining or regaining equilibrium while flying. No man can fly blindfolded for any length of time. There must be visual contact with the horizon either directly or through the aid of instruments. It is necessary to depend upon instruments while flying through fogs, clouds, and dense rain or snow or in darkness sufficiently great to obscure the horizon. When visual contact with the horizon is lost the flyer easily goes into a spin by unconsciously pulling his ship into too steep a climb, losing flying speed and dropping off to one side. This accounts for the loss of some of those who have attempted to cross the ocean and shows the importance of vision in flying straight and level. Engine failure, fuel failure and structural defects account for some of these disappearances, no doubt, but it is likely that clouds, fogs, darkness and other weather conditions were responsible for most of these losses. Extensive experiments by Captain Ocker of the Air Corps and Captain Myers, Flight Surgeon, have shown conclusively that with the eyes closed a man cannot depend upon his senses to tell his position nor in which direction he is turning, nor whether he has stopped turning and begun to spin in the opposite direction. It seems likely that these experiments will be extremely valuable in the development of instrumental flying. The mail pilots are particularly good in this sort of flying and are accustomed to depend largely upon their instruments.

Aside from questions of nervous stability, it is impossible to state definitely at the present time what types of men make the best flyers. Racial aptitude for any task is governed by biological factors dating from remote antiquity, and is therefore comparatively fixed. Individual aptitude varies in greater or lesser degree within the racial limits. There are born flyers just as there are born athletes and musicians. Most any physically fit individual of average intelligence can learn to drive a car or to fly an airplane, just as most any schoolboy can play ball, after a fashion. Given a physically fit candidate of average intelligence and educational qualifications, it remains to determine his aptitude for the specific task of flying. Since he must be trained at government expense and since the government is financially and morally responsible for his welfare, and for the safety of others dependent upon his skill, it is well worth while to go to considerable pains to avoid mistakes in selection. The only safe and sure method of assessing individual aptitude is by actual trial. In the old days it was customary to explain the controls to an aspirant, then put him into a plane and let him either fly or die. This was expensive and sometimes tragic, but the survivors usually became brilliant aviators.

A French Ace described to me his sensations on his first flight. He had had a few days ground schooling and possessed unusual aptitude, as subsequently proven. He stepped into the plane, the motor was started, and he took off across

the English Channel. The last words he heard were: "There goes another one across the Atlantic." The plane then seemed to plunge in all directions and in his inexperience he naturally over-controlled, making matters worse. Although a man of unusual courage he was afraid to attempt to turn around and come back to shore but headed across the Channel toward England. He flew until the gas was almost half exhausted and then having gained what he considered sufficient altitude, with great trepidation he managed to turn the ship about and get back to the home field without mishap. This was a severe test and present methods are rightly more humane.

We strive to improve; and, with this end in view, the School of Aviation Medicine has been making strenuous efforts to develop and standardize the neuropsychic part of the examination. An intensive personality study is made of every candidate with a view to eliciting evidences of nervous instability and also in the hope of eventually being able to predetermine those individuals who have or have not especial aptitude for flying. It is hoped that sufficient data will ultimately be accumulated, studied, classified and correlated with actual performance in flying to enable Flight Surgeons to say definitely in the majority of cases which types will succeed and which will fail in the actual test of flying. At the present time it is too early to evaluate this work, and it can only be stated that the intensive personality study frequently discovers evidences of potential or actual instability of the nervous system which, when found and substantiated, constitute just grounds for rejection without further trial or expense. Even though an unstable individual may learn to fly he is a poor risk, since he is likely to break down under the stress of military flying, especially during active operations.

Certain physical tests involving psychological elements are undergoing experimentation with a view to predetermining aptitude for aviation. The O'Rourke Coordinator and the Thorne Reaction Time instruments seem to be the most promising of those under experimentation in this country at the present time. These instruments have self-recording attachments which by means of pens and tracings not only leave a record in black and white of the individual's reaction time, both simple and selective, but they record his errors as well. The results thus far obtained are too meager to warrant predictions as to the probable value of such tests. Careful correlation with actual flying performance and with the causes of failure therein will be necessary before final assessment can be made and the value of such tests determined.

In England the Reid apparatus has been intensively tried out and its results are being applied in predicting aptitude and in checking progress during flying training. It promises to be of great value, but research is still necessary before it can be adopted as a basis of selection for the flyer. However, there is reported an 80% correlation between the findings of the Research Laboratory and the findings of the instructors in a recent class. It has a self-recording device, the records of which show performance on the machine and these records are compared with performance in flying. The elements of "improvability" in an individual is given due weight, which is as it should be.

The Ruggles Orientator is a mechanical device operated by controls similar to an airplane and during the last fiscal year it was adopted by the Flying Training Department of the Army Air Corps as a means of estimating potential flying ability. It has no self-recording device and results depend upon opinion based on the careful observation of trained flying instructors habituated to its use. Its controls are so arranged as to be actuated by the subject or by the observer and, since it puts the former in unusual positions likely to upset equanimity in individuals easily disturbed, it may bring to light psychic weaknesses otherwise likely to escape detection. Like any other unfamiliar task, performance in the Orientator may demonstrate inherent awkwardness. Those who use it have great faith in it as a performance test to demonstrate that intangible factor known as "inherent flying ability". In the hands of specially trained flying instructors it is of potential value in selection as well as in training procedure. At the present time the Ruggles Orientator is being used as a guide in selection and no candidate has been eliminated on its findings without the concurrence of examining Flight Surgeons, who reach their conclusions independently by examination of the neuropsychic system.

It is understood that the Navy has fitted a self-recording device to the Ruggles Orientator and contemplates extensive experimentation with a view to correlation with flying.

There is a growing tendency toward conservatism with regard to the various

mechanical tests as well as toward opinions based on personality studies as a means of predicting aptitude for aviation. Nevertheless, progressive experimentation is necessary and there is a real and growing need for some reliable test to measure the specific aptitude of a candidate before subjecting him to a task involving risk to life.

The only new test which has been recently added to the examination for flying as prescribed by Army Regulations 40-110 is the self-balancing test for neuromuscular equilibrium devised by Group Captain Martin Flack of the Royal Air Force. This test is practically a Romberg test with the candidate standing on one foot instead of both. Three trials are given to determine steadiness while so standing on each foot with the eyes closed. A normal man without functional or organic disturbances of the nervous system should be able to execute this test.

The second great problem in Aviation Medicine is the care or conservation of flying personnel. This, like selection, requires special training and necessitates conscientious application of medical knowledge to meet individual needs. So far as we know there is not, strictly speaking, an especial aviator's disease in the sense of its being peculiar to flyers. Air sickness is similar to sea sickness and to swing sickness. Anoxemia has been encountered in mountaineers as well as in aviators. Dope poisoning occurs on the ground and is encountered in other industries. Aviators, like other men, are subject to all sorts of diseases and injuries in addition to certain stresses and strains more or less occupational in character. A sick airman is, of course, unfit to fly, but a skilled and experienced flyer can safely compensate for physical defects which would rightfully exclude a candidate or ground a beginner.

Flying demands reasonably good health and flyers should have careful medical supervision at all times. Prompt measures should be taken for relief of any condition which is at the time, or later promises to become, cause for disqualification in flying. A slight ailment in a flyer is relatively more serious if it is of such nature or degree as to interfere with his pursuit. Airmen realize this and are usually quick to seek medical advice when occasion occurs.

The personal and professional relations between Flight Surgeons and flyers are and should be rather more intimate than usually necessary between medical officers and representatives of other arms of the service. Not only do Flight Surgeons render medical attendance to military personnel and to their families on flying fields as do other medical officers but they must be constantly though unobtrusively observant of the health and physical condition of the flying personnel under their care. In addition to holding sick call for flying commands, it is customary for a Flight Surgeon to be present on the flying line daily in order that he may assure himself that every flyer is feeling fit to fly before taking off. They invite consultation and encourage confidence with a view to rendering help. This attitude demands tact and is assisted by an approachable personality which avoids conflict without sacrificing dignity or subverting professional integrity.

The Flight Surgeon does not confine his activities to conducting the annual semi-annual and special physical examinations for flying required by Army Regulations. He operates the dispensary or hospital on his field and attends the sick like other medical officers. He must be capable of making a diagnosis and of rendering definitive treatment for those conditions encountered in general medical and surgical practice. He looks after the sanitation of his field and supervises hygienic measures calculated to conserve and improve the health of the command. Although he has a fair working knowledge of the various specialties which together comprise the major part of his own specialty, he does not presume to compete with the most eminent specialists in each and all of these subjects. When in practice he encounters conditions beyond his professional qualifications or facilities, he initiates transfer to a general hospital.

In order that a medical officer may understand the task and viewpoint of the flyer and the better to evaluate medical matters in connection with aviation it is necessary that he fly. It is not necessary that he be himself a pilot, but some dual instruction in flying is desirable to broaden his views, and there is no objection to his becoming a pilot provided he has sufficient aptitude and time to qualify as such. Flying experience enables a medical officer to solve medical problems and reach decisions otherwise less readily attainable.

With regard to the future of Aviation Medicine not much need be said since it has become evident to all that the future of aviation itself is assured and our profession must strive to keep pace with progress in flying.

Within the past year nearly 300 prominent physicians throughout the country have been selected by the Bureau of Aeronautics, Department of Commerce, to ex-

amine applicants for civil aviation. Examinations by Flight Surgeons of the Army and Navy are accepted without question by the Department of Commerce. This indicates not only the rapid advance of interest in aviation but also the recognition of the fact that air pilots must be carefully scrutinized before being licensed to fly.

The problems of aeronautics are being solved daily. Aircraft, although not yet fool-proof or self-operative, are being constantly improved and standardized so that the safety factor is rising, while the human element remains comparatively unchanged. The latter factor can only be improved in this generation by advancing medical methods and procedures.

There is room for much research and investigation by those who select Aviation Medicine as a specialty. It represents opportunities for advancement in Ophthalmology and Otolaryngology, Psychiatry and practical Psychology, as well as other branches of medicine and surgery. It offers a broad field for medical officers of the Army, especially the younger men. There need be no fear that professional opportunities will be restricted in the case of those who take up aviation medicine, since by so doing they do not and cannot abandon general practice, but on the contrary are required to possess and apply a working knowledge in several recognized specialties, and this knowledge can only serve to increase their professional attainments and enhance their value to the country.

---oOo---

AIRSHIP EQUIPMENT TESTED AT SCOTT FIELD ✓

During the past month experiments were conducted at Scott Field, Ill., with an airship landing tractor which was designed at the ~~Engineering Division~~ **Engineering Division** of the ~~field~~. While the machine has demonstrated its practicability, it is not at present entirely satisfactory. The experiments are being pushed forward with vigor, and it is believed that when funds are made available for certain changes in design a great deal of trouble now experienced in landing light airships will be largely overcome and will cut the size of landing crews to six or eight men. Its use as an out-of-door mooring device and as a mechanical means of taking the ships in and out of the hangar seems very probable.

Test of the Nichols Form-fitting Parachute Pack has been made, and it was found that for certain types of airships and for certain duties aboard all ships this type of pack is very satisfactory, provided that the back plate can be made to fit the conformity of each individual who wears one. This, of course, would almost necessitate having these plates made up in a large assortment of sizes.

A new type of Balloon Basket, designed at the Engineering Department on the suggestions of operating personnel, was tried out recently and found to answer the requirements. The old style basket was quickly broken up in heavy and windy landings, resulting in high loss of baskets and high overhead in basket maintenance. In the test of the new basket the pilot landed with a high rate of descent several times and permitted the balloon to drag over rough terrain without damage. The old type basket would have been practically useless after such treatment.

---oOo---

SECRETARY OF WAR INSPECTS MARCH FIELD

The Hon. Dwight F. Davis, Secretary of War, recently inspected the Primary Flying School at March Field, Riverside, Calif. The Secretary was greeted with the regulation nineteen-gun salute upon his arrival, but due to the short duration of his visit no formal program was arranged. An inspection of the new buildings under construction and the Flying Cadet Detachment was made during the course of his visit.

The new construction work at March Field is progressing rapidly. The skeleton work on two of the large hangars is completed, and the excavation work on the barracks is nearly finished. The flying line has been moved a considerable distance from the hangars to make way for the new construction, but by the application of a "dolly" fitting on trucks the ships are being carried to the line without any delay.

CHINESE AVIATOR VISITS SAN ANTONIO AIR DEPOT

In the midst of visits to various Air Corps activities in the vicinity of San Antonio, Texas, Major Tien Lai Huang, of the Chinese Air Corps, recently made an informal call at the San Antonio Air Depot at Duncan Field for the purpose of gaining an insight into the supply and maintenance operations thereat. He was accompanied by Mr. Benjamin J. Kwok, Secretary of the San Antonio Chinese Nationalist organization.

Major Huang is an accomplished scholar (Ph.D., Columbia) and linguist, and is popularly known as "China's Lindbergh". He is a member of the Intelligence Division of the Chinese Air Corps, and is a prominent figure in the national affairs of China, being a member of the recently victorious Kuomintang, and a delegate to the League of Nations. Major Huang ended a four months' tour of the United States in San Antonio for the purpose of making final plans for his contemplated Pacific Ocean flight in his plane, the "Spirit of Canton", in the very near future, from Los Angeles to Nanking, via Hawaii and the Midway Islands, leaving San Antonio for Dallas to take over his plane.

---oOo---

AIR CORPS PLANES ESCORT CARRANZA FUNERAL CORTEGE

The funeral train bearing the body of Capt. Emilio Carranza, Mexican Good Will flyer, who was killed when his plane crashed on his attempted flight from New York to Mexico City, passed through San Antonio on the way to Laredo on July 20th. The funeral ceremonies at San Antonio were participated in by the Army, the Air Corps, and numerous civilians and State organizations. The honor and respect paid Captain Carranza were most impressive indications of the esteem in which he was held.

The Commanding Officer of the Eighth Corps Area appointed Brig. Gen. Fiske as officer in charge of all military ground activities, and Major J.E. Chaney, Kelly Field, as the director of all aerial activities. Over 100 planes from Kelly Field, Brooks and Dodd Fields participated in the aerial demonstration over San Antonio, and all ground troops of Ft. Sam Houston took part in the ceremonies on the ground.

The body of Capt. Carranza was taken from the train just after a battery of the 11th Field Art. had fired an 11-gun salute. Accompanied by honorary pallbearers - officers of Ft. Sam Houston - the casket was placed on an artillery caisson and taken to the municipal auditorium. The streets of San Antonio through which the cortege was to pass were lined with people, both Americans and Mexicans, and everywhere there was evidence of sincere mourning for the Mexican pilot who gave his life in an attempt to further the relations of the U.S. and Mexico.

While formations of DH's, O2's, AT-4's, NBS-1's and P-1's circled overhead and droned out a funeral dirge, the casket was taken from the caisson and placed in state in the San Antonio municipal auditorium. Brig. Gen. Albert J. Bowley acted as representative of the U.S. Army in placing a wreath of flowers on the casket.

At 7:30 in the evening the body was replaced upon the train and the journey to Laredo started. Arrangements had been made whereby the train was to be delayed at a point north of Laredo until daylight, and at that time 75 planes from Kelly, Brooks and Fort Crockett met the train and escorted it to the International Bridge across the Rio Grande. There, again, the body was taken from the train and, escorted by troops from Fort McIntosh, was turned over to Mexican military authorities in the center of the International Bridge.

---oOo---

"ENGLISH AS SHE IS WRIT."

The following is a good example of the many peculiar specimens of letters and inquiries received from time to time at the office of the Middletown Air Depot:

"Dear Sir:

I am writing you these few lines to ask you about your old tipe moters and will you sell one of them the hold thing the some one was telling me about them that I could buy one of them the hold Plain of the old tipe one and if you will sold one of them write and tell me I am anxious to lurn and may be some good some time and write and tell me as possable.

So I will close write soon

From _____ "

SECOND BOMBARDMENT GROUP PILOTS FLY TO CALIFORNIA

The 2nd Bombardment Group, Langley Field, was busily engaged in preparations for a flight of 9 LB-5-A bombers to the West Coast. The start of the flight was delayed two days due to adverse weather conditions, but at 9:30 a.m. September 3d the nine big planes took off for Augusta, Ga., 400 miles distant, arriving there shortly after 6:00 p.m. Early the next day the planes took off for Montgomery, Ala., the next scheduled stop, but weather conditions proving unfavorable, the pilots returned to Augusta an hour later. Along towards noon weather conditions cleared sufficiently to permit Major Knerr and the pilots under him to take off for Montgomery, Ala., at 1:30 p.m.

On September 5th the bombers flew from Montgomery to Shreveport, La., in 5½ hours' flying time, and on the afternoon of the following day they arrived at Midland, Texas.

The original schedule contemplated the flight arriving at Los Angeles, Calif. on September 8th to participate in the National Air Races. In addition to Major Hugh Knerr, commanding officer of the flight, pilots and relief pilots selected to fly the bombers are: Captain Cecil G. Sellers, Air Reserve; 1st Lieuts. Harold W. Beaton, Phillips Melville, Emile L. Kennedy, 2nd Lieuts. Ward J. Davies, A.J. Kerwin Malone, Alfred M. Johnson, William B. Blaufuss, Ford L. Fair, Willard R. Wolfenbarger, Air Corps, 1st Lt. Wilton M. Briney, Air Reserve; and Captain Ira F. Peake, Medical Corps, Flight Surgeon. Data will be obtained as to the mobility of a Bombardment Squadron.

---oOo---

NOTED BRITISH AIRMEN INSPECT AIR CORPS ACTIVITIES

Royal Air Force World War "Aces", Squadron Leader A.S.G. Lee and Flight Lieut. McCloughry, who are touring the United States inspecting American air activities, recently visited Langley Field. During their stay at this field they were the house guests of Lieut. and Mrs. Frank B. Tyndall and luncheon guests of the Commanding Officer, Lieut.-Col. C.C. Culver. The British air officers were flown to Wright Field, Dayton, Ohio, by Lieut. William Blaufuss.

---oOo---

RECREATIONAL ADVANTAGES AT LANGLEY FIELD

It has been pointed out by Lieut. Leslie Young, Recreation Officer of Langley Field, that enlisted men on the post have more recreational advantages than the average best equipped field. Individual clubs are the personal property of men belonging to the several units on the field. The 49th, 96th and 20th Bombardment Squadrons, the 58th and 59th Service Squadrons and the 19th Airship Company have their own recreation clubs. The recreation rooms include pool tables, reading desks, periodicals, radios, etc. Some have pianos and other club house equipment. In this connection, it is planned to complete within two years a theatre on the water front to replace the present one, with a seating capacity of nearly 1,000.

---oOo---

STUDY OF AVIATION IN THE PUBLIC SCHOOLS

Mr. A.R. Romer, principal of the Oakland, Calif., schools, and Miss Mary Romer, instructor in the San Diego, Calif., schools, recently visited Rockwell Field, Coronado, Calif., for the purpose of securing material for the school reader on the subject of "Aviation." It is understood that this is the first time this form of study has been attempted in the public schools.

---oOo---

CADET WINN JOINS CATERPILLAR CLUB ✓

Add one more to the Caterpillar Club. Flying Cadet Raymond L. Winn, undergoing flying instruction at the Primary Flying School at March Field, Riverside, Calif., is willing to testify to the good qualities of the Army parachute. On August 13th, Cadet Winn, while practicing chandelles in a DH at 3,000 feet, was unable to pull the nose of the plane back up. He stayed with the ship until within 300 feet of the ground and then went over the side. He made a safe landing on the outskirts of Perris. The DH was a total wash-out.

REPORT ON PANAMA TO WASHINGTON TO PANAMA FLIGHT ✓

Lieuts. Robert W. Douglass, Jr. and James E. Parkor, Air Corps, who started at 9:55 a.m. June 18th from Bolling Field, D.C., on their return flight to France Field, Panama Canal Zone, arrived at their destination at 1:05 p.m. July 11th. This return trip which they had hoped to negotiate in four days dragged along for a period of over three weeks due to no fault of their own. When they arrived at Havana, Cuba, on June 17th and two days later attempted to take off for Tela, Honduras, failure of fuel pressure from auxiliary tanks in both planes was discovered. Havana was some 200 miles behind at that particular time and, much against their will, they were forced to return to the Cuban capital. It was not until July 10th that repairs on their planes were completed and they were able to resume their journey to Panama.

The report on the flight from Panama to Washington was covered in the June 5th issue of the News Letter and, to avoid repetition, only that portion of the report recently received from France Field bearing on this round trip flight which has not been previously covered is given below, as follows:

Performance of Planes:

Type: Boeing Pursuit PW9-C, Air Corps Nos. 26-457 and 27-195.

Equipment: Standard without armament, with standard auxiliary tank (38 gal.)

Preparations: No special preparations were made. These planes were received from Rockwell Intermediate Depot about May 1, 1928. All connections were tested, the ignition system checked thoroughly. All lines and screens in the fuel system were cleaned and checked. The compasses were swung and checked. Fuel consumption tests were made on all tanks. An extra flange was welded on the tail skids to prevent ground-looping and to give less roll in any short fields encountered.

Special Equipment: Each ship carried in addition to the pilot's baggage and flying equipment, the following: 1 45 cal. service automatic with 80 rds. ammunition; 1 Very pistol with 1 doz. flares; 1 can emergency rations; 2 smoke candles; 1 canteen, water; 1 PW kit, complete; 12 spark plugs; 1 cross-country envelope; 1 machete; 1 magneto (extra); 1 flashlight; spare shock absorber cord, wire, cotter keys, etc.

Performance: Gasoline consumption at 1850 r.p.m. 18 gals. per hour. Oil consumption approximately 1/5 pint per hour. Indicated air speed (average) 115 miles per hour. No trouble encountered with cooling systems except at high altitude.

Landing Fields and Service:

1. DAVID, R de P. - Two miles southeast of city. 1000 x 1000 yds. Smooth and hard the year round. Gas and oil on the field.
2. MANAGUA, Nic. - one mile south of city. 44 x 1000 yards. Well drained and in good condition. Operated by U.S. Marines. Hangars and excellent service.
3. GUATEMALA CITY, Guatemala. Four miles south of city. Approximately 3/4 mile square. Well drained, hard, altitude 5000 feet. Hangars, and office of Guatemalan Air Corps. Fuel obtained from Standard Oil Co. (West Indian) in city. Arrangements can be made by cable.
4. MINATITLAN, Mexico. Two miles northeast of town. Open field 400 x 1000 yards directly in front of a row of brick quarters. Hard and slightly rolling. No hangar space. Fuel obtainable from Mexican Eagle Petroleum Co., Minatitlan. The landing field is the property of this company.
5. TAMPICO, Mexico. Two miles west of city. L-shaped field. Approximately 400 x 400 yards. Hangar and fuel on field.

Courtesies:

a. At Managua, Nic., Major Ross E. Rowell, Marine Corps, commanding Second Brigade Air Service, and his command, were extremely hospitable and placed mechanics at our disposal. These mechanics checked and repaired our planes in a very efficient manner.

b. At Guatemala the Guatemalan Air Corps officers were very courteous. Mr. Trammel of the American Embassy was of great assistance in obtaining service and in sending cables.

c. At Minatitlan, Mexico, the manager and employees of the Mexican Eagle Petroleum Company were very friendly and hospitable. They secured fuel and aided in every way to service and guard the planes.

Recommendations:

1. This route is recommended as a feasible and safe route for land planes

with a cruising range of 600 miles. However, it is not recommended that the air line route from Guatemala City to Minatitlan, Mexico, be followed on account of:

- (a) Extremely mountainous and desolate country.
- (b) Lack of accurate maps and scarcity of definite landmarks.

2. This flight should be made via Salina Cruz, Mexico, and across the Isthmus of Tehuantepec, where there are definite landmarks, a line of communication and comparatively low country.

 FLIGHT LOG: (Return trip Washington to Panama, via Havana, Cuba)

<u>Date</u>	<u>Departure</u>	<u>Arrival</u>	<u>Time (minutes)</u>	<u>Miles</u>
6/16/28	Bolling Field, D.C. 9:55 a.m.	Jacksonville, Fla. 3:15 p.m.	320	645
<u>Remarks:</u> Weather clear, northeast winds. Landed at Jacksonville in local thunderstorms. Compass course followed.				
6/17/28	Jacksonville, Fla. 10:50 a.m.	Havana, Cuba. 3:50 p.m.	300	580
<u>Remarks:</u> Weather clear, winds light and variable. Emergency landings can be safely made on beach from Jacksonville to Miami. Municipal field at Miami. Pan-American Airways field at Key West. Out of sight of land thirteen minutes from Key West to Havana.				
6/19/28	Havana, Cuba 6:55 a.m.	Havana, Cuba Returned 10:25		
<u>Remarks:</u> Weather clear, northeast wind. Motors were thoroughly checked				
6/18/28	6/18/28	Took off at 4:55 a.m.	Failure of fuel pressure from auxiliary tanks in both ships was discovered almost immediately after take-off. Landed at 5:15 a.m. and increased tension on relief valve springs. Took off at 6:55 a.m. Pressure began to drop slowly and 200 miles from Havana the pressure could not be held with aid of hand pumps. Returned to Havana. An emergency field was located at 10 miles south of Pinar de Rio, Cuba.	
7/10/28	Havana, Cuba 5:20 a.m.	Pinar de Rio, Cuba 6:15 a.m.	55	90
<u>Remarks:</u> This stop was made to give us added safety factor of almost 100 miles to our cruising range on the flight to Tela.				
7/10/28	Pinar de Rio, Cuba 7:15 a.m.	Tela, Honduras 12:30 a.m.	315	675
<u>Remarks:</u> Weather clear, 25 mile northeast winds shifting to east. Local rains encountered for 100 miles on coast of British Honduras. No fields of any kind observed. Country passed over was swampy and flat. Very poor emergency field running north and south near beach at northern edge of Belize, Honduras, 150 x 50 yds. Poor approaches over buildings with houses on west side and the beach on east side. Prevailing east winds (cross wind). Out of sight of land, Cuba to Cozumel Island, 40 minutes.				
7/10/28	Tela, Honduras 1:35 p.m.	Managua, Nicaragua 4:05 p.m.	150	285
<u>Remarks:</u> Weather cloudy, ceiling 5000 feet. Clouds were below tops of higher ranges. By following a river valley mountains were negotiated to Tegucigalpa, Honduras. From there the country sloped gradually to Managua with clearing weather. Emergency fields scattered along valleys from Tela to Tegucigalpa. Two miles south of Tegucigalpa with United Fruit Co. radio towers on edge of field. A few open and cultivated fields observed from Tegucigalpa to Lake Managua but of doubtful value as emergency fields.				
7/11/28	Managua, Nic. 7:30 a.m.	France Field, C.Z. 1:05 p.m.	330	630
<u>Remarks:</u> Weather clear. Winds variable. Head winds encountered from David to France Field. Flew over radio station at Punta Arenas, Nic. at 9:25 a.m., and David, R de P. at 11:15 to check in with radio and telegraph. Flight uneventful. Total flying time, 24 hrs. 30 min.; total distance 2905 miles; Average speed, 118.6 miles per hour.				
<u>Performance of Planes:</u>				
<u>Equipment:</u> Standard without armament. An auxiliary tank, capacity 65 gals. was designed and built by Materiel Division, Wright Field, and installed on each plane, giving one hour and 45 minutes more flying than with standard auxiliary tank, and a total capacity of 127 gallons. Fuel tests in actual flight showed 7 hours 20 minutes flying range at 1900 r.p.m., using altitude adjustment, indicated air speed 120-125 m.p.h. Bendix brakes were also installed on the planes.				

The motors were not changed after the flight from the Canal Zone to Washington but were thoroughly checked. New compasses were installed and corrected.

Performance: Gasoline consumption 18 gals. per hour at 1850 r.p.m. Oil consumption approximately 1/5 pint per hour. Indicated air speed 115-120 m.p.h. No trouble encountered with cooling system. The oil temperature regulator was removed at Wright Field. The water temperature averaged 80° c. and oil temperatures averaged 85° c. The entire flight after removal of oil temperature regulator.

On the take-off at Havana on June 19th, both planes developed trouble with fuel pressure, especially with auxiliary tanks. After one and one-half hours' flying in an attempt to keep going with hand pumps, the pressure from the auxiliary tank was entirely lost and the pressure from the main tank began to become uncertain. This caused us to return to Havana. Suspecting air leaks, all lines and the three-way valves were removed and inspected with no results. Then the C-5 pumps and B-1 check valves were removed and showed slight signs of wear. After remedying this as much as possible with facilities at hand, no results were obtained. It was decided to replace them, as no other trouble could be found. We cabled for these parts June 20, 1928. They were shipped June 21st and were received in Havana July 1st. Upon installation, the results were the same as before. No pressure on either could be held over ten minutes.

The three U.S. Air Corps officers, and two Master Sergeants stationed at Havana, all Pan-American Airways Co. pilots and mechanics were, with ourselves, completely puzzled. On July 3rd we cabled the Chief of Air Corps requesting an expert be sent from Wright Field to assist us. Mr. Dyckman of Wright Field arrived July 6th. After checking the work done on the fuel systems, he ran a crude laboratory test on the aviation gasoline we had been using and found it had a very low boiling point. Testing two other brands of gasoline with higher boiling points, furnished by the Standard Oil Co. of Cuba, better results were obtained, although not completely satisfactory. We then tried the regular commercial ESSO gasoline, with a boiling point of about 115° F. This proved satisfactory and we took off at daybreak July 10th. No more trouble was experienced with fuel pressure. No mechanical trouble was experienced on the entire flight.

A tendency to ground loop was observed when a landing was made with a full auxiliary tank. This could not be controlled with brakes. A 2" x 3/4" steel flange was welded on the tail skid shoe and no more trouble of this kind was experienced.

Landing Fields and Service:

1. Jacksonville, Fla.: Municipal Field about nine miles north of city along main highway. "L" shaped field, cinder runways about 400 yds. long. Excellent approaches. Hangar space and service on the field.

2. Havana, Cuba: On Western edge of city one mile inland from Gulf. Approximately 1000 yards by 500 yards, slightly rolling. It is used by Cuban Air Corps as training field and by Pan American Airways, Inc. The field is being leveled by the Cuban Government, Cuban Air Corps hangars and office buildings on eastern edge of field. Pan American Airways hangar on northwestern edge of field. Fairly good approaches. Northeastern corner of field very rough and dangerous.

3. Tela, Honduras: Three miles west of city. A two-way field consisting of a runway 500 yds. long by 50 yds. wide running northeast and southwest. Good approaches. Radio towers at right of northeastern end. The runway has been graded thru an old half-mile race track. On either side of the runway is high thick grass. One hangar owned by United Fruit Co. at southeast corner of the race track. Excellent service. Gas and oil on the field. Radiograms can be sent to and from radio station owned by United Fruit Company.

Courtesies:

1. The Materiel Division at Wright Field, Dayton, Ohio, especially Major C.W. Howard, A.C., and staff, designed, built and installed on each plane an auxiliary tank, capacity 65 gallons, and Bendix brakes. This work was completed in ten days, allowing the flight to start before the rainy season became dangerous, thru Central America. These installations gave the planes a cruising range of 800 miles and a means of landing in small fields with safety.

2. At Havana, Cuba, the then acting Chief of the Cuban Air Corps, Lt.-Col. Julio Sanguily, Cuban Army, placed at our disposal the facilities and men of the Cuban Air Corps. The attitude and service of the commissioned and enlisted men of the Cuban Air Corps was excellent.

The Cuban Air Commission, in command of Captain R. Jean, A.C., gave us every possible aid in service, sending cables, etc., and was largely responsible that our flight was resumed successfully.

3. The United Fruit Co., managers and employees, at Tela, Honduras, were exceedingly hospitable and rendered invaluable service in servicing planes, sending radiograms, etc. The United Fruit Co. office at Cristobal, C.Z., had instructed every office in Central America and Cuba to keep them informed as to our whereabouts and to render any assistance possible.

Recommendations:

1. The route from Washington to the Canal Zone via Havana, Cuba; Tela, Honduras, and Managua, Nic., is recommended as a safe, feasible route for three-motored land planes or Amphibians with a cruising radius of 800 miles.

2. The route from Washington, D.C. to the Canal Zone, via Havana, Cuba, is a more direct route than the land route followed via Minatitlan, Mexico, and Brownsville, Texas. It is almost 1000 miles shorter, viz:

France Field to Washington, via Mexico - 3830 miles

France Field to Washington, via Havana - 2905 miles

Difference - 925 miles

3. The Pan-American Airways, Ind., has planned to build fields at Merida, Mexico, and at Belize, Jr. Honduras, to be available January 1, 1929. When these fields are completed, planes with 500 miles cruising radius can fly this route safely.

---oOo---

A NIGHT FLIGHT TO NEW YORK
By Bolling Field Correspondent

Captain Harold M. McClelland, Air Corps, with Staff Sgt. Nels E. Swanson as passenger, recently left Bolling Field for Mitchel Field for a night flight, the start being made at 8:30 p.m. The plane used was an O-1 equipped with navigation lights and with parachute flares on the bomb racks.

Sgt. Swanson on his return declared that the flight was one of the most enjoyable he had ever made. His description of the trip is as follows:

"We took off at 8:35 p.m. and, after circling the field once, headed northeast for Mitchel. We easily picked up the Air Mail beacon light 20 miles away and right on our course. The beacons are very easily seen on a clear night, and at 3,000 feet we could see them flash 40 miles away.

Washington looks very beautiful at night from the air, it being a very well lighted city. I expected Baltimore and Philadelphia to look as beautiful as Washington, but I was due for a disappointment in that respect.

We followed the beacon lights on our course with about 3,000 ft. altitude. The cities and towns looked very beautiful and I could see numerous auto lights blinking along the highways. I can't say much about the trip after leaving Philadelphia, as I think I dozed off to sleep. I had just been relieved from guard at 6:00 p.m., and having played ball that afternoon I was quite tired. I managed to come up for air over Coney Island, and it was a sight for sleepy eyes. It is remarkable, to say the least, how well lighted that place is. I could just imagine what an enjoyable time some folks were having down there and would have liked to have joined them. Very soon Mitchel Field loomed up ahead, and we landed at 10:30 p.m., with the aid of the landing lights on the field."

---oOo---

INSPECTION OF NATIONAL GUARD AIR CORPS ACTIVITIES

Captain Charles T. Phillips as pilot, with Staff Sgt. Ernest N. King as mechanic, left Bolling Field on August 1st to inspect National Guard Air Corps activities. The schedule for the trip is as follows:

Bolling Field to Camp Perry, Ohio; to Camp Grant, Ill.; to Camp Knox, Ky.; to Camp Grayling, Mich.; to Mobile, Ala.; to Little Rock, Ark.; to Lambert Field, Mo.; to Martinsburg, West Va. and back to Bolling Field.

The personnel, planes, equipment and charts of the National Guard organizations at these posts will be inspected, and training instructions will be given as well as advice on the handling of financial matters pertaining to their efficient operations.

Captain Phillips has already inspected the posts at Pine Camp, N.Y., and Columbia, S.C.

The plane used for these flights is a Douglas O2-H which Capt. Phillips ferried from the factory at Santa Monica especially for the purpose. The trip is expected to last about 23 days, thus allowing two full days at each field.

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS

Changes of Station:

Following officers relieved from duty with 3rd Attack Group, Fort Crockett, Tex., and assigned as instructors - 1st Lt. Wm. R. Sweeley, 2nd Lts. Alex. E. Cabana and Mark D.S. Steensen to March Field; 2nd Lieuts. Howard M. Turner and Manning E. Tillery to Brooks Field.

2nd Lt. John K. Nissley, Langley Field to Rockwell Field, Calif.

2nd Lt. George H. Steel, Aberdeen Proving Grounds, Md. to Langley Field.

Capt. Paul J. Mathis, Langley Field, to Office Chief of Air Corps.

Capt. George P. Johnson, Chamute Field, to Hawaiian Dept., sailing about October 9th.

1st Lt. Harry A. Halverson, San Antonio Air Depot, to March Field.

Capt. George M. Palmer, Instructor Minnesota Natl. Guard, Minneapolis, to Langley Field, Va.

1st Lt. Joseph A. Wilson, Mitchel Field, to Boston Airport, Mass.

Major Carlyle H. Wash from duty at France Field to duty in Hawaiian Dept. effective March 30, 1929.

1st Lt. Kellogg Sloan, Bolling Field, to duty as Instructor, New Jersey National Guard, Newark, N.J.

1st Lt. Cecil E. Archer, Wright Field, to Office Chief of Air Corps.

Capt. Harrison W. Flickinger from duty as Air Corps representative at Atlantic Aircraft Factory, Hasbrouck Hts., N.J. to duty as Air Corps representative in charge inspection and procurement activities, Buffalo, N.Y., and vicinity.

2d Lt. Oscar P. Herbert, Walter Reed Gen. Hospital, to Langley Field, Va.

Assignment 2nd Lt. Wm. L. Scott as student Engineering School, Wright Field, Dayton, O., revoked.

Promotions:

Captain Robert C. Candee to Major, rank from August 26, 1928.

Capt. Gerald E. Brower to Major, rank from August 17, 1928.

1st Lt. Lotha A. Smith to Captain, rank from August 16, 1928.

1st Lt. Lewis R.P. Reese to Captain, rank from August 10, 1928.

1st Lt. Byron T. Durt to Captain, rank from August 11, 1928.

1st Lt. Earle G. Harper to Captain, rank from August 11, 1928.

1st Lt. John P. Temple to Captain, rank from August 7, 1928.

2nd Lt. Hoyt S. Vandenberg to 1st Lt., rank from August 19, 1928.

2nd Lt. James M. Fitzmaurice to 1st Lt., rank from August 11, 1928.

Resignation:

Major Thomas G. Lanphier, August 25th.

Relieved from detail to Air Corps:

1st Lt. Charles H. Crim to 62nd Coast Artillery, Fort Totten, N.Y.

Captain Hugh D. Adair, Inf., to 2nd Div., Fort D.A. Russell, Wyoming.

2nd Lts. Clint L. Taylor and Lindsey R. Wingfield to duty in Hawaiian Dept. with the Field Artillery.

2nd Lts. Joseph B. Daugherty and Douglas B. Smith, Inf., to duty as students at Infantry School, Fort Benning.

2nd Lt. Raleigh H. Hendrix to 13th Coast Art., Fort Crockett, Texas.

1st Lt. Elden Q. Faust, QMC, to Fort Sill, Okla., for duty as Assistant to the Quartermaster.

1st Lt. Emerald F. Sloan to Infantry, 2nd Div., Fort Sam Houston, Texas.

Reserve Officers to active duty to June 30, 1929:

2nd Lt. Draper Frew Henry, Annapolis, Md., to Mitchel Field, N.Y.

2nd Lt. Charles Kingsbury, Redlands, Calif., to Rockwell Field, Calif.

2nd Lt. Charles H. Earnest, West Palm Beach, Fla., to Maxwell Field, Ala.

Detailled to Air Corps and to Brooks Field, Nov. 1, for training:

2nd Lieut. Albert S. Jaron, C.A.C. Transferred to Air Corps:

Major Wm. O. Ryan, August 15, 1928, with rank from Sept. 13, 1923.

Changes of Station (Continued)

1st Lt. George P. Tourtellot relieved from present assignment at Wright Field and assigned as student, Engineering School.

Captain John J. Devery, Jr., Chamute Field, to Bolling Field, D.C.

1st Lieut. Donald P. Muse, Bolling Field, to Maxwell Field, Ala.

---oOo---

PLANE LOCATES MEN MAROONED IN BAY

Warrant Officer Leland Bradshaw of Langley Field with Sgt. Darker, Air Corp Tactical School Det., and Sgt. Mishmas of the 96th Bomb. Sqdn., were recently marooned at the York Spit Light. Rough seas and high winds forced Warrant Officer Bradshaw to steer his boat into the York Spit Light, where they were tied up and stayed until the storm subsided. When the men failed to return to the boat house at Langley Field, Lieut. Clayton Bissell flew over that section of the Chesapeake Bay and located Bradshaw and his party, who waved all was well to him from the light house. A number of airplanes from Langley Field were forced down in this vicinity the same week end.

NOTES FROM AIR CORPS FIELDS

March Field, Riverside Calif., Aug. 15th.

The opening of airports in Calif. is becoming a popular pastime with the pilots at this station. A formation recently flew to Pomona to assist in the dedication of the W.K. Kellogg Airport, the largest privately owned airport in the United States. Visalia, Calif., also called on the services of this field to participate in the dedication of their airport.

Second Lieut. Walter L. Wheeler, recently assigned to this station upon his return from foreign service, was appointed Assistant Adjutant. 1st Lt. Earle H. Tonkin is substituting for 1st Lt. Homer B. Chandler as Air Corps Supply Officer during the latter's absence on leave.

Headquarters Detachment, 1st Lt. John B. Patrick, commanding, celebrated Organization Day with a trip to San Clemente, Calif. Following a day devoted to sports, the organization went to Balboa Beach where they were the guests of the management at a dance given in their honor.

A total of 173 Flying Cadets are at present under instruction at this station. The Faculty Board eliminated eight members of the July Class at recent meetings.

Flying Cadet Neville I. Wright, a member of the July 1st Class, was instantly killed in an air accident on August 6th. Cadet Wright landed directly on the wings of a plane waiting to take off. His ship was catapulted forward by the impact with the propeller and landed upside down, Cadet Wright being pinned beneath the wreckage. Lieut. C.J. Kenny and Cadet Elmer Miller were occupants of the plane waiting to take off, but miraculously escaped injury.

1st Lieut. Earl G. Harper and 2d Lts. George E. Henry and Paul L. Woodruff left recently for San Antonio, Texas, to ferry three DH's back to this station. The return trip, scheduled to be made via Colorado Springs, Colo., was to enable the trio of pilots to participate in the ceremonies incident to the opening of a new airport at that city.

Thirty-one applicants for appointments as Flying Cadets were present on August 14th to take the educational entrance examination.

The Flying Cadets walked away with the second quarterly field meet held at this station. Amassing a total of 77½ points, the Kaydets won the

field championship for the second time in succession. The organization championship was won by the 54th Squadron with a total of 35 points, followed in order by the 53rd, 70th, 47th and Headquarters Squadrons. Corporal Joel P. James, 47th Squadron, won the individual high point prize for organization men.

1st Lieut. James D. Givens was appointed Director of Ground Instruction, replacing 1st Lt. James L. Grisham, who recently left for foreign service. Lt. Givens will also act as School Secretary during the temporary absence of 1st Lt. B.T. Burt, who is on leave of absence.

Sixty-one planes left this station August 15th for Rockwell Field to participate in the dedication of Lindbergh Field, San Diego. The flight was made up of ten PT-3 formations and 10 DE-4 formations, with the Douglas Transport. Following the dedication in San Diego it was contemplated that a number of the ships would visit the Pacific Southwest Exposition at Long Beach, Calif.

Congressman Maas, 4th Congressional District, Minnesota, was a visitor at this station August 14th. The Congressman addressed the commissioned personnel at a meeting of the officers. A tour of inspection of the various Air Corps stations is being made by airplane by Mr. Maas, and he evinced much interest in the functioning of the school. Congressman Maas is a rated airplane pilot and availed himself of the opportunity of getting in over five hours' solo time while at this station.

Rockwell Field, Calif., August 22nd.

Funds have been allotted for repairing of corrugated iron roofs on hangars and shops at Rockwell Air Depot. Twenty buildings are to be re-roofed with tar and muslin, and two were completed on July 31st.

Mr. Charles Dollfus, of the French Technical Service for Aeronautics, visited Rockwell Field July 27th. Mr. Dollfus has been interested in balloons for over seventeen years.

Captain Hugh M. Elmendorf, Commanding Officer of the 95th Pursuit Squadron stationed at Rockwell Field, was presented with a distinguished aerial gunner's badge by the Adjutant General. Captain Elmendorf won the distinguished aerial gunner's designation in the annual matches in aerial gunnery and bombing in 1927.

Colonel Louis M. Nuttman, Inf., recruiting officer of the 9th Corps Area accompanied by Col. Hunter B. Nelson,

recruiting officer of the Los Angeles District, visited Rockwell Field July 25th to consult with the Commanding Officer and local recruiting officer on recruiting activities of the post.

Major A.L. Sneed, Commanding Officer of Rockwell Field, departed July 24th in an O2-H for the purpose of ferrying same to Edgewood Arsenal, Md. He returned to Rockwell August 8th, after spending several days in Washington and Dayton in conference on personnel and materiel matters affecting Rockwell Field.

The officers of Rockwell Field were guests of the San Diego Chamber of Commerce at an "Aviation Ball" held at the Hotel del Coronado on the evening of August 16th. Officers from practically every Air Corps field on the coast attended and made the affair a brilliant success.

Middletown Air Depot, Pa., August 2.

General Foulois paid the Depot a short visit on July 21st.

The famous round the world racers, Capt. Collyer and Henry Mears, stopped off for a breathing spell on Sunday, July 22nd, and after sending some wires, took off in exceptionally soupy weather for Miller Field, N.Y.

Lieut. O'Neal took off in an O-2 July 2nd and headed for Fort Riley, Kansas, said ship to be used to carry the President's mail while he is on vacation. Lieut. C'Neal landed with no trouble at his destination July 4th.

The opening of the airport at Shamokin, Pa., July 11th was attended by Capt. DeFord and Lieut. Mills from this post. On the 21st Lancaster had its dedication, and Lieuts. Mills and O'Neal journeyed thence. A tough time was had by all.

On the evening of the 24th Col. and Mrs. Fravel were hosts to a dinner party of sixteen served at the Inn at Mt. Gretna, Pa. The occasion was the celebration of the date of the Colonel's entry into the military service 30 years ago. Besides Col. and Mrs. Fravel, there were seated Gen. Price, Commander of the Pennsylvania National Guard; Dr. and Mrs. George, Dr. and Mrs. Deatrack, Miss Keefer, Capt. and Mrs. Fleming, Capt. and Mrs. DeFord, Lieut. and Mrs. Estabrook, and Lieut. and Mrs. McGregor.

Capt. and Mrs. Earl H. DeFord left this station for a short leave of absence on Aug. 3rd, and the Capt. will report at Langley Field for the school later in the month. Their departure was the cause of innumerable parties,

and the entire post will keenly feel the loss of this popular couple.

During July 8 airplanes were delivered to their proper stations by air and 11 were received for overhaul. Included in the engines shipped was one entire carload to Fairfield for repair. Material for two complete tile type hangars, consisting of 18 carloads, was received and stored by the Depot Supply. Engineering has major overhauled 22 Liberty and 3 Curtiss motors during the month, also 7 planes.

Maxwell Field, Montgomery, Ala. Aug. 4.

This post has just finished giving its third successful two weeks' summer training course for Reserve officers. There were 33 officers who availed themselves of this training, and all of them passed their physical examinations. Quite a few of them soloed, notwithstanding the fact that some of these officers had not been in ships since the World War.

Two new O2-H's were ferried to this field this month from Santa Monica, Calif. by Lieuts. Whatley and Miller. They seem to have everything on them in the way of equipment, including the kitchen stove. We are mighty proud of them.

Several tow-target missions were flown this month at Fort Barrancas, Pensacola, Fla., for gunnery practice with the Navy.

The 22nd Observation Squadron at this post is celebrating its 11th anniversary this month.

Lieut. Isaac W. Ott, Air Res., reported for a year's active duty.

Lieut. Frank Byerly, Air Res., was ordered to Maxwell Field for a year's active duty.

Mitchel Field, L.I., New York, Aug. 21.

Civilization is fast encroaching on our erstwhile rural community here at Mitchel Field. First it was a whale of an illuminating gas tank a quarter of a mile northwest of the field; not it is a high tension line running along the north boundary of the station. However, this high tension line is of some use; the other day the line of towers guided into the airdrome two PT's full of Reserves who were caught out around Farmingdale by a lowering fog.

The 5th Squadron, line the First, is looking forward to its annual field maneuvers in October at Camp Dix. Plans are under way to camp out on the airdrome, away from the camp ground proper, with their own "Chow gun" and officers' mess.

Lieut. "Benny" Mendez, R., Lieut. of Colombian Army Air Service, is with us again. He is fast losing his command of Spanish as he acquires skill with our O-1 planes. He has been away from home so long that he won't recognize the old home town when he gets back. He asks many questions on things aeronautical, the principal one being "Any ships to fly this morning?"

The First Squadron completed the training of Reserve officers from the First Corps Area, as has the Fifth Squadron those from the 2nd Corps Area. Of the seventy or more Reserves trained here this summer, eight have soloed in service type planes - O-1's in this case; five of the eight being placed in Class I as being qualified to assume their place in a tactical squadron without a further refresher course.

The First is getting ready for the annual field maneuvers, and under the guidance of Lieut. N. Laughinghouse they hope to show General Preston Brown of the First Corps Area that the Squadron is the equal in quality to its name.

The Fifth Squadron (the 1st Division Air Service) had its roster of pilots badly depleted by the transfer of Lieut. Lauer to the 61st Service Squadron and the detachment of Lieuts. Hunter, Peaslee and Mower to Aberdeen Proving Grounds. The last three will be flying tow targets for the new anti-aircraft gun tests there for some weeks to come.

Rockwell Air Depot, Calif. August 3d.

The Depot Supply Department has moved into its new quarters, which was formerly known as Warehouse "A". This building is the first concrete hangar as one arrives at Rockwell Field. The interior of the building has been re-decorated and it makes a splendid office. This move greatly increases the efficiency of the Depot Supply. Much paper work has been eliminated and telephone calls reduced by at least 50%. Under the new arrangement all desks of both the office force and those of the warehouse force are in one large room.

The 95th Pursuit Squadron has 11 PW-9 airplanes of the latest type and are making good use of them. The "threes musketeers" - Lts. W.L. Cornelius, J.J. Williams and Irvin A. Woodring, take a little exercise in the clouds each morning in three of these new planes, Lieut. Charles W. O'Connor arrived with an O-2A plane from the

Fairfield Air Depot for delivery to the 11th Bombardment Squadron. Lieut.-Col. Harry Graham, who also came to the coast in this airplane, left it at Los Angeles, the plane having come from the East via Phoenix, March Field and Los Angeles to Rockwell Field. The personnel is looking forward to a visit by the Colonel, who was one of Rockwell Field's former popular commanding officers.

Recent deliveries on Douglas O2-H planes were taken at the Douglas plant by Lieut. Forrest L. Neville, who piloted one to Dodd Field, Ft. San Houston, Texas, and Lieut. Milton M. Murphy, who ferried one to Pope Field, Fort Bragg, N.C., on July 31st. Both planes were inspected and serviced at the Depot.

Major H.B. Clagett, Air Officer, 9th Corps Area, arrived on official business at Rockwell Field July 30th and remained until Aug. 3rd, when he returned to Corps Headquarters.

Brooks Field, San Antonio, Tex. Aug. 9th.

Representative Melvin J. Maas, of St. Paul, Minn., arrived here August 2d in an O-2 piloted by Lieut. Hart of Chamute Field. He remained here about a week, making an inspection of Air Corps activities in this locality, and was then flown to March Field for the purpose of inspecting that station.

Lieut. D.D. Fitzgerald, who was recently transferred here from Chamute Field, was detailed as instructor in the Communication Section of the Ground School, relieving 1st Lieut. M.Schneider.

Seven parachute jumps were made simultaneously by enlisted men on duty at this station from a formation flying in a "Lufberry Circle" at 2,000 feet. The jumps were witnessed by Representative Melvin J. Maas, of St. Paul, Minn. The personnel making the jumps were Sgt. R. Funk, Corporals W.H. Stark and C.F. Mitchell, Privates R.G. Field, H.V. Hardy, S. Tolle and M. Roberts. Lieut. L.P. Hudson led the formation and directed the jumps, giving the signal by firing a Very pistol. This is the first time jumps were made at this station from a formation flying in a "Lufberry Circle." 11th School Group Hqs: Staff Sgt. Dale Leonard received orders for duty in Panama. This is his first shot at foreign service.

Private James E. Meyers, now on furlough, writes in from Middletown, Ohio, stating that laboring in the Iron Mines is not so hot and that he may be expected back at Brooks shortly.

Jumping Jimmie Zieler remains on duty as acting 1st Sergeant during the absence of Sgt. Williford.

20th Photo Section: Lieut. T.E. Lowe took three months' leave. During his absence Lieut. E.C. Lynch is our Commanding Officer.

Sgt. Chestnut received orders to sail for the Philippines in September. All personnel of the Section hate to see Chestnut leave. However, our loss is the 6th's gain. Sgt. Patterson replaces him.

Two new men were recently assigned the Section this week - Arner from Denver and Whitley from Tulsa, which brings the Section up to full strength. Our Acting 1st Sergeant, Supply Sergeant and other jobs too numerous to mention, Sgt. Dill, is leaving on a three months' furlough to visit points in the east, mainly Towanda, Pa., wherever that is. The covered Ford will be his prairie schooner.

Pvts. Barr, Grievies and Whyte, G., returned from furlough and all report having a wonderful time. A certain little bug afflicted Whyte while on furlough. Who is she, Whyte? Pvt. "Liney" Harrison is still on furlough but is expected back within a few days.

46th School Squadron: Pvt. Ellis P. Streater died at the Fort Sam Houston Station Hospital July 16th. The cause of death was an ulcerated stomach. The remains were sent to Wewoka, Okla., accompanied by his wife. The Squadron extends its heartfelt sympathy.

1st Sgt. Silliss reports there will be no radical departures from the old policy, "Best kept grounds on the field." He further states the new re-allotment of ratings, Air Mechanics, 2nd Class, lost the organization one Corporal but gave us one Private, 1st Class. Former Staff Sgt. Robert M. DeWald, of this organization, recently discharged by purchase, is now flying Air Mail out of St. Louis.

62nd School Squadron: 1st Sgt. B. Booth maintains we hold three first places on the Field, viz: neatness Mess Hall, best equipped Day Room and the most attractive barracks. Sgt. Booth invites any doubter to report to him at the orderly room and he will convince him as to the accuracy of this statement.

Dusty Rhodes sailed from Frisco on July 13th for duty in Hawaii. Beware of the Hula girls, Dusty!

The organization is now on the range, and from current reports Congress will be required to appropriate additional funds for pay of Experts and Sharpshooters.

Brooks Field, San Antonio, Texas, Aug. 24.

In one of the former contributions to the News Letter it was predicted that a course in advanced navigation might be conducted at this station for the permanent personnel. This prediction is about to become a reality, as the necessary equipment to conduct this course has been requisitioned. Should it be possible to procure these items, the class will be conducted by 1st Lieut. H.H. Holland.

Major S.W. FitzGerald, Commanding Officer of Brooks Field, departed for Washington by rail to ferry a Curtiss O-11 to Kelly Field.

1st Lieut. Walter G. Bryte departed August 6th on 30 days' leave. It has been rumored that while on leave Lieut. Bryte forsook the ranks of the bachelors and joined up with the downtrodden benedicts.

1st Lt. S.M. Connel, C.O. of the 46th School Squadron, took seven days' leave to visit Leakey, Texas.

1st Lt. O.R. Cook returned from 30 days' leave and resumed his duties as Instructor in the Dept. of Ground Instr.

1st Lt. E.C. Langmead left Aug. 18 on thirty days' leave.

Captain Frank W. Arnold, QMC, is on one month's annual leave.

1st Lt. F.T. Yount, QMC, assumed the duties of Post Quartermaster during Captain Arnold's absence.

A picnic and dance was given at Landa's Park, New Braunfels, by the Officers' Club on Aug. 17th. The program consisted of swimming and diving events, commencing at 5:00 p.m. and lasting until 6:30 p.m. Supper was served at 7:00 p.m. followed by dancing in the open air pavilion an hour later.

51st School Squadron: On August 18th the entire personnel of the organization was excused from all duties in order to permit their participating in the picnic and barbecue given at the Fair Oak picnic grounds in celebration of Organization Day. About 450 lbs. of meat was barbecued between 1:00 a.m. on the morning of the 18th and 12:00 noon, when dinner was served. In addition, salads, relishes, cake, coffee, ice cream and punch were served to the organization and the guests. Athletic events commenced at 11:00 a.m., and extended through until 7:00 p.m. These events consisted of -

- 100 yard dash (for men)
- Shoe Race (free for all)
- Tug of War (married vs single men)
- Potato Race (for ladies)
- Egg Race (for ladies)

Nail driving contest (for ladies)
 Cracker eating contest (free for all)
 Horse-shoe pitching contest (ladies)
 Relay Race (married men and their wives)
 Sack Race (for children)
 Three legged race (for men)
 Wheel-barrow race (for men)
 50-yard dash (for children under 12)
 Relay Race (for men)
 Ugly men's contest
 Indoor Baseball Game (married men vs. single men)

Upon the completion of the athletic events supper was served and then the dancing commenced, continuing until 10:30 p.m. With the swimming facilities available and the arrangement of the program, there was not an idle moment throughout the day. The squadron's regret is that there is but one organization day a year.

Camp Nichols, Rizal, P.I. July 2nd.

Headquarters, 4th Composite Group:
 Lieut. Lindeburg is back on duty after a siege of dengue fever.

Capt. C.A. Pursley, who arrived on the U.S.A.T. GRANT, was assigned to this detachment.

The Camp Nichols Tennis Team's good record was broken this month by the Corregidor team in matches played at Camp Nichols.

Sgt. Arant, Cpl. Ligon, Pvts. Risdon and James left for the States on the July Transport. The old gang is surely going fast.

The detachment gained two good men this month - Pvt. Cross, transferred from 66th Service Squadron, and Pvt. Lamoroux from 28th Bomb. Sqdn.

66th Service Squadron: Lt. Wells was on cross-country trip to Aparri doing photographic work with the 6th Photo Section. He reports a very interesting trip.

Organization Day was celebrated June 2nd at Montalban. A good "swimming hole" was found there, which was taken advantage of. Picnic lunch was served at 1:00, and a large time was had by all.

Our Acting First Sergeant Joseph H. Benevides, who has been acting "Top Kick" for the past fifteen months, was appointed First Sgt. on May 28th and received congratulations of the entire organization.

Staff Sgt. Leonard L. Bentley, who has been in charge of the flying field construction for the past six months, has been ordered to Selfridge Field, Michigan, and will leave on the transport scheduled to sail about July 7th. It is with regret that we see him leave. Sgt. Bentley has worked early

and late with his detail of men enlarging the flying field.

Sgt. Charles H. Wason, our Supply Sergeant, was discharged on June 15th and reenlisted the next day. He left on a pass for parts unknown. With about six years to do until he has thirty year service, Sgt. Wason is watching with much interest the outcome of the 25-year bill.

Tech. Sgt. Wm. R. Church, who has been in charge of the Post Ordnance and Armament, will leave on the July transport for his new station at Fort Crockett, Texas.

Staff Sgt. Norman C. Jullivant, who has been on special duty with the 6th Photo Section, this station, for the past six months, is leaving on the July transport for the 21st Photo Section, Scott Field. Sgt. Jullivant will be going back to his old outfit, as he left there two years ago for foreign service.

Staff Sgt. Jack Goulla, who has been in charge of construction on the E. and R. Building, was discharged June 23rd and re-enlisted the following day. He received his orders to return to the States on the July transport, going to Mitchel Field, L.I., via the Panama Canal. On arrival in New York he will take a sixty-day furlough before reporting for duty.

Staff Sgt. Norris Brock was discharged per E.T.S. June 21st and reenlisted the next day.

Staff Sgt. John J. Dooney transferred to the 2nd Observation Squadron, Kindley Field. Staff Sgt. Jasper Lindsey, transferring from the "rock", is now on special duty in post headquarters as Assistant Post Sergeant Major.

The Squadron organized a basketball team, and from all reports some good material is turning out for practice. Sgt. Lyman L. Littlejohn is manager of the team. The other organizations on the field had better watch their step.

28th Bombardment Squadron: The following promotions were made during this month: Sgt. Deekham to Staff Sgt.; Corporals Null and Rihard to Sgts.; Pvt. King to Corporal.

who left
 The Squadron lost 17 men on the Transport sailing in July.

Staff Sgt. MacDermott, who leaves on the July Transport, is spending 30 days at Leguio on D.S. prior to departure. Looks as though he will be able to stand the trip and eat three squares a day.

Master Sgt. Kelly, who leaves this squadron on the October Transport, was granted a three months' furlough with permission to travel in China and Japan returning to the U.S. via commercial liner. The Squadron loses a very valuable man in the person of Master Sgt.

Kelly and we all wish him the best of luck at March Field.

Clark Field, Camp Stotsenburg, P.I.

With the Transport GRANT arriving June 30th and sailing July 7th, there was a large turn-over at Clark Field both among officers and enlisted men. Officers who left when the GRANT sailed were Lieut. Heffley to Mitchel Field; Lieut. Dobzien to Crissy Field; Lieut. Crawford to Selfridge Field, and Major Walton, our Commanding Officer, to March Field. Replacements were as follows: Major Cousins, from O.C.A.C., who will take command; Lieut. Oakley G. Kelly from the Organized Reserves; Lieut. Bump from Fort Crockett, Texas; and Lieut. Irvine from Selfridge Field. Twenty-five enlisted men left on the 7th.

Baguio was very popular among members of this command the past month. Lieut. and Mrs. Crawford, Lieut. and Mrs. Heffley, Mrs. Dobzien and Mrs. Wolf visited the mountain resort.

Our flying field is undergoing a thorough working over. Due to the sandy nature of the soil, coupled with a long dry season, it was in pretty bad shape. Thanks to the labor of Lieut. McCormick's army of Filipinos, however, we hope it will soon be in better shape.

The anti-aircraft season will soon be with us again. In fact, the way for the grand work-out has already been paved with about ten hours' towing for machine gun firing by the 24th Field Artillery (PS). Let us hope the whole thing goes off as smoothly as it did last year.

Kindley Field, Fort Mills, P.I.

The rainy season arrived and with it comes weeping and wailing and gnashing of teeth. Instead of the hum of Liberty motors there falls upon the ear the gentle slap-slap of paint brushes upon wood and the clatter of saw and hammer. Headquarters building has been painted gray with green trimmings; the other buildings are well under way and it won't be long until we have the show place of the Philippines.

During a lull in the storm, Lts. Patrick and Watkins with Lt. McLellan of Camp Nichols, accompanied by Tech. Sgt. Lee, Master Sgts. Cooper and Wilson, took off in three amphibians for San Jose, Mindoro, and points south. Their itinerary included Iloilo, Zamboanga, Jolo, Cotabato, Camp Keithley and Camp Overton. The trip was for the purpose of aiding Major Kilner and Major Pirie in the inspec-

tion of military reservations under orders of Headquarters Philippine Department. All ships returned June 28th. We won't detail the heart-breaking (and pleasant) experiences, for we expect that has been done by the 4th Composite Group.

Well deserved promotions were awarded during the month when Sgt. Grover C. Moss became a Staff Sergeant, and a Sergeant's warrant was delivered to Corporal Arneson.

The following new officers joined us on June 30th: Lieuts. Lionel H. Dunlap, Howard G. Davidson and Lester M. Rough. Lt. Dunlap takes over Operations and Communications; Lt. Davidson, Station Supply and Lt. Rouch, Organization Supply and Agent Quartermaster.

On June 19th a "Short Timers Party" was held in honor of those going back to the States. Corporal Ward, acting Mess Sergeant, did himself proud. Master Sgt. Wilson was the hit of the evening as he detailed the history of the Southern Island Flight. Among those going back are Sergeant-Major Ross Peck, whose genial disposition wins him friends wherever he goes and whose ability as a cartoonist, raconteur and all around artist has furnished entertainment galore. Private Miles' melodious voice will no longer be heard crying "Ice, Ice" in the wee small hours. Sergeant Robinovitz, our Irish Mess Sergeant, will no longer toss the festive ham and eggs at Corregidor, nor will Staff Sgt. Gray tell the boys what makes the motor run. Staff Sgt. Jolly's loss will be felt on the line.

This is Basketball season and the team is shaping up. We have challenged the 66th Service Squadron of Camp Nichols to a show down. Lt. Davidson is the new Athletic Officer. That ought to help, too.

San Antonio Air Depot, Duncan Field, Tex. August 1st.

Friday, July 20th, was marked in San Antonio by great honors paid to the memory of the late Captain Emilio Carranza, Mexico's flying Ace and Good

Will Messenger to the United States, when the special train bearing his body, en route to Mexico City, stopped in San Antonio for over three hours. The military funeral cortege passed from the train through the streets of the city to the Municipal Auditorium, where impressive ceremonies were held, and returned to the train. The ceremonies were in charge of the Commanding General of the 8th Corps Area, and were participated in by State, Municipal and Military authorities, representatives of the Mexican

Government, and numerous patriotic and other organizations and activities of San Antonio; and were witnessed by thousands. The Commanding Officer of this Depot, Lt.-Col. Mars, was one of the honorary pallbearers and participated in the placing of wreaths on the casket. Other members of this command attended the ceremonies.

Approximately 18 officers of the Quartermaster Corps Reserve, on active duty at Headquarters Eighth Corps Area, paid a visit to this Depot July 24th, in charge of Major H.C. Glover, QMC Res. They evinced much interest in the workings of the different departments of the depot.

On July 25th a party of about nine student officers of the School of Aviation Medicine, Brooks Field, were conducted, in charge of Capt. Robert K. Simpson, M.C., on a tour of inspection through the shops and warehouses of the San Antonio Air Depot.

Among our number from July 18th to 31st was Major Philip P. Cook, Air Corps Reserve, of Paris, Texas, on active duty training at this Depot, this being his second tour here.

Capt. Wm. F. LeBaron, Air Reserve, of San Antonio, is availing himself of a 14 days' tour of active duty training at this Depot, beginning Aug. 1st.

In the field of athletics, the San Antonio Air Depot Baseball Team (the "Airmen") are continuing to show the old speed. On July 21st they took the championship of the Saturday League, one of the four amateur leagues of San Antonio, and are now conceded the best chance for the Amateur City League Championship. If successful, it will put them in line for the State Amateur title.

San Antonio Air Depot, Tex. Aug. 14th.

The Engineering Department of the San Antonio Air Depot turned out the following in the way of airplane and engine overhaul during July: Airplanes, 5 DH-4M-1, 2 DH-4M-2, 3 DH-4M-2E, 11 PT-1, 1 PT-3, 1 AT-4, 3 O2, 3 O2-C, 1 C-1, 1 C-2A, 2 NBS-1, 1 PW-9, 1 KA-1, total 35; Engines - 40 Liberty, 32 Wright-E, 1 Wright E-3, total 73.

Capt. Wm. F. LeBaron and 1st Lt. Edward R. Stapley, Air Reserve, the former of San Antonio and the latter of Stillwater, Okla., completed 14-day tours of duty August 14th at this Depot.

1st Lt. Ennis C. Whitehead, of the Office of the Chief of the Materiel Division, was a visitor at this Depot August 6th to 7th, for conference with the Commanding Officer regarding pro-

posed new construction at the Depot.

On August 7th this Depot had the pleasure of a brief visit from Hon. Melvin J. Maas, Representative in Congress from St. Paul, and aviation enthusiast, incidental to his visit to the Air Corps Training Center for a study of ground school and flying training methods.

Langley Field, Va., August 7th.

The activities at the field were devoted largely to making organized reserve training periods pleasant and profitable.

The 409th Attack Squadron in active training at Langley Field divided itself into flights, as did the organized reserve squadron just preceding it. The spirit of flight contest is becoming keener as each reserve squadron reports for duty.

The following Air Corps Reserve officers were on the Reserve Staff: Lieut. Col. Joseph F. Randall, Executive Officer; Major W.D. Grant, Squadron Commander; Captains E.T. Kelton and J.W. Lankford leaders of "A" and "B" Flights, respectively.

So far this month the flights have contested in aerial machine gun firing and pistol shooting. Each flight since arrival was graded on its promptness, and the individuals in each were graded on military bearing, neatness, appearance of quarters, etc.

The following Langley Field officers were assigned as executive officers: Capt. Ernest Clark, camp commander; 1st Lt. D.L. Behncke, Air Reserve, on active duty at Langley, Executive and senior officer; 2nd Lt. Ford L. Fair, Adjutant and Recreation Officer; 2nd Lt. Ward J. Davies, Operations Officer; 1st Lt. W.C. Wimsatt, Engineering Officer; 1st Lt. John K. Nissley, Supply Officer; Capt. H.S. Steenberg, M.C., Camp Surgeon. Ten instructor officers were also assigned to assist the Attack organization in clearing moot points.

The funeral of the late Lieut. Chas. B. Austin, who died on July 27th, was held at the Arlington Cemetery. A guard of honor, composed of fellow officers of Langley Field, accompanied the remains to Washington and their final resting place.

Langley Field, Hampton, Va. Aug. 29.

This month has occasioned Organization Day picnics of several Langley Field squadrons, the 49th Bombardment, the 96th Bombardment Squadron and the 96th Bombardment Squadron being among

those to celebrate this day.

Of the 48 candidates for the Flying School at Brooks Field who were recently examined, 14 passed the physical examination. All of them were exempted from the mental examination by virtue of having completed two years' college work.

Capt. C.E. Rust, Lieuts. Peyton, Vaughn and Thomas are among officers on duty from this station at the Aberdeen Proving Grounds, Md. They will be there for two months in connection with anti-aircraft development. Capt. Wm. Flood, 19th Airship Company, is there for the same duty.

Both Lighter-than-Air and Heavier-than-Air Reserve officers are engaged in 15 days' training at Langley Field. The Group is giving training to the 304th and 305th Observation Squadrons, Organized Reserve. The 19th Airship Co. is instructing a smaller number of balloon pilots.

Reserve officers of the two squadrons, 304th and 305th, are competing for a cup to the most efficient squadron. The same events as in the other squadron contests prevailed in this one. The high spirit of competition still exists.

Capt. Chas. L. Hayward, 1st Lt. S.S. Deach, 2nd Lts. Chas. C. Murphy, D. Murphy and E.H. Wolff, all of the Air Reserve, reported for duty with the 19th Airship Company, for a period of two weeks beginning August 12th. While on temporary duty here, the Reserves are to undergo intensive training in free ballooning and observation work, as well as training for airship pilots.

Capt. Ernest Clark assumed command July 1st of the 59th Service Squadron, relieving Captain James F. Doherty. Second Lieut. W.R. Wolfenbarger was also assigned to this organization.

Lieut. Frank B. Tyndall represented the Army Air Corps in the Ford 1928 National Air Tour. He followed the other 29 planes, carrying the official scores and reports of the Weather Bureau and press. Lt. Tyndall joined the Tour at Lambert Field on July 1st and continued with them throughout the itinerary of the tour, reporting back to Langley Field the first part of August.

Lieut. E.M. Morris and Mrs. Morris left Langley Field and sailed from New York Sept. 5th for duty in the Philippine Islands.

The officers and ladies of Langley Field entertained the two Organized Reserve Squadrons, the 304th and 305th, with a boating party. The boat was anchored in Chesapeake Bay and a swim-

ming match was held.

More than 20 officers, who will be students in the Air Corps Tactical School at Langley Field the coming scholastic year reported for duty. A grave problem for the officers of Langley Field and the real estate people of Hampton has presented itself in finding suitable quarters for the officers located near enough to the field.

Lieut. James F. Walsh, who was seriously injured at this field August 8th, was removed from the post hospital at Fort Eustis to the Walter Reed Hospital in Washington, where he is reported to be getting along nicely.

Boston Airport, Boston, Mass. July.

The month of July was a busy one at this station, the increase in flying being due to better weather conditions than that which prevailed during the spring and early summer. Several Air Corps Reserve officers on active duty, and in general, added interest in flying among the inactive Reserves and others.

During the past three weeks several Reserve officers (pilots) have been checked out, some of whom have not flown for six years. We are glad to see them renew their interest in the flying game.

The total pilot time flown at this station during July was 265 hours. This, of course, is not all Reserve flying, as Lieuts. Duke and Cobb, the two Regular Army officers on duty here, and Capt. Ford, the Corps Area Air Officer, have 127 pilot hours to their credit. General Preston Brown flew with Lieuts. Duke and Cobb 28 hours during the month. General Parker, from the War Department, during an inspection tour of posts within the Corps Area, flew five hours. Congresswoman Edith Nourse Rogers, of Mass., also flew several hours in planes from the airport, while others of lesser note, though influential people, were given hops.

The following Air Corps Reserve officers were on active duty for 14-day periods during the month: 1st Lieuts. Robert L. O'Brien, Charles C. Greene, Charles Clark and George H. Lusk, all pilots.

During the month training in connection with Coast Artillery and Anti-aircraft target practice, was carried on by personnel with equipment from this station. Artillery Adjustment, Tow Target and Tracking missions with units at Forts Preble, Williams and McKinley, Me., Fort Andrews and Standish in Boston Harbor, were conducted, and all proved satisfactory and successful. One accident happened during these operations, V-5824, A.C.

on July 19th, when 1st Lt. Lusk, Air Reserve, on active duty at the time, was sent to Portland, Me., to operate with the troops at Fort Williams in a D.H. tow-target ship. He was instructed to land at Portland Airport to confer with the Adjutant of Fort Williams prior to mission, but in landing he hit a soft spot, blew out both tires and the ship turned over on its back. Damaged beyond local repair the plane was sent to Middletown Air Depot. Neither the pilot nor Pvt. Russell, who was the target operator, was hurt.

Our O-2 mail plane, which had been at Middletown for overhaul, was flown from there to Boston by Lieut. Duke on July 24th, so we are fairly well supplied with ships at present, though one PT-1 had to be loaned to Mitchel Field for their training period. At present we have 3 PT-1's, 1 VE-9, 1 DH-4B, the O-2M, one amphibian borrowed from Mitchel Field, and the A-3 assigned for General Brown. The DH4B and the Vought are old type planes, and they will be disposed of in the near future.

Major Dargue from the Chief's office stopped over for fuel a few days ago. The Major at one time was in command of the Airport, but that was when it was in its infancy. He was pleasantly surprised to note the improvements here since his time when, as he said, one had to wear hip boots to push the ships out to runway, and sweep the snow off your desk each morning before you could get near it. Captain McClelland, also from the Chief's Office, was a visitor. Lt. White, stationed at West Point, N.Y., arrived here the 30th. When landing he broke a strut on his ship. As he was flying an amphibian and no spare parts of that kind are available here, he was forced to wait until such could be obtained from the factory.

The enlisted personnel was increased by one man when Private Bower joined on the 17th. This increases the detachment to 14 enlisted men and greatly improves efficiency.

Boston Airport, Mass., August.

The principal item of news at present is the anticipated combined training of 1st Corps Area troops to be held at Fort Ethan Allen, Vt., September 1st to 9th.

The month of August so far has been a busy period, and it is believed that flying time for the month will exceed time for any previous month to date. This is due to additional Reserve officers flying.

The 1st Obs. Squadron, stationed at Mitchel Field, but assigned to this Corps Area for training, operations and other work necessitating Air Corps activities, is leaving Mitchel Field August 27th by air and motor transportation for Ft. Ethan Allen, moving in one echelon as follows:

Aug. 27, Mitchel Fld. to Hartford, Conn.
28, Hartford to Worcester, Mass.
29, Worcester to Concord, N.H.
30, Concord to Claremont, N.H.
31, Claremont to Bradford, Vt.
Sept. 1, Bradford to Ft. Ethan Allen.

Each day's camp will be established at or near flying fields located in towns where stops are made, and planes each day will fly to destination of the truck column, excepting on Aug. 31 at Bradford, Vt., on which date planes will be based on Fort Ethan Allen.

As the enlisted men on duty at the Boston Airport are members of the 1st Obs. Sqdn., this command is included in the maneuvers and are now making preparations to leave the Airport Aug. 29th for Concord, N.H., where the Squadron will be joined. The trip to Fort Ethan Allen and training there should prove of great benefit to all, especially to us of the Air Corps who have had so little field service. All here are looking forward to it with much interest.

The flying performed by Regular and Reserve officers on active and inactive duty consisted of local flying, training testing equipment and cross-country flying to various places in New England, Mitchel Field, Albany, West Point, N.Y. and Washington. Most of these cross-country flights were made with Maj. Gen. Preston Brown on official trips and tours of inspections.

A 4-ship formation with Lt. Cobb in command, and 3 Reserve pilots, flew to Martha's Vineyard, where an Air Carnival was held. They reported having a good time, but unfavorable weather delayed the return of planes for two days.

The following Air Reserve officers were on 14 days' active duty in August: 1st Lts. Theodore E. Baker, Francis C. Crowley and Ray C. Van Arsdale, all pilots.

Several notable visitors called here during the past two weeks. Lt. O'Neil from Bolling Field flew former Asst. Sec of War MacNider here; Capt. McClelland from the Chief's Office brought Congresswoman Rogers of Mass. from Washington, and Lt. Quesada, enroute from Northeast Harbor, Me., to Washington with Secretary Davison, stopped here for fuel. Major Dargue also paid us a visit. Governor Deewster of Maine had planned to visit the Airport, but found that he was unable

to do so at the time anticipated. His Secretary of State, however, who is a 2d Lt. in the Maine National Guard, with four other officers, called on the Commanding Officer of the Airport, and each was given a short flight.

We have a new Corps Area Air Officer now, Col. Burt, whom many of us who served in France during the war will remember, as he was in the Air Service at Chaumont, Tours and other stations during the unpleasantness at that time. Capt. Ford, who has been Acting Air Officer since Major Longanecker left, is now handling Reserve personnel and activities pertaining to them.

We are losing Lt. Cobb Sept. 1st. He is going on leave for two months, after which he is ordered to Selfridge Field. We are sorry to see Dick go, but he likes them fast, faster than we have them here, so here is hoping he is assigned to a Pursuit Squadron, and we should not be surprised to see him steal some of Jimmie Doolittle's stuff, for he is one, - well, what did they call Lindbergh?

It is understood that Lt. Joe Wilson from Mitchel Field is ordered here for duty in place of Lt. Cobb; at any rate, we will have to have some pilot to help Lt. Duke with the flying being done, as it would be impossible for one officer to do it all and take care of other activities.

Staff Sgt. Wm. H. Blackdon, from Mitchel Field, is ordered to duty at Boston to replace our acting 1st Sgt. Anderson, who retires in October. Sgt. Blackdon will report here after the training period at Fort Ethan Allen, when Andy will take a furlough to hunt himself a home.

41st School Sqdn. Kelly Field, August.

The Squadron is entirely equipped with A-3 type airplanes, and we are receiving very satisfactory service. The last of the old standbys were ferried to March Field.

Sgt. W.O. Trager is at present on furlough, having reenlisted recently. When last heard from he was in Washington, D.C., seeing if there was any hopes of having only 5 to go instead of 10. Good luck, Bill.

Pvt. John T. McMahon, formerly of the 9th Infantry, has taken the burden upon himself to represent the Squadron in the boxing tournament being held here.

Capt. John I. Moore, 1st Lt. John F. Whiteley, 2nd Lts. George J. Eppright and Earle E. Partridge left by air Aug. 10th for Colorado Springs,

Colo., to participate in the dedication of the Municipal Airport, returning August 13th.

1st Lt. Arthur Thomas left on the 3d by rail for Garden City, L.I., to ferry an AT-5A to this station.

2nd Lt. R.W. Gibson, our Adjutant, is performing the duties of Personnel Adjutant, ACAFS, during the temporary absence of 1st Lt. R. B. Lea.

1st Lt. Wm. W. Welsh is enjoying a 30-day leave "somewhere" in New Mexico. Fishing must be good, as he requested a ten-day extension which was approved.

Master Sgt. J.A. Downey wired in for a ten-day extension from Golden, Colo. Must be some attraction in that part of the country.

Staff Sgt. F. Pierce reenlisted last month for the last time. He is at present making preparations to go on furlough as it is about time to gather in the crops. He has decided that farming is more profitable than buying cars.

Sgt. Gleason, Mess Sgt., is under orders to sail for P.I. Sept. 28th. He is still hoping the 25-year bill goes thru before then, as he seems to have something rather attractive up in West Texas. Sgt. W.W. Norris is taking over the reins until a replacement arrives.

Kelly Field, Texas, August 1st.

43rd School Squadron: The new Pursuit Class is well under way and are now doing formation work.

The Squadron received two of the new Curtiss AT-5A's a few days ago.

The men in the organization have been receiving instructions in Whirlwind engines from Mr. Voorhees of the Wright factory.

On July 26th this Squadron celebrated Organization Day with a picnic at New Braunfels.

Lieut. Kiel has returned from leave. Major Strauss and Capt. McDaniel returned from a trip to the Pacific Coast in our Curtiss O-1.

Lieuts. Thompson and Burwell have gone East to ferry back two new airplanes. Corporal Talbot and Pvt. Sanchez are to be discharged soon.

Private Ewing was discharged and reenlisted to go to Chamute Field.

Private Strange is on furlough and will report in at Chamute Field for duty.

Marshall Field, Fort Riley, Kans. Aug. 24.

The summer training camps for Reserve officers were completed, and the squadron is getting back to routine missions.

Only a few crack-ups occurred this year due to this training, none of these being serious.

Two of our pilots narrowly averted a

serious accident when Lieut. Brownfield in an O2 hit the tail of a PT occupied by Lieut. Munson. The accident occurred as Lieut. Brownfield took off just as Lieut. Munson landed directly ahead.

Lieuts. Blackburn and Daniels arrived last week with two O2-H airplanes from the factory in California. One of these was sent to Superior for the Presidential Air Mail Detachment and one was assigned the squadron.

2nd Lieut. Charles C. Coppin, Jr., was relieved from further duty with the Presidential Air Mail Detachment, he having tendered his resignation as an officer of the Army to take up work elsewhere. We regret to lose the services of Lt. Coppin and hate to see him leave.

The Squadron will go on a tactical hike next month, and all transportation and equipment are being placed in readiness for the trip.

France Field, Canal Zone, July 30.

The Aerial Gunnery and Bombing Practice and the Small Arms Target Practice with the cal. .45 pistol for 1928 was just completed with the following results:

Of the 12 Pursuit Pilots firing the Pilots' Course A, 11 qualified as Expert Aerial Gunners.

Of the 11 Observation Pilots firing the Pilots' Course A, 3 qualified as Expert Aerial Gunners, 4 as Aerial Sharpshooters, and 3 of them failed to qualify.

Of the 13 Bombers participating in the Bombing Practice, Bombardment Course B-A, all qualified as Expert Bombers, which is considered an excellent average.

Of the 653 enlisted men who fired the Dismounted Pistol Course with the cal. .45 pistol, 235 qualified as Pistol Experts, 84 of which number qualified with a percentage of 93 or better. The highest was Master Sgt. Sorenson, who fired the course with a final percentage of 99.3. Staff Sgt. Doherty came in second with a percentage of 98.6, and Lt. H.G. Crocker came in third with a percentage of 98.1.

France Field recently organized a Pistol Team to represent it in all Pistol Matches to be held by local Gun Clubs. During the past 4 months, 4 matches were entered, and in each case the team made an excellent showing. It is expected the team will carry away the honors in the coming Department Pistol Competition.

Lts. Bushey, Parker and Douglass received the congratulations of the command upon their return from the

National Gunnery and Bombing Competitions at Langley Field, where they won the final leg and received the Distinguished Aerial Gunnery and Bombing Medals.

The 25th Bomb. Sqdb. welcomed with open arms the recent consignment of three Keystone (Pirate) Bombers which arrived July 10th, and will soon bid farewell to the last of the old wooden NBS-1's which gave faithful service in the past 6 years.

Owing to the fact that the 7th Obs. Sqdn. is now down to airplanes of the amphibian type, all other types having been either cracked up or salvaged and there being no hope for a replacement of any other type in the near future, every effort is being made by the mechanics to grow web feet in order that they can handle these ducks when they land on the water.

Lts. Bushey, Bailey and Howard returned recently from leave of absence on the East Coast, and from all indications the vacation was beneficial to each.

Capt. Simonin, Lts. E.D. Jones, King, Davidson, Cronau and McDonald, having been granted leave of absence, are now enjoying vacations somewhere in the U.S.

The following cablegram was received from Lt. George C. McDonald: "Request months leave extension to get married also quarters (Gold Coast preferred.)"

Recent arrivals here for tours of foreign service included Major Borden, MC, who relieved Major Edward P. Beverly as Flight Surgeon, Major Tressel, D.C., Lts. E.E. Harmon and Jamison, and Chaplain Tarskey, who relieved Chaplain Carroll, now stationed at Selfridge Field, Mich.

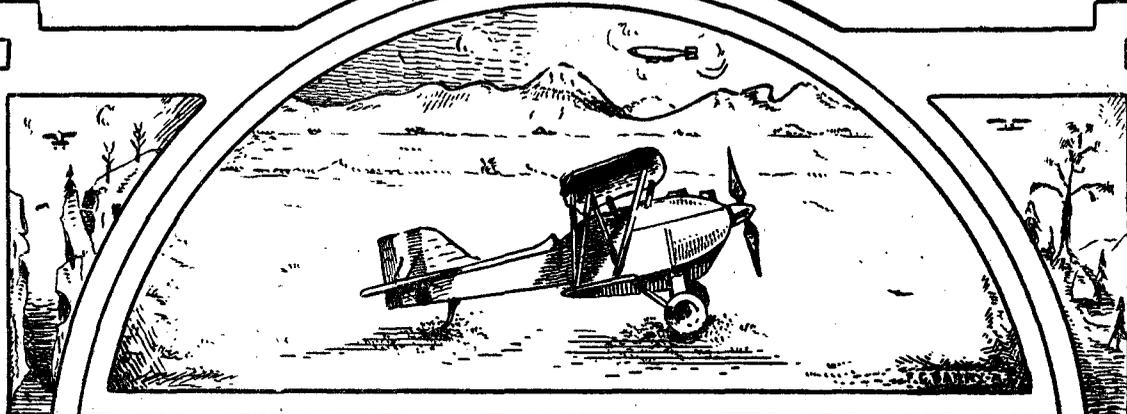
Col. Fisher and family recently returned from leave of absence in Calif., where they enjoyed two months of Calif. sunshine. Immediately upon his return, Col. Fisher went on an inspection trip to the various airdromes in the interior, which included a new one recently opened up by the United Fruit Co. at Progresso, R. de P., near the Costa Rican border.

The 24th Pursuit Squadron observed Organization Day July 19th by having a barbecue and beer party on Manzanilla Island, and from all indications it was a very enjoyable day for all members of the squadron and their invited guests.

Recent arrivals of Noncommissioned officer replacements included Mr. Sgt. Ernest Cote from Kelly Field who replaced Mr. Sgt. Fletcher; Mr. Sgt. J.K. Williams from March Field who replaced Mr. Sgt. Grimble; Mr. Sgt. Redfern from Kelly Field, who replaced Mr. Sgt. Hale, and Tech. Sgt. Cox from March Field who replaced Tech. Sgt. Nelmar.

Lts. Zane, Ballard and Cluck, ordered to the States, are to be stationed at Selfridge, Kelly and Wright Fields, respectively.

V-5824, A.C.



Air Corps
News =
= **Letter**



— ISSUED BY —
OFFICE CHIEF OF AIR CORPS
WAR DEPARTMENT
WASHINGTON, D. C.

TABLE OF CONTENTS

---oOo---

	<u>Page</u>
The Los Angeles Air Races.	347 - 351
Emergency Life-Saving Parachute Jumps Exceed the Century Mark. . .	352 - 354
Colonel Lindbergh's Aide Learns to Cook.	355
Brooks Field Men Enthusiastic about Parachute Jumping.	355
Airships Perform Simulated Night Bombing Mission	355
"Service" for Visiting Pilots at Kelly Field	355
Secretary of War Visits Luke Field	356
Two Varieties of Sky Pilots Fly at Luke Field.	356
Emergency Treatment of Crash Victims	356 - 357
Goat Relieves Cat as Squadron Mascot	357
France Field Very Much on the Job.	357
Information Concerning France Field.	358 - 359
Burial of Lieut. John J. Williams.	359
Airmen in Philippines Experience Strenuous Cross-country Trip. . .	360 - 362
Proposed "Sunshine Route" for Air Mail	362 - 363
Lieut. Doolittle to Gather Fog Flying Data	363 - 364
New Home for Bachelor Officers at March Field.	364
The Bombardment Group Flight Across the Continent.	365 - 366
Rockwell Field Used as Control Point in Air Races.	366
Reserve Observation Squadron Trains at Rockwell Field.	366
Hawaiian Airmen Undertake Anti-aircraft and Harbor Defense Missions	366 - 367
Summer Rest Camps for Hawaiian Air Corps Personnel	368
Fourth Observation Squadron Men Prove Go-getters	368
War Department Orders Affecting Air Corps Officers	368 - 369
Air Corps Exhibit at California Fair	369
Notes from Air Corps Fields.	370

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation

---oOo---

THE LOS ANGELES AIR RACES ✓

For the second consecutive time, the National Air Races, the outstanding aeronautical event of the year in America, was held on the Pacific Coast, this time at Los Angeles, Cal., from Sept. 8th to 16th, inclusive. This year the Army Air Corps did not participate in the races to the extent that it had in the past there being only two major competitive events in which they took part - the John L. Mitchell Trophy Race, a closed event for members of the First Pursuit Group at Selfridge Field, Mich., and the General Mason M. Patrick Trophy Race, limited to members of the Third Attack Group at Fort Crockett, Galveston, Texas.

Pilots of the 1st Pursuit Group who flew to Los Angeles were Major Ralph Royce, Commanding; Capt. Victor H. Strahm; Lieuts. Julian B. Haddon, Rex K. Stone, John K. Cannon, Frank D. Klein, Burton M. Hovey, Jr., Frank G. Irvin, Frank H. Robinson, William H. Doolittle, Ernest H. Lawson and Robert L. Schoenlein.

The Attack Group pilots who journeyed to the Pacific Coast were Maj. John H. Jouett, Commanding; Capts. Ralph H. Wooten, Horace N. Heisen, 1st Lieuts. John G. Williams, George A. McHenry; 2nd Lieuts. Ivan M. Palmer, Earl C. Robbins, Otto C. George, Walter W. Gross, Herbert M. Newstrom, Donald W. Benner, George R. Acheson and George H. McNair. 2nd Lieuts. Richard H. Gilley, Eyrle G. Johnson accompanied the Group as Reserve pilots. Also accompanying the Group were Capt. Robert Murphy, Medical Corps, and Maj. M. L. Morales of the Guatemalan Air Corps.

Langley Field pilots were also among those present at the Races, 9 bombardment planes making a tactical flight across the continent. Pilots who made the long journey from the Atlantic to the Pacific in the big planes were, in addition to Maj. Hugh J. Knerr, who was in command, Capt. Cecil G. Sellers; Lieuts. Harold W. Beaton, Phillips Melville, Emile T. Kennedy, David L. Behncke, Ward J. Davies, A. J. Kerwin Malone, Alfred H. Johnson, Wilton M. Briney, William B. Blaufuss, Ford L. Fair, William Wolfingbarger and Harold L. George. Flight Surgeon Capt. Ira F. Peak, M.C., accompanied the flight.

Lieut. J. E. Upston, Air Corps, of the Information Division, Office, Chief of the Air Corps, preceded the Langley Field flyers in the dash across the continent. He piloted a Curtiss Falcon observation plane and was accompanied by Mr. Frederick R. Neely, Staff Correspondent of the Washington "Evening Star". This flight of the bombing pilots is described by the Langley Field Correspondent elsewhere in this issue of the News Letter.

The opening of the Air Meet on September 8th was attended by about 50,000 persons. At 1:30 P.M., an Army gun boomed a salute, while the band played the "Star Spangled Banner". Next came salutes for high Army and Navy officers scattered in the special boxes reserved for them.

During the entire afternoon the spectators were entertained by a fine exhibition of formation and acrobatic flying by Army, Navy and Marine Corps flyers. Five pilots from the 91st Observation Squadron, Crissy Field, Presidio of San Francisco, Cal., indulged in formation flying, while the Pursuit pilots from Selfridge Field, after some splendid formation work, split up into threes, dived, zoomed, rolled and cut a varied assortment of didoes. The Marine Corps share in the program was a flight of seven Curtiss Falcons from Observation Squadron No. 8, while the Navy displayed its VB-2B Squadron. A feature of the program was an exhibition of acrobatic flying by the three Navy "Sea Hawks".

During the course of the afternoon the nine Keystone Bombers from Langley Field arrived and flew in formation over the field.

The program on the following day, Sept. 9th, was marred by the crash of Lieut. George H. Hasselman, U.S. Navy, a member of the VB-2B Squadron, who crashed 50 feet to the ground in a side slip and was seriously injured.

Following the conclusion of the Navy Race, nine big dark green Army planes from the 2d Bombardment Group, took the air and gave the spectators an opportunity to view at close range these "Dealers of death and destruction", as the announcer fittingly called them.

Two freak planes had the air to themselves for a while when Al Wilson's 1910 Curtiss pusher plane and the California Tech "flying dill pickle" - the almost tailless plane with the tilting wings - entertained the crowd.

The crowd had another thrill when the parachute jumping exhibition was staged. George Brink, Navy parachute jumper, narrowly escaped serious injury when the folds of his parachute, driven by the wind, wrapped themselves around him and he was unable to disentangle himself. After hurtling toward the ground for approximately 1600 feet, Brink opened his auxiliary chute and landed nicely.

Two other jumpers, W.T. Dodson and Harry Woodby, of Los Angeles, made the jump simultaneously with Brink, and when the latter landed he stated that he had not realized how far he had fallen until his chute partly unfurled from his face and he saw the jumpers far above him floating down through space.

Six Marine Corps aviators participated in a race to commemorate the Air Corps Round-the-World Flight. It was a fifty-mile sprint, and was won by Lieut. Decker, who negotiated the distance in 23 minutes, 21 seconds. Four of the World Flyers were present at the Races in the persons of Capt. Lowell H. Smith, Lieuts Erik H. Nelson, Leslie P. Arnold and Jack Harding.

More formation and acrobatic flying by the Navy VB-2B squadron, the planes of the 91st Observation Squadron and the three Navy Sea Hawks was viewed by the spectators.

The program of the second day of the National Air Races ended with an exhibition of fireworks and field lighting parachute flares. Al Wilson in his ancient plane zoomed and swooped over the grandstands with colorful rockets bursting on the plane's wings. His exhibition followed a demonstration of night lights on Mines Field. An automatic lighting system which caused the great field to be brilliantly illuminated was turned on by the hum of an approaching airplane motor.

The third day of the National Air Races, September 10th, was marred by an unfortunate accident to one of the Army's "Three Musketeers", in the person of Lieut. J.J. Williams, of the 95th Pursuit Squadron, Rockwell Field, Cal. His death marked the only fatality among the hundreds of flyers appearing in the races, and proved a sad ending to an otherwise successful day, causing the some 85,000 spectators to leave the field in a sorrowful mood. The "Three Musketeers" Lieuts. Williams, I.A. Woodring and W.L. Cornelius, took the air shortly after five o'clock for the purpose of giving an exhibition of Army Pursuit acrobatic maneuvers in close formation in their fast little pursuit ships.

After the completion of the formation maneuvers, Lieuts. Woodring and Cornelius climbed up to an altitude of 10,000 feet and executed a three-quarters outside loop in formation. Meanwhile, Lieut. Williams remained at a lower altitude and entertained the spectators with a series of solo acrobatics. As Lieuts Woodring and Cornelius completed their maneuver, Lieut. Williams started across the area in front of the grandstand flying upside down. His engine was noticed to cut out, whereupon he immediately completed his roll and returned to an upright position. Contrary to expectations, however, his engine did not pick up and, not having sufficient flying speed to effect a safe landing, his plane descended in a flat glide, striking the ground with the wheels, which collapsed, resulting in a crash which caused his death.

This accident was one of those queer turns of fate wherein pilots are sometimes killed in what may be termed a minor crash, whereas in other crashes where the plane is reduced to a mass of wreckage pilots emerge almost unscathed.

Lieut. Williams' comrades saw the accident that befell their leader, but they continued to loop and roll for many minutes thereafter. When both landed they showed the strain and grief they were under while carrying on above.

The spectacular acrobatic flying of the "Three Musketeers" and the "Three Sea Hawks" (Lieuts. D.W. Tomlinson, A.P. Storrs and W.V. Davis, U.S.N.) was special stuff. These six Army and Navy airmen had been well drilled in their respective acts and they gave the public the biggest "kick" of the meet.

The outstanding event of the day was the finish of the Class A Race, when more than a score of small commercial planes came roaring into the field and landed within a twenty minute period. Earl Rowland, the Kansas Flyer, who held the lead in the Race ever since taking off from New York, came into the field and flashed across the finish line a fraction of a minute ahead of the others. Following him came 22 others, and two hours later the last racer came in, delayed en route from San Diego by a forced landing due to a balky motor.

The cross-country racers and the acrobatic flyers at the field had to share honors with Colonel Lindbergh, who arrived at the races shortly before 10 o'clock in the morning and took his place in the 'judges' stand in the afternoon.

The day was just a continuous performance of "fancy" flying, instructive, beautiful and thrilling. It was "Navy Day" and the Navy planes had the biggest

part of the schedule to themselves.

There was a bombing exhibition by the Marine Corps bombing planes which dropped small explosive bombs on a round target laid out in front of the grand stand.

A spectacular demonstration of night flying by military and civilian planes formed the major portion of the night program. The nine big Keystone bombers from Langley Field, Va., led the demonstration. Invisible against the background of the night except for their navigation lights, they simulated a night bombing attack while traveling at a 90-mile-an-hour clip.

Civilian pilots had their inning during the fourth day of the Races, September 11th. The San Francisco to Los Angeles Race was won by H.M. Myrhes; Charles Dycer finishing second and Jack Frye, third. Nine ships finished the race and they reached the field about half an hour before they were expected.

Following the arrival of the Derby racers, Army Air Corps planes took off and staged a mimic warfare, six Keystone Bombers from Langley Field, Va., and nine Pursuit ships from the 1st Pursuit Group, Selfridge Field, being in the air in two V-formations, the bombers flew over the field, swung into echelon and presumably dropped bombs on enemy positions. About a thousand feet above them flew the swifter pursuit planes, circling back and forth to hold their speed down to the slower pace of the bombers. And still higher, darting back and forth through the sky, flew a single observation plane, watching the entire operations.

Three members of the First Pursuit Group, Lieuts. Frank Klein, Robert Schoenlein and Trevor Kenyon, leaped into the air in their pursuit planes and engaged in a mimic air battle.

The Marine Corps staged a 50-mile race, ten laps of five miles each, confined to planes of the 8th Observation Squadron. Lieut. Woodarcyk was the winner by the scant margin of three seconds, his time being 23 minutes and 14 seconds.

Five ships of the 91st Observation Squadron, Crissy Field, gave another demonstration of formation flying; the three "Sea Hawks" performed in their accustomed manner; Al Wilson and his 1910 pusher plane flopped along cheerfully about the sky, and the California "Dill Pickle", which looked as if it couldn't possibly fly, actually did.

A new and different kind of plane, silver in color, sped past the grandstand at a 140-mile clip. It was E.D. Heath's "Baby Bullet", the smallest of all planes. Boasting of a single wing, with a spread of 14 feet, it stands so low that when a crowd is around it, the plane is completely hidden. It weighs 252 pounds and is powered with a two cylinder engine.

Parachute jumpers furnished more thrills. There were three triple jumps, a big plane soaring aloft with a jumper perched on the end of each lower wing clinging to a strut and another in the cockpit. Two thousand feet up and, what appeared to be three black dots, detached themselves from the plane and started falling until three white bubbles blossomed out in the sky and checked their descent. The three jumpers timed their departure from the plane so as to float down in line. They landed sitting down, but it was rather windy and the chutes dragged them along for an uncomfortable distance.

Volunteering to take the place of Lieut. J.J. Williams, one of the Army's "Three Musketeers", who died as the result of his crash on Monday, Colonel Charles A. Lindbergh again acted as leader of the two remaining Musketeers and went through a series of acrobatic maneuvers which thrilled the spectators. The Flying Colonel banked, dipped, zoomed, and led the Army men through all the regular feats of formation flying before returning to terra firma and receiving an ovation from the spectators. It might be stated in this connection that Lieuts. Cornelius and Woodring were classmates of Col. Lindbergh when the latter was working for his wings at the Air Corps Training Center at San Antonio, Texas. Apparently there is nothing of a superstitious nature in Lindbergh's character, for painted in hugh numerals on the side of his dark green pursuit plane was "1".

The fifth day's program, Sept. 12th, (Lindbergh Day) included the arrival contestants in four cross-country races. E.E. Ballough, piloting a Laird plane was the first to finish the Class B Transcontinental Race, after working all night at Yuma, Arizona, to install a Wright "Whirlwind" engine in his ship.

Robert W. Cantwell, in a Lockheed "Vega" plane, finished first in the Class C Race from New York, closely followed by Capt. C.B.D. Collyer and Edward J. Brooks, the two remaining contestants in the race.

H.C. Lippiatt, of Los Angeles, won the Oakland to Los Angeles Class B Race with his Travelair plane.

William H.E. Drury won the Canadian flight from Winsdor, Ontario.

Two races, in which Army Air Corps pilots were the sole participants, were successfully run off during the course of the afternoon. The first was the John L. Mitchell Trophy Race, a contest limited to members of the First Pursuit Group, Selfridge Field, Mich. Lieut. B.H. Lawson, the winner, completed the 120 mile closed circuit at an average speed of 154.743 miles per hour. Lieut. W.H. Doolittle was second with an average speed of 154.311 m.p.h. The other entrant finished in the following order:

Third	-	Lieut. F.M. Robinson,	153.427	miles per hour
Fourth	-	Lieut. J.B. Haddon,	153.041	" " "
Fifth	-	Lt. Robt. Schoenlein,	153.034	" " "
Sixth	-	Lieut. F.G. Irwin,	151.741	" " "
Seventh	-	Lieut. Rex K. Stoner,	150.923	" " "
Eighth	-	Capt. V.H. Strahm,	149.315	" " "
Ninth	-	Lieut. Eagen,	149.315	" " "
Tenth	-	Lieut. F.O. Klein,	145.153	" " "

Lieut. G.R. Acheson, averaging a speed of 139.5 miles an hour, won the General Mason M. Patrick Trophy Race over a 120 mile closed circuit, this contest being limited to members of the Third Attack Group at Fort Crockett, Galveston, Texas. The planes flown in this first competition for the Trophy, donated by the Hon. F. Trubee Davison, Assistant Secretary of War for aviation, as a perpetual memorial to General Patrick upon the latter's retirement as Chief of Air Corps, were the standard Army Attack type, powered with Curtiss D-12 engine. The remaining contestants in this race finished in the following order: Lieuts. H.W. Anderson, E.C. Robbins, Capt. Ralph H. Wooten, Lieuts. G.A. McHenry, G.H. Macnair, O.B. George, W.W. Gross, Capt. Horace N. Heisen, Lieuts. J.G. Williams, H.N. Newstrom and Major J.H. Jouett.

A great crowd was on hand on the sixth day of the Races, Sept. 13th, presumably attracted by the news that Colonel Lindbergh would again perform with the Army "Musketeers" and, further, to welcome Art Goebel, the only remaining contestant in the New York - Los Angeles non-stop race. Goebel was the only one to complete the flight but was disqualified because he stopped at Prescott, Ariz. to refuel his plane. He made the flight across the continent in 23 hours, 51 minutes. All the other competitors in this race were forced down because of unfavorable weather conditions.

Earl Rowland, of Wichita, Kans., officially declared the winner of the Class A, New York to Los Angeles Race, won his trial heat in the Civilian Free for All 50 mile Race in the fast time of 27 minutes, 20.39 seconds. He flew his Cessna plane, the same one in which he crossed the continent. Tex Rankin won the second heat in 29 minutes, 17.80 seconds.

In the fast time of 25 minutes, 18.19 seconds, Lieut. J.L. Kane won the Army Race for observation planes over a 60 mile course.

In addition to the racing events recorded above, Col. Lindbergh and the two Army Musketeers, the three Navy "Sea Hawks" and other military planes "did their stuff".

A demonstration of the speed with which a transport airplane, carrying five passengers, can unload its passengers in case of emergency in the air, using the Army aerial life preserver, was strikingly illustrated. The following men from the Parachute Department, March Field, jumped at intervals of five seconds from a Douglas C-1 Transport, piloted by Lieut. J.S. Gullet; Sgt. Harlan Utterback, Sgt. George W. Wehling, Pvts. Frank J. Garjola, Harry W. Booth and James Graham.

The ball in the evening was the crowning feature of the program of the Meet and it was pronounced one of the most brilliant affairs ever seen in Los Angeles Army, Navy and Marine Corps officers in uniform lent color to the occasion and decorations in the national colors added to the military atmosphere.

Six speed races kept the spectators on their toes during the afternoon of Sept. 14th. The stellar performance was furnished by E.F. Heath in his "Baby Bullet" which flashed across the judges' stand a winner in the 50 mile contest for light ships. The time was 27 minutes, 1:62 seconds.

A 50 mile race for Navy Pursuit planes was won by Lieut. J.G. Crommelin, whose time was 20 minutes, 18:06 seconds and average speed 147.77 miles an hour.

A civilian Free for All Race (800 cubic inches open cockpit) for a distance of 75 miles, was won by E.E. Ballough in a Laird plane, his time being 33 minutes, 52.78 seconds.

The next event, a contest over a 50 mile course limited to National Guard officers piloting Douglas observation planes, was won by Lt. Brooks, who averaged a speed of 124.88 miles per hour, time 24 minutes, 1:27 seconds.

The 95th Pursuit Squadron, Rockwell Field, staged a race all by itself as the last event of the afternoon, the distance being 50 miles, 5 laps around a 10 mile course. Lt. W.J. Cornelius flashed across the line as winner of this contest between the Pursuiters stationed on the Pacific Coast.

The races on Saturday, Sept. 15th, (Army Day) were attended by the greatest crowd ever recorded at an aeronautical entertainment. Commercial aviation, which failed to take a leading role at any time during the Meet, made a feeble bid for honors, but it was soon howled down by the roaring engines of the service pilots who, highly skilled, drilled and possessing superior equipment, bore the burnt c the work.

The Army's share in the day's program started with a formation of nine obsolescent DeHaviland planes piloted by instructors and students from March Field Riverside, Cal. Then followed a race between pilots of the 91st Observation Squadron from Crissy Field; a formation by eight planes from the 2d Pursuit Squadron, Rockwell Field; the "Three Musketeers", led by Col. Lindbergh; a formation of 11 primary training planes piloted by March Field students; a special exhibition of pursuit maneuvers by three pilots from the 1st Pursuit Group, Selfridge Field; a demonstration of attack tactics by nine attack pilots from Ft. Crockett, Texas; three of March Field's crack parachute jumpers, St. Sgt. Utterback, Pvts. Graham and Booth, demonstrated a formation triple parachute jump, leaping simultaneously from three observation planes flying in close formation; they descended in for-

mation, forming a perfect triangle and finally, a mass formation of all types of Army planes participating in the Air Races, except the bombing planes.

In the 91st Observation Squadron Race, Lt. R.J. Little experienced some difficulty when his motor cut out. He managed to land on the field just in time. Lieut. F.H. Barber won the contest with an average speed for 100 miles of 127.49 m.p.h.

An innovation in flying above the heads of the assemblage was the "Lufberry Circle" of eight planes of the 95th Pursuit Squadron, while Col. Lindbergh and Lieuts. Woodring and Cornelius put on their act. The pursuit ships, separated by about 50 feet and banked over for circle flying, apparently chased each other around a huge circle, keeping it geometrically perfect and producing a mighty roar that set the crowd wild. The "Three Musketeers" had a new addition to their act in the form of a diving attack from three directions, culminating at one point in such a fashion that it looked like a wholesale collision right in the center of the field.

The Navy's "Three Sea Hawks" dashed onto the stage in a unique fashion. Lieut. D.W. Tomlinson, leader of the formation, possesses an ancient "Jenny" which he flies off duty. This old craft was seen flopping onto the field. It rolled up in front of the grandstand close to the three Boeing fighters which were waiting for their masters. Out of the "Jenny" jumped the three "hawks" and they rushed at full speed for their ships and in a flash they were off.

The first race, limited to civilian pilots, was a free-for-all event open to all types of planes with engines of 510 cubic inch displacement or less. It was for 50 miles and the first prize was \$1,200. Earl Rowland won this contest with an average speed of 111.74 miles per hour.

Then there was a free-for-all for planes with engines of 220 h.p. or less.

This was won from the speed standpoint by L.A. Schoenair in a Buehle airseday who averaged 118.79 miles per hour.

The unlimited all-civilian contest for the air transport speed and efficiency trophy, offered by the Detroit News, caused special interest owing to the presence of Art Goebel. The latter, however, did not win, first honors going to Robert W. Cantwell, who, piloting a Lockheed "Vega" with a Wasp 425 h.p. engine, averaged 140.30 miles an hour over the 50 mile course.

Col. Lindbergh came across with another surprise, demonstrating his versatility by proving that Al Wilson was not the only one who could fly the old 1910 pusher plane. The Colonel contented himself with flying absolutely level and chasing a formation of three pursuit ships, although it wasn't much of a chase - more like the tortoise chasing a hare.

As the shades of night descended on Mines Field, Sgt. George W. Wehling, of March Field, won the precision parachute jumping contest, a closed event to members of the Army, Navy and Marine Corps. The Army Parachute Jumping Team from the Parachute Department of March Field won three of the four places in the three day precision jumping contest. This team consisted of Staff Sgt. Harlan Utterback, Sgt. Wehling, Pvts. F.G.G. Garjola, H.W. Booth and J.A. Graham.

Sgt. Wehling won first place by landing within a 100 foot circle on each of the three days. The jumps were made from 1500 ft. altitude from a Douglas C-1 Transport plane. On the last day of the contest Sgt. Wehling thrilled the spectators by descending within 14 feet of the center of the circle. Third and fourth places in this contest were won by Pvt. Garjola and Sgt. Utterback, respectively.

According to press reports, the final day of the Meet broke all previous records in attendance and assured its financial success beyond all question. One feature was the Navy free-for-all pursuit plane race, in which the new Boeing experimental single seater fighter was entered. Lt. Thomas P. Jeter, U.S.N., its pilot, was the winner, covering the 60 mile course at an average speed of 172.26 m.p.h. This plane was later entered in an altitude race to 10,000 feet in competition with Standard Curtiss and Boeing single seaters and won hands down.

The Army Air Corps participated in several events in the last day's program, viz: - formation and battle maneuvers by the 95th Pursuit Squadron, led by the "Three Musketeers"; maneuvers by the 1st Pursuit Group, a demonstration of Attack Maneuvers by the Third Attack Group and the Parachute Jumping Contest, previously mentioned.

Next on the program was an innocent looking contest called "dead stick landing". This required the competing civilian pilots at 1,500 feet altitude to cut the engine entirely, make a complete circle and land his plane to a mark on the field. The various pilots maneuvered their planes for a landing close to the mark as skillfully as though they had 1,000 h.p. in reserve. The winning plane, an Aeromarine, low wing, plywood monoplane, resembles a miniature edition of a Junkers. Of German design, it embodies aerodynamic qualities which give it controllability at stalling speed. It flies like a seagull and at times appears to stand still in the air, especially in the face of a breeze. Owing to its extreme controllability at slow speeds, this monoplane maneuvered up to within four feet of the mark and won the contest.

The Army's participation in the National Races was under the supervision of Maj. H.B. Clagett, Air Officer of the 9th Air Corps Area. Capt. A.W. Brock was the Operations Officer; Lt. Russell L. Maughn, Engineer Officer and Lt. O.K. Robbins, Adjutant.

Cleveland, Ohio, will be the scene of the National Air Races next year, officials of the National Aeronautic Association, which sponsors this annual classic, having decided that the time is again ripe for the Middle West to take its turn in staging same.

EMERGENCY LIFE-SAVING PARACHUTE JUMPS EXCEED THE CENTURY MARK

Since the article in the News Letter of July 24th, wherein it was stated that 87 candidates had been initiated into the Caterpillar Club and that a total of 92 jumps had been made (five being repeaters), seven more jumps have been made, as follows:

<u>Date</u>	<u>Name</u>	<u>Place</u>
June 18th	Flying Cadet William R. Shephard	March Field, Calif.
July 19th	Flight Lieut. E.E. Ewen, U.S. Navy	Pensacola, Fla.
August 15th	Flying Cadet William J. Crosswell	Kelly Field, Texas.
August 9th	Lieut. B. E. Gates, Air Corps	Mitchel Field, N.Y.
August 13th	Flying Cadet Raymond L. Winn	March Field, Calif.
Sept. 14th	Flying Cadet Sheldon C. Yoder	Kelly Field, Texas.
Sept. 25th	Lieut. Roger V. Williams	San Diego, Calif.

A reader of the News Letter, noting the last compilation of members affiliated with the Caterpillar Club, directed attention to the disastrous accident in Chicago a little before five o'clock on the afternoon of July 21, 1919, when the Goodyear dirigible balloon "The Wing-Foot Express" burst into flames, fell and crashed through the skylight of the Illinois Trust and Savings Bank. The kindness of the Chicago "Herald and Examiner" made it possible to obtain a full account of this accident which resulted in 13 persons losing their lives. Ten were employees of the bank at work at the time of the accident, two were passengers and one a mechanic in the dirigible.

The airship, making its maiden flight, had been cruising for about 45 minutes over the downtown section of Chicago at an altitude of about 1200 feet when the accident occurred. According to the report, all of the occupants of the airship had parachutes. Immediately after the airship caught fire, John Boettner, the pilot, jumped with his parachute and landed on a roof, escaping with slight injuries. Henry Wacker, Chief Mechanic, suffered a broken back while descending in a flaming parachute. Altogether there were five occupants in the airship, the pilot, two mechanics and two passengers. One passenger had both legs broken when descending with his parachute, which was also on fire, and died the following day. The remaining passenger and mechanic died in the crash on the bank roof, being unable to use their parachutes in getting away from the airship.

In the News Letter of July 27, it was stated that the first time an Army parachute was utilized in this country in the extreme emergency was on August 24, 1920, by Mr. William O'Connor, who in making a premeditated jump was forced to use the Army chute when his own, a privately manufactured one, failed to function. It is doubtful if any justification exists for amending this statement, since it is not known whether Messrs. Boettner and Wacker used the Army type parachute. At any rate, these two gentlemen enjoy the distinction of being the first to use the parachute as a means of reaching the ground alive after being forced to leave a disabled aircraft during flight.

Adding the names of Messrs. Boettner and Wacker to the seven new candidates above recorded makes the score at this writing 96 members and 101 emergency life-saving jumps.

Sometime ago the Irving Air Chute Co., Inc., of Buffalo, N.Y., furnished the Information Division of the Air Corps with the names of nine airmen of foreign countries who saved their lives through the medium of the parachute. Just recently this concern furnished seven additional names, and stated that it has authentic advices on the saving of an additional flyer in Poland and two in Japan, promising to furnish these names as soon as obtained. From this it would seem that, as far as available information shows, a total of 115 airmen owe their lives to the parachute.

The list of foreign airmen who have to date made emergency parachute jumps follows:

June , 1926	Tentland	Pilot Officer, RAF	London, Eng.
July 6, 1926	E.R.C. Scholefield	Civilian	Weybridge, Eng.
July 29, 1926	H.C. Steanes	Sergeant, RAF	Andover, Eng.
July 29, 1926	W.J. Frost	Sergeant, RAF	Andover, Eng.
Aug. 4, 1926	Nils Soderburg	Lt. Swedish RAF	Malmsslatt, Sweder
April 12, 1927	Augustin Juisto	Minister of War	La Rioja, Argento
April 22, 1927	David Gregg, DFC	Flt. Lieut. RAF	Chelsham, Eng.
May 25, 1927	Tuttle	Flying Officer RAF	Hendon, Eng.
June 30, 1927	Bjarkow, Lieut.	Danish Air Force	Copenhagen,
Feb. 17, 1928	Leonard A. Walsh	Flying Officer RAF	Folkstone, Eng.

April 3, 1928	V. O. Eyre	Flying Officer RAF	North Weald, Eng.
April 7, 1928	Trout	Pilot Sgt. RAF	Brentwood, Eng.
May 30, 1928	Antonio Jordan	Pilot Officer, A.F.	Torun, Poland
June 21, 1928	Henryk Pawlicki	Pilot Officer, A.F.	Torun, Poland
July 14, 1928	B.A. Sjoby	Lieut. Swedish RAF	Malmslatt, Sweden
August 16, 1928	Leslie C. Bennett	Flying Officer, RAF	London, Eng.

Reports have been received from several of the newer members of the Caterpillar Club, recounting their experiences, and because such reports are always interesting as well as instructive, some are quoted below, as follows:

CADET CROSWELL. On August 3, 1928, Cadet Dawson was assigned as pilot of NBS-1 No. 135 and I was assigned as passenger to fly No. 2 position of a 3-ship "V" type formation. We took off at 9:00 a.m. and had been flying just about an hour - Dawson doing splendid work - when the formation leader had headed for Kelly Field from a point about 7 miles Northwest. The leader gave his zoom indicating a landing and Dawson had followed him through on the zoom. About 3 seconds after we had resumed straight and level flight, the ship suddenly nosed down in a vertical dive without any apparent provocation at all. The sudden dive was of such a nature to throw us a few inches from our seats. I put my hand upon the windshield to aid me in getting settled in my seat again. I looked at Dawson and caught his eye. There was an alarmed look on his face so I understood that he had no part in causing the ship to nose over. I watched him for a few seconds and he worked his controls frantically in an effort to right the ship. The moving of the controls had no effect whatever on the ship - it continued in its' dive - the controls worked as easily as tho the ship were parked on the ground. Again I caught Dawson's eye, and in that look there was a mutual understanding that we would leave the ship. We had lost about 500 feet by this time, I estimate.

We both started to leave the cockpit at the same time. I had the intention of climbing back thru the opening between the fuselage, the left motor, the horizontal motor bracings, and the top wing, and I believe Dawson had the same intention with respect to the right side. I was not particularly alarmed. I seemed to know instinctively that I was going to escape unscathed.

As I rose from the cockpit, the blast of air over the windshield hit me and blew me back against the brace wires of the catwalk. I used my hand to work myself around and thru the wires, and while I was still entangled in these first brace wires, I caught a glimpse of the cockpit and saw that it was empty. An instant later I saw a streaming white object trailing behind the ship and I realized that this was Dawson's parachute opening and thought that he had gotten clear of the ship. I then put my right hand on my rip cord and held it.

By the time that this series of events happened in rapid sequence, I was free of the front wires. I was blown back against the rear wires. I used my left hand to free myself of these wires, and it felt, when I was free, that I was pulled off into space which was due to the fact that the ship was falling faster than I was. I saw this as soon as I was free - the ship was traveling about 20 miles per hour faster than myself, so I waited until the tail surface had passed me. I pulled the rip cord with all my strength and waited, still watching the ship which was pulling away from me slowly. I must have fallen about 100 feet between the time that I pulled the rip cord and the time that I felt the jerk of the chute opening. During this time, I had a distinct sensation of falling which sensation I had always heard was absent in falling thru the air. Just after the jerk of the opening chute and before I could orient myself with respect to the horizon, I heard the crash of the ship. When I could locate myself, I looked down and saw the ship and immediately thought of fire, and for an instant watched to see if it would break out, but it did not.

I then saw that I was about 100 feet above the ground and traveling away from the ship with the wind at about 20 miles per hour. I was oscillating and would apparently land on my left side, so I swung myself around to land facing the direction of my wind travel.

I Landed swinging down from an oscillation and fell over on my right shoulder about 100 yards from the crash. I experienced no pain or discomfort from my landing. I ran to collapse my chute. This done, I looked up with the expectation of seeing Dawson coming down above me. I did not see him above, so I scanned the horizon, then I saw a farmer running toward me. I asked him where the other fellow had landed. He told me that I was the only one who had jumped.

I gave him my parachute and we both ran over to the ship. We were the first to arrive. From the angle that I approached the ship, I could see nothing of Dawson I ran around the wreckage and there he was laying on top. A glimpse showed that there was no hope. I turned away trying to decide whether to pull his body from the wreckage or to leave it until someone came to investigate. I decided on the latter course, so I took one more look to make sure that he could not be alive, then covered his body with my parachute.

I sent the farmer to call up Kelly Field and report that Dawson had been killed and that I had gotten out alive.

When we went into the dive, the engines were running at about 1550 RPM. Dawson did not cut them and I attribute the fact that the ship pulled away from me before I pulled my rip cord to the added velocity given the ship by the engines.

My first conscious thought after my chute opened was, "how lucky I am." Everything else I experienced in the way of thought, feeling, or reaction was, I believe, subconscious. I was not very much excited; my nerves were, to my best knowledge, in excellent condition, but I was filled with horror and grief at the sight of Dawson's body in the wreckage. He was a good friend and I did not believe that he had gone down with the ship until I saw him.

LIEUT. LAWRENCE J. CARR. A defective safety belt was the cause of Lieut. Carr being initiated into the Caterpillar Club. He was piloting a PW-9 Pursuit plane approximately two miles north of Clark Field, Camp Stotsenburg, P.I., at a speed of about 120 miles per hour and started an aileron roll at about 2,000 feet altitude. The roll was half completed and the ship was on its back when the safety belt broke and allowed the pilot to be dropped out of the plane. "I intended to stay on my back for a time and then complete the roll," Lieut. Carr stated in his report. "I had just decided to finish the maneuver when I felt myself being shot out of the plane and I found myself in the air. I pulled my rip cord and the chute seemed to open immediately. I could hear the ship howling and then I heard a crash. I didn't seem to be coming down very fast and hardly drifting at all. I landed in a pile of soft sand in a dry river bed just north of the field. No ill effects or injury were sustained from the jump.

LIEUT. B.E. GATES was ferrying an XO-13 plane with a V-1570 motor from the Fairfield, Ohio, Air Depot to Mitchel Field, via Bolling Field. While "dozing" along at 3,000 feet over Elkins, West Va., he heard a loud report from the motor, followed by considerable smoke. He did exactly as any of us who have flown over that country would do - went over the side and pulled the parachute rip cord. He came down in a beautiful blackberry patch where he wallowed around trying to rid himself of the life-saving chute, which by now was an encumbrance. After several hours of intensive Boy Scout training, he reached a clearing and human help, the latter being a duplicate of the supporting cast for Batty and Hatton in the movie "The Big Killing."

Lieut. Gates enlisted their aid in a search for the plane and the abandoned parachute. Skilled mountaineers as they were, and spurred on by a private reward of \$10.00 offered for the discovery of the wreck, it was three days before it was found, a jumbled mass of wreckage, containing the remains of the pilot's uniform and "civies", and other personal effects.

CADET WM. R. SHEPARD, while on a cross-country trip from March Field, ran into foggy weather. "After passing through a number of fog banks, lasting only a very few seconds," he said, "I finally entered one which lasted several minutes. While looking closely for some view of the ground, unknowingly I let my ship nose down and gather quite a bit of speed, as shown by my air speed indicator. This would have brought me to the ground had I not been in a canyon, as indicated by dark places showing up in the fog which I considered tops of mountains. After banking to avoid four or five of these peaks and stalling my plane trying to get above them I decided that I could not dodge them very long before I would crash. So considering a jump my only hope to escape, I jumped and landed in San Juan Canyon, six miles northeast of Capistrano."

CADET R.L. WINN, piloting a DH-4MLT plane on a training mission, went into a spin from a wingover at 3,000 feet altitude. "I tried every means to get this ship out of the spin," said Cadet Winn, "but was unable to do so. Do not know cause of ship failing to respond to the controls. I left the ship while still spinning at an estimated altitude of between 150 and 200 feet."

of text
received
of text

COLONEL LINDBERGH'S AIDE LEARNS TO COOK ✓

According to the News Letter Correspondent from France Field, the latest recruit for the Domestic Science Course is 1st Lieut. Robert W. Douglass, Jr., the well known aide to Colonel Lindbergh. He is now prepared to cook short-order meals while en route on any cross-country flight. A special stove is being designed for installation in PW-9 airplanes. "It is believed," the Correspondent states, "that this will successfully solve the problem of long distance flying and keep the pilot occupied so that he will not have time to think about engine trouble. No one has succeeded in tasting any of the delicacies prepared by Lieut. Douglass, but we all feel assured that his recipes will be much in demand wherever he goes."

---oOo---

BROOKS FIELD MEN ENTHUSIASTIC ABOUT PARACHUTE JUMPING

Word from the Primary Flying School, Brooks Field, San Antonio, Texas, conveys the information that there are on file in the parachute department at that field 49 applications from enlisted men requesting permission to make a parachute jump. A considerable number of jumps has already been made at Brooks Field, usually seven at a time from planes flying in formation,

---oOo---

AIRSHIPS PERFORM SIMULATED NIGHT BOMBING MISSION

Two of the TC type airships at Scott Field, Ill., were recently sent on a simulated night bombing mission to Louisville, Ky. Shortly after departure, heavy cumulus clouds began to pile up in the vicinity of Scott Field, and during the night the area around the field was swept with several severe thunderstorms. One in particular did considerable damage when it centered over the field with a violent electrical display. Two of the bolts struck two of the transformers at the north end of the reservation and burned them out. It was noon before the power was again entering the field.

The pilots of the airships, Captain Wm. O. Butler and Lieut. Wm. R. Turnbull, reported that storms occurred around them during their flight to Louisville, but they were fortunate in not directly encountering any until just before they arrived at their objective. They continued on their course and arrived over Louisville at 11:00 p.m., staying over the town for three quarters of an hour. During the return journey a severe storm was encountered about 80 miles east of Scott Field. Although the airmen tried to get around it, they found it impossible to do so without adding several hours to their return trip. They finally decided to try and fly through it and, judging the position of the more violent areas of the storm by the intensity of the meteorological disturbances encountered, succeeded in striking clear sky in about 30 minutes, with the storm behind them.

The rest of the trip was uneventful except for the strong head winds that held them back. In every way the mission was considered a success.

---oOo---

"SERVICE" FOR VISITING PILOTS AT KELLY FIELD ✓

The 68th Service Squadron, Kelly Field, San Antonio, Texas, which has a total of 9 airplanes, consisting of 4 DH4-M2's, one DH4-M2-P, one XA-1 Ambulance plane, one C-1 and one C-1C transport plane, maintains a flight section and the visiting ship hangars, in addition to the usual engineering departments peculiar to a service squadron. These departments comprise an Aero Repair, Engine Storage, Machine Shop, Blacksmith and Welding Shop, Dope and Paint Shop, Carpenter Shop, and a Salvage and Reclamation department. An emergency crew of ten enlisted men is maintained on duty at all times at Visiting Ship Hangar No. 6, where visiting pilots and passengers are always received in a cordial manner and the very best service possible rendered, whether it be changing a spark plug or overhauling the complete plane and engine. Skilled mechanics are to be had at all hours. Locker facilities for baggage and parachutes are available, and bathing facilities are now in process of installation.

SECRETARY OF WAR VISITS LUKE FIELD

The Hon. Dwight F. Davis, Secretary of War, visited Luke Field, Hawaii, on August 14th last. When the Secretary arrived in Honolulu harbor the day before on the battleship "Pennsylvania", every available plane, not only from Luke Field but also from Wheeler Field and the Naval Air Station at Pearl Harbor, took part in an aerial show in his honor. The following morning at about nine o'clock he arrived at Luke Field on the barge of Admiral Marvel and was met by Major P.E. Van Nostrand, Commanding Officer of the 5th Composite Group, who escorted him on a tour of the hangars and barracks. Altogether he was on the field about an hour before leaving for Schofield Barracks. Officers of the field indicated that the Secretary had found things in general pleasing, and highly complimented the personnel on their apparent efficiency.

---oOo---

TWO VARIETIES OF SKY PILOTS FLY AT LUKE FIELD

Eleven Army Chaplains were recently given a flight at Luke Field, H.T., when they were guests of Chaplain H.A. Rinard. Master Sgt. Ertwine, who piloted the Douglas Transport, reported that most of the Chaplains enjoyed the trip, evidencing few symptoms of sickness from the motion of the ship. The flying parsons were E.J. Griffin, E.E. Lane, D.H. Hockman and S.O. Wright of the Honolulu Sector, and C.O. Purdy, J.G. Martin, E.R. Martin, E. Burling, C.R. Watkins, A.L. Evans and J.B. Webster of the Schofield Sector.

---oOo---

EMERGENCY TREATMENT OF CRASH VICTIMS

By the Kelly Field Correspondent

From time to time at the Air Corps Advanced Flying School, Kelly Field, Texas, the airplane ambulance continues to be called upon to bring crash victims to the Base Hospital at Fort Sam Houston. In at least one case during the past year the ambulance saved life through the speed with which transportation of the injured personnel was effected. In several cases the recovery of the individuals was materially assisted by the rapidity with which medical attention was obtained.

When a crash in the vicinity of San Antonio occurs, it is usually some considerable time - from the standpoint of the suffering of the individual - before word of the accident reaches Kelly Field. This, usually, is due to the fact that the crash is ordinarily seen and reported by a farmer, who does not know the routine of the procedure necessary to get in touch with the Operations Officer of the station to which the plane belongs. In several cases an hour has elapsed before word came in.

The Operations Officer, immediately upon receiving word of the crash, its location, and any other information that may be available, telephones the ambulance pilot, who is constantly on the alert. While the pilot is warming up his motor, the Operations Officer notifies the hospital, assisted in getting an immediate connection by means of a special telephone line that is used for reporting crashes only. The medical officer, who has his flying equipment and medical supplies constantly in readiness for emergency, rushes to the ambulance, getting there usually before the plane is ready to take off.

The emergency medical equipment taken by the medical officer to the scene of the crash is as follows:

- a. A crash bag containing -
 - Picric acid 1% 500 c.c.
 - Iodine Tr. 250 cc.
 - Triangle bandages (slings) 3.
 - Adhesive roll (wide 2" to 3").
 - Muslin bandages, 6.
 - Front line dressings, No. 1 red, 4.
 - Gauze bandages, 8.
 - Cotton, absorbent, 1 lb.
 - Gauze, 4" x 4", 1 package.
 - Tourniquet, 1.

b. Splint unit consists of the following:

- 1 Thomas leg splint
- 1 Thomas arm splint
- 4 wire mesh splints
- 1 foot support for Thomas leg splint
- 1 splint support for Thomas leg splint
- 1 ankle hitch (for extension) over shoe
- 1 litter bar.

"Splint them where they lie!"

It is needless to state that splinting, if necessary, is done where the patient is found. The hurrying of seriously injured crash victims to the hospital before this is done is dangerous; any movement of a compound leg or arm fracture before it has been properly splinted is liable to increase the shock and lessens the chances of recovery by as much as fifty percent. The layman is justified in removing the victim from the wreck and placing him in a prone position that will allow him as much comfort as possible; but beyond that he should do nothing until medical attention arrives, which - after notification of the crash has reached Kelly Field - is a matter of minutes.

---oOo---

GOAT RELIEVES CAT AS SQUADRON MASCOT

According to the News Letter Correspondent from Luke Field, T.H., the 23rd Bombardment Squadron has gone in strong for mascots. "Tiger," an aged cat, who it is reputed came to Oahu with the Squadron from March Field in 1922, recently received considerable publicity in a Honolulu paper as the only flying cat in the Air Corps. He had his picture in the paper and everything. Since then he has been cared for so gently that he has become insufferably lazy and "high hat." He has developed into the world's champion feline snob. This did not sit so well with some of the boys, so while on their recent summer camp they captured the kid of a mountain goat.

Sergeant Fitzpatrick demonstrated his ability as a wet nurse to infant goats and was unanimously elected to the job. At this writing the infant is only about four weeks old, but had already demonstrated its inherent attributes by chewing everything within reach. It is expected that by the time he is weaned from the bottle he will be able to keep the area policed of all tin cans and other refuse. Lieut. A.H. Foster, who was in command of the Squadron, formally christened him "Steve", a quart bottle of milk being used in the ceremony. Incidentally, he has had his first flight, and the men claim him to be the only flying goat in captivity.

---oOo---

FRANCE FIELD VERY MUCH ON THE JOB

It is surprising to find the number of things which can be crowded into one short year, especially at an Air Corps station in a foreign country where nothing of importance is supposed to happen, but this was disproved during the past fiscal year. The News Letter Correspondent directs attention to the following extract from the Annual Activities Report:

The fliers at France Field flew over 7,000 hours with the few airplanes assigned to this station. Most of it was combined training with other arms such as Anti-Aircraft, Tow Target, Tracking, Infantry Liaison, Contact, Coast Artillery and Field Artillery Adjustment, and numerous other tactical problems. Also in addition to this, approximately 2,000 hours were consumed in cross-country flying to the outlying airdromes in the interior.

In addition to the flying, arrangements for and the handling of the flights of Colonel Lindbergh; Costes and LeBrix, the French fliers; the Dirigible "Los Angeles"; the flight of the Assistant Secretary of War for Aeronautics and the Chief of Air Corps, and the flight of two PW9-C's from Panama to Washington were taken care of by France Field personnel.

---oOo---

Complying with request of a representative of the Department of Agriculture a Fokker C-2 Transport, assigned to the 18th Pursuit Group, Wheeler Field, Schofield Barracks, T.H., was recently utilized in sowing from the air approximately 350 pounds of seed in an area of about 4½ square miles, above the fire trails, in the vicinity of Schofield Barracks.

FORMS
100
100

INFORMATION CONCERNING FRANCE FIELD

Officers, and Non-commissioned Officers and their families, reporting at France Field, Panama Canal Zone, will be met at the dock, transported to the field, and all baggage taken care of by a representative thereof. All baggage is subject to inspection by the Customs officers, and each individual must clear his baggage before giving the baggage checks to the Field Representative. Radio notification will not be necessary if voyage is made on government transport, but is advisable if on a commercial boat.

BAGGAGE: All baggage will be delivered to quarters on the day of arrival. Household goods will be delivered as soon as possible after being unloaded.

LOCATION: France Field is located about $3\frac{1}{2}$ miles from the docks at Cristobal. Cristobal is of approximately 1500 population and is a ten minutes' ride from the field by the Panama Railroad. An excellent concrete road is available for motor transportation.

POST OFFICE: The proper address for all mail and shipments for this station is, "France Field, Canal Zone."

MESSING: There is no Officers' Mess, but there is a Bachelor Officers' Mess, the members of which are very glad to extend mess privileges to any families who arrive on the post, until they secure the necessary equipment and provisions to begin housekeeping.

SHOPPING AND MARKETING: A well equipped commissary is maintained, and privileges are extended to members of the post by the Naval Air Station at Coco Solo, Canal Zone, approximately one mile from France Field. The Panama Canal Commissary also carries a complete line of provisions, household equipment and a moderate selection of ladies' and children's clothing. Fresh eggs, meats, vegetables and fruits are always in stock, and pasteurized milk for children can be had on a physician's certificate. There are Chinese gardens in the vicinity and a good variety of vegetables can be had from them at reasonable prices.

SERVANTS: Colored servants are available, but they are not efficient. There is no such thing as "trained help". There are limited facilities for quartering them on the post.

LAUNDRY: Practically all laundry of officers and their families is done by laundresses on the post, but there is a good steam laundry in Colon.

BANKS: Banking facilities are available. There are branches of the Chase National, and National City Bank of New York. Many have found it desirable to keep a small account in the States to cover purchases made there.

SCHOOLS: Children can attend school in Cristobal. The France Field Post Exchange maintains a bus, which carries them to and from school at nominal rates.

HOSPITALS: Hospitals are excellent, but officers' families must pay for all services, including room, cost of operation, medicine, food, etc.

UNIFORMS AND EQUIPMENT: Officers should, if possible, leave all woolen uniforms and clothing in the States. Practically all uniforms and equipment can be purchased here. Khaki and white are easily procured and the services of native tailors are available. The ordinary yellow khaki worn in the States is not official here, and officers are required to have uniforms made of a green khaki. Generally speaking, officers will find that the proper clothing, ornaments and insignia can be secured in the Canal Zone as easily as in the States, and in many instances, much cheaper.

FURNISHINGS AND QUARTERS: It is recommended that married officers be prepared to purchase a living room set of wicker as it is more practical for the tropics. Short nap woolen or grass rugs are preferable to the heavier grades on account of the moths and mildew. Valuable paintings, photographs and leather bound books should be stored in the States. Silver tarnishes but does not deteriorate if kept clean. There are dry closets in all quarters. Twenty-five cycle, 110 volt alternating current is furnished. Any electrical equipment having 60 cycle motors cannot be changed here: however, electric percolators, grills, stoves, toasters, irons, sewing machines and sweepers should be brought, as they work satisfactorily and are needed. Silk and satins deteriorate rapidly and furs are hard to preserve. Ordinary summer clothing is what is required.

The quarters here are very good, but there are not enough of them, and, in order to avoid too much ranking out and unnecessary moving, quarters are assigned to the Lieutenants who have been here the longest. This policy in-

sure a reasonable degree of permanency, once an officer is settled. Quarters in Colon and Cristobal are very hard to find, and are not good, even when obtained.

If you have a good radio set, bring it. There are sets in operation here and, although radio reception during the rainy season is not as good as in the States, practically all the eastern, middle western and some western stations can be heard.

CIVILIAN CLOTHING: Civilian clothing cannot be worn on the Canal Zone or in the Republic of Panama, except when going on or returning from leave, but is obligatory when visiting foreign countries. Tailors are available and tailored civilian clothing can be purchased to advantage here. If trips to Central and South America are contemplated, light weight suits will be suitable and should be brought, but it is advisable not to bring more than one good civilian suit, which, as stated above, can be worn only while on leave. Shoes are hard to obtain only in the odd sizes.

RECREATION: The principal forms of recreation are golf, swimming, boating, fishing, basketball, handball and tennis, and some hunting and horseback riding. Necessary equipment can be purchased here, the cost being approximately the same as in the States. For fishing, salt water and tarpon tackle is used, as other tackle is too light.

CLIMATE: The temperature varies from 76 degrees (minimum) to 86 degrees (maximum). During the rainy season, May to December, there is a gentle breeze practically all the time. During the dry season, January to May, a ten to twenty mile northeast wind is in evidence at all times.

Those with children should feel no apprehension in bringing them to the tropics. Competent medical authorities state that until children reach the age of 8 or 10 years, they have many advantages, and no disadvantages over those in the States.

It is advisable that dogs be left in the States. The climate here does not seem to agree with pedigreed dogs. It is also desired to call attention to the fact that dogs are not allowed on Army Transports and it would be necessary, therefore, to ship them by commercial liner.

Duty hours are short, but intensive and the professional advantages to Air Corps Officers, ambitious to perfect themselves in their chosen work, are enormous. Endeavor is made to enable officers to learn the duties and tactical operation of all the various phases of Air Corps work. All other branches of the service, excepting Cavalry, are stationed on the Zone and combined exercises are held weekly.

---oOo---

BURIAL OF LIEUT. JOHN J. WILLIAMS

Lieut. John J. Williams, 95th Pursuit Squadron, Rockwell Field, leader of the Army's famous "Three Musketeers", was laid to rest in the Fairhaven Cemetery, Santa Ana, California, on the afternoon of September 17th. Lieut. Williams met his death while demonstrating pursuit maneuvers at the National Air Races, Mines Field, Los Angeles, September 10th.

Dignity and simplicity marked the services at the Santa Ana Chapel. Reverend Moffett Rhodes officiated, and stressed the outstanding virtues of the departed flyer -- friendliness, leadership and the ability to win and hold the sincere respect and admiration of all with whom he came in contact; men of rank, and men who received orders from him.

Testimony to the esteem in which Lieut. Williams was held by the enlisted men of the service was a large floral piece from the enlisted men of the Ninety-fifth Pursuit Squadron. Two distinct designs occupied conspicuous places among the floral offerings, one from the officers of the Ninety-fifth Pursuit Squadron and one from the officers of Rockwell Field.

Lieuts. Strickland, Gregg, Hopkins, Meadow, Ives and Mallory were pall bearers. Droning a requiem in the sky, Lieuts. Cornelius, Woodring and R.V. Williams, led by Colonel Lindbergh, flew in a four-ship formation over Santa Ana and the Fairhaven cemetery during the entire service. As "Taps" was being sounded, the four planes flew low over Lieut. Williams' resting place and paid a last loving farewell.

Brief Masonic services, rendered by fellow lodge members of the Order, preceded the military ceremonies.

The entire city of Santa Ana joined in the last tribute to the dead Air Corps Officer. A vast concourse of citizens of that city and neighboring towns thronged the sidewalks near the funeral chapel and along the line of march of the cortege.

AIRMEN IN PHILIPPINES EXPERIENCE STRENUOUS CROSS-COUNTRY TRIP

Marooned on a lonely beach in the Philippines, their two Amphibian planes disabled by an unusually rough surf, Army airmen from Kindley Field spent two rather uncomfortable days in the midst of a continuous downpour of rain, waiting for a boat to rescue them.

Two Amphibians from Flight "A", 2d Observation Squadron, recently left Kindley Field at 7:00 A.M., for Camp Nichols, Rizal, P.I., preparatory to a flight to Mindoro. The pilots were Lieuts. Meloy and Dunlap, with Sergeants Cox and Dooney as mechanics. The News Letter Correspondent goes on with the story, as follows:

"We landed at Camp Nichols at 7:22 A.M. to pick up Capt. Stecker, Q. M. C., who was to accompany us to San Jose, where a survey of proposed landing field was to be made. Left Camp Nichols at 8:10 A.M. and headed south. This being the rainy season, one would hardly have called weather conditions propitious. Low hanging clouds almost completely obliterated Mindoro, so that our route had to be along the coast line.

"Aside from playing tag with storms, all went well until we had reached Cape Calavite on the northern coast of Mindoro, where Plane No. 4 with Lieut. Meloy, Capt. Stecker and Sgt. Cox turned back because of a large storm area ahead of them. At about this same time No. 1 headed straight for shore and was fortunate to reach Palawan Bay, where the churning ocean was somewhat calmer. No. 4 followed closely and at 9:30 A.M. both planes were bobbing up and down on extremely choppy water. Because of sea conditions and a high wind, it was with difficulty that both planes were taxied up on the lonesome beach.

"Some forty minutes were consumed in turning both planes around and in preventing serious damage from the breakers, which were rolling in with considerable force. By this time the only four natives in this neck of the woods arrived on the scene and in their humble way tried to help us.

"When the planes were secure the trouble shooting on No. 1 began. Some water was found in the rear carburetor and moisture in the right head. The carburetor was repaired and a new head put on, after which the motor revved up O.K. In the meantime, several squalls came up and the bay was a mass of high waves and white caps. Along about 3:00 P.M. there was some let up in water conditions close to shore and we decided to take off. No. 4 took off first and was in the rough water just about the time it had gotten "up on the step". From then on it was a struggle between plane and sea, with odds on the latter. Somehow the old bus pulled herself clear on about the "steenth" wave and staggered into the air much to the relief of all on board. No. 1, did not fare so well and it was only after several attempts that it succeeded in breaking loose from the seething waves and staggering into the ether.

"Both planes circled around the Cape and headed back home at 4:00 P.M. Less than five minutes later, No. 1 was again in distress. It had altitude enough to reach a small horseshoe beach on the rock bound coast of Cape Calavite. The crew of No. 4 watched the landing in the heavy sea and noted that the disabled plane reached the shore somewhat damaged but safe. Knowing that the stranded aviators had plenty of food and water for at least seventy-two hours, Lieut. Meloy opened up No. 4 and headed for Corregidor. Upon arriving at Kindley Field, arrangements were made by radio with Camp Nichols to have an Amphibian from that station accompany No. 4 back to Calavite the following morning."

Let Lieut. Dunlap take up the story:

"Lieut. Meloy seeing that the other ship was beached safely, headed for Kindley Field to get help for the disabled crew.

"Cape Calavite has sheer rock coast down to within a few yards of the water, where there is a soft sandy beach. The depth of the sea is about nine fathoms along the shore and suddenly drops off to three hundred and twenty-one fathoms a short distance away. The China Sea is very rough at this time of year and the waves were rolling in and breaking on this ledge off shore, causing breakers some twelve to fifteen feet high on the beach.

"In coming through these breakers, one of them came up under the tail of the plane forcing it up into an almost vertical position standing on the nose of the hull. This contortion threw Sgt. Dooney out of the rear seat, clear of the plane and into the incoming breakers, and he was washed ashore. The succeeding breakers washed the plane farther upon the beach until it was out of danger of being torn to pieces. Here it was anchored to keep the tide from

taking it out to sea when it went out a few hours later.

"The plane being disabled and beyond emergency repair there was nothing to do but unload and prepare for the night, for it was too late for any assistance to be had until the next day at least. The two cockpit covers, with the aid of the rock face of the shore, were made into a shelter above the high tide mark. The baggage, food, water and parachutes were stored under this, for rain had begun to fall, as it does sometimes at this season of the year.

"The food was scarce, not many cigarettes or matches and the water was about all gone, as most of the supply had been used while repairing the engine on the first forced landing. Investigation showed that there was a small fresh water river flowing down the mountain into the sea at one end of the beach. It was about thirty feet wide, clear as a spring and flowed at a rate of about twelve miles an hour. Here was plenty of water and, with the little food on hand, the crew could hold out for several days. It rained all the night, but without the meager shelter of the cockpit covers, it would have been a great deal worse. Then came the dawn and shortly after the grand and glorious sight of two Amphibians, piloted by Lieuts. Watkins and McClellan. Lieut. Watkins landed, and a beautiful landing it was in that sea with waves eight to ten feet high. Due to a misunderstanding of signals, Lieut. Watkins attempted to beach his plane and met the same fate as the one already beached. Luckily, the second ship had plenty of food on board, also two more cockpit covers. The other ship returned and a message was written on the beach for him to get help in the form of a boat to come to the rescue of the four marooned men and the two disabled planes. After reading the message, he headed north and disappeared in the direction of Manila.

"Camp was enlarged and improved to accommodate four instead of two, wood collected, water boiled and sandwiches consumed. There was nothing to do but wait for the rescue boat to come and take the party off the rock bound coast.

"The next morning about daybreak, the Mineplanter "Harrison" from Fort Mills steamed around the point and into view of the four marooned men. A life boat was launched, rowed ashore and beached.

"It was decided to start the motors of the planes and taxi them through the breakers to the Mineplanter. Lieut. Watkins succeeded in getting his plane through the breakers and out to the ship, but Lieut. Dunlap was not so fortunate with the other plane. Just as he got to where the waves were breaking, the wheels of the plane stuck in the soft sand. A fifteen foot breaker, however, struck the ship with full force, which loosened it from the sand and the motor pulled it through that one. Another breaker just as large then struck it and bent two blades of the propeller, making it impossible to go farther. The plane was beached again, tied to the shore and the instruments taken off. The landing party from the Mineplanter then launched the life boat and all ashore were taken aboard the "Harrison".

Lieut. Watkins wrote his impressions as follows:

"Took off 6:30 A.M., headed toward Fortune Island, Over South Channel, water getting rougher, hit Will Rogers head wind. Pass Golo Island, water still rough. Approach Mindoro and look for No. 1 in each cove. Pass one good beach and wish they were there. Proceed about five miles and see No. 1 on small beach in a shallow cove. Go down to look her over. Ship looks O.K. - seems to be high and dry on beach. Water looks pretty rough with long ground swells and heavy breakers on beach. Men on beach waving arms, but do not get signals. Fly up and down shore looking for better beach, but do not find any. Decide to land if possible. Fly very close to water and decide landing would be safe. Ready to land between swells, but feel queer with landing field rising and falling about ten feet. Let her settle between swells, land disappears. Ride upon next swell, fly again, land again, fly again, bounce and then O.K. Not so bad after all. Start to taxi into cove. Two hundred yards from shore -- series of big swells come -- look like mountains. This will be serious if beach is soft. Men walking up beach, stop and signal where to come in. Fine -- they have picked out a good place. Taxi a little closer. Wait for next series of big swells to pass. Give her full gun and follow last big swell. Next big swell one hundred yards behind. This will be fine if beach is O.K. Ten feet more! It won't be long now. Bang! We're stuck in the sand. Here come the big ones. Look out! Crash! There goes the left aileron. Crash! That caught the rudder and pinched my heel. Turning around now. Goodbye, flippers and stabilizers. All turned around, safe and O.K. except for one aileron, elevator, stabilizer, rudder and tail post. Might as well get out now and unload supplies and inspect

damage.

"Find Ship No. 1 out of flying condition with broken wing and doubtful motor. No. 4 could be made flyable by robbing No. 1, but it is stuck in the sand so badly that launching is out of the question. Nothing to do but hope that McClellan will get back and send boat. Write message in sand "Q.M. Boat" and pull off tail of No. 4 to show it is out of commission. McClellan drops message he is going for boat. Hope he makes it.

"Move supplies to camp and prepare for 'long vacation'. Spend time boiling water, chopping wood, working on No. 1 engine, boiling water, making coffee, eating sandwiches, boiling water, dodging smoke, trying to sleep, figuring out when boat will come and boiling more water.

"Harrison" arrives at 7:00 A.M. stops one mile out and lowers life boat. Boat spills passengers on shore forty-five minutes later. Pow-pow with Mate Smith. "Harrison" cannot come any closer. Ships must be taxied out. Work on No. 1 - get the motor running. Decide to try No. 4 first, because all men needed to get it out of sand and breakers not as bad as in front of No. 1. Start motor and with all men pushing and digging sand work it nearer the water. Wait for last series of big waves. Almost stuck in sand again -- would have been fatal. Cleared sand just in time to ride over next big wave before it broke. All O.K. and headed for sea. Rudder doesn't work very well, but Sgt. Wilson walks out on wing to steer. Tie to "Harrison". Go round and round waiting for other ship.

"Watch No. 1 start, get caught in big waves and go back to beach. Looks bad. More waiting. Life boat leaves beach, abandoning No. 1. Life boat pulls up by No. 4 to take us off. We would sell our positions at a low price, but we are hungry and the "Harrison" looks mighty good. Well here goes. Safe in boat. Safe in "Harrison", No. 4 in tow, food, sleep. No. 4 loaded on "Harrison" in lee of Golo Island. Five hours to Corregidor and nothing to do but take it easy and think how much worse it might have been."

---oOo---

PROPOSED "SUNSHINE ROUTE" FOR AIR MAIL

In these days of the rapid advance of commercial aviation, the City of San Antonio is right "on its toes" with concerted interest and active accomplishment along this line at all times. A recent instance of this was the organization in this city of the Southern Transcontinental Air Route Association for air mail from New York to Los Angeles, via San Antonio, by the establishment of the proposed "Sunshine Route"; with representatives of the Chambers of Commerce and aviation interests from 16 of the important southern cities in attendance. The following account of this organization appeared in the "San Antonio Express"

"Sponsoring the establishment of a 'Sunshine Route' for air mail from New York to Los Angeles, the Southern Transcontinental Air Route Association was formally organized and its route outlined in a meeting representing 16 southern cities in San Antonio Monday.

Cities named in the proposal, which is to be put before Assistant United States Postmaster General W. Irwin Glover, in charge of air mail, include New York, Atlanta, Montgomery, Mobile, New Orleans, Lake Charles, Orange, Beaumont, Houston, San Antonio, San Angelo, Fort Stockton, Pecos, El Paso, Douglas, Tucson, Phoenix, Yuma, San Diego and Los Angeles.

W.L.S. Gordon of New Orleans, elected president of the association, will call Assistant Postmaster General Glover by long distance telephone as soon as he returns to New Orleans, seeking an appointment for the presentation of the program in Washington. Representatives of all the cities named are to make up a committee, the greater part of which will make its visit to Washington by air.

Porter Whaley of San Antonio was made secretary of the association; W.R. Weaver of Montgomery, Henry C. Clifton, of El Paso, and H.B. Watkins of Phoenix, Ariz., were made vice presidents.

Delegates attending the organization meeting constituted themselves members of the board of directors for the association. W.R. Weaver, Henry C. Clifton and Porter Whaley were members of a committee to outline the route.

After the meeting Monday morning, delegates had lunch on the roof garden of the St. Anthony Hotel, and later were taken on a sight seeing tour to Winburn, Kelly, Duncan and Brooks Fields. Most of them returned to their homes Monday evening.

Delegates attending the meeting included: John B. Carrington, San Antonio; Col. George W. Stuart (on duty with the 90th Division in San Antonio); John L. Henning, Lake Charles, La.; W.L.S. Gordon, New Orleans, La.; Youngs C. Crook, San Antonio; W.R. Weaver, Montgomery, Ala.; Marshall Callender, New Orleans, La.; Henry C. Clifton, El Paso; Alfred P.C. Petsch, Fredericksburg; Arthur Burnett, San Antonio; Louis O'Donnell, Houston; W.B. Tuttle, San Antonio; Mayor W.D. Holcombe, San Angelo; Charles Mumm, Laredo, Texas; Emilio Azcarraga, Monterrey, N.L. Mexico; Kirke T. Moore, Tucson and Douglas, Ariz.; J.T. Byrne, Orange; Claude C. Wild, San Angelo; P.G. Lucas, San Antonio; H.B. Watkins, Phoenix, Ariz.; Ike Ashburn, Houston; E.A. Feille, San Antonio; P.A. Whaley, San Antonio; James A. Mars, Duncan Field; Jack Ballard MacDonald, Colorado Springs, Colo.; C.C. Leel and Sidney Kring, San Antonio."

As indicated in the above quoted article, these delegates visited the San Antonio Air Depot, among the other aviation activities of this vicinity. They availed themselves of a very comprehensive examination of its activities and manifested the keenest interest in the operations of the Depot shops and warehouses, particularly the latter, one of the group even expressing the wish that it could be permitted to send an employee of a certain concern on a visit to the Depot for a study of our methods, for use in one of the concern's plants.

---oOo---

LIEUT. DOOLITTLE TO GATHER FOG FLYING DATA ✓

"Smiling Jimmy" Doolittle, whose friendly disposition has won for him that cheerful appellation, has a new station as well as a new job. Shortly after his return to the United States after many interesting experiences in South America, he rejoined his old station, Wright Field, Dayton, Ohio.

Before his departure for South America, where he conducted a six months' aeronautical tour in the interests of the Curtiss Aeroplane and Motor Corporation, Lieut. Doolittle was on duty in the Airplane Branch. Upon his return he was assigned to duty with the Flight Research Unit of the Flying Branch, temporarily located at the Fairfield Air Depot. He did not tarry long at his new assignment. War Department orders issued shortly afterwards assigning him to Mitchel Field, N.Y., where, in addition to his regular duties, he will cooperate with officials of the Daniel Guggenheim Foundation for the Promotion of Aeronautics in their research work in connection with fog flying.

"South America is much more progressive in aviation than it is believed to be", said Lieut. Doolittle in commenting upon his recent trip. "Each country on the sea coast has its navy and army air corps, and the interior countries, Bolivia and Paraguay, have army air corps."

Lieut. Doolittle sailed for South America from New York City on January 19, 1928. Accompanying him were Mr. C.W. Webster, president of the Curtiss Aeroplane Exporting Corporation, and Mr. Jerry Van Wagner and Mr. Toddhunter, mechanics. The first stop was made at Colon, Canal Zone, where Lieut. Doolittle and Mr. Webster visited France Field, and later were flown by Lieuts. Swede Larson and Burton Lewis, in a Martin bomber, across the Canal to the opposite side, where they embarked for Peru. Landing at Lima they were joined by W.H. McMullen, the other pilot for the trip. There they made their first airplane demonstration before the Peruvian navy and army respectively, first with pontoons and then with wheels.

The group left Lima on the 25th of February, flying to Ilo, Peru, a distance of 575 miles, and the following day to La Paz, Bolivia, 270 miles, and there demonstrated the O-1 and P-1 airplanes to the Bolivian army. The pontoons for the P-1 were shipped up, and an attempt was made to fly from Lake Titicaca. The lake's altitude of 12,700 feet was too great, however, and it was impossible to get the plane to leave the surface of the water. On several occasions it was rocked off, but immediately settled to the surface again. After an hour and a half taxiing up and down the lake (at times the distance of twenty miles to the shore) in order to get better wind and wave conditions, the pontoon strut fittings pulled out, making it necessary to discontinue the try. At the start of this flight the main gas tank held 28 gallons of gasoline, but at the conclusion only three gallons remained.

A number of short flights were made from La Paz. One of the most interesting of these was a flight over the Andes mountains, and down into the head waters of the Amazon river to the old Tipuani mines. These mines are considered as one

of the principal sources of gold mined by the early Incas, and although only 75 miles airline from La Paz it requires nine days to reach the mines and ten days to return by muleback which is the only available means of transportation. Yet in one hour and a half, Lieut. Doolittle made a round trip to the mine from La Paz, carrying the manager of the mine and a motion picture photographer; and during that time the latter was permitted to take all the movies he wished. The manager of the mine, very much impressed by this incident, became so interested in the possibilities of the airplane that he immediately decided to clear a landing field at the mine site, putting one thousand Indians to work for that purpose, and started negotiations for the purchase of airplanes, which he intended using for the purpose of bringing personnel and supplies into the mine and for bringing out the very rich ore.

Several demonstrations were given at La Paz and on March 23 one was given at Oruru, the second largest city in Bolivia, located near Lake Poopo. On March 24 the group flew from Oruru to Sandiago, Chile, stopping a few minutes for gasoline at Antofagasta, Chile, and at Ovalle, Chile. At the latter stop, 30 gallons of gasoline, carried in the back seat of the O-2 in five-gallon tins, were transferred to the auxiliary tank of the O-1 in ten minutes. The total flying time from La Paz to Santiago, a distance of 1,350 miles, was but 12 hours.

Demonstrations were made to both the Chilean army and navy, and it was while flying the O-1 from the water that the airplane was wrecked beyond repair. Lieut. Doolittle then proceeded in the P-1 without McMullen, flying on May 8, from Santiago, Chile, to Buenos Aires, Argentina. A record Flight was made on this occasion, the distance of 750 miles being covered in five hours and 45 minutes flying time, the elapsed time being six hours and 10 minutes. Only one stop was made, at MacKenna, Argentina, for gasoline.

Demonstrations were made to the Argentina army at El Palomar, and to the Argentina navy at Bahia Elanca, some 500 miles to the south. While in Buenos Aires, flights were made to Montevideo, Uruguay, for the purpose of demonstrating the planes to the Uruguanian army and navy.

A non-stop flight was made from Buenos Aires to Asuncion, Paraguay, a distance of 730 miles, on July 1. The elapsed time on the trip was five hours and 15 minutes, constituting another record flight for this stretch. On arriving at Asuncion at 1 o'clock in the afternoon, arrangements were made for demonstrations before the President of the Republic, the Minister of War, the Chief of the Air Corps, and other officials at 3 o'clock. They were on hand, the demonstration was given, the planes overhauled and serviced, and at daybreak the next morning the flyers were leaving for Rio de Janeiro, Brazil.

The 960 mile distance between Asuncion and Rio de Janeiro was covered in a non-stop flight, made in seven hours and 10 minutes. It was the first time this country has ever been crossed by air, and by air is the only possible means of crossing, as it is a part of the great tropical jungle and absolutely impene-trable on the ground. No sign of human habitation or of wild life, other than great flocks of brilliant green parrots, was seen until approaching the cultivated part of the country along the coast.

Another O-1 airplane had been shipped to Rio de Janeiro, and both the O-1 and P-1 planes were demonstrated on wheels and pontoons. On July 18 the last demonstration was given, the P-1 was then torn down for shipment home, and a few days later, on July 21, the O-1 plane was flown down to Buenos Aires, where the flyers again met McMullen, whose mission it was to return with the O-1 to Chile. Lieut. Doolittle, whose leave from the Army had expired, then went aboard the S.S. Western World at Buenos Aires on July 26 for the return voyage, arriving at New York, August 15, and from thence to Dayton. -- Supercharger.

---oOo---

NEW HOME FOR BACHELOR OFFICERS AT MARCH FIELD

Contract for the construction of the bachelor officers' quarters at March Field, Riverside, Calif., in the amount of \$110,000 was awarded by the War Department recently to the Los Angeles Construction Co., and work will be started immediately. The same concern recently completed the construction of the steel hangars.

THE BOMBARDMENT GROUP FLIGHT ACROSS THE CONTINENT ✓

By Lieut. Wilton M. Briney, Air Reserve

The first successful transcontinental movement of a bombardment squadron was accomplished by the 2d Bombardment Group in September. Facing adverse weather conditions clear across the continent, the 2d Group landed its bombers on Mines Field, Los Angeles, Cal., Sept. 8, making up two full days lost en route.

Maj. Hugh J. Knerr, Commanding Officer, 2d Bombardment Group, led a formation of 9 LB-5A bombers during the entire trip to the Pacific Coast and return. The unflinching navigation of the flight leader, together with the excellent morale of all the flight personnel, officers and enlisted men alike, made possible the completion of the mission as scheduled in spite of weather adversities.

The flight, scheduled to leave Langley Field, Sept. 1st, did not get away until the 3d because of dangerous weather, and even on the 3d took off in face of weather anything but inviting. The first night stop was made at Augusta, Ga. Five o'clock the following morning found the motors warmed up and the personnel ready to take off. The weather, however, disputed the ability of any bombardment flight to reach its objective through it.

Low hanging clouds greeted the pilots as they hopped off from the Augusta Field. A flight of 2 hours and 35 minutes, which will long remain in the minds of the pilots, resulted. Nothing could have happened which would have made the flight personnel more confident of the ability of moving a bombardment squadron intact under adverse conditions.

First driven to the south and back to the north, then back to the south of the course because of storms, low fogs and high clouds, the flight leader took the flight to within twenty miles of Macon, Ga. It was at this point that many times the bombers were lost to view one from another because of closing in clouds. A hole in the clouds developed just above some space cleared for a saw mill site. In any direction for many miles the terrain was such as to make a successful landing impossible.

The leader signalled for the formation to follow in column of ships, circle within this hole and set a course back to Augusta, Ga., landing there 2 hours and 35 minutes after the start. The same afternoon, Sept. 4th, the flight took off, dodged storms and reached Montgomery, Ala. (Maxwell Field).

The night was spent at Maxwell Field, the personnel on the line with ships warmed up at three o'clock in the morning, but it was not until nine the same morning that the flight could take off. The clouds at Maxwell from three until almost nine o'clock were as low as the water tank on that field. At the first moment at nine o'clock the flight took off for Shreveport, La., landing at Monroe for gas.

From Shreveport west, strong head winds were encountered, very hot sun and a lot of dust. Servicing facilities from Monroe west also helped tax the personnel's morale, which in spite of head winds, sand storms, poor servicing facilities, prevailed at its high point. The flight hopped from Shreveport to Midland Texas, where more dust and head winds were encountered. Quickly after the flight had landed all bombers were on the field and properly placed for servicing. This was done shortly before noon. The last ship received servicing at 4:30 in the afternoon.

A night flight was considered to make up the time thus lost, but pilots flying regularly over the route strongly advised against it because of lack of night landing facilities at El Paso and the extremely rough and desolate terrain from Midland to El Paso. Persons living in Midland and arriving on the field the next morning at 5:30 found the bombers had gone. The next stop, El Paso, offered the same sand.

Three of the 7000 pound bombers became mired in the sand when taxiing on the runway for a take-off.

The next stop, Tucson, Ariz., had in store for the flight the usual quota of sand plus a thermometer reading of 116 degrees Fahrenheit on the field.

From Tucson the flight hopped to San Diego, reaching Rockwell Field the morning of Sept. 8th. Flying up the coast to Mines Field, Los Angeles, they landed at four o'clock in the afternoon, thus making the time of arrival as originally scheduled.

The flight remained at Los Angeles from the 8th until the 14th. Some 34 experiments were run during the stay in Los Angeles by the flight personnel which had nothing to do with airplanes, navigation, fueling or other kindred aviation matters. Cold creams, skin balms, both liquid and dry, were applied

at every time and in every manner known to man. It is believed that, if a composite report of all tests run could be obtained from the 2d Group personnel, surely an ideal remedy for sunburn would result.

The return trip, though not as strenuous as the trip out, was not exactly what could be called a pleasure jaunt. Strong winds out of the east were encountered. Old timers said that it had been years since a strong wind had come from the east and that they had very few winds other than from the west. They blamed the storm prevailing on the southeast coast.

The return trip was over the same route as far east as Midland and it was at that town that we received the first weather favor since the commencement of the trip on Sept. 3d. Upon leaving Midland early in the morning, Sept. 19th, the flight had a tail wind which was taken advantage of by a single hop from Midland to Wichita, Kans., where 100 gallons of gas per ship was taken on and the flight continued to Kansas City, Mo., where it arrived at five o'clock the afternoon of that day.

The hop off from Kansas City was made six o'clock September 21st. The flight leader received a wire at Dayton that the present going would put the flight into Cincinnati a day before it was expected, resulting in a night stop at Dayton and a continuance of the flight the next morning to Cincinnati.

Cincinnati was left behind eight-thirty Sunday morning and the 2d Bombardment Group's home station reached the same day, in one hop, at one o'clock.

Langley Field when reached on Sept. 23d had in store for its pilots the same brand of weather it gave them upon their departure, low, fast moving clouds. Maj. Knerr landed, followed by the other members of his flight, all in possession of facts concerning the transcontinental movement of a bombardment squadron which are far more valuable than any paper data which might be obtained.

2d Bombardment Group Officers making the flight follows: Maj. Hugh K. Kneel, Capt. Cecil G. Sellers, Air-Res., 1st Lt. Harold W. Beaton, 1st Lt. Phillips Melville, 1st Lt. David L. Behmcke, Air-Res., 2d Lt. A.K. Kerwin Malone, 1st Lt. John R. Drumm, 2d Lt. Alfred M. Johnson, 1st Lt. Wilton M. Briney, Air-Res., 1st Lt. William B. Blaufuss, 2d Lt. Ford L. Fair, 2d Lt. Willard R. Wolfenbarger, 1st Lt. Emile T. Kennedy, Capt. Ira F. Peake, Flight Surgeon.

---oOo---

ROCKWELL FIELD USED AS CONTROL POINT IN AIR RACES

Rockwell Field, Coronado, Calif., was selected as a control point for the Class "A" and Class "B" transcontinental racing planes. A finish line was laid out west of Headquarters Building, and the civilian planes used the west half of the field. Officers of the post acted as assistant judges and timers. The Class "A" racers arrived early Sept. 10th and left for Los Angeles at noon. The Class "B" racers stopped at the field on the morning of the 12th and departed in the afternoon. Some of the commercial planes made exceedingly fast time on the flight from New York and demonstrated the feasibility of transcontinental air transportation.

---oOo---

RESERVE OBSERVATION SQUADRON TRAINS AT ROCKWELL FIELD

Twenty-one officers of the 514th Observation Squadron, Air Corps Reserve, completed two weeks of very extensive training at Rockwell Field recently. The training included tactical missions; lectures on maintenance and other aeronautical subjects; cross-country practice; and considerable airdrome flying. Plans were formulated for inactive training to take place at various points in Southern California during the remainder of the year and until the next summer's encampment. A plan was also devised for ferrying the planes to the assembly places. To Lieut. B.R. Dallas, Unit Instructor and Camp Commander, goes much of the credit for the marked success of the training camp.

---oOo---

HAWAIIAN AIRMEN UNDERTAKE ANTI-AIRCRAFT AND HARBOR DEFENSE MISSIONS

Approximately 200 hours of night flying in conjunction with the harbor defense and anti-aircraft target practice was completed by the 5th Composite Group, Luke Field, T.H., in the past three months, according to the records of Capt. L.L. Harvey, Group Operations Officer.

While this is not considered a record for night flying, the efficient and harmonious cooperation which existed between the Air Corps and Coast Artillery during the time is worthy of note. On the completion of the work, Major Franklin Kemble, 64th Coast Artillery, addressed a letter to Maj. Van Nostrand in which he highly complimented the work of the Air Corps personnel and extended the appreciation of the officers and men of his battalion.

---oOo---

IMPROVEMENT IN FLYING FACILITIES AT LUKE FIELD

A new runway, 200 feet wide and 1500 feet long, equipped with a modern underground sprinkler and costing approximately \$15,000, was completed at Luke Field and will be ready for use in a short time as soon as the grass attains a little more growth. The runway extends in a northerly direction from the southern end of Fords Island, and is situated about the center of the field between the Air Corps hangars and the Naval Air Station. The area west of the runway and extending to the Air Corps hangars is also being served by the new sprinkler system.

In addition to the grading and installation of pipe lines by the civilian contractors, the personnel of the field was used to haul the dirt from the excavation pit. Several motor trucks were kept busy for about two weeks completing the work.

---oOo---

DISTINGUISHED FLYING CROSS AWARDED LIEUT. ENT

Second Lieut. Uzal G. Ent, Air Corps, now stationed at Kelly Field, Texas, was, on Sept. 15th, awarded the Distinguished Flying Cross for heroism while participating in the National Elimination Balloon Race as aide to 1st Lieut. Paul Evert on May 30th last.

"Their balloon was struck by lightning or received a heavy charge of electricity", said the official citation, "during a severe electrical storm over Youngwood, Pa., at an altitude of approximately 1,200 feet, instantly killing the pilot, setting the balloon on fire and severely shocking and partially paralyzing Lieut. Ent. He endeavored to revive his pilot, not being sure that he had been killed, but was unsuccessful. Although the balloon was burning and slipping, he so maneuvered it as to land safely without injury to private property. When the balloon collapsed about 20 feet above the ground, the remaining hydrogen gas burned quickly, destroying the envelope and net. Disregarding his own personal safety and with great devotion to duty, Lieut. Ent stayed with the balloon at the risk of his life instead of landing with his parachute. His courage, daring and heroism reflect great credit upon himself and the Army of the United States."

---oOo---

PROMINENT VISITORS AT MARCH FIELD

Visitors at the Primary Flying School, March Field, Riverside, Calif., recently, included Major-General James E. Fechet, Chief of the Air Corps; Brig.-General Frank P. Lahm, Commanding the Air Corps Training Center; Congressman W. Frank James and Allen J. Furlow; Brig.-General E.E. Booth, Asst. Chief of Staff; Miss Amelia Erhardt, of Trans-Atlantic flight fame and Major Ralph Royce, former Commandant of the Air Corps Primary Flying School, Brooks Field.

Generals Fechet, Lahm and Mr. James arrived at the field Sept. 16th from the National Air Races at Los Angeles. After an inspection of the new construction the party were driven to Riverside, where they were the guests at a luncheon given by the Chamber of Commerce.

Congressman Furlow visited the field on the 20th, being a passenger in a plane piloted by Lieut. Amis. A tour of inspection of the post was followed by an address to the commissioned personnel.

General Booth, upon his arrival on Sept. 21st, was greeted with the 11-gun salute. He came from Clover Field on a tour covering the various Army posts in California. The Reserve Officers Association of Riverside tendered General Booth a dinner at night.

Miss Erhardt was the guest of Major and Mrs. M.F. Harmon on Sept. 20th, flying from the Los Angeles Air Races in a Lockheed "Vega".

During Major Royce's short stay at the field he met many of his old friends from Brooks Field who are now on duty at March Field.

SUMMER REST CAMPS FOR HAWAIIAN AIR CORPS PERSONNEL

Immediately after the inspection of Luke Field, T.H. by the Secretary of War, the squadrons of the 5th Composite Group began their summer rest camps, the 23d Bombardment leaving for Waimanalo for two weeks. The trip was made by air, 116 men with all equipment, including the tents, poles, rolling kitchens and mascots being transported in Martin Bombers, with the bomb bays turned into cargo hatches. About four hours were required to make the move.

After being in camp for ten days, the 23d returned to Luke Field and transported the 72d Bombardment Squadron to the site of their old camp. Both transfers were made the same day, every ship going heavily loaded each way. Later on the 72d vacated the camp to the 4th Observation. The 23d Squadron acted as transport squadron for all the moves and established somewhat of a record when they moved the 72d back to Luke Field and moved the 4th, accomplishing the task in just three hours from the time the first ship left the ground until the last man and piece of baggage was moved.

---oOo---

FOURTH OBSERVATION SQUADRON MEN PROVE "GO-GETTERS".

The personnel of the 4th Observation Squadron, Luke Field, T.H., just completed the erection of a new recreation room built in the rear of the squadron area. Heretofore the Squadron had been using two pyramidal tents, but they were found to be too small and not adapted to the purpose.

There being no appropriation available to cover such construction, the Squadron turned out to a man and, by securing lumber from the maintenance as well as what could be salvaged from airplane crates, they erected a building which is a credit to the Field as well as to their resourcefulness. The work was started under the direction of Lieut. L.W. Motley and was completed by Capt. C.E. Giffir who now commands the squadron.

----oOo----

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS

Changes of Station: 1st Lieut. Arthur W. Vanaman, San Antonio Air Depot, to Brooks Field, Texas.

1st Lieut. Charles E. Branshaw, Brooks Field, to San Antonio Air Depot.

2d Lieut. Samuel R. Harris, Jr., to Brooks Field, Texas.

1st Lieut. James H. Doolittle, Wright Field, to Mitchel Field, N.Y.

* Capt. Edmund W. Hill, Scott Field, Ill., to Chanute Field, Ill.

1st Lieut. Wallace G. Smith, March Field, to Chanute Field, Ill.

1st Lieut. Wm.M. Lanagan, Kelly Field, to Chanute Field, Ill.

1st Lieut. George H. Brown, Marshall Field, Kansas, to Chicago, Ill., for duty with Organized Reserves, 6th Corps Area.

Detailed to Air Corps and to Primary Flying School, Brooks Field, for training:

• November 1st:-- 2d Lieut. Robert S. Israel, Jr., Field Artillery; 2d Lieut. Robert W. Stika, Infantry; Capt. Carl H. Atrong, Cavalry; 2d Lieut. Merrow E. Sorley, Corps of Engineers; March 1, 1929 -- 1st Lieut. Edward M. Edmonson, Field Artillery; 2d Lieut. Joseph P. Shumate, Coast Artillery; 2d Lieut. Lewis S. Kirkpatrick, Infantry.

Promotions: 1st Lieut. William V. Andrews to Captain, with rank from August 28, 1928.

2d Lieut. Stewart W. Towle, Jr., to 1st Lieut., August 28, 1928.

2d Lieut. Carl B. McDaniel, to 1st Lieut., Sept. 14, 1928.

2d Lieut. Glen C. Jamison, to 1st Lieut., Sept. 5, 1928.

Resignation: 2d Lieut. Harold Currie King, Oct. 3, 1928.

2d Lieut. Edward Coppin, Jr.

Retirement: 1st Lieut. Frank M. Bartlett, with rank of Captain, for disability incident to the service.

Relieved from detail to Air Corps: 1st Lieut. Bradford W. Kunz to 2d Infantry, Fort Wayne, Mich.

Reserve Officers assigned to active duty to June 30, 1929:

2d Lieut. Elwell A. Sanborn, Upper Lake, Calif., to Grissy Field.

1st Lieut. Byron A. Glover, Atlanta, Ga., to Maxwell Field, Ala.

Transferred to Air Corps: 1st Lieut. Wilfrid H. Hardy, Cavalry, Sept. 10th, 1928, with rank from March 24, 1928.

---oOo---

AIR CORPS EXHIBIT AT CALIFORNIA FAIR

The March Field exhibit at the Southern California Fair exceeded even the success of last year. Considerable favorable publicity was given the exhibit by the newspapers. One of the most interesting exhibits was a stripped down DH-4 plane, showing every working part in full view. The plane was completely equipped with machine guns, camera, radio, bombs, etc., and the lower wings and fuselage stripped of all fabric. A platform was built to enable the interested to get a close up view of the interior of the cockpit. The earth inductor compass also drew considerable attention, it having been connected with a small motor so that actual operation was shown.

The exhibit included a complete radio installation for broadcasting, also the method used in teaching radio code by means of the Ediphone. The Photo Section was represented by a complete developing, printing and enlarging plant, together with a mosaic of Riverside that was of special interest to the local citizens. Armament of all description; aircraft instruments; the different types of aircraft clothing and equipment were displayed.

The Ruggles Orientator vied with the DH for first place in interest and duplicated its success of last year of being the best "bally-hoo" on the grounds.

The arrangements were in charge of 1st Lieut. James D. Givens, Air Corps.

NOTES FROM AIR CORPS FIELDS

---oOo---

Kelly Field, San Antonio, Texas, August 31st.

Major J.E. Chaney, Commandant of the Air Corps Advanced Flying School, and for the past four and one-half months commanding the Air Corps Training Center, in the absence of Brigadier-General Frank P. Lahm, went on 30 days' leave, September 1st. Major Chaney will spend his leave in Long Island, New York City, and Southern Maryland.

As the second of a series of fights planned by the Athletic Officer, Lieut. Stanton Smith, the Missouri Pacific Athletic Club staged a benefit fight the night of August 23d at the Kelly Field Gym.

Featuring in the finals was Kid Reyes, veteran fighter of San Antonio, against San Miguel of the 68th Squadron. During five rounds of fast, clean fighting neither man could score a knockout blow, but in the sixth round Reyes put the soldier down for the full ten.

68th Service Squadron; 1st Lieut. William M. Lanagan, Commanding,
Corporal Bryant E. Lumley, Correspondent.

The following changes affecting personnel occurred since August 1st:

Mr. Sgt. Carl T. Hale, Air Corps, late of France Field, Panama, arrived on the 1st and immediately took up the important duty of Shop Foreman of the Aero Repair. Sgt. Hale is no doubt a valuable addition to the Squadron and the organization as a whole welcomes him heartily. Sgt. Hale is replacement for Mr. Sgt. W.R. Redfern, who departed for Panama, via San Francisco, on or about June 1st.

Staff Sgt. Mehnert, Air Corps, formerly of the 3d Pursuit Squadron, Philippine Department, arrived from foreign service on the 7th inst, as replacement for Staff Sgt. Joe Mullenix, who left for a tour of foreign service. Welcome home, Sergeant.

Pvt. 1st Cl. Gordon, popular member of the emergency crew on duty in Hangar #6, departed for Oklahoma on 60 days' furlough to visit relatives.

Pvt. Guthrie, of the renowned team of Lumley and Guthrie, pinochle champs de luxe, also departed on a 60-days' furlough.

* * * * *

As evidence in proof of the fact that the Air Corps and Kelly Field -- particularly the 68th Service Squadron -- are becoming more popular as time passes, Pvts. Leon A. Brown, 23d Infantry and Sydney A. Melcher, 9th Infantry, were recently transferred from their former organizations, to the 68th upon their own request.

Lieut. H.L. Boyden was relieved from assignment to the 40th School Squadron and reassigned to this organization. In addition to his duties as Post Transportation Officer, he was detailed as Squadron Operations Officer and Assistant Engineering Officer.

Lieut. Johnson was detailed as Station Air Corps Supply Officer in addition to his many squadron duties.

Staff Sgt. R.E. Mitchell, our efficient flight chief, is planning to submit application for examination for commission as Second Lieutenant, Air Corps Reserve, in the near future; with the idea in mind of taking examination for J.A.P. rating. Sgt. Mitchell has well over the 500 hours mark in pilot time, and has flown more than a dozen different types of commercial and military planes. The entire squadron wishes him the very best of luck in his undertaking and every one is confident that he possesses the inherent qualifications of a good pilot and an excellent officer.

Pvt. 1st Cl. (A/M 2 Cl.) "Greaser" Sauseda is on the market for a 35 H.P. Anzina air-cooled engine for his outrigger strut type monoplane, which is now in the process of manufacture. The plans call for a 26 ft wing spread, 54 inch chord, 6½ ft. in height and 17 ft. overall length. Clark "Y" wing section is to be used. Instead of the conventional closed cabin, a single open cockpit will be substituted. The "Greaser" estimates that it will have a high speed of from 90 to 95 miles per hour and should cruise from 75 to 80 miles per hour under normal conditions.

Pvt. Sauseda is an ex-flying Cadet and is an accomplished airplane and aviation engine mechanic and aeronautical engineer, and is considered fully capable of constructing his own plane from the ground upward. He expects to receive his private commercial pilot licence from the Department of Commerce in the near future.

The hangar gang is wondering whether dope or whitewash will be used on the linen. Probably whitewash, in view of the fact that he has already conducted tests with it on his flivver.

As usual, the squadron was well represented in both the inter-squadron swimming meet held September 6th, and the call for candidates for the Kelly Field football team. The bone crushers are getting into trim and everyone is looking forward to the time when the team marches on the gridiron to win new laurels.

Lieuts. Todd and Wooford of Fairfield passed through recently, en route to Rockwell Field with two PW-9Ds for the Pursuit Group being organized there. It is understood they are to ferry two new O-2H planes from the factory to Pope Field, N.C.

Lieut. Davidson, of the 3d Attack Group, came up from Galveston recently in an A-3 to visit Mr. Johnson, who is stock superintendent with the Station Supply. "Johnny" is a 2d Lieutenant, Air Corps Reserve, and received his flying training at Post Field, Ft. Sill, at the same time that Lieut. Davidson received his. They became good friends then and frequent visits are still made from time to time.

Lieut. Johnson, Squadron Adjutant and Supply Officer, while proceeding to Colorado Springs, Colorado, as passenger in an O-11 plane, for the purpose of dedicating a new airport at that place on the 10th, came to an abrupt halt at Amarillo, Texas, when the plane ground looped and partly washed out the landing gear. Lieut. Johnson received a very painful cut under his right eye. Lieut. R.H. Dean, the pilot, was unhurt.

The emergency wrecking crew, under the able leadership of Staff Sergeant Bright, were kept very busy of late, due to quite a number of forced landings and crack-ups within a hundred mile radius of the airdrome.

This crew is equipped with a White wrecking truck, which was constructed locally about two years ago by converting one of the old war time reconnaissance busses into a modern wrecker. It is capable of picking up wrecked airplanes in almost any condition or position. Too much credit cannot be given this crew for the wonderful results attained in the past. Trips have been made as far as 500 miles away from the airdrome, over the worst kind of roads, and in some cases under very adverse conditions as to locality of the wreck and the terrain of the surrounding country.

Kelly Field, San Antonio, Texas, Sept. 19th.:

SQUADRON NOTES

39th School Squadron: 1st Sgt. Samuel H. Byrne and Staff Sgt. Jack Wolfe are engrossed in the acquisition of a goat ranch in the vicinity of San Angelo, Texas. Upon returning from his last weekly visit to the ranch, Sgt. Byrne said it certainly was restful to sit and watch the goats on neighboring ranches meandering around complacently eating gravel. Sergeant Wolfe complains that the two and only goats on their ranch merely spend the week end there.

Pvt. George Sedlock, who hasn't been to town for two years with nothing but virtue to hold him back, took advantage of a three day pass two days ago. His little brother, Anthony, says George isn't going to get ahead of him, for the minute he gets back with the valise he is going to try one.

Lieut. R.H. Finley, commanding the 39th Squadron, reports his "Barometre Economiques" shows thirteen enlisted men discharged E.T.S. in the last three months, and all re-enlisted. The reason is no military secret.

42nd School Squadron: The entire 42d Squadron, and the baseball team in particular, was honored September 8th by Major Tinker, Post Commandant, when, he presented, in behalf of the squadron, to each of the players a little token in the form of a gold baseball upon which was inscribed the legend "42d Sqdn., Champs '28". Lieut. Healy, our Squadron Commander, made some very appropriate introductory remarks preparatory to the presentation.

In addition to the players, Staff Sgt. Timothy Dodson received one of these little tokens, presented to him by Lieut. Healy in appreciation of his loyalty to and support of the team, and especially of his services as champion bat boy.

San Antonio Air Depot, Duncan Field, Texas, Sept. 1st.

Orders were received for the transfer of 1st Lieut. Harry A. Halverson,

A.C., from this Depot to March Field, Calif. effective, December 13th.

Capt. Lewis B. Massie, Quartermaster Corps, Quartermaster at this Depot, was ordered, for the convenience of the Government, to proceed to his home and await retirement. His retirement, after thirty years' service, will probably take place about the first of the coming year. Capt. Massie, who has been on duty at this Depot for over a year, expects to make his home in San Antonio. His departure is greatly regretted, and he carries with him the sincerest wishes of the Depot personnel on his re-entry into civil life. On Capt. Massie's departure, due to the fact that our official family circle is at present rather more "cozy" than is quite comfortable, by reason of several transfers and extended leaves of absence from this station, it will be necessary that the various duties of Acting Quartermaster, Utilities Officer, Fire Marshal, etc., be added to the already greatly diversified positions held by our Adjutant, Lieut. Brophy.

Among the visitors to this Depot during the past month were 1st Lieuts. Donald G. Stitt, Aubrey Hornsby, Wallace E. Whitson, and Cornelius J. Kenney, A.C., of March Field, who obtained DH-4M-1s from this Depot to ferry back to their station, Lieut. Stitt leaving on August 27th, Lieut. Kenney on the 28th and Lieuts. Hornsby and Whitson on the 31st.

More news from our Baseball Team, the S.A.A.D. "Airmen":

Through consistent hard fighting, in the closest series ever staged in San Antonio, our team won the City Amateur Baseball Championship, when they took the final game of the City Series from the San Antonio Public Service Company Team on August 22d with a score of 4 to 2. The series was featured by three of the tightest games imaginable, with excellent pitching and fielding holding the hitting down. And now the Depot Team has disposed of the City of Austin's Team in its upward climb to the State Amateur Championship. Great credit is due to Lieut. R.V. Ignico, our Athletic Officer, for his untiring efforts in managing and personally working with and supporting the Team through the most successful season a Depot Nine has ever had.

Lieut. A.S. Albro, our Engineer Officer, has been thinning the fish out considerably in the Guadalupe River. Some opinions have been advanced that he will take care of any surplus that has accumulated and will make ample room for the spawning season.

September 1st marked the opening of the Hunting Season, and there is much anticipation, including, beyond a doubt, many contemplated alibis for use against the possibility that some game may escape our redoubtable Nimrods.

San Antonio Air Depot, Duncan Field, Texas, Sept. 17th.

On September 14th this Depot enjoyed a brief informal visit from Major Delos C. Emmons, A.C., of the Office of the Secretary of War.

Major Lewis H. Brereton, A.C., Commanding Officer of the Air Corps Troops at Post Field, Fort Sill, Oklahoma, came in by air on September 14th for a visit to this Depot and to other activities in this vicinity.

1st Lieut. Fred. B. Wieners, is availing himself of a leave of absence for one month and fifteen days, beginning September 14th.

2nd Lieut. Morris A. Schellhardt, Air Corps Reserve, of Pawhuska, Oklahoma, started a fourteen day tour of active duty training, effective Sept. 12th.

Warrant Officer Charles Chester rejoined this Depot on September 12th from a leave of absence since July 5th.

The Engineering Department of this Depot overhauled and repaired the following airplanes and engines during August, 1928:-

Airplanes:- 5 DH-4M-1; 1 DH-4M-1T; 3 DH-4M-2T; 10 O-2; 1 O-2-C; 4 O-2-H; 1 O-2-M-1; 2 O-2-M-4; 3 NBS-1; 2 NBS-4; 2 PT-1; 1 AT-4, 2 VE-9; 1 Pl-B, Total, 38 Airplanes: Engines:- 75 Liberty, 31 Wright E, 1 Wright E-4, 1 Curtiss D-12, Total, 108 Engines.

The Annual Picnic and Barbecue of the San Antonio Air Depot was held in picturesque Koehler Park, San Antonio, on September 13th, under the supervision of the Duncan Field Civilian Club. It was ideal southern autumn weather, and an enthusiastic crowd of from 1000 to 1500 employees and their guests made the utmost of the day. This multitude was efficiently and expeditiously fed in fifty minutes with a profusion of luscious barbecue and "accessories", following which the day was devoted to an exciting and varied program of contests and events, with suitable prizes, ending with dancing to an excellent orchestra.

until far into the evening. There was not a dull moment for anyone during the whole day; and with unanimous voice the greatest credit is given to the officials and committees of the Duncan Field Civilian Club for their handling of the most successful picnic we have ever enjoyed.

Camp Nichols, Rizal, P.I., July 27th.

Flight "B", 2d Observation Squadron: With the transfer and assignment of several new men during the past month, our company strength has increased to 44 men.

All airplanes in this organization have been on the jump during the past month.

Several cross-country hops have been in the march of events so far as flying is concerned.

The visual inspection system consumed a great deal of time and hard study on the part of both officers and enlisted men, but is proving its efficiency over all previous systems.

Headquarters, 4th Composite Group: The headquarters detachment again received a change in Commanding Officers. Captain Charles A. Pursley, A.C., has taken over command. Capt. Pursley comes to us after a long tour of duty with the Organized Reserves.

Lieut. Alfred Lindeburg is now Assistant Post Exchange Officer.

Sgt. Dolliver is working in Post Headquarters. Pvt. McDonough, former Pay Roll Clerk for this detachment, was transferred to the 28th Bombardment Squadron, where he acquired three stripes all at once. Stanley C. Robbins, Operator clerk, was promoted to Corporal. Pvt. 1st Cl. Bain to Specialist 1st Class; Pvt. Ames to Pvt., 1st Cl.; Pvt. Garten to Specialist, 5th Class; and Pvt. Kirby to Specialist, 6th Class.

Pvt. Humphreys returned from furlough on the 10th.

66th Service Squadron: 1st Lieut. Earl S. Hoag arrived on the last transport and was assigned to the Squadron, taking over the duties of Mess Officer, vice Lieut. Harold R. Wells, who was transferred to Flight "B", 2d Observation Squadron, this station.

Staff Sgt. Albert E. Stevenson arrived on the last transport as replacement for Staff Sgt. Jack Guolla.

Tech. Sgt. Leobardo Valtierra, Flight Chief of the Engineering Department, Philippine Air Depot, discharged on July 13th, re-enlisted the following day. He is now counting the days until the sailing of the transport in October, when he will return to the U.S.

An excellent dinner was served on the 4th of July -- turkey and all the "trimmin's". A vote of thanks was given the Mess Sergeant and cooks.

Staff Sgt. Tony Yucius, who is the third oldest member of the Squadron, was discharged on July 22d and re-enlisted the following day.

Cpl. Harold B. Fisher, enlisted pilot, returned to the States on the U.S.A.T. "Grant" for his new station at Mitchel Field, Long Island, going via the Panama Canal. He will take advantage of a three months' furlough before reporting to his new station. We wish him luck.

28th Bombardment Squadron: Staff Sgt. William L. Yount was transferred to the 3d Pursuit Squadron at Clark Field on July 4th. He spent the following week end with us. Evidently, the home ties were hard to break.

Sgt. Adelmo Garcia was promoted to the grade of Staff Sergeant. He has well earned his promotion, and the members of the squadron were glad to see him advanced.

Staff Sgt. Reuben S. Beckham, Supply Sergeant and erstwhile NCO of all trades, is back on his old job.

The prospectus for the post Basketball team looks very promising in the persons of Way, Sarver, Selby and Jones. It might also be of interest to note that the 28th won the inter-post basketball championship, with only one defeat. Privates Stollard and Covington were recently appointed Corporals.

5th Photo Section: Lieut. John D. Corkille, pilot and Lieut. George W. Goddard, photographer, flew to Legaspi and made some interesting photographs of Mayon Volcano, which is in eruption at the present time.

Lieut. and Mrs. Goddard are now touring the Southern Islands.

The Section received two men on the U.S.A.T. "Grant" Privates Kenar and Nelson, both graduates of the Photographic School at Chanute Field.

Kindley Field, Fort Mills, P.I., July 27th.

As usual the week ends were marked with an influx of Manila guests and the usual dinners and entertainment.

Lieut. and Mrs. Meloy gave a farewell party to Major and Mrs. Longino and to Lieut. and Mrs. Hodges early in the month. About forty guests were present, including arrivals from "Topside", Camp Nichols and Clark Field. After refreshments galore, bridge, poker, red dog tables were organized.

Most of the officer personnel at Kindley attended the costume dance of the month at "Topside". Old Kelly Fielders were heard to remark that the party was reminiscent of those yesteryears held at the Aviation Club, Kelly Field. Lieut. Holland stepped out and distinguished himself by winning the costume prize.

The Kindley Field Officers Bowling Team, after a defeat of three straight games, decided that there was too much pressure down at the bottom and began to practice a few days straight and are now near enough to the top to see light and get a fresh breath of air. We have now won seven games and lost five, which puts us in third place among the Coast Artillery Teams. In a recent game the Air Corps bowled a total of 808 points, which is the high score for any team this season. Look out, boys, for Lieut. Rouch, whose average is 160, and Lieuts. Meloy, Dunlap, Patrick and Davidson who also get hot and knock down 170. We will be at the top pretty soon.

Clark Field, Camp Stotsenburg, July 27th.

3d Pursuit Squadron: With the transport "Grant" gone, Clark Field has settled down to a steady routine again. Work on the flying field is still going on and the field is rounding into shape nicely.

The tow target work with the 26th Cavalry was discontinued, due to the fact that the tow target ship with Lieut. McCormick in it caught fire from faulty wiring at a thousand foot elevation. Exhibiting a high degree of courage and efficiency, Lieut. McCormick landed the plane and put the fire out. Unfortunately, the ship rolled into a drainage ditch and washed out the under carriage.

Lieut. George Murray, a new addition to the squadron, was welcomed with open arms by Lieut. Kelly, who previous to this was a lone bachelor.

Luke Field, T.H., Sept. 8th.

Maj. P.E. Van Nostrand, Commanding Officer of the Fifth Composite Group, left for the mainland on the "Cambrai", August 27th to attend the National Air races at Mines Field, Los Angeles. During his absence Capt. Raymond O'Neill assumed command. At the outset of Major Van Nostrand's absence, Capt. O'Neill was ill in quarters, during which time Capt. Henry Pascale steered the ship.

Lieut. George V. McPike left to attend the races on the same boat with Maj. Van Nostrand. Both officers will be back on duty with the arrival of the November transport.

Lieut. J.F.J. Early, recently appointed Athletic Officer has announced an ambitious sports program for the winter months. Following the baseball season just closed, work started at once on the basketball teams. A Field Day program is in the offing which, in all likelihood, will be held on the site of the new baseball grounds being constructed for next season. The arrival of Sgt. Morris Aubree and his assignment to the 72d Bombardment Squadron has stimulated interest in track activities also. Aubree now holds the Second Corps Area championship for the 6 $\frac{1}{2}$ mile run and is one of the outstanding runners in the Army. He barely missed the Olympics this year, although he defeated Corporal Frank Gerny in the eliminations.

Lieut. R.L. Williamson was relieved as Personnel Adjutant and assigned as Engineering officer of the Fourth Observation Squadron. Lieut. J.C. Shively was appointed Personnel Adjutant to relieve him.

Lieut. Motley has assumed the duties of assistant Group Operations officer and Group Information officer.

Major P.E. Van Nostrand, commanding officer of the Fifth Composite Group, was recently elected Post Commander of Fox-Cornet Post No. 9, American Legion, to fill the unexpired term of Lieut. R.H. Magee.

The membership of the Legion post at Luke Field now includes 95 per cent of the officers and men of the Air Corps in the Hawaiian department who are

eligible, according to the records of the Post Adjutant.

Several reforms have already been instituted by the new commander, which are expected to result in added interest being taken in Legion affairs. Not the least of these is the formal initiation of new members and an active membership campaign. That the new commander will have the full cooperation of the entire post is indicated by his unanimous election to the office.

Air Depot, Middletown, Pa., Sept. 5th.

During the month of August five airplanes were given major overhaul at the Middletown Air Depot, including one bomber, three observation and one pursuit plane. Three planes were received for major overhaul, and eleven planes are in process of going through the shops. Nineteen Liberty engines and nine Curtiss D-12 engines were turned out by the Engine Repair Department.

During the month the Depot Supply shipped 7 carloads of material and received 7 carloads. In addition to the above, there were 264 L.C.L., parcel post and air shipments made, and 133 received. Total weight of material shipped was 179,000 lbs. Total weight received, 170,000 lbs. Money value of shipments made, \$473,519.00 and of shipments received, \$163,262.00.

The 103d Observation Squadron, Pennsylvania National Guard, under the command of Major John S. Owens, encamped at this Depot from July 28th to August 11th. During their training period here, several of the junior officers were given Airplane Pilot and Junior Airplane Pilot ratings by a board of officers convened to examine them at this station.

Cross-country flights during the month included the dedication of airports at -

Williamsport, Pa. - August 18th.
Towanda, Pa. - August 19th.
Selinsgrove, Pa. - August 24th.
Sunbury, Pa. - August 31st.

Reserve officers on active duty for a two weeks' period of training at this station reported as follows:

Capt. Arthur Wilson - August 1st
1st Lieut. Clarence W. Welsh - August 1st
2d Lieut. Herbert R. Hare - August 1st
1st Lieut. James E. Scheirer - August 2d
1st Lieut. Arthur W. Williams - August 29th

Maxwell Field, Montgomery, Ala., Sept. 6th.

During the month of August a considerable number of visiting planes, Army, Navy and Civilian, landed at this field.

The period of July 1st to August 25th was devoted principally to the training of Reserve Officers reporting for two weeks' summer training.

Two more Reserve Officers reported for an extended tour of active duty for one year at this station, making a total of nine in all here now.

Lt. Herman F. Woolard, A.C., ferried a PW-9-D plane from Dayton, Ohio, to San Diego, Calif., and was accompanied on his return by Lt. Narcisse L. Cote, A.C., of this station, each ferrying an O2-H plane from Santa Monica, Calif., to this field.

Lts. Roscoe C. Wriston, and Russel C. MacDonald, A.C., of this station, departed by train for California to ferry back here two O2-H planes.

Lt. Wendell B. McCoy, A.C. (DOL) left by train August 31st for California to ferry back another O2-H plane for use at this field.

As per usual, quite a lot of tow target work was done in connection with Fort Barrancas, Fla., and Fort Benning, Ga.

On August 17th Lieuts. Jas. G. Pratt, A.C., Reuben Kyle, Jr., A.C., and Isaac W. Ott, Air-Res., made a flight to Myrtle Beach, N.C., to participate in the opening of a new municipal airport there.

During the early part of August Lieuts. Wendell B. McCoy, A.C. (DOL), Robert C. Ashley, Isaac W. Ott, Pilots; with Capt. Robt. J. Platt, M.C., Lieuts. Murray C. Woodbury, Air-Res. and Wm. J. Persons, Air Res., passengers, flew to Shreveport, La., to assist in the opening of the new airport at that point.

France Field, Panama Canal Zone, August 27th.

Senator and Mrs. Barkley and Miss Barkley of Kentucky, paid France Field a visit recently and were given a hop across the Isthmus in a bomber. They seemed to be more than pleased with their flight.

Lieut. Le Brou had another forced landing, this time in a PW-9 at Aguadulce, Republic of Panama. The plane was damaged to such an extent that it required sending spare parts from France Field by bomber. Lieut. Hutchins started up to Aguadulce with the bomber and, upon arrival at Rio Hato, was forced down due to one of his motors freezing on account of loss of water. It was then necessary to send another plane, piloted by Lieut. Zane, to take a spare motor to Lt. Hutchins, pick up the spare parts for the PW-9, and take them on to Aguadulce. All three planes returned within a couple of days, seemingly no worse from the mishap. It seems that this is one time that the old saying that three accidents in a row must happen together, was disproved.

Lieut. E.E. Harmon, upon his arrival here, was assigned to the 25th Bombardment Squadron and, using the military phraseology, he was, in addition to his other duties, assigned as Marine Transportation Officer and Officer in charge of boxing.

Lieut. Harold C. King, returned from detached service at Langley Field and leave of absence in the States wearing the new Distinguished Bomber and Gunnery Medals awarded him while at Langley Field. This makes a total of five officers at this station who are wearing these medals.

Upon completion of the Annual Small Arms Target Practice with the .45 caliber Pistol, it was found that the 24th Pursuit Squadron won the Department Commander's Trophy (an old type Service Pistol, nickel plated), they having attained the highest percentage of qualification on the post with an average of 83.5.

Staff Sergeants Gilmore and Adcock arrived at this station from March Field and Kelly Field, respectively, on August 21st. Sgt. Gilmore was assigned to the 63d Squadron as replacement for Staff Sgt. Murdock, and Sgt. Adcock was assigned to the 25th Bombardment Squadron as replacement for Sgt. Lofley.

Major Peabody paid France Field a visit during the stay of the Transport "Grant" in Panama, en route to New York. Major Peabody is en route to the Field Officers Tactical School at Langley Field. He seemed to enjoy his stay here very much. He was the guest of Capt. Herold while at this station.

The France Field Pistol Team held another Pistol Competition at France Field on August 26, 1928. Representatives from the Balboa and Cristobal Police Departments, the Balboa and Cristobal Gun Clubs, the Second Field Artillery and the Navy and Marine Corps shot in the competition. The course was the prescribed National Match Course cut in half and was won by the Cristobal Police, who fired with the .38 cal. Smith & Wesson Target Pistol with the six inch barrel. Second place was taken by the combined Navy & Marine Corps Team, using the .45 cal. Automatic Colt. Third and Fourth places were taken by the two teams from France Field.

Sgt. Herman of the Cristobal Police won 1st place. Lieut. Crocker and Mr. Sgt. Lucy were high guns for France Field. There were about 250 pistol enthusiasts on the range during the shoot and, regardless of the fact that there was a drizzling rain during the entire day, everyone seemed to enjoy himself very much.

Brooks Field, September 8th.

The entire flying instructor personnel of "A" and "B" stages flew to Eagle Pass on Friday, August 24th for lunch, returning the same day.

On August 27th, Lieut. L.P. Hudson received the sad news that his father had died and that the funeral services would be held on the thirteenth. Lieut. Hudson left by air at 4:30 A.M. on the 28th for Bolling Field to attend the services.

Other cross-country trips made by officers of this station since the last writing were:

Sept. 1st, - Lts. Stroh and Walbridge took off for Madagorda Island down in the Gulf and returned the 3d.

Lt. Carlson and Pvt. Lamar departed for Okmulgee, Okla., on the 1st and returned the 3d.

Maj. S.W. FitzGerald and Lt. D.D. Watson flew to El Paso, Sept. 2d. Lt. Watson returned to Brooks and Major FitzGerald continued on to California.

Lt. Chennault with Mr. Hair as passenger flew to Derby, Texas and returned the same day.

Lieut. Bryte flew Staff Sgt. Martin to Fort Clark on Sept. 7th. Sgt. Martin is assigned to duty at the Airways station there.

Lieuts. Holmes and Fritch visited Dallas, returning the same day.

Lieut. R. Day with a mechanic flew to Houston on Sept. 6th, returning the same day.

Langley Field, Va., Sept. 5th.

19th Airship Company: On Sept. 6th, at 7:00 A.M., the old aircruiser, TC-10-254, under the command of Lieut. B.T. Starkey, assisted by Warrant Officer R.E. Lassiter, and the U.S. Navy airship J-4, which arrived at Langley Field on Sept. 5th, under command of Lieut. R.F. Tyler, U.S. Navy, took off from the local station for the Naval Air Station, Lakehurst, N.J., home station of the J-4. The ships left Langley Field in a formation flight, and after encountering strong head winds all way up, arrived at Lakehurst, N.J., at 1:15 P.M. While at Lakehurst, the TC-10-254 made a flight to Governors Island, N.Y. on the 10th, for the purpose of training for Colonel T.A. Baldwin, Air Officer, 2d Corps Area, and on the 11th Colonel C.G. Hall, A.C. and Lieut.-Col. Ira F. Fravel, A.C., were given training flights in TC-10-254 at Lakehurst. The airship returned from Lakehurst, N.J., on the 12th, at 5:50 P.M., after battling thunderstorms and head winds for seven hours. The ship endeavored to follow the coast line on the flight from New Jersey, but was the plaything of variable winds and at one time was swept to sea and at another was carried inland a few miles off her course. "We're lucky to get here", remarked Lieut. Starkey, as his ship settled down on her home field at sundown.

There were no special missions during the past week and our flying was limited to a number of training and test flights near the home station.

1st Lieut. John M. Perkins, Air Corps Reserve, reported for duty with this organization for a period of two weeks beginning Sept. 15th.

Rockwell Field, Coronado, Calif., Sept. 20th.

Rockwell Field was host to Major Ralph Royce and eleven officers of the First Pursuit Group, Selfridge Field, both before and after the National Air Races at Los Angeles.

The officers, under command of Major Royce, who made the flight west, were: Capt. Strahm, Lieuts. Haddon, Stoner, Lawson, Klein, Egan, Robinson, Irvin, Kenyon, Doolittle and Schonlein.

Nine Keystone LB-5 Bombers from Langley Field, commanded by Maj. Knerr, stopped at Rockwell Field for service while en route to and from the National Air Races. The huge planes made the transcontinental flight without mishap or any serious delays.

Maj. Clagett, Air Officer of the Ninth Corps Area, and Maj. Harmon, Commanding Officer of March Field, were frequent visitors to Rockwell Field the past two months.

Nine planes of the Third Attack Group, Fort Crockett, Texas, commanded by Major Jouett, visited this field on their way to the Races at Los Angeles, and again stopped here before returning to Galveston. The visiting officers from the Third Attack Group included: Capts. Wooten and Heison; Lieuts. Newstrom, George, McNair, Gross, McHenry, Acheson, Williams and Anderson.

General Fechet, Chief of Air Corps, was a guest of Major Sneed while visiting Rockwell Field on his return to Washington from the National Air Races at Los Angeles.

Congressman W. Frank James, chairman-elect of the Military Affairs Committee, House of Representatives, arrived at Rockwell Field, by plane on Sept. 16th, and departed the following day for Washington, in tri-motored Fokker transport.

Brigadier-General E.E. Booth, Assistant Chief of Staff for Supply, War Department, visited Rockwell Field, Sept. 19th, on official business.

Major Delos C. Emmons, A.C., from the Office of the Chief of the Air Corps, visited this station Sept. 19th.

A letter of appreciation has been written to the Chamber of Commerce, Santa Ana, Calif., for the hospitality and courtesy extended the pilots of the Ninety-fifth Pursuit Squadron upon their recent sad mission to that city in

connection with the funeral of late Lieut. John J. Williams, Air Corps.

Major F.E. Parker, Finance Department, arrived at Rockwell Field, Sept. 20th, for purpose of auditing property accounts.

Chanute Field, Rantoul, Ill., Sept. 25th.

There was a scurrying of feet in a certain office in the Munitions Building. "Someone has fainted", was the cry which caused the commotion. A small crowd gathered around the recumbent form of ye editor of the News Letter. "Give him a drink", someone suggested. This suggestion aroused the scribe from his stupor sufficiently to hear some unfeeling wretch suggest "Give him hair." The cause of this temporary passing out episode was explained when it was noticed that tightly grasped in one hand was a contribution to the News Letter from Chanute Field.

Seriously, we are glad, indeed, to hear from "Old Shinoot", and we hope contributions from that neck of the woods will reach us regularly from now on.

But to quote the contribution - On Sept. 17th, Lieut. Loutzenheiser flew to Fort Leavenworth in an A-3 with Capt. Kirk Mason, Medical Corps, as passenger. The same day Corp. Swisher took an O2 to Fairfield Depot to change engines. He was accompanied by Staff Sgt. Anderson.

Lieuts. Warren and Post made a round trip to Cleveland in an A-3 on the 19th. Tech. Sgt. Jackson flew to Dayton to bring back Lt. Robinson who had taken a P-1 down the day before.

On the 22nd Lieut. Loutzenheiser hopped to Rochester, Minn., in an A-3 and returned with Congressman Maas the next day. That afternoon the Lieut. flew to Chicago and return.

Lieut. Peterson flew Capt. Palmer to Indianapolis and return.

On the 25th Lieut. Roberson took off for Baltimore in an A-3 with Capt. Miller, QMC, as passenger.

The baseball season closed last Saturday, after an exciting race during the last two weeks. Two schedules constitute the season and the winner of the first plays the winner of the second for the post championship. Headquarters won the first and tied with Photo and Mechanics for the second. Mechanics won out in the three game elimination series, and also captured the Trophy in the final series. Headquarters was handicapped because the personnel of that section is largely transient.

On Sept. 21st Lieut. McNeil, Recreation Officer, staged the biggest boxing match ever held at Chanute Field. He had as contenders Les Marriner, the new sensation from the University of Illinois and Oscar Baker of the Pacific Coast.

Marriner won fifteen of his fights via the knock-out route, losing one on decision and winning one the same way. The affair was held in the new outdoor arena built by the Recreation Department this summer. Marriner put his man away for the count in the 3rd round. The semi-windup presented Jimmie Sayers and Red Rodman, both Hoosiers, in the 118 pound class. There was plenty of action and it was really a better show than the big boys put on. Two other bouts and a battle royal completed the show. The new Air Corps band, under Warrant Officer Lindstrom, entertained with an hour's concert before the battling began. About three thousand were present and went away satisfied with the matching and promoting. The next card will be presented Oct. 26th in the gymnasium. We will be able to seat about two thousand people inside.

Lt. McNeil developed into quite a fight promoter and, we can say, a successful one. All the boxing matches held since his appointment as A & R Officer were good ones, even though two or three were not financial bonanzas. In the total, however, there is a profit in the shape of a new arena and band stand and plenty of seating facilities for any kind of athletics or entertainment.

The first of the season's dances sponsored by the post will be given early in October. Several new ideas in regard to the staging of such dances will be tried out.

Of course, there will be considerable regret that several of the well liked officers must take up their duties at other fields. Lt. Yeager goes to the Islands, Capt. Devery to Bolling and Capt. Johnson has already gone to Hawaii. But -- such is the army.

Marshall Field, Fort Riley, Kans., Sept. 27th.

The 16th Observation Squadron settled down to routine business since the Air Mail Detail from Superior, Wisc., returned to the station. We believe we did good work, considering the type of flying done, and the weather in that section. There were a few major crashes due to fog, but in no case was there serious injury to personnel. Lieut. Charles T. Skow, who was in charge of the detail, has gone on a well earned leave of forty-six days.

Lieut. M.C. Robinson just returned to this station after an extended trip to Superior, Wisc., Chanute Field and Dayton, Ohio, where he inspected the Air Corps Supplies for new ideas to be put into effect at our station. Lieut. Robinson had quite a few tough experiences while on the trip. He encountered a heavy fog near Superior and was forced down with a crash as the result, but proceeded without further damage. After installing a new motor at Scott Field, another forced landing was made near Kansas City on account of a broken throttle. The ship was slightly damaged.

Ten planes from the 1st Pursuit Group, Selfridge Field, under the command of Major Ralph Royce, arrived here at 4:00 P.M., Sept. 5th and departed on the 6th en route to Los Angeles to the Air Races.

Major General Fechet, Chief of the Air Corps, paid us a visit Friday, Sept. 21st. The General arrived at 4:00 P.M., in an O-2H piloted by Lieut. Quesada, accompanied by Senator James and mechanics in a Fokker Tri-motored transport piloted by Lieut. Dinger. The planes took off for Chanute Field at 8:15 A.M., Sept. 22d.

Lieuts. Hix, Munson and Wright delivered three O-2H planes to Fairfield for overhaul last week, carrying two passengers en route to Washington. These men were brought to this field in a Douglas transport from San Antonio, Texas.

Lieuts. Rice and Brownfield made a trip to Miles City, Montana, to assist in the dedication of a new airport there. They reported a fine trip and returned with a large supply of game which they shot while on the trip.

The 16th Observation Squadron took a tactical hike to Marion, Kansas, Sept. 12th and remained in camp until Sept. 14th. The entire Squadron participated in this hike, and was transported by eighteen trucks and four airplanes. A demonstration was made while there for the benefit of the Old Settlers' Celebration then in progress.

March Field, Riverside, Calif., Sept. 24th.

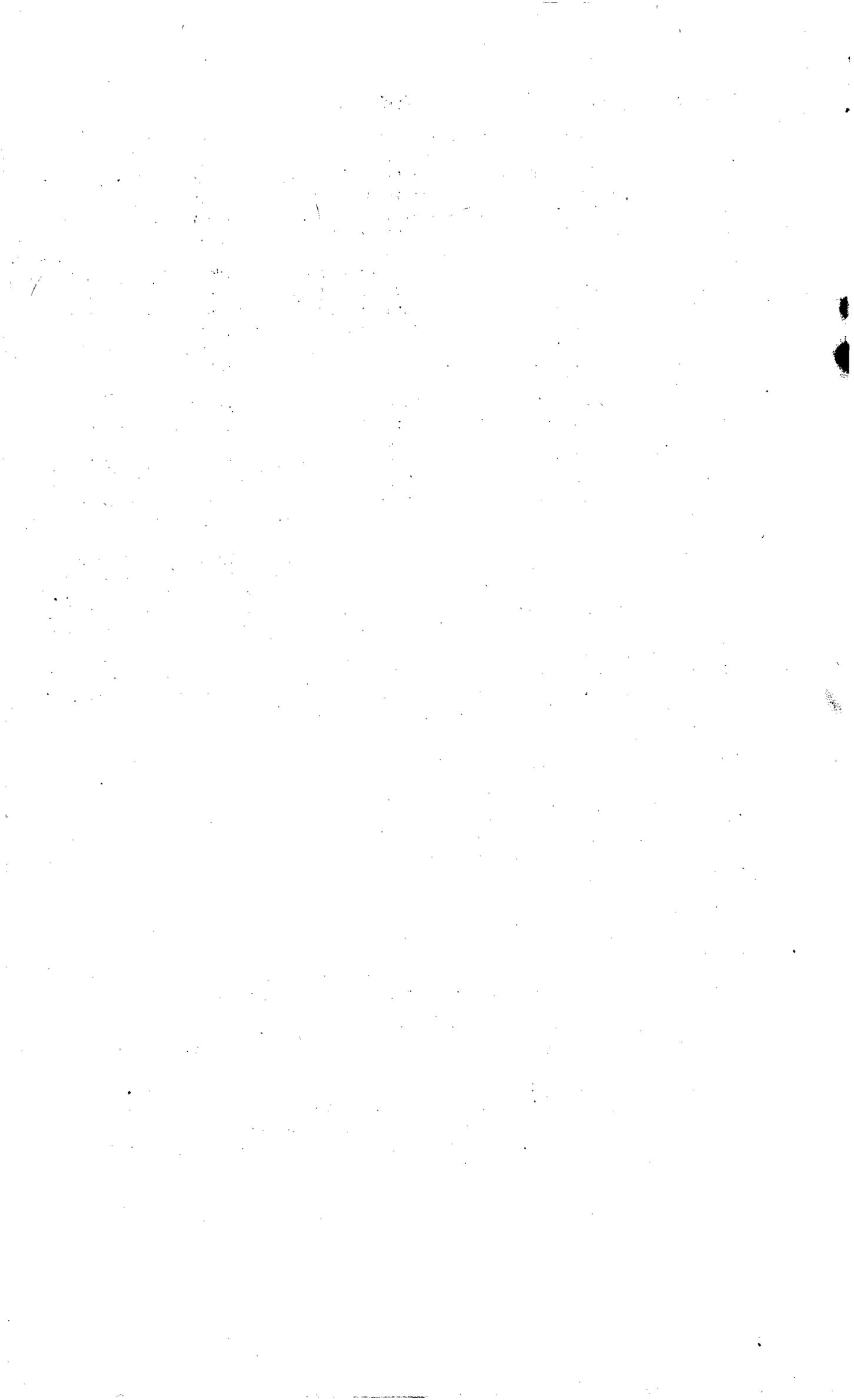
Cpts. Arthur B. McDaniel, Louis R. Knight and 2nd Lieut. R.W. Harper, were on temporary duty at this station during the month for a short period. The purpose of their visit was the coordinating of the records of the flying schools.

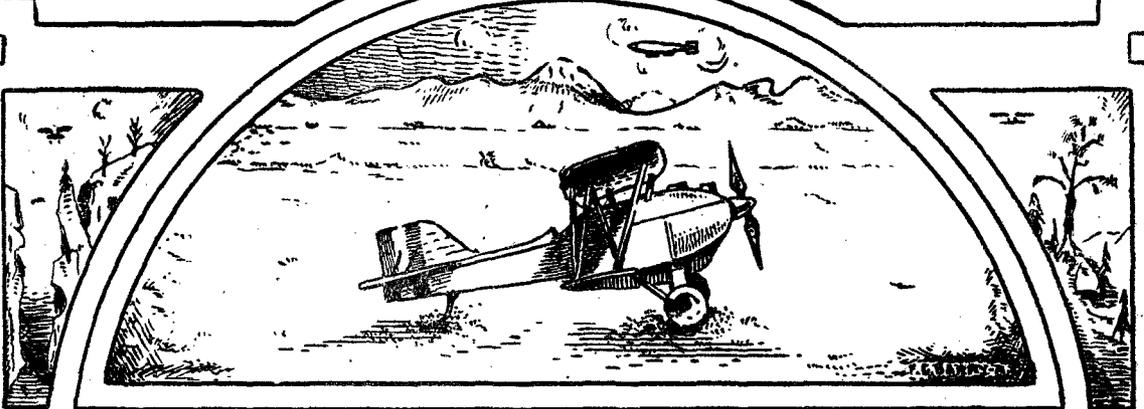
March Field is singing the praises of their quintette of parachute jumpers in the Air Meet at Los Angeles. With five men entered, March Field was awarded first, second and fourth places in the final results and brought home \$800.000 of the prize money. Sgt. Wehling placed first, Pvt. Garjola second and St. Sgt. Utterback took down fourth money. 1st Lieut. Frederick V.H. Kimble, A.C., piloted the plane from which the men dropped.

Major L.A. Walton, A.C., reported to this station during the month from the Philippines and was designated as Assistant Commandant. He will have active charge of all training activities.

Sixteen flying cadets said good-bye to the school during the month, all due to the lack of 'inherent flying ability'. At the present time 150 students are under instruction.

Congratulations are being extended to Cpts. B.T. Burt, Earle G. Harper and 1st Lieut. Hoyt S. Vandenberg, who recently received promotions. Captain Harper assumed command of the 47th School Squadron, in addition to his duties as Post Exchange Officer. Captain Burt will continue his duties as School Secretary.





Air Corps
News =
= **Letter**



— ISSUED BY —
OFFICE CHIEF OF AIR CORPS
WAR DEPARTMENT
WASHINGTON, D. C.

TABLE OF CONTENTS

—oOo—

	<u>Page</u>
Army Flyers Create New Altitude Record	380 - 383
99th Observation Squadron to be Reconstituted	384 - 385
Graduated Flying Cadets Assigned to Active Duty	385 - 386
Chief of Staff Visits Brooks Field	386
Brooks Field Entertains American Legion Delegates	386 - 387
Sea Sleds Prove Worth in the Emergency	387
Birds Endanger Night Flying Army Pilots	388
Supply and Engineering Conference at Wright Field	388
Flying Commissary in Canal Zone	388 - 389
Barge Used for Bombing Practice	389
Some Dope on the 88th Observation Squadron	389
Training at the Air Corps Technical School	389 - 390
Large Refueling Truck Tested at Wright Field	390 - 391
Army and Navy Air Forces in Combined Aerial Review	391
Death of Lieut. William L. Cornelius	391
Duration Flight at Rockwell Field	391
Caterpillar Club Roster one shy of Century Mark	392 - 393
Practice Parachute Jumps at Brooks Field	393
New Officers for the Air Corps	393 - 394
War Department Orders Affecting Air Corps Officers	394 - 395
Primary Flying School Graduates Transferred to Kelly Field	396
Cartoon	397
Notes from Air Corps Fields	398

Information Division
Air Corps

October 29, 1928

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

---oOo---

ARMY FLYERS CREATE NEW ALTITUDE RECORD

Rising to a height of 37,854 feet, two Army airmen, Captain St. Clair Streett, pilot, and Captain Albert W. Stevens, observer and photographer, created a new altitude record, in that they ascended to the highest mark above the ground ever reached by an airplane carrying more than one occupant.

While the above flight was made on October 10th last, the two recording barographs carried in the plane, both of which functioned perfectly, have just been calibrated by the U.S. Bureau of Standards and the Air Corps informed of the result by the National Aeronautic Association. No categories for record flights in planes carrying more than one occupant have been established by the Federation Aeronautique Internationale, the world's aeronautical governing body, under the belief that the creation of such additional categories would serve to introduce endless complications. The two-man altitude mark established by Captains Streett and Stevens will, therefore, constitute an unofficial record only.

The present altitude record for airplanes (38,418 feet) was made by Lieut. C.C. Champion, U.S. Navy, at the Naval Air Station, Anacostia, D.C., July 25, 1927. It will thus be seen that Captains Streett and Stevens only missed by 564 feet of matching the official world's altitude record for heavier-than-air craft. Air Corps officers are of the belief that, had Captain Streett been the sole occupant of the plane on this particular flight, he would have created a new world's altitude record. The purpose of the flight, however, was not to create a new altitude record but to test camera equipment in the rarefied atmosphere as well as to experiment with a new method of obtaining altitude measurements by means of photographs. Relieved of the weight of Captain Stevens and the photographic equipment carried along, the plane would have been some 225 pounds lighter. In altitude flights, an additional weight of such proportions, especially when reaching the thin air strata, proves no mean handicap.

The airplane piloted by Captain Streett was the XCO-5, the same one which had been used by former Lieut. John A. Macready and Lieut. Wm. H. Bleakley, Air Corps, on their previous altitude flights. It was equipped with the latest type supercharger. The airmen took off from Wright Field, Dayton, Ohio, at 11:00 a.m., and returned to their home base at 5:00 p.m. When their supply of gasoline became exhausted they were about seven miles above sea level.

It may appear rather strange that the pilot apparently miscalculated the length of time he was in the air and permitted his gasoline supply to become exhausted. As a matter of fact, however, Dame Nature took matters into her own hands and kept the flyers in the air against their will. The intense cold at the ceiling of the plane had shrunk the metal parts of the throttle and supercharged controls to such an extent that they were immovable. It was not until Captain Streett finally managed to reach about 34,000 feet that the cold abated sufficiently to permit the controls to again become movable. When this came to pass, the gasoline supply had been used up, and there was nothing left to do but to make a long glide for it in order to reach terra firma again.

Captain Streett calculated that he would be able to glide back to Dayton, but adverse wind currents brought the plane down in a dead stick landing near Rushville, Indiana, 70 miles from the place they ran out of gasoline. Here they shed their heavy clothing, obtained 50 gallons of gasoline, and took off for Wright Field.

The liquid oxygen used on the flight functioned perfectly. The supply proved more than ample, and no ill effects whatever were experienced by the airmen during their sojourn into the intensely cold upper air regions.

Despite the intense cold at the ceiling of the plane, Captain Stevens was able to manipulate his camera without the least bit of difficulty. A small gadget, slightly larger than a rifle cartridge, enabled him to move his fingers as nimbly as though he had been working on the ground. This cartridge is a

miniature electric heater slipped into an asbestos pocket across the fingers of the heavy leather mittens, designed to enable the observer to use his hands at all times for camera work at high altitudes. Just to test the effectiveness of this little device, which was fed from the ignition battery, Captain Stevens momentarily slipped it off one hand. The moment he did so, however, his fingers started to become numb.

The airmen wore electrically heated goggles. A 3/8-inch hole just over the pupil of the eye in each lens was drilled in order to enable the wearer to see in the event the rest of the lens became coated with frost. The condition anticipated became an actuality during the flight. When the plane reached the upper air regions where the intense cold prevailed, the goggles became coated with frost. Had it not been for the small hole drilled in each lens, the airmen would not have been able to see at all. As it was, they were forced to cock their heads in all directions in order to see any given object.

The story of the flight is best told in the words of Captain Stevens:

"A plane will climb to practically its maximum ceiling in an hour. Captain Streett and I had agreed that at the end of an hour an extra 25 minutes would be spent trying to get a few hundred or few thousand feet more. We took off at a little after eleven o'clock. Every two minutes we took readings of time, indicated altitude and temperature, and made a vertical photograph from which later to calculate the actual altitude. Everything went fine, and at the end of an hour and 20 minutes I was elated to see the hand of the altimeter in my cockpit approach the 40,000-foot mark.

"For the next five minutes I was very busy making as many exposures as possible, and at the end of this time the hand was at 40,200. This meant that we were at about 37,500 feet above sea level, yardstick measure. I turned and tapped Streett on the shoulder, this being the signal previously arranged that time was up.

"Streett had been experimenting with different air speeds, and was climbing at the time at between 52 and 54 miles an hour, indicated. He nosed the plane down, the air speed mounted to 95 miles, and looking back into my own cockpit, I saw the hand drop back in a few minutes to 37,500 feet and later to 34,000. The temperature, which had been 76 below Fahrenheit, or 60 below centigrade, rose to minus 48 centigrade. Seventeen minutes later we were still at 34,000 feet and, to my amazement, 24 minutes from the time we had started our descent, we were at 34,700, indicated.

"I thought to myself: 'Streett certainly must like this thin air up here. Why in thunder doesn't he reduce the engine speed and get us down out of here. Doesn't he know that at this rate we haven't hardly any gasoline left?'

"From time to time I looked over his shoulder, saw the engine was running at full throttle, with full supercharger on, that our air speed was still over 90, and that we weren't losing altitude; in fact, we were gaining a little. I could see him pull on the throttle levers from time to time, and noticed that one of them was twisted out of position. What had happened was that the intense cold during the comparatively long stay at ceiling had shrunk the metal parts of throttle and supercharged controls so that they were immovable. That is, Captain Streett could not shut the engine off. Furthermore, he did not dare to intermittently cut the ignition switches, for this would have let a flood of raw gas into the supercharger passages, and likely cause a fire. To cut them completely would mean very likely a ruined engine, and certainly a frozen radiator. So he kept flying, trying to force the plane lower with engine. Due to the low factor of safety of a plane of this type, he could not raise the air speed to more than 95 miles per hour in a glide; and yet, at this speed, or a lower speed, it started to climb again.

"In short, we couldn't get down below 34,000. Although the temperature was 48 below centigrade, it was relatively warmer, and the controls finally became movable, but too late, for the engine had begun to sputter. Captain Streett closed the radiator shutters, pulled back the throttle, and we began to drop.

"The propeller still turned rapidly from the push of the plane, and at intervals a few spoonfuls of gasoline would slop from the practically empty tank into the carburetor line, as the plane lurched into air pockets. With the ignition switches still on, the engine would sputter from time to time, and fortunately kept warm enough to keep the cylinder jackets from freezing.

"In this fashion we glided from 34,000, and at 20,000 the engine quit completely. At one time we were almost over Indianapolis and, although our glide was headed in the direction of Dayton, we were still 75 miles away when the

ground began to loom up close. From our tremendous altitude, Streett had plenty of time to look the country over, and had decided on one of the largest fields in view, a field half a mile long and 30 rods wide.

"Now a plane of this type has no air feel at all, compared to regular planes. In other words, it flies like a barn door. Consequently, it was a really remarkable feat when the Captain flew by the end of the field, banked the long wings of the plane at 60 degrees, did a 270 degree turn, landed with a dead stick, rolled to a stop, and still had two-thirds of the field left.

"We shed our heavy flying clothes, got 50 gallons of high test gasoline from the nearest town, Rushville, Indiana, and at 4 o'clock took off for Wright Field, where we landed before five o'clock. We still had over 10 pounds of liquid oxygen left in our vacuum jacketed vaporizers. This happens to be the first flight ever made entirely with liquid oxygen, without compressed oxygen also being carried as a safety factor, and demonstrates the degree of reliability of the apparatus which had been designed by the Materiel Division of the Air Corps."

The following editorial, which recently appeared in a newspaper of prominence and long standing, may prove of interest in connection with Captain Stevens' story of the flight:

"Of all incredible mishaps, the one which even Baron Munchausen forgot to mention has just befallen two of the Army flyers at Wright Field, Dayton, Ohio. Captains Streett and Stevens attained a height of 40,200 feet and then could not come down. It is explained that the throttle was frozen. But when two expert aviators had to sail around until their fuel was exhausted, they are lamentably like the celebrated motorists of the early days who circled the block eighty-seven times because he had forgotten how to stop."

This particular editorial writer is evidently not very familiar with the history of Army aviation, otherwise he would have remembered that Captain Streett was the leader of the New York to Nome, Alaska, flight back in 1920. Knowledge of this fact would have deterred him from even thinking it strange that Captain Streett cruised along in the frigid atmosphere until a dead engine forced him down. Captain Streett has to his credit several years of service with the First Pursuit Group at Selfridge Field, Mt. Clemons, Mich., and they say that it gets pretty cold up there in the dead of winter. As a cold weather flyer, the Captain has few, if any, equals among American aviators.

Seriously speaking, however, it is just too bad that this particular newspaper has not yet reached the stage where it considers aviation of sufficient importance to assign a man with a knowledge of this science to write the editorials and other material relating thereto.

In the first part of this article mention was made of the utilization of high altitude photographs as a means of obtaining altitude measurements. To illustrate this new system of altitude measurement, if three or more points on the ground are shown, the distances between which are known, from accurate ground survey data, by measuring the distance of the image separations on the negative and knowing the distance from the negative to the optical center of the lens in the camera (the focal length), the problem of the length of the perpendicular dropped from the lens to the ground becomes a geometric one of similar triangles, and can be figured in feet or meters to within one-tenth of one percent mathematical accuracy.

Captain Stevens plans to make a comparison of the results obtained through camera calculations with those obtained from the barograph formula used by statisticians in the Bureau of Standards. His findings will no doubt prove very interesting.

An official report was recently received on the high altitude photographic flight made on September 23rd by Lieut. James H. Doolittle, pilot, accompanied by Captain Albert W. Stevens, observer and photographer. The purpose of this flight was to test photographic and certain other high altitude equipment, and the altitude reached was 37,200 feet, as determined from preliminary calculations of photographs, subject to a check of the focal length of the lens.

The ascent consumed one hour and 25 minutes, including 20 minutes at the ceiling of the plane. The descent to the ground required 45 minutes. It appears that the oxygen carried was not sufficient for the two occupants of the plane. Captain Stevens temporarily lost consciousness, and Lieut. Doolittle became semi-unconscious just before turning the nose of the plane downward. Both revived completely as lower altitudes were reached.

At the maximum altitude, a temperature of 57 degrees below zero, Centigrade, (-70.6 deg. Fahr.) was encountered. The clock froze, as did one of the spirit levels of the camera, also a spot on Captain Stevens' cheek. Lieut. Doolittle found the controls extremely hard to manipulate because of the extreme cold. The camera was covered with ice.

The plane piloted by Lieut. Doolittle was the Materiel Division XCO-5, which was used by Lieut. Macready in 1927 in making his world record altitude flight. Eighteen photographs were obtained, several from the peak height. In spite of a scattering of clouds at 6,000 feet, they show the highways and outstanding structures of the territory beneath with remarkable clarity. So distinct are these pictures, in fact, that they could stand enlargement to ten diameters. Under war conditions they would be of untold military value. The area covered by the exposure is 33 square miles.

The military value of high altitude photographs has been proven heretofore, however, and on this expedition they were taken to serve a new purpose. The computation of altitudes in terms of feet or meters has always been worked out on a necessarily theoretical basis. The barograph (recording altimeter) records are taken, and from a fixed formula in which average temperatures for the different altitudes are arbitrarily assumed, the particular altitude in question is worked out. This method adopted by the Federation Aeronautique Internationale for calculating height in feet or meters is simply a method, not necessarily accurate according to tape line measurements, but it being impracticable to drop a tape line down perpendicularly from 35,000 feet or so, or in any other way to obtain actual physical measurements, it arrives at as nearly an accurate reckoning as is possible with the knowledge at hand. These computations invariably bring about a change in the altitude as shown on the barograph, the correction usually bringing the figure downward. Nor do the different organizations always agree on the results. In 1921, for instance, in computing Lieut. Macready's altitude record, the altimeter reading was 41,200 feet. Calibrations worked out by the Bureau of Standards brought the figure down to 39,000 feet. Later, under another method of computation, the figure was reduced to 37,800 feet and, finally, under the F.A.I., it was computed as 34,509 feet.

It is not desired to give the impression that the photographic method of calculation will take the place of that obtained from the barograph for high altitude work. From the standpoint of the airplane and supercharger designers, it would be far more valuable to know the measure of air density through which a plane is capable of operating than the actual physical distance above the ground it has attained. It is possible that a plane might climb to a certain altitude one day, which, because of different air density conditions, it could not reach on another. Consequently, the high altitude engineer must work for a plane which will travel through the medium of lightest air rather than for one which will travel the greatest number of feet above the earth. Just how frequently these two conditions would tally is not certainly known, and it is expected that the photographic computations in conjunction with the F.A.I. computations will throw much light on this subject.

For the computation of altitude records in terms of public understanding and to obtain the actual height in tape line feet or meters, it would seem that the photographic method would be invaluable. And, as a minor consideration, with officials getting the camera and focal length dimensions before take-off and taking possession of the film upon descent, the possibility of dispute or fraud would be completely eliminated.

Two types of goggles were tested, one, electrically heated, the other a double lens type with an air space between the lenses. The former were quite successful, but the inner lens of the latter frosted over from the moisture from the skin and eyes and finally became opaque. Captain Stevens had drilled a 3/8-inch hole just over the pupil of the eye in each lens of a pair of standard goggles, which it is thought will enable him to see through when the rest of the lens is frosted, with sufficient protection to the eye to obviate injury.

Electric heating devices have been applied to the clock and the camera, also the miniature heater, in the shape of a cartridge, for keeping the hands warm, and which has already been previously mentioned. These electrical installations use remarkably little power from the 12-volt system. The clock takes 9 watts, the camera 40 watts, the gloves 10 watts each, and the goggles, having no insulation, take 40 watts.

99TH OBSERVATION SQUADRON TO BE RECONSTITUTED

The 99th Observation Squadron, which is to be reconstituted on November 1st next at Mitchel Field, N.Y., was organized August 21, 1917, at Kelly Field, San Antonio, Texas, under the command of 1st Lieut. W.T. White, A.S., O.R.C., and on November 14th of that year, under the command of Captain Wm. E. Goodman, Jr., embarked on the White Star liner CEDRIC for England. It arrived at Tours, France, on December 12th, it being the first complete American aero squadron to arrive at the 2nd Aviation Instruction Center.

Men were assigned to special duty in various training departments, and they became familiar with the foreign types of planes and motors with which they were soon to have experience at the front. Lieut. Andrew W. Shiland took command of the Squadron on February 25, 1918, and on March 30th was succeeded by Major Arthur R. Christie. The Squadron, composed of three officers and 136 men, left March 11th for Haussimont on the Marne, where hangars were erected and preparations made for the arrival of pilots and planes.

On March 23rd, 18 pilots with Sopwith LA2 planes, landed and reported for duty. Of the original pilots who were members of this squadron at Haussimont, only one is still in the service - Captain Horace N. Heisen, Air Corps, who is now on duty with the 3rd Attack Group at Fort Crockett, Texas.

Shortly afterwards, with the assignment of observers to the Squadron, it was ready to commence work over the enemy lines as a completely equipped American Observation Squadron.

Aerial work started on April 1st, the planes of the 99th working in conjunction with the 3rd Field Artillery Observation School at Mailly, France. This work continued daily until May 31st, when the Squadron was ordered to Amanty, France, for station. Here it was joined by additional observers, and actual operations over the enemy lines were started.

During the month of June a number of flights were made over the enemy lines, the one on June 22nd being a memorable one in that all of the three planes flown on a reconnaissance mission returned to the home airdrome with innumerable holes in the wings, thus attesting to the accuracy of the enemy anti-aircraft batteries.

On July 1st the Squadron was ordered to Luxeuil-les-Bains, being the first American unit to arrive at this place. Here three more observers joined the organization, and aerial work commenced immediately with the 5th Corps Infantry Liaison School. Pilots and observers of the Squadron worked with members of the 285th Spad (French) Squadron at Corcieux, France, in order to learn the St. Die Sector.

During the latter part of July, reconnaissance flights were made almost daily over the enemy lines, and several combats were had with enemy airmen. On July 24th a flight of the 99th Squadron, under the command of Lieut. Lyle S. Powell, was transferred to Dogneville, taking over the sector which had been occupied by the 285th Escadrille (French).

The first photographic mission of the 99th Squadron over the enemy lines was made on July 31st, when 24 exposures were taken, all successful, of different parts of the sector. Lieuts. Llewellyn and Hill, who were on protection on this mission, had a combat with a German airman flying an Albatross, but without result. On the afternoon of the same day another photographic mission by the same pilots resulted in 36 successful exposures being made.

Various other photographic, reconnaissance and other missions were made during the month of August, and information of great value obtained. Several planes of the Squadron were badly damaged by anti-aircraft fire. On one of the missions, flown by Lieut. Frank A. Llewellyn, with Lieut. R.H. Neel as observer, they were subjected to heavy fire from 15 anti-aircraft machine guns and several batteries of anti-aircraft artillery. The plane was struck by a number of machine gun bullets, one of which cut the rudder and elevator control wires and caused the rudder to jam. The broken control wire was held and operated by Lieut. Neel under the direction of the pilot. Operating the machine in this manner, the airmen continued their liaison work until the plane became unmanageable when, in spite of its damaged condition, they managed to bring it back safely to their airdrome. For this conspicuous service both airmen were awarded the Distinguished Service Cross.

On September 8th, the 99th Squadron moved to Souilly, Meuse, France, to work with the 5th Army Corps, 1st American Army. From September 7th to the 20th, the Squadron participated in the St. Mihiel Offensive. Planes bearing the insignia of the "Fighting Buffalo" were constantly in action until the cessation of hostilities.

ities on November 11, 1918. Lieuts. Clarence C. Kahl and Raymond C. Hill, members of the Squadron, were awarded the Distinguished Service Cross for extraordinary heroism in action when, in the course of a photographic mission, they were attacked by an enemy formation of nine planes. Lieut. Kahl put up a gallant fight against overwhelming odds, the protection planes being driven off by the enemy. Lieut. Hill, the observer, was shot through the heart, but Lieut. Kahl, by his pluck, determination, skill and courage brought back the plane and the photographs to the American lines.

Upon the return of the 99th Observation Squadron from overseas duty, it was for a brief space of time stationed at Hazelhurst Field, L.I., New York, and then transferred to Camp Alfred Vail, N.J.

During the latter part of 1919, the organization was transferred to Bolling Field, Anacostia, D.C., where it remained on duty until the latter part of April, 1927, when it was transferred to Kelly Field, San Antonio, Texas, for station. The Squadron remained at Kelly Field until August 1, 1927, when it was rendered inactive and the personnel thereof transferred to the 39th School Squadron, Kelly Field.

In reconstituting the 99th Observation Squadron at Mitchel Field, of the 132 men which will comprise its enlisted strength, 50 men will be sent there from Selfridge Field, Mt. Clemens, Mich.; 50 men from Scott Field, Belleville, Ill., and the remainder will be recruited at Mitchel Field. The Selfridge Field contingent will comprise one Master Sergeant, one Technical Sergeant, 3 Sergeants, 3 Corporals, 10 Privates, 1st Class, and 32 privates, while the only noncommissioned officer among the 50 men from Scott Field will be one Staff Sergeant.

---oOo---

GRADUATING FLYING CADETS ASSIGNED TO ACTIVE DUTY

Of the 45 Flying Cadets, scheduled to graduate from the Advanced Flying School, Kelly Field, Texas, on or about October 26th, 42 have been recommended for assignment to active duty under their Reserve Commissions for the period November 1, 1928, to June 30, 1929, viz:

To Fort Crockett, Galveston, Texas:

2nd Lieut. Richard P. Sanders, Jr.	Lawton, Oklahoma.
2nd Lieut. John Henry Williamson	Ninety Six, S.C.
2nd Lieut. Francis M. Zeigler	Philadelphia, Pa.
2nd Lieut. Charles W. Haas	Ocean Park, Calif.
2nd Lieut. Richard H. Lee	Los Angeles, Calif.

To Rockwell Field, Coronado, Calif.

2nd Lieut. Stanley K. Robinson	Pasadena, Calif.
2nd Lieut. Robert W. Stewart	Salt Lake City, Utah.
2nd Lieut. Hugh L. Smith	Salt Lake City, Utah.
2nd Lieut. Andrew F. Solter	Los Angeles, Calif.

To Crissy Field, San Francisco, Calif.

2nd Lieut. Donald R. Lyon	Los Angeles, Calif.
2nd Lieut. George W. Hansen	Freewater, Oregon.

To Maxwell Field, Alabama.

2nd Lieut. Joseph B. Duckworth	Atlanta, Ga.
2nd Lieut. Lindsay M. Bawsel	Atlanta, Ga.

To Fort Sam Houston, Texas.

2nd Lieut. Walter A. Fenander	Oakland, Calif.
-------------------------------	-----------------

To Mitchel Field, N.Y.

2nd Lieut. Roland O.S. Akre	Beloit, Wisconsin.
2nd Lieut. Wm. R. Shephard	Bardstown, Ky.
2nd Lieut. Clinton P. Warner	Renton, Washington.
2nd Lieut. Charles D. Fator	San Antonio, Texas.
2nd Lieut. Russell A. Cone	Champaign, Ill.

To Langley Field, Va.

2nd Lieut. Warren Higgins	Framingham, Mass.
2nd Lieut. Dean V. Johnson	Crete, Nebraska.
2nd Lieut. Harry J. Osterman	Oglesby, Ill.
2nd Lieut. Howard E. Hall	Lamar, Colorado.
2nd Lieut. Emery J. Martin	Columbus, Kansas.
2nd Lieut. Leland S. Stranathan	Los Angeles, Calif.
2nd Lieut. Walter R. Agee	Silver City, New Mexico.
2nd Lieut. Donald W. Duckman	Portland, Oregon.

To Selfridge Field, Mt. Clemens, Mich.

2nd Lieut. Aheldon B. Yoder
2nd Lieut. Aubrey L. Moore
2nd Lieut. William M. Morgan
2nd Lieut. John A. Winefordner
2nd Lieut. Homer L. Sanders
2nd Lieut. Robert K. Giovannoli
2nd Lieut. Andrew D. Knox
2nd Lieut. Robert K. Black
2nd Lieut. Max H. Warren
2nd Lieut. Kingston E. Tibbetts
2nd Lieut. Edward H. Underhill
2nd Lieut. Ralph C. Rhudy
2nd Lieut. Carl F. Theisen
2nd Lieut. Ernest K. Warburton

Almont, Michigan.
Brady, Texas.
Marshall, Mo.
Zanesville, Ohio.
Houston, Texas.
Lexington, Ky.
St. Paul, Minn.
Long Island, N.Y.
Chicago, Ill.
Columbus, Ohio.
Brighton, Mass.
Galax, Utah.
Meridian, Conn.
Brighton, Mass.

To Langley Field, Va.

2nd Lieut. William J. Crosswell

Bonacia, Calif.

Not assigned to active duty.

Frederick P. Sanson
Alexis F. Dupont, Jr.
Blaine B. Newcom

Hartford, Conn.
Wilmington, Del.
Wichita, Kansas.

But for the efficiency of the Army type parachute, this particular class of students would have numbered but 42, as three of the graduates, Flying Cadets William R. Shephard, William J. Crosswell and Sheldon B. Yoder, are members of the famed mythical Caterpillar Club, jumping with their parachutes from disabled aircraft during flight and reaching the ground safely.

---oOo---

CHIEF OF STAFF VISITS BROOKS FIELD

All the personnel of Brooks Field, San Antonio, Texas, turned out on Oct. 12th to pay their respects to Major-General Charles P. Summerall, Chief of Staff, and Brig. General Frank Parker, Assistant Chief of Staff in charge of operations for the Army. Accompanied by Brigadier-General Albert J. Bowley, commanding the 8th Corps Area and the Second Division; Brigadier-General Frank P. Lahm, Commanding General of the Air Corps Training Center; Major J.A. Hoag, Assistant Chief of Staff of the Second Division; and Major S.W. FitzGerald, Commanding Officer of Brooks Field, the officers visited Brooks Field after witnessing the air maneuvers at Kelly Field. They were interested spectators when a machine gun crew of six men were dropped from planes with parachutes.

A few seconds later another parachute opened from a Martin Bomber and a machine gun floated to the earth. The crew secured the gun as it reached the ground and had it set up and firing within three minutes. The maneuver was staged for the purpose of showing the feasibility of landing ground troops quickly from planes, and General Summerall expressed himself as highly pleased with the exhibition.

Enlisted men making the jump from the planes were: Privates Loreain Tolle, Theodore Miller, Myron A. Lamparty, Homer P. Brensford, Robert W. Stevens, and Alfred P. LeFay. Miller came down in a patch of cactus and Tolle's parachute caught in telephone wires near the hangar line. No injuries resulted, however.

---oOo---

BROOKS FIELD ENTERTAINS AMERICAN LEGION DELEGATES

Along with the rest of the United States Army in San Antonio and vicinity, Brooks Field was the scene of animated activity from Monday, October 8th, until Saturday, October 13th. The American Legion held its Tenth Annual Convention in San Antonio during that time, and Brooks Field did its share of entertaining and directing the visitors to the field.

The dirigible "Los Angeles", the pride of the Navy, with a crew of 40 officers and men under command of Lieut. Commander H.V. Wiley, paid a brief visit to San Antonio Monday morning and circled the city and surrounding Army camps and flying fields before tilting her nose in the air again and sailing off into the clouds northward to Fort Worth. The visit here was an official call to the American Legion Convention, but lack of a mooring mast prevented the landing of

the dirigible.

The Army semi-rigid dirigible RS-1, from Scott Field, Ill., landed at Brooks Field at about 9:30 a.m., October 10th. The big airship carried a crew of 16 officers and men, under the command of Captain William E. Kepner, and made the 1,000-mile trip via Memphis, Tenn., and Shreveport, La., after leaving Scott Field at 8:38 a.m., October 9th. The ship was placed in the balloon hangar with the aid of practically the entire enlisted personnel of Brooks Field, and was again in the air to take part in the air maneuvers over Kelly Field and Brooks Field on the morning of October 12th. The RS-1 took off for its home station at 11:35 a.m. October 15th.

---oOo---

SEA SLEDS PROVE WORTH IN THE EMERGENCY ✓

A report was just received from the Commanding Officer of Langley Field, Va., describing the prompt measures taken to effect the rescue of two Army air-men who had crashed in the water.

Second Lieut. W.F. Haldeman, Air Reserve, as observer, and 1st Lieut. Charles W. Carneal, Air Reserve, as pilot, in a DH-4 airplane, were recently engaged in aerial gunnery on the range on Willoughby Point. They had just completed a run and were turning for another run when the plane side-slipped and struck the water. The blow was so severe as to wreck both wings and the plane sank immediately. Fortunately, the water was not deep enough to completely submerge Lieut. Carneal, his head remaining above water. Although somewhat stunned, Lieut. Carneal quickly released his safety belt and brought Lieut. Haldeman to the surface and held him above water until help arrived. Lieut. Haldeman was completely submerged and unconscious, and but for Lieut. Carneal's prompt action would have been drowned. Lieut. Carneal stated that after he had raised Lieut. Haldeman's head above the surface of the water, it seemed a matter of seconds rather than minutes before rescue boats reached him.

Captain Douglas Johnston, Air Corps, in a TC Airship overhead, saw the crash, and almost immediately afterward saw two sea sleds approaching, one from Willoughby Point and one from the boathouse. The crash occurred in Back River, approximately three-quarters of a mile from Willoughby Point and nearly two miles from the boathouse.

Outboard dinghy No. 2 was at the time on station off Willoughby Point, and Sea sled No. 1 on alert duty at the boathouse. Both started promptly at the alarm, the dinghy being somewhat delayed because of motor trouble. A soldier from the 19th Airship Company, Private M.C. Eckert, was in a rowboat several hundred yards from the scene of the accident. He immediately rowed to the wrecked airplane and arrived there approximately thirty seconds before Sea sled No. 1. At about the same time a civilian in a rowboat also reached the wreck. Eckert placed his rowboat alongside the fuselage of the wrecked airplane and Sea sled No. 1 was maneuvered so that it would be possible to take the personnel from the airplane through the rowboat directly into the cockpit of the Sea sled. The civilian in the rowboat offered assistance, but as military personnel were on the spot, his assistance was not necessary.

The Commanding Officer of Langley Field states that the fact that rowboats were present in this particular instance does not in any way lower the value of the sea sleds as necessary life-saving equipment, inasmuch as this was a coincidence which could not be expected to happen except occasionally. Over sixty per cent of the area within ten miles of Langley Field is water or marsh. To insure maximum provision for rescue, the life boat equipment is assigned to various stations during flying hours to cover the different areas over which various types of flying is carried out. The Operations Officer assigns these flying regions and also assigns the life boats to the particular stations in order to cover the area. Insofar as the available equipment permits, life boats are habitually assigned to stations so located as to insure two stations being within three miles of a forced landing on the water, either by airplane or by parachute. The degree of efficiency expected of the system is that in case an airman is forced to take to his parachute, at least one life boat will be on hand at the time and place the man in the parachute reaches the water.

BIRDS ENDANGER NIGHT FLYING ARMY PILOTS ✓

Neither the residents of Washington who recently witnessed the beautiful spectacle of three brilliantly illuminated airplanes flying in formation over the City nor the airmen themselves realized that there was any danger connected with the nightly excursions of these planes into the upper air regions.

During the wind-up of the formation flying on Saturday night, in connection with the Carnival at the Army War College for the benefit of the Army Relief Fund, an incident occurred which gave the three Army pilots some anxious moments. The airplane formation ran afoul of another formation - a flock of birds which the pilots judged to be wild ducks, being unable to discern them clearly because of the blinding glare of the searchlights playing over the planes. One of the birds collided with a wheel of the plane piloted by Captain Ross G. Hoyt and started it spinning violently. Feathers were noted flying in all directions.

For the next two or three minutes thereafter the airmen passed through these bird formations at irregular intervals, and they maneuvered as rapidly as possible away from the glare of the multi-colored searchlights which they believed had served to attract the birds, feeling greatly relieved when the feathered tribes were finally left behind. Had one or more of the birds struck the propeller of any of the planes, serious consequences might have followed, for in that event there would have been a likelihood of the motor becoming unseated and seriously damaged, necessitating a forced landing.

The airplanes used on these night formation flights were the O-1 observation type, and they were flown on four consecutive nights, the participating pilots being Captains H.M. McClelland, Ross G. Hoyt, Lieuts. James N. Peyton and Newton Longfellow. The last named officer flew on two of the nights in place of Captain Hoyt.

The flights were made at an altitude of about 3,500 feet. The airplanes were illuminated by innumerable automobile tail lights, arranged in a special circuit and fed by the regular ignition battery.

---oOo---

SUPPLY AND ENGINEERING CONFERENCE AT WRIGHT FIELD ✓

Some sixty officers, representing generally one supply and one engineering officer from each of a number of designated Air Corps fields throughout the country; four officers from the Office Chief of Air Corps, representing the Finance, Training, War Plans and Inspection Divisions; and officers from the engineering sections of the Materiel Division, congregated at Wright Field for the annual Engineering and Supply Conference, which convened at noon of October 16th and closed on October 18th at 4:30 p.m. A dinner dance was given on the night of the closing day in honor of the visiting officers.

The program, which was in charge of Lieut. Martenstein, arranged for definite time schedules. On October 16th, one p.m., the conference was opened in the Wright Field auditorium by Major Fickel, who is acting Chief of the Materiel Division during General Gillmore's absence in Europe. Talks by heads of the various sections of the Materiel Division followed. During the forenoon of October 17th, the officers visited with the various branches of the Experimental Engineering Section. In the afternoon of the 17th and the morning of the 18th, discussion of the various engineering and supply topics on which the officers were directed to come prepared was held in the main conference room. These subjects embraced various maintenance and installation problems of airplane parts, armament, engines, generators, parachutes, propellers, clothing, rubber goods, and field and station equipment. Air Corps publications and methods of distribution were also discussed.

As usual, this pooling of experience was of great value in solving many problems and made for clearer understanding and better cooperation throughout the service.

---oOo---

FLYING COMMISSARY IN CANAL ZONE

The 7th Observation Squadron, France Field, Panama Canal Zone, now has a flying commissary in its hangar, same being an Amphibian used for ferrying commissary supplies, including ice, to the detachment on duty as Target Detail on

Largo Remo Island.

Due to the excessive humidity at the reef and on the island where this detachment is stationed, soft bread molds over night, and the ever present salt spray corrodes tin cans and makes it practically impossible to keep a week's supply of rations in camp. It is therefore necessary to send rations to the camp every other day, and until suitable boats are obtained amphibians are doing the work. The plane lands near the shore and the commissaries are transported from plane to the beach by small boat.

The detail is maintained at Largo Remo Island for the purpose of handling the large floating targets used for aircraft machine gun practice.

---oOo---

BARGE USED FOR BOMBING PRACTICE

The Panama Canal recently donated a large barge, formerly used as a horse barge, to the Air Corps for a bombing target. In order to do the bombing with live bombs at a safe distance from the canal, the barge was towed to the southwestern edge of Gatun Lake, and the 25th Bombardment Squadron, France Field, attempted to sink it by formation bombing. The formation consisted of three NBS-1's, piloted by Lieuts. A.E. Jones, Davidson and Howard. The bombers were Lieuts. Lewis, Souza and Zane. The bombing was done at an altitude of 6,000 feet and the results were considered very good in view of the fact that it was very cloudy and the bombers were compelled to do their bombing through small holes in the clouds. The bombs used were 100 and 300-lb. types and, although no direct hits were registered, the bombs were dropped closely alongside the target.

After the Bombardment Squadron finished the bombing, the Pursuiters took off with 50-lb. bombs for their turn. This resulted in two direct hits, sinking the boat.

---oOo---

SOME DOPE ON THE 88th OBSERVATION SQUADRON

The 88th Observation Squadron, recently reconstituted at Post Field, Fort Sill, Okla., was at the time of its organization designated as a Corps Observation Squadron. It was assigned to the First Corps on May 29, 1918, and on June 1st reached the front at Toul. It was engaged in the operations in Toul Sector and at Chateau Thierry, St. Mihiel and the Argonne-Meuse first and second offensives.

This Squadron accomplished many reconnaissance missions over the lines, taking pictures, locating machine gun nests and batteries and gathering military information of the greatest value. It received official credit for four enemy planes brought down. The Squadron suffered 14 casualties, consisting of six killed and eight wounded.

At the conclusion of the War the Squadron was returned to Langley Field, Va. and from there proceeded to Camp Knox, Ky., for a stay of approximately four years. From there the Squadron was sent to Wright Field, Ohio, for a stay of almost five years.

From the time the Squadron was returned to the States to the time of leaving Wright Field, it was engaged in the training of Reserve officers, carrying out missions in connection with line organizations, Air Corps tactical maneuvers, and routine work with the Fairfield Air Depot in the overhaul and assembly of Air Corps planes. The Squadron also took an active part in the conducting of the International Air Races at Wright Field, Ohio.

On May 4, 1927, the 88th was ordered to Brooks Field, Texas, under the provision of the Air Corps five-year expansion program.

On August 1, 1927, all members of the 88th Squadron were transferred to and organized as the 51st School Squadron, Air Corps. The work of the Squadron under the new designation consisted of assisting in the training of future Air Corps officers and cadets. In this connection, the Squadron has operated "A" stage at Brooks Field with an efficiency that is a credit to any organization in the Air Corps.

---oOo---

TRAINING AT THE AIR CORPS TECHNICAL SCHOOL

At the present time three enlisted classes, comprising 31 students, are undergoing instruction in the Photographic Department of the Air Corps Technical School

at Chamute Field, Rantoul, Ill. In the Communications Department a class of 17 enlisted men started the course of instruction on September 4th. One class graduated on October 12th. During September five classes of enlisted men were undergoing instruction in this Department. In the Department of Mechanics the courses are all filled to capacity. It will be possible to handle larger classes as soon as the machinery now on hand is installed and additional airplanes are received.

---oOo---

LARGE REFUELING TRUCK TESTED AT WRIGHT FIELD ✓

By A.M. Jacobs

That the Air Corps has need of equipment less picturesque than that which leaves the ground in flight, but necessary to the smooth running of the modern airdrome is, now and then, through the conducting of a test or the issuing of a report, brought to proper notice. For some time there have been on the drafting tables in the corner of the Equipment Branch dedicated to transportation projects at Wright Field, sketches of huge trucks with all sorts of unusual-looking equipment. These, it was revealed, concerned a heavy duty refueling unit and a wrecking truck under development for standard Air Corps use. On September 8th last the first test was run on a new heavy-duty refueling unit or service truck.

This is the largest truck the Air Corps has ever possessed, having a capacity of 1200 gallons of gasoline and 100 gallons each of oil and water which may be heated by exhaust coils installed in these tanks. The largest amount of gasoline ever carried in any previous standard type truck is 350 gallons. The truck has air compressor, power, and hand-operated pumps, a filter, and meters. It is estimated that three planes, each requiring 300 gallons of gasoline, 30 gallons of oil, 25 gallons of water, and air for the tires can be serviced with one of these units in 24 minutes.

Servicing is accomplished by filling the truck's gasoline and oil tanks from the storage tanks, and the water tanks from whatever source is available. The truck is then run out to the airplane, and the gasoline, oil and water is forced into the plane's tanks through hose lines either by air pressure, power pump, or hand pump. Air supplied by the air compressor, driven by the truck engine, is stored in a tank for filling tires. Gasoline or oil may be pumped directly into the truck from the field's storage tanks, or pipe lines from the tanks may be installed to some convenient point on the field. All valves for operating the various systems are grouped, and full instructions for operating them are engraved on brass plates. An enclosed rack for carrying the hose is provided on one side of the unit, with a similar compartment for carrying other miscellaneous equipment on the other side.

The chassis, a Coleman six-wheeled type, is provided with 42 by 9 pneumatic tires all round. The old large trucks have always been hard to steer. This new truck drives very easily through all six wheels. Air brakes connect with the four rear wheels and an emergency hand brake operates on the drive shaft. Mr. W.E. Huffman, in charge of transportation development at Wright Field, accompanied the truck on its first test from Kansas City to Scott Field, Belleville, Ill. After driving 65 miles it was found that both rear left tires were down. Examination revealed that the valve cores had become loosened, allowing the air to escape. When repairs were made the journey was resumed.

Scott Field was reached without further difficulty, the top speed being 45 to fifty m.p.h., the average speed 25 m.p.h. Several leaks through the system were discovered on arrival, and these were repaired, the joints tightened, and further tests made by driving the unit over rough roads. When it was certain that all equipment was functioning properly, the unit was turned over to Scott Field for service testing. Later, it will be driven to the Materiel Division, whether further tests will be conducted, sending it on to Kelly Field later. This truck, it is expected, will greatly facilitate the servicing of all planes, but it will be most convenient for the larger types, such as the cargo and bombing planes.

The wrecking truck in contemplation will be built on the same type six-wheel chassis as the servicing truck, but the body has installed a hand-operated crane for loading heavy equipment or changing engines, with a capacity of two tons. This truck will be 18 feet long, 7 feet wide, and have a capacity of five tons. It will be used for transporting new and wrecked airplanes and as a cargo truck for carrying large quantities of gasoline and oil in drums. It will be required to

operate on unlimited cross-country missions in reaching the scene of crashes. One complete airplane (observation), or either the wings or fuselage of a bombing plane may be mounted on it. This will prove an important piece of field equipment either for war or peace-time purposes.

---oOo---

ARMY AND NAVY AIR FORCES IN COMBINED AERIAL REVIEW

For the first time in the history of aeronautics in the Canal Zone, the Army and Navy Air Services combined their forces for an aerial review and formation flying at France Field recently. A practice aerial review and combined formation^{flight} was held on the day prior to the departure from the Canal Zone of Governor Walker, and on the following day an aerial review and formation flight in his honor.

The following letter of commendation, addressed to the Commanding Officer of France Field, Panama Canal Zone, was received from the Headquarters of the Panama Canal Department, relative to the above review and formation:

"The Department Commander received today a letter from Governor Meriwether L. Walker, of the Panama Canal, in which he expressed his admiration of the ceremony with which he was honored on the occasion of his departure from the Isthmus, and his commendations of the impressive aerial demonstration given in his honor.

It is a source of great satisfaction to the Department Commander to know that the ceremonies, including the aerial demonstration, was of such excellence as to merit the highly complimentary remarks from so eminent an authority as Governor Walker."

---oOo---

DEATH OF LIEUT. WILLIAM L. CORNELIUS, A.C.

Second Lieut. William L. Cornelius, Air Corps, 95th Pursuit Squadron, Rockwell Field, followed his buddy "Masketeer", the late 2nd Lieut. John J. Williams, Air Corps, into the Great Unknown on September 25th last.

Lieut. Cornelius met his death instantly in a crash resulting from a mid-air collision with another PW-9D airplane, flown by 2nd Lieut. Roger V. Williams, Air Reserve. The two planes came together over Rockwell Field, as the Squadron went into a "Luffberry Circle" preparatory to landing. Lieut. Williams got clear of the falling wreckage and his parachute opened less than 200 feet above the ground. The collision occurred at an altitude of 1200 feet. The pilot chute of Lieut. Cornelius' plane caught on the instrument board of his plane and the big chute was pulled out of the pack.

The sole survivor of the Army's famous "Three Masketeers of the Air" - 2nd Lieut. I.A. Woodring - escorted the body of the dead flyer to the family home at Antlers, Oklahoma. Military burial was made at Fort Smith, Arkansas. Appropriate funeral services were held in San Diego prior to departure by train.

---oOo---

DURATION FLIGHT AT ROCKWELL FIELD

William Brock and Edward Schlee, in a Bellanca Monoplane, took off from Rockwell Field on Saturday, September 29th, in an attempt to break the world's endurance flight record. After 59 hours, 19 minutes and 15 seconds in the air, they were forced to land due to a leaking valve in the main fuel tank. Although they fell seven hours short of making a new world mark, they smashed the American record of E. A. Stinson and G. W. Haldeman by six hours. Messrs. Brock and Schlee announced after landing that they would take the air again for another attempt at the world mark.

On October 17th the National Aeronautic Association announced that the contest committee had placed its stamp of approval on the above flight, officially recognizing it as a new American airplane endurance record. The record was made under Class C for airplanes, returning to point of departure without refueling. The Bellanca plane was powered with a 220 h.p. Wright Whirlwind engine.

The record of Messrs. Stinson and Haldeman, made at Jacksonville, Fla., March 28, 29 and 30th, was 53 hours, 36 minutes and 30 seconds. They piloted a Stinson Detroit plane, also equipped with a 220 h.p. Wright Whirlwind engine.

CATERPILLAR CLUB ROSTER ONE SHY OF CENTURY MARK ✓

Three more members have been added to the roster of the Caterpillar Club since the last issue of the News Letter, at which time the score stood at 96 members and 101 emergency life-saving jumps. The candidates who were recently declared good-standing members of this famed mythical organization are listed below, as follows:

<u>Date</u>	<u>Name</u>	<u>Place</u>
Sept. 14, 1928	2nd Lt. H.W. Pennington, Air Res.	Fresno, Texas.
Sept. 14, 1928	Private J. S. Wilson, Air Corps	Fresno, Texas
October 21, 1928	Major Floyd E. Evans, Nat'l Guard	Detroit, Mich.

Lieut. Pennington, stationed at Fort Crockett, Galveston, Texas, was flying a Curtiss A-3 airplane on a cross-country trip, with Private J.S. Wilson as passenger. When one and one-half miles west of Fresno, Texas, the pilot encountered a terrific rain and wind storm while flying in a cloud at 7,000 feet.

"The ship became uncontrollable and went into a spin," Lieut. Pennington stated. "It made about two turns and came out, then went into another. I was handicapped by not having an air speed indicator and the fact that I was blinded by the rain. As the ship was nearing the ground rapidly, I realized my mechanic and I had to leave the ship that we might save our lives, which we did by jumping overboard and pulling the ripcord of our chutes. Could not leave the ship headfirst due to air pressure. Put left leg over side of cockpit and rolled out, passing underneath the tail surfaces.

My first act on leaving the ship was frantically trying to find my rip cord, which I finally managed to do, then I felt a sudden jerk and I realized my chute had opened. As I came to the ground, which I could see dimly at about 200 feet, I was drifting into a clump of large oak trees. Managed to miss them by slipping the chute, but landed on a barbed wire fence. After landing I was frantic, thinking my mechanic had been killed, but found him unhurt standing by the ship, having made a successful parachute jump, too.

Wind on surface was blowing approximately fifteen miles per hour. The rain was coming down in torrents.

Bruises and scratches about the face and body due to landing on a barbed wire fence and being dragged on the ground by the chute. Swollen ankles due to the force of hitting the ground."

Major Floyd E. Evans, Michigan National Guard Air Service, was piloting an AT-1 plane, with 2nd Lieut. Edward C. Snell, Infantry, National Guard, as passenger. While performing a roll at 2,000 feet, the upper right wing collapsed. Major Evans jumped from the disabled airplane with his parachute and reached the ground safely. He had ordered his passenger to jump, but for some unknown reason the latter failed to do so and paid the penalty with his life. The detailed account of this accident has not yet been received.

In the previous issue of the News Letter, Oct. 5th, Flying Cadet Sheldon C. Yoder was mentioned as having joined the Caterpillar Club. A detailed account of this parachute jump was recently received, and same is quoted below, as follows:

"On September 14, 1928, at about 8:45 a.m., I was flying solo in No. 3 position of a 3-ship V-type formation of DH4M2 planes, headed west at about 7,000 feet, approximately three miles northeast of Castroville, for the purpose of giving pursuit students training in the attack of a formation of observation planes - the pursuit formations attacking from an altitude of 9,000 feet.

I was flying DH4M2 No. 85. We were flying straight and level at the time of the crash. I was watching the leader very closely to see his signal for a turn, as it was understood that we would turn when the pursuit formations dived down out of the sun. There was a loud crash and jar. It seemed to me as if the motor had torn itself to pieces and come loose from its base on account of the crankshaft breaking, or some such similar cause. It was all a mass of wreckage and the engine cowling on both sides spread open. I learned afterwards that the pursuit formation of six planes had dived from about 9,000 feet, the first unit of three led by Cadet Tostevin diving below and coming up underneath. Tostevin's plane, AT-4 No. 12, hit just at the rear of my motor, from below, at a very steep angle. I had no idea that the pursuit formation had started their dive, as we had not started our turn. We were flying about 70 miles per hour. I had noticed that my motor was running at a little less than 1300 r.p.m. a few seconds before the crash, and it was the same throttle setting when the crash occurred. The motor of my plane seemed to jump on its base and tear itself to pieces and I thought that the crash and jar was from that cause,

though it seemed pretty severe. I could see nothing of Tostevin's plane. My plane immediately went out of control and went into a slow diving spin to the left.

Realizing that there was absolutely no chance of bringing my plane down, I unbuckled my safety belt and stood up in the cockpit. Putting my left foot on the seat and helping with my hands on the edge of the cockpit, I threw myself out the left side toward the inside of the spin. The force of the wind, combined with the centrifugal force of the spin, threw me upside down into the rear cockpit as soon as I left the front one, with the back of my shoulders on the seat and my legs hooked over the left side of the cockpit. I pulled myself out of the rear cockpit and shoved away from the plane on the left side. The tail seemed to swing away from me, due to the spin, and I pulled my rip cord when I saw that I wasn't going to hit it. The parachute opened almost instantly. As soon as the parachute had opened and I had pulled the seat under me I looked down to see my plane. It appeared to be about 500 feet below me at that time. It looked as if it were only one plane, and it still looked like one plane when it hit the ground. The wreckage did not burn. It stopped spinning at what appeared to me to be about 2,000 or 3,000 feet from the ground.

I would judge that my plane had fallen about 2,000 feet before I finally got clear. My parachute, an Irving seat type, oscillated from about 4,000 feet to about 2,000 feet, but I was never swinging in an arc of more than 6 or 8 feet. I landed in an open space in the mesquite, facing down wind, and was going forward. As I had to slip the chute in order to hit the open space I was not traveling forward fast enough to hit on my face. I landed on my feet with just enough force to cause me to fall slightly forward and to my left side. The parachute collapsed and lay on the ground in front of me. I sustained no injury whatever.

I rolled my parachute and harness up and walked in the direction of where I had seen my plane hit the ground, which was toward the Castroville Road, less than a mile away to the south. It was a little over a half mile to the wreckage from where I landed. The first intimation I had that another plane had hit mine was when I saw the two motors in the wreckage.

The weather was excellent, with a surface wind of about 12 miles per hour from the southeast at the time of the jump.

I knew when I saw the motor go to pieces that I would have to jump. I did not think of the actual jumping, as my main thought was to get clear of the plane. I thought nothing about whether or not my parachute would open until it was already open. On the way down my main reaction was a feeling of relief at being safe and wondering where I would land in the mesquite. My reaction after the jump was surprise at there being two planes in the wreckage, and wondering who had been in the other plane. I could hardly believe that he had not jumped and come down without anyone seeing him, when we did not find his body in the wreckage. His body was found about 200 yards from the wreckage."

---oOo---

PRACTICE PARACHUTE JUMPS AT BROOKS FIELD

The Brooks Field parachute department, headed by 2nd Lieut. Linwood P. Hudson, with Master Sergeant Erwin H. Nichols as his assistant, has had more than its share of activity since the beginning of the summer. Since June 1st the department has jumped 93 men, most of them being made from DH-4's flying in 7-ship formations. This is an exceptional record under any circumstances, and more so since there have been no worse casualties than a couple of cracked leg bones. Privates William H. Hays and E.W. Owens each cracked up a leg in landing, but these accidents are in no way the fault of the parachute department. The men failed to follow instructions and landed sideways with their legs crossed.

Seven more jumps and Master Sergeant Nichols will have established a record of having supervised one thousand 'chute jumps without a single serious accident.

---oOo---

NEW OFFICERS FOR THE AIR CORPS

The number of commissioned airplane pilots in the Army Air Corps has been augmented by the addition of 18 graduates from the Advanced Flying School, Kelly Field, Texas, who finished their training on October 26th and received the

rating of airplane pilot. War Department orders, recently issued, assigned these new Air Corps officers to duty at the following flying fields:

To Mitchel Field, Long Island, N.Y.

2nd Lieut. Robert L. Easton (Inf.)

To Selfridge Field, Mt. Clemens, Mich.:

2nd Lieut. John C. Crosthwaite (Cav.)

2nd Lieut. James D. Curtis (C.A.C.)

2nd Lieut. Orrin L. Grover (C.A.C.)

2nd Lieut. Charles A. Harrington, (C.E.)

2nd Lieut. Neil B. Harding, (Inf.)

2nd Lieut. Fay R. Upthegrove, (Inf.)

To Maxwell Field, Montgomery, Ala.:

2nd Lieut. George W. McGregor, (F.A.)

To Langley Field, Va.

2nd Lieut. Marvin M. Burnside, (C.A.C.)

2nd Lieut. Maurice F. Daly, (F.A.)

2nd Lieut. David M. Hackman, (Inf.)

2nd Lieut. Marion Huggins, (Inf.)

2nd Lieut. Ernest G. Schmidt, (Inf.)

To Fort Sam Houston, Texas:

2nd Lieut. Milton M. Towner, (F.A.)

To Marshall Field, Fort Riley, Kansas:

2nd Lieut. Bernard C. Rose, (Inf.)

To Fort Crockett, Galveston, Texas:

2nd Lieut. Julius T. Flock, (Sig. Corps)

2nd Lieut. Walter S. Lee, (Inf.)

To Crissy Field, Presidio of San Francisco, Calif.:

2nd Lieut. Joseph Smith, (Cav.)

With three exceptions (Lieuts. Crosthwaite, Burnside and Lee) the officers listed above graduated from the United States Military Academy, West Point, N.Y. with the June, 1927, class, and started their flying training at the Primary Flying School, Brooks Field, Texas, on November 1, 1927.

Lieuts. Crosthwaite, Burnside and Lee were commissioned in the Army from civil life, but started their flying training at the same time as the West Point graduates.

---oOo---

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS

Changes of Station:

Major H.C.K. Mahlenberg from University of Washington, Seattle, Wash., to Fort Hayes, Columbus, Ohio, for duty as Air Officer.

Major Delos C. Emmons from Office Chief of Air Corps to duty in Office of Assistant Secretary of War.

1st Lieut. Solomon L. Van Meter, Mitchel Field, to Walter Reed General Hospital for observation and treatment.

1st Lieut. John R. Druma, Langley Field, Va., to Kelly Field, Texas.

1st Lieut. Julian B. Haddon, Selfridge Field, to Wright Field, Dayton, O.

1st Lieut. Walter D. Buie, Scott Field, Ill., to Langley Field, Va.

1st Lieut. Joseph Smith, Kelly Field, to duty in Hawaiian Department, sailing from San Francisco on or about March 9, 1929.

1st Lieut. David W. Goodrich to Bolling Field upon completion of tour of duty in Hawaiian Department.

1st Lieut. John M. Davies, Chamute Field, to Panama Canal Zone, sailing from New York about June 6, 1929.

1st Lieut. Levi L. Beery, Kelly Field, to Wright Field, O.

Orders for date of sailing for Panama Canal Zone of 1st Lieuts. James M. FitzMaurice and James A. Healy amended from Nov. 28, 1928, to June 6, 1929.

1st Lieut. Robert H. Finley, Kelly Field, Texas, to Chamute Field, Ill.

1st Lieut. Emile T. Kennedy, Langley Field, Va., to Sand Point, Seattle, Wash., for duty with Organized Reserves, 9th Corps Area.

1st Lieut. Perry Wainer, Chamute Field, Ill., to Kelly Field, Texas.

2nd Lieut. Joel G. O'Neal, Middletown Air Depot, Pa., to Air Corps Technical School, Chamute Field, Ill., for course of instruction in maintenance engineering.

2nd Lieut. Otto Wienecke, Scott Field, Ill., to Langley Field, Va.

2nd Lieut. Harry P. Bissell, Mitchel Field, to Fort Leavenworth, Kansas, for duty with Air Corps detachment.

Promotions: Major Gerald C. Brant to Lieut.-Colonel, rank Sept. 27, 1928.

Lieut.-Colonel Charles H. Danforth to Colonel, rank from October 2, 1928.

2nd Lieut. Edgar M. Fogelsonger to 1st Lieut., rank from Sept. 21, 1928.

2nd Lieut. Herbert K. Baisley to 1st Lieut., rank from Sept. 25, 1928.

Transferred to the Air Corps: 2nd Lieut. Rogers A. Gardner, Sept. 13, 1928, with rank from June 12, 1925. (Cavalry)

2nd Lieut. Eyrle G. Johnson, Cavalry, October 13, rank from July 3, 1923.

1st Lieut. Augustine F. Shea, Field Art., Oct. 3, rank from Sept. 2, 1923.

Detailed to Air Corps, and to Primary Flying School, Brooks Field, March 1, 1929:

1st Lieut. Louis J. Tatom, Signal Corps.

2nd Lieut. Donald C. Hawkins, Corps Engineers.

2nd Lieut. John H. McCormick, Signal Corps.

2nd Lieut. Arthur A.G. Kirchhoff, Corps of Engineers.

1st Lieut. James L. Welchel, Corps of Engineers.

2nd Lieut. Carroll M. Pearce, Infantry.

2nd Lieut. Frederick Funston, Jr.,

Assignments:

Major Leo A. Walton as Assistant Commandant, Primary Flying School, March Field, Calif.

Reserve Officers relieved from extended active duty:

2nd Lieut. Cameron T. Robertson, Selfridge Field, Mich.

1st Lieut. Raymond J. Little, Crissy Field, Calif.

---oOo---

PRIMARY FLYING SCHOOL GRADUATES TRANSFERRED TO KELLY FIELD

A total of 85 Flying Cadets are scheduled to start the advanced course of flying training at Kelly Field, Texas, on November 1st. Of the above total, 39 Cadets graduated from the Primary Flying School at Brooks Field, San Antonio, Texas, and the remaining 48 from the Primary Flying School at March Field, Riverside, Calif.

The names of the Cadets now entering upon the last four months of training and who, upon graduation next March, will receive commissions as 2nd Lieutenant in the Air Corps Reserve, are listed below, as follows:

From Brooks Field Primary School

Edward H. Alexander

Charles W. Alverson

Frank Armstrong

Al Nugier Booth

Leon R. Brownfield

Spencer Callaway

William T. Colman

Richard V. Conover

William G. Davis

Edwin M. Day

Edwin A. Dietel

Marl Estes

Flint Garrison, Jr.

Chester P. Gilger

Charles Weston Goode

Dudley D. Hale

Hans T.E. Hertzberg

Paul M. Jacobs

Garland M. Lasater

Nicholas A. Laurenzana

William L. Lee

James W. McCauley

William A. Matheny

Wm. H. Maverick

Thomas L. Mosley

Jack H. Neale

John L. Nedwed

Charles F. Scott

Floris W. Shade

Morley F. Slaght

W. D. Slingerland

Wm. P. Sloan

Thomas R. Starratt

Paul R. Sutherland

Millard F. Tindall

Edwin Lee Tucker

Reginald F.C. Vance

Byron S. Warner

Lude G. Wilkens

From March Field Primary School

Milton H. Anderson

Ramon R. Arias

Albert Boyd

Kenneth C. Brown

Otis F. Bryan

John H. Bundy

Harry E. Campbell

Wm. M. Campbell

Sam W. Cheyney

Robert H. Clarke

Richard I. Dugan

Glenn T. Fields

Harley Ray Grater

David D. Graves

Herbert L. Grills

Haywood S. Hansell, Jr.

Harry J. Zimmerman

Leonard F. Harman

John S. Harvey

Melvin S. Hollidge

Ivan D. Houston

Noble G. Hueter

Harry H. Jones

John P. Kenny

George F. Kinzie

Durward O. Lowry

Trenholm J. Meyer

Allen J. Mickle

Ralph A. Murphy

Hugh G. Nicholson, Jr.

Lewis R. Parker

George H. Pfeuffer

Wesley F. Phillippi

Thomas S. Power

Raymond W. Frank

Horace J. Reid

Clarence K. Roath

James A. Ronin

Harry A. Saunders

Samuel R. Spiker

Richard B. Stith

John W. Thomas, Jr.

James H. Wallace

Robert M. Wilson

Raymond L. Winn

Jack W. Wood



HOLY CATS! (or words to that effect)
Where were they WHEELS?

"Cannon"
Sambler

NOTES FROM AIR CORPS FIELDS

Wright Field, Dayton, Ohio, October 15.

September saw the departure of Lieut. Clarence Crumrine from the Field Service Section and the Materiel Division bound for the Hawaiian Islands. Just after his departure, the announcement came through of the award of the Distinguished Flying Cross to the pilots of the Alaskan Flight of 1920, of which Lieut. Crumrine was one. We were sorry the presentation could not take place in the Wright Field Auditorium with all the Wright Fielders heartily applauding.

Word comes from General Gillmore that he and Mrs. Gillmore are enjoying extremely their sojourn abroad. They have had wonderful weather ever since leaving Dayton, the General writes, which certainly is no small factor in the enjoyment of travel in any country.

Lieut. Donald S. Burns, E.C., who has been a valued member of the Materiel Division in charge of aerial mapping work since 1924, left on August 1st for Houghton, Michigan, where at the Michigan College of Mining and Technology he will be in charge of courses for R.O.T.C. students. He will be greatly missed. Lieut. B.C. Hill will take Lieut. Burns' place in the Aerial Mapping Unit.

Lieut. James T. Hutchinson, veteran of the Flight Test Branch, is due to sail on December 28th for three years in Hawaii. "Hutch's" departure will leave Lieut. Amis the only remaining member of the old 1926 group of test pilots who served with Lieut. Barksdale as chief. Lieut. Moffat left on September 1st for Hawaiian service, and Lieut. Doolittle on September 25th for Mitchel Field, where he is to be engaged in research work for the Guggenheim Fund in connection with equipment for fog flying. Thus do flying crowds scatter. Others of that well-remembered force are Lieut. Harry Johnson, now at Selfridge Field; Lieut. John A. Macready, now with the Frigidaire Corporation, Dayton, Ohio; "Lovie" Meister, now General Manager of Buhl Airplane Company; Ralph Lockwood, now Chief Engineer of the Fairchild Aircraft Corporation; and Lieut. G.P. Tourtellot, now with the Air Corps Engineering School as student.

Lieut. Gene Batten, who has been serving as test observer at Wright Field recently, was transferred to Rockwell Field. He made the trip by water, sailing on the transport leaving New York on October 9th.

It is good news to hear that Lieut. Bruner, who for the past two years has been serving in the Philippine Islands, is soon to return to Wright Field. Lt. Bruner was formerly in charge of the development of night flying equipment. Lt. John D. Corkille, who is remembered as being stationed at McCook Field for a short time in connection with the 1924 air races, is also to report to Wright Field at the expiration of his Philippine service.

Captain and Mrs. C.F. Wheeler returned to Dayton in September after an absence of five years. In 1922-23, Captain Wheeler served at McCook Field as Supply Officer. Since then he has seen foreign service in the Hawaiian Department and completed a course of instruction in the Tactical School at Langley Field.

Lieut. A.W. Martenstein, who recently reported at Wright Field from the Philippine Islands, was assigned to duty in the Field Service Section. One doesn't talk long with Lieut. Martenstein without guessing him from Virginia.

Maxwell Field, Montgomery, Ala., October 8th.

Two new O2-H's recently arrived at this field, having been ferried from Santa Monica, Calif., by Lieuts. H.F. Woolard and W.L. Cote.

Lieuts. Howard D. Norris and Isaac W. Ott, Air Reserve, and Reuben W. C. Jr. A.C., in three O2-H's, attended the opening of the airport at Winceur-Salem, N.C. on September 1st and 2nd.

Two Reserve officers, Lieut. Frank P. Milstead, of Atlanta, Ga., and Lieut. L.C. Campbell, of Chattanooga, Tenn., reported during September for 14 days' active duty training.

Several tow target missions were performed during September at Fort Benning, Ga., by Lieuts. L.P. Turner and I.W. Ott.

Captain Wm. E. Lynd, Director of Ground School Activities at Kelly Field, Texas, spent a few days here early in September. He left for Fort Benning, Ga., where he expected to continue his trip of inspection in connection with service schools.

Fourteen Army bombers, under the command of Major Hugh J. Knerr, arrived at this field enroute from Langley Field to Los Angeles to attend the Air Races.

Lieuts. R.C. MacDonald and R.C. Wriston arrived Sept. 8th in two new O2-H's which they ferried from Santa Monica, Calif., for use at this field.

Major Ira A. Rader, Air Corps Representative at the Infantry School, Fort Benning, Ga., made several trips by air to and from this station during September.

Lieut. H.F. Woolard ferried a Douglas Transport from Wright Field, Dayton, Ohio, for use at this station.

Lieut. R.C. Wriston, Photographic Officer, completed a mosaic of Fort McPherson, Ga.

The opening of the airport at Marion, N.C., Sept. 22nd and 23rd was attended by Lieuts. Frank Byerly, Jr.; D.D. Arnold and I.W. Ott, who flew three O2-H's.

On Sept. 22nd the Maxwell Field football team journeyed to Fort Benning, Ga. and suffered defeat at the hands of the strong Fort Benning team.

Lieut. James G. Pratt arrived at this field Sept. 24th, having ferried a new O2-H from Santa Monica, Calif., via El Paso, Wichita, St. Louis, Chicago, Cleveland and New York.

Lieuts. W.B. McCoy, N.L. Cote, and C.H. Earnest, in three O2-H's, and Lts. Byron A. Glover, W.H. McArthur and I.W. Ott, in three PT's, attended the opening of the airport at Albany, Ga., on Sept. 29th and 30th.

On Sept. 29th Lieut. Reuben Kyle, Jr., departed for Albany, Ga., enroute to Lakeland, Fla., to ferry Mr. Davis, Secretary of Labor, from Lakeland to Jacksonville, Fla.

San Antonio Air Depot, Duncan Field, Texas, Sept. 28th.

Fifteen members of the present class at the Air Corps Advanced Flying School at Kelly Field visited the Depot on Sept. 26th for an inspection of its various operations.

Lieut. Harold D. Smith, from Fort Leavenworth, Kansas; Lieut. Isaiah Davies, from Richards Field, Kansas City, Mo., and Lieut. Walter R. Peck, from Schoen Field, Fort Benjamin Harrison, Ind., were recent visitors at this Depot, ferrying PT-1's to their respective stations.

Major Joseph Noyes, Air Reserve, and Lieut. Harry Weddington, Air Corps, were visitors at the Depot from Love Field, Dallas, Texas, on September 24th.

Warrant Officer Arthur R. Trabold was assigned to duty at this Depot, arriving here on September 17th from a leave of absence on completion of his tour of foreign service in the Hawaiian Department.

Lieut. Morris A. Schellhardt, Air Corps Reserve, completed a 14 days' tour of active duty at this Depot on September 25th.

Rockwell Field, Coronado, Calif., October 10th.

Rockwell Field's latest deserters from the bachelor ranks - 2nd Lieut. J.E. Mallory, Air Corps Reserve, and 2nd Lieut. Norman H. Ives, Air Corps Reserve, and their brides of a few weeks, were guests of honor of the officers of this post at a reception and dance held in the Officers' Club on the evening of October 6th. Beautiful sterling silver water pitchers, wedding gifts from the officers of Rockwell Field, were presented to the newlyweds. Lieut. Mallory was married at Santa Rosa and Lieut. Ives at Los Angeles.

The Navy marring mast, which has long been a dangerous obstacle on Rockwell Field, has been removed and the field cleared on that end of North Island. Operations of tactical units here made the removal necessary.

The first class of the scheduled Officers' Troop School, Rockwell Field, for the period October 1, 1928, to June 1, 1929, was held on October 8th. Lieut. R. Baez, Jr., conducted the class in armament and aerial gunnery.

Lieut.-Col. Frank L. Griffin, Corps Area Signal Officer, accompanied by Mr. Wm. L. Winner, Assistant Radio Engineer, Signal Service at Large, visited Rockwell Field the latter part of September for purpose of inspecting Signal Corps property and making such changes as deemed necessary, in the communication system of the post. A schedule of radio transmission was arranged between Rockwell, March Field and Los Angeles, and several changes in the radio equipment were made as a result of Colonel Griffin's visit.

Congressman Allen J. Furlow, of Minnesota, piloted by Lieut. Wm. N. Amis, A.C., arrived at Rockwell Field Sept. 21st, and departed for March Field the following day. Mr. Furlow is the sponsor for the "Furlow Bill".

Wing Commander T.G. Hetherington, British R.A.F., Air Attache to the British Embassy, was a recent visitor at this post.

Mr. H.M. Hunter, Ammunition Foreman, 9th Corps Area, arrived at this post October 8th to make a general inspection of the ammunition storage conditions.

Major P.E. Van Nostrand, A.C., Commanding Officer of Luke Field, Hawaii, and Captain Lowell H. Smith, former Chief Engineer of the Rockwell Air Depot, now stationed at Luke Field, were recent visitors at this post.

Major H. J. Houghton, Chief Engineer of the Rockwell Air Depot, and Lieut. C.P. Kane, Depot Supply Officer of the Rockwell Air Depot, left October 10th by rail for Wright Field, Dayton, O., to attend the annual Engineering and Supply Conference at the Materiel Division.

A very successful bridge party was held at the Officers' Club, Rockwell Field, the evening of October 2nd. The guests included practically all the officers of Rockwell Field and their wives. Mrs. E.C. Black and Mrs. H.R. Baxter were hostesses. Due to the increasing popularity of bridge, regular parties are being planned, and the ladies of the post will act as hostesses in rotation.

France Field, Panama Canal Zone, Sept. 20th.

Shortly after the announcement of the marriage of Lieut. G.C. McDonald and Miss Ann Brown Kimberly, on Saturday, August 25, 1928, the bride and groom arrived at this station. They were met at the docks by the band and all of the officers of France Field, and were given a regular Air Corps take-off on the Non-Stop Flight of Matrimony. The McDonald family haven't moved on the post as yet, but it is expected they will be given a regular old fashioned chivaree when they do.

Lieut. Cluck departed from this station Sept. 3rd for leave of absence in the United States and reassignment upon expiration thereof to Wright Field. Lt. Cluck is certainly missed by all personnel of the command, as he is a very active Air Corps officer and is well liked by everyone with whom he comes in contact. Wait until "Jimmie" tells his fish stories! Ask him what to do with an 8-foot shark.

Lieut. King also left this station Sept. 3rd for leave of absence in the United States, and since that date notification has been received to the effect that he has sent in his resignation from the service. No doubt his resignation will be approved by the President, and the event it is, the Air Corps will lose a very fine young officer and an excellent pursuit pilot.

A hunting party consisting of Master Sgts. Haney and Lucy, Tech. Sgt. Baxter and Staff Sgts. King, Kirby and Musick, went up into the interior of the Republic of Panama to Don Arias' Rancho, where they enjoyed excellent hunting for five days. The rancho is used by Don Arias as a summer resort and, although it is 60 miles from nowhere, he has the place fixed up with electric lights furnished by his own lighting plant, running water piped all over the place, and the thatch-covered huts furnished with up-to-date furniture, including wicker. From all information obtained from the hunting party, it was practically impossible for them to realize that they were actually in the jungles on a hunting trip in view of the fact that they had all the comforts of home instead of having to "rough it" as they expected to do.

Several cross-country trips to David, Republic of Panama, were made during the month by the 7th Observation Squadron and the 25th Bombardment Squadron which included four trips with the ambulance plane for the purpose of ferrying sick people to the hospital in Panama City.

The 7th Observation Squadron observed their Organization Day on Sept. 8th by having a Squadron Field Meet in the Colon Baseball Park. The field meet included pitching horseshoes, boxing, foot races, baseball, etc., and lasted until 12:00 noon. Beer and sandwiches kept the personnel from starving after the finish of the meet. There was a full attendance of officers and men, and a good time was enjoyed by all.

Lieut. Glen C. Jamison is receiving the congratulations of the officers of the post on his recent promotion to the grade of 1st Lieutenant.

Lieut. Robert T. Zane, commonly known by his intimate friends as "Bob", having failed to obtain his third extension for duty in this Department, was scheduled to leave for the United States for reassignment to Selfridge Field on

September 27th. In commenting on the disapproval of his application by the War Department, one of the officers was heard to say that no doubt he was under the influence of ether, and probably that was the reason why his explanations for desiring such an extension was questioned by the War Department and his request refused. After five years here he has made many friends, and everyone will be sorry to see him leave.

Colonel Fierro, who flew from Mexico to Panama recently, landing at Albrook Field, ferried his plane to France Field on September 11th for a complete overhauling. The work was started immediately by his own mechanic, assisted by mechanics of the field, and was completed on September 17th. During his stay on this side, Colonel Fierro was the guest of France Field.

On September 12th the officers and ladies of France Field held a reception in honor of Colonel Fierro. All post commanders, their staffs and ladies were guests at the reception, also prominent civilians on the Atlantic side. The visitor left for his home station in Mexico City on Sept. 18th. The following letter of commendation was received from the Mexican Legation; addressed to Major-General Malin Craig, Department Commander:

"In the name of Lieut.-Colonel Fierro and in my own, I come to express my most expressive thanks for the many attentions and facilities that were given him during his stay here by you and other high officers of the United States Army stationed in the Canal Zone.

Lieut.-Colonel Fierro charged me expressly to convey to you his appreciation for the care and attention given the 'Lower California No. 2', both at Albrook Field and France Field, where he was allowed all kinds of facilities to repair his monoplane and to replace some broken parts.

I seize this opportunity to reiterate to you the assurance of my attentive consideration.

RAFAEL FUENTES JR.

Charge D'Affaires of Mexico."

Brooks Field, San Antonio, Texas, October 17th.

The Air Corps Primary Flying School at this field has enrolled, for the November 1st Class, 77 student officers from the last graduating class at West Point. The new student officers have all reported and are now in the midst of their ground school instruction.

Lieut. Max F. Schneider has taken over the duties of Assistant Director of Ground School, relieving 1st Lieut. J.C. Kennedy, who is leaving for the Philippine Islands.

Lieuts. A.H. Rich and D.M. Ramsey ferried two PT-1's from the San Antonio Air Depot to Bolling Field, Washington, D.C. These pilots left on October 10th and carried as passengers Privates Taylor and Strief, who traveled as far as Chamute Field, Rantoul, Ill. Upon their return, Lieuts. Rich and Ramsey were to ferry two DH4M-2P planes from Bolling Field to Kelly Field. While in Washington these two officers paid a brief visit to the Office Chief of Air Corps to meet old friends and acquaintances.

Lieuts. C.E. Branshaw and E.W. Raley left for Wright Field to attend the Engineering Officers and Supply Officers Conference held there this month.

Lieut. Harvey F. Dyer ferried a DH4M-2P from Maxwell Field to Kelly Field on October 4th.

Lieut. J.C. Denniston ferried a DH4M-2P from the Fairfield Air Depot to Kelly Field on September 26th.

Lieut. James Flannery is Acting Air Corps Supply Officer during the temporary absence of 1st Lieut. E.W. Raley.

Due to "inherent flying ability" seven Flying Cadets left the School during the past week. At the present time 91 student officers and 94 cadets are under instruction.

Master Sergeant J.L. Waugh, 46th School Squadron, Brooks Field, was ordered to report to the Commanding Officer, Flying Cadet Detachment, for the November 1st Class, to take training in grade. Staff Sergeant Snowden from Kelly Field is training in grade with the July 1st Class.

The football season is on, and Brooks Field started practicing about Sept. 1st with 2nd Lieut. Simonton, former West Point star, as head coach. Coach Simonton should put a fine team into the field with the material he has available, augmented by a coaching staff boasting such former West Point and All-

American stars as "Light Horse Harry" Wilson, Art Meehan, Norris B. Harbold, Samuel R. Brentnall, LaVerne G. Saunders, Truman H. Landon and Emmett O'Donnell. Wilson and Meehan, coaching the backfield, have developed three fine backs, "Red" DeFord, quarterback; Harrington, fullback, and Hughes, halfback. Harbold and Brentnall have had a harder time with the end positions, as most of the applicants are green material, but with a little more time they will have the positions filled nicely. Saunders, Landon and O'Donnell are working on the line and have turned out a plunging offense with Hargrove at center and Flesher at tackle showing up exceptionally well.

On October 7th Brooks Field played the San Pedro Tigers at Garrett Field, San Antonio, and defeated them 7 to 0. The team did well on defense, but offense was weak within scoring distance. DeFord made the score on a quarterback sneak and Hughes gained many yards on line plunges. The entire line showed up well on defense.

On Saturday, October 13th, the team went to Kerrville, Texas, for their second practice game of the season. With Schreiner Institute as opposition they came out on the short end of a 19 to 0 score. According to the coaches, defeat was due to the superior condition of the Institute players. Total number of first downs was equal. Brooks Field completed 10 forward passes out of 17 attempts. Defense was decidedly weak during the first half, all tackles being made by the backfield. Hargrove, Harbold and DeFord played well throughout the game and held Schreiner Institute to a lower score than any other team has been able to do this season.

Bolling Field, Anacostia, D.C., October 15th.

Bolling Field formally opened its new Gymnasium on the evening of October 9th with a smoker. Lunch was served to all officers and enlisted men of the post and their visitors at 6:00 o'clock in the Mess Hall. The excellent eats provided by Mess Sergeant Joseph J. Stein were washed down with copious draughts of near beer.

During the serving of lunch the post orchestra furnished excellent music, and again later in the evening, after the adjournment to the Gym, The doors of the gymnasium were thrown open at 7:00 o'clock, and all the seats were quickly filled. The boxing started promptly at 8:00 o'clock, with a battle royal put on by four colored boys from Anacostia.

The talent for the six 3-round exhibition bouts was supplied by the men stationed at the field, and a troop of fighters introduced by Goldie Ahearn, ex-light-weight champion of the A.E.F., who is now a local trainer. The most interesting bout of the evening was undoubtedly that put on by Bobby Goldstein and Sailor DeLacey.

A vacant hangar with approximately 20,000 feet of floor space has been turned into a modern, well-heated gymnasium which can be used throughout the year.

Courts have been laid out for handball, volley ball, indoor baseball, basket ball and squash on one side of the gymnasium, while on the opposite side is the attendant's office, dressing rooms and showers. On top of the dressing rooms a gallery has been built for the use of the spectators.

At the conclusion of the bouts, Major Howard C. Davidson, post commander, announced that the gymnasium was now open for the use of all members of the command and also extended the use of the Gym to those stationed at the Naval Air Station.

It is hoped that during the coming winter much use will be made of this gymnasium and that many games may be obtained with visiting teams.

A dressing room has been fitted up in the Officers' Club for the use of any ladies desiring to make use of the gymnasium.

Equipment for use in any of the sports may be had from the Gym attendant for a small fee.

This gymnasium will fill a long felt want on this post, as the winter months have been practically devoid of any athletic entertainment for either officers or men.

Camp Nichols, Rizal, P.I., September 7th.

Flight B, 2nd Observation Squadron: Members of this organization are anxiously awaiting the delivery of the new Douglas O2-H's. Six of them and five new light bombers arrived lately on the Transport MEIGS.

Headquarters, 4th Composite Group: Captain Charles A. Pursley is temporarily

in command of Camp Nichols and is the Executive Officer for the 4th Composite Group, Air Corps, having relieved Major Kilner, who is traveling in China and Japan.

Sergeant Wirth, our Mess Sergeant, has decided to return to the States after fifteen years in the Philippine Islands.

Private Louis D. Garton, formerly of this organization, reenlisted in the 10th Signal Corps Company. Why leave the Air Corps, Garton?

Promotions were few this month, Private, 1st Cl., Kerr being promoted to Specialist, 5th Class, and Private John J. Stibal to Specialist, 6th Class.

66th Service Squadron: Captain George L. Usher, Commanding Officer of the Squadron, is on 30 days' leave of absence, having left on the U.S.N.T. GOLD STAR for Chinese ports. During his absence, 1st Lieut. Earl S. Hoag has assumed command.

The inter-post ten pin bowling teams brought out some good material. At present the squadron is leading by a good margin, and it is hoped that we can keep the good work up.

28th Bombardment Squadron: 1st Lieut. Corley P. McDarment, who has been touring the Southern Islands of the Philippine Archipelago the past month, reports a very interesting trip. Lieut. McDarment leaves us on the sailing of the next transport, having received orders assigning him to Langley Field.

The Philippine Islands possess attractive qualities, as can be seen from the applications for extension of foreign service tours. Ten enlisted men of this squadron have applied for extension.

Master Sergeant Fred Kelly left August 2nd on a ninety-day furlough to visit China and Japan. Upon expiration of this furlough he will report to March Field where he has been assigned to duty.

It was with a feeling of regret that the squadron learned of the injuries sustained by Staff Sergeant Emil G. Schmolka, when the Martin Bomber in which he was a passenger made a forced landing in a rice field one mile south of Calumpit, Bulacan. While flying at an altitude of 1,000 feet, motor trouble developed, and Lieut. Anderson, the pilot, was forced to pick a place to land. The plane hit a ditch, turned over on its back and caught fire. Sergeant Schmolka received a fractured skull and internal injuries. The latest reports from Sternberg General Hospital indicate a fair chance of his recovery. Privates Robert Baker and William Dickinson also were passengers. The former escaped without injury, while the latter suffered a sprained wrist.

6th Photo Section: The personnel of this Section was kept busy this month with laboratory work pertaining to the Northern coast of Luzon. Inasmuch as the supply of aerial film was nearly exhausted on this project and the rainy season has set in, very little aerial photography has been done.

Lieut. Goddard returned from three weeks' detached service in the Southern Islands.

Staff Sergeant Patterson was discharged on the 18th and "re-upped" on the 19th. He leaves the Section on the October Transport, going to the Photo Section at Fort Sam Houston, Texas.

Clark Field, Camp Stotsenburg, P.I., Sept. 7th.

3rd Pursuit Squadron: The dry season is still on around Clark Field. Some of the new officers are questioning the fact that there is a rainy season here.

Bombing and ground target practice with some pursuit tactics thrown in have been the routine work for the pilots. Worthy of mention is the fact that the last wooden DH in the Philippine Department, if not in the U.S. Army Air Corps, was dismantled and washed out this month.

Kindley Field, Fort Mills, P.I., Sept. 7th.

2ND Observation Squadron: The month of August was quiet and uneventful. Rumors of the Squadron moving to Camp Nichols recur with alarming frequency, but we haven't started packing up yet.

Lieut. and Mrs. Meloy are scattering pesos through China right now. They sailed on the GOLD STAR for a six weeks' trip.

Lieut. Dunlap is commanding the 2nd Observation Squadron during the absence of Lieut. Meloy.

San Antonio Air Depot, Duncan Field, Texas, October 19.

The Hon. Allen J. Furlow, Representative in Congress from Minnesota, recently visited this Depot and inspected its operations, while on an air tour of the country to gather first-hand information of the various military and commercial aviation activities from the more important Air Corps establishments and commercial airplane factories of the United States. Congressman Furlow appeared greatly pleased with the work of the various Air Corps activities in this vicinity.

Major-General Charles P. Summerall, Chief of Staff of the Army, visited this Depot October 12th, during his tour of inspection of the military centers of this section, accompanied by Brig.-General Albert J. Howley, Commanding General of the 8th Corps Area, and Brig.-General Frank P. Lahm, Commanding General of the Air Corps Training Center.

On October 5th the Depot was visited by General Eduardo Hay, Under-Secretary of Communications of the Republic of Mexico, with Lieut. Luis Boyer, Chief of the Mexican Air Mail Pilots, accompanied by Brigadier-Generals Albert J. Bowley, Frank P. Lahm and Major Robert J. Halpin, G-2 of Hqrs. 8th Corps Area. General Hay, who arrived October 3rd for a visit in San Antonio, aboard the first Mexican air mail plane (piloted by Lieut. Boyer) of the new International Air Mail Line between the United States and Mexico, is intensely interested and active in the promotion of mutual aviation interests between his country and the United States, and is particularly desirous of seeing the eventual establishment of a great Pan-American airway linking the United States with all the Latin-American nations.

Captain Willis H. Hale, of the Office Chief of Air Corps, on a tour of inspection of the Visual Inspection System at various Air Corps Stations, was a visitor at this Depot from September 29th to October 2nd for that purpose. He was assisted in this inspection by Tech. Sgt. Christian E. Petersen, of Bolling Field.

Mr. Cornelius G. Loose, Technical Assistant, of the Field Service Section, Air Corps Materiel Division, Wright Field, visited the Depot the first part of October on temporary duty for conferences in the matter of supply requirements and maintenance questions.

During October the Depot lost two of its officers, ordered to other stations. Lieut. Harry A. Halverson, who has been with us for approximately the last three years, left here on the 13th for leave of absence, visiting in California, prior to his transfer on Dec. 13th to March Field. Lieut. James E. Duke, Jr., on duty at this Depot since July, 1925, was transferred to Selfridge Field October 1st, departing on that date for a short leave of absence to make the trip to that station by automobile. The personnel of this Depot, and the numerous friends of these two officers in this vicinity, greatly regret their departure and wish them every success at their new posts of duty.

Captain Joseph W. Timmons, Jr., QMC, was welcomed October 2nd as a new member of this command, being transferred from Fort Bliss, Texas, for duty as Quartermaster at this Depot.

Lieut. A W. Vanaman, Chief Engineer Officer of the Depot, returned October 2nd from a three months' leave of absence, visiting in the East.

Lieuts. R.V. Ignico and A.S. Albro, of this Depot, left October 14th to attend the annual Engineering and Supply Conference held at the Headquarters of the Air Corps Materiel Division, Wright Field.

Major John N. Reynolds, Commanding Officer of Mitchel Field, accorded this Depot the pleasure of a brief informal visit on October 17th while passing through this vicinity.

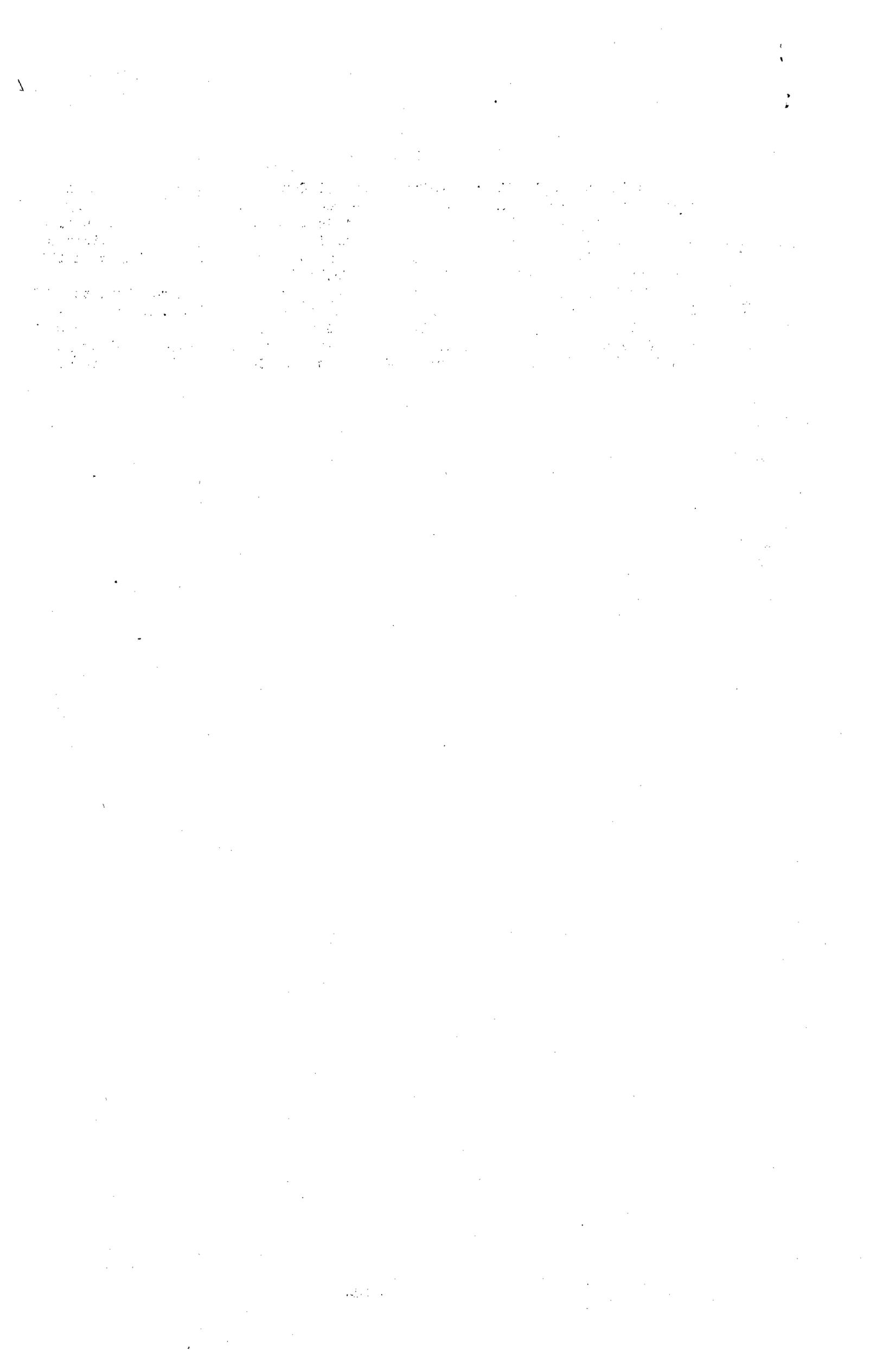
Lieut. Leland R. Hewitt, on duty with the Organized Reserves at Little Rock, Ark., was a visitor here October 17th and 18th to obtain a PT-1, which he ferried back to his activity.

Among our number at the present time are two members of the Air Reserve: Captain George R. Gaenslen, Air Reserve, of San Antonio, who is on 14 days' active duty training, beginning Oct. 17th, and who is on familiar ground with us, having previously had three periods of active duty at the Depot; and Lieut. William D. Herring, of Amarillo, Texas, who is availing himself of thirty days' instruction and training on inactive status, beginning October 8th.

Mr. C.O. Wetherell, for a number of years clerk in charge of the Civilian Personnel Section of Depot Headquarters, was recently transferred to the Rockwell Air Depot, Coronado, Calif. As an efficient employee of long service, and as a leader in all civilian welfare, social, and athletic activities at this Depot, Mr. Wetherell was a familiar and esteemed figure in our midst, and on his departure for his new station on September 20th was the recipient of sincere expressions from all of regret for his leaving us and wishes for his continued success.

During the splendid and colorful Annual Convention of the American Legion which was held in San Antonio during the week beginning October 8th, many of the Legionnaires paid sightseeing visits to this Depot as one of the points of interest of the city. Several of them were particularly interested in revisiting the scene of their activities here during the memorable days of the War when this Depot was the old original "Kelly Field No. 1."

The Engineering Department of this Depot overhauled and repaired the following airplanes and engines during the month of September, 1928: Airplanes,- 2 DH4M-1, 1 DH4M-2, 3 DH4M-2T, 11 FT-1, 1 AT-4, 1 NBS-1, 1 O2, 5 O2-C, 3 O2-H, 1 O2-J, 1 O2-M4, 1 C-2, 1 C-1, Total, 33 airplanes. Engines,- 47 Liberty, 7 Wright-E, 4 Wright E-4, 1 Wright J-5, 2 Curtiss D-12, Total, 61 engines.



Serial No. 274-S

LIST OF NEW MATERIAL ADDED TO INFORMATION DIVISION FILES,
OCT. 1 to OCT. 27, 1928.

Available for loan to Air Corps organizations only upon
request to the Air Corps Library, Munitions Bldg.,
Washington, D.C.

DOCUMENTS

- A 00.7 Military Show Fort Snelling, Sept. 28-29-30, 1928. Program and
U.S. 5 Guide to Exhibits.
- A 10/192 Considerations on Propeller Efficiency, by A. Betz. Sept. 1928. Nat.
No. 481 Advisory Committee for Aeronautics, Tech. Memo. No. 481.
- A 10/192 Ignition and Combustion Phenomena in Diesel Engine, by F. Sass.
No. 482 Oct. 1928. National Advisory Comm. for Aeronautics. Tech. Memo. #482.
- A 10/220 Agreement Relating to Air Navigation between Poland and Czecho-
No. 315 slovakia. Sept. 5, 1928. (In Bulletin of Information of Internat-
ional Commission for Air Navigation, No. 315, pp. 1-6.)
- A 10/220 Methods Employed at Croydon Aerodrome, at Lympne Airdrome and at
No. 316 the R.A.F. Aerodrome, particularly at Night for Indicating the direc-
tion of the Wind, Marking the Limits of the Landing Area or Aerodrome
Boundaries and Marking Obstacles. (In Bulletin of Information of
International Commission for Air Navigation, No. 316, pp. 4-8.)
- A 10 U.S.40 The Hazard of Lightning in Aviation. Sept. 26, 1928. The Daniel
No. 10 Guggenheim Fund for the Promotion of Aeronautics, Bulletin No. 10,
Sept. 26, 1928.
- A 10 U.S.101 Civil Air Accidents and Casualties (First Half Year, 1928) and
No. 36 1927. U.S. Dept. of Commerce, Domestic Air News, Sept. 15, 1928, pp. 7-9.
- A 10.23 109 The Determination of Several Spray Characteristics of a High Speed
No. 298 Oil Engine Injection System with an Oscilloscope, by C.W. Hicks and
C.S. Moore. Nat. Advisory Comm. for Aeronautics, Tech. Note #298.
- A 81/37 Air Corps Insignia. 38 Photos.
- B 00 U.S./3 Executive Order for the Purpose of Carrying into Effect the Pro-
visions of Sec. 20 of the Act of Congress Approved June 10, 1922, as
Amended by Sec. 6 of the Act of July 2, 1926, Public 446, 69th Con-
gress, Relative to Increased Pay for Personnel of the Army, Navy
Marine Corps, Coast Guard and National Guard. Executive Order #4610,
March 10, 1927.
- B 10 Commissioned Officers, Qualified Military Air Service Pilots and
Mexico/1 their Who's Who, Mexico. June 23, 1928.
- C 00 U.S.15 Separate Air Ministries, France. (From Washington Post, Sept. 11,
1928 and Relates to Separate Air Service in U.S.)
- C 21/87 1928 Annual Report of the Chief of the Air Corps, 1928.
- C 21 96 Brief History of the Air Corps and Its Development, by Lt. Clayton
Bissell. 1927. Stencil U-746, A.C.
- C 50.09 8 The Army Industrial College, Outline of Course, 1928-1929.
Sept. 4, 1928.
- C 53 U.S./8 Air Corps Primary Flying School, Brooks Field, San Antonio, Texas,
1928 Courses of Instruction, 1928. Contents: Pt. 1, Curriculum; Pt. 2,
Airplane Engines.
- C 71.6 U.S.2 Two Man Altitude Photographic Flight by Capt. Stevens and Lt.
Doolittle, Sept. 22, 1928. Oct. 9, 1928. Stencil U-882, A.C.
- D 00.12 122 The Dimensions of Crates for the Overseas Shipment of Airplanes, by
No. 2945 F.W. Herman. Air Corps, Materiel Div., Tech. Report 2945, July 17, 1928.
- D 00.12 105 Recent Problem in Airplane Statistics - The Single Spar Wing - Pt.
No. 208 4. Jan. 14, 1927. Air Corps, Materiel Div. Memo Report No. 208.)

- D 00.12 105 Strength of Materials, by G. Delanghe. Air Corps Materiel Div. No. 224. Trans. 224, Aug. 28, 1928.
- D 00.12 122 Questionnaire on TE-2 Airship, by F.D. Swan. Air Corps Materiel No. 2917 Div. Tech. Report #2917. June 15, 1928.
- D 00.12 122 Tests of Keystone Bomber LB-5A Fin and Stabilizer, by O.F. Spevacek. Air Corps Materiel Div. Tech. Report #2936, July 10, 1928.
- D 00.12 122 A Study of Elevator Design for Maximum Rigidity and Minimum No. 2937 Weight, by R.H. Rice. Air Corps Materiel Div. Tech. Report 2937, July 21, 1928.
- D 00.12 122 Puncture Proof Inner Tubes, by C.J. Cleary. Air Corps Materiel No. 2938 Div. Tech. Report #2938, Aug. 2, 1928.
- D 00.12 122 Experimental Determination of Division of Upper Wing Hinge Drag No. 2940 Reactions in XLB-6 Airplane, by H.L. Pfau. Air Corps Materiel Div. Tech. Report #2940, June 25, 1928.
- D 00.12 122 Static Tests Conducted on Bendix-Laddon (Disc) Wheels, by E.G. No. 2949 Rydlun. Air Corps Materiel Div. Tech. Report #2949, July 25, 1928.
- D 00.12 122 Erection and Operation Tests of Commercial Motor Balloon "Goodwill" No. 2950 by W.E. Huffman. Air Corps Materiel Div. Tech. Report #2950, July 26, 1928.
- D 00.12 122 Altitude-Azimuth Chart, by Bradley Jones. Air Corps Materiel Div. No. 2952 Tech. Report #2952, July 21, 1928.
- D 00.12 122 Report of the Static Test Conducted on the Sauzedde (Wire) Wheels, No. 2959 by E.G. Rydlun. Air Corps Materiel Div. Tech. Report #2959, Aug. 18, 1928.
- D 00.43 38 Aircraft Accidents, Method of Analysis. N.A.C.A. Report #308, 1928. (Report Prepared by Special Committee on Nomenclature, Subdivision and Classification of Aircraft Accidents.)
- D 00.57/1 Oxy-acetylene Welding in the Aircraft Industry, by J.B. Johnson.
- D 10.11 8 The Determination of the Elastic Moduli of a Mild and a Medium Steel, by H.E. Smith and H.L. Cox. (Great Britain Aeronautical Research Committee Report and Memo #1138, June, 1927.)
- D 10.13 27 Aluminum Alloy Reinforced Plate Columns. Navy Dept. Bureau of Aeronautics. Serial #80076, Sept. 27, 1928.
- D 13.46 3 The Interlocking Equisignal Beacon, by Capt. W.H. Murphy. (From "Signal Corps Bulletin" No. 41, Dec. 1927.)
- D 52.1 431 The Armstrong Whitworth "Starling" (British) (Single Seat Fighter) No. 82 N.A.C.A. Aircraft Circular 82, Sept. 1928.
- D 52.1 525 Model Designation of Airplanes, Oct. 1, 1928. Prepared by Air Corps Materiel Division.
- D 52.1 Auto- Further Development of Autogyro Theory, Pts. 1 and 2, by C.N.H. giro/8 Lock. Great Britain Aeronautical Research Comm. Report & Memo #1127, March, 1927.
- D 52.151 61 The Lift Distribution in Any Biplane, by L.V. Kerber. Rev. May 11, 1928. Aug. 12, 1927.
- D 52.18 4 On the Horizontal Flight of a Helicopter, by H. Glauert. Great Britain Aeronautical Research Comm. Report & Memo #1157, March, 1928.
- D 52.43 1 General Information of Detachable Blade Type Propellers. Navy Dept. Bureau of Aeronautics. Tech. Note #189, Sept. 17, 1928.
- D 52.6 13 Salvage of Airplanes. Navy Dept. Bureau of Aeronautics. Tech. Note #191, Sept. 25, 1928.
- D 52.62 14 Water Pressure Distribution on a Seaplane Float, by F.L. Thompson. N.A.C.A. Report #290, 1928.
- D 52.7 8 The Resistance of the International Airship Models Measured in the Wind Tunnel of the Royal College of Science, South Kensington, by F.T. Hill and T. Tanner. Great Britain Aeronautical Research Committee Report & Memo #1160, March, 1928.

D 72.1 Wing Gun Installation for O2-U-1. Navy Dept. Bureau of Aero-Browning/6 nautics. Tech. Note #190, Sept. 15, 1928.

A oo.1 1 Aeronautics from 1813 to 1817 - Complementary Notes by Chas. Dollfus. Supplement to Articles in "Aerophile", Jan. 1, May 15, 1914; July 1, 15, 1915; July 1, 15, 1916 and March 1, 15, 1917.

BOOKS

020 D19G Modern American Library Economy -- List of Subject Headings for Information File. 2d Ed. Dana, J.C.

172.4 K42w Will Civilization Crash? Kenworthy, Hon. J.M.

172.4 N82 Back of War. Norton, H.K.

331.88 N21 The Work of the International Labor Organization. National Industrial Conference Board.

336.73 Un3ap Appropriations, New Offices, etc. Statements...1928. U.S. Congress.

341.1 L47L League of Nations...Contents: Special commission for the preparation of a draft convention on the private manufacture of arms and ammunition... Private manufacture and publicity of the manufacture of arms and ammunition and implements of war; Declaration concerning wars of aggression; arbitration, security, disarmament and the work of the Preparatory Commission for the disarmament conference. League of Nations.

341.1 Un3 Report of the Delegates of the U.S. of America to the Sixth International Conference of American States Held at Habana, Cuba, January 16 to Feb. 20, 1928. U.S. Delegation to the International American Conference. 6th, Habana, 1928.

347.7 M13 Patent Office Practice. McCrady, A.R.

355 Ar5 Armaments Year Book, 1927-1928.
1927/28

355 Az6 The Reserve Officers' Handbook. Azoy, A.C.M.

355 G31 The Mechanization of War. Germain, V.W.

356.2 Un3i Intelligence and Its Relation to the Air Service. 1918. U.S. Army A.E.F., 1917-1919.

358.51 F84a Aerial Observation for Artillery. (1918) France. Ministere de la Guerre.

384 Sh8 Wireless Communication in the British Empire. (U.S. Bureau of Foreign and Domestic Commerce (Dept. of Commerce) Trade Inform. Bul. 551) Shoup, G.S.

538.7 Un3m Terrestrial Magnetism. (Special Publication No. 126) U.S. Coast & Geodetic Survey.

623.41 Un3o Ordnance Provision System. Groups G, L, and R.

629.13 G78 Pioneers of the Air. Gravatt, Lila.

629.13 G79ap The Siskin III Aeroplane, Jaguar Engine. (Air Publication 1317) No. 1317 Great Britain Air Ministry.

629.13 L51 Pilot's "A" License. 2d Ed. Leeming, J.F.

629.13 M22a The Art of Flying. Macmillan, Norman.

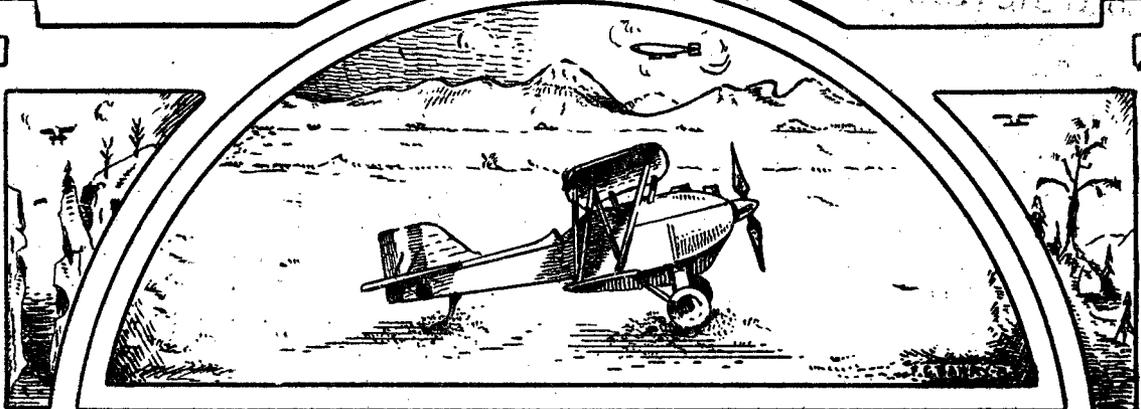
629.13 St4a Acrobatics, A Simple Explanation of Aerial Evolutions. Stewart, Oliver.

629.13 Un3a Conquests of the Air, Record Flights and Flyers. Union Trust Company, Detroit.

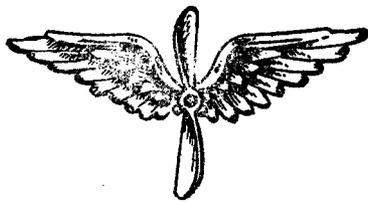
Serial No. 274-S

BOOKS, Cont.

- 629.1303 Un3b Balloon Terms, their Definitions and French equivalents. U.S. War Dept. Div. of Military Aeronautics.
- 629.144 Oa4 Oakland Municipal Airport. Oakland, Cal. Board of Port Commissioners
- 629.148 G79 1928 Air Force Act, 1928. Great Britain Laws, Statutes, etc. 1910-1928 (Geo.V)
- 629.155 Splg Gentlemen Prefer Aeroplanes! Complementary to This Airship Business.
- 691.1 Un3g Grade Marking of Lumber for the Consumer's Protection. U.S. National Committee on Wood Utilization.
- 912 R15c 1928 Commercial Atlas. Ed. 59. Rand, McNally & Co.
- 913.42 C85 Air Survey and Archaeology. (Great Britain Ordnance Survey. Professional Papers. New Series No. 7) Crawford, O.G.S.
- 940.44 En2 Letters from a Flying Officer. Enderby, Hon. John.
- 942.08 P21 The Army and Sea Power; A Historical Outline. Pargiter, R.B.



Air Corps
 News
 Letter



— ISSUED BY —
 OFFICE CHIEF OF AIR CORPS
 WAR DEPARTMENT
 WASHINGTON, D. C.

1928
 57
 U.S.
 AID

Table of Contents

---oOo---

	Page
Extracts from Annual Report of the Chief of the Air Corps, Fiscal Year 1928.	405- 410
Graduation Exercises of Advanced Flying School	410- 411
The New Class at the Advanced Flying School.	411
Marine Corps Officer Receives Navy D.S.M.	411- 412
Enlistment of Boy Scouts in the National Guard	412
War Time Insignia Revived.	412
Caterpillar Club Membership Passes Century Mark.	413- 416
Examinations for Regular Army Air Corps to be Held	416- 417
Employees Rewarded for New Ideas	417
Improvements Effected at Rockwell Air Depot.	417
Prospective Air Corps Officers from Marshall Field	417
Commercial Aviation in the Hawaiian Islands.	418
Advanced Flying School Participates in Staff Maneuvers	418
Lieut. Kelly Receives Distinguished Flying Cross	418
Amphibians Cruise to Lanao	419- 420
Class Parade of Air Corps Advanced Flying School	421- 422
Retiring Non-Coms. Honored with an Aerial Review	422
Instructors School Conducted at Kelly Field.	422
Lieut. Crumrine Assigned to 18th Pursuit Group	422- 423
Landing a Machine Gun Crew with Parachutes	423
Fast Flight from India to England.	423
War Department Orders Affecting A.C. Officers.	424
Notes from Air Corps Fields.	425

Information Division
Air Corps

November 24, 1928

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

---oOo---

EXTRACTS FROM ANNUAL REPORT OF THE CHIEF OF AIR CORPS, FISCAL YEAR 1928. ✓

Organization, Station and Personnel

The close of the fiscal year 1928 has seen the completion of the first increment of the Five-Year Expansion Program for the Army Air Corps as authorized by the Act of Congress, approved July 2, 1926. With only a few changes, the revised program of July 1, 1927, has been carried out.

No changes have been necessary in the basic organization of the Office of the Chief of the Air Corps to allow for the increased activities.

The commissioned personnel situation in the Air Corps has changed very little during the past fiscal year. The prospects for the betterment of the commissioned situation during the coming year are bright, provided vacancies are available in the Army which will allow a larger number of graduates of the flying school to be commissioned in the Air Corps. Seventy-six graduates of the Military Academy, West Point, class of 1928, have been detailed to the Air Corps. Due to the increased interest in aviation which has developed during the past year, the educational qualifications of the cadets being sent to the primary flying school have greatly increased. Approximately 70% of the cadets entering the July 1st classes at the primary flying schools are college graduates and upon graduation should offer excellent officer material for the Air Corps. The problem of increasing the commissioned personnel of the Air Corps is not one of producing flying personnel but of providing sufficient appropriations to allow graduates of the Air Corps Advanced Flying School to be immediately commissioned as Second Lieutenants in the Regular Army upon graduation or placed upon active duty as Reserve Officers, subject only, in so far as numbers are concerned, to the limitations fixed by the annual increments set forth July 24, 1927.

The number of aeronautical ratings in the commissioned personnel during the year was increased from 896 to 966, a net gain of 70.

The amount of flying pay appropriated for the fiscal year 1928 was considerably increased due to the expansion provided in the first increment and the sum of \$400,000. was available. Practically this entire sum was expended during the year for the flying pay of enlisted men on duty at regular activities and for sergeant instructors of the National Guard and the Organized Reserve. The restriction heretofore placed in the law which limited the number of men on flying duty was removed. An effort has been made for several years past to remove this restriction and as a result the money for this purpose was allotted to Commanding Officers so that they could place the number of men desired on flying duty with the money thus furnished. With the increased funds allowed, the allotments to all activities were increased accordingly.

As in the past year, the number of enlisted pilots has steadily decreased due, primarily, to the fact that increased commercial flying activities have made it possible for these men to secure better pay in civil life or in other government aviation agencies. If the Air Corps is to retain its small number of enlisted pilots, it is believed that suitable grades should be set aside for the exclusive use of men so rated or that a separate and distinct grade be secured. It is considered that all enlisted pilots should at least be in the first three noncommissioned grades and that they should not necessarily be carried, as at present, on the Tables of Organization.

Every effort must be made to accord flying cadets a status commensurate with their responsibility as potential officers, and the new uniform is one step in this direction.

The flying cadet is today legally an enlisted man and as such suffers from certain disadvantages which can only be removed by legislation. A study is being made of the flying cadet status with a view to forwarding recommendations on this subject.

During the year, an exceedingly large number of requests for information concerning flying cadets training was received. The number of applications for flying cadet appointment submitted was greatly in excess of the number submitted during the previous year. A total of 3,833 applicants against 1063 for last year were authorized to take the examination for flying cadet appointment. A large number of applications were returned to the applicants disapproved for failure to meet the prescribed requirements.

Three examinations were held during the year with results as follows:

<u>Date of Examination</u>	<u>Total Authorized</u>	<u>Qualified</u>	<u>Disqualified</u>	<u>Failed to Report</u>
Aug.14, 1927	1,336	139	618	579
Dec.13,1927	1,208	137	662	409
Apr.10, 1928	1,289	230	782	277

At the present time there are 136 eligibles on the list for promotion to Master Sergeant. It is expected that about 50 names will be added to this list shortly after July 1st as a result of examinations held in April.

Promotion to the grade of Technical Sergeant is particularly slow when it is considered that the Air Corps has nearly a thousand authorized Staff Sergeants. There are now about 350 eligible candidates on the list for promotion to this grade and about 150 names will be added shortly after July 1st as a result of the examinations held in April.

The Air Corps Act, approved July 2, 1926, provides for the extended active duty of Air Corps Reserve Officers and funds were allotted for the active duty during the first increment of 110 officers during the fiscal year 1928.

A total of 95 qualified pilots were ordered to one year's active duty with the various Air Corps Tactical Units specified by the five year procurement tables. Of this number, 39 were appointed in the Regular Army, 2 were killed, 1 relieved on account of physical disability, 1 discharged and 15 returned to inactive status to accept positions with the Department of Commerce or civilian flying concerns. Forty-one non-flying reserve officers who graduated from Air Corps ROTC units during June, 1927, were ordered to the flying schools on July 1, 1927, for one year active duty and flying training. Nineteen were relieved prior to July 15, 1927, because of their physical disqualification and 10 were relieved during the course on account of their lack of inherent flying ability.

The great volume and high quality of work performed by Flight Surgeons in the field, both in conducting the physical examinations for flying and in other professional work peculiar to flight surgeons, is outstanding. The following tabular statement serves as an index to the volume of this work which has steadily increased since 1921 and continues to increase commensurately with the expansion of the Air Corps under its Five-Year Program:

Year	Physical Examinations	Personnel on Duty in Office, Chief of the Air Corps			Total Flight Surgeons with Air Corps
		Flight Surgeons M.A.C.	Civilians		
1921	2,837	2	1	3	45
1922	4,188	2	1	3	45
1923	5,051	2	0	3	48
1924	5,546	2	0	3	50
1925	6,628	2	0	3	50
1926	6,553	2	0	3	47
1927	6,491	2	0	3	52
1928	9,612 (to May 31)	2	0	3	58

From the foregoing figures, it will be seen that the work required of Flight Surgeons has more than trebled since 1921, whereas the number of the personnel engaged in its performance has not been materially increased, a fact which reflects credit on the small corps of Flight Surgeons and merits consideration by higher authority.

It will be noted that the number of Flight Surgeons and civilian clerks on duty in the Medical Section of this office is the same as prior to the beginning of expansion of the Air Corps, while the volume of work performed in this office has increased 50% within the fiscal year. It has been and still is impracticable to detach a Flight Surgeon from any Air Corps station for assignment to duty in this office, since to do so would unduly deplete the station whence such officer was withdrawn.

Considering the volume and essential importance of the work performed by Flight Surgeons on duty with the Air Corps the number of these Medical Officers so assigned is totally inadequate and, except for additional help which has been afforded from time to time by Flight Surgeons ordered to temporary duty to assist in conducting the physical examinations of applicants for appointment as Flying Cadets by Boards at various stations, these physical examinations could not have been handled. Even with such additional examiners, there has been great difficulty experienced at all Air Corps stations in conducting the cadet examinations. Additional medical examiners are only available for a few days temporary duty in connection with the Cadet Boards and serve to make these examinations possible but the great bulk of the work by Flight Surgeons on duty with the Air Corps is performed without any outside assistance.

The total number of physical examinations for flying during the period July 1, 1927, to May 31, 1928, exceeds the total for the preceding fiscal year by 3,121, or approximately 50%. It is estimated that, with the additional physical examinations made during June, the total for the fiscal year will number about 10,000.

The Visual Inspection System mentioned in the last annual report was applied to the 731 Air Corps airplanes to which the system had not been previously applied so that this system is now in full use at all Air Corps activities. Standard sets of tools and equipment, the provision of which forms part of the Visual Inspection System, were issued for all airplanes. Thirty-seven station inspections were performed to promote proper functioning of the system.

The rate per thousand flying hours of accidents due to engine trouble (power plant) was reduced during the year to one-third of the average rate which prevailed during two previous years. These accident rates indicate that sixty-three crashes from engine troubles were prevented by new methods and equipment.

Aircraft accident records for several previous years were analyzed and facts indicating probability of further substantial reductions in accident rates were established. A system was initiated whereby all forced landings are reported and data compiled therefrom to indicate needed changes in aircraft construction and operation. By joint action of the National Advisory Committee for Aeronautics, the Air Corps, the Bureau of Aeronautics and the Aeronautics Branch of the Department of Commerce, a standard system for classifying accident causes and compiling data was devised, which will make comparable the statistics relating to all activities using the system. It has been found that most accidents are due to one or another of a few well defined causes and, by taking data from all activities comparable, the relative importance of the causes and the remedies needed may be determined with greater accuracy.

OPERATIONS AND TRAINING ✓

In October, 1927, there was assigned to the Signal Corps Aircraft Radio Laboratory at the Materiel Division, Wright Field, a three-motored, transport type C-2 airplane. This plane, which was equipped as a laboratory and which was used in connection with research on aircraft radio problems while in the air,

has made it possible to investigate problems and conduct tests heretofore not possible, and has contributed more than any other single thing toward overcoming difficulties encountered in this line of work. The important investigations carried out were in connection with radio beacons, high frequency transmitters and receivers, transmission phenomena, double voltage generators and capacity altimeters.

The airplane equipped as a radio laboratory has also been equipped with special instruments for the purpose of carrying out research on problems in aerial navigation.

During the Fiscal Year 1928 the Air Corps photographed approximately 35,000 sq. mi. of areas in various parts of the United States for the War Department and various Federal Agencies.

The major portion of this work was accomplished for the following Government Departments:

War Department	1,400 sq.mi.
Geological Survey.	10,000 sq.mi.
Engineers Corps, Rivers & Harbors.	8,200 sq.mi.
Coast and Geodetic Survey.	2,500 sq.mi.
International Water Commission	5,000 sq.mi.
International Boundary Commission.	2,000 sq.mi.

As in previous years, the surveys for the Geological Survey were carried out by two Independent Mapping Units whose organization was approved by the War Department.

During a four months' period the unit from Scott Field photographed approximately 5,000 sq.mi. in northern Maine, New Hampshire and Vermont and the unit from Chanute Field photographed about 4,500 sq.mi. of areas in the western and central portions of Illinois. Based on data furnished by the Geological Survey on the gross savings of aerial surveys over ground surveys, it is estimated that these two units accomplished a saving to the Government of close to \$100,000 in their four months' operations.

The Air Corps organization at Fort Sam Houston has about completed the photographing of a considerable portion of the course of the Rio Grande. This work is being done for the International Water Commission in connection with the rectification of the Rio Grande and the stabilization of the boundary line between the United States and Mexico and for use in a study of the distribution of the waters of the Rio Grande.

Courses of Instruction at Air Corps Special Service Schools
Fiscal Year 1928

School	Course	Students	Duration
Wright	Aero Engineering	*R.A. Officers	12 mos.
Langley	Tactical	R.A. Officers	9 mos.
		*N.G. & Res. Officers	4 mos.
Brooks	Primary Flying	All student pilots	8 mos.
March	Primary Flying	All student pilots	8 mos.
Kelly	Advanced Flying	All student pilots	4 mos.
Scott	Balloons & Airships	All student pilots	11 mos.
		N.G. & Res. Officers	5 mos.

Chenute	: Armament	: *R.A. Officers	: 5 mos.
	: Communications	: *R.A. Officers	: 9 mos.
	: Photography	: *R.A. Officers	: 9½ mos.
	: Maintenance Engineering	: *R.A. Officers	: 6 mos.
	: Armament	: N.G. & Res. Officers	: 3 mos.
	: Communications	: *N.G. & Res. Officers	: 3 mos.
	: Photography	: N.G. & Res. Officers	: 3 mos.
	: Maintenance Engineering	: *N.G. & Res. Officers	: 3 mos.
	: Airplane Mechanics	: R.A. Enlisted Spec.	: 24 weeks
	: Aircraft Armorers	: R.A. Enlisted Spec.	: 24 weeks
	: Crew Chiefs Course	: R.A. Enlisted Spec.	: 24 weeks
	: Engine Mechanics	: R.A. Enlisted Spec.	: 24 weeks
	: Gen.Mechanics, Aircraft	:	:
	: Welders	: R.A. Enlisted Spec.	: 32 weeks
	: Parachute Riggers	: R.A. Enlisted Spec.	: 6 weeks
	: Photography	: R.A. Enlisted Spec.	: 24 weeks
	: Radio Mechanics and	:	:
	: Operators	: R.A. Enlisted Spec.	: 28 weeks

*Inactive during year.

The National Guard. ✓ The approved tables of equipment for National Guard observation squadrons authorize the issue to each squadron of three standard service observation airplanes and five training airplanes. The issue of all standard observation planes was completed during the Fiscal Year. The Chief of the Militia Bureau has funds available and the Air Corps expects to procure sufficient additional training airplanes early in the Fiscal Year 1929 to complete the issue of five secondary planes to each squadron.

Despite the temporary shortage of equipment which resulted from the necessary elimination on September 1, 1927, of 104 wooden JN type airplanes in the National Guard, its training progress has been remarkably satisfactory. All auxiliary equipment, including radio, necessary to fully equip the three observation airplanes has been issued each squadron and their training programs for the summer of 1928 call for the performance, in cooperation with the other troops of their respective divisions, of practically all the missions common to the role of division aviation.

The Organized Reserves. ✓ The training of Air Corps Reserve Officers has been encouraged in accordance with an established policy.

In the last annual report reference was made to the rapid deterioration of the war-built JN training planes. The majority of planes used for reserve training was of this type, and it was necessary to withdraw them from use and salvage them on September 1, 1927. As only a limited number of PT training planes were available for replacement, the elimination of the JN planes caused a tremendous reduction in flying facilities - leaving some reserve stations without a single airplane. Strenuous efforts have been made to provide as many PT planes for reserve training as is possible and a number have been assigned to reserve stations. In the next six months it is expected to have adequate flying facilities available for the needs of the Air Corps Reserve.

Attention was also called in the last annual report to the large number of officers of the Air Corps Reserve who could no longer be considered flying officers. There has been a very large reduction in the number of flying reserve officers due to the increasing pressure of business matters and failures to pass the physical examinations. As a result of these causes, there are today less than 700 reserve officers capable of flying with the tactical units without further tactical training at a school, though there are over 3,000 reserve officers with aeronautical ratings.

For some years a study has been in progress with a view to organizing the Reserve Corps on a sounder basis. As a result of this study, recommendation was made that the flying officers of the Air Corps Reserve be classified according to their flying proficiency and this was approved by the War Department.

It is believed that this classification of the flying reserve officers into groups according to their flying proficiency is of far reaching importance. It will enable an accurate estimate of the exact degree of readiness of the Air Corps Reserve at all times and it will afford a sound basis for compiling the estimates for funds required for airplanes, reserve airdromes and other flying facilities.

The morale and esprit de corps of the Air Corps Reserve is remarkably high, considering the many adverse factors, such as lack of adequate flying facilities with which the individual reserve officer is confronted.

Materiel

The Materiel Division, Air Corps, has functioned under essentially the same organization since its establishment in 1926. What changes have been made since that time were in the nature of administration economies in furthering consolidation of activities as facilities at the new Wright Field became available.

The present organization comprises the Headquarters and engineering establishment at Wright Field, six Air Depots, four Procurement Inspection Districts and six Procurement Planning Offices under Industrial War Plans.

There are 128 military officers and approximately 3,000 civilians engaged in carrying out the various activities of the Division and component agencies under its jurisdiction.

The activities of the Materiel Division are carried on by six sections,-- Experimental Engineering, Procurement, Repair and Maintenance, Industrial War Plans, Field Service and Administration. The functions of each of these sections were outlined in the last annual report.

---oOo---

GRADUATION EXERCISES OF ADVANCED FLYING SCHOOL

Graduation exercises for the July-November, 1928, Class of the Air Corps Advanced Flying School, Kelly Field, Texas, were held on October 26th. At 1:30 p.m., an aerial review, in which all students participated, was held, the students flying the type of airplane in which they specialized. At 3:00 p.m. the Certificates of Graduation were awarded in the Aviation Club. The program was as follows:

Invocation - - - - -	Chaplain T.A. Harkins
Introductory Remarks - - - - -	Brig. General Frank P. Lahm
Commanding General, Air Corps Training Center	
Address - - - - -	Brig. General Frank Parker, G.S.
Assistant Chief of Staff, G-3, War Department	
Awarding of Certificates of Graduation - - -	General Parker
Awarding of Reserve Commissions to Flying Cadets - - - -	General Lahm
Awarding of Wings - - - - -	Major Clarence L. Tinker, A.C.
Benediction - - - - -	Chaplain T.A. Harkins

The following students were awarded Certificates of Graduation:

- 1st Lt. Joseph Smith, A.C., Cav.
- 2nd Lt. Marvin M. Burnside, A.C., Cav.
- 2nd Lt. John C. Crosthwaite, A.C., Cav.
- 2nd Lt. James D. Curtis, A.C., Cav.
- 2nd Lt. Maurice F. Daly, A.C., F.A.
- 2nd Lt. Robert L. Easton, A.C., Inf.
- 2nd Lt. Julius Flock, A.C., Cav.
- 2nd Lt. Orrin L. Grover, A.C., Cav.
- 2nd Lt. David M. Hackman, A.C., Inf.
- 2nd Lt. Neil B. Harding, A.C., Inf.
- 2nd Lt. Charles A. Harrington, A.C., C.E.
- 2nd Lt. Marion Huggins, A.C., Inf.
- 2nd Lt. Walter S. Lee, A.C., Inf.
- 2nd Lt. George W. McGregor, A.C., F.A.
- 2nd Lt. Bernard C. Rose, A.C., Inf.
- 2nd Lt. Ernest G. Schmidt, A.C., Inf.
- 2nd Lt. Milton M. Towner, A.C., F.A.
- 2nd Lt. Fay R. Upthegrove, A.C., Inf.
- 1st Lt. Miguel Rodriguez, Venezuelan Army.

Flying Cadets:

Roland O.S. Akre
Lindsay M. Bawsler
Robert K. Black
Donald W. Duckman
Russell A. Cone
William J. Crosswell
Joseph B. Duckworth
Alexis F. DuPont, Jr.
Charles D. Fator
Walter A. Fenander
Robert K. Giovannoli
Charles W. Haas
Howard E. Hall
George W. Hansen
Warren Higgins
Dean V. Johnston
Andrew D. Knox
Richard H. Lee
Donald R. Lyon
Emery J. Martin
Aubry L. Moore
William M. Morgan

Blaine B. Newcom
Harry J. Osterman
Ralph C. Rhudy
Stanley K. Robinson
Homer L. Sanders
Richard P. Sanders, Jr.
Frederick P. Sansom
William R. Shephard
Hugh L. Smith
Andrew F. Solter
Robert W. Stewart
Leland S. Stranathan
Carl F. Theisen
Kingston E. Tibbetts
Edward H. Underhill
Ernest K. Warburton
Clinton P. Warner
Max H. Warren
John H. Williamson
John A. Winefordner
Sheldon B. Yoder
Francis M. Zeigler

Special Observers:

1st Lt. George H. Brown, A.C.	1st Lt. Dache M. Reeves, A.C.
1st Lt. Charles Douglas, A.C.	1st Lt. Graham M. St. John, A.C.
1st Lt. Fred C. Fishback, A.C.	2nd Lt. William O. Eareckson, A.C.
1st Lt. Jesse A. Madarasz, A.C.	2nd Lt. Uzal G. Ent, A.C.
1st Lt. Harry G. Montgomery, A.C.	2nd Lt. John P. Kirkendall, A.C.
1st Lt. Harold A. Moore, A.C.	2nd Lt. Leslie A. Skinner, A.C.

One of the largest audiences to witness a graduation exercise at the Advanced Flying School was present, amongst those present being several Generals and other high ranking officers of the Army.

---oOo---

THE NEW CLASS AT THE ADVANCED FLYING SCHOOL

The largest class to enter the Air Corps Advanced Flying School under Plan "B", the new system of training, enrolled on October 1st for the class starting on November 5th. It consists of five Regular Army officers and 85 Flying Cadets in the Airplane Pilots Course and 12 Regular Army officers and one Warrant Officer in the Special Observers Course.

The following officers were assigned as Flying Instructors for the new class:

PURSUIT

1st Lt. E.C. Kiel, A.C., Senior Instr.
1st Lt. T.W. Blackburn, A.C.
1st Lt. A.B. Ballard, A.C.
2nd Lt. E.E. Partridge, A.C.
2nd Lt. L.S. Smith, A.C.
2nd Lt. Y.H. Taylor, A.C.
2nd Lt. S.E. Prudhomme, A.C.
2nd Lt. L.S. Jamieson, A.C.

ATTACK

Capt. John I. Moore, A.C., Senior Instr.
1st Lt. George Beverley, A.C.
1st Lt. Graham St. John, A.C.
2nd Lt. T.A. Sims, Jr., A.C.

BOMBARDMENT

1st Lt. J.W. Monahan, A.C., Senior Instr
1st Lt. W.T. Larson, A.C.
1st Lt. R.A. Snavely, A.C.
2nd Lt. E.F. Booth, A.C.

OBSERVATION

1st Lt. W.S. Gravely, A.C., Senior Instr
1st Lt. C.R. Evans, A.C.
1st Lt. H.K. Ramey, A.C.
1st Lt. H.A. Moore, A.C.
1st Lt. W.T. Meyer, A.C.
1st Lt. G.P. Talbot, A.C.
2nd Lt. R.H. Dean, A.C.
2nd Lt. O.P. Weyland, A.C.
2nd Lt. W.D. Old, A.C.
2nd Lt. J.W. Andrew, A.C.

---oOo---

MARINE CORPS OFFICER RECEIVES NAVY D.S.M.

Major R.E. Rowell, U.S. Marine Corps Air Service, a student at the Air Corps Tactical School at Langley Field, Va., was presented with the Navy Dis-

tinguished Service Medal by Major-General John A. LeJeune, Commandant, U.S.M.C., at a very impressive ceremony held at Langley Field on October 20th.

Major Rowell was in command of the Marine Air Forces in Nicaragua during a period of 13 months and performed a difficult trust so efficiently and well that the Distinguished Service Medal was awarded to him, accompanied by the following citation contained in a letter from the Secretary of Navy:

"For exceptionally meritorious service in a duty of great responsibility in command of the Aircraft Squadron attached to the Naval Forces on shore in Nicaragua from February 1927 to August 1928. Largely through his untiring energy, efficient administration, superior leadership and great personal heroism, under conditions heretofore unparalleled in the history of aviation, the success of our forces operating in Nicaragua during a period of political unrest was greatly enhanced."

Major-General LeJeune flew to Langley Field for the representation with Major Drainard as his pilot and accompanied by Captains Wood and Craig in another airplane. At Quantico an escort of three Marine pursuit planes met the General's flight and accompanied it to Langley Field, where they landed at 10:15 a.m., October 20th.

The presentation ceremony was simple but impressive. A square was formed on the flying field with bombardment, pursuit, observation and attack airplanes forming three sides of the square. All Air Corps organizations then formed inside the square and the reviewing officers and officer making the presentation on the open side of the square. The command was presented, the citation read and the well-deserved decoration pinned on the breast of Major Rowell's coat. The command was then dismissed and the airplanes were taxied into position on the flying field for an aerial review in honor of Major-General LeJeune and Major Rowell.

---oOo---

ENLISTMENT OF BOY SCOUTS IN THE NATIONAL GUARD ✓

The Secretary of War recently received a letter from James E. West, Chief Scout Executive of the Boy Scouts of America, in which he stated that reports from some State Scout Executives indicates that some units of the National Guard are enlisting and urging boys as young as thirteen to enlist and give false date of birth.

In reply, the Secretary of War called attention to the fact that the State authorities are responsible for the enlistment of members of National Guard units of the respective States, but that any violation of National Guard Regulations governing such enlistments might subject the offending State to withdrawal of Federal aid and recognition. He further suggested that the names of the officers alleged to have violated enlistment regulations be secured and submitted, and promised that a thorough investigation would be made of the specific cases reported.

It is not believed in the War Department that any widespread violation of the minimum age limit for recruits exists. Such a practice is unnecessary in view of the fact that no shortage of available personnel exists in any State. In fact, all States are desirous of securing an increase in the authorized allotment of strength, indicating that sufficient personnel is available all the time to care for expansion, without the obvious undesirable resort to enlistment of young men under the age of eighteen.

The Boy Scouts of America is an organization which has a distinct place in the lives of boys, and National Guard officials lend every aid to its development. But the National Guard has a mission entirely different from the Boy Scouts and their activities can never overlap. For that reason alone there should never be a dual relationship of personnel. Without disparagement of the Boy Scouts, no National Guard officer should do anything to warrant having his organization dubbed "Boy Scouts."

---oOo---

WAR TIME INSIGNIA REVIVED ✓

The 95th Pursuit Squadron, Rockwell Field, Coronado, Calif., has revived the war time insignia - A Kicking Jackass. This is being painted on both sides of the PW-9's of the 95th Squadron. The noses of the planes are also being painted a bright red.

✓

CATERPILLAR CLUB MEMBERSHIP PASSES CENTURY MARK.

The membership roll of the Caterpillar Club has passed well over the century mark, according to the latest compilation made of parachute jumps in this country. In the last issue of the News Letter, the number of emergency parachute jumps was given as 104 and the number of lives saved as 99. Since that time seven more jumps were made, so that the score at this writing is 111 jumps and 106 lives saved.

While every endeavor has been made to keep as accurate a record as possible of additions to the Caterpillar Club, it is not always possible to do so except in the case of Army Air Corps airmen, who are required to make a special report whenever forced to resort to an emergency parachute jump. It is only through newspaper reports and the good offices of the Irving Air Chute Co. that information is obtained on jumps made by other than Air Corps pilots.

Recent correspondence with the Irving Air Chute Co. disclosed three emergency parachute jumps of which the Information Division of the Air Corps had no record, viz:

August 23, 1927	John E. Heywang, Civilian	Lake Sebasticook, Me.
March 27, 1928	Ensign J.M. Carson, U.S. Navy	Pensacola, Fla.
July 4, 1928	Ralph C. Wensinger, Civilian	Cleveland, Ohio.

Other emergency parachute jumps which have come to the attention of the Information Division of the Air Corps are listed below, as follows:

November 1, 1928	Captain Earl H. DeFord, A.C.	Harpersville, Va.
November 14, 1928	Lieut. Harvey F. Dyer	San Antonio, Texas.
November 14, 1928	Sgt. Frank J. Siebenaler, A.C.	San Antonio, Texas.
November 18, 1928	Paul Collins, Air Mail	Brookville, Pa.

Frequently, when reading newspaper reports of emergency parachute jumps, one notices a headline to this effect: "Parachute Cheats Death." An accident occurred on November 16th last at Port Lavaca, Texas, where the caption "Death Cheats Parachute" would seem to be appropriate. Second Lieut. Frank Z. Corson, pilot, and Private James W. Snedaker, observer, of the 2nd Division Air Service, Fort Sam Houston, Texas, while engaged in tow target practice, collided with a tow target. According to the telegraphic report on this accident the belief is expressed that the tow target fouled the ailerons or elevators. The airplane immediately went into a steep vertical slip and was completely wrecked about one-half mile from the shore. The pilot and the observer jumped with their parachutes, both functioning perfectly. The officer and the enlisted man and their parachutes disappeared within a very short time after striking the water. Motor boats in the near vicinity started search within a few minutes. Up to this writing no report has been received of the recovery of the bodies. ly

All accidents are, of course, regrettable, but it is particularly unfortunate that this accident happened when the plane was flying over water, for a parachute-landing on terra firma would unquestionably have saved the lives of these two men. The record of the Army parachute for safety is still unblemished, no instance being known of any failure of the chute to function once the jumper cleared the airplane and pulled the rip cord.

A number of reports have been received from airmen who recently joined the Caterpillar Club. These reports are always interesting and instructive, for they outline experiences which may prove helpful to men in the flying game who at some time or another may be confronted with the necessity of resorting to the parachute in order to live and fly another day. Reports recently received and which have not heretofore appeared in the News Letter are given below, as follows:

JOHN E. HEYWANG took off in a home-made seaplane which he had constructed himself from parts of an Avro and Canuck, and powered with an old LeRhone 110 h.p. motor. The take-off was made from the shore of Lake Sebasticook, Maine, and Mr. Heywang got the ship in the air in 18 seconds.

At about 1800 feet the lower right wing broke off and a second or two later the lower left wing also broke off. Mr. Heywang was wearing an Irvin Air Chute, and although he had never before made a parachute jump, he states that he had no hesitancy in jumping. He also states that what impressed him most forcefully during the descent was the absolute quiet that prevailed after the noise of the ship. He drifted over the shore and landed in the trees with only a few bruises and a cut lip.

ENSIGN J. M. CARSON. While engaged in aerial tactics, Curtiss Hawk airplanes A-7410 and A-7420, piloted by Ensign J. M. Carson, U.S. Navy, and 2nd Lieut. I. A. Kimes, U.S.M.C., respectively, collided at 2,000 feet altitude in the vicinity of Corry Field, Pensacola, Fla.

Finding his airplane completely out of control, Ensign Carson jumped, opening his parachute when clear of the airplane, and made a safe landing. Lieut. Kimes was able to bring his plane down under partial control and landed it without injury to himself.

RALPH C. WENSINGER left the Cleveland Airport in a Travel Air biplane piloted by Stewart Kramer, to make an exhibition jump at Chippewa Lake. The parachute Mr. Wensinger intended to use was an exhibition type, stuffed into a bag which was tied to the airplane. In addition to his exhibition parachute he wore an Irvin Air Chute in seat pack as an emergency measure.

He jumped from an altitude of 2,000 feet. His drop, instead of pulling parachute out of its bag, tore the bag in two, leaving a ring of canvass around the parachute in such a way that it could not open. Mr. Wensinger dropped to within 500 feet of the ground in an attempt to get the chute clear. He then pulled the ring on his Irvin seat pack, which opened promptly and saved him from certain death. He landed close to the side of a barn, the exhibition parachute landing on the roof of and on the other side of the barn.

FLYING CADET W. R. SHEPARD. On a flight from San Diego, Calif., to Long Beach, Calif., on June 18, 1928, I encountered fog banks blowing in from the ocean north of Oceanside, and clinging close to the ground and sea. I flew inward in an effort to go around them but passed through several thin ones, which only kept me out of sight of the ground a few seconds at a time. Soon as I was inland about seven or eight miles with the Santa Anna Mountains on my right and the Santa Rosa on my left. I flew between them and very near to the ground in order to stay under the fog.

As I progressed I entered a fog through which I did not so readily pass. All the while I looked carefully for ground. Soon I felt my ship grow unsteady and I tried my controls for a possible spin. The ship responded so I knew I was not spinning. My airspeed indicator showed the ship diving. I leveled it out as best I could but soon saw a dark spot show ahead. I banked to avoid it. Soon another showed up. I repeated this a few times so decided I must be in a canyon and I knew I could not avoid the mountains very much longer, so I decided the use of my parachute would be my only chance. After putting the plane in a left bank and throttling the motor to half way on the throttle guide, I jumped head first from the plane, pulling the rip cord as soon as clearing the ship. I fell through fog for about half way to the ground and landed on the side of the mountain with a 15-mile wind blowing toward the mountain. No injury whatsoever was experienced. The landing was made on the south side of the San Juan Canyon about 6 miles Northeast of Capistrano, California.

FLYING CADET RAYMOND L. WINN. On a training mission from March Field, Calif., August 13, 1928, I was flying a DH4M-1-T, AC31498, while practicing banks and turns over the vicinity of Nuevo, Calif., about eight miles southeast of March Field, about 8:20 a.m. I started to make a wing over to the left and the ship fell into a left spin. After trying to right the ship and failing to do so, I decided to jump. The ship was completely out of control at the time of my leaving it.

I used the U.S. Army Service Seat Type Parachute, having cut the switches before jumping. I estimate the engine speed to have been about 400 r.p.m. I estimate the speed of the aircraft to have been between 125 and 135 m.p.h. The ship was spinning to the left at the time of my leaving. I stood up in the seat and was thrown clear of the ship. I pulled the rip cord when I thought I was clear of the ship. The ship went into a spin from a wing over and after trying to right it in every known manner and failed I decided to jump. I resorted to the parachute as soon as I realized the ship was completely out of control. I cut the switches, then left the plane, released the parachute and it opened immediately. No trouble was experienced in locating and pulling the rip cord. The wind velocity was about 10 m.p.h., and clear weather. The parachute was oscillating and I landed rather hard. I only received minor bruises from the snag of the harness in the opening of the parachute.

PRIVATE JEWELL S. WILSON. On the morning of September 14, 1928, while flying as observer with Lieut. Pennington in a Curtiss A-3, I had occasion to make my first emergency parachute jump. We had been in the air about three hours and were flying at around 8,000 feet. The air was rough and quite a few rain clouds were encountered, one of which was very strong and threw the plane into a tail spin. The pilot righted the ship at about 3,000 feet. We flew for about five or ten minutes and came upon another of these clouds. It appeared smaller and less furious than the one we had just passed through, however, but it extended higher and was moving faster. The pilot evidently found the wind and rain too strong in this cloud and tried to fly out of it by turning and going back. It was in this maneuver that the ship was caught and thrown into a second spin.

The wind velocity was high and the rain dense, so much so that I had pushed my goggles up to enable me to see the altimeter. The ground could not be seen and I wanted assurance that we were at a safe altitude. I knew that we were losing altitude. However, it had not occurred to me to jump. I noticed the pilot motioning, but I thought he was referring to my goggles. I was not so eager to jump and I did not know that was what he meant for me to do until I saw him throw his leg over the rim of the cockpit and then I was positive of his intentions. It seems that I lost control of all my faculties and for a few seconds I was mentally "out". I made two attempts to rise from the seat before I thought to release the safety belt. I unbuckled it and started climbing out back of the cockpit. I thought it best to do that on account of the tourelle mounting. I climbed out on the fuselage, found the ripcord and jumped. I don't know how far I fell when I pulled the rip cord or how I ever managed to get started. I cannot remember any sensation in falling, it didn't last long enough for that, and I can't account for any thought until the parachute opened. My only concern then was where I'd hit and how. I landed quite hard and was dragged about 100 feet before I was able to spill the wind out of the chute. I must have jumped at about 500 feet, judging from the length of time it takes a dummy chute to fall from that altitude in comparison with the time that elapsed while I was coming down. I immediately located the ship thru directions furnished me by a negro and climbed upon the wreck to wait for the pilot. I think my biggest moment of the whole affair came when I saw the Lieutenant on his way toward the ship.

This was my first and only parachute jump. I had often wondered how I would feel and how I would act under such conditions, and now that it is all over I can't recall anything about it. I was not frightened and I did not dread to jump. I knew that if I went down with the ship that I would be killed, there was only one choice, and I took it without any reservations. It all happened so quickly and definitely that I am unable to explain any part of it, other than the visible results. I received a slightly sprained knee in landing; otherwise I'm none the worse and a lot wiser.

MAJOR F. E. EVANS of the 107th Observation Squadron, Air Corps, Michigan National Guard, was flying over Rouge Park Field, Detroit, Michigan, with 2nd Lieut. Edward C. Snell as passenger. He had placed his PT-1 in a barrel roll. The nose of the plane had just risen above the horizon and it banked over approximately 45 degrees when the upper right front wing spar broke. Major Evans signaled his passenger to jump, but the latter failed to do so, and was killed in the crash.

Major Evans stated that he had a feeling of complete safety and confidence in the parachute. "I thought of the long talked of count of four to be certain of clearing the plane," he said, "and decided to wait until I was certain of being clear. The wreckage of plane was falling around me when I decided it was time to pull. I recall seeing the pilot chute far above me and the thought passed through my mind that I had not only lost an airplane but a parachute as well. When the main chute opened I received a terrible jerk, well distributed. I must have gone down headfirst as I whirled around suddenly. Had no feeling whatsoever of falling. Mind seemed clear. When approaching the ground I kicked around until facing the direction of travel in respect to the ground. Fell when landing, but immediately jumped to my feet and ran onto parachute to prevent being dragged. First thought was where my passenger had landed, as I had no idea that he had not jumped even before I did, as I shouted 'Jump' immediately after the breaking of wing. I apparently hit my head when landing, as I had a slight headache afterwards for several hours, otherwise no ill feeling whatever."

CAPTAIN EARL H. DeFORD, in his official report, stated: "On November 1, 1928, at about 3:10 p.m., at a point about two miles northeast of Morrison, Va., the undersigned made an emergency parachute jump from an AT-5 airplane Number 28469. At the time of the jump the airplane was out of control. The type chute used was an Irving seat-type. At the time the jump was made the engine was turning over at about 1500 r.p.m., and the airplane was in a tight left-hand spin and to the best of my recollection must have been dropping at 150 miles per hour.

The cause of the jump was a collision in mid-air between the airplane of the undersigned and an airplane of the same type flown by Captain Robert J. Archibald, U.S. Marine Corps. The collision occurred during a formation maneuver.

When the collision took place, my airplane went out of control and due to the spin I was unable to stand up and jump clear. I tried to reach the hand flaps on the trailing edge of the upper wing but could not reach them. I finally managed to get my feet on the seat and I forced myself up and out to the right and reaching over the side, caught hold of the trailing edge of the lower wing near the fuselage and pulled myself out of the cockpit, striking the right lower wing and bouncing off into space at which time I pulled the rip cord and the chute opened immediately. I have no recollection of any reactions during or after the jump. The thing which was uppermost in my mind was the fear that I would not be able to get out of the ship at a sufficient altitude to permit my chute to open. After the collision took place at about 1400 feet my chute did open at about 800 feet from the ground. When the chute opened it jerked me hard enough to cause considerable soreness in my neck and shoulders. I suffered no injury from the jump except as stated above."

---oOo---

EXAMINATIONS FOR REGULAR ARMY AIR CORPS TO BE HELD ✓

Examinations of applicants for appointment as second lieutenants in the Air Corps, Regular Army, in accordance with the provisions of AR 605-5 and special conditions hereinafter set forth, will be held from December 17 to 22, 1928, and from March 18 to 23, 1929, inclusive. Owing to the lack of time, the examination scheduled for December will be held only within the continental limits of the United States.

Eligibility to compete in the examination will be confined to candidates who are qualified flyers falling within the scope of the following classifications:

Those who have graduated from the Air Corps Primary Flying School and from the Air Corps Advanced Flying School within the past six years.

Others who satisfactorily demonstrate that they have qualified for flying within the past six years.

By "qualified flyer" is meant any individual who fulfills the necessary mental, moral and physical qualifications for appointment as second lieutenant, United States Army; and who, in the opinion of the boards appointed to examine the candidate and his records, is qualified to enter immediately into the duties required in the tactical units of the Air Corps. This requires ability to fly satisfactorily the type of service airplane in use by any unit to which he might be assigned; also, that the candidate must have flown in heavier-than-air aircraft at least two hundred hours while acting as pilot, seventy-five of which must be alone, and must have successfully completed the course prescribed by competent authority.

Each application should be accompanied by the necessary documentary evidence substantiating the candidate's claim for exemption in the educational examination, as well as credentials establishing his practical flying qualifications. Upon receipt and consideration of such documents accepted candidates will be authorized to appear before specified boards and will be granted such exemptions in the mental examination as circumstances warrant. Candidates whose applications may not be approved will be so informed. In view of the early date of the December examination, applications for that examination should be submitted directly to The Adjutant General, as should also requests for information pertaining to that examination. Applications for the March, 1929, examination will be submitted to the Corps Area Commanders in accordance with Section III, AR 605-5.

Boards of officers to conduct the December examination will be convened at the following-named places:

Mitchel Field, Long Island, N.Y.

Bolling Field, Washington, D.C.

Langley Field, Hampton, Va.

Maxwell Field, Montgomery, Ala.

Wright Field, Fairfield, Ohio.
Selfridge Field, Mt. Clemens, Mich.
Kelly Field, San Antonio, Texas
Rockwell Field, Coronado, Calif.

Chamute Field, Rantoul, Ill.
Marshall Field, Fort Riley, Kansas.
Fort Crockett, Galveston, Texas.
Vancouver Barracks, Washington.

Crissy Field, Presidio of San Francisco, Calif.

Graduates of the Air Corps Primary and Advanced Flying Schools, who are also graduates of recognized colleges and universities, will be exempted from the entire mental examination.

---oOo---

EMPLOYEES REWARDED FOR NEW IDEAS

A new innovation in the Depot Supply Department, Rockwell Air Depot, is the "Suggestion Box." While the suggestion box has been in vogue at the Rockwell Depot for some time, the Depot Supply goes a step further and grants an award for the best suggestion during the week made by the employees. It is believed that the employee, being very close to the routine of his work, is in a position to see an improvement oftentimes which might be overlooked by his superior. The suggestion box is a means by which this improvement is brought to light, and the reward given for the best suggestion during the week is an incentive for an employee to think out new ideas.

---oOo---

IMPROVEMENTS EFFECTED AT ROCKWELL AIR DEPOT

The new addition to the main warehouse, G & H, Rockwell Air Depot, Coronado, Calif., has been completed, and the warehouse personnel is busy moving airplane engines to their new location. As each box is taken from one section to the new section, it is opened, the number verified, the number of overhauls noted, and other pertinent data taken on the condition of the engine. This involves quite a large amount of labor, but it is believed will pay in the end.

The rear section of the Shipping and Receiving Department has been concreted and a new Fairbanks-Morse 20-ton scale is being installed. This will be a useful addition to the Shipping Department, as in the past it has been impossible to weigh a crated airplane at this Depot. The machinery in the Packing Department is also being changed to the new location and all wiring placed in conduits, making a much safer and neater job. The Packing Department was recently equipped with a new Yates-American Saw Bench which also adds to the efficiency of this Department.

On checking up the number of shipments this fiscal year with past activities it is found that the activities of the Rockwell Air Depot increased nearly one-third over last year, and as time goes on it is expected that the percentage of increase will be even greater.

After having spent a number of years working by artificial light, the main depot warehouse is being equipped with monitor sky-lights. This is now under construction, and already a great improvement is seen. The work is progressing rapidly and is probably finished at this writing. The sky-lights will be a great improvement in working conditions in G & H Warehouses.

---oOo---

PROSPECTIVE AIR CORPS OFFICERS FROM MARSHALL FIELD

Some of the Reserve Officers now on active duty at Marshall Field, Fort Riley, Kansas, will take the examination for appointment in the Air Corps, Regular Army, on December 17th. The examination is being held earlier this year due to a large number of vacancies, and the time left for preparation is short. Those Reserve Officers who expect to take the examination are listed below, as follows:

Lieut. Guy F. Hix
Lieut. Wilbur Erickson
Lieut. Ronald R. Walker
Lieut. Robert E.L. Pirtle
Lieut. Donald E. Broughton
Lieut. Ralph O. Brownfield.

COMMERCIAL AVIATION IN THE HAWAIIAN ISLANDS

By the Luke Field Correspondent

Progress in commercial aviation in the Hawaiian Islands has been somewhat slow in recent months, due to a variety of reasons, principally the lack of landing facilities.

Recently, however, the newspapers of Honolulu have carried accounts which indicate that this condition is being improved. Colonel P.M. Smoot, chairman of the Territorial Aeronautical Commission, has been very active in surveying landing fields and pushing their construction. In the latter part of September he announced that work had already been started on a field on Molokai. This field, which covers 204 acres, will have a 400 ft. wide runway to begin with, he stated. The Colonel announced that while no site was chosen for a field on Maui, several locations will be considered at an early meeting of the Commission.

On the heels of the statements of Colonel Smoot, news dispatches from the coast announced that Edwin A. Lewis, President of the Hawaiian Tours Co., has purchased three planes for commercial use in the Islands and that they were due to arrive in Honolulu during October. Mr. Lewis also stated that he had engaged the services of two well known pilots on the mainland and that they would arrive during the month to open a civilian flying school at Honolulu. The planes purchased by Mr. Lewis are a Swallow, American Eagle and Monocoupe. He has also secured the distributing agency for them for Hawaii, the announcement stated. A try-motored Bach, capable of carrying ten passengers, was also purchased by the company and is expected to arrive in Hawaii in December where it will be placed in immediate inter-island service.

---oOo---

ADVANCED FLYING SCHOOL PARTICIPATES IN STAFF MANEUVERS

The Air Corps Advanced Flying School participated in the Staff Maneuvers conducted by the Eighth Corps Area from October 22nd to 26th. This was primarily a staff maneuver, and all troops were represented with the exception of the Air Corps. The maneuvers constituted a Field Army, and the Air Corps units were assigned as Divisional Air Service Squadrons and Army Air Force.

In addition to the Advanced Flying School, the 12th Observation Squadron of Fort Sam Houston and the Third Attack Group of Fort Crockett comprised the Air Corps units. Corps and Divisional ground units, which were represented by staff, each had assigned as their Air Service unit two observation airplanes and personnel for their operation. The Army Air Force consisted of an Air Corps Wing, composed of one Pursuit Group and two squadrons, one Attack Group and three squadrons, one Observation Group and two squadrons, and one Bombardment Squadron. The operation of this unit was from Kelly Field. War conditions were assumed, and simulated missions were carried out by Air Corps units. Observation missions were carried out by the Observation units. One night observation mission was conducted with the use of flares. One night Bombardment mission was conducted with the formation of nine airplanes as far north as Austin.

The participating Air Corps personnel at Kelly Field carried out over 400 hours of flying time during the maneuvers. The Headquarters of the Army Air Corps was at Fort Sam Houston under the command of the Corps Area Air Officer. An Air Corps Staff to assist in the conduct of the maneuvers was secured from the Advanced Flying School.

The maneuvers were of valuable addition to the instruction of the students and permanent officers at Kelly Field and constituted the final instruction of the class graduating on October 26th.

---oOo---

LIEUT. KELLY RECEIVES DISTINGUISHED FLYING CROSS

Probably the most outstanding event in the history of the 4th Composite Group, Camp Nichols, P.I., occurred recently when 1st Lieut. Oakley G. Kelly, 3rd Pursuit Squadron, was decorated with the Distinguished Flying Cross by the Commanding General of the Philippine Department, Major-General Wm. Lassiter, who was accompanied by Governor-General Stimson. Camp Nichols was represented by Captains Charles A. Pursley, Charles M. Savage, Lieuts. Alfred Lindeburg, W.J. Paul, Ralph Stearley and Earl Hoag. Lieut. Kelly and his bachelor companion, Lieut. Murray, entertained a number of the officers and their wives with a luncheon.

✓

AMPHIBIANS CRUISE TO LANAO

An Open Letter from Papa Fletcher, the Sky Pilot of Moroland

"Zamboanga, P.I.1928

Editor, Mindanao Herald:

You have asked me to give you a little something about our flight to Lanao and Cotabato. That's just like you, John, to ask a man to do something around the end of the fiscal year with all the office work piling up. You needn't expect much.

At 6:30 a.m. on the 23rd, three army amphibian planes left Zambo for Camp Keithley. Major Kilner handled the tiller of No. 1 and had Papa Fletcher on the quarter-deck and Master Sergeant Lee in the lower hold. 'Baldy' Pirie held the sticks on No. 2 with Lieutenant Watkins on the fore-peak as anchor handler. 'Micky' Patrick was on the bridge of No. 3 with Lieutenant McClelland and 'Spider' Kelly in 'tween decks and aft lower hold, respectively.

Kilner throws a wicked stick. I suspect that he did his darndest to put her into a tail spin because if he could throw me out he would gain one file. On the quarter-deck I was holding down I found a batch of canvas, straps, buckles and such like which I was told to drape about me. I said, 'Hell, no, let Sgt. Lee have them.' Kilner said, 'No, he's down below and it wont do him any good anyway.' I struggled with the stuff for a spell and by the time we were about half way to Ganassi I decided to sit on the whole works. John, I'd like for you to tell me what good a parachute is going to do a fellow who is flying over water one thousand fathoms deep, and in some places deeper!

Kilner set a compass course direct for Ganassi, on the southwest shore of Lake Lanao. This took us right across lower Olutanga, the narrowest part of Baganian Peninsula, just south of Lake Numungan, and a little north of Lake Dapao. The ship handled beautifully.

It was an ideal day for flying and visibility was very good. Shortly after leaving Zambo, Mount Malindang, way over in Misamis, loomed up, and a few minutes later the Dutig mountains began to take form. The Ganassi peaks, however, were obscured until we were right on them.

I enjoyed this leg of the flight very much because it took me across the Lake Numungan country, through which I struggled and fought leeches and mosquitos for months, nineteen years ago, while chasing wily old Mamintong and his band of outlaw Maranaos.

The flying distance from Zambo to Camp Keithley is 170 miles. It is doubtful if there is a more glorious flight of the same length anywhere in the world. With the ever-changing color of the sea over the coral reefs and great depths, the gem-like little lakes nestling among magnificent peaks, the cultivated lands around Lakes Dapao and Lanao, the beautiful cloud effects, the rushing mountain streams flecked with occasional waterfalls, the Mohammedan mosques, the uplifted faces and waving arms of thousands of Moros in their colorful dress - nothing seemed to be missing from an entrancing and unique panorama.

There were a couple of minutes while over the jungle when it would have been mala suerte if the engine had suffered a cramp in her barriga. By the way, John, is a plane a female? Those planes climbed wonderfully. When Kilner would lean back to read one of my wise notes our darned plane would climb so fast that the instrument couldn't keep up with it. And speaking of instruments, I never saw so much useless junk on the bulkhead of any ship. When we started I thought that we should have lots of altitude while kiting across the mountains and I had my line of dope all worked out. I was going to jettison about a ton of instruments and things.

One hour and fifty-five minutes after leaving Zambo we dropped anchor near the piers of Camp Keithley on the north shore of Lanao. All hands jumped into 'Commercial' Smith's truck and shoved off for Maria Christina Falls. Isn't it a strange thing, John, that a man who will take an old rattle-trap plane up in the air a couple of miles and turn it over and drop it to within a couple of feet of the ground, will turn green with fear when he gets into a lowly truck driven by someone else?

Things went well until we were within a hundred feet of the two-hundred-foot drop into the Agus Canon. Smith's brakes went kabluay. It was a case of heading her into the jungle by ground looping or trying to mill her to a standstill. Papa slid his skinny carcass through one of the portholes, grabbed Smith's adopted son and said 'Gentlemen, I am awfully glad to have knowed you!' The contours of the ground helped Smith to stop the truck just in time to save Papa the labor of

beating the wild hogs to the remains.

Maria Christina was never more wonderful. The beautiful perpetual rainbow arched from the foot of the falls to a point a hundred yards down stream. Baldy Pirie is either half-witted or carries lots of life insurance. He had one of those moving picture affairs. In order to get a good shot at the falls from top to bottom he had to hang on by one heel. Spider and Papa held on his flimsy belt while he turned the crank. By the way the muzzle was pointed I believe that he got some good shots at the tops of the jungle trees.

The trip back to Camp Keithley in Smith's truck was such a hazardous voyage that the fliers left their fingerprints on the stanchions of the bus. A start for Cotabato was attempted at 7:00 a.m., the 24th, but Baldy Pirie's amphibian had throat trouble and he didn't think it advisable to start over the Butig mountains without knowing what his oil pressure was. Kilner with Papa and Sgt. Lee took off and had a look-see around the northern part of Lanao, then landed to give aid to No. 2.

It is strongly suspected that the junior officers had a scheme to gain three files. All three Majors were piled into No. 1 with Kilner handling the reins. Clam Face Watkins and Sergeant Lee started in to dismantle the old crate. Their only tools were an old suit case knife and a broken stillson wrench. Micky Patrick, after taxi-ing all over Lake Lanao, managed to get No. 3 into air. Taking a look at Maria Cristina from the air he dropped a message informing his commanding Officer that he, Mack and Spider were going to Cotabato to get a batch of hot cakes.

All of this shifting of personnel made a 'mack' out of Papa who heaved on the anchor, and as the ship started to drift into No. 3, Kilner gave her the gun. The bottom of Lake Lanao is covered with a vine-like water cress. As No. 1 surged ahead the anchor gathered up this stuff. It's no mean job for a man in his light fifties to haul in an anchor with three hundred pounds of junk hanging to it. The mud hook being duly stowed Kilner hit her up for Cotabato after promising Clam Face that he would go to Zambo and get some throat gargle for the ailing ship. We soared right over the Ganassi peaks. Charts show that these peaks are 5,200 feet in height. With the altimeter in No. 1 reading 5,200 feet we seemed to be about 300 feet above the highest peak.

Anchored in the Cotabato River at 9:40 a.m., and found that Mack was fueling No. 3 with the aid of Micky and Spider. Governor Gutierrez had everything in apple pie order. At 10:30 a.m. Baldy decided that he would take the Governor and Papa for a trip up over Lake Liguasan and Fort Pikit. Just above Cotabato there is a bunch of telegraph wires crossing the river about fifty feet above the water. The Governor had hung a white cloth on these wires. Baldy headed his boat up stream and got into the air much sooner than he expected. I was intent y watching the maneuver and wondering whether we were going over or under the wires. Then I happened to think that probably Baldy had one of those contraptions called 'Hell I Copped Her'. As we shot under the wires our left wing touched the flag and I said 'Well, He Nearly Copped Her!' The flight over Pikit was wonderful. The Governor occupied the lower hold and could look out of the side port-holes. He enjoyed the trip very much.

Mrs. Gutierrez served one of her incomparable lunches to the tired birdmen. When landing in the Cotabato River, Papa dropped the anchor. When an attempt was made to get the anchor back on board, Baldy and Papa heaved with all their strength and could not budge the thing at all. Local divers were sent down to locate the trouble and found the anchor tangled in a batch of Brooklyn street-car tracks.

As No. 1 and 2 were about to take off for Zambo in blew Clam Face and Lee with No. 3. They had fixed the old crate up with parts of a mowing machine and an old sickle. These guys could make a tin lizzie fly. At 4:00 o'clock, after bidding the kind Cotabato folks adios, all three ships hit it up for Zambo. Mack had the two Manila majors in his crew as macks, Watty took Lee and Micky Patrick took Papa and Spider. No one seems to know why old No. 3 likes to stick so close to the water. She's a cranky old girl. After kicking her in the pants for a quarter of an hour Pat got her to move. Then she took the air rather nicely.

The 155 miles from Cotabato to Zambo were covered in 92 minutes at an altitude of seventeen feet. A very enjoyable trip. Sorry I have no more to relate, Old Top. The result of the search for landing fields is a military secret which we cannot divulge, owing to the lurking land profiteers.

In a hell of a haste,

PAPA FLETCHER.

-Mindanao Herald.

V-5847, A. C.

CLASS PARADE OF AIR CORPS ADVANCED FLYING SCHOOL

The students of the last graduating class of the Air Corps Advanced Flying School, Kelly Field, Texas, participated in a parade on Friday afternoon, October 19th, followed by a dedication of a class memorial.

The parade started at 2:00 p.m., Lieut. David Hackman acting as Marshal. He was dressed in the uniform of his office, an Egyptian Sheik, smoking a German pipe. He was astride a beautiful, unclipped white charger, which had spent the previous morning asleep in a stable mud-hole after it had returned from its duties as motive power for the garbage chariot. The Marshal was followed by the Post Band. The Quick Thinking Pursuiters came next, led by their Hula drum corps. The beautiful rhythm of their steady beats and the swaying of their graceful bodies caused nothing but complimentary comments from the spectators.

A float followed, titled "Bombardment, The Slow Thinkers," which was manned by members of the Pursuit Section. It showed "Bombardment" lying in a G.I. cot, very sick. Another float followed carrying a banner titled "Attack, Non-Thinkers." Unfortunately, the Attack Section was on a cross-country that day and was not able to retaliate. The Bombardment came next, all astride heavy, slow speed, lazy, underpowered, draft horses, riding in seven-horse formation. Arriving in front of the reviewing stand, they changed to column and from column back to "V" formation. Some of the horses, characteristic of the types they represented, were slow to respond to the controls, and some of them fell off on a wing (slipping on the hard, hard pavement). This Section was dressed in coveralls, helmets and goggles, wearing parachutes and carrying a control wheel. The section was led by a student, dressed and disguised as their distinguished Senior Instructor. He was immaculately attired in uniform, a large, well waxed red mustache gracing his face. He carried a stick and led a small pooch hound on the end of a ship's hawser. He looked more like Lieut. Monahan than Lieut. Monahan does himself, and Lieut. Monahan had several characteristic poses (standing erect with hand on hip, twisting his mustache with the other) taken of his imitator so that, in the event the Adjutant General or the Chief of Air Corps desires his photograph he will not have to take time for a sitting but will merely send forward one of these prints.

The Bombardment was followed by two members of another section carrying a bomb on a stretcher. The Observation Section was last but not least. It was led by its Scotch Swinnette Haig and Haig Band, which rendered melodious tunes throughout the parade. The drum major unfortunately broke his baton just prior to the start of the parade and was forced to use a sewer suction pump to keep the time. With so little practice the Band did excellently, and the soft music which emanated from the golden trumpets and the perfect time kept by the drummers produced the most favorable comments from the severest critics. This section of the parade was the largest, due to the fact that they had more specialties to demonstrate.

The floats were as follows: "Close Reconnaissance," an observer looking through a large key-hole with a pair of field glasses at a student, undressed as a red headed woman taking a bath; "Aerial Photography," a student with a Brownie Eastman Camera tied on the end of a bamboo fishing pole extended over an enclosure marked "Ladies Dressing Room." As true to the practice (?) of the Photo Section, the pictures taken were developed and distributed throughout the length of the march. The finished copies resembled to a marked degree pictures often seen in a well known magazine on Art. A student followed pushing a dolly on which was mounted a very small kitchen stove with the caption "Miniature Range." A student carried a banner saying "The Road to Success in Observation is Gravelly," indicating the well known Senior Instructor in the Observation Section. A student with a fish pole over his shoulder held by another in the rear and on the extreme end of which was tied a bottle, which at one time contained something over $\frac{1}{2}$ of 1%, followed. Try as he could the student was unable to reach the bottle. The significance was appropriate as the student was Fred Fishback or "Fred Still Fishing." The solemnity of the occasion was disturbed by a student shooting off smoke bombs. The parade came to an end by that eminent Air Corps philosopher, etc., Lieut. Dache Reeves coming up in the rear, carrying a standard, "Observation, Above All."

The parade came to a halt before the band stand in front of the Commandant's quarters, where the Memorial to be dedicated was hidden by a white tent. The ceremonies started with a snappy march selection by the Swinnette Band. Lieut. Eareckson, the drum major of the Swinnette Band, dedicated the memorial in the

name of the class. With a few well chosen words, he enumerated the motives which prompted the presentation of this fitting little monument. His speech was very touching and appropriate. The Memorial was accepted with a short speech by Major C.L. Tinker, A.C., in the name of the Air Corps Advanced Flying School. To the strains of a late Hungarian waltz, played and demonstrated by the Swinnette Band, the string was pulled and the Memorial unveiled. It was a large G.I. can sitting on a Texas mahogany pedestal on which was inscribed "Class of November, 1928."

Not a dry eye was present as the spectators slowly passed about this shrine to view its beauties from a close angle.

(P.S. The Memorial was back on duty the next day, just in rear of the kitchen of the Officers' Mess).

---oOo---

RETIRING NON-COMS. HONORED WITH AN AERIAL REVIEW

First Sergeants Harry Jowett, 7th Observation Squadron, and James Franks, 63rd Service Squadron, France Field, Panama Canal Zone, have the distinction of being the first enlisted men of the Panama Canal Department to receive the honor of an aerial review upon retirement.

Sergeant Jowett enlisted at 1316 Filbert Street, Philadelphia, Pa., on July 1, 1898, and his first assignment was to Company L of the 21st Infantry, then stationed at Plattsburg Barracks, N.Y. He served continuously in various units of the service, including the 2nd Infantry; 3rd Field Artillery; the Ordnance Department at Augusta, Ga.; 1st Battalion of Engineers at Washington Barracks, D.C.; Motor Transport Corps at Sandy Hook, N.J.; the Air Corps at Bolling Field, and the Panama Canal Department. He was retired on October 1, 1928.

Sergeant Franks first enlisted at Bellefonte, Pa., on June 22, 1899. He received his recruit training at Bedloes Island in New York Harbor. He was sent as replacement from Recruit Barracks to Porto Principi, Cuba, where he was assigned to Troop F of the 8th Cavalry. He remained in Cuba until April, 1902, when he returned to the United States, and since that time he has served in various branches of the service, including the Ordnance Department, Coast Artillery Corps with stations at Fort Howard, Md.; Fort Slocum, N.Y.; Fort DeLesseps, C.Z., and in the Air Corps at France Field. Sergeant Franks was retired at this station on September 25, 1928.

In both cases of retirement, the good wishes of the Commanding Officer, officers and enlisted men of France Field accompanied them in their well earned retirement, and in the orders published by the Commanding Officer, France Field, a statement was made to the effect that the services of these First Sergeants during the past thirty years set a mark at which the younger members of the service can well aim.

---oOo---

INSTRUCTORS SCHOOL CONDUCTED AT KELLY FIELD

The Air Corps Training Center Flying Instructors School was recently in active session at Kelly Field, San Antonio, Texas. The course started on October 3rd and lasted a month. Captain John I. Moore was in charge and had as his instructor personnel Lieuts. Nelson, Tocher, Carter, Walbridge and Warren R. Carter. A total of 25 officers of the Air Corps from stations about the country took the course.

The course at this school consists of one month's intensive training in the advanced methods of flying training in all air maneuvers. Its purpose is to increase the efficiency and the coordination of all flying instruction given at the Air Corps Flying Schools.

The equipment used were PT-1, PT-3 and DH airplanes. The 40th School Squadron is charged with the maintenance of this equipment.

---oOo---

LIEUT. CRUMRINE ASSIGNED TO 18th PURSUIT GROUP

First Lieut. Clarence C. Crumrine, Air Corps, who was the advance man in Greenland for the Around-the-World Flight recently arrived for duty in the Hawaiian Department and was assigned to duty with the 18th Pursuit Group at Wheeler Field, Schofield Barracks, T.H.

Lieut. Crumrine is the third officer connected with that epic achievement

to be assigned to Hawaii. Captain Lowell H. Smith, commander of the flight, is now stationed at Wheeler Field, and Lieut. R.J. Brown, whose organizing ability made the flight possible, is on duty as Assistant Air Officer of the Hawaiian Department.

---oOo---

LANDING A MACHINE GUN CREW WITH PARACHUTES ✓

Another demonstration of the feasibility of landing ground troops with machine guns was given at Brooks Field, San Antonio, Texas, on the afternoon of October 19th. Cameramen made a record of the jumps for the news reels. One man came down first from a single plane so that the cameras could catch an individual jump, and shortly afterwards five more men jumped from a five-ship formation at a 3,000 ft. level. A Martin Bomber dropped the machine gun as soon as the crew landed, and it was set up and firing within three minutes.

Enlisted men making the parachute jumps were: Staff Sgt. Wilbur Lage, Privates R.W. Stevens, Loreian Tolle, Theodore Miller, M.A. Lamparty and Fred H. Natierski.

---oOo---

FAST FLIGHT FROM INDIA TO ENGLAND. ✓

According to a prominent London newspaper, the recent flight from India to England made by Captain C.D. Barnard and Flying Officer E.H. Alliott, in their Fokker airplane, was the fastest ever made between these two countries. Leaving Karachi, India, at dawn on Sunday, and making only four landings on the way, the airmen succeeded in covering the distance of nearly 5,000 miles in $4\frac{1}{2}$ days.

The landing was made in picturesque circumstances. The sun had set, the boundary lights of the airdrome at Croydon were flashing, the buildings were picked out in red lines which dimly revealed crowds of people standing on the roof of the airdrome hotel, and a powerful flood light showed a fan-shaped beam over the grass of the landing surface.

At 8:50 p.m. the siren signalled that the machine had been sighted from the control tower, and a moment later a faint hum disturbed the stillness, and the machine could be seen silhouetted against the faint purple of the evening sky. The plane circled around the airdrome, and then glided in, and - sharply picked out by the flood light like an actor on the stage - it made a perfect landing.

It taxied up to the airdrome buildings and, amid the cheers of the small crowd of spectators on the airdrome, Captain Barnard and Flying Officer Alliott stepped out. Colonel Ivor Edwards, representing the Air Ministry, received them.

"Our first stage was from Karachi to Bushire on Sunday," Captain Barnard stated. "On Monday we took off with the intention of flying to Aleppo, but being delayed by head winds, we had to land in the desert on the way. We reached Aleppo on Tuesday, and on Wednesday we flew on to Sofia.

"Today we have flown non-stop about 1,400 miles by the route we chose. Our object was to demonstrate the practicability of an organized air service with present day machines between India and England."

The fastest previous flight between India and England was made by Messrs. Brock and Schlee, the American airmen, and by Mr. Bert Hinckler in an Avro-Avian light airplane. In both instances the time taken was seven days. By the fastest mail steamer the journey takes three weeks.

Fast flights to India have so far been dogged by bad luck. The attempts made by Flight Lieut. Carr, of the Royal Air Force, failed on two occasions when he was forced to land on the way.

The Fokker machine (the Princess Xenia) used by Captain Barnard and his companion, is a Dutch-built monoplane with wood-covered wings. It has a British Bristol air-cooled engine. It was used by Captain McIntosh in his attempt to fly the Atlantic from Ireland, and was also used in a projected non-stop flight to India, being forced down in Poland.

Captain Barnard is a well-known long-distance flyer, and many outstanding achievements stand to his credit. Flying Officer Alliott was formerly a test pilot at the Royal Air Force experimental establishment at Martlesham Heath.

WAR DEPARTMENT ORDERS AFFECTING A. C. OFFICERS

Changes of Station:

Upon completion of tour of duty in Hawaiian Dept., Major Henry J.F. Miller and Lieut. Lewis A. Dayton to duty at Langley Field, Va.

1st Lieuts. John M. McDonnell, Kelly Field, and Wallace E. Whitson, March Field, to duty in Philippines, sailing from San Francisco about Feb. 6, 1929.

Upon completion of tour of duty in Philippines, 1st Lt. David G. Lingle to Wright Field, O., and 1st Lt. Elmer D. Perrin to Chanute Field, Ill.

2nd Lieut. Charles G. Fearcy, to Brooks Field, Texas, upon completion of tour of duty in Panama Canal Department.

1st Lieut. Benjamin F. Griffin from Air Corps Tactical School, Langley Field, Va., to duty in Hawaiian Dept., sailing from New York about March 8, 1929.

1st Lieut. Lawrence C. Craigie, Brooks Field, to Panama Canal Dept., sailing from New York about February 21, 1929.

Captain Clearton H. Reynolds, from Ft. Sam Houston, Texas, to Selfridge Field, Mt. Clemens, Mich.

Major Edwin D. Lyon from Office Chief of Air Corps, Washington, to Panama Canal Zone, sailing from New York about April 18, 1929.

Lieut.-Col. Harry Graham from Wright Field, Dayton, O., to Headquarters 3rd Corps Area, Baltimore, Md.

1st Lt. Jesse A. Madarasz from duty as student, Advanced Flying School, Kelly Field, Texas, to Chanute Field, Rantoul, Ill.

Captain Wm. D. Mayer, Wright Field, to Fort Sam Houston, Texas.

2nd Lt. Herbert W. Anderson, Fort Crockett, Texas, to Wright Field, O.

Captain Lawrence P. Hickey, upon completion tour of duty in Philippines, to duty with Air Corps Detachment, Fort Leavenworth, Kansas.

1st Lieut. Harold L. Clark, Kelly Field, to Office Chief Air Corps.

Transferred to the Air Corps:

2nd Lieut. John G. Moore, Field Artillery, Oct. 20, 1928, rank June 12, 1924.

2nd Lt. George V. Holloman, Inf., October 24, 1928, rank from June 30, 1925.

2nd Lt. James S. Stowell, Inf., October 20, 1928, rank from June 12, 1924.

2nd Lt. Glenn O. Darcus, Cavalry, November 3, 1928, rank from June 30, 1925.

Detailed to Air Corps and to Brooks Field, Texas, March 1, 1929, for training:

2nd Lieut. Thomas F. Trapolino, Cavalry.

2nd Lieut. John M. Sterling, Field Artillery.

2nd Lieut. Leon W. Johnson, Infantry.

Relieved from Detail to Air Corps:

Major George M. Peek to 5th Field Artillery, Fort Bragg, N.C.

Promotions:

Captain Oliver P. Echols to Major, with rank from November 2, 1928,

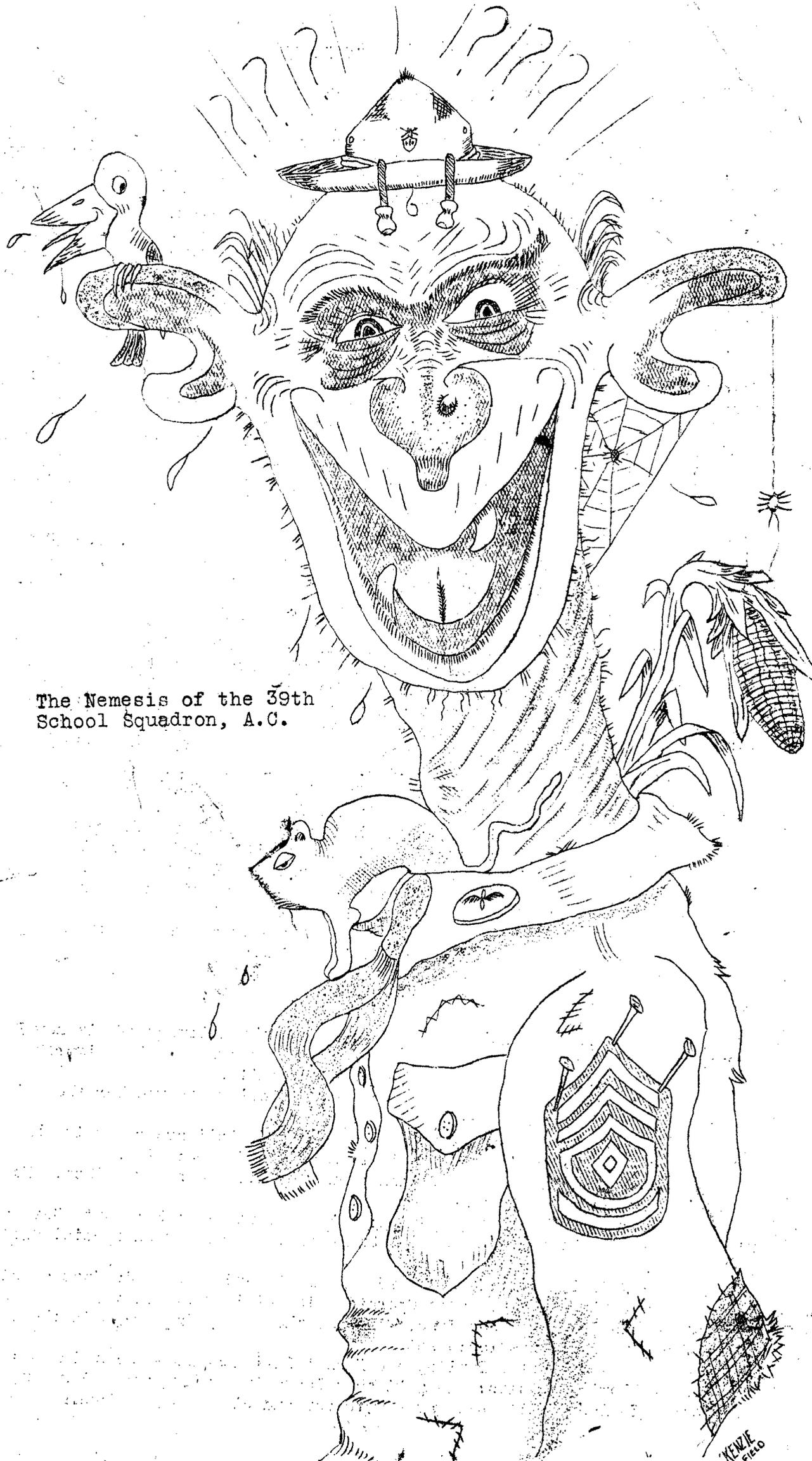
1st Lieut. Harry A. Dinger to Captain, with rank from October 27, 1928.

1st Lieut. Edwin F. Carey to Captain, with rank from October 27, 1928.

1st Lieut. Merrick G. Estabrook to Captain with rank from October 30, 1928.

Resignation:

Captain Edwin E. Aldrin



The Nemesis of the 39th
School Squadron, A.C.

KENNIE
FIELD

NOTES FROM AIR CORPS FIELDS

France Field, Panama Canal Zone, October 25th.

Lieut. Pardoe Martin, who has been on detached service as Army Observer with the Marines in Nicaragua, paid us a visit on October 19th. He flew down here in a Fokker tri-motored Transport in company with some Marine officers and men who brought a flight of two Fokker Transports to Panama. The planes received minor repairs and the personnel were given a good time while here. The visitors took off for Managua on October 26th.

Every afternoon between rains, you can see about 90% of the command on the baseball field participating in inter-squadron baseball games, and it is surprising to note how many baseball enthusiasts there are on the post. Even a game made up of "scrubs" on a Sunday will draw a crowd of two or three hundred spectators.

Boxing also has its place in the athletics of this station, and the boxing officer has a whole platoon of "pugs" training every day for the Department Boxing Competition to be held at this station during the early part of December.

Last but not least, in between the crack of the bat and the slam of the boxing glove, you can hear the bang of the 45 pistol on the France Field target range, which indicates that the France Field pistol team is diligently practicing on the Standard American Target and making every effort to fit themselves to win the high places in the Department Commander's Annual Small Arms Competition to be held at Fort Clayton on December 17, 1928.

The team for the shoot this year will consist of 1st Lieut. H.G. Crocker, Team Captain; Master Sgt. Sigurd L. Sorenson, Master Sgt. Floyd B. Haney, Master Sgt. Willard D. Lucy, Staff Sgt. Leo Laquatra and Private Stephen Sislock.

1st Lieuts. Wm. H. Bleakley and Edwin F. Carey recently reported for duty at this station. The former was assigned to duty with the 24th Pursuit Squadron and the latter to the 63rd Service Squadron. Lieut. Carey has, in addition to his other duties, been assigned to duty as Marine Transportation Officer.

Master Sgt. Aurand, replacement for Master Sgt. "Pete" Biesiot, arrived at this station on the last transport and is now on duty in the Intelligence Office.

Staff Sgts. Hamilton and Leonard, replacements for Staff Sgts. Brainard and Rush, arrived at this station and were assigned to the 7th Observation Squadron and 63rd Service Squadron, respectively.

Lieut. Cronau and family returned from the States on the last transport, having spent several months' vacation in the Eastern States.

Good cigars come high! A lot of them, say about 50 or so, spells money, and when a fellow loses it hurts his pocket. Lieut. "Charlie" Howard is the one who lost in the recent Alibi Contest. Recently when the L-5 went into the ocean, the Judge asked him for his alibi. No doubt he hadn't had time to think up a good one, so he said: "Well, you see it was like this --- I looked down and the skipper was gone. You see I just missed the skipper," and the rest being unintelligible mutterings, the Judge said: "You're stuck."

Camp Nichols, Rizal, P.I., October 1st.

Flight B, 2nd Observation Squadron: Since the delivery of six new Douglas O-2H's, the status of aircraft in Flight "B" has shown a decided improvement. Formations are common, and every pilot wears a smile.

Short-timers are beginning to sound off. Don't know whether the noise is really heartfelt or just force of habit.

Staff Sgt. George S. Dooley and Cpl. Harry I. Hall are reporting back to the States on transport scheduled to sail from Manila October 27th.

Staff Sgt. Ray R. Willett finished another hitch September 13th. He just couldn't quit and is in for another three years.

Headquarters 4th Composite Group: The acting First Sergeant, Sergeant Simmons, was appointed Air Mechanic, 2nd Class, and placed on special duty with Flight "B".

Sergeant Dolliver is doing guard this month and says it is just a holiday.

Sergeant Fitzpatrick, Radio Operator, is waiting for the weather to clear so that he can leave for San Jose, Mindoro, where he will assist in the installation of a new short wave radio set.

The Inter-Regimental Bowling and Basket Ball Leagues are now in full swing with the following results: Camp Nichols leads in bowling with 13 games won and one lost. In Basketball, six games were won and eight lost. Tennis and Baseball

are just in the formation stage.

28th Bombardment Squadron: The death of Staff Sgt. Emil G. Schmolka on September 11th at the Sternberg General Hospital was a great shock to his many friends. Sergeant Schmolka died as the result of an airplane accident on August 23, 1928, near Calumpit, P.I. Interment took place at Fort William McKinley on September 13, 1928. He leaves a widow.

Sergeant George J. Parker was discharged on September 10, 1928, for the convenience of the Government and is now Warehouse Superintendent of the Philippine Air Depot.

Master Sgt. and Mrs. Kellems announce the arrival of a fine baby girl on August 31, 1928, at the Sternberg General Hospital, Manila. Sergeant Kellems sails on the October Transport, and will be stationed at Brooks Field, Texas.

First Lieuts. Corley P. McDarment, Charles B. DeShields and Hez McClellan, having completed their tour of foreign service, have been ordered to return to the U.S. on the October transport. Their assignments are as follows: Lieut. McDarment to Langley Field, Va.; Lieut. DeShields to Post Field, Fort Sill, Okla., and Lieut. McClellan to Mitchel Field, N.Y.

The Squadron received with open arms five new Keystone Bombers on August 22nd. Work was started assembling them.

6th Photo Section: The 6th Photo Section Training Program is about completed. Instruction in developing, printing, enlarging and supply work has been given to the entire Section, which at the present time consists of sixteen men. In addition to the training work, the men of the section have been busy painting, repairing old equipment, and installing a new negative and photographic print filing system.

Colonel Max C. Tyler, Department Engineer, has found it necessary to hire five draftsmen to take care of the hundreds of photographic prints furnished that office for the Pataon Peninsular map. This map is being made in connection with the Philippine Department progressive military program.

The United States Coast and Geodetic Survey, Bureau of Lands and Bureau of Forestry, have received the first shipment of photographic prints of the 5,000 square miles northeastern Luzon mapping project. The photographs of this unexplored area were made last May and June from the flying base of Aparri and Casiguran Bay.

Staff Sgt. Patterson is returning to the States on the October boat. Photo Section Commanders needing an expert camera repair man should meet the boat at "Frisco."

The whole Photo Section was "up in the air" last week. The Douglas Transport was assigned to the Section for a few hours for the purpose of giving the dark room boys an opportunity of clearing their lungs of chemical fumes.

The "Hypo Hounds" are still bragging about their victory over the Sternberg Basketball team, which the post team failed to defeat.

Kindley Field, Fort Mills, P.I., October 1st.

2nd Observation Squadron: The month of September has been one of rain, rain and yet more rain, with incipient typhoons keeping us on the alert. Flying activities have continued, however, from our north hangar, away from the rippling (or raging) waters of the China Sea.

A war condition period on the "rock" ushered in the month, and the nights were made hideous by "call to arms" at all sorts of ungodly hours. Landing parties were repelled, however, and the peace came.

Personnel here are considering applying for additional pay due to the hazards of necessary and frequent trips by automobile to topside, via Kindley Field road, and are glad of the comparative safety of an airplane, mile high.

Those who have served here will recall the cliffs at the base of which our road winds, and won't be surprised at the tale of an avalanche. Some several hundred tons of earth and boulders mark the place where the road was, and the landslide missed the Kindley Field bus by minutes only. We are more or less marooned and will be for several weeks. Ice and provisions are received by boat and hoisted per dolley to waiting transportation.

Lieut. and Mrs. Meloy and Mrs. Dunlap returned from China during the month and were greeted with the necessity of climbing Malinta Hill in the dark to reach home. Pouring rain speeded their tired feet. Vince reports that China is wonderful, but it's better to read about it.

Another returning officer was Captain L.C. White, Flight Surgeon, who came back commercially from a few days leave in the States.

The sound of "gas" was common for a while last month. Lieuts. Dunlap, Watkins, Rouch and Davidson made daily afternoon trips to Topside to imbibe more learning, while Park Holland sat back in his easy chair and wished them well. He recollected that last year he had "volunteered" for the course.

Clark Field, Camp Stotsenburg, P.I., October 1st.

3rd Pursuit Squadron: The month of September saw Lieut. Oakley G. Kelly presented with the D.F.C., after several years of waiting. The Cavalry and Camp Nichols aided the 3rd Pursuit Squadron and General Lassiter made the presentation. The ceremony was followed by an aerial review. Congratulations and "cumshaw" followed the review.

Lieut. and Mrs. Carr left for Baguio for thirty days' detached service. Despite the fact that they came back six days early, they said they enjoyed Camp John Hay immensely.

Last but not least, our pride and joy, Lieut. Bill Irvine, stepped into trouble in a down wind take-off in formation when he hit a soft spot on the field. No injuries except to the ship. Two wings, half the landing gear and a prop suffered when he ended up on his back.

Marshall Field, Fort Riley, Kansas, November 16th.

The 16th Observation morale is mounting higher with two more O-2H's and the promise of three more, which will make us one short of our full quota. We need every one of them, as our training schedule with the Cavalry and the dedication of airports keep all our available planes and pilots busy.

We enjoy these missions, especially the cross-country to the various towns in the Corps Area for the purpose of Airport dedications. The recent dedications have been Algoona, Iowa, in which three planes took part; Omaha, Nebraska, to which all planes were sent, and Davenport, Iowa. At the conclusion of the last dedication two pilots were ferried to Dayton where two reconditioned O2-H's were turned over to them.

Captain Gates and Lieut. Duncan proceeded to Chicago following the dedication of the airport at Davenport and returned Nov. 15th.

Major Robert E.M. Goolrick, Commanding Officer, went to Washington to attend his mother who is ill.

The Squadron played a large part on the program of the capture of Chaldron Farm, enacted by the men of this command on October 27th. Two ships from Leavenworth also took part in the program.

The Squadron has taken a lively interest in bowling this season, and both officers and enlisted men have now a large share of tournaments played with other organizations.

We have a good Basketball team with which we expect to win the pennant.

Lieut. B.C. Rose just arrived at this station from the Advanced Flying School at Kelly Field.

Maxwell Field, Montgomery, Ala., October 24th.

A large group of Confederate Veterans were housed at this field during the recent State Reunion of the Alabama Division, at Montgomery, Ala. These Veterans have been comparing the arms used by them during the war between the States with the modern implements - airplanes, bombs and machine guns.

Being centrally located in the South, Maxwell Field has become a very important link in the Military-Naval airway system, and consequently has the pleasure of entertaining many people of prominence, traveling by air, both military and civilians.

During the last few months the following were visitors: Former Assistant Secretary of War, Mr. Hanford MacNider; Costes and LeBrix, the French Trans-Atlantic Good Will Fliers; Will Rogers, the humorist; the tri-motor Old Gold Advertising plane; General James E. Fechet, Chief of the Air Corps; Assistant Secretary of War, F. Trubee Davison; Mr. Hawks of the Texas Oil Company; the Chilean Ambassador, Don Carlos Davila; Mr. Applegate in a British D.H. Moth plane; Mr. R.H. Fleet, connected with the Consolidated Aircraft Company of Buffalo, N.Y.; a flight of 26 planes from the Attack Group at Galveston; a flight

of five Marine Corps planes under the command of Major Lutz; 80 planes comprising the Demonstration Group under command of Brig. General D.D. Foullois; and a flight of 14 Army Bombing planes enroute to the races in Los Angeles.

In addition to the notables, there is a constant stream of air officers, Army, Navy and Marines, who make Maxwell Field a port of call.

The Air Corps at this station is constantly in receipt of communications regarding enlistments where vacancies are not available. For this reason Maxwell Field has within the last year been able to pick the very choicest material for its personnel. Unquestionably with the expansion of the Air Corps under the five year program, Maxwell Field is destined to be one of the most important air posts in the country.

Rockwell Field, Coronado, Calif., November 3rd.

During the past few weeks Rockwell Field was honored by visits from numerous high ranking officers of the Army. Major-General Frank D. Cheatham, the Quartermaster General, visited this station October 31st in connection with the new construction program for Rockwell Field. Brig.-General D.D. Foullois, Assistant Chief of Air Corps, accompanied by Captain Hunter, arrived by plane from Tucson, Ariz., on October 28th. After a thorough inspection of Rockwell Field and its activities, General Foullois departed for March Field the following day, accompanied by an escort of nine PT-9 planes from this station. On October 16th Brig.-General Frank Parker, Assistant Chief of Staff, paid us a visit.

1st Lieut. F.D. Valentine recently arrived here for duty after a tour of duty at West Point. He was assigned to the 11th Bombardment Squadron and, in addition, is performing the duties of Post Athletic Officer.

Lieut. John K. Nissley is another recent arrival at this station from Langley Field, Va. He was also assigned to the 11th Bombardment Squadron and appointed Police and Prison Officer and Assistant to Post Quartermaster.

Major J.H. Houghton, Chief Engineer Officer of the Rockwell Air Depot, and 1st Lieut. C.P. Kane, Depot Supply Officer, returned to this station October 23rd after attending the annual Engineering-Supply Conference at Wright Field, Ohio.

Mr. M.H. Hunter, Ammunition Foreman, 9th Corps Area, arrived recently for the purpose of making a general inspection of the ammunition storage conditions here.

The Officers' Club, Rockwell Field, entertained at a Hallow'een Costume Dance on the evening of October 27th. The Club was attractively decorated with bales of hay, pumpkins, corn stalks and serpentine. Refreshments consisted of apple cider and pumpkin pie. Costumes representing everything from shower baths to automobile tires were in evidence. Captain "Red" Black, as a French maid, pushing Lieut. H.R. Daxter in a baby carriage, took the honors. Lieut. Daxter was appropriately dressed as an infant. Officers from Camp Hearn, Fort Rosecrans and the Air Corps fields in this vicinity were invited. Several smart dinner parties preceded the dance.

Lieut. C.P. Kane, Depot Supply Officer, was host recently to the Depot Supply Office personnel, entertaining at a bridge party at his home in San Diego. A very enjoyable evening was had by all.

Brooks Field, San Antonio, Texas, October 25th.

Night flying for the Cadet class of July 1st started on the night of October 22nd. All of the ships used are PT-1's and PT-3's from "A" stage. Flying will continue until the students have successfully completed the night-flying course.

Twenty-five planes left the field enroute to Marfa, Texas on Oct. 29th, the purpose being to train student officers and cadets in cross-country flying. The flight was led by Lieuts. Waller, Spry and Camblin and was made up of three student officers and 19 Cadets. The student officers were Lieuts. Henry, Kirby and Willis, of the March, 1928, Class.

Captain Mileau and 1st Lt. Flannery flew to Dilley, Texas, October 24th and returned same day.

Lieut. E.J. Roberts, Jr., accompanied by mechanic, flew cross-country to New Orleans on October 23rd.

Captains Knight, White and Snell, and Lieuts. Cook, Holland and Langmead flew cross-country to Eagle Pass, Texas, Tuesday, October 23rd, returning same day.

Eleven planes flew to Galveston Oct. 24th for the purpose of training student officers and cadets in cross-country flying. The following students piloted the

ships: Lieuts. McNaughton and Simonton, Cadets Lee, Matheny, Neale, Slingerland, Vance, Sutherland, Starrett and Warner. Lieut. A.L. Harvey was the commanding officer of the flight.

1st Lieuts. Robin A. Day and L.L. Koontz left for Mitchel Field October 17th to ferry two DH4-M2-P planes to Kelly Field.

1st Lieut. Max F. Schneider left for Middletown Air Depot October 17th to ferry a DH4M-2K to Kelly Field.

2nd Lieuts. William E. Baker and Richard D. Reeve left the San Antonio Air Depot, Duncan Field, October 20th, ferrying two PT-1 planes to Pittsburgh Airport, Pa. Staff Sgt. Franklin K. Deal, Jr., traveled as passenger with Lieut. Baker.

Master Sgt. Homer J. Fagg, 62d Service Sqdn., was detailed as Post Sergeant Major during the temporary absence of Staff Sgt. Franklin K. Deal, Jr.

1st Lieut. Claude E. Duncan and 2nd Lieut. L.P. Hudson left Brooks Field en route to Post Field, Okla., via rail to ferry two O-2 airplanes to Kelly Field.

Sergeant John "Spud" Murphy, 51st School Squadron, is being discharged for the convenience of the government so that he may reenlist for a tour of duty in the Philippines. This will make Sgt. Murphy's second trip to the Islands. The country seems to appeal to him - reason unknown.

On October 21st Brooks Field won another football game. The Maroons, whose ranks boasted several all-American grid selections and former West Point stars, defeated the Texas State amateur champion collegiates by a 20-0 score at League Park field. The game was featured by sensational plays by the Brooks Field backfield. "Red" Fuelling, subbing for Meehan at right half, started the third quarter by reaching high into the air, intercepting a Collegiate pass, and racing 65 yards for the second counter. Landon, Maroon left half, made the last touchdown by a 55-yard broken field dash. Landon suffered a badly twisted ankle in the first quarter but persuaded Coach Simonton to send him back into the game in the final period, and less than five minutes had elapsed when he shook five Collegiate players and ran limping down the field with the ball, covering the last 20 yards almost at a dog trot, due to the intense pain in his ankle.

"Light Horse" Harry Wilson played the second quarter for the Maroons and thrilled the crowd with two great end runs to pave the way for DeFord to go over with the initial touchdown. Wilson amassed a total of 110 yards from scrimmage the short while he was in the game, 55 yards of this being on passes from DeFord.

The entire Brooks Field team played stellar football throughout the game. DeFord starred with his consistent passing and punting. Harrington and Hughes in the backfield gained many yards by a series of deceptive plays. The line held in great shape, and stopped the Collegiates in their tracks most of the time. Doggs, Hassell, Murray and Garrett played well for the Collegiates.

Kelly Field, San Antonio, Texas, November 7th.

Brig.-General Benjamin D. Foulois, Asst. Chief of Air Corps, and Capt. F. O'D. Hunter, stopped over at Kelly Field on October 24th and 25th enroute to March Field, Calif. They took off on the morning of October 26th.

On October 24th a dance to the graduating class was given by the officers of Kelly Field in the Aviation Club. Dancing was from 9 to 12, and a very large crowd was in attendance.

Mr. Hansen of the District Supervisor's Office, Aeronautics Branch, Department of Commerce, Dallas, spent Oct. 24th and 25th at Kelly Field examining all applicants for Commercial Transport Pilots License. About 68 applicants passed the test, including not only the graduates of the last class but several permanent Air Corps officers.

Lieut. Robert Finley left for Chamate Field, Ill., on November 5th, having been ordered to that station for duty.

Lieut. D.H. Dunton returned October 27th from an extended cross-country trip throughout the north and east.

Lieut. John S. Griffith reported for duty October 17th from the Hawaiian Islands and was assigned as Assistant Operations Officer.

Three P1's, piloted by Lieuts. Gaffney, Griffith and Sprright and five A-3's piloted by Major Tinker, Lts. Thompson, Finley, Olds and Carlson, and with Major Strauss, Capt. Jervey, Lts. Meyers, Evans and Cassidy as passengers, spent Oct. 20th in Denison, Texas, at the opening there of the new Municipal Airport.

Crissy Field, Presidio of San Francisco, Calif., October 5th.

Major G. C. Brant, pilot, with Colonel F.L. Dengler, Coast Artillery, as passenger, and 2nd Lieut. Wentworth Goss, pilot, with Mr. George Hearst of the San Francisco Examiner as passenger, left the field recently for Capitola, Calif., to witness the anti-aircraft firing of the 63rd Coast Artillery, (A.A.)

1st Lieut. Edwin B. Bobzien, pilot, with Master Sgt. Wm. L. Klutz as photographer, left Sept. 26th for Merced, Calif., using this place as a base for mapping Tuolumne Meadows in Yosemite.

1st Lieut. E.E. Moulton, Air Reserve, pilot, with Staff Sgt. LeRoy as passenger, proceeded to Strathmore, Calif., on Sept. 5th to participate in the dedication of that city's airport.

Major Henry B. Clagett, Air Officer, 9th Corps Area, left Sept. 5th in a Douglas Transport for Mines Field, Los Angeles, Calif. in connection with the National Air Races held at that field. He had with him Master Sgt. Chester W. Kolinski, relief pilot, and Captain A.W. Brock, Jr., who acted as Operations Officer during the Air Meet.

Major G.C. Brant, Lieuts. Edwin B. Bobzien, Carlton F. Bond and Wentworth Goss, A.C., and Lieuts. Frank H. Barber and Orie W. Coyle, Air Reserve, left the field Sept. 7th for Mines Field, Calif., to attend the National Air Races. They were followed on the 8th by Lieut. R.J. Little, Air Reserve, and on the 12th by Lieuts. L.A. Walthall and Paul C. Wilkins.

During the entire month of September 2nd Lieut. Harold F. Brown was engaged in cooperative work with the 63rd Coast Artillery (AA) in summer camp at Camp McQuade, Capitola, Calif.

1st Lieut. Frank H. Barber, Air Reserve, pilot, with 2nd Lieut. Rogers A. Gardner, A.C., as observer, ferried an O2-H airplane to Capitola, Calif., to replace the DH plane which had been used by Lieut. Brown in cooperative work with the 63rd C.A. (AA). This plane was flown back to Crissy Field and, with another DH, a photo plane, transferred to March Field, Calif. Lieuts. Barber and Joseph R. Hargrove, Air Reserve, flew them to March Field.

1st Lieut. Frank D. Hackett, pilot, with 1st Lieut. Howard M. Fey, observer, left Sept. 18th for the purpose of checking strip map No. 40, San Francisco-Los Angeles. On the 20th, Lieut. Hackett and Major Delos C. Emmons, of the Office of the Assistant Secretary of War, proceeded to Visalia and Sacramento, Calif., for the purpose of inspecting airports thereat. On the same day, Capt. Wm. C. Ocker, pilot, with Master Sgt. Gravlin, proceeded to Lake Port and Clear Lake, Calif., to inspect landing fields thereat.

Lieut. Carlton F. Bond transported Lieut. H.L. George, of Langley Field, Va., to Reno, Nevada, for the purpose of inspecting the landing field thereat.

Sixteen officers of the Medical Reserve Corps were given an extended ride in a Douglas Transport, piloted by Master Sgt. Chester W. Kolinski.

On Sept. 28th, Capt. Floyd N. Shumaker, pilot, with Staff Sgt. Charles Fields, as radio operator, engaged in cooperative work with the 2nd Battalion, 76th Field Artillery, Presidio of Monterey, Calif.

Capt. Floyd N. Shumaker, leading a formation of seven PT's, left on Sept. 11th for Mines Field, Los Angeles. Those comprising the formation were Capts. Chapman and McDonald, Lieuts. Galehouse, Eddy, Vines, Cavagnaro, Flynn, Gilbert, Hoey and Ames, all of the Air Reserve. On the return trip two of the planes were forced down and wrecked in the landing. One, piloted by Lieut. Flynn, at Tulare, and the other, piloted by Lieut. Vines, near Clover Field, Calif. Pilots and passengers escaped with minor injuries. Capt. Wm. C. Ocker, A.C., was dispatched to Tulare to investigate the wreck, the investigation of the other wreck being conducted by Clover Field personnel.

Capt. Floyd N. Shumaker, A.C. with 2nd Lieut. Harold F. Brown, A.C., proceeded to Colusa, Calif., to participate in the dedication of that city's airport, which took place on Sept. 25th.

Luke Field, T.H., October 15th.

The number of Air Corps men applying for extensions of their tour of foreign service at Luke Field during the past few months has been highly gratifying to their officers, according to Lieut. James C. Shively, Personnel Adjutant of the Fifth Composite Group. Applications for discharge by purchase have become an almost unknown thing here also, it was said. During the past

month five men of the 23rd Bombardment Squadron, two from the 65th Service Squadron and one from the 72nd Bombardment Squadron applied for extensions.

Luke Field will have the largest Post School this year in its history, according to Lieut. Clarence B. Lober, Educational Officer. It was said that up to the present time 155 men enrolled for the various courses. The largest course for the year will be the one in Aero Mechanics, more than 50 men having requested this course in particular. Courses in primary and advanced education have also been included in the curriculum.

Second Lieut. Carl B. McDaniel, engineering officer of the 72nd Bombardment Squadron, received the order authorizing his silver bars during September. First Lieut. McDaniel now ranks from September 14th. He accepted and took the oath on September 21st. At the time his promotion was received, Lieut. McDaniel was highly-praised by his commanding officer, who commended him on an enviable record both as a flier and an engineering officer.

Captain Harry C. Drayton, commanding officer of the 72nd Bombardment Squadron, was elected Post Commander of the American Legion, Fox-Cornet Post No. 9, at the regular September meeting, and took the oath during October. Captain Drayton is also one of the executive committeemen for the Department of Hawaii.

The month of September saw the squadrons of the 5th Composite Group busy with a number of inter-island hops, the first one being an emergency trip to Hilo, Hawaii, to carry doctors and medicine for a serious case of pneumonia. The planes left Luke Field on September 13th and returned the following day.

Drs. Nils Larsen and Paul Withington, Honolulu physicians, were ferried from Luke Field to Hilo and return, after the Commanding General of the Department had authorized the trip. Walter Eklund, manager in Hawaii for a local concern, had been reported ill, and the aid of the Air Corps was asked by his employers. Both Honolulu newspapers gave the trip considerable publicity, each commenting editorially on the readiness of the Army to be of assistance in humane pursuits as well as combat. One of the papers quoted a prominent Honolulu man as giving entire credit to the Air Corps for saving Eklund's life. This flight was handled by the 72nd Bombardment Squadron, Lieuts. Carl B. McDaniel and Clyde A. Kuntz, pilots.

Seven Martin bombers and five of the new Loening Amphibian planes made a three-day flight to Kauai, September 25-27, for the purpose of personnel training and photographic work. A careful study was made of the flying conditions both over the channel and landing fields available on Kauai. All possible fields were photographed.

Upon their return to Luke Field the same ships were immediately placed in condition for a trip to Hawaii. This flight also occupied three days, October 2-4, and resulted in considerable benefit to those making the trip. Mr. G.E. Douglas, Assistant Superintendent of National Parks for the Territory of Hawaii, was a passenger on the trip.

Sergeant Clinton W. Terry, Air Corps, was killed on October 1st when a Keystone Bomber in which he was a passenger and piloted by Captain Harry C. Drayton, crashed at Haleiwa Beach, Oahu. Terry, who was a member of the Headquarters Detachment, had been spending a few days at the summer camp near there and was returning to Luke Field to resume his duties as stenographer to the Commanding Officer of the 5th Composite Group when the fatal accident occurred. None of the other occupants of the ship was injured.

Sergeant Terry was 26 years old and a native of Binghamton, N.Y. He was serving on his second enlistment, having joined the service in 1924. In the short time that he had been on duty with the Air Corps his loyalty and personality had won for him the respect and admiration of both officers and men of the command.

The harmonious relationship existing between the Naval Air Service and the Army Air Corps was further demonstrated during the past month in connection with the inter-island flight to Kauai. The Naval Air Station furnished escort planes for the Army to mid-channel, and the Navy tug "Pelican" kept a constant patrol of the waters between the islands. Their assistance in this respect added a considerable margin of safety to the flights, according to the officers flying them.

Six enlisted men stationed at Luke Field successfully passed the preliminary examination for entrance to West Point Preparatory School, and are now attending the courses at Schofield Barracks. The young Air Corps men who are training for commissions are: Privates Ira Bashein, Duval L. Crist, Edward Flanick, Gordon Harris and Lyle F. Johnson of the 65th Service Squadron, and John Highfield, of the 23rd Bombardment Squadron.

San Antonio Air Depot, Duncan Field, Texas, November 14th.

An exciting fishing trip was had on the week end of November 3-4, when Gen. F.P. Lahm, Commanding General of the Air Corps Training Center, and Lieut. Norman D. Trophy, the Adjutant of the Depot, went tarpon fishing on the Gulf, off Port Aransas, Texas. Tarpon was the prey sought - what was actually hooked was a 17-foot shark, the largest ever seen in Southern waters. However, after a desperate and long-fought battle, towing the 40-foot boat at breakneck speed, the shark was victorious, snapping the three-quarter inch chain that held him and departing for parts unknown. This appears to be the biggest true story of recent times in this vicinity on the old familiar subject - "You ought to see the one that got away!"

On Nov. 12th and 13th this Depot was accorded the pleasure of a visit from Major Jacob E. Fickel, Executive Officer and at present Acting Chief of the Air Corps Materiel Division, on his return from the West Coast, piloting one of the new O2-K planes to Wright Field.

We were glad to receive a visit Nov. 13th from Major H.S. Martin, Chief of the Field Service Section, Materiel Division, who is making a visit of inspection of Air Corps activities in this vicinity regarding supply and maintenance matters.

The Engineering Dept. of this Depot overhauled and repaired during October - Airplanes, - 6 PT-1, 1 PT-3, 2 AT-4, 1 DH-4M-1, 2 DH-4M-1T, 2 DH-4M-2, 1 DH-4M-2P, 1 DH-4M-2T, 1 O1-B, 1 O2-C, 3 O2-H, 1 C-1, 1 C-1-C, 2 A-3, 1 NDS-4, 1 XA-1, 2 VE-9, 1 NS-5, total 30; Engines, - 30 Liberty, 23 Wright-E, 6 Wright E-3, 2 Wright E-4, 1 Wright J-5, 10 Curtiss D-12, total 72.

Captain C.W. Ford, of Hqrs. First Corps Area, Boston, Mass., and Lieut. J.A. Wilson, on duty at the Boston Airport, East Boston, were welcome visitors here November 5th to 7th, coming by rail to ferry two PT-1's back to Boston Airport. Lieut. Wilson renewed old acquaintances at the Depot, having been on duty here some six years ago.

Second Lieut. William D. Herring, Air Reserve, of Amarillo, Texas, completed Nov. 6th 30 days' instruction and training on inactive status at this Depot.

Captain S.J. Idzorek and Lieut. H.M. Newstrom, of Fort Crockett, paid us an informal visit by air on November 8th.

Lieut. R.V. Ignico, our Depot Supply Officer, and Lieut. A.W. Vanaman, Chief Engineer Officer of the Depot, made a cross-country trip to Fort Crockett on Nov. 8th for a conference with the Commanding Officer of that station on supply and maintenance matters, returning on the 9th.

Lieut. H.A. Dartron, Depot Supply Officer of the Fairfield Air Depot, was a visitor at our Depot Nov. 9th in course of a trip, ferrying a plane to Kelly Field.

Lieuts. R.V. Ignico and A.S. Albro returned on October 21st and 20th, respectively, from attending the annual Engineering and Supply Conference at the Headquarters of the Air Corps Materiel Division, Wright Field, reporting an interesting session of the conference.

Captain George R. Gaensslen, Air Corps Reserve, of San Antonio, completed a fourteen days' tour of active duty training at this Depot on October 30th.

Lieut. L.D. Fator, Air Reserve, on duty at Post Field, Fort Sill, Okla., was a visitor at this Depot on November 2nd, bringing in an O-2H for work thereon.

On November 3rd Lieut.-Colonel Ira F. Fravel, A.C., Commanding Officer of the Middletown Air Depot, and now on temporary duty at the Air Corps Advanced Flying School, Kelly Field, called at this Depot for a pleasant informal visit.

Serial No. 275 LIST OF NEW MATERIAL ADDED TO INFORMATION DIVISION FILES
Oct. 28 to Nov. 22, 1928

Available for loan to Air Corps organizations only upon
request to the Air Corps Library, Munitions Bldg.,
Washington, D.C.

DOCUMENTS

- A 00 35 The World Is Round, by Bradley Jones. (Pub. in U.S. Air Services, Nov., 1928)
- A 00.5 Regulations for Air Travel in Egypt. Sent. 25, 1928.
Egypt/1
- A 10 192 Ignition Points and Combustion Reactions in Diesel Engines, by
No. 483 J. Tausz and F. Schulte. Oct. 1928. (Nat. Advisory Committee for
Aeronautics, Tech. Memo. Nos. 483, 484.)
- A 10 192 Research on the Control of Airplanes, by B.M. Jones. Oct., 1928.
No. 485 (Nat. Advisory Committee for Aeronautics, Tech. Memo. No. 485.)
- A 10 205 Functions of New French Air Ministry Outlined. (In Foreign Aero-
No. 113 nautical News, Bur. of Foreign & Domestic Commerce, No. 113, Oct. 19,
1928, pp. 1-4.)
- A 10 220 General Convention Between Germany and Spain Relating to Air Navi-
No. 319 gation. (In Bulletin of Information of the International Commission
for Air Navigation, No. 318, pp. 1-6.)
- A 10 220 Adhesions of the Netherlands to the Air Convention of 13th Oct.
No. 319 1919. (In Bulletin of Information of the International Commission
for Air Navigation No. 319, Oct. 3, 1928.)
- A 10 220 Agreement Entered into between the Government of the Union of
No. 320 Socialist Soviet Republics and the Government of Afghanistan relat-
ing to the Air Transport Service between Kabul and Tachkent. In
Bulletin of Information, InterNat. Committee for Air Navigation, No.
320, pp. 1-3.)
- A 10 222 Aviation and Anti-aircraft Artillery of France, Italy, England
and Japan. Sept. 28, 1925.
- A 10 US/100 Aeronautic Trade Directory. Rev. May 15, 1928. (Dept. of Commerce,
No. 3 Aeronautics Branch, Aeronautics Bulletin No. 3.)
- A 10 US/7 Airports; Types of Management, Rentals, Concessions, Field Rules,
No. 21 U.S. (Dept. of Commerce, Aeronautics Branch, Info. Bul. No. 21, 2d Ed.)
- A 10 US/100 Airport Rating Regulations, U.S. Rev. Aug. 1, 1928. (Dept. of Com-
No. 16 merce. Aeronautics Branch, Aeronautics Bulletin No. 16.)
- A 10.23 109 Bearing Strength of Wood under Steel Aircraft Bolts and Washers
No. 296 and Other Factors Influencing Fitting Design, by G.W. Trayer. (Nat.
Advisory Committee for Aeronautics, Tech. Note No. 296.)
- A 10.23 109 The Effect of Fillets between Wings and Fuselage on the Drag and
No. 299 Propulsive Efficiency of an Airplane, by N.N. Gough. (Nat. Advisory
Committee for Aeronautics, Tech. Note No. 299.)
- A 10.23 109 The Variation in Pressures in the Cockpit of an Airplane in Flight,
No. 300 by T. Carroll and W.H. McAvoy. (Nat. Advisory Committee for Aeronautics
Tech. Note No. 300.)
- A 10.23 109 Flight Tests of No. 10 Cowling, by Thomas Carroll. (Nat. Advisory
No. 301 Committee for Aeronautics. Appendix to Tech. Note No. 301.)
- A 10.23 228 Theories of Flow Similitude, by A. F. Zahm. (Nat. Advisory Committee
for Aeronautics, Report No. 287.)
- A 30.2 122 Aerial Photography for Indiana, by T.M. Bushnell. (Reprint from
"Proceedings of Indiana Academy of Science." V. 37, 1927.)
- B 30 5 New Air Minister, France - Mr. Laurent Eynac. Sept. 20, 1928.
- C 32.2 19 The Wright Brothers' Medal.
- C 50.04 5 The Infantry School, Fort Benning, Ga., 1928-29. Courses of In-
1928/29 struction.

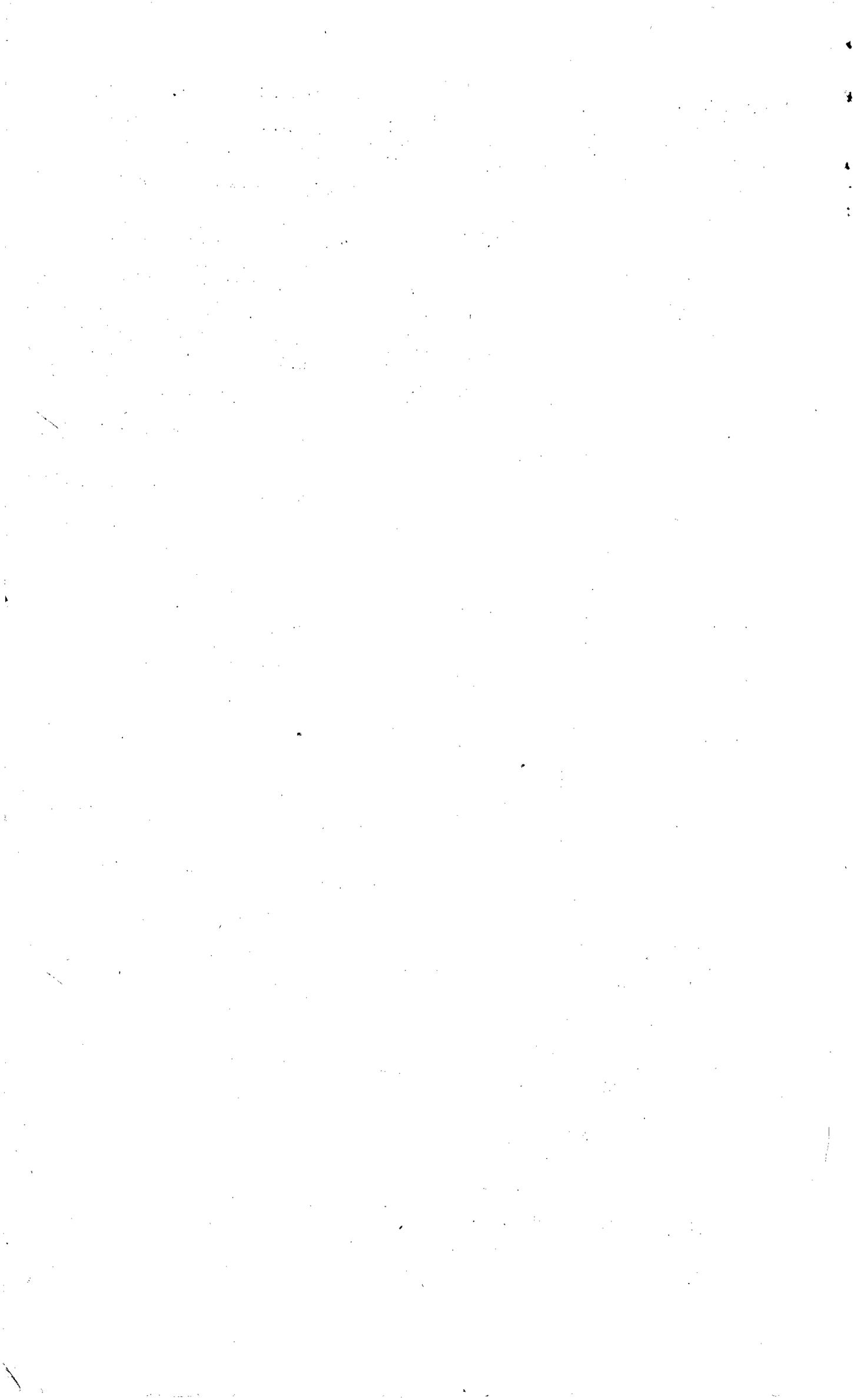
Serial No. 275.

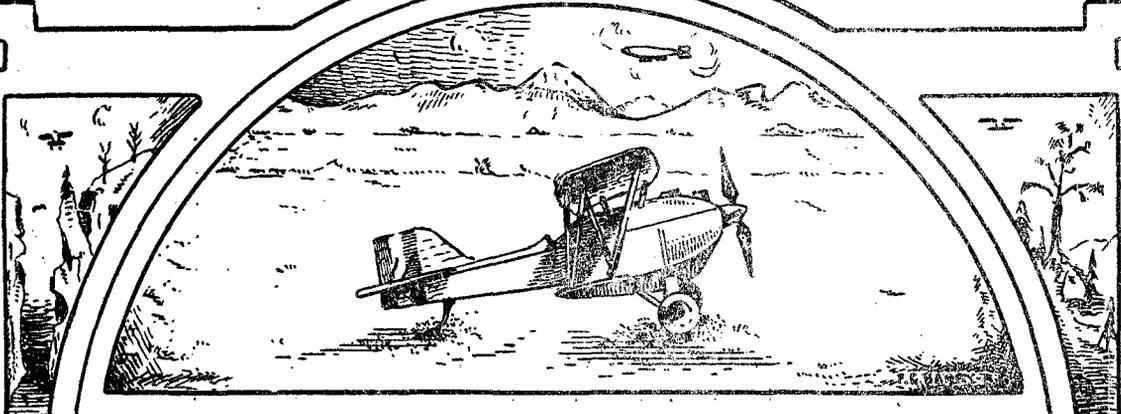
DOCUMENTS (Cont.)

- C 50.09 18 Quartermaster Corps Motor Transport School, Camp Holabird, Baltimore, Md., Courses of Instruction, 1928-29.
- C 51.1 France Program of the "Morane-Saulnier" School for Pilots, France. 1928.
2
- C 53 US/9 Problem for Reserves, U.S.
- C 71.6 US/41 Report on the Army Hawaiian Flight, by Lt. A.F. Hegenberger.
- D 00.12 122 Installation Instructions for Airdrome Landing Field Floodlight
No. 2965 Air Corps Type A-6, by W.T. Harding. (Air Corps, Materiel Division, Tech. Report 2965.)
- D 00.12 122 Airdrome Landing Field Floodlight, Air Corps Type A-6, by W.T.
No. 2966 Harding. Oct. 12, 1928. (Air Corps Materiel Division, Tech. Report 2966.)
- D 00.12 122 Manual on Revolving Beacon, Air Corps Type B-5, Equipped with Lamp
No. 2967 Changer, Air Corps Type A-2, by W.T. Harding. (Air Corps Materiel Division. Tech. Report 2967. Aug. 15, 1928.)
- D 00.12 122 Test of Bomb Release Handle, Type L-13, by L.J. Eyler, Aug. 6, 1928.
No. 2973 (Air Corps, Materiel Div. Tech. Report 2973.)
- D 00.12 122 Wing and Control Surface Characteristics of Service Airplanes, by
No. 2977 R.J. Campbell. (Air Corps, Materiel Division, Tech. Report 2977, Oct. 2, 1928.)
- D 11.4 11 Isemann Automatic Rivets. Oct. 24, 1928. (Navy Dept. Bureau of
Aeronautics. Serial 8131A.)
- D 13.3 Com- Titterington Micrometer Compensator. Oct. 17, 1928 (Pioneer In-
pass/31 strument Co.)
- D 52.1 241 Determination of Center of Gravity and Mean Aerodynamic Chord,
by T. de Port. (Air Corps Materiel Div., Airplane Branch Report
Serial No. 2790, Rev. Aug. 28, 1928.)
- D 52.1 431 The Vickers "Vellore" (British) Freight Carrier. (Nat. Advisory
No. 83 Committee for Aeronautics. Aircraft Cir. No. 83, Oct. 1928.)
- D 52.1 431 The Caproni Monoplane "Ca 97" (Italian). (Nat. Advisory Committee
No. 84 for Aeronautics. Aircraft Cir. No. 84, Oct. 1928.)
- D 52.1 Auto- A Summary of the Experimental and Theoretical Investigations of
giro 9 the Characteristics of an Autogiro, by H. Glauret & C.N.H. Lock.
(Great Britain Aeronaut. Research Committee Report & Memo. 1162,
April, 1928.)
- D 52.1 Cur- Airplanes and Parts: AT-5 Type - Assembly and Maintenance Instruc-
tiss 60 tions. Sept. 10, 1928. (Air Corps Tech. Order 01-60.)
- D 52.151 55 Effect of Cellule Arrangement on the Rate of Autorotation Calcu-
lated by the "Strip" Method. July 7, 1927. (Inform. Circ. No. 609.)
- D 52.33 42 Beams of Lightened Box Section. June 8, 1928. (Navy Dept. Bureau
of Aeronautics. Serial No. R-8599.)
- D 52.33 45 Test of T2N-1 Experimental Duralumin Wing Beam Sections. Oct. 18,
1928. (Navy Dept. Bureau of Aeronautics, Serial E-30482.)
- D 52.4 8 Method of Testing Spark Plugs for Aviation Engines. Oct. 10, 1928.
No. 24 (Navy Dept. Bureau of Aeronautics. Power Plant Note No. 24.)
- D 52.412 1 Test of Filters for Lubricating Oils and Fuels. Oct. 17, 1928.
(Navy Dept. Bureau of Aeronautics, AEL-225.)
- D 52.413 Mag- Test of Scintilla type SC Dual Magneto. (Navy Dept. Bureau of
netos/5 Aeronautics, AEL-223.)
- D 52.413 Mag- Test of General Electric Co. Aircraft Magnetos. Oct. 10, 1928
netos/5 (Navy Dept. Bureau of Aeronautics, AEL-224.)
- D 52.413 Mag- Engines and Parts, General - V-AG Type Magnetos. (Air Corps, Tech.
netos/79 Order 02-1-35A.)

DOCUMENTS (Cont.)

- Ser.No. 275.
D 52.46 19 Test of Tuthill, Type OB Fuel Pump. Oct. 20, 1928. (Navy Dept. Bureau of Aeronautics, AEL-226.)
- D 52.5 20 Test of UO-1 Wheel Type Landing Gear with Streamline Steel Tubular "V" Struts. Nov. 5, 1928 (Navy Dept. Bureau of Aeronautics, Serial No. 66-28.)
- D 52.7 9 The Adventurous Story of the Airship; Voyage of the Graf Zeppelin Recalls Man's Struggles to Tame the Free Balloon to Service as a Dirigible, by T.J.C.Martyn.(From N.Y.Times Magazine, Oct.28,1928.)
- D 52.74 33 Drag of C-class Airship Hulls of Various Fineness Ratios. (Nat.Advisory Committee for Aeronautics. Report No. 291.)
- A 10.01 US/7 Air Traffic Rules. (Dept. of Commerce. Aeronautics Branch, Aero-
No.15 nautics Bulletin No. 15.)
- D 61.2 25 Reglement sur l'Usage International des Symboles et Termes Employes en Technique. (Commission Internationale de Navigation Aerienne,1927)
- 016.355 Un3r Review of Current Military Writings, Sept.1928. U.S. Army Service Schools, Fort Leavenworth.
- 317.3 Un3 1928 Statistical Abstract of the U.S.1928. U.S.Bureau of Foreign & Domestic Commerce (Dept. of Commerce.)
- 325.86 P19 Annual Report of the Governor, 1928. Panama Canal. Governor
1928
- 330.9 C88 Interpretation of the Index of General Business Conditions.Crum,W.I
- 336.24 N21 The Shifting and Effects of the Federal Corporation Incom Tax. Vol.1-Manufacturing & Mercantile Corporations. National Industrial Conference Board.
- 354.42 Su2 Airmen or Noahs; Fair Play for Our Airmen. The Great "Neon" Air Myth Exposed. (British Book.) Sueter, Murray.F.
- 359 T18 1928 Taschenbuch der Kriegsflotten, 1928.
- 629.13 B32 An Approach to Winged Flight. Batten, J.D.
- 629.13 G79ap Royal Air Force Pocket Book. 1928. Great Britain. Air Ministry.
No. 1081
- 629.13 R66 Engineering Aerodynamics. (Ronald Aeronautic Library) Diehl,W.S.
Vol. 14
- 629.13 R66 Elements of Aviation. (Ronald Aeronautic Library) Clark, V.E.
Vol. 15
- 629.142 K67 Spring Flight. (From Smithsonian Report for 1927)Klemperer,Wolfgang
- 629.145 Un3ae Aerial Navigation. (June,1918) U.S Navy Dept.
- 629.17 AL2a The Airplane, April, 1928. Tentative Ed. Aldrin, E.E.
- 778 W72 Aerial Photography. Winchester, C.A.C.
- 920 B13 Memories of Land and Sky. Bacon, Gertude.
- ✓940.373 L62 A.E.F., Ten Years Ago in France. Liggett, Hunter.
- 940.4 Ed5 Military Operations, France and Belgium,1914. Ed. 2,v.1,Edmonds,
J.E., comp.
- 940.42 W36 The Palestine Campaigns. Wavell, A.P.
- 940.45 B13j The Jutland Scandal. Bacon, Sir R.H.S.
- 944.03 H13 Vauban, Builder of Fortresses. Halevy, Daniel.
- 998 EL5 At the North Pole. (From Smithsonian Report for 1927)
Ellsworth, Lincoln.





Air Corps
News —
— Letter



— ISSUED BY —
OFFICE CHIEF OF AIR CORPS
WAR DEPARTMENT
WASHINGTON, D. C.

Dec 14
1928
57
U.S.
NO. 17
AID

TABLE OF CONTENTS

	<u>Page</u>
Air Corps Notes from Annual Reports.	434 - 436
Air Officers to Aid Commercial Aviation in Hawaii.	436
An Exclusive Fraternity at Kelly Field	437 - 438
Spirit of Cooperation in the Air Corps	438
Representative Furlow Visits Maxwell Field	438
Dedication of Jackson, Miss. Airport	438 - 439
Rockwell Field Wins Silver Cup	439
Officer Performs Unusual Landings with the "Duck".	439
Kelly Field Pilot Performs Unusual Landing Feat.	439 - 440
Graduation from Air Corps Technical School	440
Battle Against Rabbits Waged at Rockwell Field	440
Swimming Champions Visit Luke Field.	440
Caterpillar Club Still Going Strong.	441 - 442
Army and Naval Men Combine in Legion Post.	442
Special Welcome for Service Men at Tampa Terrace Hotel	442
Lieut. Hopkins Has Narrow Escape	443
Trans-Pacific Fokker Receives Overhaul	443
Commercial Aviation in Hawaii.	443
Luke Field Officers Escape Injury in Crash	443
Hatbox Field to be Enlarged.	444
Fast Flight from Detroit to Boston	444
Booming Aviation in Jacksonville	444
Elaborate Maneuvers Planned for Next Spring.	444 - 445
Majority of Flying Cadets College Men.	445
New Radio Beacon Receiving Set	445
Policies in Effect in Office Chief of Air Corps.	446
New Book of International Airports	446
Civilian Aviation Attracts Enlisted Pilots and Mechanics	446
Caterpillar Club Deprived of Two Members	447
Resignation of Captain Aldrin.	447 - 448
Secretary of War Lauds Aviation Pioneers	448
Description of Recently Authorized Uniforms.	448 - 449
Air Corps to Conduct Elaborate Experiment on Refueling Aircraft in Flight	449 - 452
War Department Orders Affecting Air Corps Officers	452
Colonel Culver Goes to the General Staff	452
Distinguished Flying Cross for Lieut. Eielson.	452
Notes from Air Corps Fields.	453

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

---oOo---

AIR CORPS NOTES FROM ANNUAL REPORTS

In the Annual Report of the Secretary of War, for the fiscal year ended June 30, 1928, he states that the development of our air defenses has been most gratifying. Touching on the passage by Congress of the 5-year expansion program for the Air Corps, which program was inaugurated July 1, 1927, he goes on to say:

"In order to obtain the authorized increases in the number of pilots it was necessary to concentrate on flying training. To this end, seven tactical squadrons temporarily were placed on an inactive status and the personnel employed for the formation of the necessary school squadrons. The pilot strengths of other tactical units were reduced to a minimum and no replacements were sent to relieve those officers who were returning from foreign service. It has been possible to reconstitute four of the tactical units rendered inactive, and others will be reconstituted during the coming fiscal year.

The commissioned strength of the Air Corps has increased somewhat during the 4-year period. On the last day of the fiscal year 1924 there were 872 officers in the Air Corps and 32 officers detailed to the Air Corps from other branches for training. On June 30, 1928, the commissioned strength stood at 961, exclusive of 144 officers detailed from other branches for training. The number of pilots had increased during the same period from 768 to 950. While the enlisted strength of the Air Corps had increased from 8,723 on June 30, 1926 to 9,077 on June 30, 1927, and to 9,493 on the last day of the past fiscal year it was still below the actual strength on June 30, 1924. Both commissioned and enlisted strengths are somewhat below that authorized for the first increment of the 5-year expansion program.

Flying training has been systematized through the creation of the Air Corps Training Center at San Antonio, Texas. One primary flying school, now located in California, will be moved to San Antonio as soon as housing facilities are available at the training center. This will result in greater efficiency because of proximity to the other schools of the Training Center and to the supply source. It is believed that the training system which has been developed in the Army Air Corps is second to none in the world.

In airplane construction this has been a period of standardization. Improvement in existing designs may be anticipated in the future rather than changes in the articles of equipment themselves. Pursuit, observation, training, and cargo types of airplanes have attained a standardized position; attack and bombardment types, however, require further development. The equipment of the Air Corps has decreased numerically during the past four years as a result of exhaustion of war-built materiel. The decrease in actual numbers, however, has been offset by an increase in the quality of the equipment. The number of aircraft-hours flown has increased from 150,319 in 1925 to 182,903 in 1928. This increase may be used as an index of the enlarged activities of the Air Corps.

The Air Corps has been considerably handicapped by the necessity for using up a large war-time stock of Liberty engines. This was essential in order to carry out the policy of strictest economy. It is now planned, however, to discontinue the procurement of planes equipped with Liberty engines, as the number of these engines in storage suitable for reconditioning is sufficient only to provide replacements for the airplanes now on hand and so equipped.

During the past two years the Air Corps has given numerous demonstrations at the various service schools of the Army for the purpose of familiarizing all branches with the capabilities and limitations of aviation. These demonstrations, combined with the joint maneuvers which have been conducted with other branches, have resulted in a more complete understanding of the problems of

cooperation."

In another paragraph the Secretary of War enumerates outstanding flights made by Air Corps personnel in the past four years.

In the Annual Report of the Hon. F. Trubee Davison, Assistant Secretary of War, to the Secretary of War, he states that the most pressing problem in the Air Corps is the question of the promotion of officers. "No other branch of the Army is as adversely affected as the Air Corps by the so-called 'World War hump,' Mr. Davison says. "In addition to that, junior officers are performing duties all out of proportion to their rank and frequently they are of a very hazardous character. The result is that the officer morale is seriously impaired, and a solution by legislation should be effected during the coming short session of Congress. The Furlow Bill, as it passed the house, is unquestionably the most satisfactory promotion measure ever introduced, from the Air Corps standpoint. It is earnestly to be desired that that measure, or one containing its provisions in substance, be enacted into law."

Contending that the present enlisted grades are not suitable to Air Corps organizations, Mr. Davison advocates more provision for mechanical specialists than exist at present.

Touching on the 5-year expansion program, Mr. Davison states that this program can be smoothly and efficiently carried to completion if sufficient funds are made available and legal obstacles are removed which complicate the personnel situation.

In enumerating actual accomplishments under the 5-year program, Mr. Davison calls attention to the fact that the first increment of the program required that there be on hand or on order at the conclusion thereof 1,186 airplanes and that the commissioned and enlisted personnel number 1,100 and 9,590, respectively. There were actually on hand 939 airplanes and 237 planes on order, and the commissioned personnel numbered 1,014 and the enlisted men 9,514. During the fiscal year just closed, about one-fifteenth of the permanent housing required for Air Corps enlisted men was completed of the total required at the conclusion of the 5-year program. Less than one one-hundred-and-fiftieth of the permanent housing for officers was constructed during the fiscal year 1928, which the Air Corps should have at the conclusion of the 5-year program. About one one-hundredth of the total construction required for noncommissioned officers at the conclusion of the 5-year program was completed during the fiscal year 1928. It will be seen, therefore, that whereas the personnel and plane parts of the program for the first increment were practically completed, the housing and technical construction fell far behind.

Inviting attention to the fact that the first increment of the program called for 110 Air Corps Reserve officers on duty with Air Corps tactical units, Mr. Davison explains that the reason only 65 of them were called to duty was due to the shortage of planes and quarters at Air Corps stations and that it was necessary to disapprove the applications of about three out of four reserve officers who applied for such training.

"Our experience with the first increment of the program," Mr. Davison states, "indicates that there is a shortage of aircraft. It seems that the complete program should call for 2,400 planes rather than 1,800. However, before submitting a definite recommendation for an increase, one year's additional experience is desired in carrying out the second increment. A shortage of planes under the program is even more serious than a shortage of personnel. One of the fundamental reasons underlying this proposition is made clear in that there is a reserve of pilot personnel in the Air Corps reserve, whereas nowhere is there a reserve of planes. Likewise, whereas it only requires a few months at most to make up any deficit in personnel after an emergency has arisen, it takes from one year to 18 months to build aircraft in numbers sufficient to meet our requirements."

Mr. Davison asserts that motor development in the Air Corps has been seriously handicapped by the fact that thousands of Liberty motors were left over from the war. These motors, of which there are still over 3,000 on hand, are now 10 years old. During that decade there has been an enormous advance in design and construction. The Liberty motor is unreliable, inefficient and uneconomical compared with modern motors, and Congress should not be asked to appropriate any more funds for planes equipped with them. They should be eliminated as rapidly as possible.

Summarizing the operations of the Air Corps during the past fiscal year, Mr. Davison states that the total of 182,903 aircraft hours flown surpassed last year's record by over 40,000 hours. This flying was made necessary by a heavy program and the large variety of missions to be performed, some of the more important projects being the bombing experiments on the Pee Dee River bridge; anti-aircraft tests; personnel and organization training; the annual machine gun and bombing matches; experiments in aerial navigation; Air Corps demonstrations at the Special Service Schools; participation in the National Air Races; field maneuvers; cooperation with civil activities such as airport dedications, flood relief and photographic projects; aerial photographic missions for the Geological Survey, Corps of Engineers, Coast and Geodetic Survey, International Water Commission and International Boundary Commission, totaling more than 30,000 square miles; and the flying done at the Primary, Advanced Training and special service schools.

With regard to the demonstrations staged by the Air Corps at the various Army Service Schools last spring by a group of 72 officers and 86 enlisted men, flying in 74 airplanes, Mr. Davison states that all reports from the commandants of the schools visited indicated that these demonstrations were well worth the work and expense involved; that the Commandant of the Command and General Staff School took particular occasion to write a special letter to the War Department commending the Air Corps for the efficient way in which the demonstration was carried out and the high standard of training shown by the Air Corps personnel.

"One remarkable lesson gained from these demonstrations," Mr. Davison says, "was the reliability of modern airplanes and engines. Seventy-four planes were flown over 4,000 miles, each without a single casualty or accident or damage to aircraft. Seventy-four planes started on the maneuvers and 74 planes returned to their home stations. I want to stress particularly another lesson to be gained from that remarkable performance, and that is the efficiency of Army Air Corps flying personnel. Over 296,000 miles flown by 74 different pilots without mishap to aircraft, and all of this done on cross-country flying, generally over terrain unfamiliar to the pilot personnel - that, it is believed, is a record without parallel."

Touching on the work of the Materiel Division at Dayton, Ohio, Mr. Davison states: "I noted with interest that during the past year, as has been the practice since the war, the work of the experimental engineering section of the Materiel Division has proved of incalculable value to the civil industry. Not only has this been true in the development of aircraft and power plants, but particularly in regard to the development of certain adjunct equipment, particularly air navigation devices. In this latter field the Army Air Corps has taken the lead, and the instruments which have been and are being successfully developed will be equally valuable to planes flying the air mail or in civil commerce."

Commenting on the fact that during the last fiscal year the Air Corps flew 182,903 hours, or over 18,000,000 miles with but 27 fatalities, or 677,400 miles flown per fatality; that in 1927 there were 43 fatalities with only 140,000 hours flown, or 327,600 miles per fatality, and that in 1921 the Air Corps suffered 73 casualties although it flew only 77,359 hours, or a casualty for every 1,059 hours flown, Mr. Davison states that a careful analysis for the reasons underlying this wonderful improvement indicates two principal causes. The first, and probably the most important, is that practically all war-time equipment has either been destroyed or declared obsolete and is no longer used. The planes flown during the last year were of newer design and construction and consequently more safe. The second reason is that the pilots flying the planes are reaching a higher standard of pilot efficiency. "I think there is little doubt but that the course given at our pilot school is now better than ever before," he said. "Also, we are getting a better flying cadet product to begin with than at any time formerly. Those pilots who trained during the war and who have been in the Air Corps during the succeeding 10 years are, of course, year after year piling up additional experience and skill, which makes for greater safety in flight."

---oOo---

AIR OFFICERS TO AID COMMERCIAL AVIATION IN HAWAII

Lieut.-Colonel John H. Heward, Department Air Officer, Hawaiian Department, and Commander Victor D. Herbster, USN, Commanding Officer of the Naval Air Station at Pearl Harbor, have been appointed to the Aviation Committee of the Chamber of Commerce of Hawaii. Commander Herbster and Lieut. Chester Clarke, Air Reserve, were appointed to the Territorial Aeronautical Commission by Governor Wallace R. Farrington.

AN EXCLUSIVE FRATERNITY AT KELLY FIELD

By the News Letter Correspondent

Kelly Field has a fraternity of Air Corps officers to which it has been the privilege of only a chosen few to be elected. Its membership is not limited and rank, age, color, or previous condition of servitude are not considered. Any Air Corps officer stationed at Kelly Field is eligible for membership to this esteemed and honored fraternity. To become eligible a man must have distinguished himself far above all expectations in the performance of some deed in the air so dumb as to be beyond human conception, and yet live, and to have exercised a mental slowness ranking next and after a snail while piloting or directing the course of army aircraft. When the members of this society select a man as a member, he must assume this honor with dignity and pleasure.

Wright Field is the only other known Air Corps Field to have a similar organization - The Flying Jackass. Kelly Field is proud to announce that it too gives recognition to its distinguished airmen in membership to the Dumb-bell Club. When an Air Corps officer has performed some feat like hitting a mule in the vast airdrome of Kelly, taking off to Dallas due north in the morning and landing at dusk 60 miles southeast of Kelly out of gas, falling out of an airplane at 1100 feet for no good reason at all, etc., his deeds must not go unsung. He is elected to the Dumb-bell Club and made custodian of the sacred banner, the Dumb-bell Flag. He inscribes his name on the banner in the presence of all officers of Kelly Field and remains custodian of the banner until some other officer is so fortunate as to become a member.

The Air Corps officers whose names appear on the roll of honor are:

Major C.J. Browne (deceased)
1st Lieut. R. L. Maughan
1st Lieut. Max F. Schneider
Major R. C. Candee
Captain John I. Moore
1st Lieut. Y. A. Pitts
2nd Lieut. L. S. Jamieson
1st Lieut. A. Thomas
1st Lieut. B. B. Cassidy
2nd Lieut. J.B. Burwell

A book giving the photographs and a complete and true account of the circumstances which led up to each officer receiving this honor is now being compiled.

Lieut. Burwell was the last officer to receive this honor. On October 23d he hit a mule hitched to a grass-cutter on the airdrome. He was awarded this honor by 1st Lieut. Benj. B. Cassidy, who had been custodian of the banner for the past six months. Lieut. Burwell's citation was as follows:
"Officers of Kelly Field:

We meet on this auspicious occasion to do honor to a brother officer, a man who has distinguished himself far above all expectations. We are here today, gentlemen, to bestow upon him the highest honor that Kelly Field can give - an honor next only in importance to the Congressional Medal of Honor and the Distinguished Service Cross. Before making this esteemed award, it will be necessary to review the facts and circumstances that caused the Committee on Awards to bestow this honor.

On the bright and sunny day of October 23, 1928, in his trusted DH, this intrepid Air Corps officer was cruising about the ozone of Kelly Field when, feeling a little frisky and being a quick-thinking pursuit pilot, he decided to engage in a little combat work. As it was during the noon hour, he could find no planes in the air to frolic with. He cast his eye about the sky and terrain for a suitable prey for his pent-up enthusiasm. His attention was finally attracted to a two-mule-powered single-place grass attacker piloted by an Ethiopian field officer, which was flying at a very low altitude and at a very uncertain speed in the vicinity of the 43rd Squadron airdrome. Our brave hero licked his chops and, turning to his mechanic, said: 'Watch me down the Quarter-master Air Force.' Pushing his throttle forward, he made one of those terrific dives so common to the quick-thinking brigade. The Ethiopian pilot, seeing that he was being attacked from his right flank and being sadly outclassed, took to his parachute. However, one of the mule powers of the motor, seeing that escape was impossible, decided to put up as good a fight as possible. He elevated his

tail to an angle of 45 degrees, brought back the bolts of his rear guns and as the DH got within range let fly, hitting the DH in a vital spot, causing it to careen over on its side and fall to the ground a mass of flames.

Fortunately, the hero who risked his life beyond all call of duty, who was so enthralled with the desire to give his Corps the supremacy of the airdrome and who, without thought of personal safety, engaged an enemy far superior to him in equipment, escaped the fray with only bruises and burns and has now completely recovered and is with us today.

Lieut. James B. Burwell, it is with the greatest pride that I bestow upon one who is so fearless, so courageous and so self-sacrificing, this little honor, and with the unanimous approval of this body of officers select you as a permanent member of the Dumb-bell Club and custodian of our sacred banner, the Dumb-bell Flag."

-----oOo-----

SPIRIT OF COOPERATION IN THE AIR CORPS

Captain F.F. Christine, Air Corps, at the Middletown, Pa. Air Depot, noted in a morning paper that there had been a rather disastrous fire at Mitchel Field, New York, the night previous. A radio was sent to the Commanding Officer of Mitchel Field, placing the Supply Department at this Depot and all facilities at his service. In this way he thought to facilitate the rehabilitation of the department destroyed by fire.

The Commanding Officer of Mitchel Field was much pleased with the offer for speedy service and sent the following letter to the Middletown Depot:

"My dear Christine:

I cannot tell you how much we appreciate the fine spirit indicated in your telegram of November 19th, offering to expedite supplies to assist us in recovering from the recent fire. It is this sort of cooperation which makes the Air Corps such a fine branch to serve with, and everyone at Mitchel Field is delighted to see the proof of your appreciation of this spirit in your letter.

Thanking you very much indeed, I am

Sincerely yours,

H.C. PRATT,

Lt. Col., Air Corps,
Commanding."

-----oOo-----

REPRESENTATIVE FURLOW VISITS MAXWELL FIELD

Lieut. Wm. N. Amis, pilot, with Congressman A. J. Furlow, passenger, landed at Maxwell Field, Montgomery, Ala., recently, spending the night at the post and departing the following morning. Quite an interesting talk was made to the officer personnel by Mr. Furlow, the author of the Furlow Air Corps Bill.

-----60o-----

DEDICATION OF JACKSON, MISS. AIRPORT

Members of the Third Attack Group, Fort Crockett, Galveston, Texas, recently participated in the dedication of the new Municipal Airport at Jackson, Miss. In connection with the dedication an Aero Meet was staged which lasted two days some of the features being acrobatic flying, balloon bursting, races for commercial and army planes, and dead stick landings. In the Army Race, Lieut. E.P. Rose was the winner, Lieut. L.W. Desrosiers finishing second and Lieut. I.M. Palmer, third. Large crowds witnessed the events.

Nine pilots from Fort Crockett who journeyed in A-3 planes to Jackson were Captain R.H. Wooten, 2nd Lieuts. H.W. Anderson, E.C. Robbins, O.C. George, L.W. Desrosiers, I.M. Palmer, E.P. Rose, W.S. Lee, Air Corps, and F.M. Ziegler, Esq. Leaving Fort Crockett at 1:45 p.m., November 8th, they arrived at Jackson at 5:05 p.m.

All of the planes arrived at the new airport without difficulty, and the officers and men were given rooms in a leading hotel as guests of the City of Jackson. The local Reserve officers entertained the aerial visitors with a luncheon on Friday afternoon and with a dance that night, both of which were fully enjoyed.

Under date of November 14th, the Mayor of Jackson addressed the following

letter to the Chief of the Air Corps:

"On behalf of the citizens of Jackson I wish to thank you for your cooperation in sending the Army airplanes from various stations to participate in the dedication of the Jackson Airport on November 9th and 10th. Each and every officer and enlisted man made a wonderful showing here, not only with their magnificent handling of their ships but also the personnel are of the highest type, and the public generally was highly pleased. I am also glad to report to you that every officer with whom I came in contact expressed their appreciation and surprise in finding that the Jackson Airport, according to their statement, is one of the best that they have had the privilege of seeing."

---oOo---

ROCKWELL FIELD WINS SILVER CUP

Three miniature airplanes, flying in a perfect "Vee" formation, throughout the course of the Armistice Day parade in San Diego, won first place and a beautiful silver loving cup for Rockwell Field. The planes were "piloted" by three of the post Juniors, the "Three Musketeers."

Mounted in an atmospheric setting, on a Liberty truck, the three scale-model Douglas O2's with their tiny helmeted and goggled pilots, drew great applause the entire line of march. The silver propellers churned the air unceasingly as the three ships held their position in the procession as it wended its way through the streets of San Diego and into the Stadium. In place of the usual Liberty 12's, each "prop" was turned by "one-boy-power", from the cockpit by means of a crank and driveshaft. The "motors" all functioned perfectly, and no forced landings marred the epochal flight. The fuel consumption was remarkably low - three hot dogs per hour - according to Lieut. Roth, who commanded the flight from the front seat of the trucks. After a thorough inspection of all the floats entered in the parade, the judges awarded first prize to the Rockwell Field entry because of its originality, exactness in detail, and the popular approval evinced by the spectators. The three planes, designed and constructed in the Depot shops, are perfect reproductions and masterpieces, of which the entire organization at Rockwell Field can justly feel proud.

The cup was presented at a special ceremony, in which all the Units of Rockwell Field participated. Following the presentation, the 11th Bombardment Squadron, 95th Pursuit Squadron and Hqrs. 7th Bombardment Group passed in review. The civilian employees of the Rockwell Air Depot, as well as many visitors, witnessed the ceremonies.

---oOo---

OFFICER PERFORMS UNUSUAL LANDINGS WITH THE "DUCK"

An officer at Luke Field, T.H., whose name must remain a dark secret for the time being, has been demonstrating the versatility of Amphibian airplanes during the past month.

Being a thorough officer in every sense of the word, said Lieutenant was always very careful to warn the other officers of his organization to watch the wheels when making landings. Probably thinking he would show them what he meant he tried to set the ship down in the waters of Pearl Harbor without drawing them up, and got away with it. Next, coming in to the field for a landing, he set the "Duck" down in a soft spot with the wheels up. It was a perfect dry landing without wheels, for no damage was done.

Luke Field officers are eagerly awaiting a written treatise from his pen as to how these landings should be made.

---oOo---

KELLY FIELD PILOT PERFORMS UNUSUAL LANDING FEAT

Lieut. O.P. Weyland had a rather miraculous experience recently while flying over Sanderson, Texas - miraculous because of the country over which it happened and because no damage was done to the plane or injuries received by himself. To the hundreds of Air Corps pilots who have flown from San Antonio to Marfa, Texas, it is well known that the country around Sanderson, Texas, is very rugged with practically no place to set a plane down except in a small field at Sanderson. Lieut. Weyland was returning to Kelly Field from Marfa. When about five miles east of Sanderson, about 2500 feet above the hills, there

was a violent agitation of the motor and the propeller flew off.

There being no field to land it, and land he must, he picked out a level spot covered with a very small mesquite close to a straightaway in the Southern Pacific tracks. He landed there, dodged bushes, and brought the plane to a stop with only the fabric torn in a few small places.

Upon examination of the airplane, an O-11, it was found that the crankshaft had broken at the thrust-bearing, causing the propeller and the forward end of the crankshaft to fly off. A new motor was installed, a runway through the mesquite cleared, and Lieut. Weyland flew the plane back to Kelly Field.

---oOo---

GRADUATIONS FROM AIR CORPS TECHNICAL SCHOOL

A total of 51 enlisted men graduated from the Air Corps Technical School, Chamute Field, Rantoul, Ill., on December 14th, in the following courses:

Airplane Mechanics	14
Engine mechanics	12
General mechanics	4
General mechanics (including welding)	4
Parachute riggers	9
Radio	8

Most of these men belong to units at Air Corps fields and returned to their proper stations. A few unassigned men will be sent to activities now needing men so qualified.

---oOo---

BATTLE AGAINST RABBITS WAGED AT ROCKWELL FIELD

The field was strewn with the dead and dying - powder smoke and flying lead bullets filled the air - the yells and shouts of the attackers drowned out the shrieks of the wounded. The Salvation Army truck sped back and forth behind the lines, picking up the dead, as the annual Rockwell Field offensive against Jack Rabbits moved across the Island.

Led by Major Sneed, Commanding Officer, the "Army", supported by civilian employees, and armed with shotguns, baseball bats, and miscellaneous forms of clubs, drove the pests towards the bay, where they were disposed of in a wholesale manner. The Salvation Army was on hand to collect the rabbits for distribution to needy families. About 600 rabbits were killed in the drive.

Due to the destruction of young plants, trees and flowers on the post, it became necessary to rid the field of these pests. Many of the rabbits, however, succeeded in "crashing" the line and escaping, thereby assuring the necessity of another drive in the near future.

---oOo---

SWIMMING CHAMPIONS VISIT LUKE FIELD

The greatest aggregation of aquatic stars to ever visit an army post gathered at Luke Field, T.H., on November 17th, and furnished the personnel with an exhibition of skill rarely displayed except in official meets.

Miss Helen Meany, Johnny Weismuller, Paul Wyatt and Walter Laufer with their trainer and manager, Dr. Francois D'Eliscu, who were in Honolulu attending a championship meet, accepted the invitation of Major Van Nostrand extended through Lieut. J.F.J. Early, Post Athletic Officer, and displayed their respective bag of tricks for the Air men.

The various organizations gathered on the shore of Pearl Harbor and watched Johnny Weismuller locate unknown rocks in the bay on which to stand. Miss Meany taught the boys that a human can almost fly without wings or planes when she gracefully soared from the diving tower, numerous times demonstrating that there is more to diving than just jumping off from a springboard. Laufer and Wyatt also convinced most of the men that there are a lot of things about swimming not taught at the oldswimming hole back home.

A tea dance was arranged at the Officers' Club for the visitors following their exhibition.

---oOo---

Ten planes of the 95th Pursuit Squadron, Rockwall Field, Calif., flew to Crissy Field Nov. 24th and returned the following day. The pilots took off in pairs, five minutes apart, arriving at Crissy Field in the same order at approximately the same intervals. Average time of flight slightly less than 4 hours.

CATERPILLAR CLUB STILL GOING STRONG

The mythical Caterpillar Club at this writing boasts of 108 names on its membership roster. A total of 114 life-saving parachute jumps have been made, however. The popular airman, Colonel Charles A. Lindbergh, is credited with four such jumps, and Captain Frank O'D. Hunter, Lieut. Eugene H. Barksdale (deceased) and Sergeant F.P. Miller with two each.

Two Air Corps officers who joined the Caterpillar Club recently are 2nd Lieuts. Wm. H. Doolittle and Robert L. Schoenlein. Piloting single-seater pursuit planes on December 11th over Selfridge Field, Mt. Clemens, Mich., at an altitude of about 3,000 feet, one of those unfortunate accidents happened - a collision. Both men took to their parachutes and reached terra firma without injury. As may be surmised, the planes were totally demolished.

Since the last issue of the News Letter, one other name was added to the Club roster. James Collins, test pilot of the Curtiss Company, saved his life by a parachute jump near Bolling Field on the afternoon of December 3rd, when the wings of his plane tore away during a full power dive at a height of nearly six thousand feet.

Collins had been up for about half an hour, putting the plane through its paces and had thrown the plane into a vertical dive at a height of 6,000 feet. The right wing tore away and Collins jumped, after considerable difficulty in getting out of the way of the falling plane. He landed unhurt near Howard Road, Southeast, and the plane crashed 230 yards south of his landing place, the motor burying itself several feet in the ground. Taken to the Naval Air Station at Anacostia and treated for the shock, he was unable to explain just what had happened. The belief is held that a strut collapsed. The plane fell nearly 3,000 feet before Collins was able to extricate himself.

The plane which Collins piloted was a new two-seater fighter, which had just been built at the Curtiss plant and flown to Washington for test by the Navy Board. Collins' flight was the first of the official test trips. One of the wings of the plane was found more than half a mile away.

Collins is a graduate of the Air Corps Advanced Flying School, Kelly Field, Texas, receiving his rating as pilot in March, 1925. For a time he was on duty in the Aeronautics Branch, Department of Commerce, and then affiliated himself with the Curtiss Company as test pilot.

A report was recently received of the parachute jump made by Lieut. Harvey F. Dyer, Air Corps, on November 14th last. The accident which necessitated this jump was a most distressing one, as it resulted in the death of six enlisted men, who were passengers in the cabin of a transport plane piloted by Lieut. Dyer. Sitting beside the pilot was Sergeant Frank J. Siebenaler, and being in the open both were able to leap from the disabled plane with their parachutes.

It appears that in the excitement of the moment one of the men in the cabin opened his parachute too soon, or accidentally, and its folds blocked the way to the cabin doors. Lieut. Dyer's report is as follows:

LIEUT. HARVEY F. DYER. I made an emergency parachute jump three miles east of Brooks Field, Texas, at 2:45 p.m., November 14, 1928, from a Douglas C-1 airplane, powered with a Liberty 12A engine. The parachute used was an Irving Service Seat type.

The velocity of the surface wind was approximately 20 m.p.h. At 4,000 ft. altitude I was executing a steep bank to the left. The speed of the airplane was approximately 110 m.p.h., and the engine speed was approximately 1600 r.p.m. Apparently the fittings on the left wing broke, the plane suddenly nosed down, and the plane was entirely out of control. I cut the switches to the engine and yelled to my passengers to jump. At the time I left the plane I do not know the speed of the airplane nor the speed of the motor. As nearly as I can remember, I unbuckled my safety belt and leaped over the side of the nose, between the propeller and the left wing. My head hit some part of the ship as I leaped, and I fell possibly 300 feet or 400 feet before I regained consciousness. I then pulled my rip cord and the parachute opened promptly, giving me a terrific jerk. My parachute opened at approximately 2500 feet altitude above the ground. I was in a half dazed condition as I rode the parachute to earth, but had enough presence of mind to control the parachute properly. I turned the parachute so that I would land with my back to the wind; I slipped the parachute to avoid landing in an area covered by trees, and made an easy landing in a plowed field near an important highway and near a farmhouse. These points I had learned while making a pre-

vious parachute jump, which was a voluntary jump made over the airdrome at Brooks Field, Texas. I was not dragged by the parachute on the ground, for I quickly pulled one side of it to me and carefully folded the silk, making a small compact bundle to carry. I suffered but minor bruises, but I was nervous and weak. I directed a soldier, who happened on the scene and in whom I had confidence, to be responsible for the safe delivery of my parachute to the parachute department at Brooks Field. Another soldier on the scene, having an automobile, rushed me to the hospital at Brooks Field, where my bruises were treated. After being at the hospital five minutes I walked to my quarters."

The above emergency parachute jump appears to be another instance where the jumper was not actually responsible for opening the parachute, it being done through some agency other than human hands. Lieut. Dyer, in his account of the jump, states that he pulled the rip cord, but it is evident that this did not cause the parachute to open. The "bit of silk" which saved his life was turned in to the parachute department at Brooks Field by the soldier to whom it had been entrusted. An immediate inspection of it brought out the fact that the end of the rip cord housing, where sewed to the harness near the ring pocket, had been torn loose, (broken twine remaining in the webbing showed the housing to have been sewed at this point with four turns of 15-pound linen twine doubled.)

The rip cord ring pocket was completely torn from the harness to which it was sewed and lost. The rip cord was still in the housing, the ring only having been pulled out about four inches. There were several abrasions on two panels of the chute which might have been caused by fouling on some part of the plane, by picking up in the field after landing or by snagging in the truck which returned the parachute.

Lieut. Dyer has no recollection of shoving the rip cord back into the housing after landing. The soldier to whom he entrusted his chute noted the condition of the rip cord, housing and ring pocket and took considerable pains to return it to the parachute department in the exact condition in which he received it.

The Parachute Officer at Brooks Field believes that when Lieut. Dyer jumped or was thrown from the plane some protruding object on the ship, caught between his harness and the housing just below the point of sewing and ripped off the housing and pocket, thus releasing the chute for him; that it does not seem possible that a direct pull on the ring could have ripped the housing and pocket free from the harness. He states that his department does not know of a single instance of an emergency or training jump where the jumper has not entirely pulled the rip cord out of the housing.

The records of the Caterpillar Club show that, in the parachute jumps of Majors Horace M. Hickam and Herbert A. Dargue, neither of these two Air Corps officers pulled the rip cord, their parachutes being opened in some unexplained manner while they were departing from their disabled planes.

---oOo---

ARMY AND NAVAL MEN COMBINE IN LEGION POST

Fox-Coronet Post No. 9, American Legion, in Hawaii, which originally was composed of Army Air Corps men entirely, now has on its rolls a number of officers and men from the Naval Air Station at Pearl Harbor, making this Post the most unique of its kind in the whole Legion organization.

Captain Harry C. Drayton, commander of the Post, when he took office in October last, advocated inviting the Navy men to membership. Investigation disclosed that practically none of the veterans at Pearl Harbor belonged to any post. Lieutenant-Commander Gladden, Executive Officer of the Naval Air Station, became enthusiastic over the proposition, and at the November meeting fifteen of their number were initiated, including Commander Gladden.

---oOo---

SPECIAL WELCOME FOR SERVICE MEN AT TAMPA TERRACE HOTEL

Major Philip G. Murphy, Quartermaster Corps Reserve, President of the Army and Navy Club of Tampa, Fla., the headquarters of which are at the Tampa Terrace Hotel, has been devoting considerable time and energy in the interests of Reserve activities in all the services. In a recent letter to the Chief of the Information Division, Air Corps, he states that rooms at the Tampa Terrace Hotel are always open to all officers of the services.

LIEUT. HOPKINS HAS NARROW ESCAPE

On a recent flight to Crissy Field, Presidio of San Francisco, Calif., from Rockwell Field, San Diego, Calif., 2nd Lieut. J.G. Hopkins, Air Corps, of the 95th Pursuit Squadron, was forced to set down twice for water for the radiator. On his second forced landing in the Douglas O-2A, he chose a favorable field within the confines of an institution for the mentally deranged, near Santa Clara. The inmates were all released and allowed to inspect the plane. After a short delay, and much explaining, Lieut. Hopkins was permitted to continue his flight.

The caption for this little story was furnished by the News Letter Correspondent. What d'ye mean "Narrow Escape"?

---oOo---

TRANS-PACIFIC FOKKER RECEIVES OVERHAUL

The Army Fokker Transport C-2, made famous by Lieuts. Maitland and Hegenberger in their flight from the Mainland to Hawaii a year and a half ago, has just been completely overhauled at the Hawaiian Repair Depot at Luke Field, T.H. This is the first time that the famous ship has been given a complete going over since its epic flight.

On November 16th Lieut. Carl A. Cover took the ship for a test flight, and it is expected that it will be ready to be turned over to its home station at Wheeler Field, Schofield Barracks, T.H., very shortly.

---oOo---

COMMERCIAL AVIATION IN HAWAII

Interest in aeronautics continues to increase in Honolulu and the outlying islands of the Group. Recently several airplanes were shipped to Honolulu from the United States, a flying field opened near the city and an aviation school launched which soloed its first student in the middle of November.

Captain J.L. Giffin came to Honolulu with Lieut. G.A. Anderson early in the month to open the school for Edwin A. Lewis, president of the Lewis Tours Co. Opening a new field on the outskirts of the city, the planes that Lewis had purchased on the Mainland were soon assembled and placed in operation. On November 14th Robert C. Duncan soloed for 30 minutes over Rogers Airport.

As soon as the Lewis interests began operating, the announcement was made that a school of aero mechanics had started operation, offering a course requiring twelve months' practical and theoretical work. Mr. Alfred H. Shuttlewood, formerly of Akron, Ohio, who came to Hawaii and served with the Air Corps at Wheeler Field, is General Manager.

The Inter-Island Steamship Company, operating steamers between Oahu and the outlying Islands, expressed their interest in the new project and the operation of a commercial airline to augment the service they now render with their steamers. Captain Charles H. Dolan of the Bishop Trust Company at Honolulu, and who served with the Air Corps during the war, was engaged by them to make an aerial survey of conditions. His report is awaited with interest.

On November 16th Lieut. R.J. Brown, Assistant Air Officer of the Hawaiian Department, announced that there are now 28 pilots in the Hawaiian Islands holding commercial licenses. The majority of these are officers of the Air Corps and the Naval Air Station.

---oOo---

LUKE FIELD OFFICERS ESCAPE INJURY IN CRASH

Lieut. David W. Goodrich, pilot, and Captain R.E.O'Neill, observer, narrowly escaped injury on November 19th last when the motor of a DH-4 cut out at a low altitude over the Waimanalo Target Range, and the plane did a ground loop on the beach into the surf.

The plane was on the water side of the range of mountains when the motor went dead at about 200 feet. Heading for a sandy strip of beach he set the plane down, but an unseen sand dune threw the ship over. Neither one of the officers was injured although they got slightly damp.

HAT BOX FIELD TO BE ENLARGED ✓

Following the recommendation of the City Council of the City of Muskogee, Oklahoma, that \$195,000 be appropriated for a new airport, the people of that community, by a vote of two to one, placed their stamp of approval on the proposition. Under the plans contemplated for the new airport, it will comprise 400 acres, which will be tile drained. The entire surface will be planted with Bermuda grass. A hangar, 100 ft. by 120 ft. will be erected, together with a pilot's house and a passenger waiting room. Complete night flying equipment will be installed. The offices and hangars will be only one mile from the center of the city.

Realizing for some time that Hat Box Field was too small and that its drainage facilities were poor, a committee of the City Council had previously urged that steps be taken to effect needed improvements. Action on the new airport was hastened through the recent visit to Muskogee of Major-General J.E. Fechet, Chief of the Air Corps, in a Fokker transport piloted by Lieut. Lester J. Maitland. Due to the muddy condition of the field the transport was soon bogged down in the mud, and the reception committee, which included the Mayor, the City Manager, the President of the Aviation Club, and various other notables needed no further argument to convince them of the inadequacy of the flying field.

---oOo---

FAST FLIGHT FROM DETROIT TO BOSTON ✓

The distance between Selfridge Field, Mt. Clemens, Mich., and Boston, Mass. was recently covered by 2nd Lieut. Frank D. Klein, Air Corps, a member of the First Pursuit Group, in three hours and 35 minutes. Departing from Selfridge Field at 11:30 a.m., November 15th, he arrived at Boston at 3:05 p.m. Due to a strong tail wind the arrival at Boston was ten minutes ahead of schedule.

On his return trip Lieut. Klein made landings at Mitchel Field, N.Y., and Buffalo, N.Y. Leaving Boston at 10:00 a.m., November 17th, he arrived at Mitchel Field one hour and 45 minutes later. On the following day he departed from Mitchel Field at 9:30 a.m., and arrived at Buffalo at 12:45 p.m. Leaving Buffalo in the afternoon at 3:00 o'clock, he arrived at Selfridge Field two hours later. His arrival at Mitchel Field was 15 minutes late and at Buffalo 45 minutes late, due to a very strong head wind.

Lieut. Klein stated that conditions at all of the landing fields were excellent and no difficulty was experienced in receiving prompt servicing of the airplane.

---oOo---

BOOMING AVIATION IN JACKSONVILLE

The Reserve Officers' Association of Jacksonville, Fla., recently staged a most successful meeting which they designated as "Air Night." The Army Air Corps cooperated in an air demonstration given during the day by sending planes to Jacksonville from Maxwell Field, Montgomery, Ala.. That day and night gave a great impetus to the feeling of air consciousness in this part of the State, and the Reserve Officers' Association takes pride in feeling that it made some contribution along this line.

A special committee on aviation has been appointed, and as part of the regular school for the instruction of Reserve officers, a six months' course in aviation was inaugurated. An initial enrollment of nearly 80 members indicates the interest manifested in this subject.

On December 1st, when the Atlanta-Miami Air Mail line was inaugurated, an Air Meet was held at Jacksonville, both of these events indicating the rising interest in aviation on the part of the public.

---oOo---

ELABORATE MANEUVERS PLANNED FOR NEXT SPRING

The Air Corps maneuvers for the Spring of 1929 will be conducted on the most elaborate scale thus far attempted in the history of this branch of the military establishment. Air demonstrations will be given at the various Service Schools of the Army, and in a maneuver at Kelly Field, Texas, at least

200 airplanes will participate.

War strength squadrons of Pursuit, Bombardment and Attack aviation will stage demonstrations at Fort Bragg, N.C.; Fort Benning, Ga.; Fort Sill, Okla.; Fort Riley, Kansas, and Fort Leavenworth, Kansas. These demonstrations will be similar in scope to those given in the Spring of 1928.

At the completion of these demonstrations, all available Air Corps units will be concentrated by air in the vicinity of Wright Field, Dayton, Ohio, and Norton Field, Columbus, Ohio, to conduct a two-sided Air Corps maneuver. The units participating in this maneuver will be the First Pursuit Group from Selfridge Field, Mt. Clemens, Mich.; the Second Bombardment Group from Langley Field, Va.; the Third Attack Group from Fort Crockett, Galveston, Texas; the 9th Observation Group from Mitchel Field, N.Y.; the 11th Bombardment Squadron and the 95th Pursuit Squadron from Rockwell Field, Coronado, Calif.; the 15th Observation Squadron from Selfridge Field, Mich.; the 16th Observation Squadron from Marshall Field, Fort Riley, Kansas; the advanced class of the Air Corps Flying School at Kelly Field, San Antonio, Texas, and the Air Corps Tactical School at Langley Field, Va. It is contemplated that this two-sided maneuver will be conducted with at least 100 airplanes on each side. These operations will continue for a period of approximately five days, after which these units will operate as the Air Corps of an Army under the command of Major-General Dennis Nolan, commanding the Fifth Corps Area. The Corps Area Staff will function as the Staff of the Army.

This last phase of the maneuvers will consist of a theoretical war problem in which ground troops will be simulated and air troops will be actual. Upon completion of this problem the various units will return to their home stations.

It is calculated that the average distance each unit will travel in all phases of these maneuvers from their home stations to the scene of the activities will be approximately 4,000 miles.

---oOo---

MAJORITY OF FLYING CADETS COLLEGE MEN

It may be of interest to the Air Corps in general that a very high type of flying cadet is reporting for training at the Air Corps Advanced Flying School, Kelly Field, Texas, under the new plan of training. The following data on the eighty-five flying cadets who started training at this school on November 5th last is given:

College graduates - 30.

Two years or more college, but not graduates - 40.

High school graduates only - 2.

Some college under two years - 12.

Graduates of U.S. Military Academy - 1.

Average age - 24.3 years.

California, with 12 students, leads the 32 States represented.

All but 20 Cadets have had some prior military experience, either in the Regular Army, National Guard, R.O.T.C., or C.M.T.C.

The last two weeks of flying training have been devoted to transition to service types of airplanes. Many Chinese landings (One Wing Low) were noted at first but a few days, and these were ironed out and the students are rapidly getting the feel of the new types of aircraft.

---oOo---

NEW RADIO BEACON RECEIVING SET

Several flight tests were recently made at Wright Field, Dayton, Ohio, in the C-2 radio laboratory airplane for the purpose of measuring antenna characteristics. It will require approximately six hours more of flying to complete these measurements. The new radio beacon receiver, which utilizes a 6-ft. vertical antenna, has been installed in an O2-C airplane. This type of receiver and antenna is very much more suitable for radio beacon work than the one using a trailing wire antenna. The beacon zone, or path, is narrowed approximately 30% and the directional effect of the antenna is eliminated, making the zone more sharply defined. A Board met recently at the Materiel Division to outline a development program for future aircraft radio equipment.

POLICIES IN EFFECT IN OFFICE CHIEF-OF AIR CORPS

The procedure to be followed in the Office Chief of Air Corps, Washington, in the selection of Air Corps officers for assignment to activities or specific duties was outlined in a recent memorandum issued by the Chief of the Air Corps.

Under normal circumstances, requests for orders effecting changes of station of Air Corps officers will be submitted to The Adjutant General in advance of the effective date of orders, as follows:

When being ordered to, or relieved from, Service Schools - 6 months.

When proceeding to, or returning from, foreign service - 5 months.

When being relieved from, or ordered to, other permanent assignments - 3 months.

Exceptions will be made in the case of officers pursuing the pilots' course at the Advanced Flying School, the Balloon and Airship School course and Service School courses of less than 6 months' duration, when orders will be requested not less than 30 days prior to the completion of the courses.

The Personnel Division will maintain lists of eligible applicants for courses at the various schools. These lists will be referred to the interested Divisions of the Office Chief of Air Corps not less than two weeks prior to the date orders are requested, and the interested divisions, together with the Personnel Division, will select the required number of officers from the list according to their eligibility and availability.

Air Corps officers required for foreign service will be selected by the Personnel Division according to War Department Regulations, policies and instructions in effect when selections are made. Those returning from foreign service will be given assignments mutually agreed upon by representatives of the Personnel Materiel and Training and Operations Divisions.

When practicable, the Commanding Officers of Air Corps activities in the United States from which it is proposed to withdraw an officer or officers will be consulted prior to the preparation of requests for orders. Their recommendations and suggestions will be carefully considered and will be adopted if not contrary to the best interests of the Air Corps.

Under normal circumstances orders will not be requested for the withdrawal of an officer until his replacement has been selected or an agreement reached that a replacement is not required.

All assignments of Field Officers and of officers ordered to and from the Office, Chief of the Air Corps, must receive the personal approval of the Chief of the Air Corps. Other assignments will be approved by the Executive.

---oOo---

NEW BOOK ON INTERNATIONAL AIRPORTS ✓

The Ronald Press is about to issue a book entitled "International Airports," the author of which is Lieut.-Col. Stedman S. Hanks, President, American Airports Corporation, who spent the summer of 1928 in an intensive study of the development of the aviation industry in Europe, with particular reference to European progress in the construction, financing, operation and management of airports.

The book contains a wealth of valuable material never before published. More than thirty photographs illustrating interesting features of European airports are included. There are also photographic reproductions of many printed forms in use abroad which have suggestive value for preparing similar forms for use in America.

---oOo---

CIVILIAN AVIATION ATTRACTS ENLISTED PILOTS AND MECHANICS

The rapid expansion of civil aviation can be seen by the loss to the Army Air Corps of its highly trained men. Each month, in addition to those Flying Cadets who are graduated and most of whom leave the service, many enlisted pilots and mechanics are discharged from the Army to accept other positions. Three of the 22 enlisted airplane pilots of the Air Corps purchased their discharge during the month of November.

CATERPILLAR CLUB DEPRIVED OF TWO MEMBERS

Two members of the Air Corps stationed at Dodd Field, Fort Sam Houston, Texas, 2nd Lieut. Frank Corson, pilot and Private James W. Snedaker, passenger, were drowned in Matagorda Bay, opposite Bayside Beach, Texas, on the afternoon of November 16th under unusual circumstances.

While in the act of firing upon a sleeve target during gunnery practice, the O2-H plane flown by Lieut. Corson collided with same. The plane was seen to make a turn after hitting the sleeve target at about 2,000 feet altitude with wings level, at which time one man jumped with his parachute. The plane then went into a vertical right side slip with nose level until at about 1,000 feet altitude, when the second man left by means of a pull off from the left side of the ship. The first man to jump did not drift as far as the man who jumped from the lower altitude. His fall was rapid and he went straight into the water. The wind blew the parachute on edge and it remained for several seconds partially bellied out upon the water before collapsing. The man who jumped from the lower altitude was seen to oscillate considerably, and when the parachute struck the water it bellied out, remaining so and dragging the jumper upon the surface of the water before collapsing and disappearing in the waves.

Upon recovery of the bodies it was found that Lieut. Corson had cleared his harness, but his parachute was not located. Pvt. Snedaker was found with the parachute harness unfastened and clear with the exception of one leg strap which was fastened. The parachute fouled with sand was held to the bottom of the Bay and did not come to the surface until after a period of seven days. Upon inspection of the parachute the silk was found to be in poor condition, tearing easily by hand due to the action of the salt water.

In the report on this accident it is stated that as the result of the collision the sleeve either fouled the controls or hung upon the struts of the left wing until the breaking of the left bay strut caused the wings to telescope. The airplane was seen to make a complete turn as if trying to glide to land, and after one man left the ship it went into a fast vertical right hand slip, nose up, motor full on. The sleeve was seen clear of the ship while the airplane was in the slip. The belief is expressed that the airplane was under partial control.

Another cruel turn of fate was the fact that the parachute landings were made about one-eighth of one-quarter of a mile from shore in only about five feet of water.

The probability is that had these parachute landings been made on terra firma both men would be members of the Caterpillar Club today. Successful emergency jumps have previously been made from lower altitudes than the two in question which ended so disastrously. ---oOo---

RESIGNATION OF CAPTAIN ALDRIN

Captain Edwin E. Aldrin severed his official connection with the Army Air Corps to accept a position as Aviation Manager of the Standard Oil Company of New Jersey, with office in New York City. His resignation took effect on November 12th last.

Captain Aldrin's reputation in the Air Corps is of a very high character. He was considered one of the most valuable all around officers. An excellent representative of the best type of Army officer, his pleasing personality won him many friends, all of whom regret his departure from the Air Corps but wish him every success in his new line of work.

Most of Captain Aldrin's service in the Air Corps was with the Engineering Division at McCook Field and with the Materiel Division at Wright Field, Dayton, Ohio. He came to Dayton in 1919 and was assigned to duty as Assistant Chief of the Airplane Branch at McCook Field. Later he organized and opened the Air Corps Engineering School. He served as Secretary of this School as well as Instructor, and greatly improved the course, handling all details in a highly creditable manner.

Captain Aldrin was born at Worcester, Mass., April 12, 1896. He attended the Public Schools of Worcester and the Clark University of that city, graduating with the degree of A.B. in 1915. In 1916 he took a special course in mathematics and electrical engineering at the Worcester Polytechnic Institute, and the following year a post graduate course in aeronautical and mechanical engineering at the Massachusetts Institute of Technology, graduating with the degree of Master of Science.

During the war he received an appointment as 2nd Lieutenant in the Coast Artillery Corps (October 26, 1917), and a permanent appointment in that branch of the service as 1st Lieutenant on June 24, 1919.

From October, 1917, to March, 1918, he was on duty at the Coast Artillery School at Fort Monroe, Va. During April and May he served as Commanding Officer of Fort McKinley, Maine, and up until the middle of June, 1918, as Executive Officer of Battery E, 72nd C.A.C., at Fort Preble, Maine.

Detailed to the Air Corps, he was placed on duty as Instructor in Aeronautics, Massachusetts Institute of Technology, and served in that capacity from June, 1918, to February, 1919, when he was assigned to duty at the Engineering Division at McCook Field, Dayton, Ohio. He graduated from the Air Corps Engineering School in 1921.

From March 6, 1922 to April 7, 1924, Captain Aldrin was on duty in the Philippines, and upon completion of his foreign service tour he was again assigned to the Engineering Division. He served as Assistant Commandant of the Air Corps Engineering School for two years, and in 1927 took a special course in aeronautical engineering at the Massachusetts Institute of Technology. He performed certain research work for the Daniel Guggenheim Fund for the Promotion of Aeronautics.

Captain Aldrin's scholastic attainments made him an extremely well qualified technical officer, and the Air Corps will miss his services.

---oOo---

SECRETARY OF WAR LAUDS AVIATION PIONEERS ✓

At the laying of the Cornerstone of the National Memorial to be erected by the United States to commemorate the 25th anniversary of the first flight in an airplane made by Orville Wright, the Honorable Dwight F. Davis, Secretary of War, made the following remarks:

"Since time immemorial, nations have consecrated battlefields and erected monuments to their distinguished sons. This nation, dedicated to peace, may well consecrate these sea-swept, sandy shores as a peace-time battlefield, for here mankind won a notable battle; here man conquered air. Here, where they won their first great victory, will be erected a monument to our peace-time pioneers of progress, Wilbur and Orville Wright.

"Since their first flight in 1903 aviation has made tremendous progress. The great continent that lies to the West of us is being covered with an invisible network of airways. This mighty ocean has been dwarfed by brave men and women who, in their tiny planes, defied space and sea.

"The memorial soon to arise here will forever keep alive the names of these two Americans who gave wings to the world, but an even greater memorial to Wilbur and Orville Wright will be the part to be played by the future expansion of aviation in fostering peace, prosperity and progress throughout the world.

"Even as we today lay the corner stone of this memorial, so aviation of today is building the foundation for a great structure - the aviation of tomorrow. From that foundation time can never erase the names of those two brothers who had the courage, the ability and the patience to transform man's dream of flight into the realm of reality - Wilbur and Orville Wright."

---oOo---

DESCRIPTION OF RECENTLY AUTHORIZED UNIFORMS ✓

In connection with the blue uniforms recently authorized for the Army, the following brief description of each of the four worn by officers is given. These four are the dress, full dress, special evening dress and the mess jacket:

The dress uniform consists of a single-breasted coat, of blue black crepe or serge with a standing collar, trimmed with 1½ inch mohair braid with gold shoulder straps with insignia of rank embroidered thereon. The base of the shoulder strap is the color of the arm of the service of the wearer. With this coat, trousers or breeches of sky-blue are worn, the material of which is of doeskin with a stripe the color of the arm of the service. The cap is of a cloth to match the coat, with a black patent leather visor and gold chin strap. The coat of arms of the United States is embroidered on the front of the cap.

The full dress uniform consists of a double-breasted frock coat of blue-black cloth with a double row of gilt buttons on the front and standing collar

trimmed with a double row of $\frac{1}{2}$ inch gold lace with cross-grained silk, the color of the arm of service, between the bands of gold lace. Gold shoulder knots are worn with the coat, with the insignia of rank secured thereon. The sleeves are trimmed with $\frac{1}{2}$ inch gold lace and rows of $\frac{1}{8}$ inch gold soutache forming three loops, the number of rows designating the rank. A belt and saber slings of black enameled leather covered with gold lace interwoven with three silk stripes, the color of the arm of service, are worn with the coat. The trousers and cap are the same as for the dress uniform.

The special evening dress is of the same cut as civilian evening dress. However, the coat is ornamented with gold lace on the sleeves and shoulder knots the same as for the full dress uniform, while the buttons on the coat are gold. The vest is white with gold buttons.

The mess jacket is single-breasted, with a long roll peaked lapel. It is cut short on the hip with a slight point front and back. It is of the same material as the dress coat, with gold trimmings the same as those worn with the special evening dress. The lapels are faced with cloth the color of the arm of the service.

For enlisted men there is one blue uniform. The coat is a single-breasted sack coat of dark blue cloth with standing collar. It is fastened down the front with six gilt buttons. The edges of the collar and the shoulder loops are trimmed with cord the color of the arm of the service. The trousers are of sky-blue kersey. For non-commissioned officers and musicians there is a stripe the color of the arm of the service. The cap is of dark blue cloth with patent leather visor and chin strap. On the cap is worn a gilt cap ornament which is disk shape with the coat of arms of the United States thereon. Insignia of rank are worn on the sleeve of the coat and are the color of the arm of service.

---oOo---

AIR CORPS TO CONDUCT ELABORATE EXPERIMENT ON REFUELING AIRCRAFT IN FLIGHT

Machinery to carry out the most elaborate experiment ever attempted to determine the practicability of refueling aircraft in flight was set into motion today when Secretary of War Dwight F. Davis, on recommendation of Assistant Secretary of War, F. Trubee Davison, and Major General James E. Fechet, Chief of the Air Corps, approved plans for a refueling endurance flight to be started by the Army Air Corps at Los Angeles shortly after dawn on New Year's Day.

Even as the launching of the experiment on January 1 heralds the beginning of a year which is expected to produce great progress in the field of flight, so approval of the project by the War Department on the very day when the entire country celebrates the 25th anniversary of the Wright Brothers' first flight comes at a dramatic moment.

Authorization for the endurance flight was granted following the successful outcome of a series of final tests conducted over Bolling Field yesterday by two of the planes and part of the personnel assigned to the mission, which is headed by Major Carl Spatz, with Capt. Ira C. Eaker as second in command. Preparations for the tests were started by these officers several months ago by order of the Chief of the Air Corps.

The preliminary preparations have been withheld from the public in order to determine the feasibility of the project and to be assured that it would be practicable to carry the tests to a conclusion.

The personnel of the mission is as follows:

Endurance plane: Major Spatz, Captain Eaker, Lieut. Quesada and Lieut.

H.A. Halverson, pilots; Sgt. Roy Hooe, mechanic.

Refueling plane No. 1 - Capt. Ross G. Hoyt, pilot and one more officer to be selected at San Diego.

Refueling plane No. 2 - This plane and its crew will be arranged for at San Diego.

Ground personnel: Lieut. Ray Harris, engineering officer; Hans J. Adamson and Lieut. Arthur Ennis, in charge of communications with the plane.

The endurance plane, with Major Spatz, Capt. Eaker, Mr. Adamson and Sgt. Hooe aboard, was scheduled to leave Bolling Field on the morning of Dec. 13th as was Refueling plane No. 1, with Capt. Hoyt and Lieut. Quesada. Overnight stops are planned at Middletown, Dayton, Scott Field and Oklahoma City. At Rockwell Field, new and carefully selected motors will be installed in both planes. This done, they will be flown to Los Angeles for take-off from Mines

Field on Jan. 1st.

The purpose of the experiment is not only to put modern airplane engines to the acid test of absolute endurance and to determine the strain of flight on the human system over a protracted period, but also, in fact, primarily, to investigate the practical value of refueling in military as well as in commercial aviation. Bombardment planes, for instance, would be given a wider radius of action, while commercial airplanes, owing to decreased fuel weight, would be able to carry greater payloads if refueling can be adopted as a routine function in aviation.

No objective has been set with respect to the length of time the plane will remain aloft. The problematical feature of the mission is best indicated in the naming of the ship, which has been called the "Question Mark". Army Air Corps heads realize that a minor mishap, which means nothing in ordinary flying, can put a most effective though temporary brake on any non-stop experiment. However, every precaution will be taken to have plane, engines and equipment as flawless as possible. Nothing will be left to chance.

"There will be but one objective after the plane takes off at Los Angeles", said Major General James E. Fechet, "and that is to refuel it when fuel is needed and to keep the ship in the air until the motors cease to hum.

"While it will be interesting to learn how long airplane motors will continue to run under actual flying conditions and without a landing being made, our primary concern is to determine the practicability of refueling while in the air.

"Preliminary research along these lines was made five years ago when Lieuts. Lowell H. Smith and John P. Richter conducted experiments which had their climax in a border to border flight along the Pacific coast in 12 hours and 13 minutes. This flight furnished opportunity for the transfer of 125 gallons of gas. Prior to this test, the same two pilots remained in the air for almost 24 hours in an ordinary DH observation plane by means of refueling. Experiences gathered in these trials will prove of great value in the experiments about to be conducted."

The tests next month and those staged five years ago differ in several respects. In the first place, the 1923 endurance plane had only one motor while the "Question Mark" has three. The largest quantity of gas transferred in the 1923 trials was 125 gallons, while about 900 gallons must be poured into the tanks of the 1929 endurance ship between dawn and dusk every day. Two men sat in open cockpits in 1923, while five men will enjoy a larger measure of comfort in the "Question Mark", which includes among its special equipment three berths, two comfortable wicker chairs, books, radio and a small electric stove.

Two officers will be on duty in the pilot's compartment as long as the flight lasts. Inasmuch as Major Spatz will attend to the transfer of supplies and Captain Eaker will be at the wheel during the contact periods - of which there will be from three to six a day - these two officers will pilot the ship during the daytime while Lieutenants Halverson and Quesada will be at the controls at night.

The endurance ship and Refueling plane No. 1 were flown to Washington Sunday from the Army Air Corps Depot at Middletown, Pennsylvania, where they were taken several weeks ago for installation of special equipment. The refueling plane has two 150 gallon gas tanks and one 40 gallon oil tank in its passenger compartment. The two gas tanks are joined with a 4 inch pipe to which is fastened a 50 foot hose with a diameter of two and a half inches. A similar hose is attached to the oil tank. Ropes for lowering food, water, messages and other supplies have also been provided.

Two gas tanks and an oil container similar to those in the refueling plane have been installed in the endurance ship. A berth has been built on top of each tank while a third cot has been constructed over the oil tank. The gasoline will be pumped by hand from the special fuel tanks into the regular tanks in the wing of the ship.

During refueling periods, the two ships will come within 17 feet of each other, the endurance plane flying beneath and slightly behind the supply ship. Major Spatz - wearing goggles, rubber face mask, rubber gloves and a rubber raincoat - will stand on a small platform built in the entrance compartment of the ship. This will place him shoulder high in the opening that has been cut in the top of the ship at this point. As the hose is lowered from the plane above, Major Spatz will catch it, pull it through the opening and turn a valve. The gasoline will then pour into a reception funnel immediately beneath the mouth of the hose, at the rate of 75 gallons per minute, and run through two 4 inch pipes into the two 150 gallon tanks. Three hundred gallons will be taken aboard at

each refueling period. Major Spatz will wear the protective covering to prevent possible burns from spattering gas. He may also be compelled to use a gas mask if fumes from the high test airplane fuel should be too powerful.

No particular hazard is involved in the transfer of fuel. The greatest risk is that a hose or a rope might be caught in one of the propellers, but this danger is minimized because the aperture through which the hose will pass is fully 18 feet removed from the nearest propeller.

Much of the safety and success of transferring the fuel and supplies will depend upon the cool heads, steady hands and nerves of Capt. Eaker and Capt. Hoyt's plane will fly above the other on a straight line and at a given altitude. It will be up to Capt. Eaker to keep his ship from either swerving, climbing or diving during transfers. Each contact will last approximately five minutes and take place at altitudes where the air is smoothest. The speeds of the two planes will be synchronized at 80 miles an hour.

Appropriate clothing and food present problems that will be solved between now and the time of the take-off. Both play important roles in the success of the flight. A special diet schedule is being prepared by Army Air Corps Flight Surgeons who also will make complete examinations of the crew before the flight starts. The medical record will be used to determine the effect prolonged flying has on pilots in the event the mission should remain in the air for any great length of time.

The course of the endurance ship has not been decided upon as yet but it is believed that it will run from Santa Monica to San Diego - a distance of about 110 air miles. In case fog or other bad flying weather along the coast should force the ship inland, the craft will fly over the Imperial Valley. The average speed of the "Question Mark" will be about 90 miles an hour with the engines turning approximately 1350 r.p.m. The cruising height of the ship will be between 2,000 and 3,000 feet during the day and from 5,000 to 7,000 feet at night.

The ship will carry a barograph which will register the endurance of the flight and provide an official record of the time spent in the air. It is also probable that official timers and observers assigned by the National Aeronautic Association will compute the distance covered by the craft in its flights. If the official mileage is recorded, all time spent by the plane off any prescribed course would not be considered in the timing. Full credit would, however, be given for endurance, whether the ship stays on a prescribed course or not so long as it remains in the air.

The air travel distance from San Diego to Los Angeles is about one hour and fifteen minutes. In the course of one day this route would be covered more than twenty times - a beat which in time would grow very monotonous to the crew of the "Question Mark" but a necessary procedure for checking mileage as well as remaining within striking distance of Refueling plane No. 1, which will be stationed at San Diego after the first refueling contact over Los Angeles has been made. Refueling plane No. 2 will be at El Centro, ready to refuel in case of bad weather along the coast or to "pinch hit" for No. 1, should the latter plane be out of commission.

When the endurance ship noses into the wind at sunrise on January 1st, it will have only 90 gallons in the tank.

The refueling plane will take off before the "Question Mark" leaves the ground as the first refueling contact for the transfer of 300 gallons of gas and 40 gallons of oil will be made as soon as both ships are in the air.

The complete log of the ship will be sent to the ground every morning and every evening. This log will show the conditions of engines and pilots throughout the period, such as mechanical work done, refueling, messages dispatched, etc.

The endurance plane will carry radio telephone equipment which will make it possible for those aboard it to communicate with the ground information center near Los Angeles, or the Air Corps station at San Diego. Should the radio fail, block signals will be used on the ground to convey weather data or other important information to the endurance plane, or messages can be passed from ship to ship during contact periods. Call letters and wave lengths for the endurance plane and the communication center, which will be established either at Santa Monica or Los Angeles, will be assigned by the Army Signal Corps before January 1st.

The endurance ship is an Atlantic C-2 Army transport monoplane with a wing span of 71 feet. It is equipped with three J-5 air cooled engines each of which generates 220 horsepower. It has a cruising speed of about 115 miles an hour.

The refueling planes are Douglas C-1 Army transports. This type of craft is a biplane equipped with a single Liberty motor generating 400 H.P. It is capable of carrying a gross weight of more than 6,000 pounds. The cruising speed is about 95 miles an hour.

---oOo---

WAR DEPARTMENT ORDERS AFFECTING AIR CORPS OFFICERS.

Changes of Station: 1st Lieut. Frank M. McKee from Norton Field, Columbus, Ohio, to duty in Office of the Chief of the Air Corps, Washington, D.C.

1st Lieut. Adolphus R. McConnell, Langley Field, to Norton Field, Ohio.

2nd Lieut. Harold A. Wheaton, Langley Field, Va. to Kelly Field, Texas.

1st Lieut. Harvey K. Greenlaw, 11th School Group, Air Corps Training Center, San Antonio, Texas, to University of California, Berkeley, Cal., for duty.

1st Lieut. Richard H. Magee, Chanute Field, to Mitchel Field, N.Y.

1st Lieut. Newman R. Laughinghouse, Mitchel Field, to Chanute Field, Ill.

1st Lieut. David M. Schlatter, March Field, Calif., to Panama Canal Zone, sailing about March 2, 1929.

1st Lieut. Edward V. Harbeck upon completion of tour of duty in Panama to San Antonio Air Depot, Duncan Field, Texas.

Reserve Officers ordered to active duty to June 30, 1929:

1st Lieut. Norfleet Giddings Bone, Dallas, Texas, to Ft. Sam Houston, Texas.

Relieved from Detail to the Air Corps: 1st Lieut. James F. Phillips, Corps of Engineers, to proceed to Wright Field, Ohio, for duty in connection with aerial mapping.

Reserve Officers relieved from extended active duty: 1st Lieut. David L. Benchke.

Detailed to Air Corps and to Brooks Field, March 1, 1929, for training:

1st Lieut. Oscar L. Beal, Infantry.

2nd Lieut. Vera H. Wiseman, Infantry.

2nd Lieut. Gustavus W. West, Cavalry.

Promotions: 1st Lieut. Carl F. Greene, to Captain, rank from Nov. 8, 1928.

2nd Lieut. John K. Nissley to 1st Lieut., rank from Sept. 27, 1928.

2nd Lieut. Charles G. Percy to 1st Lieut., rank from Oct. 2, 1928.

2nd Lieut. Eyrle G. Johnson to 1st Lieut., rank from Oct. 21, 1928.

2nd Lieut. Archibald Y. Smith to 1st Lieut., rank from Oct. 25, 1928.

2nd Lieut. Herbert W. Anderson to 1st Lieut., rank from Oct. 27, 1928.

2nd Lieut. Leslie F. Young to 1st Lieut., rank from Nov. 1, 1928.

---oOo---

COLONEL CULVER GOES TO THE GENERAL STAFF

Lieut.-Colonel Clarence C. Culver, Air Corps, Commanding Officer of Langley Field, Va., and Commandant of the Air Corps Tactical School at that station, is slated for duty in Washington starting July 1st next. Under War Department orders recently issued, he is relieved from his duties at Langley Field and detailed as a member of the General Staff Corps with duty in the War Department General Staff.

---oOo---

DISTINGUISHED FLYING CROSS FOR LIEUT. EIELSON

The War Department recently announced the award of the Distinguished Flying Cross to 1st Lieutenant Carl B. Eielson, Air Corps Reserve, the citation accompanying same being as follows:

"CARL B. EIELSON, first lieutenant, Air Corps Reserve, United States Army. For extraordinary achievement while participating in an aerial flight. Lieutenant Eielson as pilot, accompanied Captain George H. Wilkins (an English subject), from Barrow Point, Alaska, to Dead Man's Island, Archipelago of Spitzbergen, on April 15-16, 1928, without stop, a distance of more than 2200 miles. The severity of the weather, the storm area through which they passed, the impossibility of safe landing enroute with no hope of outside aid in case of a forced landing, and the complete success of the enterprise, distinguished this as one of the most extraordinary aerial accomplishments of history.

Residence at enlistment in the Army on January 17, 1918, at Fort Omaha, Nebraska, given as Hatton, North Dakota. Birthplace and permanent address given as Hatton, North Dakota.

NOTES FROM AIR CORPS FIELDS

---60---

Kelly Field, San Antonio, Texas, Nov. 24th.

The permanent officers of Kelly Field gave a formal dance to the incoming class on November 23rd. All students, including the flying cadets, attended. Music was furnished by the Post orchestra.

Lieut. John R. Drum, A.C., reported on November 22nd, having been transferred from Langley Field. He was assigned to the 40th School Squadron, (Bombardment), for duty.

By the time this goes to press another Air Corps bachelor will have become a Benedict. 1st Lieut. John Whitely is to be married on November 29th to Miss Jane Grice, a very popular and beautiful San Antonio maiden. Lieut. Whitely has been one of Kelly Field's popular bachelors and is well known throughout the Air Corps. He, with Lieut. "Rosebud" Smith, made a transcontinental flight in a Martin Bomber in 1923, and with Lieut. Lanagan captured first place in the 1928 bombing matches at Langley Field.

Hunting season is with us again and every week end sees the officers of Kelly Field off to various parts of the State in quest of game. Many record bags of ducks, doves, etc., are brought in.

Major Tinker, Capt. Easterbrook, Lieuts. St. John and Rundquist and Booth, arrived November 13th from Langley Field in five LB-5's to be used for training in the Bombardment Section.

November 22nd the football classic of the Army League took place with the 1927 Champions, the 23rd Infantry, and Kelly Field as the participants. Both teams up to this game had remained undefeated. The game was Kelly's all the way. In the first half Kelly Field scored a touchdown against the doughboys but failed to kick the goal. The game continued with Kelly in the lead, 6 to 0, until the last few minutes of play, when the 23rd Infantry shoved the ball over the line for a touchdown and kicked the goal, making the score 7 to 6. It was a hard fought game, with Kelly Field the outstanding team. The breaks of the game were against them, however, and a great team went down in defeat. The credit of the excellent showing made by Kelly Field was due to the untiring efforts of Lieut. "Pat" Booker, who was the team coach for this season. He developed from unseasoned material a team of championship caliber.

Colonel Charles A. Lindbergh dropped into Kelly Field on Sunday afternoon, November 25th, en route from Mexico to New York. As he was behind in his schedule, he was unable to stay longer than over night and took off Monday morning at 8:00 A.M. As a result, very few of the officers were able to meet him. While here he was the guest of 1st Lieut. B.S. Thompson, Post Operations Officer.

Maxwell Field, Montgomery, Ala., Nov. 20th.

A flight of 4 O2-H planes departed from Maxwell Field on Oct. 3rd for Jacksonville, Fla., en route to Orlando and St. Augustine, Fla., to participate in the opening of airports at those two cities. The Flight consisted of Lieuts. Wriston, McCoy, Woodbury and Byerly, Pilots, and Capt. Platt, M.C., Lt. Powers, Q.M.C., and two mechanics as passengers.

A number of Confederate Veterans were quartered at Maxwell Field during the re-union of the Alabama Division on October 9th, 10th and 11th.

Maj. John Brooks and Major Delos Emmons landed at this station on October 11th from Kelly Field and continued from here to Washington by train.

Lieuts. Arnold and Pratt attended conference at Wright Field on Oct. 15th.

On Oct. 16th Major Weaver, accompanied by Lieut. McCoy, went to New Orleans to assist in the selection of an airport there.

Capt. Donald P. Muse, A.C., reported for duty at Maxwell Field. He was formerly stationed at Bolling Field.

Capt. Willis Hale, from the Office of the Chief of the Air Corps, made an inspection trip here on Oct. 17th.

Maxwell Field Football Team defeated the 83rd Field Artillery Team from Fort Benning, Ga., at Cramton Bowl, in Montgomery, 27 to 0.

On Oct. 29th, the Board of Officers appointed to investigate proposed sites for the Attack Group arrived at Montgomery. The Board is composed of Col. W.H. Noble, Lt. Col. Henry C. Pratt, Maj. John Brooks and 1st Lieut. Geo. A. McHenry.

During the month of October numerous Army, Navy, National Guard and Civilian planes visited Maxwell Field.

Boston Airport, East Boston, Mass., Nov. 23rd.

General Preston Brown "Our Corps Area Commander", piloted by Lieut. Duke, recently flew to Louisville, Ky. via Langley and Maxwell Fields, returning via Lexington, Ky, Dayton, Detroit and Bolling, making the trip from Bolling to Boston in three hours and five minutes.

General Brown made an extensive survey of the Mississippi River Flood District and participated in the Armistice Day ceremonies at Louisville, Ky.

PTs at this station seem to have gone the wrong way, two being cracked up about election time.

Capt. C.W. Ford and Lieut. J.A. Wilson ferried two PTs from San Antonio Air Depot and upon arrival here were presented with orders dispatching them to Middletown Air Depot for the purpose of ferrying two more PTs from that Depot. This gives us six PTs, our full complement for the first time since Jennies were discarded.

Reserve Officers in this Corps Area have been turning out in numbers to fly our two PTs and when words get around that we have six!!!

Lieut. Borple with Lieut. Morrison, Pa. N.G., A.C., recently met with a tough break. Flying from Phila. in an O-17 they ran out of gas just as a landing was being made. They didn't quite reach the field but landed in the mud flats at the end of the field. Neither one was injured and they proceeded to the Harvard-Penn game and had the staisfaction of seeing their team defeat Harvard.

Visitors arriving at this airport will be quite surprised to note the improvements in our buildings and the new runway on the field.

Lieut. Edward M. Fairfield, A.C. Re's., donated to the Detachment a much needed "B" eliminator and we are once again tuning in on the various programs, especially the football games.

Better service will be available at this station now that we have a Garford Truck allotted for gas, oil and water.

A party of twenty-five teachers from the Boston City Teachers College were conducted on a tour through the hangars and they were amazed at what they saw, especially the parachutes and flying equipment. Several of the party took a hop in the commercial planes operating at Boston Airport, and now they are sold on flying.

A new Operations Office is being established with complete facilities for local and airways traffic. A weather board, U.S. Weather Bureau Map, radio service and other conveniences will provide service to local and visiting pilots not excelled anywhere in the Air Corps.

Air Depot, Middletown, Pa., Dec. 4th.

During the month of November the Engineering Department, under the direction of Capt. Estabrook, major overhauled five planes, including three Observation planes, one Training and one Cargo. In addition, four Observation planes were given minor overhaul. Eighteen engines were put through the ships and shipped out to the area as replacements.

The money value of shipments leaving the Depot during the month totaled \$205,257.00, while the value of receipts reached \$602,583.00

General Fechet arrived Nov. 1st in a tri-motored Fokker from Bolling Field and lost no time in getting up into the hills to do a little hunting. However, the birds seemed to know that the Chief was looking for them and made themselves rather scarce.

Col. L.M. Hathaway and Major Harms visited us on the 16th and spent most of the time making a study and inspection in our dope shop.

Four Amphibians were ferried in during the latter part of the month to be overhauled on a priority job and shipped to the Philippines. Lieut. H.H. Mills brought one from Selfridge, Lieut. R.G. Harris one from Mitchel, Capt. Ted Haight one from Bolling and Lieut. K.C. McGregor one from Langley.

A large weather map was installed in the Operations Office and is posted daily by the Meterological personnel with the weather data received from NAA. This weather data fills a much needed want and enables the flying personnel to tell at a glance weather conditions in all parts of the country.

At the end of November work was almost completed on the renovating and remodeling of the Post Gymnasium. Pennsylvania in general, and Middletown in particular, is an extremely enthusiastic community over basketball. The season begins the first week in December, and it is believed that personnel at this Depot will be afforded much pleasure throughout the winter months in witnessing first class basketball contests. The Post team is composed of members of the civilian personnel, most of whom were former college or semi-professional stars in this section of the country.

On November 15th our Contract Surgeon, Dr. J.E. Blechar, departed for Dealas Island, Md., with his fast shooting, double barreled shot gun. The Doctor spent three days in the blinds and came back to camp with many fine specimens of mallard, teal, red head and pin tail.

Warrant Officers Cecil Hewitt and Harry R. Hazzard spent several days in Cameron and Lycoming Counties, respectively, hunting birds, and enjoying a period of detached duty when the cares of office work were dropped from their shoulders. Upon their return to camp they decided that they had thoroughly enjoyed shooting birds behind their bird dogs.

Warrant Officer John M. Tibbetts departed on November 26th for a short vacation over the Thanksgiving holidays, to be spent with his people at Lexington, Mass.

Campo Nichols, Rizal, P.I., Nov. 6th.

Lieut. Elmer D. Perrin's a proud daddy. Naturally, it was a boy! Notice how the Lieutenant cuts up when he gets one of the new Blue Birds in the air. Speaking of airplanes, these Blue Birds are doing their stuff. Kicked out over two hundred hours this month. Think that's a record for the P.I.

1st Lieut. Bob. E. Nowland, of Bolling Field, who arrived on the Transport "Grant" last week, is our new Operations Officer, vice Lieut. C.C. Chauncey. Lieut. Chauncey's new station is Mitchel Field, Long Island.

Headquarters, 4th Composite Group: Lieut. Alfred Lindeburg relieved Capt. Wheeler as Post Exchange Officer. Capt. Wheeler left for thirty days' detached service in Baguio.

Staff Sgt. Hewitt left on the 28th for thirty days' travel in China and Japan.

The organization lost two men this month - Sgt. Wirth was discharged and re-enlisted in the 31st Infantry; Private Irwin transferred to the 3d Pursuit Squadron, Clark Field.

Mr. Sgt. Ryan arrived on the last transport as replacement for Sgt. Bottrell, who goes to Kelly Field.

The Camp Nichols Bowling Team won the tournament with 24 games won and six 1st.

6th Photo Section: The 6th Photo Section was engaged for the past month in laying the mosaic map of the 5000 square miles of the northeastern coast of Luzon for the U.S. Coast & Geodetic Survey.

Staff Sgt. Claude W. Patterson sailed for the U.S. on Oct. 27th, to be assigned to the 20th Photo Section, Brooks Field. Good Luck, "Pat". Staff Sgt. Herman L. Chestnutt arrived Oct. 21st as replacement. Sgt. Chestnutt appears to have all the makings of a "Dhobie Citizen". Pvts. W.H. Bond and R.L. Melody, recent graduates of the Photographic Course of the A.C.T.S., joined this organization.

66th Service Squadron: Capt. George L. Usher returned from leave, Sept. 27th. He reports a very enjoyable trip through China and Japan.

Lieut. Donald L. Bruner left for China on October 16th. Lieut. Earl S. Hoag took over the duties of Squadron Adjutant and Supply Officer.

Several "Short-Timers" parties were given during the past month. Best of all was the dinner given by the Squadron. Staff Sgt. Tony Yucius and his able assistants are to be complimented.

Tech. Sgt. Leonardo Valtierra, who has been on detached service in Northern Luzon since Oct. 1st, returned in time to meet his replacement, Tech. Sgt. Alva Killgore, who arrived on the transport "Grant" from Kelly Field.

Tech. Sgt. Robert J. Simmons, of the 8th Attack Squadron, Ft. Crockett, arrived as replacement for Tech. Sgt. William R. Church.

Staff Sgt. Don Craig of the 58th Service Squadron, Langley Field, is on his second tour of foreign service.

Staff Sgt. George W. Gaspard of the 22d Observation Squadron, Maxwell Field, arrived as replacement for Staff Sgt. Leamon V. Ward and Staff Sgt. George S. Lane as replacement for Staff Sgt. Leonard L. Bentley.

Sgt. John H. Gwinn, who has been Provost Sergeant since 1926, left for his new station at Bolling Field. We expect him back here ere long, as he is too much of a "sunshiner" to enjoy the snows of D.C.

Sgts. Pinnow and Kimery returned to the States for discharge.

E. & R. Office, Camp Nichols: Athletic events continue to draw attention. Our Post Team finished in first place in the Philippine Department Inter-Regimental Bowling League in a field of six teams, including the 31st Infantry, 59th Coast Artillery, 60th Coast Artillery, Kindley Field and Sternburg General Hospital. Swanson, Team Captain of Camp Nichols, received a gold medal for tournament high average of 182. A loving cup and six silver medals were presented to the team, which included Swanson, Drake, LeLoup, McCartney, Stibal and Larson.

The Air Corps Team finished second in the Duck Pin League, after losing a chance for first place because of the failure of one team to play their last match.

Baseball practice for the 1929 season is under way with good prospects. The Post diamond has been regraded and the backstop and pits replaced. The first inter-Post game is scheduled for October 30th between the 28th Bombardment Squadron and the 66th Service Squadron. This promises to be a good opener.

The 2d Observation Squadron, 6th Photo Section, and Headquarters Detachment are also underway with practice.

Several men are beginning training for track events which will be staged in December or January.

Two new additions to our already excellent Education & Recreation Building were started. Two bowling alleys were added to take care of the men who cannot be accommodated at the present time. Space will be provided for a larger library, reading rooms and a gymnasium. These improvements will give us a Recreation Building second to none in the Service in the Philippine Department.

A number of men signed up for an elimination Pool Tournament which will begin on the first of November.

American football gained good headway in the Philippine Islands due to recent activities in that line. The first game was played on Wallace Field in Manila. Camp Nichols won from the "All Americans" 6-0; the second game proved to be a hard fought contest and was a 0-0 tie; while Camp Nichols came in for a winning score of 13-6 in the third game. The first Filipino team broke into the game when the "All Filipinos" played the "All Americans", resulting in a 16-0 victory for the Americans.

Capt. George L. Usher, Post E. & R. Officer, is coaching the Camp Nichols team. A football league is underway with six teams entered. With two games already under our belt, Camp Nichols has good chances of winning the first football championship in the Philippine Islands.

The feature game of the season was the battle between the Air Corps eleven and the huskies from the Sixteenth Naval District. In this fracas the Army outplayed the Navy for a 21-0 shutout. A number of men are playing with the Camp Nichols squad: Ends, Soursey, Parraick, Kenar, Hessler and Loomer; Tackles, Avery, O'Connor, Melody, Craft, Stockwell, Reiger; Guards, Dickenson and Horsey, Huish, Drahoff, Stackwell, Kaiser; Backs, Way, Selby, Guber and McCartney.

Kindley Field, Fort Mills, P.I., Nov. 6th.

2d Observation Squadron: All things pass, including tropical rainy seasons, and the weather now is worthy of our "Island Paradise". We have transferred flying activities to the south patio. With tracking missions for the Coast Artillery, communications problems at Fort McKinley and our routine scheduled flights, our four Amphibians are kept turning over most of the time. Incidentally, our new steel ramp is functioning to the Queen's taste - thanks to Lieut. Dudley Watkins and the engineering department. The installation of the ramp was a somewhat hazardous piece of work and Cpls. Pfeiffer and Mills, and Pvts. Sarver, Boston and Tonielli, working under the supervision of Mr. Sgts. Cooper and Wilson, were selected for particular commendation by the Commanding Officer.

October saw the arrival and departure of the transport "Grant". Back to the States went Lieut. F.I. Patrick bound for station at San Antonio. Our new arrivals are Lieut. Hayward from Kelly and Lieut. Graves from Langley. A re-

adjustment of duties took place and the present line up is as follows:

Commanding Officer. Lieut. V.J. Meloy
Adjutant, Personnel Adjutant and
Transportation. Lieut. Park Holland
Operations Officer. Lieut. W.A. Hayward
Engineering Officer Lieut. L.H. Dunlap.
Parachute and Armament Officer. . . . Lieut. D.W. Watkins
Communications & Post Exchange Officer Lieut. L.E. Rouch
Air Corps Station Supply Officer Lieut. H.G. Davidson
Organization Supply & Agent Quarter-
master Lieut. G.S. Graves.

Of our enlisted personnel, we lost Mr.Sgt. Wilson, receiving as replacement Mr.Sgt. Turner.

The usual "Short Timers" party took place, box seats being held by Mr.Sgts. Cooper and Wilson and Mr. Miguel.

Both the officers and enlisted mens' bowling teams stood around the fifty-fifty mark when the season finished recently. Sgt. Moss was the star of the Post. He had the high score of the year for the alleys on Corregidor - 259.

The ideal baseball weather has arrived. All the old timers, in addition to a large number of aspirants, could be seen on our miniature parade ground limbering up. On October 14th, the team, under the personal supervision of Lieuts. Meloy and Davidson, turned out on Topside diamond. Whacko-right off the bat - the mighty Ira C. Lee socked a hot one. Our one and only Crette said "It shall not pass". It didn't. Crette had his thumb set that evening. The next evening one gallant Cpl. McHenry, not to be outdone, also reported to the Flight Surgeon and had his thumb set. Since then, no more thumbs have been expended.

All the officers play golf every afternoon - that is, they decorate the local course. It is believed that there are no "Hagens" in the offing.

The "Marjorie" has been reconditioned and frequent fishing trips have been made. So far, the fish have been a little bashful.

Clark Field, Camp Stotsenburg, P.I., Nov. 6th.

3d Pursuit Squadron: With the "Grant's" arrival came a big turn-over at Clark Field. Lieut. Oakley G. Kelly and Lieut. P.W. Wolf received orders to transfer to Camp Nichols. Lieut. L.J. Carr departed for Selfridge Field. The new arrivals are Capt. B.F. Giles, Lieuts. C.W. Steinmetz, A.C. Horn and G.A. Whatley. They seem very much pleased with their new station despite the shortage of quarters.

Luke Field, T.H., Nov. 22nd.

Due to the lack of facilities, Luke Field was not able to participate in the Sector-Navy Basketball Series this year. Not to be outdone, however, arrangements were made to have an Inter-Squadron tournament, utilizing the cement tennis court of the 72nd Bombardment Squadron for the games.

Each Squadron is furnishing two teams, classified as A and B, and no player of one team is allowed to switch to the other team during the series. The games began on November 8, and will be played, two games daily, until December 14th. At the expiration of the time set for the series, another series will be played to determine the Post Championship, according to Lieut. Early, Athletic Officer.

The 4th Observation Squadron won the championship in the volley ball tournament just closed. The other Squadrons participating in the contests finished in the order named: 72nd Bombardment, second; 65th Service, third; and the 23rd Bombardment, last.

Major P.E. Van Nostrand, Commanding Officer of Luke Field, returned to Hawaii on the USAT "Chateau Thierry", November 6, and resumed his duties, which were handled by Capt. R.E. O'Neill during his absence.

Since returning, Major Van Nostrand has been busily engaged in catching up the loose ends of affairs and informing the officers of the command of numerous instructive and interesting happenings at the Air Races at Los Angeles.

Three new LB-5As were just "turned to duty" from the Final Assembly at Luke Field and turned over to the 72nd Bombardment Squadron. These new ships are to replace the DH-4s with which this Squadron has been equipped in the past. New equipment is always a delight to the heart of Air Corps men and consequently, the personnel of the 72nd consider themselves the "cock of the walk" these days.

Halloween was celebrated a trifle early this year at Luke Field, but that in no way detracted from the pleasure of the occasion. One of the Hangars was renovated, remodelled and otherwise overhauled to make a fancy ballroom. It was a good job, too.

More than two hundred of Honolulu's fairest of the fair sex made the journey to Ford Island by motor bus and launch to take part in the festivities. Incidentally, they wanted to see what the flyers could offer in the way of terpsichorean ability and, having come to laugh, they went away with praise for the boys who had fooled them. Four weeks prior to the dance, the more resourceful had been attending dancing classes. Their dancing showed it, too.

Capt. George P. Johnson who recently arrived at Luke Field from Chanute, was assigned as Commanding Officer of the 23rd Bombardment Squadron, relieving Lieut. George W. Polk, who becomes Adjutant of the Squadron.

Lieut. Joseph H. Hicks, was relieved from duty with the 23rd Bombardment Squadron and placed in command of the 11th Photo Section, relieving Lieut. Harold Rivers, who was granted a leave of absence to the mainland.

Capt. Harry C. Drayton was relieved from command of the 72nd Bombardment Squadron and assigned for duty with the 65th Service Squadron.

Lieut. Clyde A. Kuntz was assigned as Commanding Officer of the 72nd Bombardment Squadron.

Lieut. A.H. Foster was assigned as Engineering Officer of the 23rd Bombardment Squadron, relieving Lieut. Homer W. Ferguson, who returned to the mainland on the USAT "Chateau Thierry" for duty at March Field.

Capt. R.E. O'Neill was assigned to the 4th Observation Squadron and assumed command, relieving Capt. C.E. Giffin.

Mr. Sgt. William O. Shupert, who arrived in the Department on November 6th on the USAT "Chateau Thierry" was assigned to duty as Post Sergeant Major.

Capt. John F. Beeson, M.C., was granted a leave of absence of two months before reporting to his new station at the Federal Reserve Airdrome, Richards Field, Mo., where he was ordered to duty as Flight Surgeon, Capt. Beeson leaves this Department on December 11th.

2nd Lieut. Charles T. Stoffer, Air Corps Reserve, completed two weeks' active duty at Luke Field and returned to his home in Honolulu. Lieut. Stoffer is a commercial pilot in civilian life.

Rockwell Field, Coronado, Cal., Dec. 4th.

The 11th Bombardment Squadron and 95th Pursuit Squadron, Rockwell Field, entertained lavishly on Thanksgiving Day. Very attractive menus for the occasion of the celebration of Thanksgiving Day 1928 were published by both organizations. The boys of the two squadrons did full justice to the sumptuous repast set before them. The Commanding Officers of the Squadrons, their staffs, families and other invited guests joined in and helped the boys celebrate Thanksgiving in a real fashion.

Lieut. John K. Nissley, A.C., our prison officer and Assistant to local Quartermaster, received promotion to the grade of First Lieutenant, Air Corps, and congratulations are in order.

1st Lieut. Eugene Batten, A.C., with his recent bride and new Studebaker roadster, reported for duty November 27th.

The following second lieutenants, Air Corps Reserve, were ordered to Rockwell Field for active duty for a period of eight months: 2nd Lieuts. Stanley Keith Robinson, Robert Wilson Steward, Hugh LeRoi Smith and Andrew Fred Solter.

The 11th Bombardment Squadron, five planes strong, hopped over the ridge to Calexico on the morning of November 27th. Due to unfavorable flying conditions, the flight was unable to return until noon of the following day. Lieut. H.R. Baxter returned the same night, however, due to urgent business in Coronado. The hospitality of Calexico and Mexicali was enjoyed fully by those who remained overnight. Lieut. Eugene Batten who reported for duty on the 27th, was taken along on the flight, and the Chief of Police of Mexicali initiated him into the "Mexican Buccaneers".

Capt. Harry E. Van Tuyle, Veterinary Corps, reported here on November 8th, for purpose of administering the annual Mallein test to public animals.

Major J.E. Fickel, Air Corps, visited the Post, Nov. 7th, and Major H.S. Martin, Air Corps arrived Nov. 10th.

Major Frederick L. Martin, Air Corps was also a welcome visitor on Nov. 30th. 1st Lieut. Robert H. Wylie, Q.M.C., visited the Post on Nov. 28th, for purpose of surveying Army water transport equipment.

1st Lieut. C.E. Thomas, Jr., Air Corps, reported for duty Dec. 1st and was designated as Chief Inspector, Engineering Dept., Rockwell Air Depot. Lieut. Thomas has just finished tour of duty in the Philippine Department.

Officers at Rockwell Field are getting their exercise every afternoon between 3 and 4, following the suggestion of General Foulois. There were a number of stiff legs and weak backs to limber up, but almost every one now can run 100 yards without developing any squeaks. Tennis and indoor baseball are favorites, with a little volley ball thrown in. A hand ball and squash court is almost ready for those who crave real action. All are grateful that post orders have given them the opportunity for recreation as well as someone to join in the fun. The frolic has come to stay.

Seven planes from the 95th Pursuit Squadron participated in the dedication of the Imperial County Airport, El Centro, California, Dec. 1st.

---oOo---

A WAIL FROM THE EDITOR

Of late months the Editor of the News Letter has been considerably handicapped in his efforts to put forth a creditable publication because a number of Air Corps Fields have not sent in contributions of material. Some of the fields are sending in contributions regularly, while others have not been heard from for months.

Contributions are desired from every Air Corps activity. The primary purpose of the News Letter is to keep the Air Corps personnel informed of the activities at every Air Corps station. The officer or enlisted man who left, say, Mitchel Field, for some other station in the United States or in the Insular Possessions, is naturally interested in hearing what is going on at his old station. In a general sense, every member of the Air Corps is interested in hearing what is being done at all fields and stations. Unless the News Letter is given whole-hearted cooperation it cannot be termed a truly representative Air Corps publication. We want every activity represented therein.

A representative of a service paper who makes periodical calls upon the editor for news stated that the Air Corps is one branch of the service where "there is always something doing". That being the case, there should be plenty of material sent in for the News Letter.

The intention is to issue a News Letter twice a month. This has not been possible of late because of the lack of cooperation in the matter of news contributions. Air Corps fields and stations which have not been heard from for some time are:

Selfridge Field, Mt. Clemens, Mich.
Fort Crockett, Galveston, Texas.
Mitchel Field, Long Island, N.Y.
Crissy Field, Presidio of San Francisco, Calif.
March Field, Riverside, Cal.
Scott Field, Belleville, Ill.
Langley Field, Hampton, Va.
Chanute Field, Rantoul, Ill.
Wright Field, Dayton, Ohio.
Fairfield Air Depot, Fairfield, Ohio.

Publicity Officers at the above activities are requested to send in contributions for the News Letter on the 1st and 15th of each month.

HOUSE AGAIN PASSES THE FURLOW BILL

The House of Representatives, on December 17th, again voiced its approval of the proposition of a separate promotion list for the Army Air Corps and passed Senate Bill 3269 to provide for the advancement on the retired list of certain officers of the Army, to increase the efficiency of the Air Corps and of the Army, and for other purposes, as amended.

The Bill S. 3269, which passed the Senate during the first session of the 70th Congress, provided for higher rank for Major-Generals Hunter Liggett and Robert L. Bullard. When this bill reached the House, it was amended during the second session by the inclusion of the provisions of H.R. 12814 - known as the Furlow Bill - to increase the efficiency of the Air Corps and for other purposes, and provided increased rank for the Chief of Staff of the Army and the officer who was the first Chief of Finance of the Army.

In the form in which S. 3269 passed the House of Representatives, a separate promotion list is created for the Air Corps, upon which shall be placed the names of all officers of the Air Corps of the Regular Army below the grade of Colonel, these names to be arranged in the same relative order that they now have on the Army promotion list; that all officers commissioned in the Air Corps after the formation of the original Air Corps promotion list shall be placed thereon in accord with length of commissioned service; that Air Corps flying officers shall be promoted to the various grades after years of commissioned service as follows: To 1st Lieut., 3 years; to Captain, 7 years; to Major, 12 years; to Lieut.-Col., 20 years; to Colonel, 26 years. The number of Air Corps officers in the grade of Colonel shall not be less than 4 percent nor more than 6 percent and those in the grade of Lieut.-Colonel shall not be less than 5 percent nor more than 8 percent of the total number of officers on the Air Corps promotion list. The aggregate number of Air Corps field officers shall not be less than 26 percent nor more than 40 percent of the total number of officers on the Air Corps promotion list. In so far as necessary to maintain said minimum percentage, Air Corps flying officers of less than the required years of commissioned service shall be promoted to the grades of Colonel, Lieut.-Col. and Major, and only in so far as their promotion will not cause said maximum percentages to be exceeded shall officers who have completed the prescribed years of commissioned service be promoted to these field officer grades. Nonflying officers of the Air Corps shall be promoted as provided for other branches of the Army.

An officer completing 30 years of service, either as an officer or a soldier shall, upon application, be placed upon the retired list. In computing length of service for retirement, credit shall be given for one and one-half the time heretofore or hereafter actually detailed to duty involving flying. Credit shall also be given for all other time now counted toward retirement in the Army. The number of such voluntary retirements annually shall not exceed six percent of the authorized strength of the Air Corps. A flying officer of the Air Corps, upon reaching the age of 54 may, upon application, be placed on the retired list. Officers physically disqualified for the performance of their duties as flying officers shall be eligible for retirement for physical disability.

Sections 5, 6 and 7 of the Bill provide for the promotion of the officers mentioned in paragraph 2, above.

Brought up on motion of Representative James to suspend the rules, Mr. Furlow, in discussing the Bill, stated:

"Mr. Speaker, the importance of this bill cannot be overly stressed. It is important because it has to do with promotion and retirement in the Air Corps. This question was gone into very fully during the last session of Congress by the Committee on Military Affairs of the House, and I am pleased to remind you that the Air Corps provisions which we are now considering were embodied in the so-called 'Furlow Bill' last session and passed by the unanimous vote of the Members of the House.

In order to expedite action on this measure your committee determined that it would make this bill a part of the Senate bill now before us, thereby making it possible for the Air Corps provisions to receive consideration during this session.

The necessity of Air Corps legislation has been brought to my attention very forcibly as the result of a 12,000-mile trip which I have just completed. I visited nearly every Army air field in the United States and had the privilege of meeting the majority of our officers in the Air Corps. My survey convinced me that unless something is done to correct the present situation during the short

session of Congress we will find ourselves before another Congress convenes with nothing but the skeleton of our present Air Corps remaining due to resignations.

When Colonel Lindbergh was here at the air conference last week, I talked with him about the Air Corps, and he was deeply concerned with its future. He gave me a statement, which appears in his own handwriting and bears his signature. I want to read it to the Members of the House. It follows:

'The Army Air Corps is facing a serious situation in regard to its commissioned personnel due to stagnation in promotion,

At present the average Army Air Corps officer is holding a command far above his rank. His prospects of promotion are discouraging, and the opportunities offered by commercial aviation are far greater than those of his Army life.

Military flying is more hazardous than commercial flying and will become more so as safety appliances are developed which cannot be used in combat planes. Also the physical strain on an Army pilot in carrying out military missions is not comparable to that of commercial transportation.

It is of utmost necessity at present to take steps toward building up the morale of our Air Corps if we expect to maintain its past standard of efficiency.

Rank commensurate with command is of prime importance. A number of our best officers have already resigned and unless steps are taken to relieve the present situation we will lose many more in the near future.

In my opinion a separate promotion list will accomplish much in building up an efficient Air Corps in the United States.

Charles A. Lindbergh.'

Colonel Lindbergh favors a separate promotion list and this is provided for in this bill.

Now why do we need a separate promotion list for the Air Corps? There are several reasons, and I desire to touch upon them briefly at this time.

On the Army promotion list there is what is known as the World War hump, and owing to the fact that during their training period the Air Corps officers averaged six months in training camp as compared with three months for officers in other branches, we find the younger Air Corps officers at the bottom of the so called hump. The three months difference in training has been reflected by thousands of files on the promotion list.

With but one-twelfth of the officer personnel of the entire Army represented by the Air Corps, we find that 40 percent of the casualties of the entire Army officer personnel take place during peace time within the Air Corps. Surely, a vacancy in the Air Corps should be filled by the promotion of an Air Corps officer, and this would be accomplished if we had a separate promotion list.

This Air Corps bill recognizes the degree of hazards of this particular branch of the service, and by its retirement features it would reward long-time flying service by earlier retirement than provided for under existing laws. This retirement feature is important because it would keep our Air Corps files filled with comparatively young, active fliers all the time, and that is what the greatest percent of our corps should be.

The bill also recognizes the justice of giving more rapid promotion during the early years of an officer's service and assures him of having rank commensurate with his command.

On the whole I am convinced that the provisions of this bill, as we have it before us today - and it is identical with the original Air Corps bill which passed the House last session - will do much toward increasing efficiency in the Air Corps. I know from observation that something must be done without delay, and I feel confident that by giving our pilots this recognition which they deserve that we will keep the majority of them in the service.

In this trip which I took around the various camps I was surprised and amazed to find World War pilots still serving as first lieutenants, charged with responsibilities normally given to captains, majors, lieutenant-colonels and even colonels."

Following Mr. Furlow's remarks, there was some discussion on the bill with respect to its additional cost to the Government by Mr. Blanton.

Mr. McSwain, in commenting on the bill, stated:

"* * * I want to say that after going into this bill, although my good friend who is in opposition to the bill has yielded me this time, I am in favor of what is known as the Furlow bill, for the benefit of the Air Corps, and I will tell you why. I think I can convince my friends from Texas that it is just and right.

The majority of the flying personnel, the overwhelming majority of the

actual flying personnel of the Air Corps, are men who went in from civil life, not from the Regular Army, not from West Point, but went in from civil life during the war emergency and became pilots, like the gentleman from Minnesota (Mr. Furlow) and his brother, both of whom were aces in the air service at that time. They went in as civilian pilots.

When the Army was increased by 100 percent in 1920, these civilian fliers were invited to remain in the Army as commissioned officers, and they went in not knowing what place they would occupy on the promotion list. Many of them were up in years. They were, however, due to the arrangement of the promotion list by the War Department, put very low down on the promotion list, and some of them who were first lieutenants are today 42, 43, or 45 years old, and unless there is a special promotion list for the Air Corps, every time an Air Corps man goes up in the air and gets killed, his place on the promotion list will be taken by either an infantryman or an artilleryman or a cavalryman or a quartermaster officer.

There is just as much difference between the service of the ordinary Army officer on the ground and that of the Air Corps officer as there is between the Army and the Navy. We recognize it is a matter of justice and of fairness that there should be one promotion list for the Navy and another promotion list for the Army generally. Now, there is just as much difference between air and land as there is between land and water, and I submit there is more difference and there is more justice and reason that there should be one promotion list and, you might say, one code of service ethics for men who go into the air, actual fliers, as there is for those who go out to sea and another one for those who stay on the land. That is the inherent logic of the situation, gentlemen."

The Bill S. 3269 goes back to the Senate for action thereon in its amended form.

---oOo---

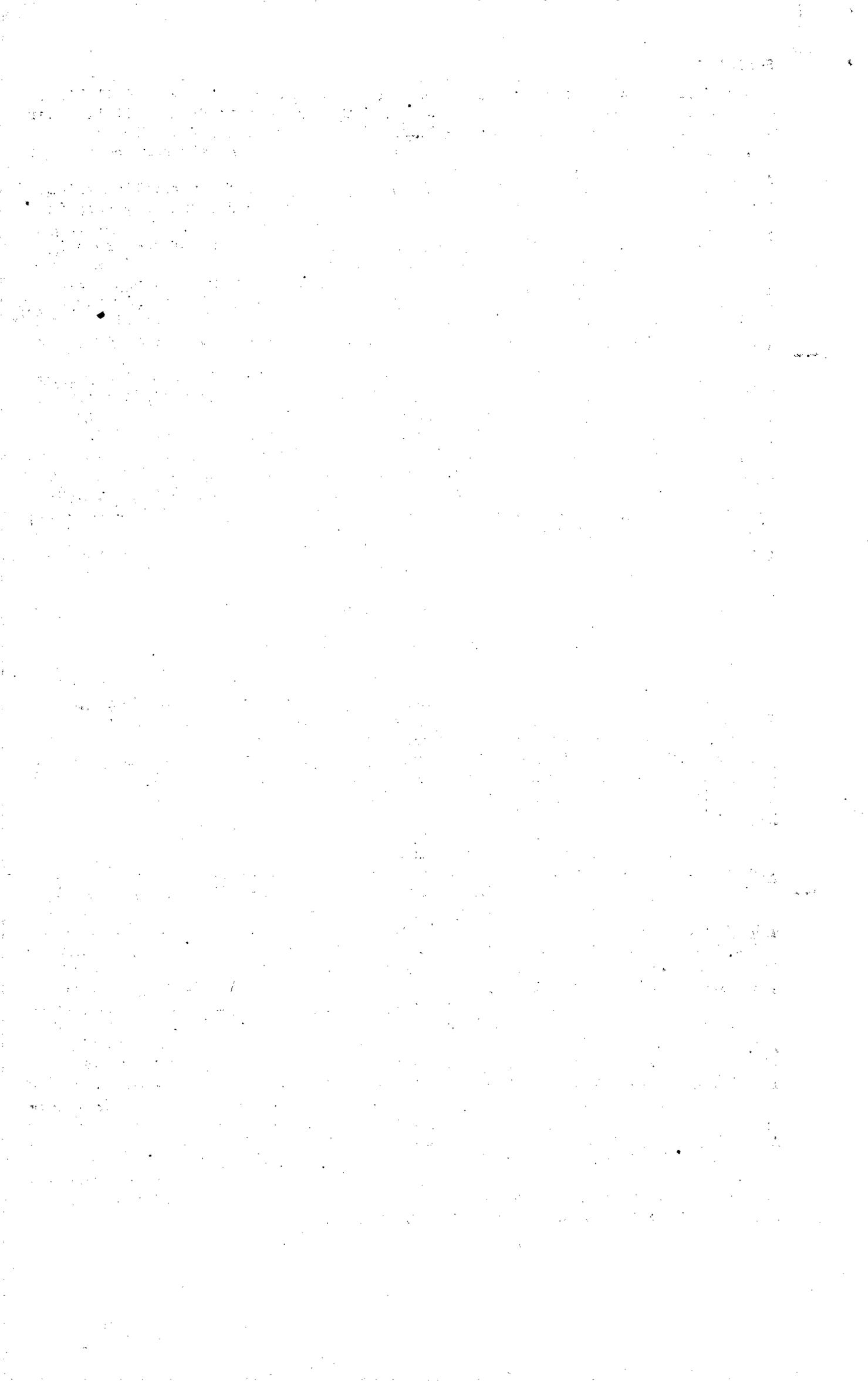
A WARNING TO AIR CORPS ACTIVITIES

Several days ago a man appeared on Bolling Field, wearing Army boots and breeches and a leather coat on which was sewed the insignia of the Royal Air Force. He presented his card with the casual remark that he was the famous Captain A. Roy Brown who received so much publicity through having brought down Captain Baron von Richthofen. Upon questioning him it was soon learned that he was an imposter and he was turned over to the local police. He did not attempt to obtain money from anyone while at Bolling Field but did ask that he be sent in an airplane to Mitchel Field.

The police could find no charge upon which to hold him. A newspaper clipping conveys the information that he had been working in Baltimore selling subscriptions to magazines. He was probably a soldier in either the American or Canadian Army, although he claims he is of Scotch descent, born in Ireland, but enlisted with the Princess Patricia Regiment in Canada at the beginning of the war in 1914. He claims he was born in 1898, which would have made him sixteen years old at date of enlistment. While at Bolling Field he told each officer that he met Jerry Brant of San Francisco who sent his best regards to the officer thru Captain Brown. He claimed to have been at Mitchel Field, and it is believed he intends to work the various aviation fields throughout the country.

According to the magazine "Our Army," the real Captain A. Roy Brown is at present in business in Toronto, Canada. While in New York the bogus Captain Brown was present at the Military Tournament at Madison Square Garden where he attempted to foist upon veterans a Legion of Valor whereby any man distinguished for bravery and noncommissioned could, upon the payment of a small monetary consideration, become a member of the Legion of Valor, and through a special Act of Congress, be retired with no less than the pay of a Captain.

The police were placed on his trail and, finding things a little too warm for him in the big city, he fled from his hotel, leaving behind him a suitcase, some clothing and a number of papers and lists bearing the names of Veterans' and Military organizations throughout the country.



LIST OF NEW MATERIAL ADDED TO INFORMATION DIVISION FILES
NOV. 23 to DEC. 8, 1928

DOCUMENTS

- A 00/82 Regulations for Civilian Employees at Air Ministry Establishments. No. 826 Ed. 3 Ed. 3, July, 1928. (Great Britain Air Ministry, Air Pub. #826, Ed. 3)
- A 00/82 Report on the Royal Air Force Promotion Examinations "B" and "C" #1350 Ed. 1 Held on 27th, 28th, 29th Feb. and 1st March, 1928. (Great Britain Air Ministry, Air Pub. #1350, 1st Ed.)
- A 00 England 1 No. 14 Notes for the Information of Candidates for Commissions in the Reserve of Air Force Officers, Great Britain, 1st Ed. (Great Britain Air Ministry, A.M. Pamphlet #14, 3d Ed., Aug. 1928)
- A 00 U.S./19 Command Post Exercises Prove a Successful Training Expedient. War Dept. Release, Nov. 27, 1928.
- A 00 U.S./28 Flying Cadets Class High in Educational Qualifications. In War Dept. Note, Dec. 4, 1928.
- A 00.5 Cuba 1 Air Traffic Regulation and Control (domestic regulations) Cuba. Nov. 15, 1928.
- A 00.51/19 Information concerning the International Juridical Committee of Aviation, International Conference on Aerial Private Laws, International Air Congress and International Commission for Air Navigation. From Dept. of State, Feb. 24, 1927.
- A 10/15 Chronology of Some of the Important 1928 Aeronautical Events. From "Aero Digest", Dec. 1928.
- A 10/192 No. 487 The Constructional Design of Metal Flying Boat Hulls, Pt. 1, Workshop Notes on the Building of Metal Hulls, Pt. 2, by M. Langley. (N.A.C.A. Technical Memo. #487, Nov. 1928)
- A 10/192 No. 488 Determination of the Air Forces and Moments Produced by the Ailerons of an Airplane, by C. Wieselsberger and T. Asano. (N.A.C.A. Tech. Memo. #488, Nov. 1928.)
- A 10/192 No. 489 On the Take-off of Heavily Loaded Airplanes, by Louis Breguet. (N.A.C.A. Tech. Memo. #489, Nov. 1928.)
- A 10/205 No. 118 Organization of Canadian Aeronautics Outlined. (In Bureau of Foreign & Domestic Commerce, No. 118, Nov. 23, 1928, pp. 5-6.)
- A 10 U.S./101 No. 40 Who's Who in World Records. (Domestic Air News, Dept. of Commerce, No. 40, Nov. 15, 1928, p. 5.)
- A 10.231/26 A Theoretical Estimate of the Pressure Gradient in a Wind Tunnel. by H. Glauert. (Great Britain Aero. Research Committee Report and Memo. #1159, April, 1928.)
- A 10.231/27 The Effect of the Static Pressure Gradient on the Drag of a Body Tested in a Wind Tunnel, by H. Glauert. (Great Britain Aero. Research Committee Report and Memo #1158, March 1928.)
- A 10.231/28 The Connection between Lift and Circulation for an Inclined Flat Plate, by A. Fage & F.C. Johansen. (Aero. Research Committee Report & Memo. #1139.)
- A 10.24/7 On the Flow of a Compressible Fluid Past an Obstacle, by H. Lamb. (Great Britain Aero. Research Com. Report & Memo #1156, Apr., 1928.)
- A 10.24/8 Note on the Forces Experienced by Ellipsoidal Bodies Placed Unsymmetrically in a Converging or Diverging Stream, by H. Lamb. (Great Britain Aero. Research Committee, Report & Memo. #1164, May, 1928.)
- A 40/49 Experiments in Absorption of Fog over a Landing Field. (Navy Dept. Bureau of Aeronautics, Serial #6385, Aug. 20, 1928.)
- B 01.5/28 Flying Puts Strains upon the Human Body. Flight Surgeon Reports on Effects and Remedies, by Col. L.M. Hathaway. (From N.Y. Times, Nov. 11, '28)
- C 20.3 U.S. 8 Strength of Regular Army Air Corps, U.S. Stencil U-891, A.C., Nov. 20, 1928. (Covers July 16, 1921 to June 30, 1928.)
- C 32.2/20 Detroit Air-Olympics Trophy Dinner, July 28, 1928, Detroit.)

Serial No. 276.

DOCUMENTS (Cont.)

C 51.1 Germany German Commercial Aviators' School, Inc. 1928 (From M.I.D.)

1

C 71.6 U.S. Six Months of Flying for Business; a Practical Test of the Airplane
43 As a Tool of Business. (From the Magazine of Business, 1928)

D 10.17/2 The Behaviour of a Single Crystal of Iron Subjected to Alternating Torsional Stresses, by H. Gough. (Great Britain Aero. Research Committee Report & Memo #1148, Oct. 1927.)

D 10.17/3 Report on the Drop of Stress at Yield in Armco Iron, by A. Robertson and A. J. Newport. (Great Britain Aero. Research Committee Report & Memo. #1161, Nov. 1927.)

D 11.1/101 Plywood New Jersey Veneer Company. (Navy Dept. Bureau of Aeronautics Serial #R-9205, Nov. 24, 1928.)

D 11.2/3 Test of Valve Lubricating Oils. (Navy Dept. Bureau of Aeronautics, AEL-227, Nov. 10, 1928.)

D 11.321/5 Six Quarts of Air, by Bradley Jones. (From U.S. Air Services, Dec., 1928.)

D 13.1/22 Air Service Catalog, Aeronautical Instruments, Class. 05-A, Ed. 2, Nov., 1928.

D 52.1/431/85 The Gloster "Goldfinch" (British) Single-seater Fighter. (N.A.C.A. Aircraft Circular #85.)

D 52.1/431/86 Bleriot Combat Monoplane 127 (French) (N.A.C.A. Aircraft Circular 86, Nov., 1928.)

D 52.1/Boeing Boeing Fighter XF4B-1 (land type). (Navy Dept. Bureau of Aeronautics, 19 NASA-37, Oct. 15, 1928.)

D 52.16/27 The Safety of Aircraft-A Statement of Design Principles as They Relate to Operating Limitations. (Navy Dept. Bureau of Aeronautics Tech. Note #193.)

D 52.41/190 Evaporative Cooling; A Report of Tests Which Were Made to Compare the Performance of an Automobile Engine with Water and Evaporative Cooling Systems, by A. H. Marshall. Also "British Govt. Adopts Steam Cooling for the Diesel Engines to Be Used on R-101, the Largest Dirigible ever Built."

D 52.43/3 Experiments with the Family of Airscrews in Free Air at Zero Advance by H. C. H. Townend, W. S. Walker and J. H. Warsap. (Great Britain Aero. Research Committee Report & Memo. #1153, Apr., 1928.)

D 52.43/4 Tests of a Metal Airscrew in a Closed Tunnel for Comparison with American Tests in an Open Jet Tunnel, by H. C. H. Townend, and J. H. Warsap. (Great Britain Aero. Research Committee, Report & Memo #1137, Dec., 1927.)

D 52.5/1 Test of F-3-B Landing Gear under Catapult Conditions before First Catapulting of Landplane. (Navy Dept. Bureau of Aeronautics, Serial #80031.)

D 52.6/0.2U Fuselage, Model O2U-1 Airplane No. A7585. (Navy Dept. Bureau of Aeronautics. Serial No. #9095, Nov. 17, 1928.)

1

D 52.7/10 Airships, Story of the Development of Lighter-than-Air Craft, and Facts about Big Airships of the Present Day, by Ruth T. Robertson. 1928.

E 10.2/26 Pan-American Airways; International Mail and Passenger Routes. (Map from "Airway Age", Nov., 1928.)

E 10.2/U.S. Maddux Air Lines Passenger Tariff and Schedule, Nov. 15, 1928. (Folder)
22

BOOKS

353.6/Un3a Annual Report of the Secretary of War, 1928. U.S. War Dept.
1928.

353.662/Un3 Annual Report, 1928. U.S. Bureau of Insular Affairs.
1928

Serial No. 276.

BOOKS(Cont.)

- 353.663/Un3 Annual Report, 1928. U.S. Militia Bureau
1928
- 353.68/Un3 Annual Report, 1928. U.S. Surgeon-General's Office
1928
- 353.8/Un3 Annual Report, 1928; U.S. Bureau of Lighthouses.
1928
- 506/Sm6a Annual Report of the Board of Regents, Smithsonian Institution
1927
- 526.91/G79 Report on the Experimental Revision of the 1/2500 Ordnance Survey
Plans. Great Britain Ordnance Survey Office.
- 551.5/H78w Weather Observations and Aids to Forecasting. Horner, D.W.
- 629.13/Ab2r The Relations between the Smithsonian Institution and the Wright
Brothers. Abbot, C.G.
- 629.13/G79ap Jaguar Series IIIA Aero Engine. Ed.3, 1928. Great Britain Air
No.1082/Ed.3 Ministry.
- 629.13/Sp11 Air Power and Policy. (Criticism of "Air Power and War Rights", by
J.M.Spaight, from The Edinburg Review, Oct.1925.) Sykes, F.H.
- 629.1302/Un3 Rigid Airship Manual. 1927. U.S. Bureau of Aeronautics.
- 629.143/B57 The Exploration of the Upper Air by Means of Kites and Balloons.
Blair, W.R.
- 629.145/G79L Aircraft Log-book, 1928. Great Britain Air Ministry. Office of Con-
troller General of Civil Aviation.

