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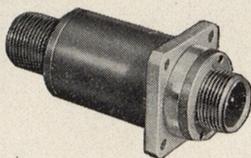


BENDIX-SCINTILLA* ignition equipment played a vital part in the non-stop global flight of the B-50.

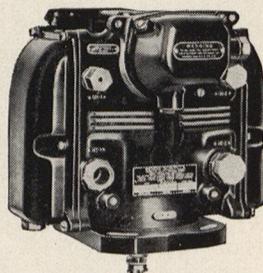
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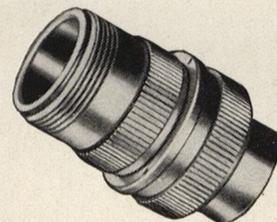
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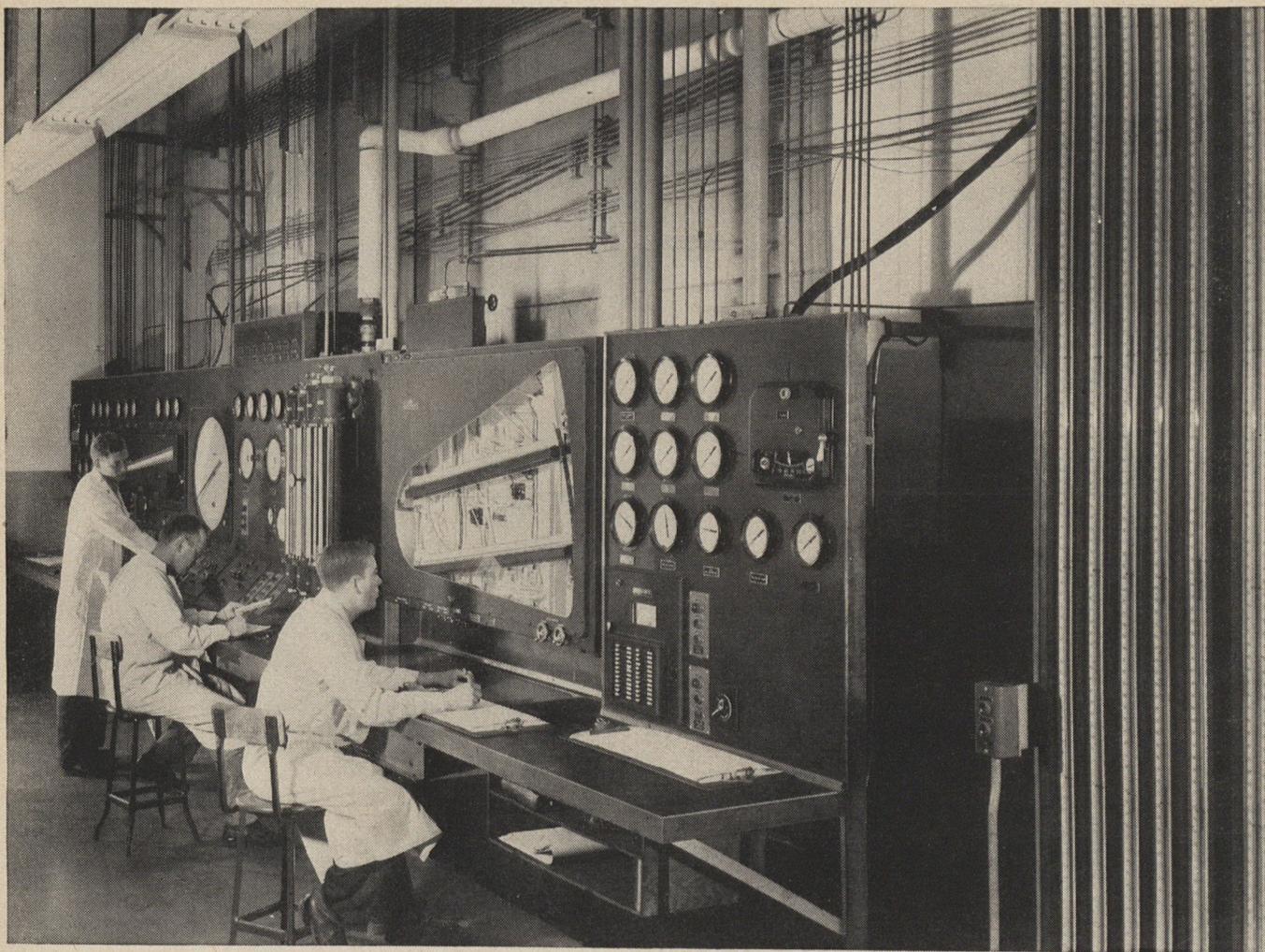
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215 readings can be taken on this...one of several control panels in Wright Turbine Development Laboratory.

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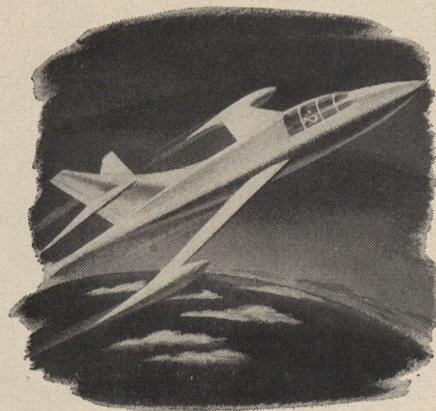
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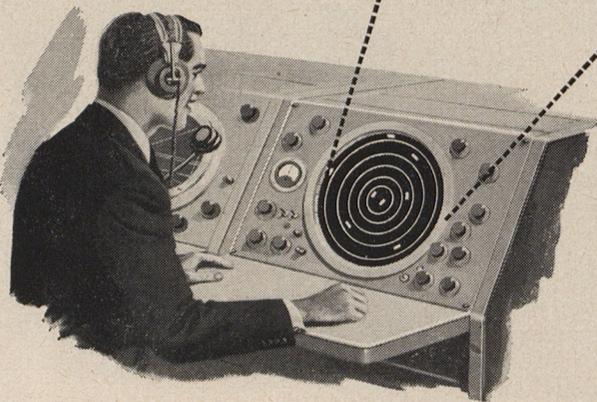
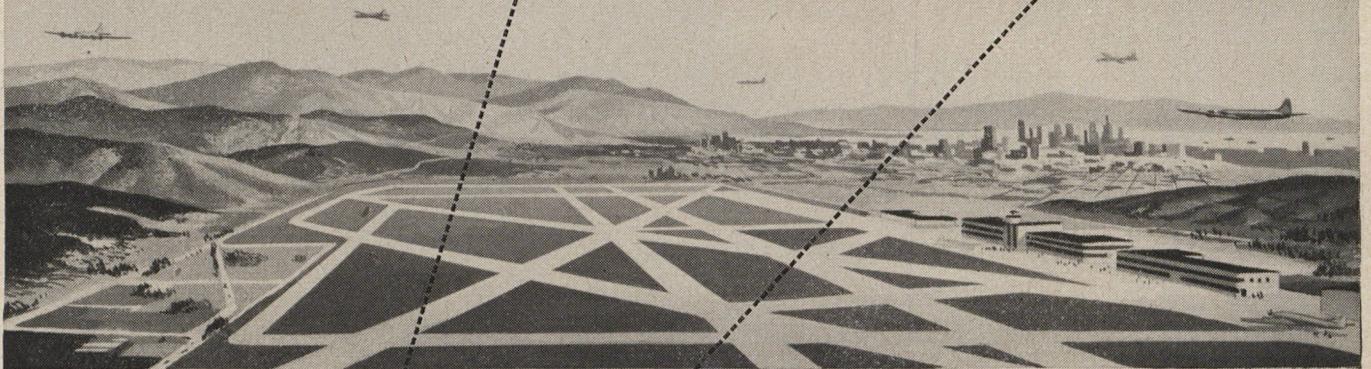
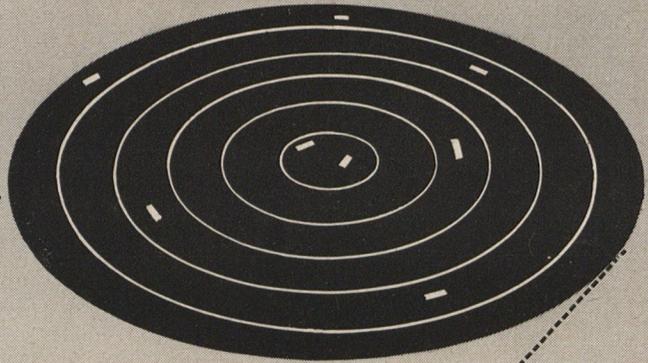
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AIR FORCE

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SHOOTING

For Whom the Axe Falls

At the Pentagon last month someone quipped that A-Day had arrived. Axe Day, he explained.

It was inevitable that the axe would fall in the defense establishment. Deadwood was thick, and Defense Secretary Johnson had his "mandate".

People wanted a heavy hand in the defense shop. End the "bickering," they said. Do some chopping. Knock some heads together. Editors, Congressmen, civic leaders were in accord. But no sooner had the chopping and knocking begun than wails and moans could be heard. Dictatorship. Defiance of Congress. From some of the same people who had demanded action. But perhaps that was inevitable too.

The Cease Firing Order

A great Washington guessing game had ended. It had to do with how Mr. Johnson would approach the unification problem. First tip-off was the manner in which the new Secretary pushed consolidation of service public relations agencies. He pushed hard. It's too early to tell how it will work out. At this writing no one involved at the Pentagon will sit still long enough to venture a guess. They are too busy moving offices into a more consolidated position.

Maybe, when the jigsaw puzzle is worked out, super-coordination will throw routine news-gathering for a loss. Maybe the security clamp will drive us dizzy. No one knows. But chances are it's a forward step on the road to unification. Surely it's worth a good honest try.

One thing seems sure: that Mr. Johnson feels effective public relations holds the answer to a lot of defense problems.

The New Under-Secretary

If this public relations point wasn't clearly understood, the appointment of Stephen T. Early as Under-Secretary of Defense, or "general manager" of the outfit, would have surprised us.



Steve Early isn't a military man, or particularly experienced in defense matters. But no one is more familiar with the intricate workings of government, or has more "savvy" on how to get things done in red-taped Washington than this veteran White House

Robert L. Coffey, Jr.

AFA mourns the loss of Rep. Robert L. Coffey, Jr., 30-year-old legislator from Johnstown, Pa., who was killed April 20 when the F-80 he was flying crashed on takeoff at Albuquerque, N. M. An Air Force veteran of 97 fighter-bomber missions over Europe and a colonel in the Air Reserve, he was an Active Member and ardent supporter of AFA. Since his election to Congress last November he had spoken openly and brilliantly in support of adequate airpower appropriations (see page 21). AFA extends its sympathy to his wife and family.

secretary of the Roosevelt era. Perhaps that savvy is just what is needed to kick through the cob-webs and dust off the mothballs in the defense setup.

Even so, the chances are that Steve Early can make his greatest contribution to the rejuvenated organization through his intimate knowledge of the working press and the whole broad field of public relations.

Air Force Day

A third move in the field of public relations came when Secretary Johnson put an end to individual service day celebrations in favor of one coordinated Armed Forces Day each year.

THE BREEZE

When the axe fell on Air Force Day it fell—let's face it—on AFA. As official sponsor of the event these last two years, the Association made Air Force Day one of its top projects.

We got used to the idea that Air Force Day was a big celebration whether it meant a few guys lifting beers in a back room toast, or bringing out a crowd of 100,000 to see an air show. Hundreds of AFA men have dug deep into their pockets and have worked long hours without reward to put Air Force Day programs across.

This year the Air Force Association again was commended by the Air Force Chief of Staff for this effort and invited to act as official sponsor of the 1949 observance. The celebration machinery was in order when Secretary Johnson's announcement was received.

President C. R. Smith immediately wrote the Secretary, explaining: "We shall miss Air Force Day, for it provided the occasion to call attention to the continuing need for national airpower. On the other hand, if you are going to have unification, there must be a start, and this is a good place to start."

Celebration and Unification

Fond as we were of Air Force Day, and all that goes with it, we have always found something lacking. AFA's Statement of Policy, adopted by unanimous vote at the convention last September, makes this reference to Air Force Day, and this distinction between that celebration and Unification:

"Only a week ago we officially sponsored commemoration of the first anniversary of the US Air Force as an autonomous unit under the National Security Act of 1947, which became public law on September 18 of last year. We did so in the belief that it was a step forward for the Air Force, and therefore justified the celebration, but we could not honestly observe the day as a tribute to unification. In the light of actual performance under the National Security Act there can be no such tribute."

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Super-carrier United States

So far the defense axe had chopped only around the edges of the Unification woodpile. Then Secretary Johnson struck a solid blow. With a resounding whack he brought construction of the Navy's 65,000 ton Super-Carrier United States to a halt.

AFA has long advocated abandonment of the super-carrier program. As long ago as April of 1948, we spoke out against "the vulnerability of super-carriers to submarines and land-based aircraft, their long production time in relation to our defense needs, their high cost in manpower, money and natural resources, their inability to function in certain key areas of the world, their dubious effectiveness and recuperative ability under combat conditions."

AFA's current Statement of Policy further explains: "We believe this so-called super-carrier program is keel deep in waste and is a deliberate effort to duplicate unnecessarily a proved and experienced land-based air organization."

Rep. Clarence Cannon (D-Mo.), chairman of the House Appropriations Committee, has commented that abandonment of the super-carrier project marks the end of "a proposed change in Navy policy which would have taken the Navy into the long-range heavy bombing field."

Straight Down the Middle

In welcoming Mr. Johnson to the top defense job it may be well to restate a few pertinent points AFA has adopted as a matter of official policy.

We fought hard for Unification but we "deplored the compromises necessary to effect passage of the Act of 1947 as failing to recognize the relative importance of the proper use of airpower in our military structure."

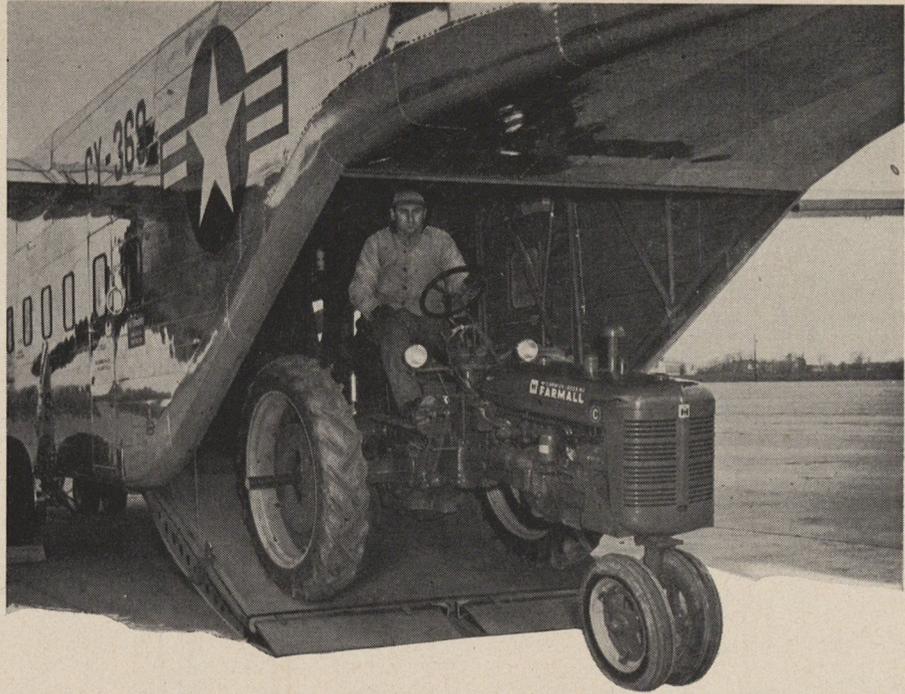
Last fall, after looking at Unification for a year, we concluded that "the measure of economy and efficiency to which the people are entitled can be accomplished only by reorganization of the military establishment in terms of three broad divisions of military effort delineated by medium of movement—land, sea and air."

Believing it obvious that the Navy "is engaged in a definite and concerted effort to project a second full-fledged air force on the national economy," and that the national welfare and national security would suffer as a result, we have urged particularly "one air force for the nation."

We have never contemplated that this type of Unification can be effected over night, though we do not feel it should necessitate an unnaturally long delay.

Mr. Johnson indicates that he is a follower of the sooner-than-later school, and we find encouragement in this. To achieve true Unification, his axe must fall straight down the middle. J. H. S.

JULY 1-2-3



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AIR MAIL



No More KP

Gentlemen: Last October I encouraged two young 18-year old fellows to enlist for the one year enlistment then being offered. They completed their basic training and were well satisfied. After a 10-day furlough they were shipped to Chanute Field. Upon arrival they were assigned to a "Food Service" which is simply KP with another name. They were told that this would be their job for the next SIX MONTHS because this was SOP for all new arrivals at the field. Naturally they were let down and discouraged. If



either one had realized that he would pull KP for six months, he surely would not have enlisted. I should like to see the Air Force Association step out and call this matter to the attention of the proper authorities.

Lester S. Gross, Jr.
Wilkes-Barre, Pa.

• Largely as a result of AFA efforts, the following message was sent to commanding officers Headquarters Air Force: "... protests are being received reference the utilization of 18-year old, one-year enlistees. The general contention is that they are being utilized in menial positions not in keeping with the intent of the Selective Service Act of 1948 which contemplates a year of balanced military training preparatory to long term service in the reserve forces. It is imperative that these short term enlistees be utilized in such a manner as to prevent a deterioration of personal relations and to insure future value in the reserve forces." ED.

New Record

Gentlemen: In one of your issues several months ago was an article from a maintenance officer assigned to a troop carrier squadron on the Berlin airlift wherein he states that the record number of hours ever flown on a C-47 was 286. This squadron has gone him one better in that during the month of March 1949 our C-47 No. 45-943 flew in support of "Operation Vittles" here in the states 310 hours and 30 minutes. We believe that this is an all time record for this type of aircraft and we

attribute this accomplishment to the Hill AFB and Transient Aircraft Maintenance Section headed by Capt. William S. Chandler and M-Sgt. Kermit Dunning.

Capt. Joe Walker
Hill Field, Utah

National Guard

Gentlemen: Concerning John C. A. Watkins' article in AIR FORCE Magazine, "Why I Resigned from the National Guard": Mr. Watkins tried to run the Guard squadron as an Air Force Unit, but, unfortunately, there are those individuals who like to play politics to safeguard their positions. Fortunately, Mr. Watkins has high principles and does not degrade himself by playing cheap politics. His statements are true, and his intent to organize the Rhode Island National Guard was in vain. In this state, politics comes first.

Charles G. Bailey, Jr.
Cranston, R. I.

Gentlemen: Rhode Island's Air Guard situation is not the least typical of our alleged "48 Little Air Forces." My heart bleeds for John C. A. Watkins who couldn't play ball with the big boys, and poor little Rhode Island. All issues of AIR FORCE Magazine since December 1946 are on file in my office. I enjoy reading AIR FORCE. It has a place in informing the many active and inactive reservists as to what is going on in military aviation. Are you presenting both sides of the Air National Guard question? Any magazine should have enough internal fortitude to stand criticism of its policies. Why not give the Air Guardsmen a better chance to speak for themselves?

Nate Eastman
Kimball, Neb.

• We suggest reader Eastman check his big AIR FORCE file for the February 1949 and March 1949 issues. The first carries "A US National Guard," by John E. Walsh, Idaho's Adjutant General and the second, "Don't Drop Your Guard," by six Air Guard leaders. And then he should read the article on page 40 by Lt. Col. R. L. Gould, Air Guard Senior Air Officer for Maryland. All these articles give Air Guardsmen "a chance to speak for themselves." ED.

Dissenting Opinion

Gentlemen: I just saw "Command Decision" and I sincerely believe that it should never have been released. Mr. Haines did an excellent job in writing "Command Decision", but Hollywood, as is the general rule, did an excellent

job of lousing it up. Why can't Hollywood depict the Air Force as it really is? Every picture I have ever seen about the Air Force has depicted the men in it as a bunch of glamour boys. The cast, to put it in plain English, was lousy. The only actor who played his part convincingly was Charles Bickford, who took the role of the reporter—roses to him, thorns to the rest of the lead players.

Edward F. Egan
Chicago, Ill.



• Although it's true Hollywood is famous for over-glamorizing, many people, including the editors, don't agree with you on this particular picture. ED.

EM News

Gentlemen: Your AIR FORCE Magazine is the finest and definitely improving with age. "In Reserve" department is good, but to read it one would think only officers are in the reserve. You never print much poop from us enlisted guys.

Ron L. Caldwell
Lewiston, Idaho

• When the Air Force clarifies its reserve program with respect to enlisted men and there is news to print, you'll certainly read about it in AIR FORCE. ED.

Scoop

Gentlemen: In all the thousands of words on Air Force global strategy via the B-36 issued by AP, UP, INS and Washington correspondents in the last several weeks, I've read no hint that the story was first broken as "Exposing the Milk Wagon Myth" in the March issue of AIR FORCE. As journalistic ethics this stinks. Congratulations on an unrecognized scoop of major proportions.

Orin Casamore
San Francisco, Calif.

More Guidance

Gentlemen: I think that the Air Force Association should offer more guidance and suggestions as to how individual
(Continued on page 9)



Young man's world

These four men caused a minor business revolution 20 years ago by new field-selling techniques in a nationwide business.

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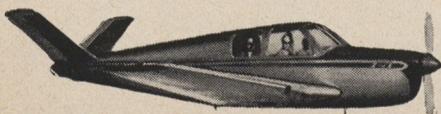
time, adequate field work was once again possible. With new and complete mobility of action, management really started managing again.

Now their business is bigger than it ever was before, and there's even more time for rest and relaxation. They're youngsters again in a young man's world—and this is something the most fabulous salary could not purchase for them.

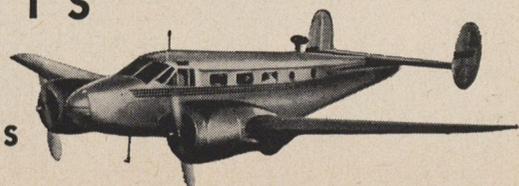
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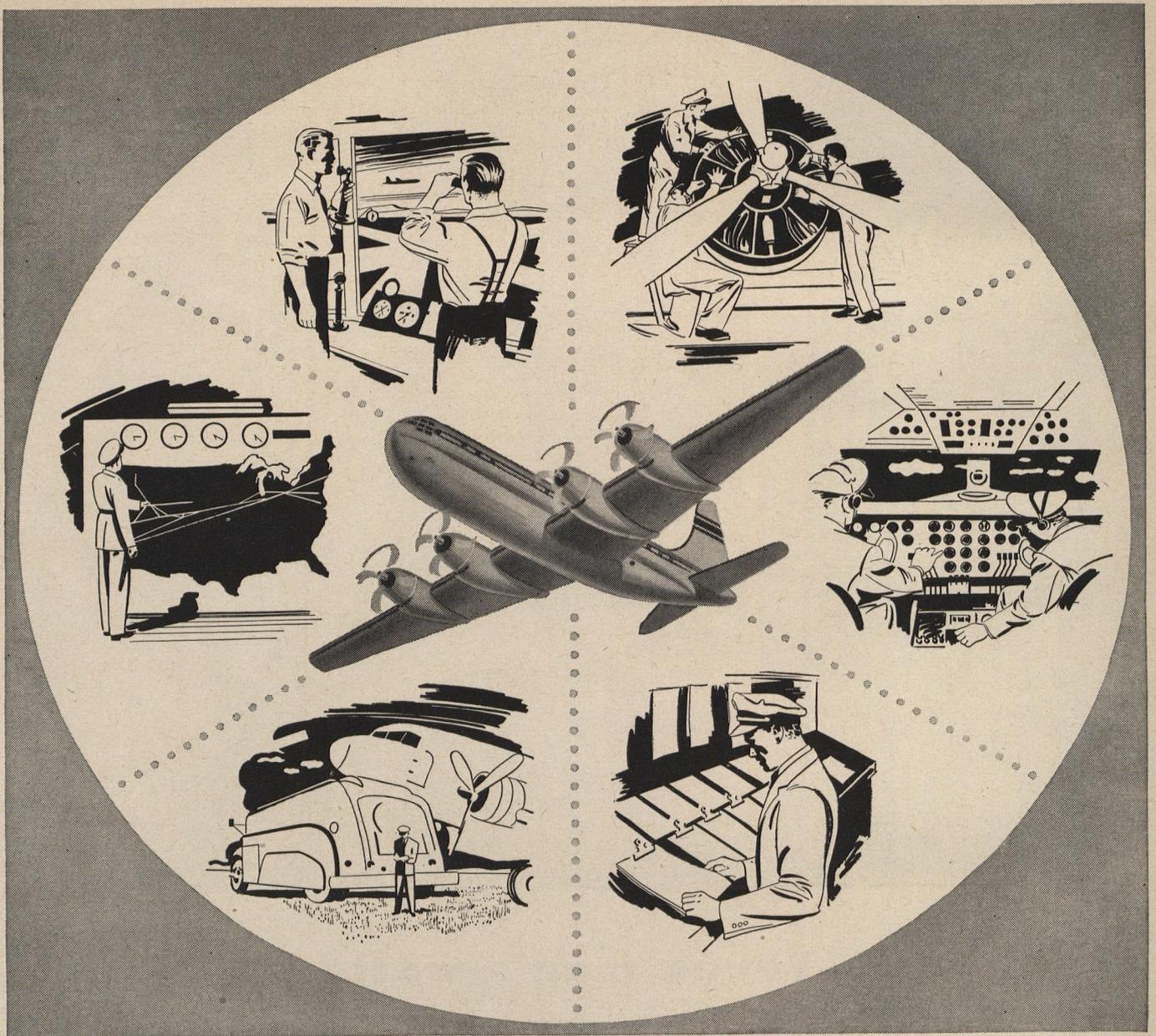
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AIR MAIL

(Continued from page 6)

members and groups can build public sentiment for a second-to-none Air Force and further the cause of airpower in general. I believe every clear-thinking veteran of the AAF and also a large number of other intelligent citizens would do a great deal more in this line if they were reminded of it more vigorously and if some suggestions were offered as to the best method of accomplishment. If such articles as "Exploding the Milk Wagon Myth" and "Kodak in Kodiak" could be brought to more widespread public attention, for instance, the effect might be surprising. Most of us hesitate to write Congressmen about bills and appropriations we would like to see passed just because we don't know enough about them and how to express our desires in the most effective way. The Association's staff has done a Herculean job in the past few years and they have done it unbelievably well. I don't know how it was accomplished, but the men of the AAF and those of our present Air Force are noted for their ability to accomplish the seemingly impossible. Well, the hardest work of organizing and building is over and I think it is about time we members at large started carrying part of the load. If one doesn't feel (as he should) that he owes an unpaid debt to men like Mitchell, Andrews, Arnold, Spaatz, Doolittle and others who have given everything to the cause of airpower, then, at least, he owes it to himself, his family and his country to see that the U. S. is without peer in the air and in technical and scientific know-how and development. Who cares how big the cost for the Air Force and atomic research are?

William R. B. Blakemore, 2nd
Midland, Texas

Photographic Proof

Gentlemen: In your March issue Harry A. Stokes states that he served in the 13th Air Force in the Philippines. He



states that he *knows* that conditions under which the GIs are living are bad. He should have said *were* bad. I am enclosing a picture of a GI dependent housing unit of which there are several hundred at Clark AFB. The GI barracks are of similar design and there are enough of them for everyone.

Lt. Lester M. Anenson
Kansas City, Mo.

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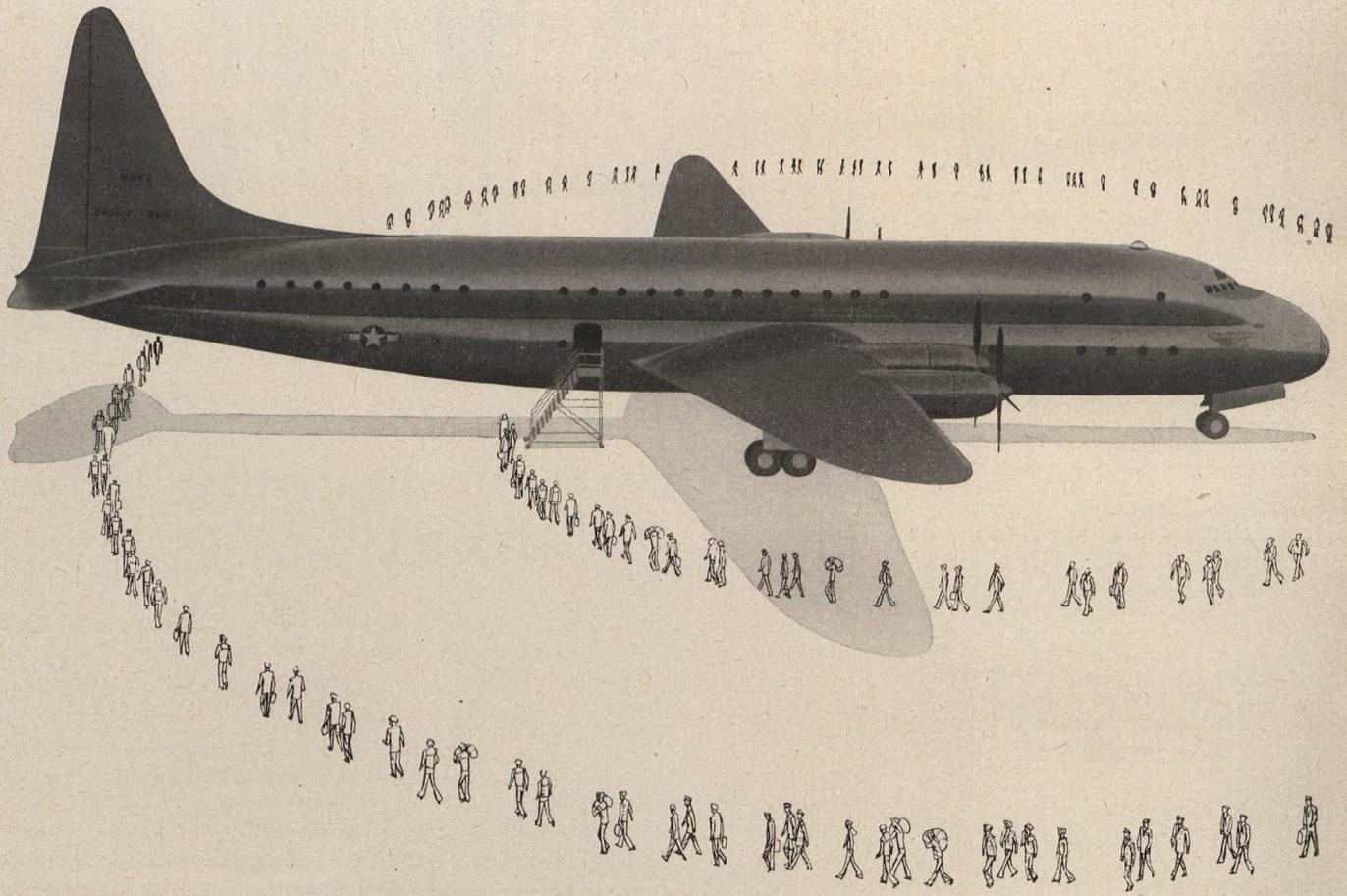
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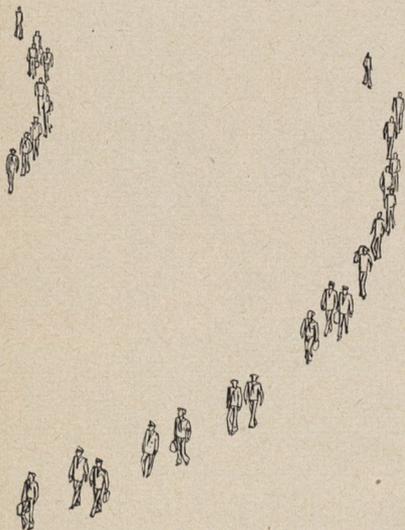
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The Constitution, which will carry 180 passengers, is currently on an exhibition tour of the principal cities of the United States.



RENDEZVOUS

Where the Gang gets together

ATTENTION 305th BOMB GRP: A history of the 305th Bombardment Group from its activation to the end of 1945 is being considered for publication. The company which will publish the book requires certain information concerning former members of the organization as they will not publish the book until they have enough orders on hand to defray printing costs. Please send your name and present address, inclusive dates of assignment to the 305th Bomb Grp, and other remarks such as job assignment, grade, to: *Col. Joseph J. Preston, Armed Forces Staff College, Norfolk 11, Va.*

TOP KICK: Will anyone knowing the whereabouts of 1st. Sgt. Anthony T. Sackoniski formerly of 45th Service Sqdn. please contact the undersigned. *M/Sgt. David J. Nelson, Air ROTC, Colgate University, Hamilton, N. Y.*

449th PHOTOS: Would appreciate receiving photographs, or negatives on loan, of the 449th Bomb Group at Grottaglie, Italy and Bruning, Neb. All my photos were lost after I was shot down. I would also like any pictures taken by ex-POWs in Bucharest, Rumania after we were liberated from Lagurel #13 on August 23, 1944. All I can offer in return is my thanks. *John S. Galati, 73 East End Avenue, N.Y. 28, N.Y.*

MORE PIX: I am compiling an album of 440th TC activities stateside and overseas. Any air or ground pictures, or negatives, would be greatly appreciated. *J. McNeal Wheatley, Greenwood Inn, Evanston, Ill.*

ATC MEN IN AFRIQUE DU NORD: I would be glad to hear from the following officers who were in the North African Division of ATC. *George W. Gilmer, Ray Pendergast, Charles Labouchere, Bob*

Halloran, John Kohlmeyer, James Garbey, James DeLury and any other of my friends who would like to exchange greetings. Capt. Robert B. Scott, 23027 Normandy Avenue, East Detroit, Mich.

FLYING CIRCUS: Would like to contact any and all ex-members of "Billie Rose" Hozapples Flying Circus, the 319th Bomb Group, 12th Air Force including Capt. T. O. Edwards, Capt. "Horse" Graham, Capt. "Livvy" Livingston, Lt. Col. John Orb, Capt. Jack Bonnell. *Lt. "Mouse" Curry, 115 East 7th St., Monroe, Mich.*

MIA: Can anyone give me information on what happened to T-Sgt. James B. McCord, last known to be with the 19th Bomb Group on Guam. I understand his B-29 was rammed by a Jap fighter. Can anyone confirm this and give further details? *K. L. Christensen, 251 Miriam Street, Daly City 25, Calif.*

PICTORIAL HISTORY: I have been told by the publisher that no more copies of the Pictorial History of the 388th Bomb Group are available and that they do not expect to reprint it. As a former POW, I am very anxious to get a copy of said book to find out what my outfit was doing while I was a prisoner. Can anybody help? *Charles Deutsch, 401 East 83rd St., N.Y. 28, N.Y.*

CHUMS: Desire to contact any and all of my old friends stationed in England. My stations were: Polbrook (110) Hq. 8th AF; Edmunds (595). *Capt. James C. Stanley, Sqdn. E 20th Airdrome Grp, Shaw AFB, S. C.*

PHOTO G WANTS PHOTOS: It's sad when an ex-photo pilot has to write for pix, but would welcome shots of Tunis, La Marsa, Naples, San

Severo, Fallonica and especially Algiers, Capri and Rome. Carl R. Mills, 111 South 8th St., Columbia, Mo.

KIA: I am trying to locate a picture of an old friend who was killed in an accident at Wright Field in May 1945. His name was Capt. William C. Glasgow of Niagara Falls, N. Y. *Sam L. Stewart, 340 Prescott St., Yonkers, N. Y.*

REUNION: If you served in one of the 3rd Air Force finance offices during the war, write the undersigned for information on the Tampa Convention, June 18-20, 1949. *Albert U. Mixon, 648 Princeton Ave., Birmingham, Ala.*

6th PHOTO RECON: I am looking for Major David Miller and Capt. Oscar L. Watson formerly of the 6th Photo Recon Group. *Jack V. Strickland, 15 South Genesee Ave., Pontiac, Mich.*

LOST MY BUDDIES: Trying to locate Andy Ronnko and Arthur Mark, friends of mine who served with me in the 340th Bomb Group, 12th Air Force, Italy and Corsica. *T. E. Jagers, Kinland Apts. No. 6, Flagstaff, Ariz.*

KIA: I am particularly anxious to secure any information whatsoever concerning events connected with the death of Major J. C. Walker, Flight Surgeon for the 91st Bomb Group, 8th Air Force at Basingborne, England early in 1945. *H. B. Churchwell, 799 Crockett St., Memphis, Tenn.*

'T WAS ON THE ISLE OF CAPRI: Former member permanent party, Isle of Capri would like to borrow 8mm movies of scenes on the Isle, Naples or Sorrento to have copies made. Safe return and Registered Mail (Continued on page 13)



Peace patrol

This formation of Boeing B-50 Superfortress bombers, cruising through the spring sunlight on a mission of peaceful purpose, is a small but important part of America's new and growing air team.

The B-50, successor to the world-famed Boeing B-29, has emerged as the standard, long-range bomber of the U. S. Air Force. Teamed with the new, double-deck Boeing C-97

military transport, it is playing a key role in this nation's program to keep the peace through Air Power.

Most versatile of all big bombers, the B-50 has a top speed of close to 400 miles an hour—and cruises 50 miles an hour faster than any other bomber of equal range. It was developed in close co-operation with the Air Force to strengthen this nation's security.

Now coming off Boeing production lines, these 14,000-horsepower Superfortresses incorporate many combat-proved design features and engineering advances that are found in no other military plane.

Air power "in being" is America's surest guarantee against aggression for years to come. The B-50's and the men who fly them form the nucleus from which this power will develop.

Boeing, designer and builder of the B-17 and B-29, is also building for the Air Force the new XB-47 Stratojet and C-97 Stratofreighter; for the Army the L-15 Scout liaison plane; and for leading airlines the luxurious double-deck Stratocruiser.



BOEING

RENDEZVOUS CONTINUED FROM PAGE 11

postage guaranteed. This is for a Fall reunion and I'd also like to hear from any former members of the Capri gang. *Joseph W. Schwartz, 118 Columbia St., N.Y. 2, N.Y.*

WHERE'S THAT REB! Can anyone help me find 1st Sgt. Harold Bowerfiend of Headquarters Sqdn. 3rd Attack Group. The last time we met was on the Island of Mindoro in the Philippines. I know he's a rebel, but I'm not sure of what part of Dixie he comes from. *John J. Kochera, P.O. Box 273, Terrace, Pa.*

REUNION: 51st Troop Carrier Wing Reunion to be held in Pittsburgh, Roosevelt Hotel July 29-30-31. All groups or units formerly attached to the Wing are also invited. For reservations write *Joseph Krotec, 40 Maplewood St., Etna, Pa.*

CBI PIX: Specially interested in shots of Combat Cargo, Troop Carrier and ACC in action. Also want photos of the Hump run, natives and the route from West Palm Beach to Karachi, India. *George H. Saylor, Box 306, Harlan, Ky.*

14th REUNION: The New York Chapter of the 14th Air Force Association will hold its spring reunion dinner at Chin Lee Restaurant, Broadway and 49th Sts., New York, Friday, May 20, 8:30 P.M. All ex-members of AVG, China Air Task Force, 14th A.F. invited with guests. Tickets at door for three bucks. For further dope write *Milton Miller, 270 First Ave., N.Y.C.*

CADET WANTED: I'm looking for ex-Lt. John J. Hyrb who was one of my cadets at Gardner Field, Taft, Calif. I think he was from New Jersey. Would also like to hear from any other of my former cadets. *David H. Barlow, 18 Summit St., East Orange, N. J.*

HEY PAISAN: Would like to get in touch with some of my friends who were in the 46th Air Service Squadron in Italy. They busted up the outfit in 1945 and I haven't seen my friends since then. *Carl L. Wise, 1670 Lakewood Ave., S. E., Atlanta, Ga.*

WHERE'S EMIL? Trying to locate my old line chief

in the 45th Recon. Night Photo Group at Furth, Germany. His name is M-Sgt. Emil L. Wiegand and when I last heard he was at the Roswell Air Base in New Mexico. *Glen E. Sharp, R. R. 3, Olathe, Kansas.*

SHOT DOWN TOGETHER: Would like to hear from Bill Buell of San Jose, California. We were shot down at Eleusis, Greece on December 20, 1944 while serving with the 20th Sq. 2nd Gp, 15th Air Force. *Harlow L. Nowell, Cross St., Medfield, Mass.*

HEY JUNIOR: Would like to contact Vernon (Junior) Carawan formerly of 320th Service Squadron, 304th Service Group, 9th Air Force. Parents may be living in Newport News, Va. Would also like to hear from other members of this outfit. *Milton Kuehl, Rt. 1, Carleton, Mich.*

451st BOMB GROUP: Can anyone help me get pictures of the 451st Bomb Group stationed between Foggia and Cerignola near Casteluccia in Italy? I'd also like photos of the 727th Bomb Sqdn. *Robert L. Henbest, 312 Water St., Elmira, N. Y.*

A LOST COIN: While stationed at Pecos AAB, Texas, as an instructor, I led a flight of students on a night cross-county to English Field, Amarillo, Texas, in February 1945. During our brief stop there I lost an English coin in the pilots lounge at Operations. The coin commemorated the 25th anniversary of the reign of King George V. It was about the size of a fifty cent piece. On one side was the profile of the King and on the other Windsor Castle. The coin is of great sentimental value and I sure would like to get it back. *George W. Hargraves, 206 Kane Building, Pocatello, Idaho.*

HEY SPUD: I am trying to locate an old buddy, Lindell "Spud" Allen. Haven't seen him since we were together at Boca Ratan, Fla. in 1947. Anyone knowing Spud's whereabouts please let me know. *Mike Kutsuris, P.O. Box 100, Capay, Calif.*

KIA: I am interested in getting information about the February 1945

bombing missions of the 486th Bomb Group and the 832nd Sqdn. A friend of mine, Lt. Norman Joe Renfro was killed in action on February 6, 1945 and I am trying to locate the details of this mission. All letters from flying personnel who were operational at that time will be appreciated and answered. *Edwin H. Nicholls, 1136 Ogden St., Denver 3, Colorado.*

WHERE'S PLATT: Must locate M-Sgt. Raymond E. Platt pre-war photographer with 119th Observation Sqdn. New Jersey National Guard, Newark Airport, N. J. When last heard from he was with Photo Charting Group MORATI. *Ben H. Haines, 88 Western Avenue, Morristown, N. J.*

94TH BOMB GP., 8TH AIR FORCE: Information is desired as to how many former members would be interested in obtaining a group history, if one can be gathered together and published. Also, the material that Ed Leonard gathered together for this purpose, but which disappeared, is sorely needed if we are to succeed. Anyone know anything about said material? A history is possible, but cooperation is needed. *Dr. Gordon A. Summers, 911 N. Kansas Ave., Topeka, Kan.*

ROSTER BUSINESS: Roster of personnel of the 449th Bomb Gp. (H) is being compiled for a history of the group. Former members please send name and address to: *Damon A. Turner, 212 Broadway, Apt. 4, Youngstown 4, Ohio, or Burr Tarrant, Whitehall, Wis.*

FOR FREE: A roundup newsletter is being published by Harry L. Page, 122 Bank St., Batavia, N. Y., for all former members of Hq. and Base Svc. Sq., 381st Service Gp., which serviced ATC planes on the Hump route out of Tezpur, India, and later moved to Shanghai. Please write to Page or the undersigned with any dope you have to offer. Sixty-nine are now on the mailing list—for free, too. Particularly want to locate ex-1st Sgt. Arvin Wahl of Denver, Ed Heard of Spokane, Pelc, the photo wallah, Godfrey Woods, ex-Lt. Arnold. *Alva J. Scott, Box 541, Hoquiam, Wash.*

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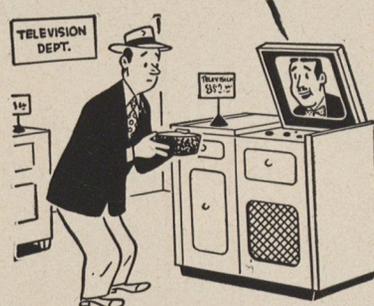
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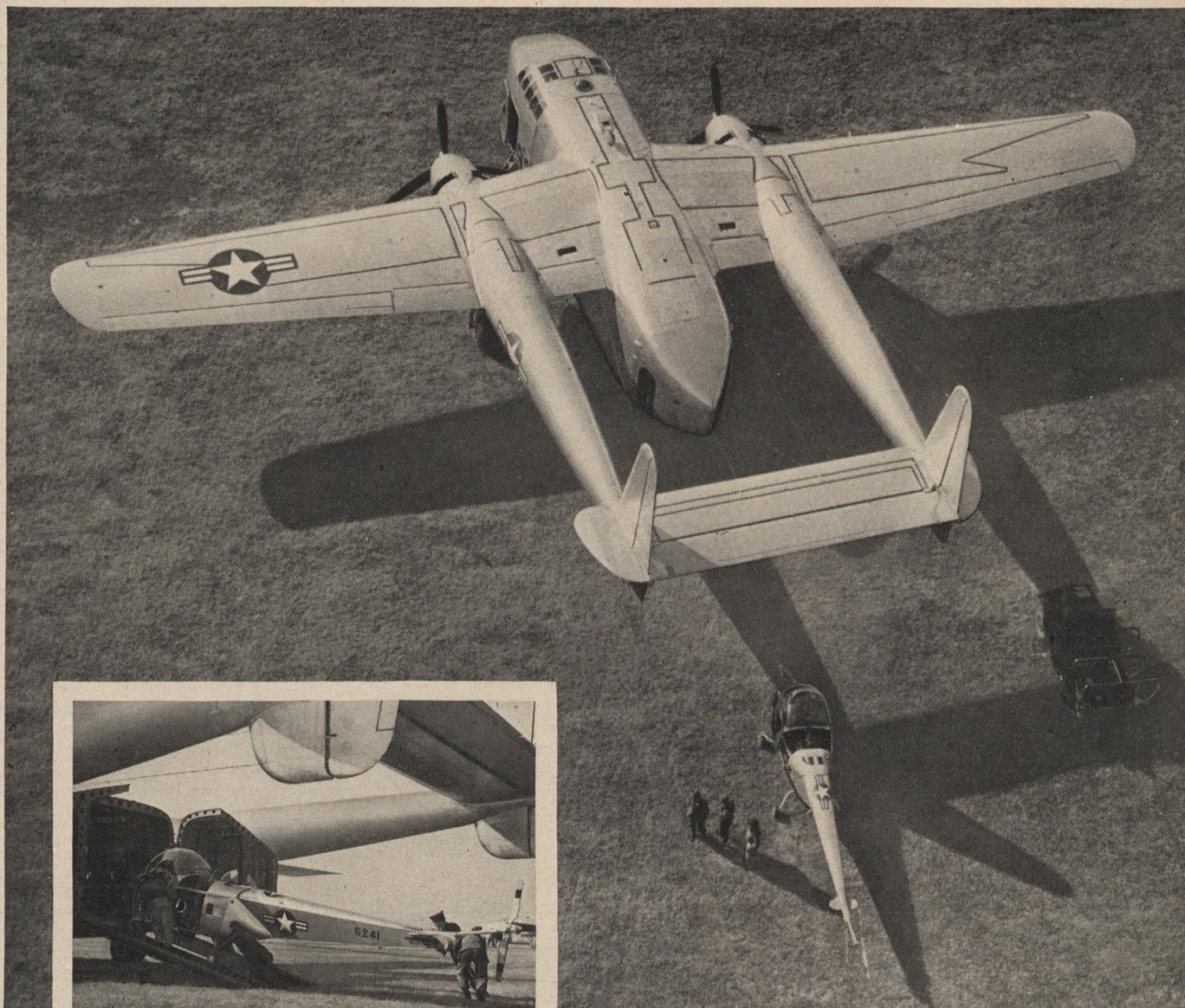
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Wounded Chinese Nationalist soldiers move south from Suchow by air. Their lot: to keep moving or become Communists.

WINGS AREN'T FOR DRAGONS

The Chinese Air Force had more than aerial superiority—it had absolute monopoly, yet it was powerless to halt the southward march of the Communists

By **Charlotte Knight**, *Air Force Pacific Correspondent*

The following report was filed from Shanghai shortly before the fall of Taiyuan and the crossing of the Yangtze River by Chinese Communist forces. Since this was written, the Communists have continued their southward march seemingly at will in spite of Nationalist "monopoly," as Miss Knight calls it, of the air. The unprecedentedly bad showing of the Chinese Air Force cannot be held solely accountable for the Nationalist defeat. But it certainly contributed to it. In this dispatch AIR FORCE's Far East correspondent who has been on the spot for twelve months and who has actually flown with the Chinese Air Force, gives some of

the startling reasons for the complete rout. ED.

Shanghai: Any report from Nationalist China today is bound to be depressing; from an air standpoint it is nothing short of tragic. The accounts of the decisive battles this past winter which resulted in Nationalist defeats of such scale that even the Communists' well-planned time-table was advanced by several months, will unquestionably make future military historians ask: "But where was the air force?" For in any assessment of the air role here in China this one grim fact emerges paramount: that possibly for the first time in the



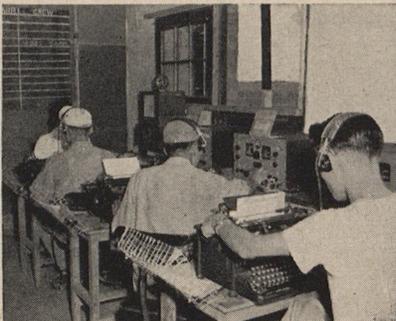
WINGS AREN'T FOR DRAGONS CONTINUED

history of military aviation an air force, possessing not only aerial superiority but absolute monopoly of the skies, lost for its government a war it certainly could have won.

What happened? And why?

The first question can be answered quite simply. The Chinese had an air force of no mean size. For the kind of war that was being fought, it could be considered a powerful air force. It consisted of eight groups of bombers, fighters, and transports. With the exception of Mosquitoes purchased from Canada, all the equipment came from the U. S. and its latest acquisition of 150 C-46s represents new "unpickled" transports in far better condition than the "war-wearies" currently being flown by China's civil

airlines. In addition, the Chinese Air Force in the years since V-J has received a sizeable slice of the millions America has poured into the China aid program, plus 40% of the entire Chinese Nationalist military budget. It has within its ranks 5000 American-trained Chinese flight personnel, all of whom were proficient enough to meet the high standards of USAF schools. For three and one-half years the Chinese Air Force has been furnished the best technical and administrative advice the USAF could provide through the Air Division of JUSMAG (Joint U. S. Military Advisory Group). The CAF has also had the advantage—if they had cared to avail themselves of it—of all the tactical lessons learned through the trial and error and bitter experiences of World War II; indeed, many of its present officers are veterans of the famed Chinese-American Composite Wing which employed some highly successful air-ground cooperation tactics against Japanese ground troops. Finally, and most important, this same air force



Nationalist students get Yankee training as radio operators at Shanghai.

had odds undreamed of in present-day warfare: no aerial opposition whatever.

But when crucial ground battles were being fought, the operations of the Chinese Air Force, with very few exceptions, added up to a "No Show" performance. To its national shame and quite likely to the embarrassment of its American supporters who had the right to expect considerably more from it, the Chinese Air Force will long be remembered as the air force which just wasn't there. There are records of entire battles being fought without tactical support from the CAF. On the one notable occasion when the CAF really did go "all-out" during the November-December battles between Hsuehchow and Pengpu, its value was at least debatable: reports too

numerous to be ignored tell of fighter-bomber "strafing" missions conducted from 6000 feet, of air-drops made from 10,000 feet, of planes which jettisoned critical supplies half-way to target areas and returned to base. Generally those which did arrive over T/A frequently dropped from such high altitudes (and consequently with such inaccuracy) that they are credited with killing an uncommon number of Nationalists, both civilians and soldiers. In fact one Nationalist ground commander is reported to have radioed headquarters the fine Chinese equivalent of "For the love of Buddha, call off the CAF!"

And there are other reports: of civil airlines being drafted into operation by the Nationalist government to carry panic-stricken evacuees and wounded soldiers from Mukden, Kinchow, Hsuehchow and other cities since fallen to the Communists, while Air Force transports on the same field were being loaded with pianos and other personal furnishings of CAF personnel. Indeed, so often has the CAF fled a potential scene of battle in advance of any of the civil airlines operating from the same

cities that CAF withdrawal came to be taken as a reliable forecast of a city's imminent fall. It became a byword within a threatened spot: "The CAF is evacuating. The rest of us had better get ready to leave."

There are those who will argue that the civil war in China was, until the great Communist offensive began last summer, largely guerrilla warfare and therefore not the kind of fighting where air could do much good, that air would be wasted on an area so great as North China—and so on. This is a lot of nonsense. If one is now to fly over a large area of Communist-held North China, as this reporter has recently done, and see trains and truck convoys bringing a continuous supply of food and ammunition to towns in Communist hands, one asks the obvious question: why doesn't the CAF cut these rail lines, block tunnels, bomb bridges, strafe trains and truck convoys? Available reports indicate that the CAF has almost never gone after one of these tactical lines of communication, nor has it made any attempt to bomb strategic targets such as the factories and arsenals alleged to be turning out some of the weapons being used against them.

For many years one of the greatest arguments against the granting of further military aid to China has been that a large percentage of U. S. supplies fell into Communist hands, either by "special arrangement" or by capture. At the present moment, it is estimated that between 75 and 80 percent of all the military goods America has supplied China is now either in Communist hands or has been "diverted" to the black market in some way or other. In fact so widespread is the public recognition of this situation that, according to a story making the rounds here, the commanding general of Nationalist Services of Supply is supposed to have remarked facetiously—and cynically—that he had the most difficult supply job a military man ever faced: "I have to supply both sides!"

Nationalist defections are by no means confined to Chinese ground



Throughout China the civilian airlines are busier than the Chinese Air Force.

troops. Several Chinese Air Force planes this past winter have secretly left their bases at night and deliberately landed in Communist territory. There have been reports of about sixteen such instances, of which several have been confirmed either by Communist radio or by other sources. These include a B-24 which took off from Nanking in early January, plus several P-51s and C-46s. Some of these C-46s, stripped



A river scene outside Peiping typical of the languid grace of Orient. City has become less languid with Red arrival.

of all markings, have as I write this been reliably reported making flights between principal Communist cities such as Peiping, Tsinan, Shihchiachuang.

Withdrawing completely from Tsingtao and the rest of North China, the Chinese Air Force is moving bag and baggage to the island of Formosa. At the moment there are a few planes still remaining in the Nanking-Shanghai area, and some in the Hongyang region. But about 250 planes, the bulk of the CAF's combat strength, have already been flown to the security of Formosa. There at Taipoh, Formosa's capital, Chinese Air Force general headquarters is now established, with General Hao Chung-ho, the local air commander, apparently in charge. CAF air depots formerly at Nanking and Shanghai have also been transferred to Formosa although many others have already fallen into Communist hands. This will also undoubtedly be true of several of the technical schools, complete with millions of dollars' worth of equipment.

So much for *what* has happened. Why it happened is not easy for someone outside the CAF itself to answer. USAF men with whom this writer talked as they were all pulling out of China two months ago, were reluctant to discuss the Chinese Air Force at all, for understandable diplomatic reasons, although Brig. Gen. Charles E. Thomas, CG of JUSMAG's Air Division, admitted that the CAF "unfortunately had performed very poorly in combat." Among the foreign civilians here, including Americans, who have closely observed the CAF during this civil war, are many extremists who either bitterly condemn it without reservation or who lay its failure directly upon the U. S. for giving too little too late.

Any objective assessment must surely include some of the arguments presented by this latter group: namely,

▶ that the entire China aid program is but a drop in the bucket compared to what we are doing for Europe

▶ that the total military loan to China is still less than that granted to Greece and Turkey in similar "stop Communism" programs

▶ that, although it is true the CAF had planes it is also true that they could operate on a limited basis because of the lack of necessary spare parts, ammunition, etc.—for which they were totally dependent upon the U. S.

▶ that, because of our State Department policy, shipments to China of combat material were withheld during a critical 18-month period and were not resumed until Congressional pressure forced the inclusion of \$125,000,000 military aid to China in the ERP bill last year.

Furthermore, argue these observers, the CAF needed—and should have had—American *operational* advice and/or leadership, with USAF experts not only supervising but actually directing combat operations down to and including squadron level. It is pointed out that the limitations imposed upon JUSMAG by the State Department and the Joint Chiefs of Staff almost completely negated the

group's ability to operate.

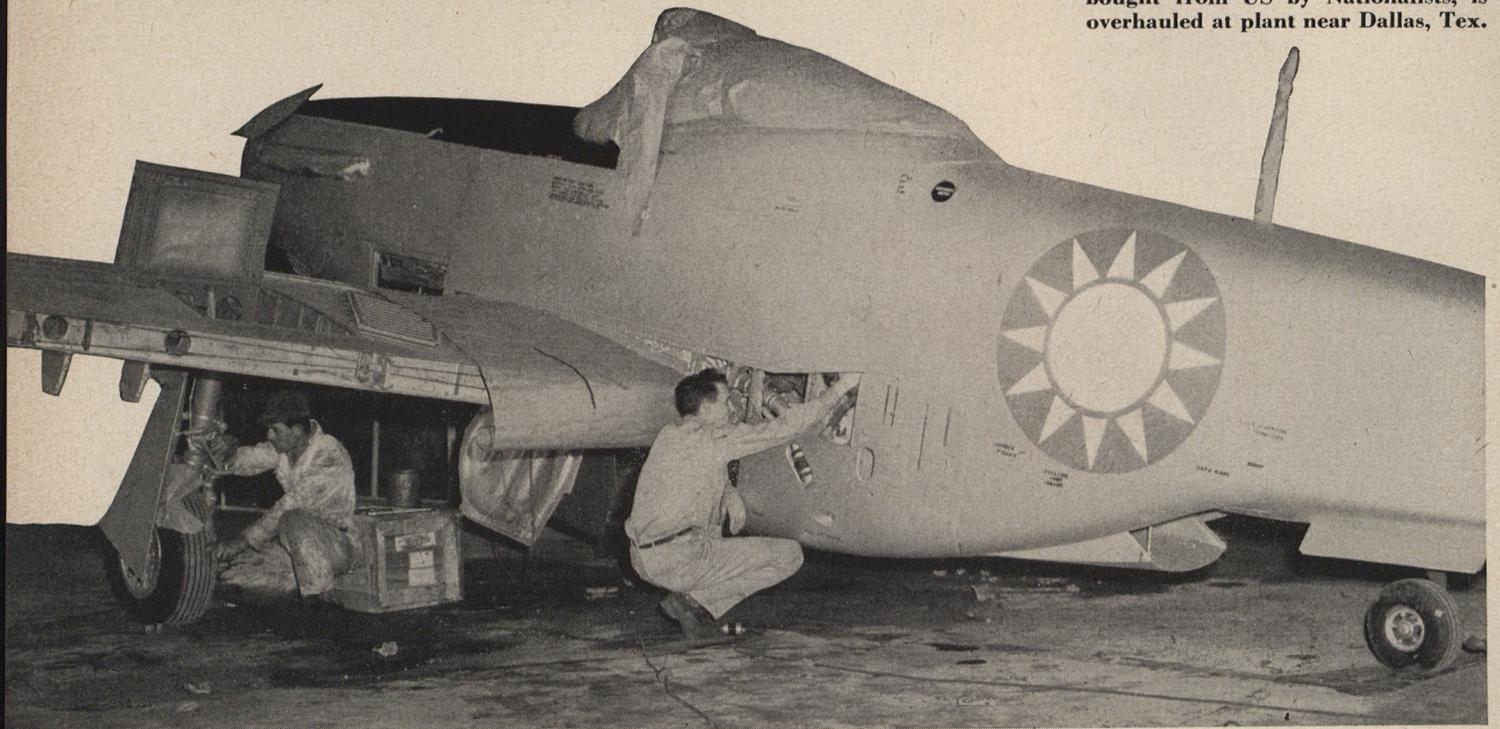
A word of background about Joint U. S. Military Advisory Group: It will be remembered that in a scrupulous attempt to avoid the onus of actively interfering in China's civil war, Washington ruled that this Advisory Group was to be specifically prohibited from giving any combat assistance whatever. As a result, aid from JUSMAG's Air Division was limited chiefly to schools—technical, weather, and communications.

The Air Division has had on its roster an able group of advisers, including senior officers recently graduated from USAF universities and tactical schools, and highly skilled technical personnel from Wright Field and elsewhere. Being airmen, almost all of them would have jumped at the chance to play a more active role in the war here.



A Chinese soldier, as weary of war as his country, lies on the earth to rest.

An F-51 Mustang fighter, one of 95 bought from US by Nationalists, is overhauled at plant near Dallas, Tex.



However, not only were JUSMAG's members forbidden to be anywhere near the front lines, they were not even allowed to accompany CAF planes on combat strikes as observers, thus making any practical tactical advice impossible. With its hands so tied, JUSMAG's value is open to question. And with the time-honored advantage of hindsight, one can now ask whether thus limiting its role was sound. Perhaps it is as well to be hanged for a sheep as a lamb for surely Communist propaganda has already effectively convinced a large portion of China that America has become as deeply involved in the war here as though we had

actively participated in it. At best our so-called policy of non-intervention could be called inconsistent. We have supplied combat material and military aid in the form of U. S. dollars to enable a government to fight Communists, but at the very same time have refused to allow American military experts, already working with the Chinese armed forces, to give the kind of operational instruction and direction through which concrete results might have been realized.

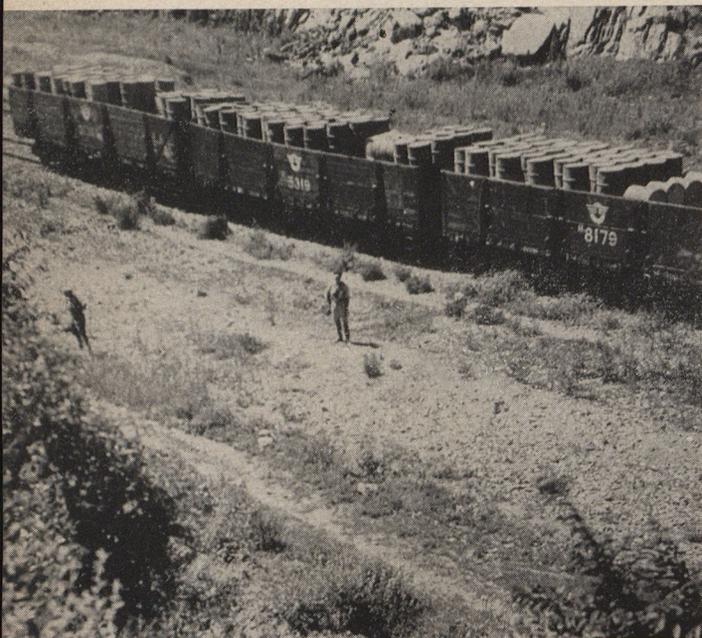
As stated earlier, this argument is frequently presented here as one of the reasons for the failure of the CAF. And it would not be fair to dismiss the subject without citing at least one other basic factor which assuredly has had a distinct bearing on the CAF's apparent aversion to combat.

Although the CAF has USAF stamped all over it, including T/Os and uniforms identical with ours, there is one major difference which undoubtedly affects the Chinese pilot's thinking when it comes to exposing himself to danger. The CAF pilot is paid the equivalent of only a few U. S. dollars a month, but he and his family (and this often includes mothers-in-law, grandmothers and so on) are provided with food by

the government. If the pilot gets killed however there are no death compensations which would take care of even his immediate family. The food stops. Through China's long history, family ties have traditionally been stronger than national patriotism; and perhaps in a country where life itself has always been a matter of survival of the fittest, it is at least understandable—if not forgivable—that a pilot might think twice before risking loss of his family's rice-bowl for the dubious honor of dying for a cause he doesn't understand too well anyway.

These are some of the background factors; no outsider can state with certainty why the CAF has not fought as it should have nor why it has even now fled to Formosa. It might even be that in their own long-range philosophy they reason that "he who fights and runs away lives to fight another day." In any event, the picture is neither black nor white but gradations of grey, with arguments and counter-arguments for both accusation and defense. More than that no observer can tell.

If the question is raised at this point as to why these columns are being devoted to even this cursory report of a foreign air force, the answer is that it concerns readers of AIR FORCE to this extent: that according to Stateside papers there is a great hue and cry being raised at present for all-out military aid to China in a final desperate attempt to stop the sweep of Communism in Asia, and Congress is being bombarded with powerful arguments (many of them even from air strategists) attempting to prove that additional military supplies will achieve this aim. However, before we become completely snowed under by apologists for the Nationalist military and air force set-up



Gas for the civil airlines of China moves into Chenchow by railroad.

as it now exists here, it would be well to inquire closely into the record of a "combat" force which the U. S. has already been supporting for three and one-half years. If we are told that additional planes and gasoline and parts will miraculously "turn the trick" and "retake North China," and if we are made to believe that, in an effort to stop the spread of Communism it becomes the duty and responsibility of the U. S., for reasons of our own Pacific security, to provide these things, let it at least be pointed out that there already was *in being* here in China a combat air force which *could* have stopped the Chinese Communists—and didn't. We agree that North China in the Soviet sphere is a serious loss. We agree also that from a strategic point of view this threatens our own Pacific frontier. But there are strong arguments against the contention that greater military aid to the present Chinese Air Force is going to supply even part of the answer to the problem.

This is not to say that air power, properly employed, could not still defeat Communist armies in North China; it is merely to underline the effectiveness of the present employment—or lack of same. That this fact is generally recognized even by the Chinese is forcibly indicated by no less an authority than one of China's ablest military commanders, Marshal Yen Hsi-shan, the aged and almost legendary defender of Taiyuan. Marshal Yen recently made a statement which in itself is the strongest indictment of the present Chinese Air Force yet heard: "If I had five bombers with American crews, and some flame-throwers, I'd clear the Communists out of Shansi province within a couple of weeks!"

But because he has no such air force and because he is surrounded by Communist armies who have cut off all his overland supply, Marshal Yen is entirely dependent upon airlift for food for his troops and his thousands of Taiyuan

civilians. Under ordinary military circumstances such an airlift—identical in essence although not in size with that in Berlin—would be properly considered the responsibility of a government's military air force. It was with natural surprise therefore that this reporter arrived in Targuan to discover that the Chinese Air Force—all its C-46s notwithstanding—was not even participating in the Taiyuan airlift. Reports circulate to the effect that the CAF considers the missions "too dangerous."

With the CAF thus defaulting, Marshal Yen has been forced to hire the services of China's three civil airlines—China National Aviation Corporation; Civil Air Transport; and Central Air Transport Corporation—to deliver his minimum requirements of 250 tons a day. Each airline operates about twenty C-46s out of *Tsingtao*, averaging about 60 round trips a day. The cost of each trip is roughly equivalent to \$2700 in U. S. money and was originally paid for by Marshal Yen himself out of his "People's Treasury" but more recently it is believed the Nationalist government is bearing a large proportion of the bill for these costly missions.

With few exceptions, all the pilots on this Tsingtao-Taiyuan shuttle—which is far more hazardous than the Berlin run—are American, most of them ex-AAF men. What most of them did not count on is the "this-is-



Before hold-out garrison at Taiyuan fell, rice was flown in by airdrop.

where-I-came-in" combat flying they now find themselves doing. The CAF is quite right; the missions *are* dangerous. There is scarcely a plane which escapes an anti-aircraft greeting of some sort as it approaches Taiyuan's on these runs. The ack-ack plus heavy Communist shelling of Taiyuan's airfields and the equally hazardous flying conditions, such as total absence of navigational aids or alternate landing fields (the entire 7-hour flight except for 4 minutes over *Tsingtao* is made over Communist-held territory) have caused many former CBI Air Transport Command veterans to remark that compared to the flying in North China now, "the Hump" was a picnic. Not that they are complaining: these American pilots here realize they are being very handsomely paid (about \$2,000 a month average) for a job which takes into consideration the risks involved.

Work begins on Shanghai's Hungjao field. This was before city was imperiled.



What Kind of Airpower?

The air-minded House of Representatives comes to grips with the leading military

issue of the day while approving a record peacetime defense appropriation

For good or ill, air mastery is today the supreme expression of military power, and fleets and armies, however necessary, must accept a subordinate rank. This is a memorable milestone in the march of man.

Other men before him had said as much, but it seemed likely that this statement of Winston Churchill's would find its way into the history books. For one thing, it was a classic phrase by a classic phrase-maker. For another, it came from one of the great military leaders of the age. Also, it was the statement of an old Sea Dog.

To a nation still plagued with a "balanced force" concept of defense and its prohibitive cost structure, the opinion of a Churchill on the relationship of land, sea and air in the military establishment was of more than passing interest. In this respect, the British leader's words were timely.

From another standpoint, Mr. Churchill's remarks were more historic than current. Slowly but surely airpower was being given proper recognition as the dominant military force in war and peace. Still unresolved was the military question of the moment: What kind of airpower?

That our leaders were at last coming to grips with the issue was evident last month at the Pentagon in Defense Secretary Johnson's booming order to discontinue work on the Navy's 65,000 ton super-carrier (see page 4). And it was evident in Congress, on the floor of the House, long a battleground of the land-sea-air argument.

Here on April 13, two weeks after Winston Churchill did his phrase-making on airpower in an address at Boston, the job at hand was to come to a decision on the recommendation of the House Appropriations Committee for a 1950 fiscal year defense outlay of \$15,909,116,800, a record peacetime total. On this day the House approved and sent to the Senate, by a whopping 271 to 1 vote, a defense bill of exactly this size. In so doing, it added \$786,832,000 to the Air Force outlay recommended by the President, but cut the presidential allocation for the Army by about \$214,000,000, and cut the Navy by about \$120,000,000. No one argued much about the slice in Army funds. But the Navy cut was agreed upon only after House members, in an all day floor fight, had wrestled with problems of defense which began where the Churchill statement left off.

The main bout was waged over a proposal of Mr. Sheppard (D) of California designed to offset the Navy reduction—and then some. He offered an amendment which would jump the pro-

urement of Navy aircraft 50 percent in the next fiscal year and increase the defense budget \$300,000,000.

Mr. Sheppard justified his amendment on the basis that the Navy part of the House appropriation bill, as proposed for adoption, was "woefully inadequate" in terms of funds for procurement of new aircraft. "More than 80 percent of the present aircraft of the Navy," he explained, "were procured during or prior to 1945 and are fast approaching the point at which they will no longer be of any military usefulness." He said that the current bill, specifying 843 new naval aircraft, provided for only "about half the aircraft needed to equip our peacetime organization to a reasonable degree of readiness." Unless \$300,000,000 was added to the Navy outlay, he charged, "We must accept the fact that one of the most important parts of the national air potential will begin a steady and inescapable decline."

In evaluating this proposal, House members were forced to deal with conflicting recommendations from the Bureau of the Budget, which would not grant such additional funds for the Navy Air Force, and the Joint Chiefs of Staff, which would. Then too, the House's own Appropriations Committee supported the Bureau while its Armed Services Committee supported the Joint Chiefs.

But as the debate continued it became obvious that \$300,000,000 worth of new Navy aircraft was merely a starting point.

As Mr. Hinshaw (R) of California, who was vice chairman of last year's Joint Congressional Aviation Policy Board, described it, the debate reflected "a conflict which has existed for some time and exists now between the two arms of the air, Naval Air and the Air Force. It is reflected here at this time because the battle for appropriations still exists."

And as arguments were advanced in support of one or the other of these two services, they gave added meaning to the contention of Mr. Case (R) of South Dakota that "A fundamental decision of this Congress is in the process of making, whether we recognize it or not: Whether or not we are going to develop two air forces."

It should be remembered that last year's much publicized Congressional battle over a 70-group Air Force, waged heatedly on this same House floor, was primarily a continuation of the traditional airpower vs. sea power vs. land power controversy. This was different. This was airpower vs. airpower—land variety against sea variety.

The difference was most evident in the stand of Mr. Vinson (D) of Georgia, Chairman of the Armed Services Committee, whose support of airpower, as such, was unquestioned. Last year he helped turn the tide for legislation to initiate the 70-group program. This year he led the campaign in the House to grant appropriations for the U. S. Air Force in excess of those proposed by the President.

Now Mr. Vinson was leading the fight for the Sheppard amendment to give the Navy Air Force additional funds. Without such funds, he declared, the proposed budget: "Cuts the Navy's operating aircraft; it cuts its attack carriers; it cuts its naval personnel; it reduces to an astonishing extent its procurement authority; it forces the deactivation of nine air stations; it prevents the production of new-type aircraft."

Mr. Mahon (D) of Texas, Chairman of the Appropriations Sub-Committee, was in sharp disagreement as to the actual effect this budget would have on Naval Air development. He countered with a statement that went unchallenged: "The appropriation in this bill for the entire Navy is greater this year than it was last year; the appropriation for naval aviation is greater than it was last year."

Mr. Short (R) of Missouri indicated his strong support of airpower when he said, "We are living in an air and atomic age, with the air arm supreme," but added that "while the Navy and Army must take, perhaps, a subordinate place, they must not be overlooked or neglected." And like Mr. Vinson, he made clear his belief that this defense bill neglected the Navy. Without the \$300,000,000 increase in naval air force funds, he said, "I fear we will not have much of a Navy by 1952."

To Mr. Cannon (D) of Missouri, Appropriations Committee chairman, the heart of the matter was which type of airpower could best deliver the atomic bomb. His choice was obvious:

"The function of the Navy in modern warfare is the maintenance of lines of communication and transportation. Let it exercise those functions. The launching of atomic bombs at strategic targets is the function of another branch of the service, and let that branch perform the duties for which it is adapted. . . . Why should we waste vast sums of money on naval planes tied down to a radius of 500 to 700 miles, to be launched from floating decks which cannot even approach the shores of continental Europe—when a smaller amount of money can supply land-based planes about the effective-

ness of which there can be no doubt.”
 “Long-range, land-based bombers,” he said, “will do more than anything else to preserve the peace of the world.” Should war come, he added, troops will be needed for occupation, “But under the Marshall Plan and North Atlantic Pact, we will have allies with troops and ships who should also be given an opportunity to discharge their obligations as contracting powers. Why not let them contribute some of the boys needed to occupy enemy territory after we have demoralized and annihilated enemy territory from the air?”

Mr. Taber (R) of New York, last year's chairman of the Appropriations Committee, pointed out that the Navy, under the defense bill being discussed, could not buy as many planes as it would like “because of the larger-sized planes they want.” Explaining that the House was giving the Navy more money than last year, he concluded “I do not think this leaves the Bureau of Aeronautics in a hole.”

The Navy side of it was expressed by Mr. Rivers (D) of South Carolina, who said, “If we do not give the Navy the \$300,000,000 for naval aviation and research, we will have signed the death warrant of naval aviation, make no mistake about that.”

He was supported by Mr. Bates (R) of Massachusetts who declared that if the \$300,000,000 was not granted, “in relatively few years, because of the lack of replacements in the Navy program, the efficiency of the naval air arm will be cut in half.” But Mr. Cole (R) of New York wouldn't let it go at that. “Naval aviation,” he said, “will not be cut in half; it will be cut one-third of what the Congress a year ago directed and authorized.”

Mrs. Rogers (R) of Massachusetts exclaimed, “I have been very much shocked and rather terrified at the effort that it seems to me is being made to scrap and weaken Naval Air . . . Naval airpower is every bit as important as land airpower.”

Added Mr. Short of Missouri, “Naval aviation contributed more to our victory in the Pacific than any other one thing.

The debate was enlivened by the comments of men who had seen combat in World War II.

The Air Force veterans included Mr. Chesney (D) of Illinois, who served both as an enlisted man and officer in the AAF; Mr. Bentsen (D) of Texas, who flew B-24s for the 15th Air Force, and Mr. Coffey (D) of Pennsylvania (see page 4) who flew fighters for the 9th Air Force.

Mr. Chesney confined his remarks to the need for greater unification of the armed services, and cited examples of waste and inefficiency he had seen during the war. Mr. Bentsen emphasized the need to spend our defense money wisely, and declared: “The B-36 has been frequently disparaged. It has been called slow, too large, uneconomical, and a ‘sitting duck’ for fighters. These charges I have heard before. They were leveled at the B-17. Yet the B-17 carried the war to Germany with dead-

ly effectiveness. These charges were leveled at the B-29. The B-29 smashed Japan . . . We were attentive before the last war to the criticisms of the B-17. We paid a terrible price in blood and treasure for our error. Let us not repeat so costly a mistake.” Mr. Coffey exclaimed “I find that the reoccurrence of the Maginot Line type of thinking in this House is somewhat alarming . . . The United States is the greatest stabilizing force in the world only as long as it remains economically healthy. We cannot, therefore, under present commitments abroad spend more than \$16 billion on the National defense.



This is insufficient to prepare for war. It would require almost four times this amount to put us into readiness for war, and most all of the Members know the terrible cost of war if it should come. Since we are unable to afford war preparation, we must utilize this sum to the greatest possible advantage . . . There is only one way we can touch Russia and that is by airpower. Therefore, if our wish is to prevent war and not to fight war let us invest the major part of our limited funds in the only weapon for which Russia has fear-airpower.”

The Navy veterans included Mr. Van Zandt (R) of Pennsylvania, Mr. Ford (R) of Michigan, Mr. Jackson (R) of California, Mr. Latham (R) of New York and Mr. Hare (D) of South Carolina.

“I am wondering,” said Mr. Van Zandt, “whether the cut in naval aviation is not the beginning of a program to dry up naval aviation and eventually remove the Navy from the seas.” Mr. Ford stressed the unique functions of naval aviation, and explained, “The Air Force with its land-based planes can and will perform important functions, but the ship-based planes must be available for the special jobs they will be called upon to perform.” Mr. Jackson reflected on the wartime island-hopping operations he had engaged in and reported that vital Pacific bases could not have been obtained without close air support from carriers. Mr. Hare commented, “The Navy Air arm did 75 percent of the work in the Pacific.” Mr. Latham made the claim

that “in one specific island campaign, just one, 7,000 Japanese planes were shot down and of those 7,000 planes, 4,155 were shot down by the naval air arm.” He added: “I believe that were we to permit either the decline or the demise of the naval air arm we would be removing and destroying the single most important force that we have in this country today for the protection of your family and mine.”

Mr. Mahon of Texas, reserving the right under parliamentary procedure to close the debate on the question before the House, made the climax speech of the day.

Observing that he was “a little bit disappointed that some people have been looking backward to the bases in the Pacific,” Mr. Mahon pleaded: “Let us not look back. If war breaks out tomorrow, we have a pretty good guess with whom it will be. We know that the reason it has not already broken out is perhaps the fact that we have the atomic bomb and we have the planes to carry the bomb . . . The greatest deterrent to a potential enemy today is the U. S. Air Force.”

To those who claimed the future of naval aviation was in peril, Mr. Mahon replied: “One of my distinguished friends said, ‘It looks as if we are going to dismantle and scrap the Navy.’ If the Navy is so poorly operated that it cannot on \$5,000,000,000 run a pretty decent establishment, there is something radically wrong with the Navy. Five billion dollars is more than we gave the Navy last year, with more for aviation than we provided last year, and people shout, ‘They are going to scrap the Navy.’ Oh, but they say, ‘Yes, but you are going to scrap the air force of the Navy.’ The Navy was told by the President and by the Joint Chiefs of Staff, ‘Mr. Navy, you have about \$5,000,000,000. Now, you spend it as you think you would like to spend it, Mr. Navy.’ And Mr. Navy said, ‘I am going to spend it this way.’ It was the Navy that decided on the 800 planes to add to the 14,000 planes they already have. Scrap the Navy? What strange words, in view of the cold facts in this situation. If the Navy had wanted to say as to this supercarrier (see page 4) which was never actually approved by the Joint Chiefs of Staff and is going to cost about \$200,000,000, ‘We will not lay the keel next week on that, we want to buy some more planes with that money,’ they could have done it.

“I do not know of a Navy man in or out of Washington who will say that in the event of another war the battleship will be used to fire a single shot—a single shot—yet the Navy is spending huge sums to operate the battleship *Missouri*. Who made that decision? The Navy.”

The vote that followed supported Mr. Mahon and the Appropriations Committee; increased funds for naval aviation were declined; all efforts to change the \$15,909,116,000 were defeated.

But a new round in the battle for airpower had just begun.

PIPER CLIPPER

With a new family plane, priced under \$3,000, Piper hopes it can crack open the postwar market for private planes

By William S. Friedman

EDITOR'S NOTE: This is another in the series of personal plane reviews conducted in cooperation with test teams provided by AFA Squadrons. When a new aircraft is announced, the staff of AIR FORCE Magazine selects a squadron to conduct the test. To do this, the squadron assembles a six-man team consisting of qualified pilots, technicians and observers, who are brought together with the subject aircraft at a convenient airport. They examine the airplane, fly it, and chew over the results. They are then interrogated by a member of the staff.

The Test Team

This team was provided by the Harrisburg Squadron of AFA. The pilots were David F. Lenker and Samuel S. Froelich, Jr., Commander and Vice-Commander of the Harrisburg group respectively. Dave is a dairyman by vocation. Early in the war, he was a civilian flying instructor, later was a special investigator for the Air Force's counter-intelligence service. Since the war, Dave has retained his interest in flying. He tried to make flying pay as a commercial pilot for a year after his discharge, but the dairy business looked

like a surer way to maintain proper nutrition. Dave still flies as frequently as possible and keeps his commercial instructor's rating, his ground-instructor's ticket, as well as his radio-telephone operator's license.

During the war, Sam Froelich flew a B-24 with the 392nd Bomb Group of the 8th Air Force. His 32 missions included runs over such hot spots as Berlin, Magdeburg, Hamburg and Wesel. Holder of the Air Medal with four clusters and the Presidential Unit Citation with cluster, Sam keeps his aviation interest alive with flight duty in

The test team provided by AFA's Harrisburg Squadron gathers around the new Piper Clipper to discuss their findings.



the Pennsylvania Air National Guard's 53rd Fighter Wing.

The technical phase of the test saw a rarity in AFA's ranks and an innovation in the test personnel. The rarity was a Navy man in our organization, Thomas G. Akers, former Photographer, 2/C, who came into AFA via his active participation in Air Force Enlisted Reserve. Tom's experience with Squadron VD-4 included the coastal aerial mapping of the entire China seaboard, flying in PB4&-2. Tom is a commercial photographer in Harrisburg, and is responsible for the pictures that illustrate this report. The Squadron's innovation in the acceptance test personnel was a guest member of the team, Dean W. Stump, the master mechanic for Trans World Airlines at Harrisburg. Dean worked on ATC aircraft during the war, and also acted as instructor to Air Force technical cadets and as inspector on transport aircraft.

The general observers operation this time featured a "brother act," Jack and Robert L. Gross. Bob is a member of AFA's National Board of Directors. During the war, he was an air inspector. He is now on active duty with the reserve unit at the Reading, Pa., Air Base. His civilian occupation is that of malt beverage distributor. Jack Gross is Deputy Wing Commander for AFA in Pennsylvania. During the war he was Group Executive Officer for the 86th Fighter Group, 12th and 9th AF, flying out of and over Tunisia, Sicily, Italy, Corsica, Southern France and Germany. He is active with the Pennsylvania Air National Guard, when he is not busy being president of the city's major Ford dealership.

In the test, the Piper Company was represented by James G. Mac Veigh of Wilmington, Del., Piper Sales Manager for Atlantic Aviation Service of Wilmington, distributors of the subject aircraft in Harrisburg. Atlantic provided both the airplane and the pilot for this test. Jim served with the Headquarters Squadron of Lowry Field during the war.

The Aircraft

The Piper Clipper represents a departure in personal aircraft in at least one direction—financial. Ever since the war, plane builders have been discussing a ship everyone could afford to own. Like the weather, no one did anything about it, until the Piper organization came up with this latest product, whose sales tag reads a hair under \$3,000. This, according to William "Pappy" Piper, brings the retail cost down to \$750 per seat and means that a four-place machine is now available at the price of the average two-place trainer.

Aside from this, there is very little radically different about the Clipper. As a matter of fact, the Piper company has tried almost desperately to reduce cost of construction without compromising on structural ruggedness, ease of maintenance and favorable flight characteristics. The purpose behind the design is to produce a good, rugged plane for a "popular" market at a



Jack Gross, AFA's Pennsylvania Deputy Wing Commander; James Mac Veigh of the Piper Company and Lt. Col. Robert Boden, Pennsylvania National Guard, examine the Clipper's 115 horsepower Lycoming engine prior to testing it.

price the public can afford to pay.

The new Clipper is a little airplane, a braced high-wing monoplane whose wing span is 29 feet three inches. It is but 20 feet one inch long, and its gross weight is 1650 lbs. Of this, 850 is airplane and 800 is useful load, one of the most favorable utility ratios achieved recently.

The ship is in the traditional Piper style. Its wheels, landing gear and empennage are common to all the Piper line, thus simplifying the supply problem and reducing the price of airframe spares. The wing is the same as the two-place Piper Vagabond, while the ribs and spar materials are the same as all the planes of the old Cub stable. The only difference between the Vagabond-Clipper wing and the remainder of the planes built at the Lock Haven factory is their length, the new de-

signs are three feet shorter per panel (six feet from wingtip to wingtip.)

The Clipper is powered by a 115 hp. Lycoming O-235-C-1 opposed four cylinder air-cooled engine turning a fixed-pitch wooden prop. Approval tests for a movable pitch propeller, to be an optional accessory, are now under way. This power plant is rather unique in that it was originally rated at 100 hp. By simply adding a ramming intake, the output was jacked up to 108 hp similar to Piper Family Cruiser, another four-place machine. Attempting to reduce sound level in the Cruiser, engineers from the Piper and Lycoming plants developed a set-up called the cross-over exhaust system. In this, the exhaust gas from the right front cylinder crosses under the engine to connect with the cylinder opposite. The rear cylinders are like-

PIPER CLIPPER CONTINUED

wise connected, and both sets are then manifolded to a stainless steel exhaust. This setup not only drops the exhaust sound a handful of decibels, but actually effects improved exhaust scavenging and results in eight horsepower increased output at static rpm. Electric starter and generator are standard equipment.

The airframe structure of the Clipper is conventional for light aircraft, welded steel tube fuselage, covered with zinc-chromate primer, a coat of aircraft dope and dope-proof paint. The wings are fabricated of aluminum alloy spars, niral ribs and dural leading edge. The airframe is covered with doped fabric throughout.

The fixed landing gear is conventional slide type with full balloon air wheels and hydraulic brakes plus a steerable full-swivel tailwheel. The rubber-shock-cord impact absorption unit is installed under the pilot's seat.

One of the observers said that the Piper Company would make a fortune if it could impart some of the engineering know-how it acquired in the Clipper to the ladies shoe industry. The Clipper is one of the few things that looks small on the outside and has a lot of room within. Its front seat is 39 inches wide, several inches wider than most in its class. The seat has a four inch fore-and-aft adjustment.

The rear seat is 37 inches wide and is provided with a common belt straight across, so that three small passengers can be carried in the rear.

The control system is conventional stick-and rudder, with toe brakes. All the mechanism of the control system is either under the floor or beneath the

seat and completely out of sight. The sticks themselves are semi-circular in shape to provide maximum clearance and personnel comfort. If the right-hand set of controls are removed, the stick stubs are not in the way, as the control root is located under the front seat. There is a clip provided under the dashboard for stowage of the right hand stick when it is not in use. A double bungee system is installed for better stick loads under reduced power conditions. Trim is accomplished through an adjustable stabilizer, the crank of which is located in the cabin ceiling.

Special arrangement has been made for cargo use. The flooring under the rug is dural, stressed to carry the sum of the plane's useful load, with a liberal safety factor. The rear seat frame is installed by means of one socket attachment and two key-hole fittings. Requiring no bolts and screws, it can be slipped in or out without tools in a matter of seconds. The regular baggage compartment is directly behind the rear seat. This makes combined seat and cargo space rapidly available for freight use.

The test team checked the airplane against the following performance statement:

Top speed.....	125 mph
Cruising Speed.....	112 mph
Stalling Speed.....	50 mph
Rate-of-climb (first minute)	
.....	600 feet
Range...(30 gallons fuel)	480 miles

The Findings

The technical phase of the test came first. The technicians went over the

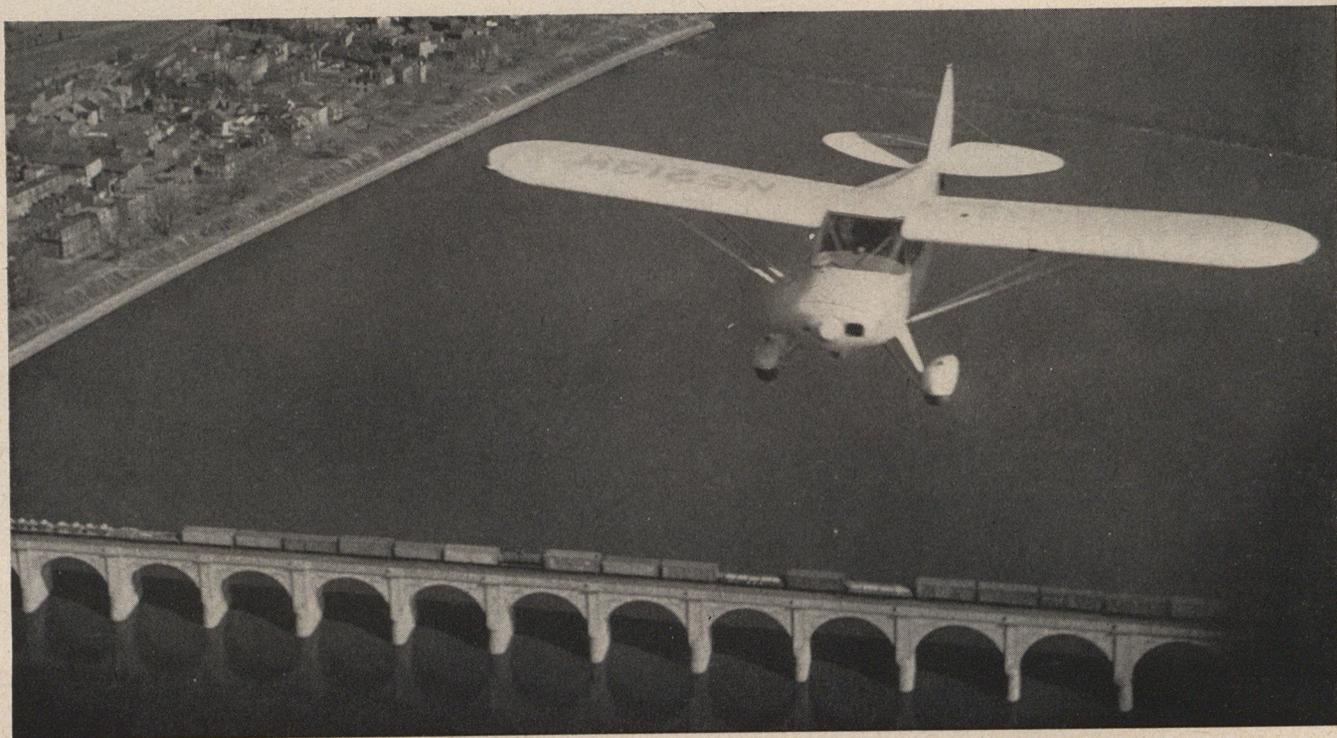
entire airframe and found that it was exceptionally rugged, that the hand-holes and inspection hatches were placed strategically and were large enough to work through. None of the functions within the airframe were located in difficult positions, and all the normal maintenance could be performed with ordinary hand tools.

Dean Stump pointed out that only the right side of the engine cowl was equipped with Dzus fasteners. This meant that the left side could only be lifted by unscrewing the cowl. While normal maintenance could be effected from one side of the engine, there might be times when a non-professional maintenance man might be tempted to skip something on the left side if it were too much trouble to get to it. Tom Akers noted that some of the wiring inside the cowl was protected by shellacked friction tape. While this is an inexpensive and workable protection, exposure to oil would eventually deteriorate the covering. He suggested that plastic spaghetti be substituted.

As a practical maintenance technician, Stump indicated that he favored fabric covering for many personal aircraft, despite the major trend toward metal covering. "Minor damage," Dean said, "when it catches up with an all-metal airframe, means a trip to the shop. The same damage on a fabric airplane can frequently be repaired with a cloth patch and dope."

The flight section checked the performance of the aircraft with four full-sized passengers, a full cargo compartment and a liberal amount of fuel, bringing the craft approximately to full service load. The test consisted of take-off, climb, steep and normal turns power on and power off, approach to
(Continued on page 52)

Over Harrisburg, the Clipper cruises at an easy 112 mph. It climbs 600 feet a minute; has a top speed of 125 mph.



FLYING DOCS

Tomorrow's flight surgeon learns the hard way how to protect the man who flies tomorrow's fastest planes

By Douglas J. Ingells

The great new bombers and the supersonic jets are born in the conference rooms of the Pentagon and on the drawing boards at Wright Field.

The scientists and the planners don't leave much to chance. They know what manner of offspring they are going to get, and by the time the newest plane is ready to test its wings, the scientists know just about how fast it will go, how high and how far, and the planners know what its job will be.

But there is another side to the planning and production of new Air Force planes. People have to fly those

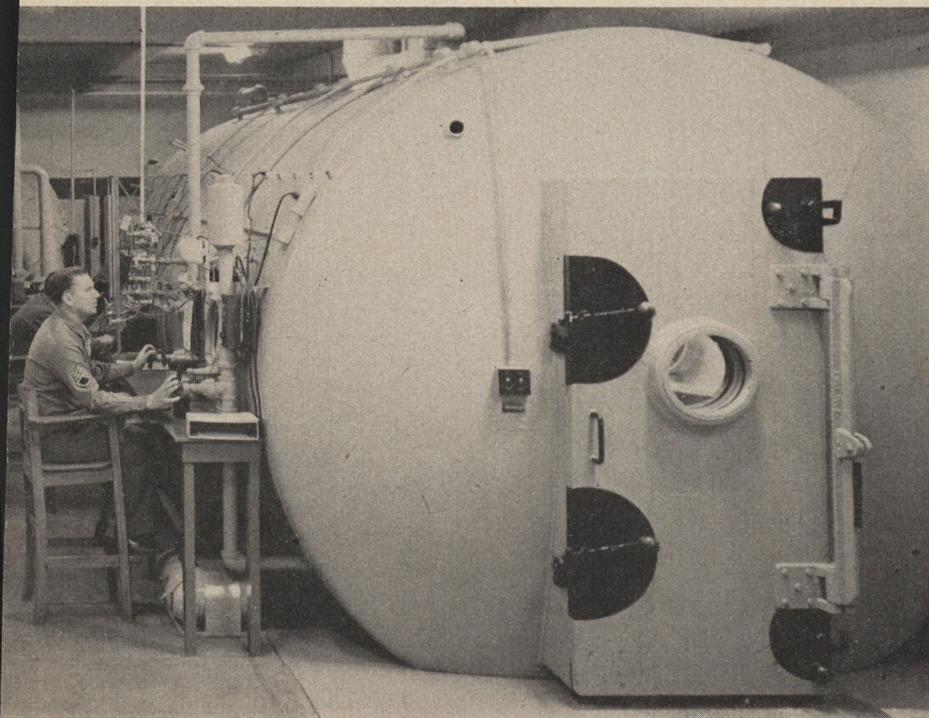
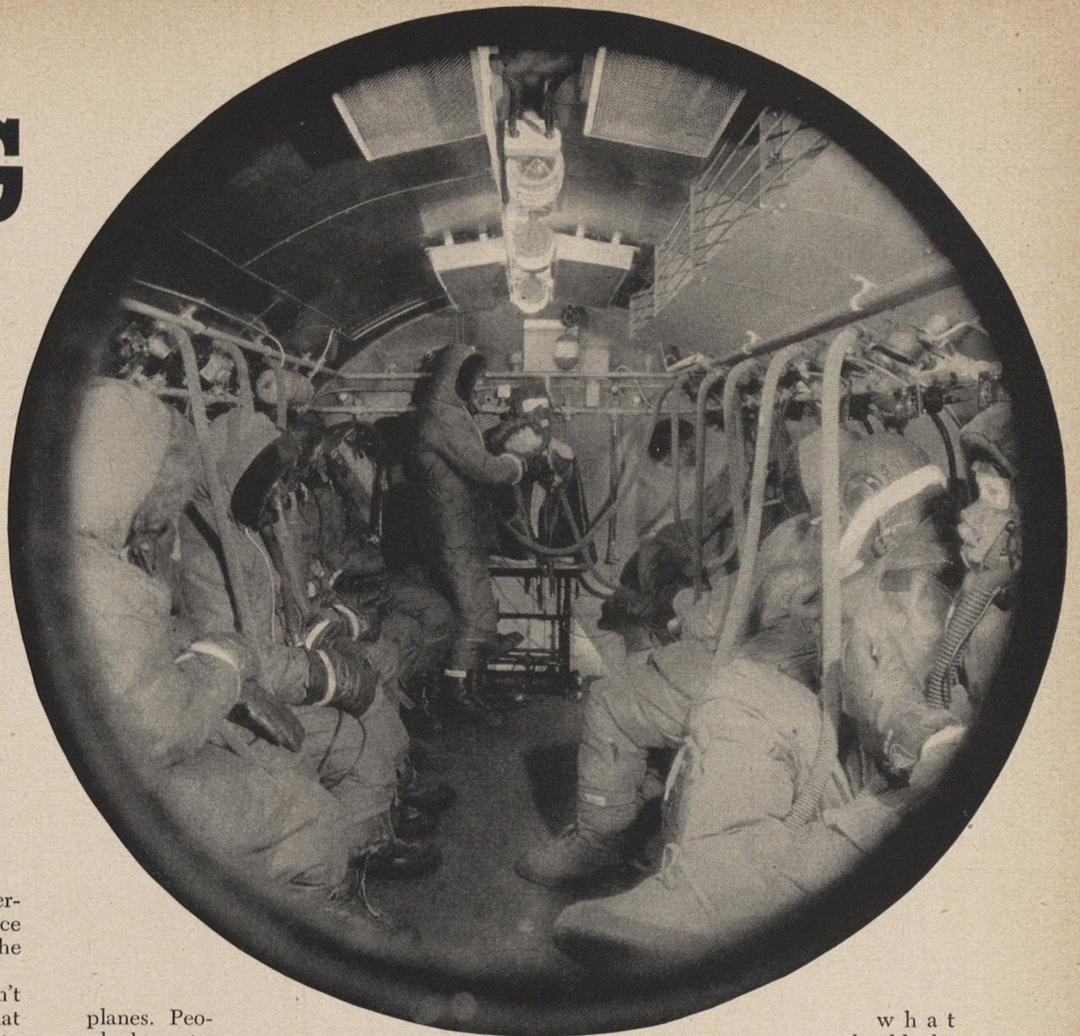
planes. People have to go to 40,000 feet and up where you can take an acre of sky and not find enough air to whistle Yankee Doodle. What happens to a man up there? And what happens to a man traveling at speeds greater than that of sound, and what about the pressure, and what should he wear, and

what should he eat, and what special equipment does he need? These questions, and many others are being answered at the School of Aviation Medicine, Randolph Field, Texas. The answers they come up with there have as much to say about the shape of tomorrow's plane as the data which comes from the laboratories and wind tunnels at Wright Field.

The experiments at Randolph field are being conducted by flight surgeons who are themselves being trained to meet new medical problems which go hand in hand with the ultra-modern warplane.

So complex has the whole question become, that former Defense Secretary Forrestal, just before his resignation, issued the following recommendations as the ideal minimum requirement in qualifications, schooling and experience for Air Force flight surgeons: One to three years' experience (preferably three) as a general medical officer prior to assignment as a student in a school of aviation medicine; a basic course in aviation medicine of at least six to nine months duration including thorough flight indoctrination under simulated combat conditions; and a minimum of one year's experience while

(Above) Flight surgeons at Randolph School of Aviation Medicine undergo high altitude tests in compression chamber, while technicians (left), observe different student reactions as the conditions within are varied.



FLYING DOCS CONTINUED

assigned to duty with an active aeronautical organization as an aviation medical examiner. Only then may an Army doctor call himself a flight surgeon.

Today's flight surgeon is truly a "flying doc." At the Randolph Field school, you'll find him riding long-range missions in B-50s, and the big and mighty B-36s. Sometimes they fly to Tokyo, half way around the world, lay over a couple of days and back they come. These are not pleasure cruises: assigned work as a crew member, little sleep, high altitudes for long stretches, breathing pure oxygen until the lips blister and sting and the tongue tastes like too many cigarettes, are all part of the trip. Or maybe its the front cockpit of a new two-place jet job whipping around the sky in loops, dives, spins, and flip-flops that turn your insides outside-in.

But when they come down the "flying doc" who doesn't wear the pilot's silver wings knows first hand what the air crews are up against. He is better fitted to see that the airmen are better fitted to fly.

The new system is working and with its success comes a new mutual respect. A cadet out for his wings at Randolph Field was grounded not long ago because of a heavy head cold. He's an ex-sergeant tail gunner who flew over a hundred missions during the late unpleasantness. In those days he didn't think much of his flight surgeon. "The guy didn't know a thing about flying, he had never been off the ground," was the way he put it. But the student has a lot of respect for his present flight surgeon who gave him the redlight at San Antonio. "I know this guy," the cadet explained, "He just got back from a long flight all pooped out himself. When he says it's for me to stay on the ground, brother, I stay. I'm convinced

he knows what's he talking about."

The story of a laboratory is always an exciting one, but at Randolph Field it is exceptionally so. For here men experiment upon themselves. As one of the students put it: "Brother, when you get a course that literally saps the life out of you, then you're going to a tough school, a really tough school."

What sort of things are going on here? Let's take a look around.

In a big, high-walled room where the temperature is far below zero and the frost on the windows so thick you have to scrape it off to get a peek inside, a group of snow-covered men in fur-lined clothing are going through an assigned routine. One man is lying on a stretcher. The others are bending over him, splinting his leg. They work fast because of the cold. When the splint is properly in place, they lift the "wounded" man and carry him to another corner of the room. Here they break out some canned food and feed him. Then they set up a small tent-like shelter made from a parachute, and build a fire. The patient rests comfortably and one of the men lights a cigarette for him. After a five-minute break, the whole procedure is repeated while a man with a stop watch times them again. It's all part of the Arctic technicians training course where men are taught how to work and live in the extremely cold weather which a crew might find if it were forced down in the Arctic circle.

Not far from the frigid chamber is a tall tower-like contraption which looks like a French guillotine. It works on the principle of a pile driver. A chair-like device is drawn up the tower and dropped with terrific impact. Its purpose is to simulate the impact forces of rough landings at high speeds.

Animals are used in this experiment. For example, a cat is strapped in the

chair and dropped in controlled tests which indicate how stiff a jolt the animal can stand. Autopsies show precise impact effects on various internal organs. Someday this knowledge may mean the difference between life and death for a pilot.

In another laboratory a man climbs into a mock up of small fighter plane cockpit, complete with all auxiliary equipment, and located inside a huge, low-pressure chamber. They can take the dummy cockpit up to a simulated 40,000 feet to 50,000 feet in a matter of minutes. The cockpit has its own pressurization system and the occupant can breathe normal air at normal pressures even though he is flying at a simulated 40,000 feet. But there is a catch to it. In the front of the cockpit, which is sealed tight, is a small opening covered with thin material. At a critical altitude, someone breaks the covering tissue and decompression sets in rapidly within the cockpit. This is what might happen to a pressurized cabin hit by an anti-aircraft shell.

The pilot grabs for his oxygen mask and snaps it on. He doesn't suffer any ill effects other than a sudden gushing of air to his cheeks and slight gas pains. Using different types of masks, and timing the speeds of the pilot's reactions, the "flying docs" are learning more and more about the effects of decompression and ways to avoid its harmful effects.

Inside a pressure chamber, a group of students try something else. At 40,000 feet, one of the men takes off his mask, stands up, and tries to walk across the chamber. As his face grows purple, he stumbles, falls down, crawls a few feet and passes out from lack of oxygen. The time: 55 seconds. They clamp a mask to his face and as he sucks in pure oxygen, color returns to his face. How long can a man get by without an oxygen mask at various altitudes? This is one of the questions answered here.

Classroom tests are equally rugged. One day, during a psychology lecture, the professor was talking about fear which sometimes overcomes the best of pilots. He told his pupils that strange expressions came over the faces of frightened men and that from these expressions, certain facets of a man's character revealed themselves. He was rattling off just so many words with no one in the class really paying attention, when suddenly there was a crash. The door burst open. A man in a prisoner's uniform rushed into the room with a guard in hot pursuit, gun blazing. Some students "hit the dirt," others ran for the door.

"It's alright," boomed the lecturer. "It's all a frame up. We've got motion picture cameras turned on you so that you can see what you look like in an unexpected, tough situation."

The Department of Global Medicine is primarily concerned with the feeding of airmen. Its experiments break down nicely into three divisions: Preflight feeding, in-flight feeding and post-flight feeding. They have already found that if you stuff a pilot full with a good,

The dangers of hypoxia (lack of oxygen) which can knock out a high-altitude flyer as quickly as an enemy's gun, are lessened by a warning device which records "brainwaves" and flashes a warning when an airman needs more oxygen.



O'er the Ramparts by Radar

The new radar net is a great defensive stride, but it is no substitute for a good offense

Early last month the Congress of the United States appropriated \$85 million for a net of radar stations to be strung around the country's perimeter—a net that would give a half-hour warning of any aircraft that approached our borders without proper identification.

The system had been planned by the Air Force for several years. But until now there was no money to finance it. Possibly because of what is referred to loosely as "the international situation" Congress now voted the necessary funds with practically no debate.

"Net" is the word Major General Gordon P. Saville who designed the system likes to use. "Some people call it a fence," he says. "But it isn't. A fence is something that you'd use for protection. The radar network will only give a warning. It is no substitute for fighter planes, and just as important it is no substitute for a strong offensive air force in being. It's a defensive measure and nothing more. And you can't win wars with devices of defense."

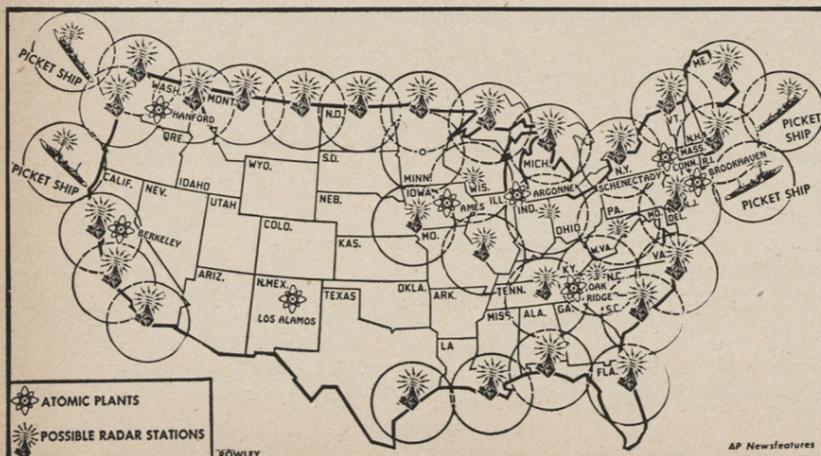
General Saville was on duty in South America when the Air Force first called him into Washington to work on the project. He was well qualified for the job. In one way or another he has been associated with air defense for seventeen years. In 1932 he was an instructor of fighter aviation at the Air Corps' Tactical School at Maxwell Field. In this capacity he participated in the world's first ground observer and aircraft warning control system. Later he became executive officer of the country's first air defense command set up as an experimental agency.

During the war he commanded the 12th Tactical Air Command in North Africa . . . an air defense job of the entire coast of the continent. He also headed the 12th in Italy. When it came time for the invasion of southern France he was in command of the air task force.

With such a background, the general set about the job that brought him up from Rio with assurance and determination. He chose three officers to help him out: one with a background in anti-aircraft, one who had a fighter background and who at the time was an instructor at the Air University on air defense, and one who was an expert in radar and early warning systems.

Together the four men sat down in their remote little office in the Pentagon and got to work. First they drew maps on several panes of glass. Then on each map they located with crayon the large centers of industry. On one map they pin-pointed all the major steel mills; on another the sources of water power; on still another the aircraft factories, and so on. Then by stacking the panes together they could tell immediately in what areas the greatest complexes

Exact location of new radar network must remain secret. The sketch below is a guess. Note the concentration in eastern industrial area.



A student learns first aid under Arctic conditions. This all-weather room simulates all climates found in the world.



Enlisted men, who will replace doctors in isolated areas, are studying ophthalmology with the aid of giant eye models.

hearty meal before take off, he is less subject to fatigue than a man who has just had a snack. A good meal also lets the flier go up an extra thousand feet. That could easily be an important, decisive edge in air combat.

And consider the problem to be solved with regard to planes like the B-36 which have long range potentials that may keep them in the air for 48 hours or more. How do you feed a crew of 15 a total of 135 meals? Various menus are being worked out: fruit

juices, cereal and coffee for breakfast; sandwiches and a hot drink for lunch; and a substantial hot dinner in the evening. For days at a stretch doctors put themselves on "in-flight diets" testing various combinations of foods until they hit a practical diet which gives a maximum of nourishment and satisfaction.

These are only some of the experiments which are being conducted at the School of Aviation Medicine. The modern airplane has made obsolete

many of the medical concepts and procedures formulated during the war years. It is reasonable to say that the flying doc is working under the strongest of pressures, because unless he can come up with new equipment and up-to-the-minute medical know-how, the speed and ceiling of the plane of tomorrow will be limited not by what the craft itself can take, but by how much punishment the human body and mind can absorb and still function with hair-trigger reaction.

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BT-13A	XPG-2A
AT-10	P-38J
AT-11	TB-25
TB-25	P-59
XB-42	B-17

GERMAN

ME-109	HE-219
AR-234	JU-388
TA-152	BU-181
V-1	V-2
HO-299	BP-20

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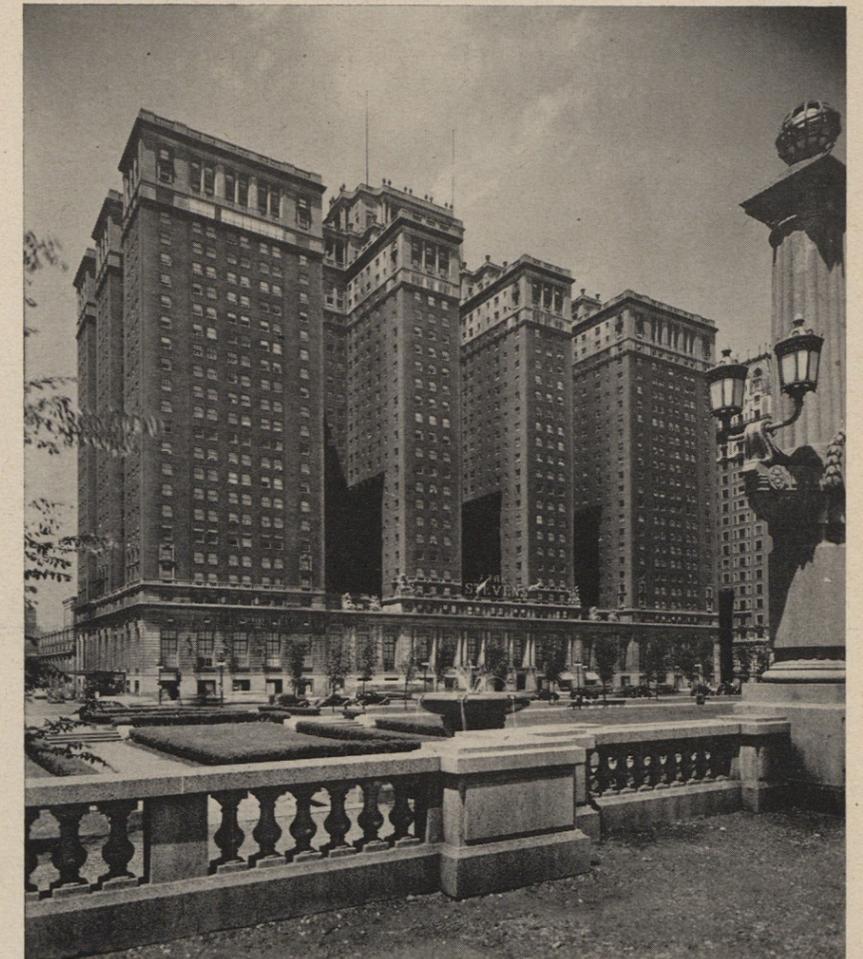
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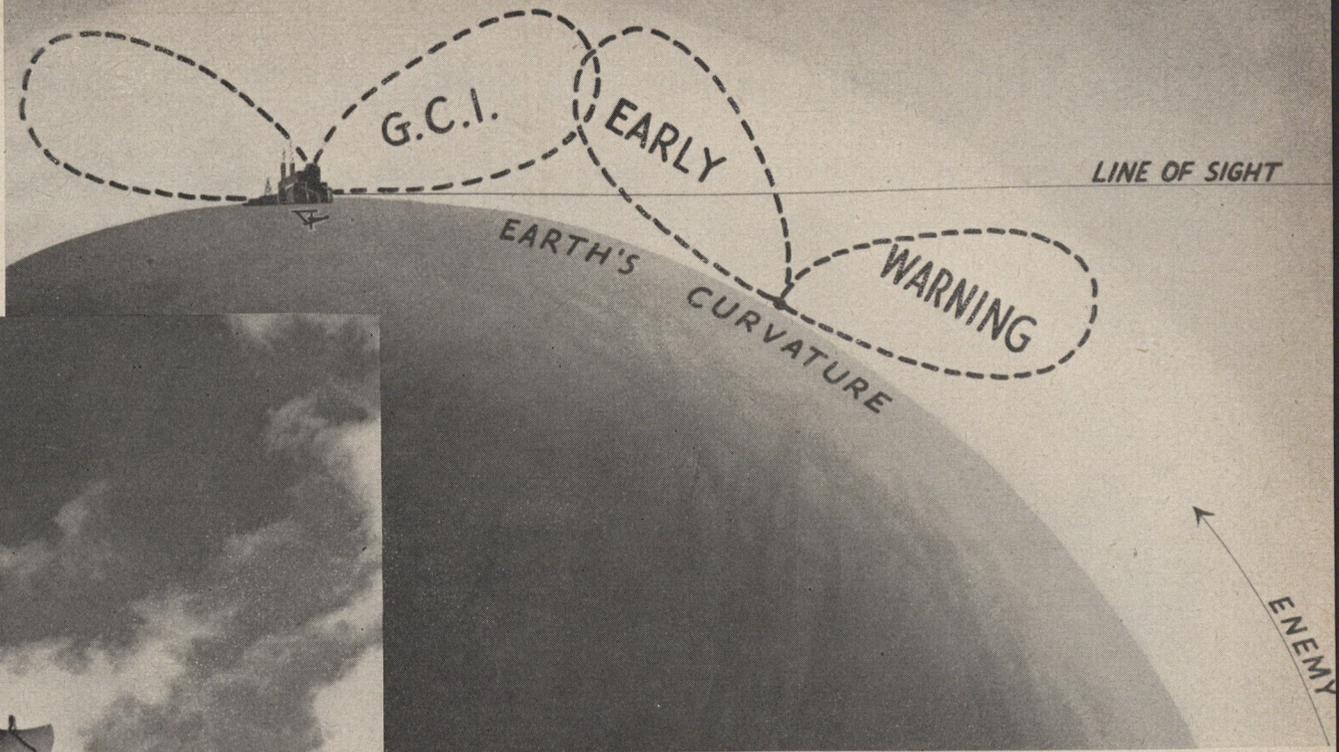
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Radar stations will be built mostly from surplus war-time equipment such as that at left. Above diagram illustrating scope of stations shows why "two-notch" system is needed for interception.

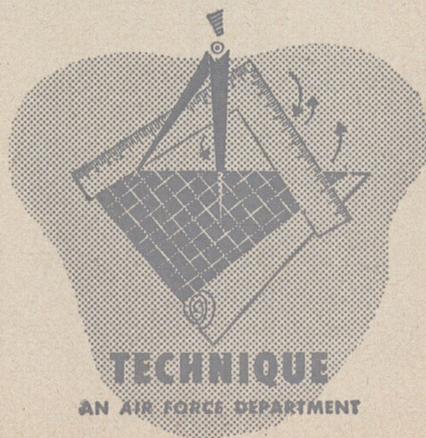
existed. These were the areas that had to be most carefully guarded. If one particular type of industry seemed to be largely outside the over all pattern, that pane of glass could be withdrawn and the net relocated accordingly.

Next came decisions as to where the stations themselves should be located. A single string around the border or around an industrial center was determined by Saville and his staff to be inadequate. Such a system would alert our fighter forces that an enemy was approaching but it would give no indication of which way he was headed. So a system of two-notch deployment was decided upon—a *double* string which would not only warn our observers of attack but would provide a "fix" on their course.

So far so good. But then came the problem of tying the net in with existing fighter bases. A fire alarm system would be no good if the fire house was too far away for the engines to get to the scene before the house burned down. An intricate tie-up of all existing facilities—Air Guard, Air Reserve, CAP—the works—resolved this problem.

The next move was to send teams out to study the areas selected and to choose the best spots within that area for actual construction of the stations. Because of the classified nature of the project at the time the teams could discuss their mission with landowners only in the most general terms. They were surveying for a possible government project — no commitments could be made and no details could be given. Under such a handicap their job was not easy.

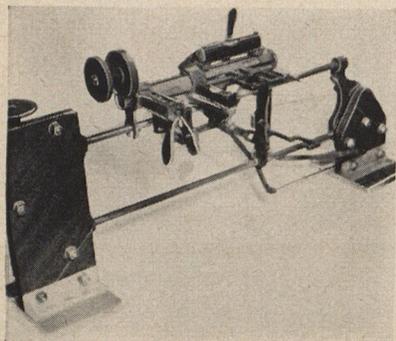
After a full winter of surveying the job is finished. With the money in its hand the Air Force will begin building shortly. It's another step toward security. But as General Saville points out, "it is no substitute for a strong offensive force. It's an adjunct."



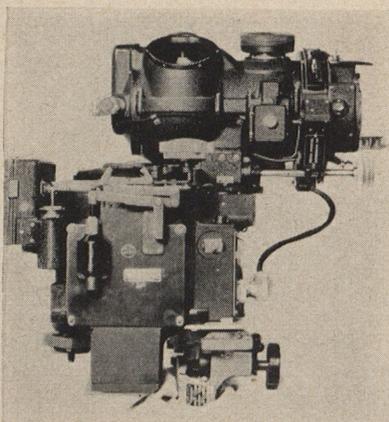
Wright Field at work on improved bombsight

New aids may make bomb drops from seven or eight miles up through overcast a cinch. Bombs may "kick" loose automatically

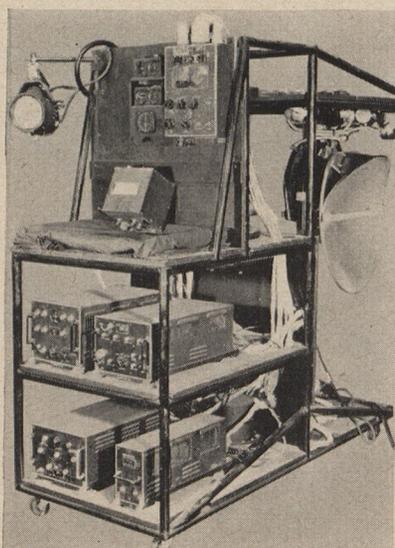
With the advent of bombers which can attain the high speeds of most World War II fighters, Air Force research people at Wright Field have



The Mark I-A . . .



The Norden . . .



And the full-blown radar bombsight

been working to perfect new sighting mechanisms which will replace outmoded bombsights and make possible precision bombing from extreme high altitudes at speeds of 500 miles per hour and more.

Radar is the key word in describing the new bombsights now being tried experimentally on most of our bombers including the B-36 and some of the faster jet jobs such as the B-47 and B-49.

"Recognizing a target with the naked eye from miles away is very difficult, especially when the bombardier is sitting in a lofty perch 40,000 feet up," explains one engineer "And it's becoming more and more difficult as speeds and altitudes increase."

Aids based on a simple radar system are being developed to defeat this problem. It may mean that the bombardier can drop his bomb (or an air-launched missile) from seven or eight miles up without actually seeing the ground except through a radar scope.

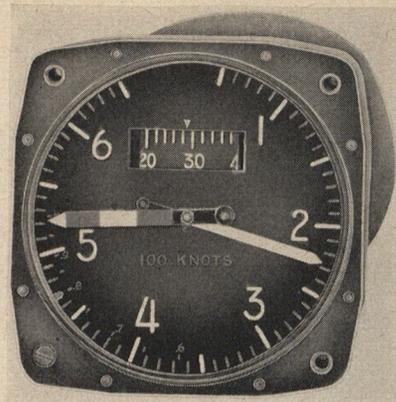
Another bugaboo in high-altitude bombing technique is the matter of trajectory. Experts have run numerous tests with various sizes of bombs and missiles to determine as accurately as possible the exact trajectory of falling objects. This, and new drift measuring means plus temperature, altitude and distance calculators feed information into the bombsight. Compensation for drift, wind, altitude and airspeed will be made automatically and it may be possible that the bombs will "kick" themselves loose when everything "coordinates" properly in the machine.

The bomb sight of tomorrow will be easy to maintain. The new mechanisms are constructed so that one section may be replaced without disturbing the entire system. Mechanics, therefore, can be taught to install and repair specific parts which will do away with the necessity of having one specially trained bombsight man who would have to work on the whole mechanism, and understand its many complicated operations. Although the bombsight will never be a simple instrument, by concentrating on only one part of it, mechanics can be trained much more quickly than heretofore possible.

Knots, Knots, Knots

Here it is: that new airspeed indicator which shows speed in knots—and we don't mean knots per hour either. According to the Wright Field equipment laboratory, the new L-6 is ready for installation in high speed aircraft as standard equipment.

The new requirements of high-speed,



A USAF airspeed indicator in knots.

high-altitude aircraft dictated the changeover from the old mph gauge. Its principle advantage, according to engineers, is that it provides closer readability of airspeed for cruise control purposes and for maintaining the constant speeds required on bomb runs. It also makes it possible to join combinations of airspeed indicators into one instrument.

The L-6 operates on the conventional static system. On the face of the single dial, the instrument shows indicated airspeed corresponding to a pre-set Mach number at any altitude up to 50,000 feet. Airspeed pointer and airspeed graduations are easily visible—being large needles finished in yellow luminous paint. The maximum speed pointer is covered with alternate bands of yellow and red radioactive paint to assure effective visibility at night under special ultra-violet lighting.

Speed is indicated in knots by large numerals on the face of the dial and in increments of knots on a drum-type indicator similar to those used on automobile speedometers.

Combined developer-printer turns out 20,000 pix daily

Any of you photo fiends who are looking for a quicker way to develop your prints might take a look at the new Air Force combination developer and printer unit which can turn out 20,000 pictures a day. And that's a lot of cheese cake for anybody's wall.

It works like this: Already developed aerial strip negatives are fed into one end of a multiprocessor. The negatives move over a series of rollers, pass through varied lighted areas, into chemical and wash tanks, under driers, and emerge at the other end as finished photographs, cut to desired size.

The whole idea, according to the photo experts, was developed to provide a complete, compact dark room for forward areas where rapid, quantity production of aerial photographic prints is essential to combat strategy. The complete multiprocessor is a complete portable photographic laboratory which can be put onto a truck or large



transport plane.

The complete unit measures 31 feet long, 17 inches wide, and stands about 5 feet high. Actually, although it is linked together as a whole unit, the machine

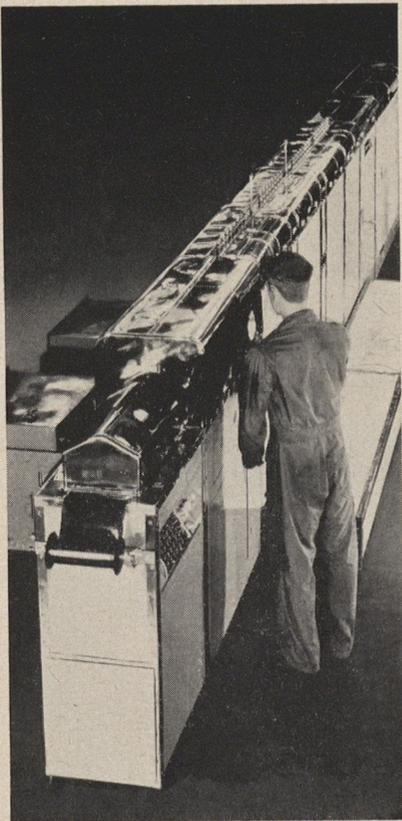
is made up of several separate units: previewer, printer, developer, spray rinse, hypo bath, wash tanks, and infrared air drier.

The entire processor packs into 16 boxes, none of which is over 6 feet long and each of which can be carried by 3 men. It can fit into the new Fairchild C-120 cargo airplane, and flown into advanced areas, it can be set up in a matter of hours.

This means that aerial photographic crews, returning from a mapping or recon mission can have their film processed in a matter of minutes after landing.

By using a special tank section, the multiprocessor can also be used for processing color prints, an advancement over previous methods in which color photography—most vital for camouflage detection—had to be sent far back from combat areas for printing and processing.

The Photo Multiprocessor, as it is called, can handle a roll of film as long as a football field. It was developed by the Air Materiel Command's Engineering Division Photographic Laboratory and built by the Technical Service Corporation of Plymouth, Mich.



Twist of the wrist starts strip film and photo paper on its automatic way through high-speed multiprocessor.

TECH TALK By Douglas J. Ingells

Sometime this summer the Dynamic Model Unit of Wright Field's Aircraft Laboratory is going to try an interesting experiment with one of their new models, a replica of the YB-49 jet propelled bomber. The 17 foot model—without any powerplants in it—is to be dropped from a helicopter so technicians can observe its stability characteristics. They're trying to find out what happens to the flying wing design in various flight attitudes.

For passengers who want to move faster than the airship, trends in design studies of jet-propelled transport planes make interesting speculation. According to some engineers the jet transport with 4,000 to 5,000 mile range will be ready to compete on level terms with the piston engine and turbo-prop arrangements in the year 1955. Jack Northrop reportedly has design studies which show that a jet propelled commercial transport version of the B-49 flying wing could be laid out to accommodate crew, 50 passengers and 20,000 pounds of freight. Figures on operating costs of jet transports are equally interesting: One study, for a short-range jet common carrier, shows that for short range, the jet is about 1.38 times as expensive as the propeller aircraft but offers a speed gain of 120 mph. That's with a conventional wing configuration. With a highly swept-back wing the figures go up; 1.56 to 1; but with an increase in speed of 190 mph. Considered on a passenger rate basis over a 1,000-mile range relative fares compare in a ratio of 100 for reciprocating engines; 102 for the turboprop; 110 for the jet. The high-cost of living fast.

Elsewhere, the Navy and NACA and other interested agencies are using free-flight models for carrying out a variety of tests with new aircraft designs, configurations and powerplants. "Literally, we have put wings on our wind tunnels," one engineer says. Present methods used fall into three categories: (1) The model airplane (or part of a plane) is mounted on the wings of a high-speed full-scale aircraft and tested while the craft zips along at various speeds and attitudes. (2) The model is dropped from a high-flying airplane and its speed and trajectory plotted from the ground as it descends; the same principle they plan to use with the YB-49 model and the helicopter only utilizing faster flying aircraft to carry the model into high-speed zones. (3) The model is mounted at some point on a rocket which is fired at supersonic speeds. What the whole program amounts to is that engineers, heretofore limited to their wind tunnels for certain laboratory experiments, are now using the sky for their testing ground.

Those big hydraulic presses which may introduce a new type of fabricating technique for certain airplane parts have finally arrived in this country from Germany. Because of their size and weight they pose numerous transportation problems in getting them to the plant at Adrian, Michigan or to the other commercial manufacturers that may get to use them experimentally under a new Air Force program . . . The big picture of the huge German Press that appeared in Technique a month or so ago, incidentally, was loaned to AIR FORCE Magazine by Hydropress, Inc., New York City. Erwin Loewy, President, who says it is the only picture of the big press available and it's very probably U. S. Engineers won't get a chance to study this particular press again outside the magazine. The Russians have it!

An instrument they call the "comparator" has been designed for checking the turbine blades of new jet engines. It provides a permanent inspection record of each blade as it is processed. Some jet engines have as many as 800 to 1500 blades in their turbines, but the instrument provides a thorough inspection of each. Its importance is stressed by the fact that a single blade which might be only a 1/2-inch particle can become defective and throw a whole turbine disastrously out of balance.

More Jet Fuel Available By New Distilling Method

Air Force, Navy and NACA perfect means of extracting more fuel from crude oil. Process will make substantial savings possible

A new fuel has been developed for jet-propelled aircraft which increases substantially the amount of fuel obtainable per barrel of crude oil. The new product, known as AN-F-58, is basically a gasoline-type fuel with an octane rating varying between 50 and 65. It was developed by the Air Force, Navy, and NACA with the cooperation of the petroleum industry.

While considerable savings will be made in the amount of oil used, the unit cost of the new fuel in dollars and cents is expected to stay about the same as the kerosene used formerly. AN-F-58 will be produced by the same suppliers who previously furnished the Air Force with JP-1.

A program of modifying all USAF jet-propelled airplanes to use the new gasoline fuel has been started. Modification of the individual planes will be slight, consisting of slight changes in fuel pumps and relocating various items of electrical equipment. All future production jets will come off the assembly line ready to use AN-F-58. Use of the new fuel will not materially change the performance of aircraft, although performance at altitude will be slightly better and cold weather starting will be easier.

Affects of Wind Gusts Tested on Flying Models at Airport

Wright Field technicians in the Dynamic Model Unit are planning another bit of realism at the tiny model airport they have constructed atop the base's

famous "hill." It is a unique air vent which will blow a vertical column of air across the flight path of the models while they are in the air. It will simulate the effect of an airplane flying into a violent updraft and thereby make it possible to obtain more accurate information on the effects of "gusts" than has been possible heretofore. Gust research has been carried on for years in a special "gust wind tunnel" at Wright, but this will be the first time the project has been taken outside where actual free-flight, power-driven models can be observed. The gust tunnel was located at NACA (National Advisory Committee of Aeronautics at Langley Field). The new test installation, which its proponents say will permit more frequent testing and thereby save time and money, will be under the direction of A. J. Stolzenberger.

Air Force Testing New Liquid Oxygen Converter At Wright

Still in the experimental stage is a new oxygen converter system which uses liquid oxygen to save space and weight over the oxygen breathing systems now in use.

The new system, now being tried out in B-17s, involves a liquid oxygen container weighing 130 pounds as against the present gas container which weighs over 400 pounds. This will permit a 44 percent increase in the oxygen supply available for the crew which can be translated into longer range and higher altitude without per-

sonal discomfort or loss of efficiency.

In principle, the new system consists of a metal tank for the liquid oxygen and a vaporizing coil. When the liquid is vaporized, pressure is formed and it is this pressure which propels the gaseous oxygen through the system to the flyer's mask.

Also under test is a mobile oxygen liquefaction plant which can be transported in one trailer truck or a large transport plane. This mobile plant can produce 80 pounds of liquid oxygen per hour which will be stored in 1,700 gallon tanks located right at the air base. To transport an equal amount of gaseous oxygen would take four and one-half times as much space.

Unveil Super Turbo-Cyclone 18

The United States will shortly have in quantity production a revolutionary new aircraft engine which can carry long-range patrol bombers around the world, non-stop, without refueling. Known as the Turbo-Cyclone 18, and manufactured by Curtiss Wright, this is the first gasoline aircraft engine to achieve the efficiency of a diesel without the diesel's weight.

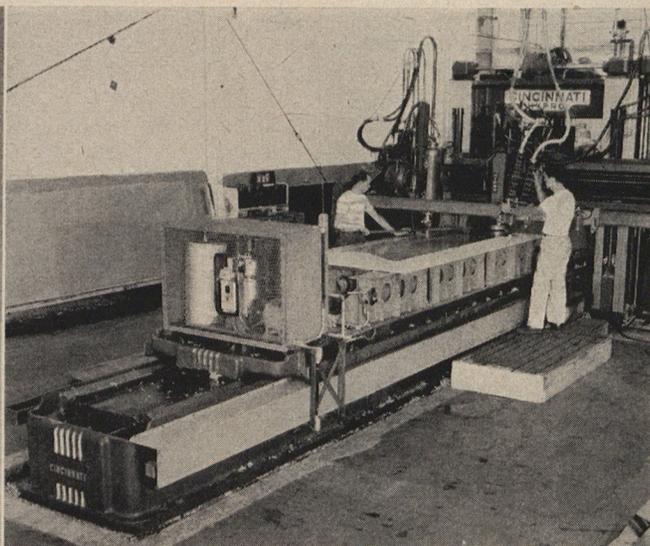
With a full military load, an aircraft powered by these engines, could take off from some point on the eastern seaboard of the United States, reach a point 2,000 miles beyond the English Channel, and return to its base again without refueling.

Engineers have described the "compound" as the most important innovation in engine design since the development of the jet turbine.

Although it was only recently that the Air Force released performance details on the new engine, AIR FORCE Magazine, in an article by William S. Friedman in its December, 1948 issue, was the first publication to carry the story of the Turbo-Cyclone 18. Two excellent pictures of the engine accompanied the article.



Piasecki's XHJP-1 helicopter, pictured above, has copped world's speed record for such craft with calibrated rate of 131 mph. Cruising speed at 75% of power is 114 mph.



Wing skins for North American's F-86 jet fighter are now tapered with this unique planer which shaves away material not required for strength. Company has two of these mills.



MILK...new weapon of Democracy!

*Supplied by air transport alone,
2½ million Berliners sample a
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• In today's diplomatic Battle for Berlin, hope for democracy is being kept alive for millions in Western Europe by the U. S. Air Force.

Flying Douglas aircraft almost exclusively, Yankee crews have poured over half a million tons of supplies into Berlin since last June. This impressive feat has strained to the limit our resources in air transport. *It has shown why sufficient cargo planes must be considered essential to any modern military defense program.*

Needed—and desperately—are larger, faster types of aircraft designed exclusively for air transport. And to meet this need, Douglas is now building the giant Douglas DC-6A. Able to fly 30,000 lb. loads at 300 mph, the DC-6A will make available to the military services a cargo transport of *rugged dependability*, capable of supplying world-wide bases in any kind of national emergency.



>> SERVING MANKIND AROUND THE WORLD

DOUGLAS AIRCRAFT COMPANY, INC.

OLD BAG OF BOLTS

The old lady didn't have much
glamour, but her tale was epic

By Maj. Ben H. Pearse

She was blessed with an assortment of names. To many she was *Old 76*. Some called her *Red Cap* and others *The Gravy Train* because she carried so many important personages to the four corners of the earth. But the name *Old Bag of Bolts* seemed to fit her best. Officially she was just AC Serial Number 40-2376, a B-24 airplane with a history all her own.

Squat and lumbering on the ground, she would waddle up to the head of a runway like a duck out of water. But once her ponderous landing gear was tucked away, she was a creature transformed—maneuvering her big bulk with the lightness of a toe dancer.

When *Bolts* was turned over to the Ferrying (now Air Transport) Command, months before Pearl Harbor, she already had cut her eyeteeth on dozens of missions. She had reached middle age for a plane of her type. As a Ferrying Command ship, *Bolts* had no regular run. Home was any place she plumped her wheels down. And it was here, there, and everywhere on short notice. Her crews had uncalled-for laundry all over the globe. Their baggage included fleece-lined clothing and boots for the Arctic, shorts and mosquito boots for the tropics.

Bolts knew what it meant to labor along through the heavy fog and mist of the North Atlantic burdened down with tons of ice. On the South Atlantic run her paint blistered under the equatorial sun; her motors choked through dust storms and wallowed through thunder squalls where St. Elmo's fire played about the leading edges of her wings and zigzagged eerily across the windshield. Her crews ate quinine instead of candy as she shuttled back and forth from Washington to Cairo over steaming African jungles and shimmering desert sands. Now and then they would zoom her low and let her chase herds of giraffes to break the monotony. With little more than a wrench and a screw driver to work with, mechanics would jump out almost as her wheels touched

the ground, then sweat in the torrid shade of her wings to change a cracked exhaust brace or broken stack, replace an oil valve, change spark plugs, service the oleos, and clean the strainers.

So thoroughly did the factory workers who put old *Bolts* together do their job and so thoroughly did her own mechanics sweat that her pilots were able to report at the end of each leg of each flight, under the heading of "Mechanical Difficulties," the sweet word, "None."

Her war assignment covered nearly 150,000 miles—really one continuous flight—and her engines hardly ever cooled until the very end. Time for her twenty-five-, fifty-, and hundred-hour checks flew past unnoticed, all because of the scribbled note that fluttered in the radio operator's hand as he dashed out to *Bolts* at Trinidad.

"Pearl Harbor attacked by Japanese at 0728," the note read.

The name of Ambassador William C. Bullitt headed the list of passengers as old *Bolts* roared out over the Caribbean. At Cairo, on that hop going over, a party of high-ranking officers boarded her for an emergency mission to Australia. Then she was loaded down until her sides were about to pop with ammunition and scores of other items badly needed in a hundred spots in the East Indies.

Maps were scarce—good ones, anyway. First Lieutenant Ben Funk, the pilot, picked up some information from a Dutch pilot at Karachi, but he still wasn't prepared for that short runway at Calcutta. It was marked "1000 yards" on his map—barely enough for a B-24 loaded until her tires bulged—but actually it was only 760 yards. Somehow, with plenty of brakes, Lieutenant Funk and old *Bolts* managed it—with a hundred feet to spare. To get off that runway, *Bolts* had to leave some gas behind.

On to Rangoon, which the Japs were bombing daily, then to Bandoeng, in Java, where the Dutch made quite a fuss over *Bolts*. They had never seen anything like her twenty-eight-ton body close up before. In fact, she was such an unfamiliar sight that an Allied plane looking very much like her had been fired on by Dutch anti-aircraft less than a half-hour before. But *Bolts* came in without difficulty. (The other ship went

on to Singapore and landed safely.

At Soerabaja, the next day, Major General Lewis H. Brereton and Major General George H. Brett were taken aboard old *Bolts* for a 10,000-mile inspection trip, 3600 miles of it in a one-day flight from the west coast of Australia to Sumatra.

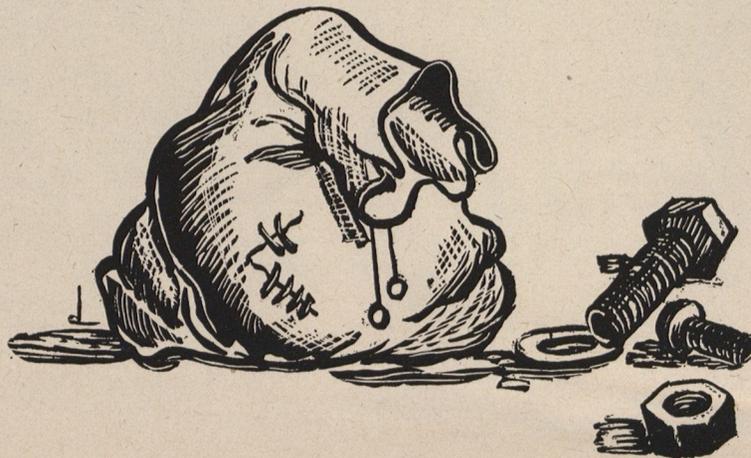
There was great need in the Indies for maintenance personnel to service the B-17's that had come in. *Bolts* was ordered to go from Australia up into the Philippines and bring out as many key maintenance personnel as possible. That was late January. The ground crews in the Philippines had been removed from Luzon to a secret airport on Mindanao. Japanese-controlled Davao was only a hundred miles away. It was a ticklish job, flying in at night, picking up the crews, and getting out unseen. *Bolts* had no armor, no self-sealing tanks, and only a few machine guns for protection.

Staff Sergeants Leo Zulkowski and Frank Sayko worked all day on *Bolts*, checking and rechecking for the afternoon take-off. The motors had long since passed the 400-hour mark. From Australia to Mindanao and back was 3600 miles, almost all of it over open water. Things had to be right.

Old *Bolts* made the trip without incident, although Lieutenant Boselli had to change course five times to avoid Jap-controlled areas. During the last lap of the flight, Captain Hewitt T. Wheless, who had flown every mile of the coast in his B-17, stood between Lieutenant Funk and First Lieutenant Charles Bowman, copilot, to guide them to the secret airfield. *Bolts* brought out twenty-five crack mechanics in her bomb bay.

About a week later, *Bolts* was off for Rangoon, with General Sir Archibald Wavell aboard. The Japs had raided a field nine miles from Rangoon a half-hour before her arrival. Pilot Funk decided to go to a satellite field in Burma, to escape a possible follow-up attack. Luck was with *Bolts*. That night the Japs raided Rangoon three times. The return to Java with Wavell was easy.

Singapore fell, and the Japs began their first raids on Java. The raids kept *Bolts* on the alert, staying away from her field while the Japs strafed it. When the air-raid alarms came, *Bolts* would lumber out to the runway, take off, and





fly south over the water and wait for the all-clear to be given.

Then *Bolts* was ordered back to Darwin, departing February 19, the day of the big Jap raid. About two hours out of Darwin, she got radio information warning her not to come in, so she landed a few hundred miles to the south, waited, and then came into Darwin shortly after the attack.

When the Japs went to work in earnest on the invasion of Java, *Bolts* was called upon for evacuation work. Twice she went back into Java from Darwin, bringing out twenty evacuees each time. Luck continued to ride with *Bolts*. The day after she left Broome, Australia, with the last lot of passengers she had taken out of Java, Broome suffered a heavy raid.

Bolts made a second trip to the Philippines. This time she took in sorely needed supplies for the wounded who had escaped fallen Bataan and Corregidor. In addition to her crew of seven, she brought out thirty officers and men from that secret airfield on Mindanao, including Lieutenant John Bulkeley of Navy PT-boat fame.

That was her last trip for the Ferrying Command. Within a few days her crew was called back to the States, and *Bolts* was turned over to the Commander of the Southwest Pacific. When Lieutenant Funk and *Bolts* parted company they had been together nearly 400 hours.

Bolts made one more daring trip after that, back to the Philippines in another rescue attempt. It was her last.

The gas load gave her only a few minutes to locate the Mindanao airfield. She circled overhead, trying to get a signal through. The Japs were everywhere; perhaps they had taken the field. *Bolts* didn't make contact in the darkness. She headed back to Australia.

But *Bolts* couldn't make it back with the remaining fuel. She headed back toward an island for an emergency landing. Her position was radioed, to aid in the rescue of her crew.

Then *Bolts* gave out of gas. She sat down in the water a few hundred feet offshore. After more than 600 hours her motors sputtered for the first—and last—time. And then only because she lacked fuel.

Members of her crew swam to safety and later were rescued by a submarine. Beyond saving was AC Serial Number 40-2376.

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Gen. Quesada outlines position of Air Force and Defense Department on Air Guard federalization

Points out that Air Guard has more fighter units in US than AF

In a frank statement before 500 Reserve and Air Guard commanders meeting in Orlando, Fla. recently, Lt. General Elwood R. Quesada, Special assistant to the Chief of Staff, USAF, for reserve forces, clarified the position of the Air Force and the Secretary of Defense with regard to the highly controversial plan to nationalize the Air National Guard.

General Quesada pointed out that the USAF has been charged, by the joint chiefs of staff, with responsibility for the air defense of the United States. At the present time the regular air force has 25 fighter groups only 13 of which are based within the continental limits of the United States. The Air National Guard with 23 Groups outnumber the regulars in this country nearly two to one, and since the successful defense of the United States in an emergency would depend almost entirely upon how quickly our air power could be mobilized, it is patently evident that the Air Force's authority is in no way commensurate with its responsibilities.

On the other hand General Quesada deplored the discord between the Guard and the Air Force and said it must cease if the best interests of the country are to be served. He said that the Air Force was solidly behind the Guard program and that the Guard has received over 70% of its authorized equipment, most of it on a non-reimbursable basis.

Quesada backed up his opinions by citing the findings of the Gray Board, a group composed of impartial civilians and officers who were appointed by the Secretary of Defense. Among their conclusions was that the "National security requires that each Service have one Federal Reserve Force." The recommendations of the board were passed on to the Secretary of Defense who concurred in them and, through the War council, delegated to the Air Force the preparation of appropriate legislation for federalizing the Guard.

General Quesada's views were vigorously attacked by Brig. Gen. Lewis E. Boutwell, Commanding General of the 67th Wing of the Massachusetts Air National Guard, who said that there were two basic military theories in opposition to each other in this controversy. One theory favors a modest standing force and a great force (National Guard) in reserve. The other calls for a strong standing army and a minor state militia. Boutwell said that the constitution of the United States calls for the former and that, therefore, the National Guard will resist all attempts to limit its power.

In Boutwell's opinion, Congress cannot alter the basic structure of the Air

National Guard. Because of the militia clause in the Constitution, the proposed merger of the Air National Guard with the Air Reserve can be accomplished only by constitutional amendment, he said.

Radio "hams" invited to join Military Amateur Radio system

Amateur radio operators, more familiarly known as "Hams," who are looking for new outlets for their talents can now get experience and training in both branches of the National Guard as members of the Military Amateur Radio System (MARS), Maj. Gen. Kenneth F. Cramer, Chief, National Guard Bureau, announced.

This is part of a recently authorized service-wide system which will establish amateur radio networks in the Army, Air Force, Air and Army National Guard, Organized Reserve Corps and ROTC. Any Guardsman or recruit who holds an amateur radio operator's license can join the new program.

The Air National Guard network would fit into the national MARS network in this way: Air National Guard MARS operators would work their own sets at home and would report in to their local MARS station director at the

air base, which in turn will check into the state network by reporting to the state MARS director or net control station. Reports would then go to the numbered Air Force directors who, finally, would pass on the reports to Air Force Headquarters in Washington, D. C.

These activities would be in addition to regular weekly armory or air base training and are purely on a voluntary basis. Radio "Hams" thus have a great opportunity to become a part of the radio communication system that would play a vital part in the defense of the country in case of emergency.

Amateur radio operators interested in participating in the program and who can qualify for membership in the Air (or Army) National Guard may contact the Adjutant General of their state or the nearest Guard air base.

New York gets first AACS unit

Air Force reserve activities on the east coast took on a new look recently when Maj. Gen. H. M. McClelland and Brig. Gens. Wallace G. Smith and Ivan Farman extended Air Force approval to the members of New York's first Airways and Air Communications Service reserve unit.

The new organization, officially designated as the 3rd AACS Reserve Wing, is commanded by Col. Guy C. Bittner, Manhasset, N. Y., who served during the war with the Air Communications division in Washington, D. C.

The mission of the new reserve unit will be to facilitate the training, organization and administration of the AACS Air Reserve Officers in New York.



General Hoyt Vandenburg presents the Air Force Award for exceptional civilian service to Mr. Tex McCrary, noted radio personality, staunch airpower proponent and prominent Air Force Association member. The citation stated that Tex' radio programs had attracted high quality men to the Air Force.



IN RESERVE LETTERS

The SOP of AR and NG

Guardsmen get new benefits Under retirement pay plan

Under a recent ruling of the U. S. Comptroller General, former National Guardsmen who have passed their 60th birthday and have had at least 20 years of satisfactory service, including active service in either war, may apply for non-disability retirement benefits under Public Law 810.

This reverses a previous ruling which said that a man had to be a member of a reserve component at the time he turned 60 in order to qualify.

Benefits are computed on a point system based upon base and longevity pay of the highest grade held. All persons who retired from the Guard before May 31, 1948 and who qualify under the terms of the law are entitled to payments retroactive to June 29, 1948, providing they apply before June 30, 1949.



The first women in New York City to be given assignments as Reserve Officers in the Air Force sign the payroll at a meeting of their Reserve unit at the Seventh Regiment Armory. At left is Capt. Arline L. Walker. At the right is Maj. Beatrice Seclav. The payroll clerk is Sgt. Bill Casey who likes the job.

Gentlemen: I am a reserve second lieutenant and I would like to go on active duty this summer. I wrote the RTC nearest my home and to the squadron to which I am assigned. I have received no reply from either. Do you have any information on active duty for reserves this summer?

Robert H. Davis
Bloomington, Indiana

• *At the present time active duty training for members of the reserve is limited to those who have a mobilization assignment or who are assigned to a reserve TO&E unit. For further information contact 10th Air Force Headquarters, Fort Benjamin Harrison, Indianapolis, Indiana.*

Gentlemen: AFR 45-15 provides for men who are technically qualified to apply for a commission in the Air Force Reserve. Can you tell me what these technical fields are?

Joseph Bianca
Scranton 8, Pa.

• *The recruiting officer in Scranton will supply you with a copy of the regulation which clearly outlines the technical skills wanted and the necessary qualifications for obtaining a commission.*

Gentlemen: Can you tell me how to

obtain a commission in the Air Force Medical Department?

Carl P. Dickan
Cleveland 9, Ohio

• *There is no Air Force Medical Department. Contact your nearest recruiting office for information regarding a reserve commission in the U. S. Army Medical Corps. There is a recruiting office in Cleveland.*

Gentlemen: Prior to my entering the Army in June 1941, I was assigned to the Field Artillery Reserve. When called to active duty, however, I was assigned to the Army Air Force and served with the Air Force until my release in January 1946. Prior to my release from the Army, I requested transfer from Field Artillery to the Army Air Force and thought that such transfer had been made until recently when I received correspondence from U. S. Army Headquarters pertaining to my reserve commission as a lieutenant colonel in the Field Artillery. What steps must I take to effect a transfer from the Field Artillery branch of the Army to the U. S. Air Force?

Lexington, N. C.
John R. Philpott

• *Write directly to the Adjutant General, U. S. Army, Washington 25, D. C. requesting to be transferred from the Field Artillery Reserve to the Air Force Reserve under the provisions of joint Army and Air Force Regulation 1-1-2. Do this quickly because after June 30, 1949 there will be no more inter-service transfers.*

Gentlemen: I am anxious to serve in the active reserve in Airways Communications. Please advise what I should do to get on active reserve status.

Lee Rall
New York 9, N. Y.

• *If you are now a member of any reserve unit, contact the Commanding Officer, Air Force Reserve Training Center, Mitchell Field, L. I., New York. If you are not a member, you may enlist at your nearest recruiting station.*

Gentlemen: Could you please furnish me with information concerning methods of applying for a Reserve Commission in the Air Force Reserve?

John A. Owen
Syracuse 4, N. Y.

• *There are several regulations pertaining to reserve commissions. Your local recruiting officer can tell you which one applies in your case and will assist you in making out your application. If he can't, write us again.*

Air Guard —or A Promise?



Maryland's senior air officer finds the Guard ready for action, the Reserve program a mirage, and the Air Force guilty of neglect

By Robert L. Gould, Senior Air Officer, Maryland Air National Guard

Both may be equally sincere in their desire to serve their country and both equally unselfish as far as personal ambition is concerned. Let's get this one point straight at the beginning—no one group in this country has any patent on patriotism. (*Author Gould must not have known that the award given Tom Lanphier "for outstanding journalistic endeavor" was made in recognition of his work as Editor of the Idaho Daily Statesman—NOT for his article in AIR FORCE magazine—Ed.*)

The one thing all of us are most interested in is a strong national defense—an adequate force, ready for instant combat. Our national economy can't stand a regular air force large enough to accomplish this objective and, as a nation, we are constitutionally opposed to a large, standing military establishment. Accordingly, a civilian air component, equipped and ready to fight, is the only other answer. The question is "Can this civilian component be more effectively trained under the Air National Guard, or by merging the Air National Guard with the Air Reserve and placing both under complete federal control?"

Colonel Lanphier believes that federalization is the answer. The interesting thing, though, is that most of his arguments in support of this position, when examined closely, actually present an extremely strong case for continuing the Air National Guard.

Let's take up the points he makes in order. First, Lanphier says that "the federal government, though it pays 97% of the Idaho squadron's expenses and supplies us with the excellent modern combat equipment we fly, does not presume to tell us specifically how, when, or where to fly it and has no authoritative way of checking on, or insuring, the quality of our training." This is an amazing statement and could not be further from the truth. With very few minor exceptions, the same Air Force regulations govern the operation of Air

National Guard airplanes and airplanes flown by the Reserve and the USAF. Either Colonel Lanphier doesn't read the directives published by the National Guard Bureau, U. S. Air Force, and the numbered Air Force responsible for the training of his unit, or unlike most squadron commanders, he would prefer to receive a specific order from higher headquarters every time he lets one of his airplanes off the ground. Perhaps the U. S. Air Force, the National Guard Bureau, and the numbered Air Forces do not go far enough in the matter of training standards and directives. But that is *their* fault and has nothing whatever to do with the Air National Guard as a method of operation.

Furthermore, the federal government *does* have an authoritative way of checking on, or insuring, the quality of our training. This authority exists in the Constitution of the United States, Article I, Section 8, Clause 16, "The Congress shall have the power to provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the states respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress." The italics are mine. In practice, the U. S. Air Force is charged with the specific responsibility, by law, of inspecting each Air National Guard unit at least twice a year, once during its armory phase training and once during its field training. If any Air National Guard unit fails to meet prescribed standards and corrective action is not taken, it is the duty of the USAF to withdraw Federal Recognition from those units. What can be more authoritative than this?

Lanphier also states, "The Air National Guard program in any given state is no better than the individual civilian who acts as Senior Air Guard

Better than promises! These jugs are from the 104th F.S. at Baltimore, Md.

In the January issue of AIR FORCE magazine, Tom Lanphier, Jr., Senior Air Officer, Idaho Air National Guard, wrote an article in which he urged the destruction of the Air National Guard. Shortly thereafter, Secretary for Air Symington presented him with the U. S. Air Force's exceptional civilian award for "outstanding journalistic endeavor in support of airpower and his dynamic leadership of the Air Force Association." Personally, I would rather have the Air National Guard! By the same logic, if Colonel Lanphier had recommended sinking the Navy, he would have been recommended for the Congressional Medal! It just doesn't make sense. Just because one man sincerely believes federalization to be in the best interests of national defense while another, equally sincere, believes that the cause will be better served by a continuation of National Guard principles and training methods, doesn't make either man the greater patriot.



Officer for that state." Isn't it axiomatic throughout the Armed Forces that no unit is better than its commanding officer?

Again Colonel Lanphier says, "But the U. S. Air Force . . . actually exercises no more than advisory control over our training program . . ." The law specifically charges USAF with the responsibility of training Air National Guard units. Whose fault is it, then, if this responsibility is not exercised? As we read on, we find Tom Lanphier admits that "by law, the training of Air National Guard units is a mission and responsibility of the USAF."

Now, we come to the payoff! "The service's ingrained fear of asserting itself too positively in National Guard affairs lest it stir up political resentment in the form of a crimped Air Force budget . . . results in an unfortunate "hands off" policy toward Air Guard training." Basically, this means that the USAF can decide for itself whether or not to comply with the law of the land. Most everyone will agree, I am sure, with Colonel Lanphier that this "is a hell of a way to build a unified, modernized citizen air force"! If true, it is a charge of the most serious magnitude, and directly involves the personal integrity of the Secretary for Air and the Chief of the USAF as well as their responsible subordinates, and should be immediately investigated by the Congress. As a nation, we cannot afford to whitewash such absolute disregard for the oath of office and such complete dereliction of duty on the part of the individuals at the head of our military establishment. Here is "politics" with a vengeance!

In fact, if we are to take Colonel

Lanphier's statement at its face value, the ghost of National Guard "politics" may be peacefully laid to rest forever. If his statement is only partially true, the USAF indulges in more politics than the 48 governors of the several states have ever done with their respective Air National Guard "Air Forces"! But the fact that Tom Lanphier can so strongly criticize, in public, the Air National Guard while retaining his commission as Senior Air Officer in the Idaho National Guard and his place on the Air Force Staff Committee on Air National Guard policy (in which he is supposed to represent the Air National Guard point of view) brings out the integrity of the National Guard and its supporting organization, the National Guard Association of the United States, in the sharpest possible relief. (Author Gould must have known that the Chief of the National Guard Bureau has demanded in strong terms that the US Air Force remove Lanphier from its Air National Guard Staff Committee because of his article in the January AIR FORCE, and that the Guard chief has been refused in even stronger terms—Ed.)

Now, Colonel Lanphier would have us substitute federalization under the Air Reserve for the present Air Na-

tional Guard. He says that under the Air National Guard we have 48 varied training programs for 48 little, independent air forces—but that has been answered, hasn't it, when he said, "by law, the training of Air National Guard units is a mission and responsibility of the USAF"? He fails to point out a single example where any state has obstructed this mission!

What is there about state lines that hampers the training of Lanphier's squadron? Won't an F-51 fly just as well over Wyoming as it does over Idaho? Does the engine of an Idaho Mustang quit when it crosses the Oregon boundary? Does Lanphier expect to be shot down in flames if he visits Seattle? Doesn't he overlook the fact that much of this country's strength is due to the union of 48 sovereign states—and that the same principle can be applied to the Air Force of the United States? Isn't it just possible that the Air Guard is better equipped and better trained than the Air Reserve because of these same state lines?

All of us are only too familiar with the deplorable state of Air Reserve training. There isn't any to speak of, nor is there any organization, except on paper! But Lanphier says the Air Guard and the Air Reserve are dupli-

"Can federalization," asks author Gould, "promise better training than this?"

ABOUT THE AUTHOR

The tenth Air National Guard leader to be represented in this series of pro and con statements on the Air Guard replies directly to Tom Lanphier's much talked about article of last January.

Even before that article appeared, Robert L. Gould of Baltimore had made his feelings known on the Guard federalization issue.

Although speaking at that time, as he does now, as an individual Guardsman, Gould is known to reflect generally the attitudes of the National Guard Association and the National Guard Bureau.

Lt. Col. Robert Gould has been a Guardsman since 1936, except for five years of war duty. He served with the Air Force as Director of Training at the B-17 CCTS at Dalhart, Texas, and at the B-29 Training Station, Pratt, Kansas, saw combat in the Pacific with the 315th Bomb Wing (B-29s), and later served as A-3 Operations in PACUSA. On Nov. 1, 1945, he flew one of the four B-29s which completed the first, and to date only, non-stop flight from Japan to Washington.

—THE EDITOR



AIR GUARD—OR A PROMISE? CONTINUED

cate agencies. This, too, simply is not so. They are *not* duplicate agencies. The Air National Guard, by definition, is an M-Day force. The Air Reserve, except for certain TO&E units, is not.

Anyway, Tom Lanphier says, "I dropped my Reserve commission and joined the Air Guard . . . because it had tactical aircraft to fly, while the Air Reserve in Idaho had nothing to offer but a promise." That has *always* been so, Colonel Lanphier—not only since World War II. I have been in the Air National Guard since 1936 and I *know* it's been so during the last thirteen years. And I don't want to trade the Air Guard for a *new* promise, either. You can't fly a new promise any easier than an old one!

In my squadron, there are many officers who formerly belonged to the Air Reserve. They unanimously oppose federalization of the Air Guard and many have indicated that they would resign their commissions if any such move took place.

There is no reason why the USAF cannot build up Air Reserve training to any practical standard it desires, independently of the Air National Guard and without conflict. Let that be done before federalization under the Air Reserve is offered as a substitute for the Air National Guard. It is simple enough to determine which is the better method. Look at training in the Air Reserves—and then look at the Air Guard. Which would *you* pick? Would you prefer to fly a promise—even a nice, shiny, new one, powered with no-jet, no-rocket engines?

The one, outstanding reason why the Air Guard should not be scrapped in favor of a single-component, federalized reserve is because the Air Guard method of training has worked and the Air Reserve method hasn't. No one wants to pull down the standard of Air Guard training to the level of the Air Reserve, and yet that is as much as we could expect under federalization, based on past performance.

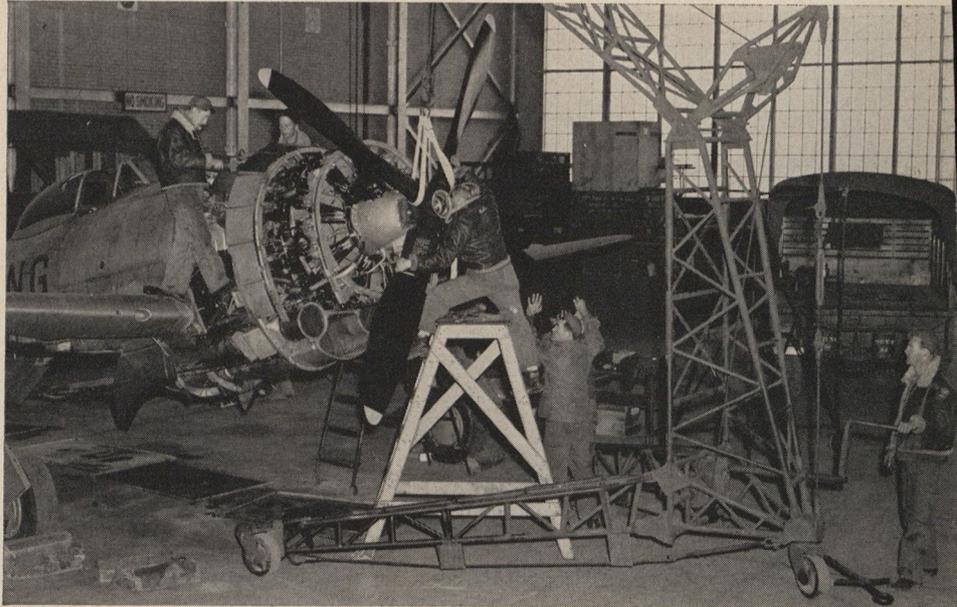
It is most significant, too, that the Air Guard has progressed to its present state of combat readiness without the benefit of support from the USAF. I concur absolutely with Colonel Lanphier that such support has been lacking, and have so stated in the Operational Efficiency Reports for the Maryland squadron. How much more *could* have been accomplished if the USAF had really tried to make the Air National Guard method work! Half the effort spent in trying to destroy the Air Guard could have made it a D-Day force by this time—in fact, and in being.

Instead, as Lanphier says, the Air National Guard has had to provide the initiative and responsibility for its own training, *with state help and state support*. A federalized component would have been (and is) helpless in a parallel situation. The Adjutant General of Maryland, Maj. Gen. Milton A. Reckord, long ago offered training con-

trol of Maryland's air units to the Commanding General of the Eleventh Air Force after waiting in vain for the Air Force commander to take the initiative. Even then the Air Force commander did nothing about it.

Much later, and again following the

Colonel Lanphier has probably been waiting for me to say something about economy and now I will. Much can be done to make the Air National Guard system more efficient, particularly as far as greater utilization of Air Guard aircraft and equipment is concerned. In fact, suggestions to increase the efficiency of Air Guard training along these lines have been before the Na-



An example of on-the-job training in 104th Fighter Sq. It's standard in USAF.

initiative of the Air Guard, a directive was published by the National Guard Bureau, with the unanimous concurrence of the State Adjutants General, establishing training supervisory channels through the normal chain of tactical command. As far as *training* is concerned, state lines are no barrier whatever. What greater authority, as far as training is concerned, could the Air Force wish?

Colonel Lanphier says, "an air arm is about as useful to the governor of the sovereign state of Idaho as a bomb-sight to a freight train." That is true. So is a tank company. Even the French 75's which were the basic weapon of a field artillery battery before World War II were hardly selected for the purpose of quelling riots and civilian disorders. The National Guard, both ground and air, is intended to be more than a mere "militia" in the modern sense of the word. Overlooked completely is the responsibility each sovereign state has to the Union. Overlooked, too, is the American heritage of avoiding the menace of concentrating complete control of all military forces in the hands of a few men in Washington. But, if the training of an M-Day force can be accomplished more effectively and more economically in the Air National Guard than in the Reserve, as time and experience have proven, why burden the argument with a discussion about "states rights"?

tional Guard Bureau and the USAF for many months. Even now, the USAF and the National Guard Bureau are considering a substantial increase in the number of combat crews authorized each Air Guard unit. Again, however, it is important to note that the initiative for this change came from within the Air National Guard itself and *not* from the USAF. In fact, it is not wide of the mark to say that the Air National Guard today is what it is solely as a result of its own efforts and the states which stand behind it.

Even at present standards of economy and efficiency, however, the Air National Guard offers much more for the taxpayer's money than the Air Reserve program. In Maryland, there are two Air Reserve training bases: one at Andrews Air Force Base near Washington and the other at Phillips Field near Aberdeen. The aircraft at these two bases available for Reserve training consist of 26 T-6s. To maintain these 26 airplanes and the personnel records of assigned Reservists are 181 officers, men, and civilian employees. According to First Air Force, the average number of hours flown per assigned aircraft for the period June through November 1948, inclusive, was 33, or a total of approximately 878 hours total flying time for Reserve pilots in Maryland and the District of Columbia. Since there are more than 800 rated pilots (other than Air Na-

tional Guard) in Maryland alone, the average is less than one hour per pilot for the six months' period. Actually, only a small percentage did any flying at all.

On the other hand, the Maryland Air National Guard has an Air Technician Detachment of 62 officers and men to maintain a total of 35 aircraft, including F-47s, B-26s, and C-47s, each of which requires far more maintenance in man hours than a T-6. These aircraft were flown a total of approximately 4500 pilot hours during the calendar year 1948, or an average of better than 2200 pilot hours each six months. Isn't the relative economy of the two systems readily apparent?

The Air National Guard of Maryland could take over the 26 T-6s now assigned to Reserve training and, with additional Air Technicians, including instructors, of 50 officers and men, could maintain training detachments at such key points as Cumberland, Maryland, Hagerstown, Maryland, Baltimore, Maryland, Salisbury, Maryland, and Phillips Field, and provide some training for *all* of the rated Reserve pilots in this state who are interested in maintaining their flying proficiency at least. Each pilot could get an hour a week with careful scheduling. This would provide about 25 times the present amount of Air Reserve training at a material saving in total cost, except for aviation fuel. If the USAF is really interested in Reserve training on an efficient basis, why hasn't it tried some such plan as this?

It would be far better to merge the Air Reserve and the Air National Guard under the present Air National Guard system. Then we might get somewhere as far as providing training to the hundreds of Reserve pilots Colonel Lan-

phier refers to who are not lucky enough to be a member of an Air National Guard "flying club"!

A most important factor in training civilian components is the amount of money Congress makes available for this purpose. Assuming the most economical method of organization and training imaginable, it is still probable that there would not be enough money to give all Air Reserve personnel sufficient training for them to maintain combat standards, individually, or as units. So that, even under the federalization that Lanphier proposes, it is more than probable that we would still have some Reservists on the outside looking in as far as being able to fly the latest in tactical equipment is concerned. If we really *are* interested in efficient training of the civilian air component, and want to get the most for our money, why don't we seriously consider merging the Air National Guard and the Air Reserve under the Air National Guard? Such a proposal was made to the Gray Board, incidentally.

While we're talking about money for civilian air component training, it is important to look at the real reason behind the abject failure of the Air Reserve training program. Actually, it is only another way of expressing the indifference of USAF toward any form of civilian component training, but it *is* basic. It is the amount of money available for the Air Reserve program—and how this money is obtained. In the Air Reserve program, funds needed for equipment, training, supplies and facilities are included in the annual budget prepared by USAF for submission through channels to the President of the United States. The President, in turn, submits his budget to the Con-

gress. It doesn't take much of an eye to see what happens to the Air Reserve program if all of the funds requested for the Regular Air Force are not obtained. The Air Force's desires for money have never yet been met and probably never will be. So the hope for obtaining any adequate amount for Air Reserve training is remote, indeed.

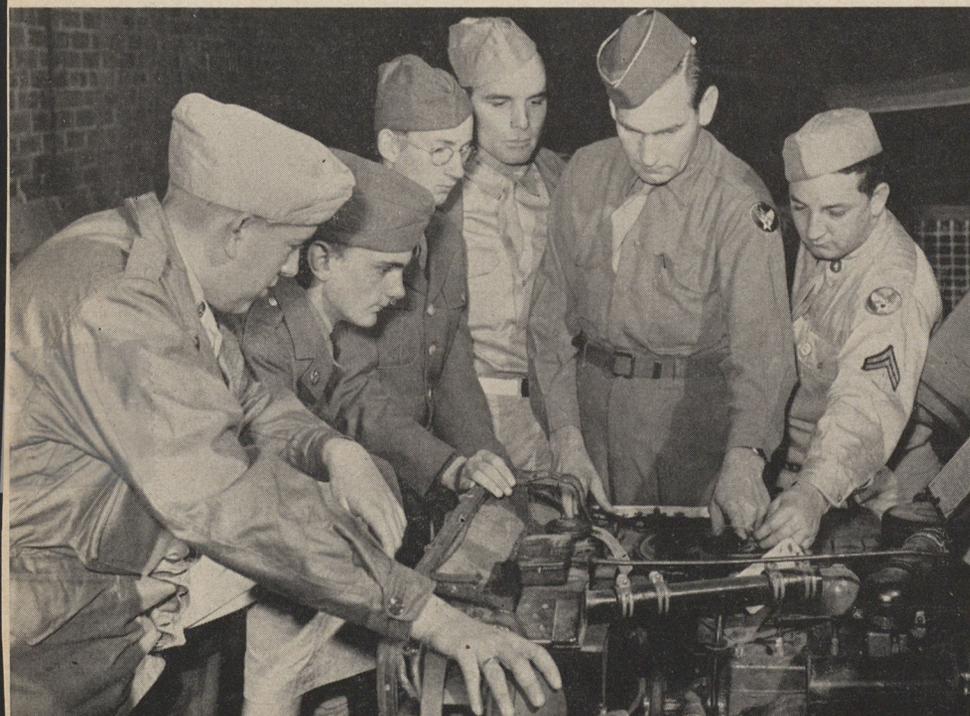
Funds for the Air National Guard, on the other hand, are protected and maintained as a direct result of the very same state lines which Colonel Lanphier so despises. The Congress of the United States is made up of senators and congressmen from every state in the union. Each of these men has a particular interest in what goes on within his state. The State Adjutants General have direct access to the Congress not only through the elected senators and representatives from their respective states, but also through the National Guard Association of the United States. The effectiveness with which these state efforts are pursued in behalf of the Air National Guard is clearly reflected in the amount of money made available for Air National Guard training and specifically earmarked as such, as well as in the modern facilities and equipment made available for the Air Guard's use.

Federalization of the Air Guard would automatically lop off this important, vital support of the civilian air component. All civilian air component funds would then be controlled by the USAF. The states would completely lose interest in the matter. The result would be disastrous. Why repudiate the best friend a civilian air component ever had?

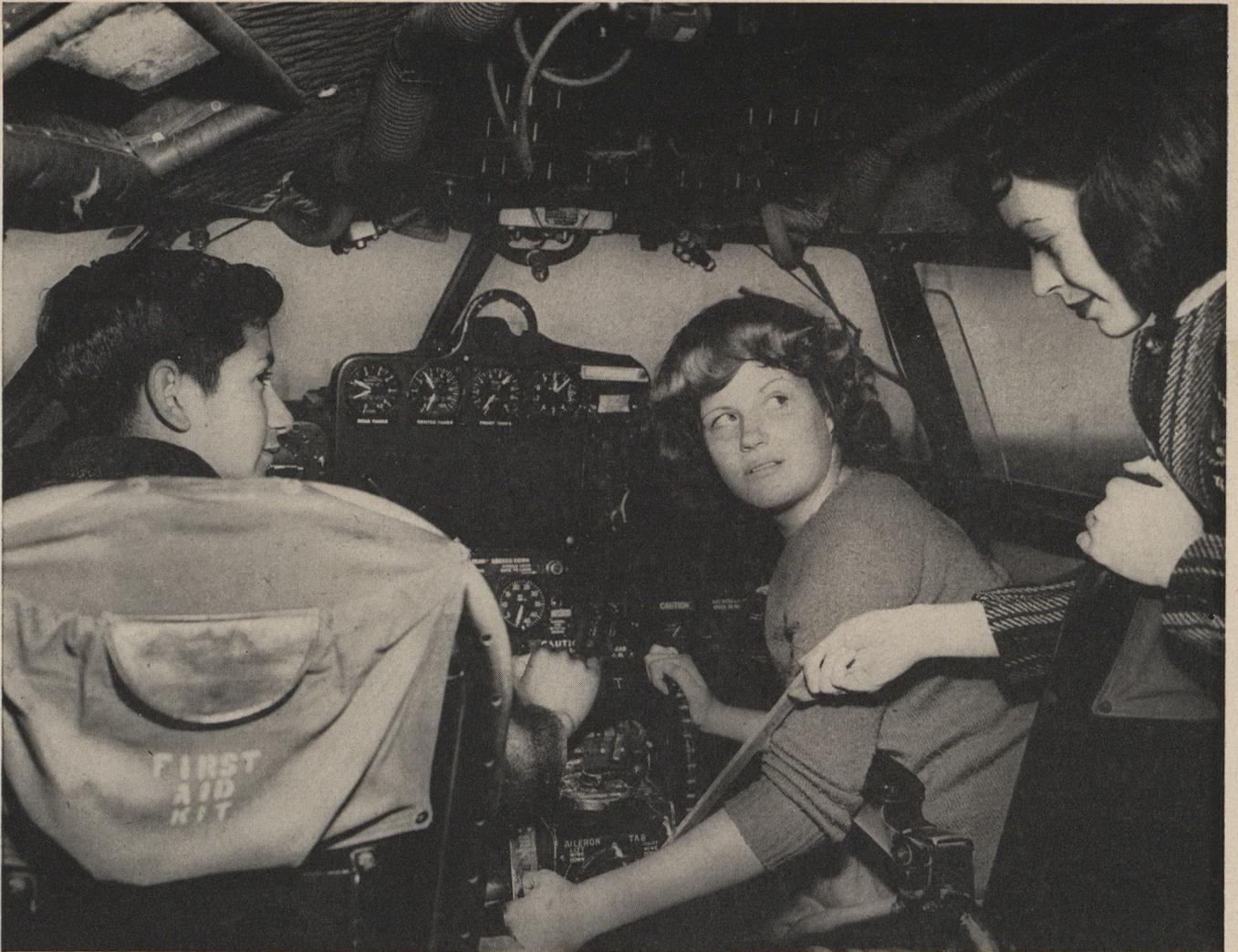
I am surprised that Colonel Lanphier failed to put his finger on the outstanding weakness of the Air National Guard system as it exists today. Briefly, this weakness is the present inability of the federal government, under existing law, to get the Air National Guard into combat at a moment's notice. In the event of lightning war, such a weakness could be fatal. This, too, can be corrected, however, without disturbing the Air National Guard as a method of operation and training. Three things are needed. Enabling legislation should be passed immediately to cover:

1. Provision by law for the USAF, through its established chain of command, to call the Air National Guard into federal service in the event of actual or impending attack by any foreign power.
2. Individual relief from property accountability in the event of such a call to federal service.
3. Provision for immediate induction into federal service of all Air National Guard personnel to coincide with the call to federal duty under paragraph one, above.

If the military establishment in Washington would devote its attention to correcting such major deficiencies as these and abandon its misguided attempts to destroy "a going concern," the interests of national defense would be served far better.



104th's Transportation Section won "excellent" rating in federal inspection.



A war weary C-46 isn't much good for flying, but it makes a wonderful classroom for the Kids of Weed Patch, California. All of aviation phases are covered here. Above, Joe Zaragoya and Mildred Hobbs study the cockpit under the tutelage of Miss Betty Thompson, former WASP wing commander. Below, the same young lady leads a mechanics workshop class.



AIRPOWER IS KID STUFF

The youngsters of Weed Patch have a classroom with wings

Let's face it. The Air Force veteran of World War II isn't getting any younger. It's been nearly four years now since VJ-Day, and with each passing summer the fly boys of the early forties are getting just a little rustier whether they will admit it or not. Doolittle himself has hung up his wings! There's no question. Flying is a young man's business, which explains in part the Air Force's noticeably increased interest in Air-ROTC affairs recently, and which also makes something more than an oddity out of the thriving aviation course in the elementary school at Weed Patch, California.

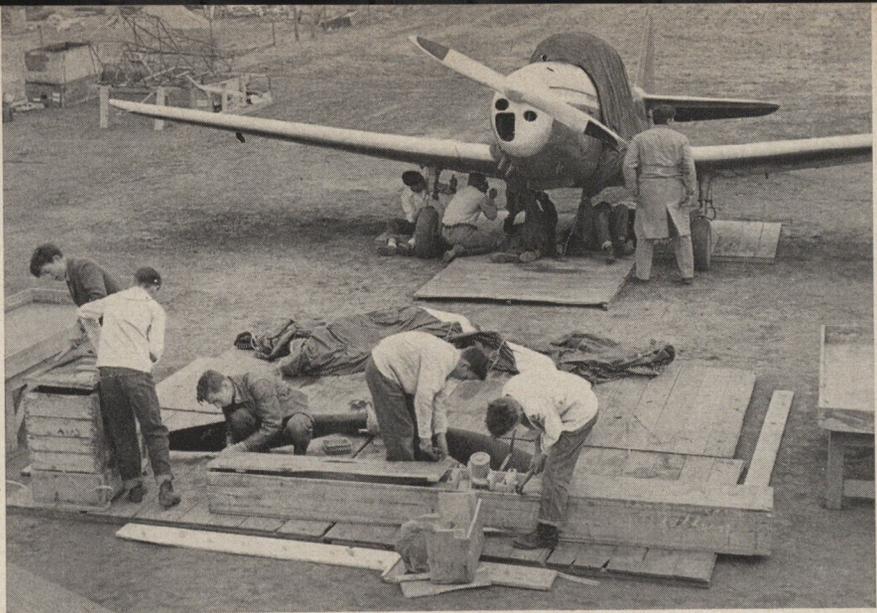
Weed Patch, as the name suggests, is in the big middle of California's "Grapes of Wrath" area. Back in 1946 the district's Superintendent of Schools, Peter Bancroft, counted up his problems like this: First came the lack of schoolroom facilities to accommodate the offspring of the area's migrant population. Second came the lack of money to build new facilities. Third was the problem of finding something in school more interesting for the none-too-academically inclined youth to do than they could find themselves down by the beautiful Kern river.

Bancroft was a pilot himself. The War Assets Administration, he had heard, was selling war-weary aircraft at ridiculously low prices. Upon investigation he found he could buy a Curtiss C-46 for \$270.00. This was it. Bancroft dug down in his own pocket for the two seventy. Not only would the tired old veteran of Hump operations provide an inexpensive classroom, it would also give the kids something as interesting to do as fishing or swimming.

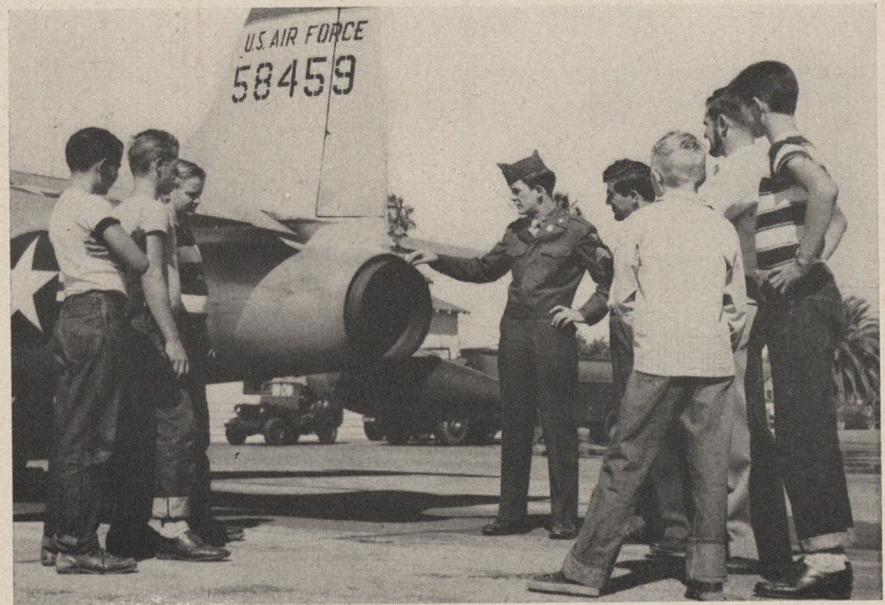
Bancroft and George Valos, an AAF veteran whom the Superintendent selected to head his aeronautics program, personally took delivery of the plane at the WAA plant and flew it to a field near Weed Patch.

There they were met by farmers and townsfolk with tractors, shovels and axes. Over fields and through gullies the plane was towed with great ceremony to its final resting place in the school yard.

The kids went for the idea like a Mustang after an ME-109. On their own hook they sponsored a carnival to raise the money to pay Bancroft back. They accomplished their objective with



Peter Bancroft gives his personal plane to a good cause. Here, the Aviation Boys work it over while others uncrate equipment bought from Army Surplus.



The Army gives the boys the low down on jet planes. The class visited March Field and covered the field with wide-eyed, eager eyes, ears and questions.

enough money to buy still more equipment. At present, in addition to the grounded C-46 classroom they have another 46 that flies, two AT-6's, a Link trainer, an odd assortment of engines and spare parts, and a 1500 foot runway, built by the townspeople. Another instructor, Charles Blair, who was a flight instructor during the war, has been added to the staff.

The kids don't actually fly the planes, but they do everything short thereof. They turn them over, rev 'em up and, under careful supervision, taxi them about. Classroom study includes primary investigation of just about everything you'd find in a regular AM school, plus elementary study of theory.

Playing hookey is no longer popular at Weed Patch. And it isn't stretching a point too far to say that America's future security in the air is just that much better off. Valos and Bancroft have hopes that maybe their idea will spread to other schools throughout the country. Such a program would be a valuable addition to the three "R's".

Bancroft and Valos pull the props through on their 270-dollar C-46.



Release Wing Ding '48

Madison Square Garden's "greatest show" now available to units of Air Force Association for local showing

What makes some parties click and others fall flat on their faces? Sometimes it's the people, or the refreshments or a new television set in the house. Make it something different and you'll end up having an affair that people will talk about.

Well, National Headquarters can make your next get-together an event that Air Force people in your city will be talking about for days. We haven't got a television show to offer you, but we've got something better: A motion picture with a star-studded cast that has probably never been excelled.

It's WING DING '48, Air Force Association's own full-length motion picture of that great Madison Square Garden reunion last year. Here's the cast, boys, read it and weep to see such quantities of stars: Bob Hope, The Rockettes, Joe E. Brown, Clark Gable (with both ears), Dinah Shore (with both larynx), Gypsy Rose Lee (with both), Marlene Dietrich, James Stewart, Jinx Falkenburg, Carmen Miranda, Jack Dempsey, Jerry Collona—we could go on but that will give you an idea.

Borrow the film, plan your party, invite your guests. Maybe you can get someone to donate a keg of beer. Go all out to make this a big thing.

The national office will send you invitational postcards already addressed to every person residing in your city who has ever been a member of AFA. All your squadron has to do is fill in the date, time and location, slap on penny stamps and drop them in a mail box.

Those of you who attended OPERATION WING DING last year know what went on that night at the Garden. Remember Bob Hope parachuting down through the roof and that sensational boxing match—two blistering rounds between that great heavyweight, Hope himself, and an up and coming young fighter named Jack Dempsey? John Reed Kilpatrick, the president of the place, who should know what he's talking about, called it "The greatest show ever staged in Madison Square Gar-

den." If you were there, this is your chance to see it again. If you were unfortunate enough to miss it, just seeing it in this great film should be the convincer for making the next one in Chicago this July. And while we're on that subject, it's not too early to make your reservation.

Aside from the fun you can have showing this film at that party of yours, you can do something for the organization, too. You guessed it—new members. Bring AFA prospects to your WING DING showing. We are providing each squadron with an OPERATION WING DING Attendance Record card. This card should be filled out by everyone who sees the film and it will tell us the status (member of AFA or not, etc.) of everyone there.

Part of the card provides for membership application and we hope that you'll be able to get many new members on party night. As for financing—National Headquarters has worked up a plan which will help you cover your postage and other expenses and leave something over for squadron activities.

Now listen to this: The Association has only ten 16-millimeter and two 35-millimeter prints of the film. Since every AFA unit is entitled to use it, this means that you'd do best to plan your affair as far in advance as possible and be patient with us if someone else beats you to the date you want. Incidentally, if you want to have more than one showing, so much the better. Maybe your squadron covers several cities—by all means have a showing in each one.

Your squadron commander has, or will, receive detailed instructions on how to go about lining up the program. He'll have all the poop and will be responsible for all the detail work. All that we ask is that you back him up by giving him all the help he needs, especially when it comes to getting everyone who might be eligible for AFA membership to come to the party. The film should do the rest.



Who will forget Hope's chute entry?



Wings for Bernard Baruch above, and a citation for show business, below.



Deep River Boys—soft and mellow.



The most famous "line" in the world.





They'll remember The Gyp for years



Low whistles were for gal above. AFA airpower awards for people below.



AFA NATIONAL COMMITTEES

President C. R. Smith has appointed AFA's seven standing committees for 1949, and one special committee, and asked members to concentrate on Association programming in the period leading up to the Chicago convention in July. A total of 32 AFA leaders will undertake committee assignments. Committeemen represent 15 different states and all sections of the country. New committee chairmen include Thomas D. Campbell of Hardin, Mont. (Finance), William D. F. Morrisson of Providence (Membership), Gill Robb Wilson of New York (Public Relations), and Robert Proctor of Boston (Policy). The complete roster follows:

STANDING COMMITTEES

Executive

Edward P. Curtis, Chairman
Rochester, New York

James H. Doolittle
New York, New York

Thomas G. Lanphier, Jr.
Boise, Idaho

Robert Proctor
Boston, Massachusetts

(Note: All national officers are ex-officio members.)

Finance

Thomas D. Campbell, Chairman
Hardin, Montana

John P. Biehn
Columbus, Ohio

John Marshall Boone
Baltimore, Maryland

Jacqueline Cochran
New York, New York

Robert Gross
Harrisburg, Pennsylvania

Thomas F. Stack
San Francisco, California

Constitution

Julian P. Rosenthal, Chairman
Forest Hills, New York

James H. Douglas, Jr.
Chicago, Illinois

William Hensley
San Antonio, Texas

Thomas F. Stack
San Francisco, California

Membership

William D. F. Morrisson, Chairman
Providence, Rhode Island

George I. Alberts
Worcester, Massachusetts

Albert Harting
Dallas, Texas

Harry J. Johnson, Jr.
South Fort Mitchell, Ky.

Bert D. Lynn
Los Angeles, California

Awards

Thomas G. Lanphier, Jr., Chairman Boise, Idaho

James H. Doolittle
New York, New York

Mary Gill Rice
Forest Hills, New York

Charles Stebbings
Chicago, Illinois

Helen Hamilton Woods
New York, New York

Public Relations

Gill Robb Wilson, Chairman
New York, New York

George Haddock
Arlington, Virginia

Ray Ireland
Chicago, Illinois

Bert D. Lynn
Los Angeles, California

John R. McCrary
New York, New York

Rex Smith
New York, New York

Policy

Robert Proctor, Chairman
Boston, Massachusetts

Walter P. Budd, Jr.
Durham, North Carolina

Harold L. George
Los Angeles, California

William Hensley
San Antonio, Texas

Casey Jones
New York, New York

Arthur Kelly
Los Angeles, California

Thomas G. Lanphier, Jr.
Boise, Idaho

Gill Robb Wilson
New York, New York

Publications

John P. Edmondson, Chairman
Scarsdale, New York

Corey Ford
Freedom, New Hampshire

Carl Norcross
Dobbs Ferry, New York

SPECIAL COMMITTEE

Thomas G. Lanphier, Jr., Chairman Boise, Idaho

James H. Doolittle
New York, New York

Gill Robb Wilson
New York, New York



CALIFORNIA

Los Angeles: The California Wing's "Operation Membership" has netted four more chartered AFA Squadrons, Bert D. Lynn, Secretary of the Wing has announced. Former members of the Air Force who served in the European Theater of Operations have banded together and formed the ETO Squadron of Los Angeles. Joseph J. Nadel of 1941 Euclid Avenue in Santa Monica was chosen temporary head of the unit. Nadel will be assisted by Howard O. Wolcott, vice commander; Cornelius Harth, treasurer; and James D. Powell, secretary. Thirty-two former ETO members signed the charter.

Long Beach: Thirty-two AFA members in the Long Beach area have formed an AFA Squadron and elected Court Powell of 1068 American Avenue to head it. Vice Commander Leo Briethaupt, Treasurer Donald Hollowell, Secretary Emily Nicol, and three council members will assist Powell.

Orange County: AFA members in Orange County have formed one of the newest AFA Squadrons. The 21 charter members voted John C. Gallagher of 8042 East Taylor Street in Buena Park to lead them, with T. C. Fallin as vice commander, E. T. Chapman as treasurer and Billy D. Ray as secretary.

San Gabriel: Another AFA Valley Squadron has been formed under the direction of the California Wing. Twenty-three AFA members residing in the San Gabriel Valley recently had their application for charter approved. I. L. McElliott of 2321 Repetto Avenue in Montebello was elected Squadron Commander; with Curt Alexander to serve as vice commander and James H. McDivitt, secretary-treasurer.

Los Angeles: All former members of the WAC, who served with the Air Force, and who reside in the Los Angeles area, will be interested in knowing that an all-WAC Squadron is now being formed under the leadership of Marion Gordon. AFA WAC veterans are urged to contact Bert D. Lynn of 1452 North Seward Street in Los Angeles.

San Francisco: The San Francisco Squadron has announced that it has just boosted its membership to 225, to become the largest Squadron in the Cali-

fornia Wing. A great deal of attention was recently focused on the active AFA unit when it sponsored the staging of "Command Decision" by the University of California College Players. So successful was the performance, that some of the acts received as many as seven curtain calls.

San Fernando Valley: The San Fernando Squadron Number One has announced its new officers, recently elected at one of its regular monthly meetings which are held in the Enlisted Men's Club-room of the Air National Guard at Lockheed Terminal Grounds in Burbank. Robert W. Salling of 2109 Lincoln Street in Burbank will head the Squadron for the coming year, and he will be assisted by Robert D. Martin, vice commander; Jack Tomkins, treasurer; Robert Snyder, secretary; and Don Mayfield, Bob Dorthy and Bill Pike as councilmen.

GEORGIA

Savannah: Over one hundred AFA members residing in the Savannah area have officially organized an AFA Squadron, and recently held a dinner meeting at the Officer's Club at Chatham Field. Col. Breckenridge, Commanding Officer of the 2nd Bomb Group of the 8th Air Force, invited the Squadron to hold its meeting at the newly re-activated base. Frank J. Skeffington was elected to head the Squadron during its first year, and the other officers are: Ralph G. Kuhn and

HAWAII

Honolulu: Mark T. Donahue of 117 Davis Avenue in Hickam Village at Honolulu, Secretary of the Oahu Squadron, has announced the election of the new squadron officers. Edward E. Johnston will head the outfit for the coming year, with Ross W. Haynes as vice commander, and Daniel W. West as treasurer. The Squadron meets at the Smile Cafe, 1953 Kalakava, Honolulu, the last Tuesday of each month. Donahue can be reached at telephone 404721.

IOWA

Cedar Rapids: Another group of AFA members in Iowa have united and formed an AFA unit with plans for selling air power as the native sons have been selling the well-known corn country. M/Sgt. Joseph K. Waddell, Jr., who is presently doing recruiting duty in Cedar Rapids called the AFA members together and helped organize them into an active Squadron. Robert N. Ettinger of 2635 Bever Avenue, S. E., was elected commander. The other officers of the unit are: Robert F. Kucera, vice commander; Donald G. Stone, treasurer; and Wm. J. Pudzuvelis, secretary. The Squadron meets the third Wednesday of each month. Plans are being completed for a Charter Ball on May 14.

KANSAS

Wichita: Over 500 AFA members gath-



AFA's Lansing squadron promotes safety as well as national security. Here members Frank Miller, Richard Goldfogle and Dennis Haley (all kneeling) apply patches of luminous "Scotchlite" tape to bike fenders of some of the town's younger pedal pushers. Squadron spent several hundred dollars on tape so that night riding by Lansing kids would be safer. Gesture was acclaimed by townsfolk.

Joseph S. Ivey, vice commanders; Manuel Mamalakis, treasurer; Harry P. Palmer, secretary; and Hessel M. Kahn, sergeant-at-arms. John W. Sognier, Donald L. Devlin and Brig. Gen. H. S. Hansell, Jr., Ret. will serve as councilmen. Michael E. Kohler of 211 East 41st Street, P. O. Box 1014 in Savannah will head the Publicity and Public Relations Committee.

ered in the Arcadia Theatre in Wichita on March 2 at the organizational meeting of the Wichita Squadron. Principal speakers of the evening were Col. D. A. Walker, Commanding Officer of an Air Force Reserve Unit in Arkansas city, and Otto Wellensiek of Nebraska City, who is a member of the National Board of Directors of the Association. Other well-known aviation figures who

were present for the meeting were: Chaplain W. H. Teed of the Wichita V.A., Brig. Gen. Ray G. Harris, retired, former commander of the Midwest Procurement District, and Col. B. W. Feiling, Air Force representative at Boeing-Wichita.

William S. Oman of 1368 Bluffview was elected commander of the Squadron, along with Perry V. Row as vice commander; Harold W. Stone, treasurer; William P. D. Wilson, Jr., secretary; and Milton Zacharias, B. G. Rowe and Merle W. Allen as councilmen.

KENTUCKY

Covington: Representatives of AFA from all over the Blue Grass State gathered in Covington for a two-day session to set up a new permanent Wing organization. From out of the conference, came the Wing's constitution and by-laws, a new slate of permanent officers and a resolution resolving that all Kentucky Squadrons shall cooperate with the State Department of Aeronautics, work with local civic and educational leaders in presenting an informational aviation program, cooperate with local Air Force Recruiting Offices, remember the disabled veterans in V. A. Hospitals, appropriately observe such occasions as Memorial Day, and support the policies and objectives of the national Association.

William C. Whitson of 55 Dudley Pike in Covington was elected Commander of the Wing. He will be assisted by William A. Mordica of 2256½ Win-

in Worcester, Massachusetts, according to George I. Alberts of the Worcester Squadron. An informal banquet will be held at the Aurora Hotel at 5:45 p.m. The Squadron has rented the Little Theatre for the premiere showing of the AFA film, "Wing Ding." After the movie, everybody will go to the new permanent quarters of the Worcester Squadron for a good old fashioned "house warming." The Squadron has just completed its new club house and have planned an evening of celebration in honor of the opening. Alberts can be reached at 21 Bridgeport Street in Worcester.

MICHIGAN

Detroit: A group of AFA members, headed by William Amos, are busy reorganizing the Detroit Squadron, and have scheduled a series of regular meetings for 1 p.m. the first Sunday of each month at the Hotel Tuller. Amos will be assisted by W. D. Becker, Jr., as vice commander, and Luther C. Morrill as secretary-treasurer. The Squadron can be contacted at 415 Burns Drive.

NEW JERSEY

Montclair: The Montclair-Essex Squadron, long a very active AFA unit, has announced its latest project, an annual essay contest for the Juniors and Seniors of the high schools in Western Essex County. The contest is to end in late May, and many very attractive prizes are being offered to the winners.

at Camp Maranacook for Boys at Readfield, Maine. If the winner of Class II is a girl, she will be awarded the equivalent value of sports clothing and equipment. Second to fifth prizes will be sports clothes and equipment. All prizes will be accompanied by an appropriate Certificate of Award. Prize winning essays are to be released to local newspapers for publication. Judging is to be done on the basis of knowledge and grasp of the subject, sound logical conclusions, and general manner of presentation.

The Squadron address is 49 Melrose Place in Montclair.

New Brunswick: At a recent dinner meeting, new officers of the New Brunswick Squadron were elected. James A. Doeler of 162 Hillside Avenue in South River, New Jersey, will head the unit for the next year. He will be assisted by Vice Commander George I. Stillwell, Treasurer Joseph H. Boricheski, Secretary Frank Tomer, and Peter Modreski, Charles Dooling, George Halabrin and John P. Deren as councilmen. The Squadron meets the first Tuesday and the third Thursday of each month at the Veterans Center in New Brunswick.

Commander Doeler has plans for assisting other AFA members throughout the State to form a Squadron in their locality, particularly in the Central and Southern areas. He has lists of the present AFA members residing in the various areas and will be glad to turn these over to persons interested in forming their own Squadron.

Stirling: A group of AFA members in the Stirling area are busily engaged in forming a Squadron, and Italo Quinto has been elected Acting Commander. Quinto is being assisted by Ted Leder and William R. Mallet. The Squadron is to be called the Union Morris Squadron. All eligible AFA members are urged to contact Quinto at Plainfield Road, Stirling.

NEW YORK

Hartsdale: John H. Caldwell, chairman of AFA's national membership committee during 1948, has reported an interesting membership campaign. Shortly after AFA President C. R. Smith announced the plans for "every member get a member" campaign, WAF Capt. Marjorie O. Hunt of the Continental Air Command requested ten AFA membership enrollment forms. Not long after that, the Association's Washington office received ten new applications for membership, with the proper amount of dues attached. A glance at the accompanying letter revealed that these applications were the same ten previously issued Capt. Hunt. The unusual factor was that nine of these ten applications carried APO addresses, indicating that Capt. Hunt had written nine of her fellow WAF members inviting them to join AFA.

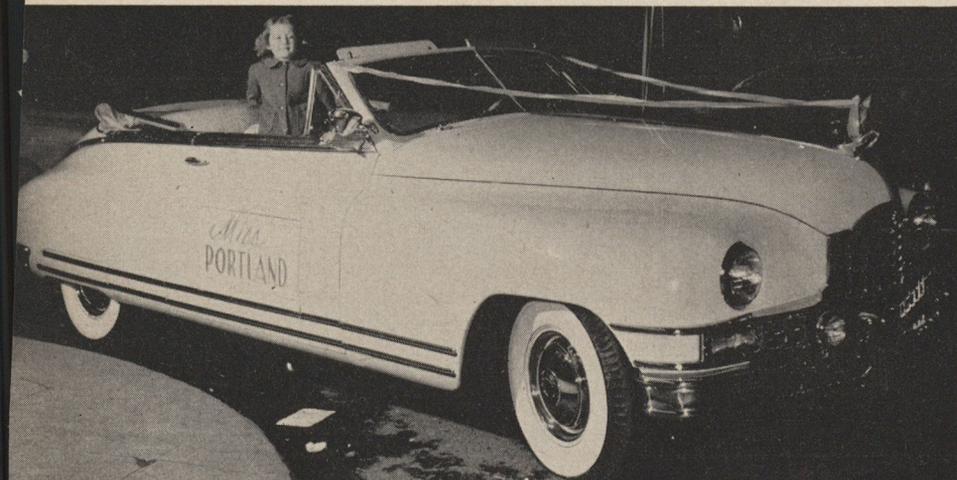
La Guardia: Members of AFA who either work or reside at La Guardia Field recently joined together and formed an

chester in Ashland as vice commander, Clifford L. Norton of 313 East 21st Street in Covington as treasurer, and Ray E. Caldwell of 2733 Dakota Avenue in Covington as secretary. They are assuming their duties immediately.

MASSACHUSETTS

Worcester: May 23rd will be AFA Night

The subject for the essays is to be, "What Effect Has the Development of Aviation Had On World Events," and first prize for the winner of Class I, which is for seniors, is a round-trip to Washington, D. C. by air and a personally conducted tour of the nation's Capital. First prize for the winner of Class II, for juniors, will be a four weeks vacation with all expenses paid



Five-year-old Sharon Ann Brown is queen of the Portland Squadron of Air Force Association. Here she rides in a chariot befitting her office during recent Portland premiere of "Command Decision" sponsored by the squadron. Sharon Ann's father was killed in 1944 while flying as a bombardier on a B-24. The Portland unit is now making plans to enter a float in the annual Rose Festival.

ROUNDUP CONTINUED

active AFA Squadron. J. E. Reinke was elected to head the outfit. Reinke is associated with Colonial Airlines. He will be assisted by Edward Tobin of Pan American Airways as vice commander, Walter Hartung of the Academy of Aeronautics at La Guardia as secretary, and H. M. Byrnes of American Airlines as treasurer. All eligible AFA members at La Guardia are urged to get in touch with the unit.

OHIO

Cleveland: The Cuyahoga Founder Squadron recently joined forces with the Cleveland Press to sponsor "Junior Aviator Day" at the Wind-A-Meer Theater. Over 100 youngsters participated in the model contest, and the AFA Squadron arranged for six of the winners to be given a year's subscription to AIR FORCE Magazine. The contestants ranged in age from seven to the late twenties. Nine of the AFA Squadron members served as timers and referees. Chuck Tracy, aviation editor of the Cleveland Press, arranged for trophies and other suitable prizes. The Squadron furnished milk, sandwiches and fruit for the youngsters during the contest. The entire event was quite successful, and plans call for making it an annual activity.

Youth aviation has long been one of the Squadrons primary activities. For over two years the Squadron has furnished instructors and supervisors in boystowns and other community centers, helping the youngsters build model planes and learn more about the technical end of aviation.

Kenneth G. Vetter of 2679 East 121st Street in Cleveland is the new commander of the Squadron. He is assisted by Vice Commander Lee Birch, Treasurer Frank Konestabo, Secretary Henry Strauss and a five-man Executive Committee, headed by Erwin Cooper, past commander of the Squadron. The Squadron is planning a big dance at the "Towne Club" on June 6th. AFA members desiring to attend the dance should contact Commander Vetter.

Cincinnati: New officers have been elected to launch the Cincinnati Squadron on a new year of varied activities. Ed Kunnen will head the outfit, and his assistants are: Robert Doolin, vice commander; Carl Auberger, treasurer; Gene Christiansen, second vice commander; and Jean Roberts, secretary. Plans call for forming several squadrons in the Cincinnati area.

Dayton: The Dayton Squadron, headed by Dr. J. H. Meyer, recently was host to AFA President C. R. Smith on a junket through Kentucky and Ohio. Smith visited several AFA Squadrons on this trip, including the Kentucky Wing convention at Covington. While in Dayton, the AFA Squadron feted him with a luncheon. Meyer informed Smith that though their Squadron had been chartered only last December, they had recently signed 100 new members.



Winners over more than 100 contestants in a model aircraft contest sponsored by the AFA's Cuyahoga Founder Squadron, Cleveland, in cooperation with the Cleveland Press, are pictured here with Commander Kenneth Vetter, left, and Erwin Cooper, past commander, right. "Junior Aviator Day" was the occasion.

The Squadron's sponsorship of the premiere showing of "Command Decision" was one of the most colorful throughout the country and netted the unit considerable publicity.

OREGON

Portland: At a recent meeting of the newly formed Portland Squadron, Harry Witt of Apartment 11, 5224 North Vancouver Avenue, was elected commander for the coming year. Other new officers are: Joe Unger, vice commander; Robert Pryor, treasurer; Dorothy Spiess, secretary; and Llewellyn Wetmore, Hollis Jones and Robert Wynkoop as councilmen. The Squadron recently made its first public appearance when it sponsored the premiere showing of "Command Decision." The special stage ceremony included the appearance of Miss Portland AFA, Queen of the Portland Squadron for 1949. The Squadron Queen is five-year-old Sharon Ann Brown, whose father was killed in 1944 while flying as bombardier on a B-24.

The Squadron has already planned its main activities for the coming year. It plans to stage a model airplane contest in the local schools, and to enter a float in Portland's annual Rose Festival parade, claimed the country's biggest rose fete. The unit also prepared for participation in the Army Day observance. Commander Witt was recently invited to write a guest editorial in the Portland papers relative to the Air National Guard and Air Reserve situation. Glenn Currey founded the new Portland Squadron and served as its temporary commander, until the recent election.

PENNSYLVANIA

Harrisburg: At a recent meeting of the Harrisburg Squadron David Lenker, local dairyman, R.F.D. #3, was elected commander for the coming year, according to Robert Gross, past commander of the Harrisburg unit. Lenker will be assisted by Samuel Froelich, Jr. as vice commander, Theodore Creznic as treasurer, and Wilbur Stein, secretary. James T. Clemm, George Schaeffer, Jack Diehl, Robert Kessinger, William Miller, past squadron commander,

and Gross will serve as councilman. Past commanders of the squadron serve five-year terms as councilmen.

WASHINGTON

Richland: Apologies are in order to the Washington Chamber of Commerce for the error in a recent issue of AIR FORCE. The newly formed AFA Squadron in Richland, Washington was listed with the recently chartered Squadrons of the California Wing's "Operation Membership." A note from one of the AFA members in Richland indicated he was a little worried as to what his state's Chamber of Commerce would say about being included as a part of California. It's not that the Washingtonians have anything against California's beautiful scenery; they just are pretty proud that their state is also one of the forty-eight. AFA members in the Richland area may get in touch with the local Squadron by contacting John A. Robinson, Jr. at P.O. Box 617 in Richland. Dr. Clark Durham of Kennewick is commander of the group.

WISCONSIN

Milwaukee: L. A. Larson, AFA Wing Commander for Wisconsin, has announced the appointment of additional Wing officers to assist him in his Squadron organizational program throughout the state. Homer P. LaViolette of Green Bay will serve as Wing Vice Commander, John Hartung of Wilwaukee as secretary and William P. McGovern treasurer. Larson recently visited Green Bay to assist in the formation of the new AFA Squadron there. R. E. Norgaard was elected commander of the Green Bay unit. The new Squadron is making plans for the sponsorship of the dedication of the new airport which is to be named Austin Straubel Field, in honor of Air Force Colonel Austin Straubel, a son of Green Bay, who lost his life early in the recent war.

Larson, who is also a member of the national Board of Directors of the Association, recently dropped in at the Washington office with the first three applications for the new Associate membership. One of the applications was that of Senator Wiley of Wisconsin, well-known in congressional circles.

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First Chief of Staff, United States Air Force

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YOU'VE GOT TO BE GOOD TO GET IN THE GUARD

Attention NEW YORK STATE AFA MEMBERS...

Have you and your wife or ladyfriend ever been to NIAGARA FALLS? Now is the time. The New York State AFA Convention is to be held at the RED COACH INN on May 28th and 29th.

Make it a double-barreled trip—see the sights of the FALLS and renew war-time friendships with your fellow AFA members.

MAKE IT A DATE
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BRING THE FAMILY . . .
There will be fun for all.

Columbus Day for AFA.....

That's right—May 8th will be Columbus Day for AFA members throughout Ohio.

Remember AFA's first national convention at the Neil House in Columbus? Ohio's 1949 AFA State convention is to be held at the same place on May 8th.

Make your reservations now for the AFA "MAY-DAY" in Columbus. There will be food, fun and business.

Contact

John P. Biehn
51 No. High Street
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**Renew AF friendships in
COLUMBUS**

ACCEPTANCE TEST CONTINUED

stall, full stall and recovery, glide and landing.

The pilots found the cockpit comfortable, the controls within easy reach, although the question of common seat adjustment for both sets of controls came up. "What happens," Sam Froelich asked, "if the instructor is a long-legged character, and his student is a runt?" The answer was that this is one of the compromises that had to be made to the minus \$3,000 price tag.

The standard instrumentation, altimeter, airspeed indicator, oil temperature and pressure gages, ammeter, compass, tachometer, circuit breaker and compass were considered adequate for a personal airplane. The Clipper inherited one valuable feature from the Stinson, a design recently acquired by Piper. That was the use of the Green Safe-Flight Stall-Warning Indicator.

Dave Lenker felt right at home in the Clipper, having had a lot of time light aircraft. He indicated that the ship's general flight characteristics were very similar to other Piper designs, and that there would have to be very little conversion time between the Clipper and any of the Cub class trainers. Sam Froelich, who had most of his flying time in military aircraft indicated that he felt at home after a few minutes of indoctrination.

In taxiing out, the ground characteristics were good, visibility over the nose was adequate. On take-off, the plane showed unusually fine directional stability. Rate of climb was good. The ship made the 600 feet claimed for it in the first minute, despite the fact that the Harrisburg airport is some distance above sea level.

In turns and stalls, the plane performed much like its predecessors in the Cub class; adequate warning and excellent recovery. There was no tendency to fall off; a true spin was virtually impossible. While the maneuver was not attempted without parachutes, the indication was that the only way to make the Clipper spin was to actually kick it in.

Dave Lenker indicated that the only place where the ship's handling characteristics differed from that of Piper's trainers was in landing. With the shorter wing and resultant heavier wing loading, the plane's sinking speed was slightly faster than the trainer's. However, this characteristic eliminated the ballooning that frequently haunted the Cub and the Family Cruiser.

The pilots had only one criticism with respect to comfort. The door placement for the front seat proved a little inconvenient. It might have been a little tough for a woman pilot wearing a skirt.

It was this easy access to the rear seats that drew the first favorable comment from the general observers. The side window system gave the passengers a good view. Jack Gross observed that while the headroom provided for the pilots seemed more than adequate, passengers over five foot ten

inches might feel that their heads were too near the ceiling for comfort.

In the matter of creature comforts, both observers indicated that there was adequate interior space sufficient to the point that two people could ride in it for full cruising range (five hours) without feeling cramped. The only thing the observers asked were ash receivers within easy reach.

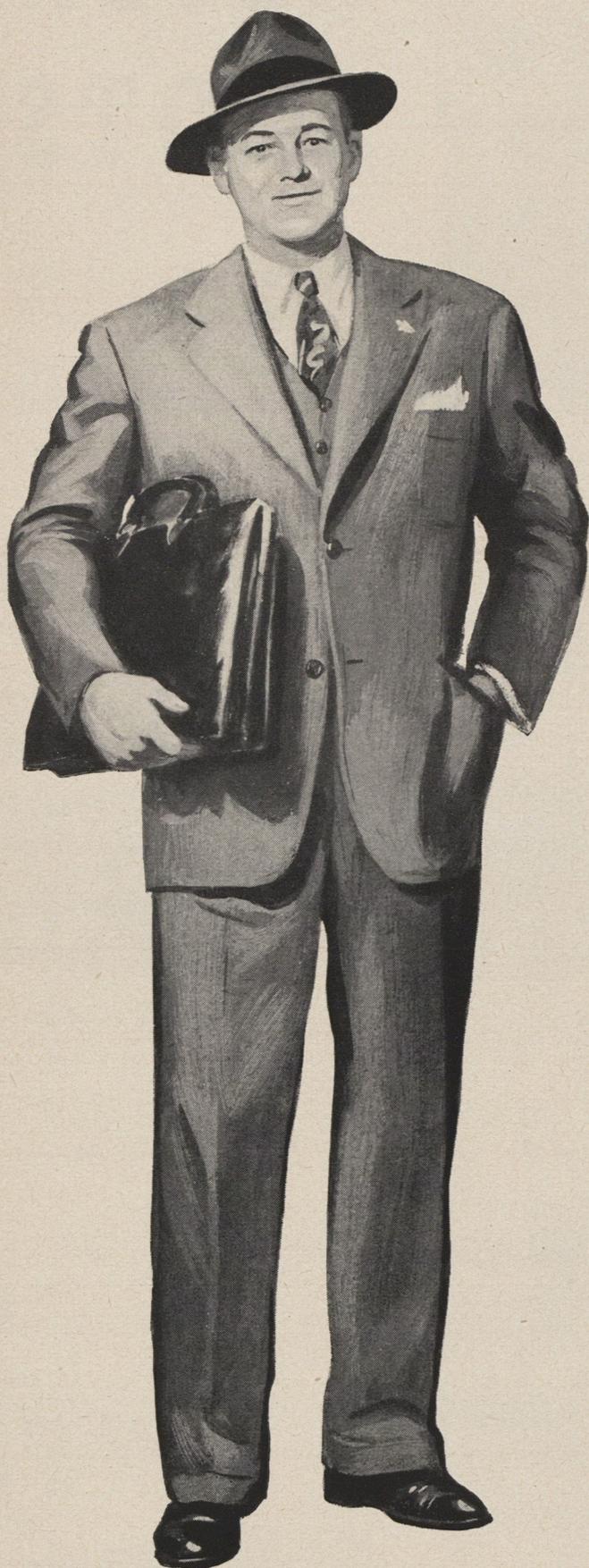
Jack Gross summed up for the observer's section by saying "With price a factor limiting lavish accessories, I would be inclined to recommend no additions, the only possible change being more head room in the rear. The flight was easy. I liked the way no oscillation developed at stalling speed. I liked the fact that the rear seat passengers can see the instrument panel without carning. The two-tone interior paint job was very attractive. I liked the idea of having wheel-fenders sturdy enough to support a heavy man, and equipped with a skid-proof top. After we became airborne, we seemed to reach 1500 feet almost immediately; a rate-of-climb totally unexpected in a light airplane. From the passengers viewpoint, I'd like to see the airspeed indicator centered in the dash."

Conclusion

In the general discussion of the airplane, the team recognized that the Clipper was built strictly for a market price. It was meant to be a utility vehicle, and within those limitations, the company had done a superior job. During this closing phase of the test, Jim Mac Veigh outlined the story of the Clipper's development. When the bottom dropped out of the highly-touted postwar personal plane market, the Pipers of Lock Haven decided those experts who said that a family plane was the solution were right. The fly in the ointment was the fact that too few families could afford all-metal high-performance products.

In general, the team found that the performance claims were conservative. Cruising speed proved closer to 118-120 mph than to the claimed 112. Fuel consumption was nearer 5 gallons per hour than it was to the claimed 6. The general performance figures ran to the conservative side. The team's ballot averaged as follows:

General Performance.....	Superior
Pilot vision.....	Excellent
Passenger Vision.....	Superior
Cockpit Comfort.....	Excellent
Handling Characteristics.....	Superior
Operational Qualities.....	Superior
Maintenance Qualities.....	Excellent
Stall Characteristics.....	Superior
Speed	Satisfactory
Range	Excellent
Economy	Superior
General Operational Safety	Superior
General fidelity to performance claims:	
Complete within the limits of test.	



Hello Soldier —

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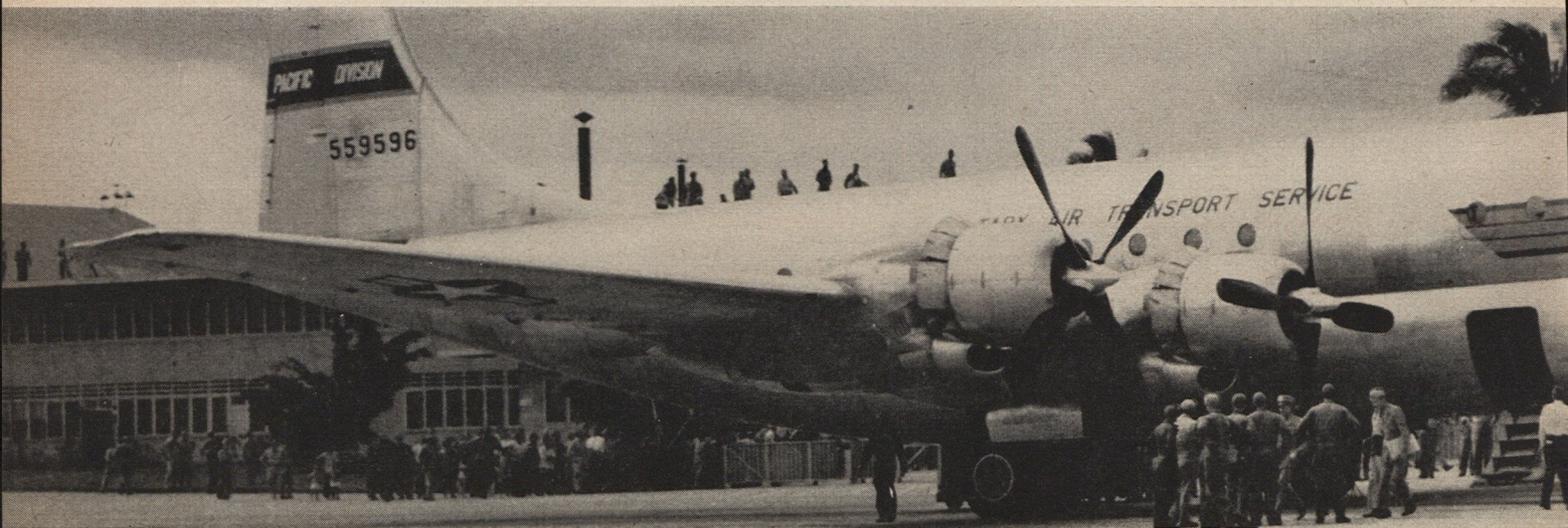
AMERICAN AIRLINES *INC.*

RECON SHOTS

The roving camera records highlights of the month in the world of aviation around the globe and back

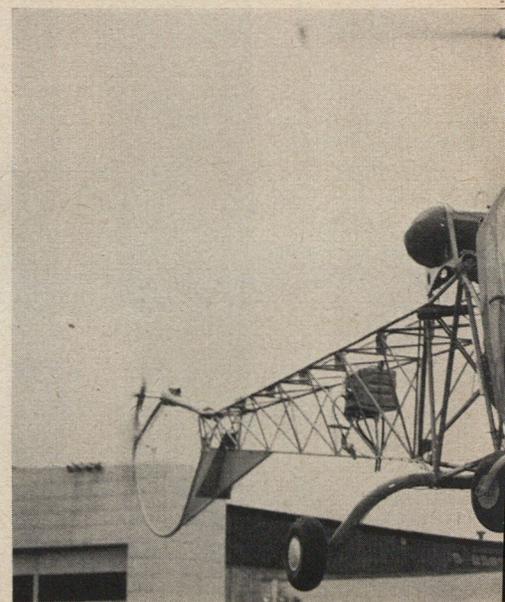


Four Shooting Stars, and the men who make them tick, are being honored at Williams Air Force Base for their record-breaking, 1,000-hour achievement.



(Above) A new look in Pacific air transportation revealed itself at the MATS terminal at Hickam AFB with the arrival of the first Stratocruiser from Calif. (Below) The boys from Alaska with the flag they dropped over the North Pole.

A new general-purpose helicopter (below), capable of carrying three passengers and 500-pound payload is being





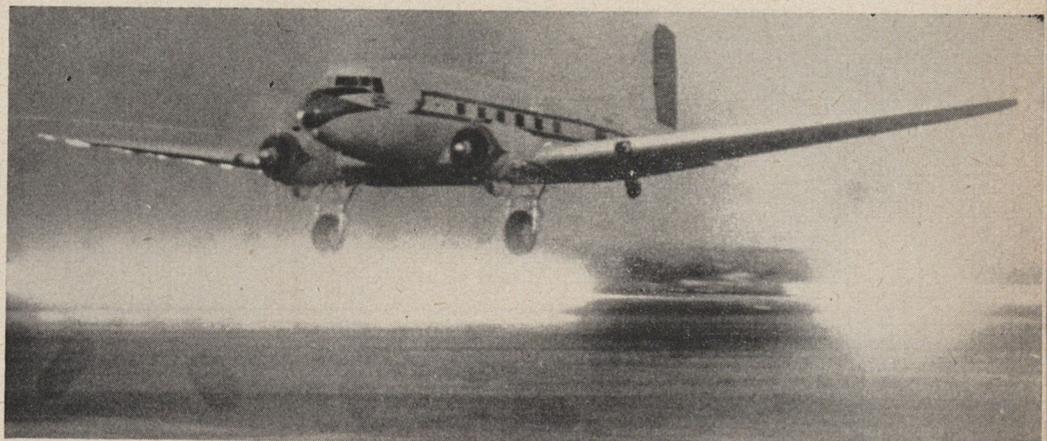
Shown on its first test flight is a B-36 equipped with four J-35 jet engines plus its regular six reciprocating ones. Mounted beneath each outer wing, the jets give additional power for takeoff and greater speed in the target area.



manufactured by the Bell Aircraft Corporation and will sell at \$23,500. The new craft has been designated the 47D1.



(Above) That most famous of all B-17s, THE SWOOSE, gets ready for its last flight to Aviation's Hall of Fame, the Smithsonian Institute. Four of the original crew pull through the props. (Below) A new fog dispersal system goes into operation at the Los Angeles Airport as a commercial plane lands.





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ADVERTISING, PROMOTION & PUBLIC RELATIONS SPECIALIST, 10 years experience, desires career position with industrial firm or agency, prefer aviation field. Engineering and mechanical background, college graduate. Write Box E-N-1 AIR FORCE. 1

TELEVISION STUDENT, 2 years college, single, AF veteran and POW, age 25, desires position with TV station or ad agency. Studio and production experience, photo store manager. Will travel. Write Box E-C-2 AIR FORCE. 1

EXPERIENCED ACCOUNTANT, university business administration graduate, former AF navigator, desires permanent position with industrial firm or airline. Mid-west preferred, references. Write Box E-A-2 AIR FORCE. 1

FORMER AIR FORCE PILOT, 28 years old, married, college background, all CAA ratings, over 4,000 hours in 40 types of aircraft, desires pilot position, or sales or technical. Write Box E-B-2 AIR FORCE. 1

EXPERIENCED GUARD PATROLMAN, M.P. school graduate, 2 years guarding prisoners, 5 years short order cook, desires position as guard patrolman. Will go anywhere. Civil Service score 86. Write Box E-D-3 AIR FORCE. 1

U. S. GOVERNMENT ADMINISTRATIVE OFFICER, personnel, supply and budget experience, desires position either continental or overseas. AF veteran, B.S. degree, completing M.S. in Foreign Service. Write Box E-D-4 AIR FORCE. 1

EXPERIENCED AF MECHANIC, engineering mechanic-gunner 25 months, college training, graduate of airplane mechanics school, desires position in aircraft structural inspection and maintenance. Prefer Southeast. Write Box E-S-7 AIR FORCE. 1

AERONAUTICAL ENGINEER, 3 years with airline, 2 years engineering training, 2 years toolmaking, 15 months B-29 Flight Engineer Instructor, desires position in New Jersey area. A & E license. Write Box E-S-8 AIR FORCE. 1

FLIGHT ENGINEER AND ENGINE MECHANIC, 3 years experience, also 3 years as wood pat-

tern apprentice, desires steady employment anywhere. Air Force veteran, age 25. Write Box E-S-8 AIR FORCE. 1

SPECIALTY SALESMAN with commercial pilot license desires position utilizing either, or both, qualifications as manufacturer's representative. Former fighter pilot. Will move anywhere. References. Write Box E-G-2 AIR FORCE. 2

AIR FORCE VETERAN, 3 years with ATC. Eight years training, study and experience in airline operations, traffic, passenger handling and public relations. Desires employment with commercial airline. Write Box E-G-1 AIR FORCE. 2

DISABLED AIR FORCE VETERAN, age 27, two years experience as aircraft and mechanical engineering technician, 7 months aircraft inspection experience. Two years of engr. schooling, 3½ years of college. Write Box E-C-1 AIR FORCE. 2

LICENSED A & E MECHANIC, age 27, desires permanent position. Three and a half years experience on AT6, C54, C47 and 749, with ATC. Experience in inspection, maintenance and overhaul. Excellent references. Write Box E-H-1 AIR FORCE. 2

A-1 PIN BALL MECHANIC desires work in Western part of country or on Pacific Coast. All around man, expert on Bally one ball machines—10 years experience as trouble shooter with Bally Mfg. Co. Write Box E-H-2 AIR FORCE. 2

FAMILY-MAN desires work anywhere in U.S. Ambitious—not afraid of hard work. Five years experience as paint sprayer—three years as electrical helper. Will accept caretaker job. Write Box E-M-4, AIR FORCE. 2

COLLEGE GRADUATE, business administration and economics experience. Young, married and ambitious. Desires sales or Industrial Relations work. 1 year NLRB field work. Similar experience in private firm. Write Box E-S-2 AIR FORCE. 2

EX-AIR FORCE PUBLIC RELATIONS CAPTAIN, age 30, college graduate, with more than 2 years post-war experience in top advertising agency. Desires contact, public relations or promotion job. Will travel or work anywhere. Write Box E-S-3 AIR FORCE. 2

EX-C.I.D. AGENT desires position. Have 18 years experience in fingerprinting, criminal investigation, security survey, bodyguard and special police officer. Will go anywhere for permanent position. Write Box E-D-2 AIR FORCE. 2

AIR FORCE VETERAN, age 27, college education, 2 years experience as personnel assistant with chain store. Aggressive, loyal and ambitious. Specialized in employer and employee relations. Will go anywhere. Write Box E-H-3 AIR FORCE. 2

AIR FORCE VETERAN, age 25, desires engineering position with manufacturer. B.S. degree in mechanical engineering. Experience in sales, radio maintenance and factory labor. Work anywhere in U.S. Write Box E-S-6 AIR FORCE. 2

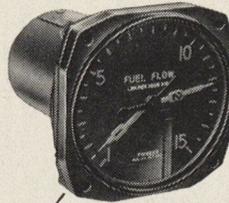
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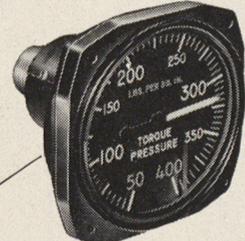
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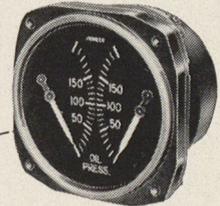
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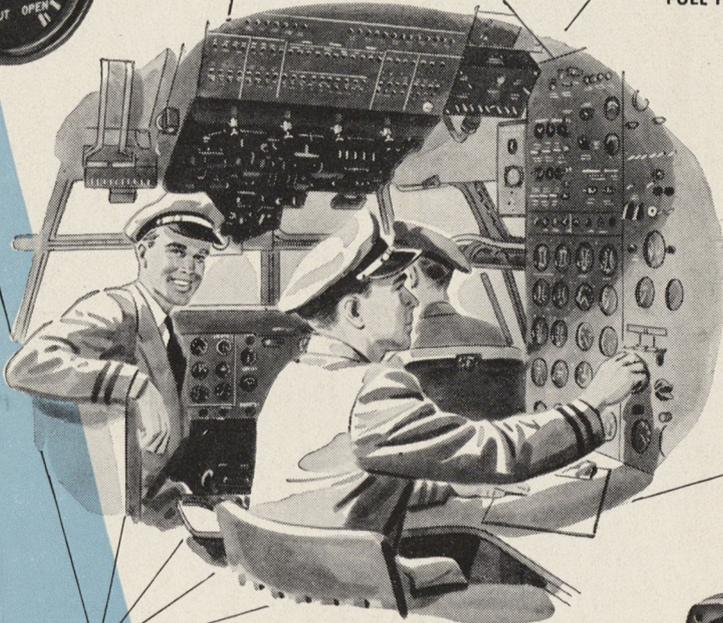
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