

AIR FORCE

THE OFFICIAL JOURNAL OF THE AIR FORCE ASSOCIATION, AUGUST, 1948

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Air Force Reunion
Madison Square Garden
September 25, 1948

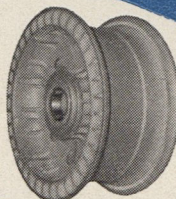
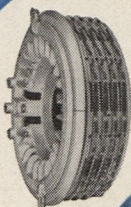
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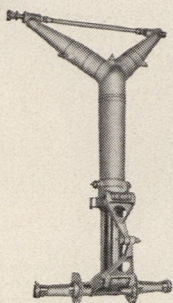
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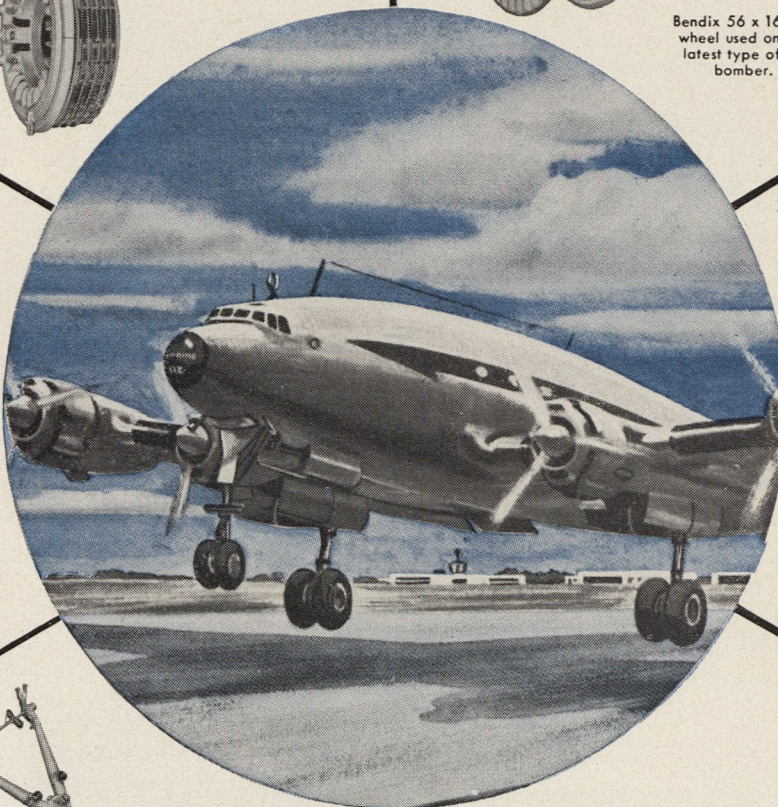
The Bendix segmented rotor brake—this four-rotor brake is designed for the high landing speeds of jet powered bombers.



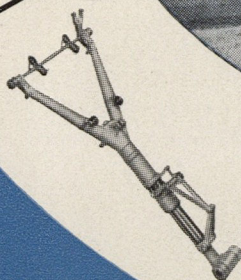
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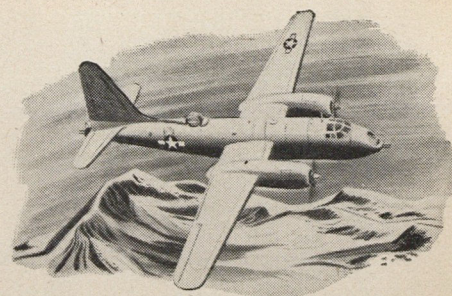
► Here a pair of electro-magnets is "shaking the truth out of a turbine blade." It is being *shaken* in this laboratory test to determine its true natural vibration frequencies—the dangerous frequencies that exist when a very small force causes a large deflection.

► The blade is oscillated by high frequency magnetic impulses. As the speed of the magnet excitation is increased, the blade is made to vibrate at its various natural frequencies. A photo-electric cell serves to locate these frequencies precisely, while a

measuring microscope reveals the exact amplitude of each.

► Modern research such as this determines blade stamina in a much shorter time than would otherwise be possible and provides accurate data from which engineers can design turbine blades and many other vital aircraft engine parts that do not possess harmful vibration characteristics.


► Another example of the painstaking research behind the development of Wright aircraft turbine and reciprocating engines.



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EDITOR and PUBLISHING DIRECTOR, James H. Straubel

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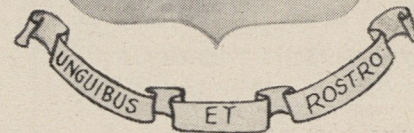
Art Direction by J. Walter Flynn

Assistant Editors, Janet Lahey, Helen Whyte

AIR FORCE MAGAZINE is published monthly by the Air Force Association at McCall Street, Dayton 1, Ohio. **EDITORIAL OFFICE:** 1616 K Street, N.W., Washington 6, D.C. National 2525. Publisher assumes no responsibility for unsolicited material. **ADVERTISING OFFICE:** 369 Lexington Avenue, New York 17, N.Y., Murray Hill 9-3817, Sanford A. Wolf, Advertising Manager. **MAILING:** Reentered as second class matter, December 11, 1947, at the post office at Dayton, Ohio, under the Act of March 3, 1879. **SUBSCRIPTIONS:** Membership in the Air Force Association, \$4.00 per year, \$2.00 of which is for 1 year subscription to **AIR FORCE**. Subscription rate to non-members, \$4.00. Single copy, 35 cents. **REGISTRATION:** Trade-mark registered by the Air Force Association. Copyright, 1948, by the Air Force Association. All rights reserved under Pan-American Copyright Convention. Printed in U.S.A. **CORRESPONDENCE:** All correspondence pertaining to editorial matters and change of address should be sent to Air Force Association, 1616 K. Street, N.W., Washington 6, D.C.

AIR FORCE IS PUBLISHED BY THE AIR FORCE ASSOCIATION

18th Fighter Group



(Coat of Arms approved 21 February 1931)

SHIELD: Or, a fighting cock with wings displayed sable wattled and combed gules.

CREST: On a wreath or and sable two wings conjoined and displayed tenné (orange).

MOTTO: Unguibus et Rostro (with talons and beak).

HISTORY: Originally organized as a Provisional Pursuit Group on 20 January 1927, the Group was redesignated as the 18th Pursuit Group, effective 21 January 1927. It was redesignated as Hq & Hq Sq, 18th Pursuit Group, 25 January 1938, and then as the 18th Pursuit Group (Interceptor), on 6 December 1939. Its designation was changed to Hq & Hq Sq, 18th Fighter Group, 15 May 1942, and the Hq Sq was ordered to be disbanded 22 July 1942. It was designated as Hq, 18th Fighter Group (TE), 12 March 1943, as Hq 18th Fighter Group, SE, effective 15 April 1944, and as 18th Fighter Group, effective 15 June 1944.

BATTLE PARTICIPATION: The 18th Fighter Group is entitled to battle participation credit for the following World War II campaigns: New Guinea, Bismarck Archipelago, Western Pacific, Southern Philippines, Central Pacific, Luzon, China Defensive.

DISTINGUISHED UNIT CITATION: Awarded for outstanding performance of duty in action against the enemy in the Philippine Islands for the period, 10-11 November 1944.

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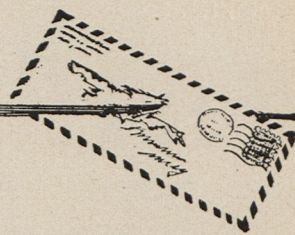
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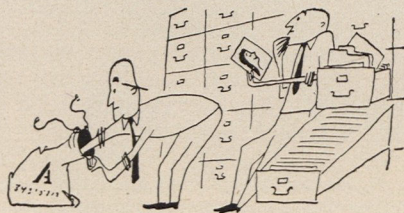
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AIR MAIL



Dual Inquiry

Gentlemen: What I want to inquire is this: I was a gunner in the 93rd Bomb Group (H) in the 2nd Bombardment Division, 8th Air Force. I finished up in August, 1944, and since then I've been wondering what happened to the outfit. Is it back in the US? If it is, I would like to take my family to see it. Colonel Leland Feigel was CO at the time I was with it. And one more thing. When we were being processed to come home, at the 70th Replacement Depot they took a lot of pictures from us and made us bind them up and put our home address on them. We were to receive



them after the war. I've never heard from them since. Can you tell me to whom I might write?

Thomas Herve, Jr.
Central Islip, L. I.

● *In answer to the first question, the 93rd is still part of the 8th, and is presently stationed at Castle Air Force Base, California. Regarding the second query, Headquarters USAF advises us that they have received numerous complaints of the same kind. At present they are conducting a thorough search with the hope that perhaps the missing pix will be found somewhere in QMC files. If they turn up, you will be advised.*—ED.

Due Credit

Gentlemen: In your April issue you tell of the role of Lackland Air Force Base in turning out recruits who are good citizens as well as good airmen. When I took basic training at Lackland in 1946, it was considered—and rightly so!—the worst Air Force station in the United States. Today under the inspiring leadership of Major General Robert W. Douglass and Brigadier General Charles F. Born, the US Air Force's basic training center is a credit to the air service and to the nation.

But much of the credit for improvement should go to one of the forgotten men of the Air Force, Major Clyde S. DeMonbrun, former superintendent of Burbank (California) Military Academy. Coming to Lackland (then Military Training Center) in late 1946, Major DeMonbrun was given the as-

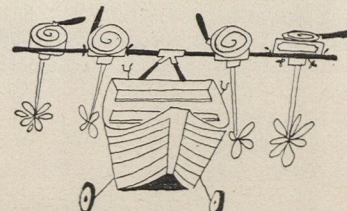
signment of detecting sources of lowered morale and improving the training program. With the aid of a questionnaire which he originated, the Major personally interviewed new recruits at work, in training and at leisure. A series of recommendations, forwarded to the A-3, were the result of the study and did much to eliminate complaints when the suggestions were adopted and translated into improvements.

Next in the beginning of 1947, Major DeMonbrun was joined by a former instructor of Chinese Cadets, First Lieutenant John T. Kazmerski, and the two officers formed the Research and Development Section (now Training Methods Branch) to formulate the first post-war basic training program of the USAF. Studying civilian and military programs and working a fifteen-hour day, Major DeMonbrun supervised the production of the present Air Force Basic Training Program in a little over a year, a project estimated to require several years. At the same time he prepared the USAF Literacy Training Program (for UMT) and supervised the preparation of a large training manual. It was largely due to Major DeMonbrun's insistence that such great stress was laid on moral as well as military training. In fact, the sex education instruction program devised by Lieutenant Kazmerski is in use throughout the Air Force, as are many other lesson plans prepared by Major DeMonbrun's organization. Not content to rest on his laurels, Major DeMonbrun is now pressing a complete revision of basic training lesson plans and sub-courses that members of the US Air Force be the best-trained airmen in the world and that they also be worthy representatives of their country.

Armand A. Korzenik
Harvard University

Dumbo

Gentlemen: A dispute has come up regarding a certain type B-17 aircraft. The



question is whether or not there was ever a B-17H, and when was it built.

R. G. Ashton
St. Paul, Minn.

● *There most certainly was. It was an air-sea rescue craft called "Dumbo" and*



was distinguished by a life boat slung under the fuselage. It was built in 1945.—ED.

New Look

Gentlemen: Lately I have noticed pictures of Air Force General officers with insignia of their branch of service on



their lapels. Is this regulation? Also I have seen enlisted Air Force personnel pictured with the branch of service insignia worn on each lapel instead of a US button on one side and a branch button on the other. How come?

Earle Terwilliger
Angelica, N. Y.

● General officers can wear branch insignia if they choose. It is not required. Enlisted personnel now wear insignia in the same position as officers. The only difference is that the em's buttons have shields behind them and the officers' don't.—ED.

More Confusion

Gentlemen: Recently an article appeared in the newspapers concerning a change in the rank designations in the Air Force from Warrant Officer to Chief Airman and Senior Airman First, Second and Third Class along with similar changes for non-commissioned officers. Does this designation apply to commissioned officers or to Warrant officers only?

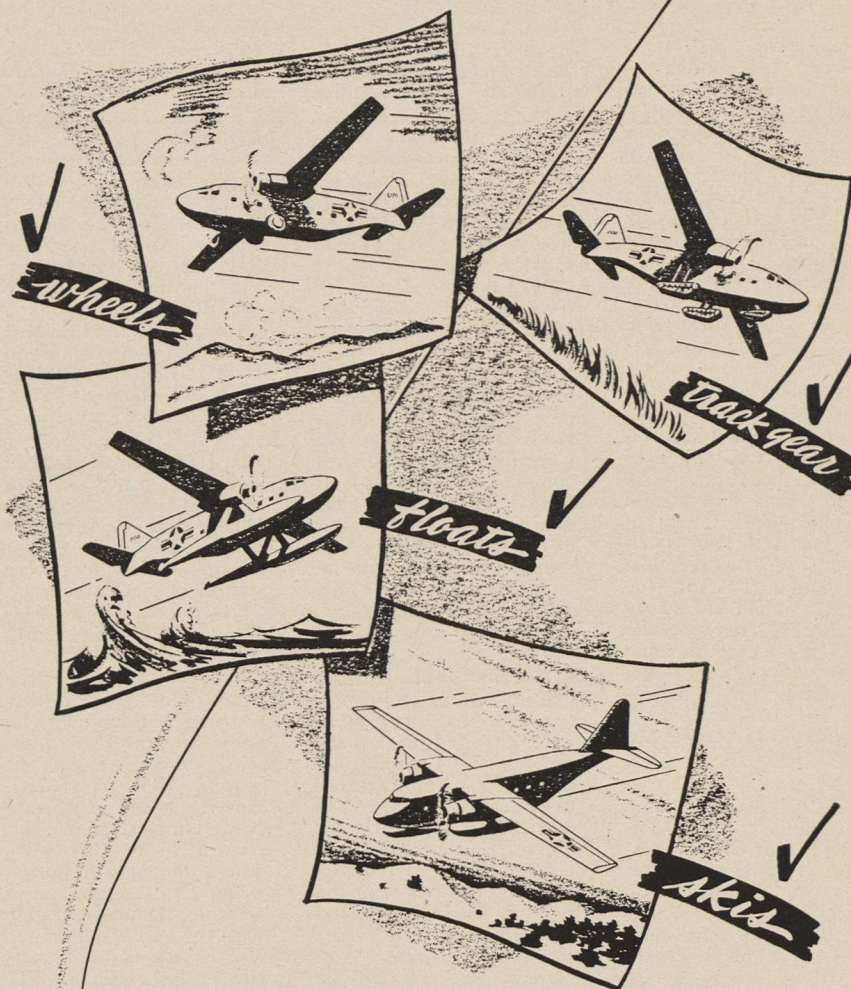
We are in perfect accord with a separate Air Force and separate uniforms but not with the new ranks. The newspaper article stated that the reason for the change was to eliminate the confusion between Army and Air Force personnel as to their ranks and ratings. If there was confusion, why change it to be similar with the Navy's enlisted men?

Ivan H. Rich
C. E. Riggs
Albert E. Templin
Harry L. Barr, Jr.
Towanda, Kansas

● The proposed change in rank designation will apply only to enlisted personnel and Warrant Officers. Sorry, we haven't got a ready answer to your second question.—ED.

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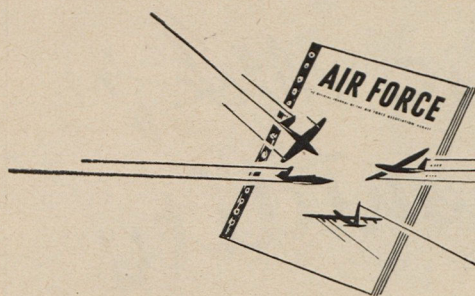
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RENDEZVOUS

Where the Gang gets together

GUNNERS: I would like to get in touch with any former members of Student Headquarters, Las Vegas Aerial Gunnery School, who were there between 1942 and 1944. If any of the former enlisted or officer personnel who were there know the whereabouts of any of the others, please let me know. Particularly, I would like to contact R. E. "Pete" Peterson, James E. Metzger, Jack Butler, Ed Bean and Johnny Williams. *Henry L. "Hal" Rankin, 3121 Forest, Apt. No. 2, Kansas City 3, Mo.*

EX-ITIES: Would like to hear from former classmates at Sioux Falls Radio School Class 7, Tyn-dall Field Gunnery School Class 43-4 and also former members of 444 BS 320 B-G (m). Especially, I would like to contact Capt. Joe Green, Maj. J. McCrory and Lt. Bob Stewart, who were crewmates of mine when we were shot down over Orte, Italy, on January 16, 1944. *William J. Gardner, 144 Acme St., Elizabeth, N.J.*

"CHICO": Please help me locate and contact William (Bill or Chico) Ferguson, 1st Lt. navigator, last reported at Ellington Field, Texas, in November, 1945. His home originally, was Ponce, Puerto Rico. I am very eager to learn his whereabouts as he is a friend par-excellence. *Al J. Merz, 2519 Hennepin Ave., Apt. No. 4, Minneapolis 5, Minn.*

EX-POW'S REQUEST: I'm trying to locate a man named Simms or Symms. He was in the photo section of the 7th H. Bomb Group stationed at Pandareswar, India, when I last saw him, before becoming a guest of the Emperor in March, 1943. He was then a sergeant. *Capt. Lloyd K. Jensen,*

Box 1403, Area B, W-P AFB Dayton, Ohio.

SOURDOUGHS ATT: Would like to contact any members of the 24th Air Base Squadron that were stationed at Elmendorf Field, Anchorage, Alaska, at the outbreak of World War II. Also I would like to hear from anyone knowing the whereabouts of Lt. H. S. Twede, who was with the 42nd Troop Carrier Squadron at the same base. *Dover B. Campbell, Box 298, Kincaid, Ill.*

LOST KRIEGIE: I am trying to locate a "kriegie" pal of mine; his name is Herb "Moose" Simlar. We were together in the west compound of Stalag-Luft No. IIIB, Sagan, Germany, during the last year of the war. His home was somewhere on Long Island. *Harold E. Cook, 4075 Union Bay Lane, Seattle 5, Wash.*

HOSPITAL CALL: I would like to contact any personnel from Squadron L, later changed to Squadron B at Lincoln Air Force Base, Nebraska, between November 1945 and 1946, particularly Lt. Harry Hicks or F/O Paul Grubb. Also any Oregon or Idaho reservists. At the present time, I'm a patient in Ward 20, Barnes Veterans Hospital, Vancouver, Wash. I can be reached either at the hospital or at my home address, listed below. *H. Deane Fuller, 2238 S.E. Ankeny St., Portland, Ore.*

LINERS: I would like to hear from any one-the-line trainees stationed at Turner Field, Albany, Ga., from June 1944 to VJ Day. *Robert S. Payne, 18 Main St., Frewsburg, N.Y.*

ESSEE: I would appreciate help in locating former T/Sgt Joe Casey of the 99th Bomb Group

Photo Headquarters. The last I knew, he was at Foggia, APO 520. If my memory serves me right, his home was in Tennessee. *Larry G. Hastings, 126 Melrose Ave., Toledo 10, Ohio.*

EYETYE: I would like some help in locating a buddy of mine, 1st Lt. Frank E. Newton, ASN 0794349. His last known address was 1106 West Reynolds St., Plant City, Fla. The last I heard, he was shot down and taken prisoner in Italy, and was released some time in 1944. *Thomas F. Hanchett, 617 Sam St., Corpus Christi, Texas.*

AI: I am interested in contacting Lt. Col. Dan Ellis, one time Executive Officer and Air Inspector of the 91st Air Depot Group while they were stationed at Cambrai, France. *Traynor W. Higbie, 104 E. 196th St., New York 58, N. Y.*

SWP: Would appreciate hearing from anyone who knew my brother overseas; T/Sgt Leon C. Hupp, ASN 374-73784. He was based at Nazab, New Guinea, from January 1944 to May 11th, when he was reported missing in action on a weather recon flight. He was the radio man on a B-25H. Lt. Cutinelli was the pilot. *Robert D. Hupp, Hotel Plaza, Gonzales-Yoakum, Texas.*

FELLOW FROSTBITEE: Would appreciate any help in getting in touch with an old buddy, M/Sgt Charles F. Case, ASN 17159716. When last heard from, he was stationed in Alaska. *John O. Freeman, 5204, East 28th Terrace, Kansas City 3, Mo.*

ORAN SPECIAL: I would like to contact 1st Lt. (Continued on page 44)

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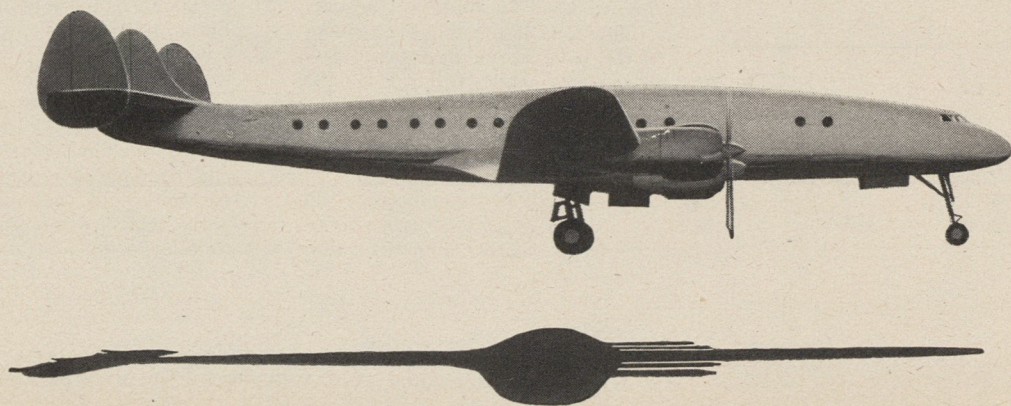
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NAME

ADDRESS

AF4



Gentlemen: I would appreciate some information concerning the Air Force Enlisted Reserve.

I was discharged from the Air Force, February 1, 1946, in the grade of Staff Sergeant, MOS 502.

I've been thinking about joining the reserve, and I'd like to know if I may do so in the grade I held upon discharge. Also, can you tell me where I must report in connection with joining the AF Reserve?

Robert C. Moeller
New York 60, N. Y.

● Providing you are otherwise eligible, you appear to be eligible for enlistment in the US Air Force Reserve in former grade of Sergeant. Visit the nearest Recruiting Station of the 113th BU (Reserve Training) office at 67 Broad Street, New York City.

Gentlemen: During the war I served with the Air Forces in AACs, as a cryptographic technician, MOS 805. At discharge, I held the rank of buck sergeant.

I would like to know if I could enlist in the reserve in my former rank and MOS, and if it's possible to take training from time to time in my former MOS.

Where is the nearest Air Force Reserve headquarters? I am near Philadelphia, Penna.

Walter E. Jones
Collingdale, Penna.

● Providing you are otherwise eligible, you appear to be eligible for enlistment in the United States Air Force Reserve in former grade of Sergeant. Visit the nearest recruiting station or the ARTD at Reading, Pennsylvania.

Gentlemen: My "Air Reserve Question" is as follows; is it possible for a member of the ERC to obtain a commission in the reserve while still on inactive reserve status?

Paul W. Morris
Woodruff, S. C.

● It is possible for members of the ERC to obtain commissions in the reserve while on inactive status providing they have served six months of active service in the AUS or one of its com-

ponents between 7 December 1941 and 30 June 1947, in either the grade of Warrant Officer, Flight Officer, or one of the first three enlisted grades, if you meet the minimum age requirements and have not passed your 28th birthday at the time of appointment. Applications should be made on WD AGO Form 170 to the nearest ADC Air Force.

Gentlemen: Although my original commission was in the Corp of Engineers, all of my five years of active duty were spent in the Air Force. When I was placed on inactive status, my Reserve units have been in the Ground Forces. Naturally, my active duty has given me a better background for duty in the Air Force Reserve, and now that I am working at Langley Field, Virginia, I would like to know what steps to take, so that I may transfer from the Engineer Reserve into the Air Force Reserve.

James E. Benedict
Hampton, Virginia

● Apply for transfer from the Engineer Reserve to the US Air Force Reserve under the provision of WD Cir 356, 146, as amended. Application should be made to Commanding General, Second Army.

Gentlemen: I am writing this letter in the hopes that you can give me some information about enlistment in the Air Force pilot training program.

I enlisted in the Air Force Enlisted Reserve at Seattle in October 1943. I passed the Cadet Examining Board and was called to active duty in December 1943. After induction at Ft. Lewis, I was sent to Buckley Field, Colorado, where we took many tests such as the psychological, psychomotor, and the Air Force 64 physical examination. Then I was notified that I was eliminated from air crew training and never received any statement as to the reason I was eliminated. I do know that I passed the physical exam. I never took any training as a cadet. At the time, we were told that all eliminees were permanently disqualified from taking training in the Air Force as an aviation cadet. After elimination from air crew (Continued on page 46)

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Ace Pilot Joe Foss and 17-Year-Old Team Up to Guard the Peace

CONGRESSIONAL MEDAL OF HONOR WINNER AND YOUNG OLLIE D. MABEE, JR., ARE WORKING TOGETHER TO KEEP AMERICA STRONG

Meet these good Americans...so representative of the thousands upon thousands of alert young men who are working for a strong and *peaceful* America in the *new* National Guard.

First, Joe Foss. As Captain Joseph J. Foss, executive officer of Marine Fighting Squadron 121, Joe earned a combat record described by the late President Roosevelt as "unsurpassed." You don't have to tell Joe about Peace. He fought for it; *he knows*.

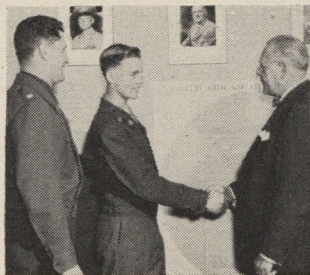
And meet 17-year-old Ollie. He's a Private in the *new* National Guard—the 175th Fighter Squadron at Sioux Falls, South Dakota. His Commanding Officer is the same Joe Foss, now a Lieutenant Colonel with the South Dakota National Guard. From Joe, Ollie is learning this important lesson: security stems from strength.

There are still some vacancies for officers and non-commissioned officers in the Air National Guard.

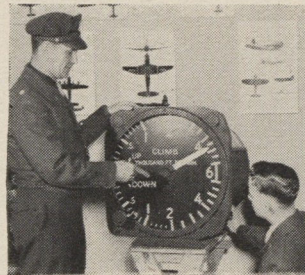
Observe National Guard Day—September 16



OLLIE TAKES A LOOK at his Dad's record with the National Guard. Staff Sergeant Ollie Mabree, at right, has been a member of the South Dakota National Guard for 25 years. Now his son serves with him—two generations working side-by-side to keep America strong.



MEETING LEADERS (and learning to be a leader) is now Ollie, Jr.'s privilege. Here Joe Foss, at left, introduces Ollie to C. M. Whitfield, Mayor of Sioux Falls. Whitfield told Ollie, "You're getting valuable training—helping yourself and your country."



GIANT INSTRUMENTS, such as the Air Speed and Rate of Climb indicators shown here, are helpful devices to student and instructor alike. Ollie's finding that the *new* National Guard has up-to-date training equipment, as well as instructors with plenty of "savvy."

For information, see the commander of National Guard unit in your community or write Adjutant General of your State!

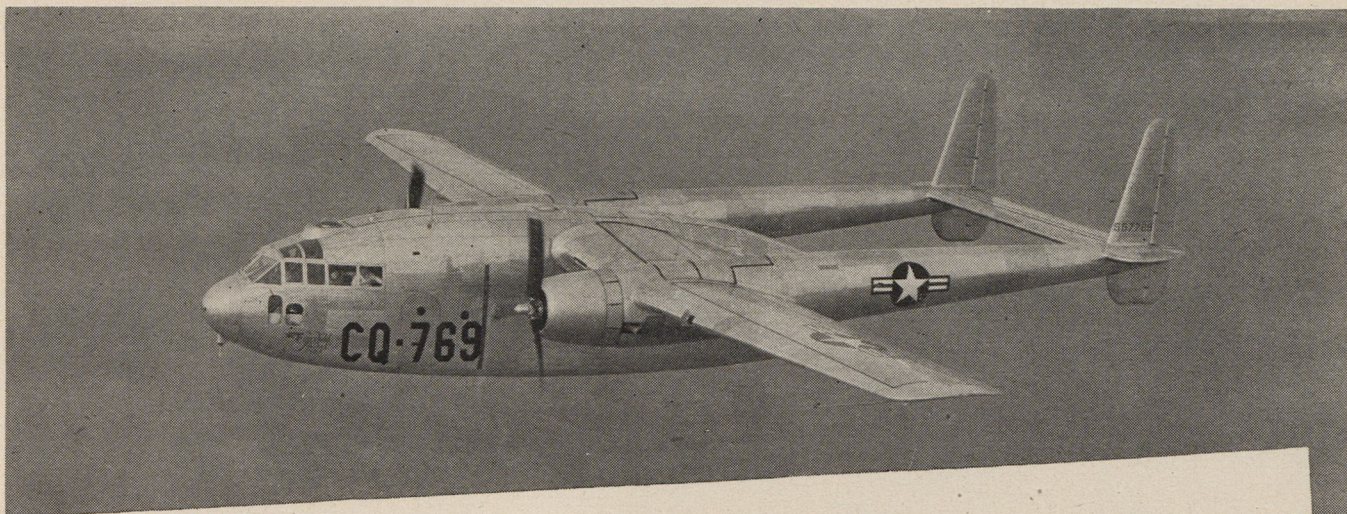
Here's how the National Guard Helps You

Pay ★ Education
Fellowship ★ Training
Sports ★ Leadership

Write or visit
your community's unit of the

NATIONAL GUARD

of the United States



Now! An Even Bigger, Better Flying Boxcar —The Fairchild Packet C-119

Something new in the air.

Out of the tried and proved first plane ever designed specifically for cargo-carrying has come this latest creation of Fairchild engineers—a super Packet.

Like the original C-82 Packet, the C-119 is a product of close cooperation between Fairchild and the Air Force.

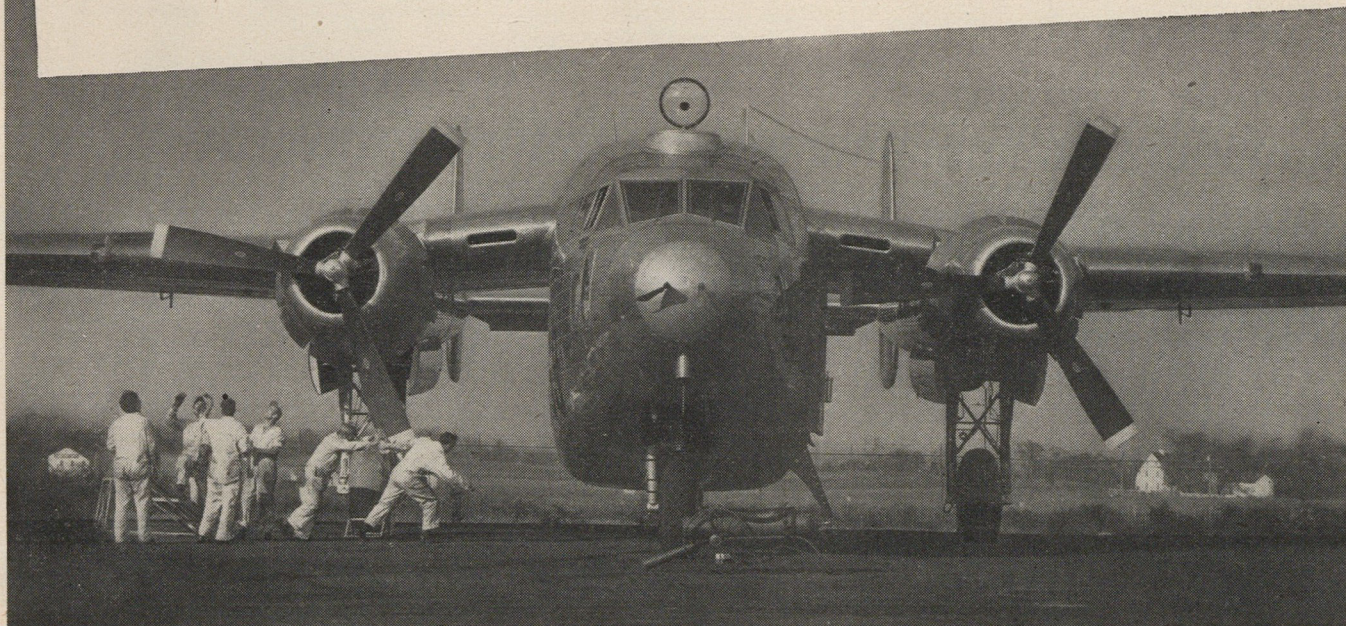
But, with increased payload, speed and climb, the new Packet can transport more men,

more equipment and more supplies than its worthy predecessor. As an ambulance plane it is equipped to carry 36 litter patients and attendants.

This new Flying Boxcar incorporates improvements and modifications proved in thousands of hours of actual service. All in all, it is flying evidence of an air-transportable Army . . . and of Fairchild engineering and research skill.

 **Fairchild Aircraft**

Division of Fairchild Engine and Airplane Corporation, Hagerstown, Maryland





AIR FORCE



On the Fall Schedule

Just three years ago this month we were concentrating our various military occupational specialties on the Pacific enemy. Some of us were setting the stage for what was scheduled to be a prolonged and costly assault on the enemy mainland. Others of us were on call for the inevitable struggle that would follow. Then with startling suddenness the war was over, and for the first time in modern history a major power had been defeated without invasion by land or sea.

By the time we returned to civilian life the impact of airpower was a realism that had been established by practical everyday experience. For us the facts of war had settled once and for all the question of airpower's significance in the military scheme of things. As the postwar months rolled by it was hard to believe that airpower would again be on the block and again be chopped at by the purveyors of obsolete weapons. It seemed almost inconceivable that opposition of the "balanced force" variety would ever seriously threaten the development of an adequate peacetime air establishment.

We know better now, and we are grateful that there were those among us who had the foresight to enlist grass roots support for airpower through the formation of an organization such as the Air Force Association.

That this "enlisting" job is never done is evident in the series of major events on our fall schedule. Our sponsorship of Air Force Day on September 18 will find AFA units throughout the country, in coordination with other organizations, observing the birthday of the Air Force with many different types of celebrations. Our second annual national convention on September 24-26 will find these AFA units combining forces in New York City to conduct association business and reestablish airpower objectives. Our Air Force reunion on September 25 in Madison Square Garden, held in conjunction with the annual meeting but virtually a convention in itself, will bring together Air Force members, past and present, in an unprecedented airpower gathering.

All these events rate high in entertainment value, and they include a reunion atmosphere that has its nostalgic touches. But all have a sobering import in the light of world conditions three years after the end of the shooting war. They are concerned with the heavy responsibility now being shouldered by the Air Force in an age torn with discontent and uncertainty and cursed with the presence of a potential world conqueror—a responsibility that represents the awesome but simple difference between life and death for millions of people. Under these circumstances the role of the Air Force must be explained and dramatized to the maximum—until everyone is fully aware of the Air Force's importance to national security and world peace. We can prepare for the events on our fall schedule with the knowledge that they serve this high purpose.

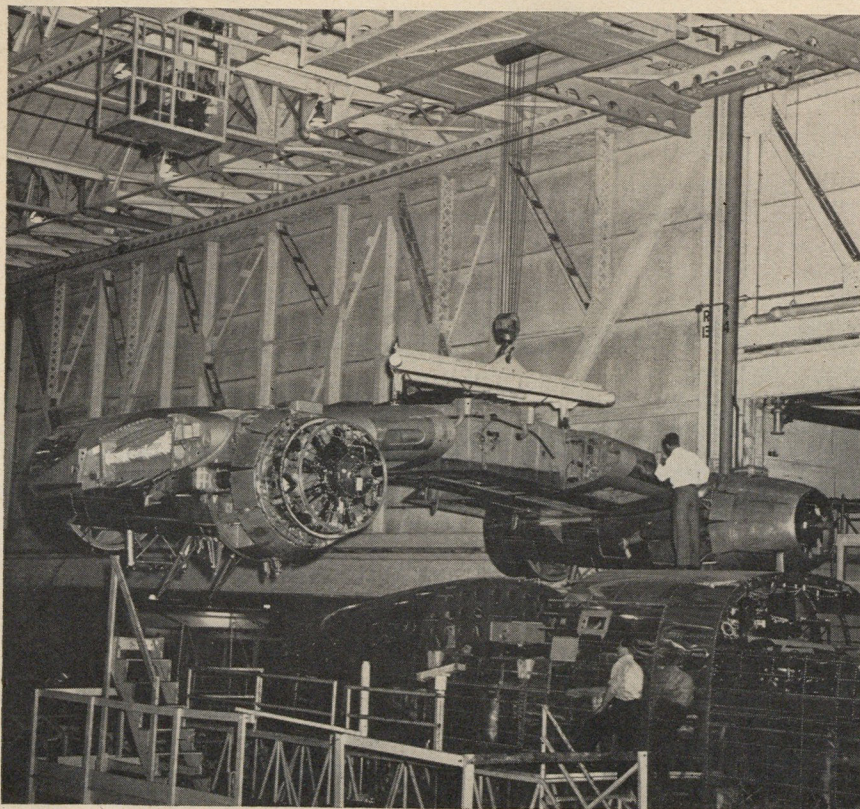
Tom Lanphier

Thomas G. Lanphier, Jr., President



Republic Aviation of Farmingdale, L.I., has a backlog of some 560 F-84 Thunderjets still to deliver to the Air Force—enough to equip about six and a half groups. Thunderjet has speed over 600 mph, range of 1000 miles and ceiling over 40,000 ft.

At Hagerstown, Maryland, Fairchild Aircraft is busy with an order for 99 C-119Bs plus still unfilled orders for the C-82 Packet. Both planes are badly needed in the program of making ground forces as completely "air transportable" as possible.



RETURN of the PRODUCT

Contracts have been made and
US cannot expect delivery of a

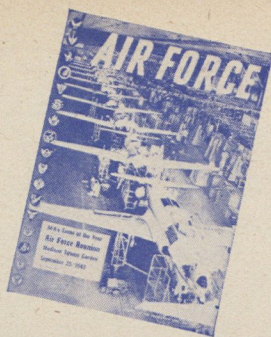
Last May when Congress was seized with the question of whether or not to vote funds for a 70-group Air Force, there were those with more ambition to save a few pennies than to secure the peace who ominously forecast that passage of the measure would disjoint the nation's economy to the point of complete collapse. It won't. As kaleidoscopic as the possibilities of figure juggling are, no conceivable manipulation of the statistics involved in the supplemental defense act of 1948—which was passed in spite of the warnings—will support such a contention.

This is not to say that an emaciated aircraft industry will be able to turn out some 4262 newly contracted for planes, for both the Air Force and Navy, overnight. The plane builders have their problems. But for the most part they are problems that exist within the four walls of the industry itself and should in no way be identified with the greater edifice of the nation's economic structure.

In a recent report published by the Aircraft Industries Association it was brought out, for example, that the total procurement authority of \$2,798,000,000 under the new program actually amounts to only one and a half percent of the current national production or national income, which is running at a rate above \$200,000,000,000. Even with its new orders, the aircraft manufacturing industry ranks far down among US businesses. And as for disturbing the equilibrium of supplier manufacturers, the AIA report reveals that the steel industry at its current rate of operations could produce all of the steel required in the aircraft expansion program in approximately three hours.

Of far greater concern now is the question of how the aircraft industry itself is going to meet the challenge placed before it. To be sure, when the current expansion program is compared with that inaugurated during World War II, it is relatively small. Production of military aircraft during the last war reached a rate of more than 100,000 planes per year before cutbacks became necessary.

Now contrast this figure with the new



ON LINE

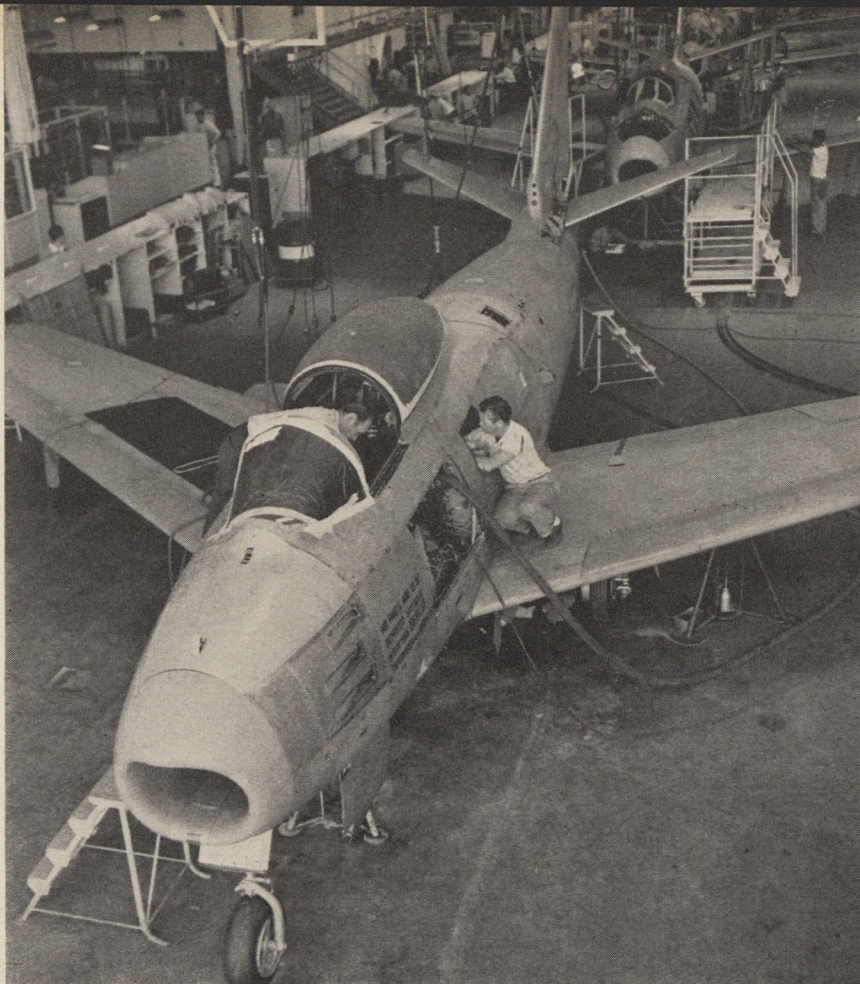
the wheels are turning, but the modernized air force overnight

expansion program which authorizes the purchase of a grand total of 4262 planes. In addition to being further evidence of the relatively slight drain on the nation's resources of such things as steel, aluminum and manpower, the discrepancy in the two sets of figures would seem to indicate that the industry should have slight difficulty in turning out the required planes post haste.

Unhappily though, the last premise is not altogether correct. For while expansion contracts are still only a fraction of wartime orders, they will nevertheless require a production rate three times greater than that which has existed since VJ-Day. It is likely that the rates of production called for in the supplemental appropriation act will not be reached for at least 18 months and perhaps not until 2 years.

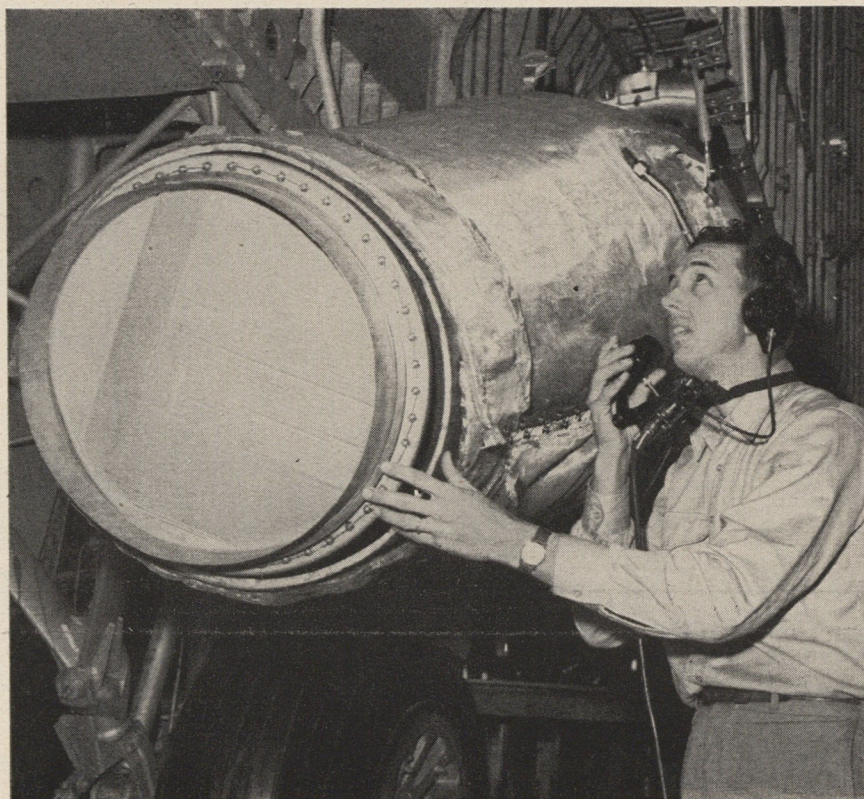
There are many reasons for the apparently protracted delay, but among the more important are these:

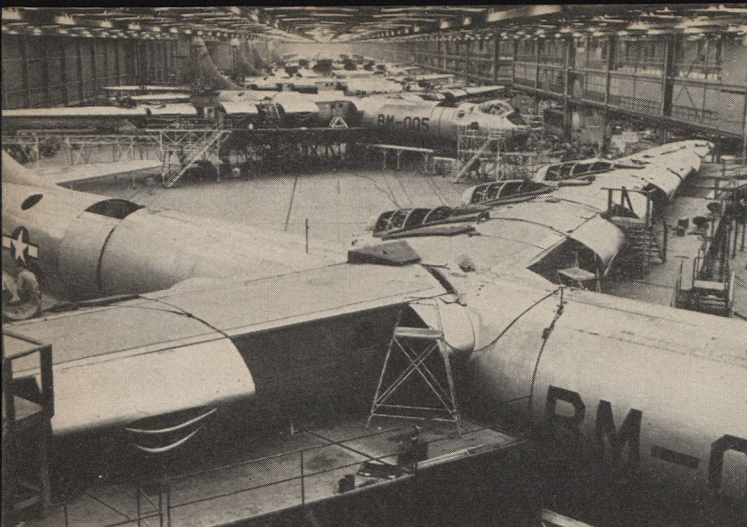
WITH ONE OR TWO EXCEPTIONS, CONTRACTS HAVE BEEN LET ONLY FOR PLANES THAT HAVE ALREADY BEEN THOROUGHLY TESTED AND APPROVED, BUT EVEN AMONG THESE TYPES THERE ARE STILL MANY PROBLEMS OF MODIFICATION, REDESIGN AND MASS PRODUCTION. It is somewhat paradoxical that the more modern and up to date the Air Force is, the more margin there is for imperfection. Especially is this true now that we are entering a whole new engineering cycle which involves sonic speeds and the attendant problems of strength, maneuverability and stability. By 1945 the venerable old B-17 was a virtuously flawless plane. And as a result, it could be manufactured about as easily as doughnuts at a Mayflower coffee shop. But by that time it was obsolete. Its successor, the B-47, is an infinitely superior plane, but it is one still possessed of innumerable bugs which can be removed only with great patience, especially in the absence of the combat test labs. The time involved in designing and building aircraft and in preparing them for mass production in 1948 as compared with World War II models designed and produced prior to 1942



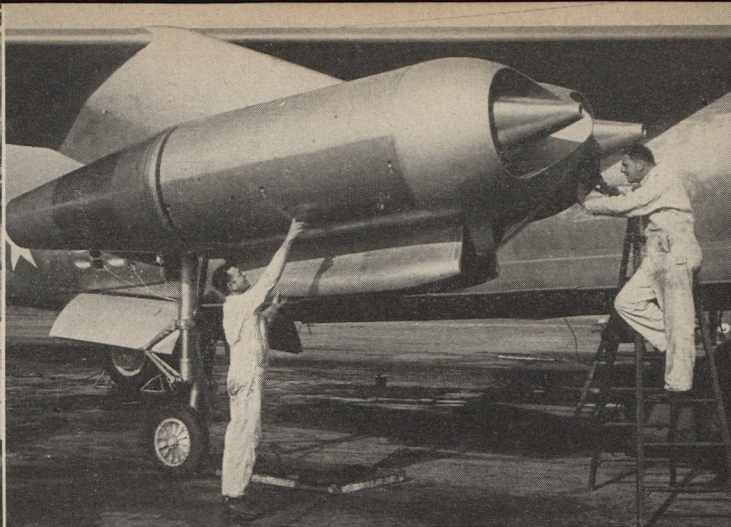
Perhaps the most promising of the new string of Air Force fighters is the new North American F-86, a sweptback jet with a published speed of "over 650 mph." Contracts for 674 have been let to date. So far however no USAF group is equipped with them.

Dark horse of the USAF bomber lineup is the Northrop B-49 Flying Wing of which 30 have been ordered. The 49 is expected to double speed and capacity of the B-17 and equal its range. Below, one of its eight Allison turbo-jets is moved into place.





Big as the Ft. Worth plant of Consolidated is, it is none too roomy for B-36s now in production. First operational 36 recently went to a unit of the 8th AF.



Workers at Boeing's Seattle plant make a final check of two of the planes six jet engines. Sweepback of the huge planes wings creates unusual production problems. As yet plane is still "experimental."

Return of the Production Line

(Continued)

has increased an estimated ten times.

Altitudes have increased roughly from 30,000 to 50,000 feet for tactical aircraft and the speed range from 300 miles per hour to 600 plus miles per hour. These two factors alone have promoted problems in basic aircraft structural design as well as accessory and control equipment. As an example, new concepts in the design of aircraft hydraulic and electrical systems must be developed to enable the systems to withstand the lower temperatures in the higher atmosphere. The matter of engine cooling at higher altitudes has become more complex. Extremely thin wing construction present problems of design and fabrication. The development of taper sheet aluminum and new types of extrusions for such wing sections of high speed aircraft is a definite construction problem. The increased complexity of design problems in subsonic and supersonic aircraft have increased the flight test time required to prove the dependability of new designs. This applies also to increased complexity of control and accessory equipment which must be flight tested in total airplane configuration to prove its serviceability for military use.

ECONOMIC CONDITIONS ARE VASTLY DIFFERENT THAN IN 1940. In 1940, the aircraft expansion program was undertaken in an economy that was far from peak levels. There was much unemployment, industrial capacity lay idle, and materials were easily available. There was an abundance of room for the expansion of any industry which could absorb men and material. In addition, the industry itself, while it lacked the bulk it has today, had not suffered serious financial losses as it has in the past two years, and was therefore in a far better monetary position to meet the expansion.

Today, on the other hand, the econ-

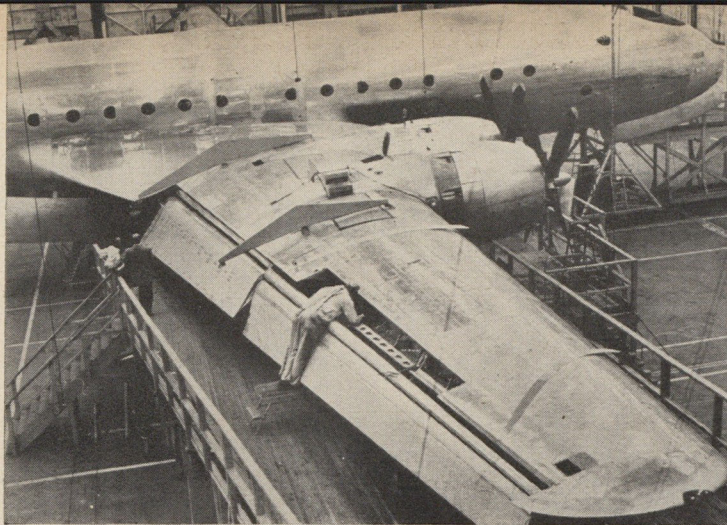
omy of the nation is saturated with orders and backlogs for civilian goods and for equipment, foods and supplies for Europe. Industrial capacity in the aircraft industry itself is largely sufficient for the new program, but capacity in industries which must supply the aircraft manufacturers with much of its parts and accessories is heavily engaged in civilian production. For example, orders placed now for fire control systems—those highly complicated electrical gadgets that are used in remote control gun turrets—are not deliverable for two full years. Undoubtedly airframe production could be stepped up appreciably if, as was the case during the war, cost was no objective, and if the old system of priorities could be resorted to. But today we are no longer faced with the stark exigencies of war and if a

manufacturer can make a greater profit building refrigerators than he can airplane parts, he is under no obligation to turn out the latter.

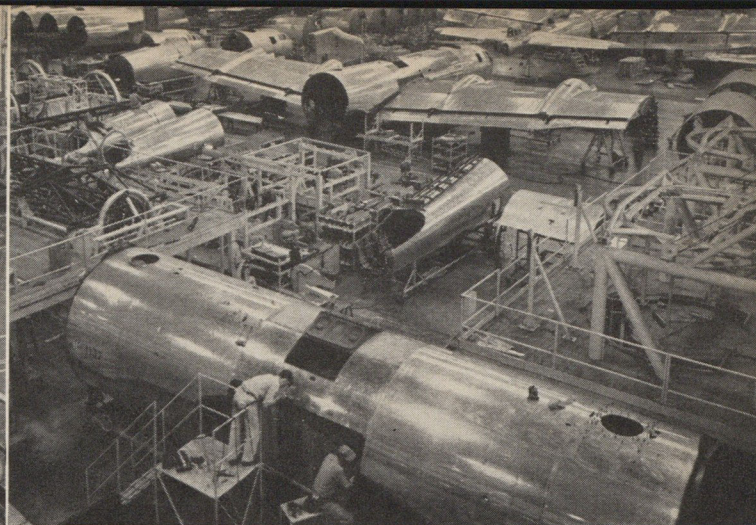
PRODUCTION OF NEW ENGINES IS A SERIOUS BOTTLENECK. Of the total of 2200 aircraft contracted for by the Air Force under the expansion program about three-fourths of them are jets. The percentage is even larger, of course, if transport and trainer types are eliminated from the total and only combat types considered. In the building of a modern Air Force this is as it should be, but there are several catches. In the first place, until now the Air Force has never been able to place jet engine contracts in sufficient numbers to support much more than one company on a production basis. That one company has been Allison—a division

Although it was the most modern of our bombers at the close of the war, the B-29 Superfortress is rapidly becoming obsolete. Here at Boeing's Wichita factory the USAF is conducting B-29 modification program to keep new plane costs at minimum.





The Douglas factory at Santa Monica, California, is now moving into production on 28 new C-124s, which are modifications of the C-74 above. The 124 will have the amazing cargo capacity of 50,000 lbs.



Successor to the B-29 in the new Air Force will be the Boeing B-50 which has a top speed of about 400 mph., and a range of about 5000 miles. 244 are ordered.

of General Motors. Now that there are sufficient orders to pass around, Allison, because of its head start, is really the only concern capable of moving into an accelerated production rate without serious readjustment. As a result, Allison has the lion's share of new business, but the Air Force, striving to build the nucleus of a healthy engine industry, has also awarded some business to companies such as Westinghouse, Pratt & Whitney, General Electric and others. Allison officials say they will have little trouble turning out their engines at a rate comparable to that of the using airframe builders. The other engine companies, who will have to start more or less from scratch, however, will have a far tougher job. Nor is this the only difficulty.

With engines, as with airframes, the

problem would be simplified if it were simply a case of getting existing engines on the production line. But it isn't. Jets are just beginning in their development cycle. New high temperature alloy materials and ceramics must be developed for combustion chambers and turbine blades, etc. Such high density and high temperature alloy materials and use of ceramics also result in fabrication problems. New tooling methods are required for forming of turbine blades. New problems in design of rotor bearings confront engineers.

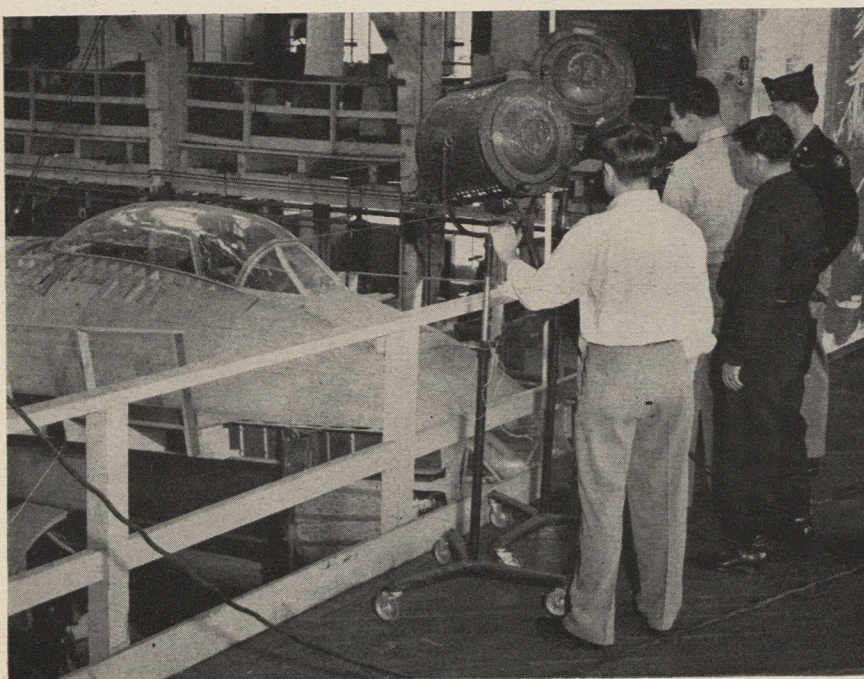
As has been mentioned, delivery of accessories and parts other than engines is also a vexing problem under the present economic set-up. The difficulty in this particular cannot be laid entirely, however, at the foot of a preoccupied domestic economy. It must be remem-

bered that component and airframe parts are generally designed with the objective of providing the greatest performance and dependability as possible. Such parts, however, often require complete redesign before they can be mass produced in order to avoid a critical shortage of material or manufacturing facilities. For example, substitutes must be developed for application where columbium or cobalt materials are used and some parts must be redesigned to utilize existing forging capacity for mass production parts. The capacity for accessory and control equipment in aircraft has also increased problems of maintenance and interchangeability. Parts must be designed or redesigned in mass production to increase interchangeability and reduce maintenance and supply problems.

Such are some of the reasons why we won't have at our disposal tomorrow the new air force we bought yesterday. According to Lt. General Edwin W. Rawlings, Air Comptroller, the modernization of the 70-group Air Force under the USAF five-year plan will be completed by the end of fiscal year 1953 with modernization of the war reserve to be completed about fiscal year 1955 or 1956. It is far from comforting to recall that the President's Air Policy Commission warned that January 1953 was the latest date we could allow ourselves to complete the revamping of our air arm. "There is no doubt about it," said the Commission, "the force we need by the end of 1952 must possess the complicated defensive equipment of modern electronics and modern defensive fighter planes and ground defensive weapons."

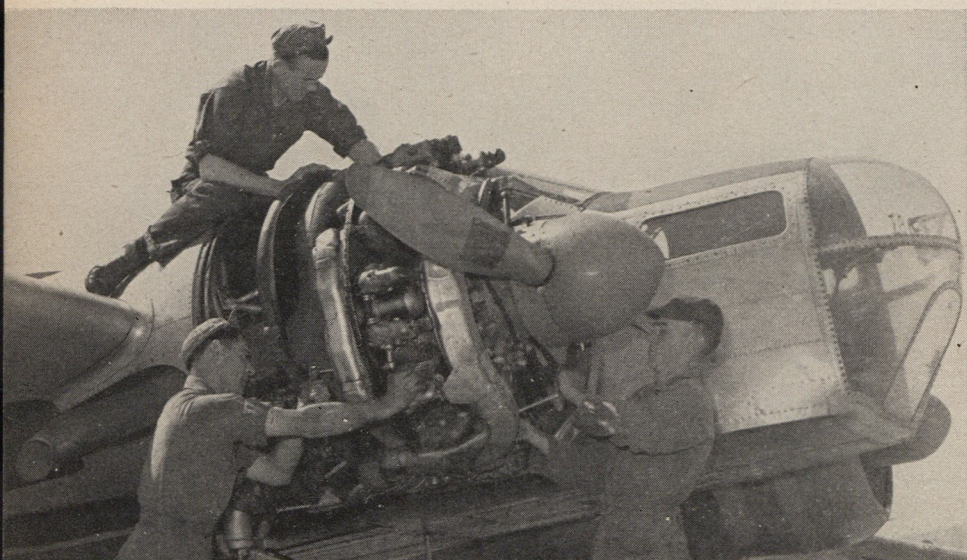
It is apparent that we are going to miss the 1953 deadline, but it will not be the fault of the aircraft industry which, even before the new contracts were let, went "beyond the call of duty" in planning for the expansion and in devising production short cuts. From its past performance record we can be sure that industry will do its utmost. Whether or not that will be good enough at this date remains to be seen.

A good illustration of why planes contracted for today can't be delivered tomorrow. Here engineers of the Boeing company study a full-scale mockup of the XB-47. The mockup was completed several years ago, but 47 is still not ready for production.





As long as there is an Army or an Air Force there will always be lines to sweat out and papers to sign. Above, members of the 319th Bomb Group at Stewart Field make with the "last name, first name, middle initial" the day after their arrival for two week meeting.



Mechanics as well as pilots found plenty to do at encampment. Above, Cpl. Merl Pitchford (astride engine) of Bangor, Maine, Pfc. Richard Steffes (left) of Newburgh, New York, and Sgt. Lesley Powell, also of Newburgh, give work-horse AT-11 a close 50-hour going over.



In a pose reminiscent of their cadet training days, reservists of the 319th cluster around their instructor, Lt. Frank Cyche (center) for briefing before bombing flight. From left: Lts. F. B. Wesley, R. H. Hedenus, Cyche, and Sgt. R. E. Cornwall. All are from Empire State.

Summertime

Air Force reservists in unit war's end prove that crewmen

By Major Robert H. Wilson

It is pretty well agreed among "students" of airpower these days that the instruments of war which brought us victory three years ago this month would, if relied upon to do the trick today, bring us only the most humiliating defeat. It is argued with considerable logic, for example, that the B-29 is obsolescent, the P-51 obsolete. But if this is true of the aircraft of the last war, the question then arises as to whether or not it is also true of the men who flew them. There are roughly 50,000 officers and men in the USAF Reserve—in storage like obsolete aircraft if you please—and like these aircraft they are at least three years older than they were when they flew their last combat missions. How do they stack up against the airmen coming off today's production line; men trained in jets, men who have become skilled in the use of new techniques and new instruments such as GCA, Loran and Shoran? Could they come through again as they did in World War II, or is depreciation setting in on them as badly and as rapidly as it is on the planes they once manned so well?

The answer is no. It is no simply because airmen can be "modified" to meet new conditions and new techniques. Airplanes can't.

It was for purposes of modification, therefore, that nearly 5000 officers and men met this summer at seven stations of the Tactical, Strategic and Air Defense Commands to participate in the Air Force's first program of reserve unit training. A total of 26 reserve groups and squadrons with at least 80 percent of their authorized strength present, ate, slept and "fought" as teams just as they had done during the war.

One such team was the 319th Light Bomb Group which met at Stewart Field, Newburgh, N. Y. For 15 days last June, the 319th's officers and men—250 of them—worked tirelessly in brushing up on old skills, and more important, in acquiring new ones.

Among the war-acquired skills which pilots of the 319th gave evidence of having slipped up on since war's end was that of instrument flying. The Air Force made a point, however, of not only bringing them back up to their previous proficiency, but of qualifying each of them for an instrument card. Since a number of instrument-radio systems which are now standard equipment in the USAF were not even known during the war, this required considerably more than mere "refresher" courses.

Soldiers

training for first time since
don't get obsolete.

It required a lot of work on Plan 62, Loran, GCA and the rest of it.

But the pilots weren't the only crew members of the 319th who had to do considerable readjusting to the new Air Force. Bombardiers and navigators discovered that since the end of the war the USAF had introduced a new triple-threat man in the line-up—a man who had the rating of Bombardier-Navigator-Observer, and who had to do the job of all three of his war-time counterparts. As a result both bombardiers and navigators dropped black powder and sand bombs on a sandbar target three miles seaward of Nantucket Lightship. And both worked on navigational problems. Each bombardier dropped 20 practice bombs during the two-week session. And even on their first mission they were hitting the target area with 75% accuracy.

Vital to the success of the meeting was the work of the unit's enlisted Reservists, without whom it would have been impossible to conduct the program. The enlisted engineering specialists got a thorough workout in keeping the aircraft maintained at an operational level. This was the first opportunity for many crew chiefs and airplane mechanics to train under actual operating conditions. With a minimum of refresher instruction from regular Air Force mechanics, they were able to keep an unusually high proportion of the unit's airplanes in the air. A group objective was to qualify as many Reservist mechanics as possible for up-grading to crew chiefs, who are much in demand, within the organization.

The enlisted Reservists made an exhaustive study of the maintenance of the A-26 with which this light bomb group eventually will be completely equipped. In the course of this study, mechanics and crew chiefs took down and reassembled the aircraft's engines and readjusted its hydraulic system, etc. Armorers cleaned, adjusted and reassembled the aircraft guns. They also received refresher instruction in aerial bomb handling procedures and thereafter conducted the loading and arming of the bombs dropped by the unit.

No, the raw material of the USAF Reserve is not obsolete. It's as modern as tomorrow's fighter, and as the one that comes the day after that, too. In addition it's experienced and disciplined. At Stewart and at each of the seven other encampments it has been amply proved that a strong reserve is one of the best guarantors of peace we can build.



Major Charles Wolfendale, a Squadron CO in the 319th, checks the loading of bombs in one of the groups AT-11s. Planes made daily flights from Stewart Field to Bedford Airfield and thence to sandbar target in the Atlantic. Early strikes were 75% within target area.



For the most part, reservists of the 319th flew AT-11s on missions such as the one above which is headed for Nantucket lighthouse from its base at Stewart. One of the ambitions of the meeting though, was to give each pilot 12 hours in tactical planes such as the B-25.



Although their flying was restricted to more conventional type planes, crew members of the 319th were given the opportunity of familiarizing themselves with the latest planes in the USAF string like this Republic F-84 which was flown in from Maine for special demonstration.

Jets For Commerce

Their range is limited and their fuel consumption is high, but recent improvements and discoveries indicate that jet airliners may still be the coming thing

By William S. Friedman

When the first jet fighters took to the sky, the pilots were master of two throttle positions; wide open and tight shut—nothing in between. The planes were committed virtually to a straight interception problem. The German jets were used chiefly for hacking at bomber formations, while the British jets spent most of their time chasing buzz bombs.

Both were full time assignments, but in these early operations the pilots had to worry almost as much about their own fuel problems as they did about the enemy. It was a tough job to get in the air, perform your operational mission and get back to the field before your juice ran out. Stop watches were much in vogue.

In these operations, fuel was blasted through the engine as fast as it could be swallowed. This gave rise to the belief that the gas turbine was, by its nature, a fuel hog, and that this unhappy characteristic would limit its use to military aircraft, chiefly fighters and light bombers.

But several months ago R. P. Kroon, engineering manager for the aviation gas turbine division of Westinghouse stated that fuel effectiveness of the turbine-type engine had been improved by 30 percent in the last three of four years, and that another 20 percent improvement could logically be expected in the next two years on the basis of experimental work already completed. Admittedly, these improvements have been aimed chiefly at stretching the range of fighters and bombers. But the revelation coupled with the recent approval of the CAA of an Allison turbo-jet for commercial use points a definite trend toward serious consideration of jets for high-speed commercial use.

This reasoning is not solely confined to mere cerebrations. In England, a Vickers Viking, powered by Rolls Royce Nene turbo-jets was test flown in April, and is now undergoing trails to determine its commercial feasibility. In Canada, A. V. Roe is in the process of building a high-speed prototype, powered by four Canadian built turbo-jets. In Holland, Fokker has a jet transport prototype under way even though local economic conditions makes progress slow. Because US jet construction is presently concentrated on giving our Air Force that supersonic look, an American transport jet may be a couple

of years off. But this condition does not prevent interested parties from exploring the problem.

A cursory examination even of improved jet engines may, on first glance, look like an invitation to bankruptcy if they were used to power a passenger fleet. Their fuel consumption is high, but there are mitigating factors which indicate that, with a properly designed airframe and the suitable range of operation, a jet transport may prove a profitable investment.

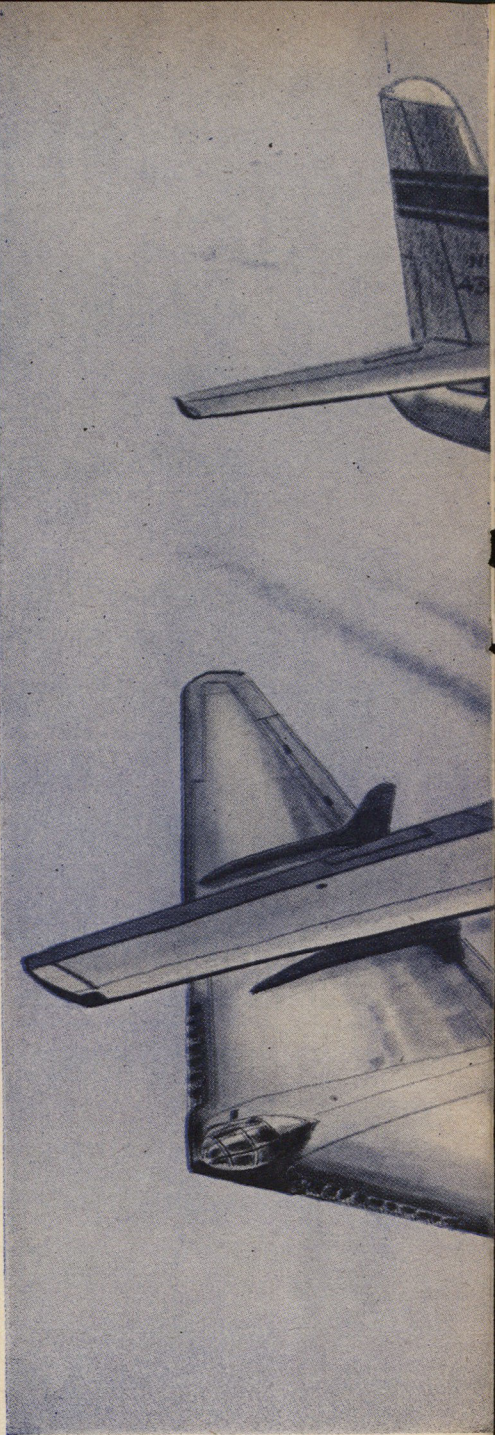
A scholarly study of the place of a jet transport in the overall aviation picture has been presented by Robert E. Hage, senior group engineer of the Boeing Aircraft Company who has associated with the development of the B-47 bomber. Hage recently completed the first of the Edwin G. Baetjer II Memorial Lectures, published by Princeton University. The study, entitled "Jet Propulsion in Commercial Air Transportation" takes into comprehensive consideration the overall problems involved in the application of turbo-jets to commercial use.

Hage compares conventional piston, turbo-prop and turbo-jet power. Out of his study he has determined that a "best" range can be laid out for minimum operating cost for each of the three transports. In his comparison, the turbo-jet pays heavily for its speed by having the shortest range. The turbo-prop and conventional engine can be designed through a wide band of ranges with little or no effect on direct operating costs, while the jet's economy suffers sharply if the range exceeds this optimum.

For that reason, turbo-jet transports can be operated economically only in medium-range or inter-city type of operation.

Hage proposes the building of 30-40 place transports whose general configuration is not unlike the B-47. Its wing should have a 35° sweepback in planform while its thickness ratio would be about 15 percent average. This plane, powered by two 7000-8000 pound thrust engines, would cruise at 500 to 525 mph at a maximum range of 1500 miles. The practical hop, therefore, would be about 1000 miles or a little under. Cruising altitude would be 35,000 feet. Operation procedure would be to make each flight a climb-to-altitude, cruise and let-down run.

This range limitation is not as great



An artist's conception of what the jet airliners

a handicap as appears on the surface. Examination of the US airway map reveals but a few legs of over 1000 miles. Five hundred is about average. The great bulk of passenger bookings are for well under a thousand miles per single transfer. In Europe the moves are even shorter because the centers of population are closer together.

It is true that the turbo-jet eats more fuel per hour of operation than either the piston engine of the turbo-prop. In the proposed plane studied for the thousand-mile operation, the jet consumes four times as much fuel per flight at 500 mph as the piston engine would at 300 mph. The turbo-prop at 440 mph would be somewhere in between; roughly twice that of the piston plane.

Jets For Commerce (Continued)



To date England has moved ahead faster than the US in research into the feasibility of applying jets to commercial airliners. One of the earliest experiments (above) was with a converted Lancaster bomber on which two Nene-Merlin jets were installed.

make over 26.6 percent error for the 300 mph airplane. The 500 mph ship suffers only a bit over 10 percent, which is a lot easier to average out.

At the present stage of the art, the airplane designer anticipates no decrease in operational safety for the high-speed airplane as long as a minimum margin of 50 mph is maintained between cruising speed and the critical speed of the design. This keeps the 525 mph airplane in a safe zone of operation. Approach and landing speed should not be higher than that of comparable four-engined equipment.

The problem introduced here was concerned chiefly with traffic, as the relatively high traffic density over major areas will call for either better procedures in landing or an increase in the number of available landing strips. This will be necessary in order to keep the jet airliner's low fuel efficiency from becoming a hazard. Should a jet plane be compelled to sit in a stack for long periods, the fuel reserve problem might become acute. Furthermore, whatever advantage accumulated from the increased speed would be dissipated in the holding process. This means that instrument or radar landing aids must be developed along with the jet transports so that the turn-around or go-on time would be accelerated along with the cruising speed.

From the passenger's viewpoint, the jet transport will have advantages in addition to increased speed. In

reciprocating-engined transports, the banging pistons and air-spanking propellers make a noise and vibration level that can make a protracted flight uncomfortable despite the best efforts put forth in sound-proofing. The turbo-jet is free from mechanical vibration because there are no reciprocating parts or interval detonations. The propeller, the major cause of noise and vibration, is totally missing.

As far as gusts are concerned, experience shows that the 35° sweptback wing rides the gusts much better than a straight wing of the same loading. Sweptback wings show a marked load-relieving effect due to the reduction in the slope of the lift curve, and the physical bending of the thin wing.

Even though the plane is twice as fast as the DC-4, the gust discomfort would probably be the same. The cruising altitude for the proposed jet transport will be 35,000 feet. At this level, gusts occur with less frequency and intensity than they do at the 10,000 feet, the typical cruising height for intercity transports.

The effect of the fleet reduction made possible by the fast planes would not only allow a capital saving on equipment, maintenance and facilities, but would permit faster introduction of new equipment. Assuming planes are of the same payload, the fleet size required to earn a given income would be inversely proportional to the block speed. For that reason, the faster, smaller fleet

would be amortized more quickly. This means it would have logged its profits and be ready for retirement in favor of swifter and more luxurious equipment at an earlier date.

By approximating the possible decrease in the direct operating cost associated with the smaller, higher speed jet fleet, a survey of passenger fare on present day scheduled service indicates that future fares might actually be lower than that currently charged by airlines. This does not take into account the increased traffic that might be generated by the speed of the new transports.

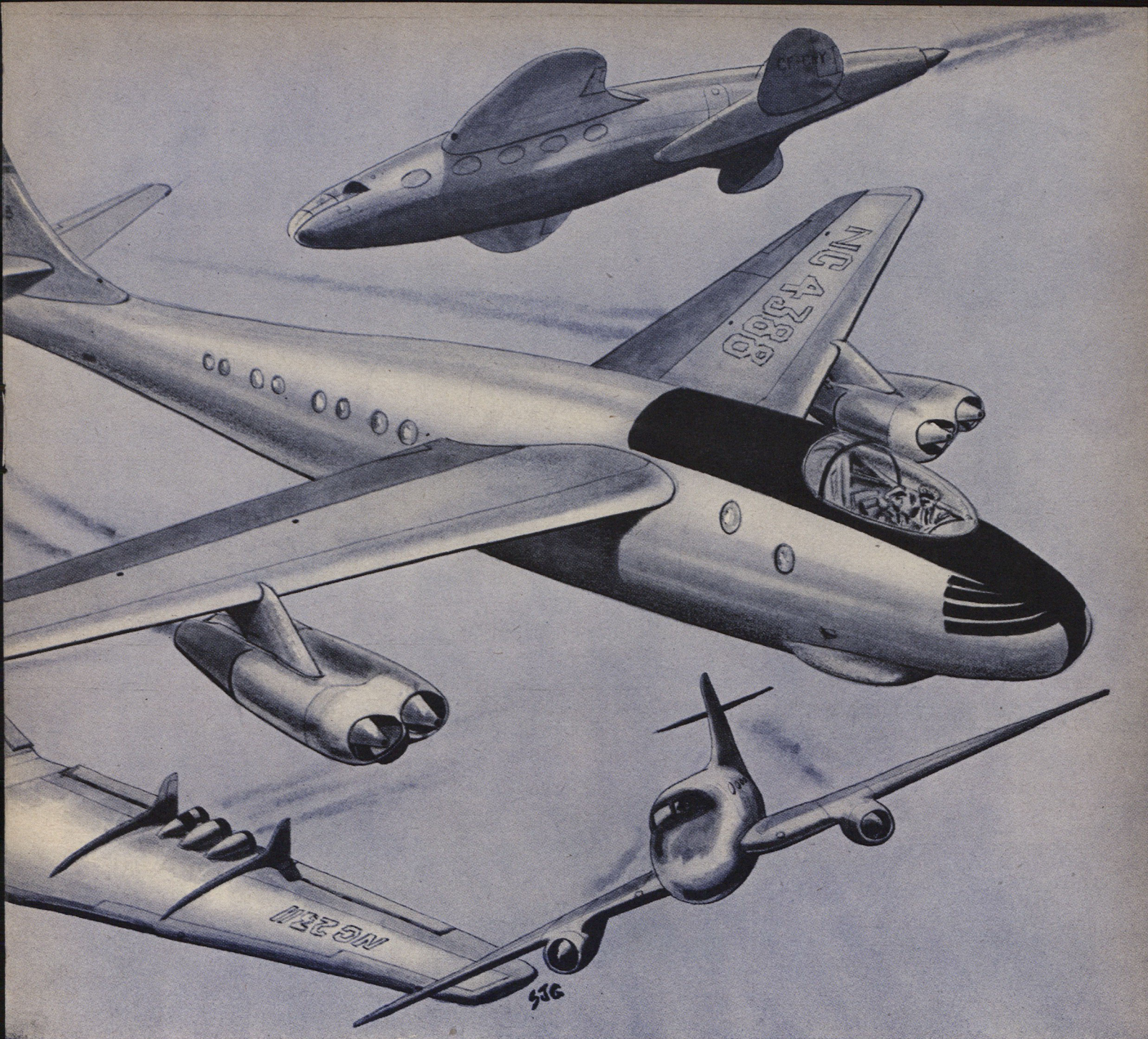
On the basis of what is known and projected, a jet prototype much like Robert Hage suggests could be ready to fly by 1950. By that time, 7000-8000 pound thrust jet units should be commercially available, so that a twin-engined airplane weighing 60,000 pounds could be operated out of a 5500-foot field like those serving the typical middle-sized US community.

Considering the Westinghouse prediction of a 20 percent increase in fuel effectiveness in about 2 years, plus such things as boundary layer control, which may cut the airframe's parasite drag, the outlook is encouraging.

In the meantime, men of vision want jet power tried out in transports. They know that the only way to find out if a 525 mph transport is salvation or damnation for the airline operators is to build one and find out.

There is undoubtedly a real place for this kind of airplane. Proven successful, it can be the work-horse of the airways. It can pick up traffic from the feeder lines and deliver it to the long-range lines, either transcontinental or transoceanic. Because the vast bulk of traffic falls within its range, it could be the major carrier, stimulating traffic by its superior speed and comfort.

The red ink on the average US airline's annual report is ample evidence that the transport industry cannot, at present, finance such a research venture. Normal replacement of conventional equipment is as great a burden as the airlines can undertake. But to date the most successful transport airplanes have either been developed as military carriers or part of their development cost was borne directly or indirectly by the military. This is logical inasmuch as a modern, healthy, Commercial transport industry is essential to our national security. At the present, machinery already exists within the Air Force for the development of the jet transport prototype. There is no reason therefore, why funds shouldn't be allocated for this purpose. Perhaps financial legislation will soon come into being so that we may be able to discover in actual flight operations whether a jet airliner, traveling at a safe margin below the speed of sound can accomplish the twin objectives of affording better passenger service and of bringing the airlines out of their present chaotic state.



of tomorrow will look like. For the most part they will be modifications of military types already in production or on drafting boards.

This, on the surface, makes the jet a bad bet until one really looks at how the airline dollar is spent. A breakdown of the 1946 figures for five top airlines shows that the indirect costs, those not directly connected with the operation of the plane, are 50 percent greater than the direct costs. Half of these indirect costs are for airline crews other than flight personnel, 25 to 30 cents out of the overall dollar outlay. Other indirect expenses include hangarage, shops, offices, sales costs, public relations, passenger service and the other fixed costs characteristic of running any large business.

In a study of the overall operating costs, the difference between turbo-jet and reciprocating costs is only 10 percent on a block-to-block basis. In ex-

change for this, the turbo-jet plane offers over 40% greater plane utilization. This is based on the fact that the plus 500 mph cruising speed would require a smaller ratio of personnel to passengers. The faster plane would utilize the time of flight crews and of ground handling personnel 40 percent more efficiently. The latter group has virtually nothing to do between plane arrivals, so, two-fifths more arrivals per plane would make a proportionate increase in the utilization of this payroll expenditure.

This economy is also reflected in a decrease in direct investment; because the plane's capacity for transfer of people and cargo would naturally be increased in direct proportion with its speed. This means fewer planes are

needed, less hangarage, less handling costs and a general superior utilization of the fixed expenses or indirect operation costs.

Another factor which would add up to a considerable saving is the minimizing of all-night operation. Under all conditions, the shift between midnight and eight is always expensive. After dark, flight crews draw a bonus. There are such factors as lighting, etc. With the 500 mph jet, ships could be scheduled to arrive no later than midnight anywhere in the US and still offer a multiple choice of departure times from major centers of population.

With a 500 mph airplane, allowances for adverse wind conditions and minor delays are a less disturbing ailment in scheduling. An 80 mph headwind will



Forget ~~COUNT~~ THE CADENCE

Remember? Well the Air Force says these days are gone forever. The Training Commands' Indoctrination Division at Lackland AFB has a new program built around competitive sports.

The long neat lines of airmen lying on their backs, grunting in cadence, are no more. From now on, physical fitness in the USAF will be built around competitive sports. The reason behind the move, according to Colonel Troy Keith of the Air Training Command, is this: Many young soldiers now entering the service are spectator athletes, *i.e.*, they only watch. Keith says this is bad. Too often passive sports participants who share the football player's excitement but not his activity develop hypertension and a blunting of reactions to stimuli to the point that when a real emergency arises the body is unable to respond. This can only be corrected if the individual gets in the game and discovers that he is as capable as the next man. Colonel Keith says when this happens we will have come a long way in building a more self-reliant Air Force.

At long last a substitute has been found for calisthenics



This is the new way. After much research, the USAF has concluded that competitive sports such as swimming races, are best means of breaking down the hypertensions of spectator athletes.

THE CONVENTION PROGRAM

Mammoth reunion in Madison Square Garden to highlight festivities when Air Force gang gets together next month in New York City for AFA's spectacular second convention

The second annual AFA national convention, featuring a program that promises to eclipse anything of its kind ever held, will be a nation-wide rallying point for thousands of Air Force members, past and present, on the weekend of September 24-26 in New York. The program was announced by AFA President Tom Lanphier Jr., following these important developments:

► An overflow crowd is assured. After a flood of advance reservations, Convention Chairman Gill Robb Wilson has urged all prospective convention-goers to make their reservations immediately with AFA national headquarters in Washington. "As a result of this unprecedented initial response, we have added hundreds of hotel rooms to those

originally set aside for the convention," he said, "but we want everyone to be satisfied with his accommodations, and for that we need as much advance notice as possible."

► The huge Air Force Reunion in Madison Square Garden is gaining in significance daily. This convention feature will bring together the top stars of show business and the men whom they entertained overseas, and in some cases fought with, during the war. Arrangements for this unique spectacle are being handled by a special convention committee appointed by President Lanphier. This group of AFA members is headed by Hollywood producer-director Hal Roach, the committee chairman. Committee members who will assist

Roach and who are already busy at the task of lining up talent, include movie executives Jack Warner and Merian Cooper, screen stars Jimmy Stewart and Clark Gable, and radio star Tex McCrary. Lanphier has announced that all receipts from ticket sales for the Reunion (a general admission ticket is included in the regular convention registration fee) over and above actual expenses will be given to the Air Force Aid Society.

► The US Air Force will participate and cooperate wholeheartedly. At the big reunion in the Garden, the Air Force will officially recognize the contributions of show business to the war effort and will present awards for outstanding wartime entertainment achievements. The Air Force itself will be formally honored at a noon banquet the second day of the convention. Air Force men in uniform, led by Secretary of the Air Force Symington and Chief of Staff Vandenberg, will come to the convention from Washington and from air bases throughout the country.

► Reunions of wartime AAF outfits have been given special consideration on the convention program. To assist men in getting together with members of their wartime organizations, a hotel room directory grouping men according to the numbered Air Force or equivalent Command of their designation will be published and issued regularly throughout the convention. Lapel buttons announcing such designations will replace the customary convention nameplate badges. Kickoff event of the entire convention will be the opening night Rendezvous and cocktail party of the numbered Air Forces and Commands.

► The convention schedule permits ample time to go "on the town." The lure of the Big City is regarded as an important factor in convention attendance, and many wives are expected to be present. With this in mind, the convention committee has allowed the average convention-goer the following free periods to see the sights: virtually all day Friday, September 24 (Registration Day) and Friday night after the cocktail party Rendezvous; cocktail hour and dinner hour on Saturday before the Madison Square Garden show, and from mid-afternoon on Sunday following adjournment of the convention. Those who care to venture out under the bright lights after the Garden reunion on Saturday night will no doubt thank the committee for scheduling a late breakfast-lunch on Sunday morning—the final day.

TIMETABLE

FRIDAY, SEPTEMBER 24

9 A.M. to 5 P.M.	Registration of delegates, members and guests at the Hotel Commodore.
2 P.M.	Meeting of all Wing Commanders.
4 P.M.	Meeting of the Board of Directors.
5 P.M. to 7 P.M.	Rendezvous cocktail party of the numbered Air Forces and Commands at the Hotel Commodore.
After 7 P.M.	On the town.

SATURDAY, SEPTEMBER 25

8 A.M. to 9:30 A.M.	Registration for late arrivals at the Hotel Commodore.
9:30 A.M. to 12 Noon	Opening business session of the convention, at the Hotel Commodore.
12:30 P.M. to 2 P.M.	Banquet at the Hotel Commodore in honor of the United States Air Force.
2:30 P.M. to 5:30 P.M.	Second business session, at the Hotel Commodore.
5:30 P.M. to 8 P.M.	On the town.
8 P.M.	Air Force Reunion at Madison Square Garden.

SUNDAY, SEPTEMBER 26

10 A.M.	Breakfast-luncheon at the Hotel Commodore.
11 A.M.	Third business session, at the Hotel Commodore.
3 P.M.	Adjournment of convention.



Madison Square Garden, above, has been the scene of many exciting events in its time, but few of them will top AFA's reunion.

► Business sessions will be the most important in AFA's history. With all the fun and reunion elements to be generated by the convention, a serious note always will be present in light of the tense international situation and in cognizance of the fact that AFA's airpower job has just begun. Climaxing the Association's busy year with regard to airpower policy matters, the convention is expected to result in the adoption of significant resolutions and the establishment of new policy goals. The Garden rally will include the presentation of special AFA awards to civilians as a phase of the Association's program to advance the public understanding and appreciation of airpower. AFA business will feature developments to help strengthen the organization locally and

nationally so it is better able to meet its ever-increasing responsibilities.

With the basic program established, the national convention committee appointed by President Lanphier has dug in for the gruelling detail work ahead. The committee itself is well qualified for the big job. Its chairman, Gill Robb Wilson, is not only a veteran at handling major events but also one of the best known men in the aviation world. A World War I pilot with both French and American air forces, he now writes a syndicated aviation column for the New York Herald Tribune. Wilson was the first chairman of the American Legion's aviation committee, is a past president of the National Association of State Aviation Officials and of the National Aeronautic Association, and was

state aviation director of New Jersey from 1939 to 1944. He organized the Civil Air Patrol in 1941 and set up its anti-submarine bases in 1942. He has been an aviation consultant to the federal government for many years and recently served as an advisor to the Congressional Aviation Policy Board. A charter member of AFA, he has been a national committeeman since the start of the organization.

Working closely with Wilson is a select group of AFA leaders in the New York area. Vice chairman of the committee is John H. Caldwell, AFA's national membership chairman and past commander of the well known Westchester Squadron. AFA National Secretary Julian B. Rosenthal heads the
(Continued on page 26)



NEW YORK CITY

AFA NATIONAL

AND REUNION OF AIR FORCE ASSOCIATES

**Huge Air Force Rendezvous at
MADISON SQUARE GARDEN**

Saturday Night, September 25

featuring

STARS OF SCREEN, STAGE

and RADIO

**Convention Headquarters
Located at**

THE HOTEL COMMODORE

**Lexington Avenue and 42nd Street
In the Heart of Midtown Manhattan**

REGISTRATION DAY:

Friday, September 24

MAKE YOUR RESERVATIONS



FRI. - SAT. - SUN.

SEPTEMBER 24-25-26

CONVENTION

AIR FORCE VETERANS

PLAN YOUR TRIP TO NEW YORK NOW. Be in on the biggest thing in AFA history. Three full days of reunions, cocktail parties, guest entertainers, exhibits, banquets and, of course, business sessions to elect new officers and plan next year's program. All this in addition to the thrills and excitement of the Big Town itself. To be assured of a place to hang your hat, clip the coupon on this page now. Mail it today to the Convention Committee, AFA National Headquarters, 1616 K St. N.W., Washington 6, D.C.

ATTENTION!

HOTEL RESERVATIONS

Advance reservations for hotel rooms are pouring in. Make sure you'll have a place to shave and hang your hat by filling out the coupon on page 46 and mailing it today. Your reservation will be confirmed immediately. Send no money. You will be billed at the convention.

REGISTRATION FEE

The convention registration fee (in addition to hotel charges) has been established at \$16.50, payable at the time of registration in New York. It entitles you to all convention functions and programs—including the cocktail party and rendezvous of the numbered Air Forces, the big luncheon in honor of the US Air Force, the mammoth Air Force Reunion at Madison Square Garden Saturday night, and the wind-up breakfast-luncheon Sunday morning.

COUPON AND HOTEL RATES ON PAGE 46

RVATIONS NOW!

The Convention Program *(Continued)*

Resolutions Committee. One of AFA's organizers, Rosenthal was chairman of the committee that drafted the Statement of Policy adopted at the national convention last year. Mary E. Gill, secretary of the AFA's First Division and commander of New York's WAC Squadron, is in charge of Registration. The publicity chairman is Reavis O'Neil, Jr., a member of Westchester Squadron and an executive with a well known New York public relations firm. Robert H. Johnson, commander of the Manhattan Squadron, is handling general admission ticket sales for the Garden reunion. Newspaper executive Ogden R. Reid of the New York Herald Tribune is the Finance Chairman.

Considerable effort has been expended by the committee to make Air Force men and women feel at home in New York during the convention, and to present the best possible program with a registration fee that is in line with the average budget. The \$16.50 fee is considered extremely low in light of the events covered. In addition, regular rates will prevail at the hotels. Convention committee members, after checking comparative costs, report that New York's hotel rates, on the average, are below those in other major cities (see page 46 for the hotel rate schedule).

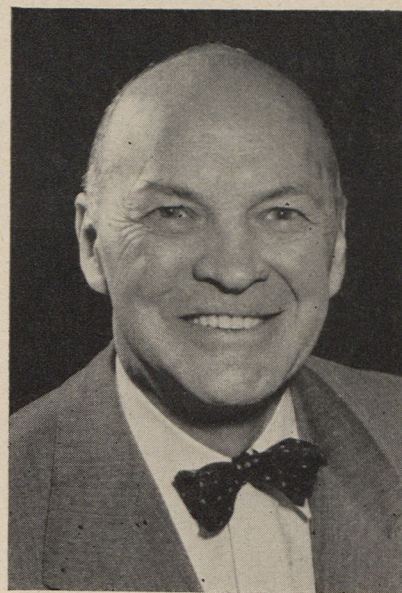
Convention Headquarters will be maintained at the Hotel Commodore, one of three convention hotels carefully selected to appeal to the maximum number of people. The Commodore—for those who desire rooms in the headquarters hotel and place their reservations

sufficiently early to get them there—is located in the heart of the Grand Central district of Manhattan at 42nd Street and Lexington Avenue. For those who prefer to be nearer to Broadway—and advance reservations indicate there are many who do—there is the Hotel Lincoln at 8th Avenue and 44th Street. And for those who like their lodging away from the headquarters hotel but want to stay in the popular east side Manhattan area, there is the Hotel Belmont Plaza at Lexington Avenue and 49th Street.

While convention activities, excepting only the reunion at the Garden, will be held at the Hotel Commodore, everyone who registers for the convention will be given a temporary guest card to the Wings Club, located in the Hotel Biltmore at Madison Avenue and 43rd Street. This card will permit them to use the facilities of the Club for the duration of the convention.

In welcoming wives to the three day meeting, the convention committee has announced that wives wishing to attend official convention functions may sign up at the regular registration fee.

Along with the first rush of advance reservations have come announcements of a few of the many "Old Outfit" reunions that will be held in conjunction with the convention. Indications are that these gatherings will take several forms. There will be air force reunions such as that planned by the Ninth Air Force, which held its 1947 meeting at the AFA national convention. There will be unit get togethers like that planned by the 95th Bomb Group, ar-



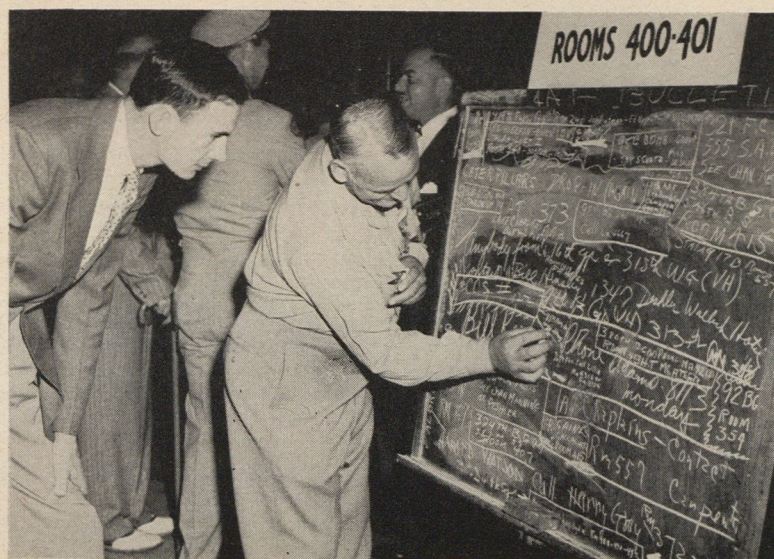
Meet Chairman Gill Robb Wilson, NY Herald Tribune aviation columnist.

rangements for which are being handled by Jay J. G. Schatz, who served as squadron navigator of the group's 412th Squadron. Schatz, who can be reached at 410 S. Wells St., Chicago, has urged all men of the 95th to hold a reunion on Friday, September 24, the opening day of the convention, at the Hotel Commodore, and asks that everyone interested contact him at that address. There will be reunions on the basis of military jobs, such as the Chaplains' reunion, also on opening day at the Commodore. The Chaplains who met last year at AFA's convention had such a successful get-together that they have decided to make it an annual affair. All Chaplains who are interested are informed that they will get full reunion details at the time they register for the convention. Special requests relative to the Chaplains' reunion should be addressed to AFA National Headquarters in Washington, attention Convention Reunions. There will be AFA unit reunions or meetings like the conference planned by the New Jersey Wing. Members in New Jersey are asked to contact Irving B. Zeichner, 114 First Avenue, Atlantic Highlands, N. J., for details. And there will be reunions by special groups such as the Air Force Pawling Club, composed of men who have gone through the Air Force's Rehabilitation Center at Pawling, N. Y.

With all the planned get-togethers, big and small, the reunion portion of the convention was expected to prevail—as it did last year—chiefly on an informal, spontaneous basis that develop only when old friends meet unexpectedly, as they invariably do at a convention of this type.

Whichever way you look at it, the New York convention will serve as a fitting climax to an historic Air Force year, and promises a whale of a good time for one and all.

REMEMBER?



Last year at Columbus, reunions were made by blackboard appointment. This year the system will be improved through the use of IBM machines.



Lincolns of the famed Squadron No. 35 over the Atlantic last summer in their formation flight to Mitchel AFB.

The RAF Today

With only 250,000 men, the RAF has again become "the few," but with advanced planes and a good training program, England is still a first-rate power

By Charles Gardner

Air Correspondent to the British Broadcasting Corporation

Since the war, Britain's Royal Air Force has had all its activities and plans overshadowed by the manpower problem. On the one hand there has been the steady "run-down" of demobilization which has had to be managed side by side with the recruitment of regulars, and, on the other hand, there has been the urgent need to "build-up" a new Air Force capable of playing its vital role of Britain's First Line of Defense—a role traditionally assigned to the Royal Navy.

The postwar aims of the RAF are clear, and have been stated officially in

the House of Commons. They can be summarized as:

- ▶ To provide the most efficient possible air defense for Britain and her dependencies, and
- ▶ To build up a mobile striking force of great weight, but with reduced dependence on elaborate bases.

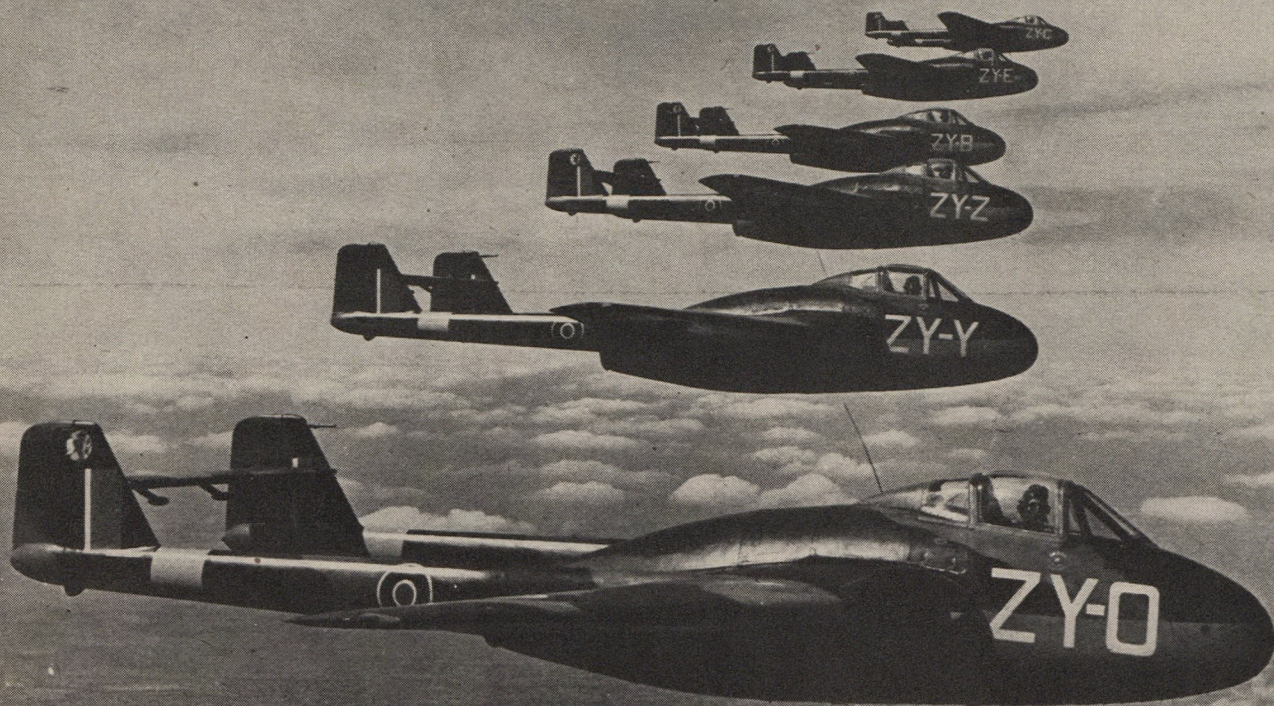
Neither of these aims has yet been achieved, though progress is further advanced on the fighter-defense side than with the mobile striking force.

The brake on the whole machine is a shortage of fully trained regular airmen to replace the wastage of demobilization and also to replace those former regulars whose tour of duty expired during, or just after, the war, and who have not signed up again.

The result is that of the present Air Force of nearly 250,000 men—only 40% (just over 100,000) are regulars who are making the Service their career.

This is a low percentage for a really efficient air arm, and its effect is most quickly seen in the difficulties of running the training program. To misquote a popular phrase in England—the RAF now has "too few instructors chasing too many short-service conscripts."

The position of the "age-group" entrants who are doing their 18 months compulsory military service is a little invidious. They have to be trained for a trade—and many of them have to be trained for the skilled trades of aircraft and engine maintenance and repair. In the final analysis it is the men with the



Formation of DeHavilland Vampires practice formation flying. Britain has achieved a surplus in production of these jets and has been able to market some of them to Sweden and Canada.

The RAF Today *(Continued)*

spanners who keep an Air Force flying, and the RAF has only enough "regular" mechanics of all trades to put them in the key positions and to man the training schools. The short-term men are, therefore, needed in the field to keep the first-line squadrons serviceable. The average serving time left to a conscript after he has finished his training is only a matter of a few months, after which he goes back to civilian life and is replaced by another man who is also finishing out his time. This leads to a perpetual and very rapid turnover of personnel—and it is a lucky Squadron Commander who can boast of a full establishment of tradesmen.

There is, as the Air Minister has said, only one way to remedy this situation—bring up the numbers of regulars. This is being done—gradually.

The difficulties relating to regular recruitment in Britain today are obvious

—need for manpower in so many other spheres; shortage of housing accommodations for both officers and men, and the attractions of the more money which can be earned in "Civvy Street." A big drive, however, has been launched and in a year or so we all hope to hear that three-quarters of the RAF is on a regular and fully trained basis.

Should an emergency arise in this present interim stage, the consoling thought is that there are thousands of men with recent experience of modern weapons (plus those conscripts now re-

turned to civilian life) who could be called up to the colors, be "refreshed" and be back on the job in periods ranging from a few days up to a couple of months.

So much then for the manpower story, except to add that the RAF has met the present situation by a wide scheme of training on the squadrons; by centralizing the pilot-instruction and by other forms of rationalization which cut down the number of instructors needed.

On the equipment side, there is a happier story to tell. Long-term founda-

The Gloster Meteor is the fastest of Britain's jet fighters, having a top speed in excess of 600 mph. It can carry bombs, rockets or photo gear.



tions are being laid for a truly first class Air Force, and the twin operational aims which I listed at the start of the article are being vigorously pursued.

All Britain's first line day-fighter squadrons are now jets—Meteors and Vampires. We believe that these British jet fighters are the fastest and best in the world, and that the maintenance-free engine hours allowable on motors like the Derwent go up to double and treble those of any other nation. We think it is this reliability and ease of operation that has prompted the USA to order Rolls Royce jet engines (Nenes) for service use, and to make them under license in the States. It should be remembered, too, that until late last year a standard squadron Meteor IV held the world airspeed record at 616 mph—and today a number of RAF squadrons are equipped with identical machines. It is our belief that no other every-day jet fighter in service use can come within 20 or 30 mph of them.

The other standard RAF jet fighter is the DeHavilland Vampire and this machine, with a slightly more powerful than usual engine, has just recovered for Britain the world's altitude record at 59,000 feet.

The night fighter aircraft of the RAF are still mainly Mosquitos—which, as one of the fastest piston-engined multi-seat aircraft in the world, will remain

power, and in Bomber Command the present shortages are keenly felt.

The big problem with jet bombers is that of range, and the view of the RAF is that it would be pointless to rush into production with jet machines which wouldn't do the war job of the aircraft they replace. There is little reason to think that machines like the Lincoln and the B-29 will be replaceable in war by jet types for some time. Britain is, in fact, building certain jet bombers, and the new tailless Armstrong AW 52 experimental jet machine is an interesting, if scaled down, version of the sort of aircraft which may come into service one day—but not next week, or the week after. There is no feeling in Britain that there is any menace in, or hope of, long-range jet bombers for some years. The day of the conventional piston-engined bomber is far from done, as General Spaatz made clearly recently.

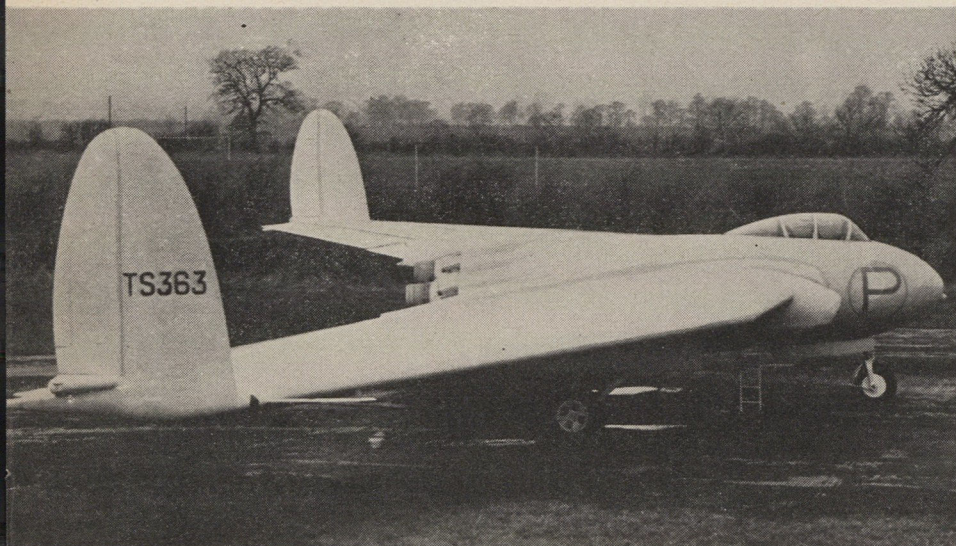
Within the limits of the resources available, however, the RAF is concentrating on mobility in her big-plane squadrons as well as on her fighters. The United States tours of the famous No. 35 Lancaster Squadron (on which I was a passenger) and No. 617 (Lincoln) Squadron, and the recent move of a squadron to Singapore, are proof of that. The idea is to develop transportable "stores pack-ups" and suitable transport aircraft as an integral part of the squad-

mand, the RAF is now re-equipping with four-engined Handley Page Hastings which can carry up to 7½ tons and fly at 300 mph for up to 3000 miles.

So, against the background of great difficulty, the RAF has managed, since the war, to get the first line fighter squadrons re-equipped with the world's best jets, and also to revive all the old Auxiliary (Reserve) squadrons which are now equipped with the latest Spitfires or Mosquitos. Some Auxiliary squadrons are to be re-equipped with Vampires this summer. On the bomber side it has kept firmly to practical realities in the Lincoln, while developing jet bombers on a long-term basis.



Crews of the 16 RAF bombers that flew the Atlantic last summer march past their planes in pre-flight review, led by Wing Cmdr. G. D. Milne.



England's cousin to our B-35-49 series is the Armstrong-Whitworth 52, powered by two Rolls Royce Nene engines. It is built primarily to study the all-wing idea.

adequate for the job until the jet bomber era becomes fact rather than wishful thinking.

The offensive side of the Service is not so well off. The main armament of Bomber Command is now the Lincoln (final version of the Lancaster), a four-engined conventional heavy bomber of considerable range and weight lifting power. Such machines need much man-

rons so that they can be moved—spares, air crew, and maintenance crew—all as one unit, and at the drop of a hat. The technique of preparing, at high speed, emergency forward fields out of virgin territory is also being studied, in the light of the great achievements in this direction in Burma and India.

For transport aircraft, and for the highly important Air Transport Com-

To my mind, however, the most significant postwar movement in the Service has been that to establish All-Empire (and Allied) Specialist Schools of the highest order, so as to create a superbly trained all-weather Air Force of experts. The deeds of the Empire Navigation School and its polar flights are well known; less well known, but equally important, are the Empire Radio and Armament Schools, the Empire Flying School (specializing in instrument flying) and the Empire Test Pilots' School. These establishments are ensuring a uniform standard of training.

One of the immediate results of this policy has been that every RAF pilot is now trained in bad weather technique from an early stage, and cannot get his "wings" unless he is a competent instrument flyer. Indeed no officer (however senior) is now allowed to fly in bad weather unless he has an instrument rating—the tests for which are up to ICAO civil airline standards.

Since British and European winter weather consists of almost non-stop bad visibility, plus icing and turbulence, this conversion of the RAF into an all-weather service, is to my mind, a major achievement.

AIR FORCE DAY



One of last year's most impressive ceremonies was the dawn memorial staged by the Dallas AFA unit in which a cross of 16 planes dropped flowers at the foot of the US flag in tribute to GI dead. Similar events are being planned for this year.

In every corner of the country definite programs materialized last month to make Air Force Day on September 18 an event long to be remembered in America's aviation history.

The US Air Force announced that the theme of the day would be its well known slogan, "Air Power Is Peace Power"—now more significant than ever in light of world conditions.

Specific objective of the Air Force's 41st birthday and first anniversary of co-equal status will be "Know Your Air

Force Better," with special emphasis on the unique, long-range strategic aspects of land-based airpower.

The USAF laid plans for country-wide "open-house" celebrations at its network of airbases, featuring displays of plane types new to the members of the community nearby an airbase. An example, it was explained, would be the display of B-29s at a fighter base, and the display of P-80s and F-84s at a heavy bomber base.

On July 7, at the Pentagon Building

in Washington, D. C., Public Information Officers from all major Air Force commands and bases met to coordinate plans and programs and hear Air Force information leaders, including Stephen Leo, Director of Public Relations, and Col. William Nuchols, Director of the Air Information Division, outline policies and operational procedures for the Air Force Day observance.

Meanwhile the Air Force Association, designated by the USAF as the official sponsor of Air Force Day, and a host of cooperating organizations have completed preliminary arrangements for a series of colorful celebrations throughout the nation as a tribute to the US Air Force. Cooperation between AFA units and other organizations will be the order of the day.

The kickoff banquet of the nationwide Air Force Day observance will be held on Friday night, September 17, in the Grand Ballroom of the Hotel Statler in Washington, D. C., under the joint sponsorship of the Air Force Association and the Aero Club of Washington. Top Air Force officers will be joined by leaders of the aviation industry and key governmental figures at the affair, at which 500 persons are expected.

Across the country the Association's San Francisco Squadron, in cooperation with the Junior Chamber of Commerce, will expand the usual one-day celebration of Air Force Day to a week-long observance to be known as Aviation Week. It will begin on Sunday, September 12, with an Air Fair at the International Airport. During the week some 50 San Francisco stores will feature appropriate window displays, the entire downtown district will be decorated, and events will include a parade of light aircraft up famous Market Street. The Commonwealth Club will cooperate with a huge luncheon on Friday, and the San Francisco Press Club with a dinner on Friday night. The Air Force Day Ball will be held on the night of Air Force Day, and on the Sunday following, memorial services for Air Force dead will be held in San Francisco churches.

Largest Air Show of the day is expected to be held at Randolph Field, San Antonio, Texas, where the celebration will involve the combined efforts of four of the six major Air Commands. The mass exhibit and aerial demonstration will be the only observance in the country bringing together the personnel of four major USAF installations. Attendance is expected to exceed the 20,000 persons who traveled to Randolph for the 1947 Air Force Day show. General Chairman of this year's event is J. W. Draper, Jr., who can be contacted through the Public Information

to Blanket Nation

Office, Kelly Air Force Base, San Antonio.

Up in Boston another joint effort will find the six New England States celebrating Air Force Day at perhaps the largest single event of its kind ever held—a New England-wide banquet on the night of Air Force Day at the Commonwealth Armory with an expected attendance of more than 3000. AFA units in this section are working closely with Air Force officers, especially Capt. Louis C. Renaud, Public Information Officer of the Bedford, Mass., airfield, who has coordinated the activities. Other Air Force Day events in New England will include a six-state model airplane contest at Bedford to be supervised by AFA's Rhode Island Wing, and a joint proclamation for the day by New England's six governors.

In Kentucky the Covington Squadron of AFA will be joined by the local Chamber of Commerce, the Northern Kentucky Chapter of the National Aeronautic Association and members of the Greater Cincinnati Airport Board in the supervision and sponsorship of the first Air Show to be held in the Covington area in more than ten years. The event will be climaxed by a banquet the night of Air Force Day.

In New York State the Buffalo and Niagara Falls Squadrons of AFA have combined with committees representing the Buffalo Civil Air Patrol, local Air Reserve units, the Buffalo A.R.O.A. and the two Chambers of Commerce to hold an Air Show, banquet and dance.

Out in California, in the Oakland area, the East Bay Squadron and Contra Costa Squadron have combined forces to sponsor a program-breakfast and aerial demonstrations.

Banquets are planned for Pittsburgh by the Greater Pittsburgh Squadron, and for Milwaukee by the Billy Mitchell Squadron, while down in Beckley, W. Va., the Air Force Day banquet will be preceded by a program and memorial services at the high school stadium in the morning, and followed by a public dance in the evening.

All these are but a few of the Air Force Day programs that have taken shape across the country. Whatever the size of the program, whether it brings together two or two thousand people, the Air Force will have a big birthday party on September 18.

NOTICE

Requests for USAF general officers as guest speakers on Air Force Day should be made to AFA National Headquarters, 1616 K St. N.W., Washington 6, D. C., so that such requests can be given personal attention and coordination.

AFA squadrons from San Francisco to Boston working to make the Air Force's 41st birthday the biggest yet



Another one of the more unique celebrations last year was held at Selfridge Field, Detroit, where the Air Force's fortieth birthday was observed with a huge birthday cake large enough to be sampled by each of Selfridge's 2000 officers and men.

SPECIAL ISSUE OF AIR FORCE MAGAZINE

The September number of AIR FORCE will be a special issue in honor of Air Force Day—dedicated to the accomplishments of the US Air Force throughout its 41-year history, and featuring a colorful portrayal of today's land-based air establishment—its men, machines and operations.

The Air Force Day issue will be available in quantity to AFA Squadrons and to all organizations sponsoring events on September 18. Bulk prices on a cost basis will prevail. It is suggested that this expense be included in the plate costs at Air Force Day banquets.

Advance requests indicate that the September issue will be in great demand. All organizations interested are advised to place their orders as soon as possible. Final deadline for receipt of such orders is August 15. Full information can be obtained by writing to National Headquarters, Air Force Association, 1616 K Street, NW, Washington 6, D. C.

CROSS



COUNTRY

Commission Honor Grads

Up to 5% of each USAF Aviation Cadet class to graduate from flying school will receive regular commissions in the Air Force under a new program recently announced by Headquarters, Training Command. Ordinarily, cadets are commissioned as second lieutenants in the Air Reserve. They are then sent on extended active duty, where some can qualify for regular commissions. The new program offers Regular Air Force commissions immediately to the top five per cent of all graduating classes on the basis of leadership, character and aptitude for military service. This does not effect qualifications of the remaining reservists for regular commissions during their active tours.

About People

Delos W. Rentzel, newly appointed CAA administrator, was recently sworn in as a member of the National Advisory Committee on Aeronautics, the government agency responsible for fundamental aeronautical research. He replaces Dr. T. P. Wright, former CAA chief, as the Administration's committee representative. Dr. Wright will remain on the committee as a "member from private life," assuming the chair left vacant by Orville Wright.

Maj. Gen. Robert W. Harper, Commanding General of the Air Transport Command since July 1947, has been named commander of the Air University. His transfer coincided with the consolidation of ATC with Naval Air Transport Service to form the new Military Air Transport Service (MATS). General Harper succeeds Lt. Gen. Muir S. Fairchild, who has been named vice chief of staff of the USAF.

Maj. Robert M. Crawford, composer of the Air Corps Song, was recently elected President of the Greater Miami Aviation Association.

Stockholders of Fairchild Engine and Airplane Corp. elected two new vice presidents at their recent annual meeting. George F. Chapaline, general manager of the Ranger Engine Division, and Turner A. Sims, chief of the NEPA project, were elevated by the ballot.

The Civil Aeronautics Board announced that Merrill Armour, Assistant Chief Examiner of Safety Enforcement Proceedings Division, has been appointed as chief of the Board's Liaison Staff for Federal-State relations. His job will be that of working with state aviation officials on such matters as enforcement of state safety regulations, coordination of accident investigation and state and federal regulatory functions.

Sidney Carter, former editor of the Aviation Market Newsletter, has been named as public relations and advertising manager of Luscombe Airplane Corporation of Dallas, Texas.

J. Darrell Harvey, Assistant to the Commanding General, Warner Robins AMCA, Macon, Ga., has been elected vice president of Export Traders Company of New York. During the war Harvey served as ordnance officer for ATC in Africa and India.

Maj. Gen. Charles P. Cabell, former chief of Air Intelligence Requirements Division, has been named Director of Intelligence for the USAF. He replaces Maj. Gen. George C. McDonald, who has been assigned to the office of the Deputy Chief of Staff of Operations.

Brig. Gen. William E. Farthing, commanding general of Far East Air Materiel Command has been re-assigned to Hq USAF.

Back to Three

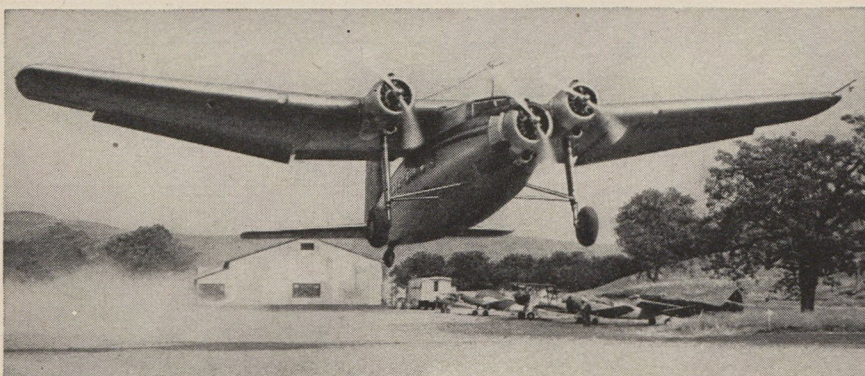
The USAF will acquire its first three-engined airplanes since the old Fords and Fokkers (1932) when they take delivery on twenty-three Northrop C-125 Raiders, military adaptations of the recently announced Pioneer. In line with the recently-awarded contract, the



Mechanical crew of "Leakin' Lena," B-29 from the 72nd Recon. Sq. of Ladd Field, that flew a record 115 hours in a single month. Front, l-r, Pfc. D. Fugate, M/Sgt. J. McCartney. Rear, Pfc. D. D. Marce, Sgt. A. E. Smith. Sgt. Alfred Nelet and the crew chief, M/Sgt. Donald E. Wood.



ATC-NATS merger takes effect in Hawaii as R. Adm. M. B. Gardner receives congratulations from Maj. Gen. B. E. Nowland, on taking command of Pacific MATS. Maj. Gen. G. E. Decker, Lt. Gen. J. E. Hull, Lt. Gen. T. E. Watson, Maj. Gens. S. L. Howard and W. E. Kepner look on.



Commercial Northrop Pioneer trimotor takes off from 500-foot light plane field. A higher-powered model (C-125) will be acquired by US Air Force. (See Back to Three)

new cargo-troop type, developed for short-field operation, will be a little larger than the commercial airplane and will be powered by 1200 hp. Wright R-1820 engines instead of the 800 hp units formerly installed. Cargo will be loaded through a drop-type ramp door nine feet wide, which will permit light vehicles to be driven directly into the plane.

The Raider will retain the simplicity of design that characterized the Pioneer. The high wing design will enable the plane to operate from brush country. Fixed landing gears are used to simplify maintenance. To allow the Raider to clear a 700 foot runway with a full five-ton load, full-span flaps are used, along with the retractable aileron system. This technique was developed on the wartime P-61 or Black Widow night fighter.

The new plane is rigged to fly on wheels, skis or floats. The float version can be used for air-sea rescue.

New ADC Functions

This summer, the Air Defense Command will assume two new responsibilities involving the USAF's Provost Marshal Division: the rehabilitation or retraining of USAF prisoners in the continental US, and the apprehension of Air Force personnel currently AWOL. According to plans announced at a June conference of ADC's Provost Marshals, rehabilitation and retraining will be given to prisoners of over two months and with less than six months still to serve. USAF Headquarters plans to allocate 300 officers and men to fulfill this mission.

The retraining program calls for balanced instruction; elementary military subjects, military drill, government, citizenship, fundamentals of American society, conduct and discipline. The programs will employ six hours of study per day, plus four hours of hard labor. Prisoners having less than two months yet to serve will receive three hours of rehabilitation training daily under their present program, in addition to their regular duties.

Under the same plan, 288 individuals

have been assigned the job of rounding up the approximately 4,500 USAF AWOL's now at large. It is anticipated that the program will retrieve about 2300 men for duty, and it is anticipated after the apprehension program is in effect for six months, absenteeism will be reduced by 50%.

Safety Winners

Twenty-four US airlines were given the Annual Award by the National Safety Council, in recognition of their contribution to safe air transportation during 1947. Twenty-three of them completed a full year without a single passenger or crew fatality. Of these, American and Northwest Airlines reached a billion passenger miles since their last fatal accident. One other, Pan American, passed its billion-mile mark before its no-accident record ended in 1947. The following lines were included on the award list:

American Airlines, Inc.: One year and 1,502,499,000 passenger miles since fatal accident Dec. 28, 1946.

American Overseas Airlines, Inc.: One year and 206,385,000 passenger miles since fatal accident Oct. 3, 1946.

Braniff Airways, Inc.: Eight years and 900,125,000 passenger miles since last fatal accident March 26, 1939.

Chicago and Southern Air Lines, Inc.: Eleven years and 546,763,000 passenger miles since the last fatal accident August 5, 1936.

Colonial Airline Inc.: Seventeen years and 180,997,000 passenger miles since fatal accident April 18, 1930.

Continental Air Lines, Inc.: Twelve years and 262,593,000 passenger miles since last fatal accident May 1, 1935.

Delta Air Lines, Inc.: Twelve years and 733,325,000 passenger miles since last fatal accident August 1, 1935.

Inland Air Line, Inc.: Sixteen years and 101,304,000 passenger miles and no fatal accidents since records were established with CAA on April 1, 1931.

Mid-Continent Airlines, Inc.: Thirteen years and 282,622,000 passenger miles since fatal accident Nov. 15, 1945.

National Airlines, Inc.: Two years and 368,500,000 passenger miles since

last fatal accident October 5, 1945.

Northeast Airlines, Inc.: Fourteen years and 244,558,000 passenger miles with no fatal accidents since the establishment of the line in 1933.

Northwest Airlines, Inc.: Five years and 1,228,604,000 passenger miles since last fatal accident May 12, 1942.

Pan American Airways, Inc.: No fatal accident on 1,443,699,000 passenger miles between August 3, 1945 and June 19, 1947.

Pan American-Grace Airways, Inc.: Four years and 413,754,000 passenger miles since accident Jan. 22, 1943.

Code Changes

One of the major changes to come along with the separate air command is an alteration in aircraft designation which is currently confusing many veteran airmen. To keep the record straight, these are the changes:

Amphibians are now designated A instead of OA.

Helicopters are now H instead of R. Search and rescue craft are now designated S.

Special research craft are to be labeled X instead of XS.

Fighters are now F instead of P.

Recon planes are now R instead of F. Trainers are identified with T.



Lt. Gen. E. C. Whitehead, commanding general of FEAF, congratulates his son, Ennis Jr. on his graduation from the US Military Academy at West Point.



Airmen just back from Rumanian POW camps strip themselves of vermin-ridden clothes and duck under hot shower while 15th

OPERATION REUNION

Our advance into German territory meant more than battles won—it meant freedom

By Maj. Laurence P. Bachmann

August, 1944: This was the month that Paris fell, the month that the 9th Air Force took a tree-top grasp on France and crushed 455 tanks, 2483 trucks, 163 vehicles and bridges, gun emplacements and freight cars without number. In England Winston Churchill reported that 5340 V-type missiles had fallen on London and East Anglia, killing nearly

5000 civilians and injuring over 14,000 others. In the Pacific, large-scale bombing of Iwo Jima began. Palanbang, Kyushu and steel plants in Japan proper were also subjected to severe AAF poundings. And in Rumania King Michael was about to order his troops to lay down their arms. . . .

About midnight a guy ran into a Rumanian prison barracks, yelling,

"Chonka! Chonka! Where the hell's Chonka?"

And drowsily Chonka sat up in his bunk, rubbed his eyes, yawned, and inquired, "Huh? . . . Me?"

"Dammit, Chonka, wake up!" the guy yelled. "Something's happened. Come listen to the guards. Find out what they're talking about."

Technical Sergeant John P. Chonka, Fifteenth Air Force gunner, crawled out



AF Sergeant (foreground) makes with DDT.

pressing closer. "Give out! What about us?"

"Well," Chonka said, "they may turn us loose in the morning." With that, he crawled back into bed.

Sergeant Chonka, however, was the only man in the prison who hadn't been thrown into a fit of wild enthusiasm. The other Americans began singing at prospects of freedom and talking about the things they were going to eat.

"For months we had amused ourselves by making out menus," Staff Sergeant William Mansfield, a ball-turret gunner from Tallahassee, said later. "Every time a guy had nothing else to do he would make out a long list—porterhouse steak, creamed potatoes, thick gravy, lettuce-and-tomato salad, ice cream, and coffee—United States coffee."

The party had reached its peak at 2 A.M., when a Rumanian colonel came into the barracks.

"Men," he said, "at last Rumania is on the right side. We knew all along that we should have been with the Allies, but what could we do? The Germans were around us, and the Allies were so far away."

When morning came the Rumanians opened all exits to the prison and told the Americans they were free.

The Fifteenth Air Force's great offensive against Ploesti oil fields, between August 5 and 20, had cost many men and planes. The accumulated losses since August 1, 1943, amounted to nearly 2300 United States airmen held as prisoners of war.

Some of these men had been prisoners of Rumania for thirteen months; some had been held but a few weeks. Among these late arrivals was Lt. Col. James A. Gunn III, commanding officer of a heavy bomb group.

On the morning the Americans were released, Colonel Gunn went to the Rumanian Air Minister, and the Secretary of Foreign Affairs, and got their permission to establish communications with the Fifteenth Air Force in Italy.

He crawled out of the Savoia Marchetti, and a group of Rumanian fliers, sympathetic to his plan, tried to console him. Among these was Capt. Bazu Cantacuzino, commanding officer of a pursuit group outfitted with ME-109Gs.

Captain Cantacuzino offered to take Colonel Gunn back to Italy, provided the American could fit into the radio compartment of a Messerschmitt.

Within a few minutes an adequate facsimile of the United States flag was painted on the German plane. The Colonel was folded into the fuselage and the panel again screwed into place. As the Messerschmitt took off from Bucharest, Colonel Gunn hoped the Rumanian ace was completely converted to the Allied cause, but there was nothing to do but sweat it out.

Two hours later, as the sun was setting behind the low hills of Italy, Colonel Gunn's home field was startled to see an ME-109G glide in to land. It taxied up, and AAF men surrounded it.

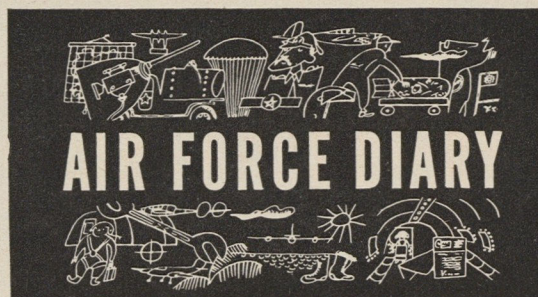
Captain Cantacuzino threw back the hood.

"I have somebody here you'll be glad to see," the Rumanian dramatically announced. He then asked for a screw driver and removed the panel.

A soldier cried, "Look at those GI shoes coming out!"

Colonel Gunn hurried to Brig. Gen. Charles Born, director of operations, and they quickly worked out a plan to rescue the men from Rumania.

The first phase of their plan was to insure that the airdrome outside Bucharest was still safe for evacuation and to start the prisoners toward their rendezvous point. If this went off successfully, it was to mesh with the major field order. The first phase of this operation began when some P-51s took off to make sure things were still safe. Captain Cantacuzino flew one of these fighters—and flew it perfectly. They found the Bucharest airdrome safe, and the signal was sent for the second phase of the operation to begin.



for our own captured airmen

of bed, grumbling at his ability to speak Rumanian. He walked through the barracks and stood for a moment listening to a group of excited guards.

As he came back to his bunk the other men crowded around him, demanding a report.

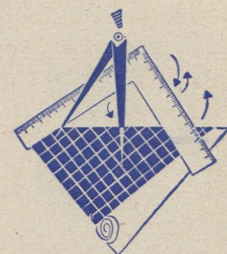
"Oh, they say the war's over," Chonka said sleepily. "Rumania has surrendered."

"What else?" the other POWs yelled,

On the morning of August 26 he was taken to an airport in Bucharest and told that he could attempt the flight to Italy across Nazi-held Yugoslavia. They presented him with a tired old Savoia Marchetti, and, after a brief checkout on the strange instrument panel, he took off. Thirty minutes later he was back. The plane was too old and asthmatic.

Immediately several B-17s, heavily escorted by P-51s, flew a rescue party into Bucharest. This party consisted of high officials who knew the Rumanian political and military background, headed by Col. George Kraigher, of headquarters, MAAF. The Americans met with the necessary Rumanian officials,

(Continued on page 48)



tech topics

Highlighting new radio aids
and X-wind landing gear

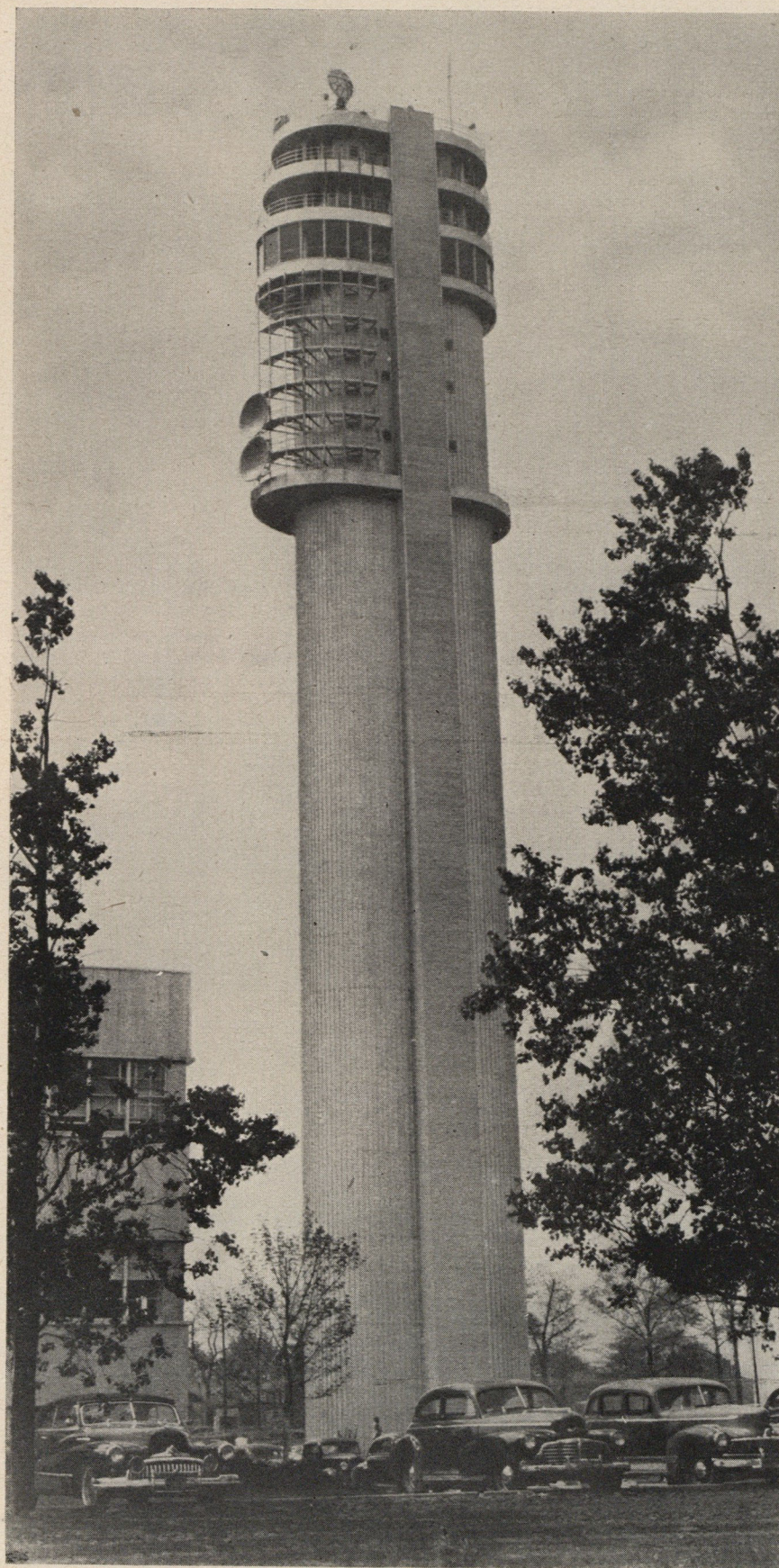
New Radio Aids

New aids to navigation, among them an adaptation of the wartime IFF (Identification, Friend or Foe) designed to simplify the business of traffic control, were demonstrated recently by the Federal Communications Laboratory of International Telephone and Telegraph at Nutley, N. J.

The first aid designated as DME (Distance Measuring Equipment) can be used in conjunction with omnidirectional range for the distance-bearing system of navigation (R-THETA) recommended by the International Civil Aviation Organization. The system can also be used with the Instrument Landing System to supplement or replace marker beacons.

The DME uses the challenger-responder system. Distance is measured by an airborne challenger operating in conjunction with a ground beacon. Both the air challenger and ground beacon have a pulse transmitter and a receiver. The challenger in the plane starts the measuring process by sending out a challenging pulse. This is received at the ground beacon and causes its transmitter to respond similar pulses. When the response pulse is received in the aircraft, special circuits measure the time elapsed between the transmission of the challenging pulse and the reception of the response. Other circuits then convert the time difference into a mechanical indication of the distance between the beacon and the aircraft. This sequence occurs with sufficient frequency to give a smooth reading.

To enable a number of airplanes in a given area to operate with a single ground beacon, the unit responds to all aircraft in the area challenging on its assigned frequency. Each airborne challenger, therefore, receives the ground beacon's response to many other challengers. To permit each plane to distin-



Here is proof that radio towers can be esthetically attractive as well as utilitarian. The handsome structure above is the new tower of the Federal Telecommunications Laboratories at Nutley, New Jersey. It is here that International Telephone and Telegraph Corp. is conducting exhaustive experiments with new radio equipment.

guish its own reading, a random variation is intentionally introduced in the repetition frequency at which the pulsations of each airborne challenger are transmitted. Special circuits in the challenger called "strokes" are then employed to examine stroboscopically, all the responses transmitted by the plane. Only those pulses having the correct variations for the particular plane are fed into the indicator. The instrument reads the plane-to-beacon distance on a standard circular dial, indicating nautical miles.

The second novel aid introduced was a system of two-color radar, developed to simplify local traffic control. The system consists of dual radar reception on a single scope. One response is picked up from conventional radar and fed to the tube through an optical system which colors the image green.

The airplanes observed are equipped with a responder much like the wartime IFF, which created an artificial echo of set frequency. This response is picked up and fed to the ground station tube through a separate circuit with an amber optical system. The two images are then superimposed on a single scope. This two-color image gives the observer a clear-cut picture of the air traffic pattern, as the aircraft pips are clearly distinguishable from ground clutter and fixed objects.

More X-Wind Gear

One of the last links in the CAA's cross-wind landing gear research program dropped into place recently when a dual-wheeled development, built by Bellanca Aircraft Corporation of New Castle, Del., was demonstrated at Washington National Airport. Like all the other planes in the research program, the Bellanca's landing gear was designed with a casting feature to permit easier cross-wind take-offs and landings. The Bellanca development has several unusual features. One is the dual-wheel arrangement. Two small wheels are installed on each landing leg, with the shock strut coming out of the center of the hubs. Unlike the predecessors, the Bellanca design incorporates the swiveling unit into the shock strut rather than the wheel hub. Rubber shock cord holds the wheel straight except when sufficient force is exerted on it for cross-wind take-offs and landings. Then it will swivel up to 30° either side of center.

The dual-wheel system effectively eliminates shimmy on the gear without the use of dampening devices. The smaller wheels, moreover, permit easier retractions into the Bellanca's relatively thick wing. The design also affords four braking surfaces, which shortens the landing roll.

Texan Trends

Thirteen major changes have been incorporated into the Dallas-built 1948 model Luscombe Silhouette in an effort to make it the most comfortable plane in its class. These changes include deep-



Latest achievement in the cross-wind landing gear program is introduced by Bellanca Aircraft Corp. of New Castle, Delaware. Bellanca is unique in that it features a dual wheel arrangement which eliminates much of the shimmy. See **More X-Wind Gear**.

foam rubber cushions, in fiberglass sound insulation, a stainless steel muffler, and no-draft ventilation. A new heater system has also been incorporated, which will permit full ventilation under sub-zero conditions. In spite of the improvements, the 1949 Silhouette is \$200 cheaper than the '48 model.

Temco of Dallas who recently took over production of the two-place Swift, has indicated that several changes, chiefly in cockpit design, are to be in-

corporated into the new model now coming off the line. The overturn structure has been modified to give more interior room, window installation has been redesigned to offer better horizontal vision, and metal has replaced a major portion of the Plexiglas in the rear of the cabin as well as the sliding portions of the canopy. The Swift is powered by a 125 Continental welding an Aeromatic propeller. Top speed is 150 mph.



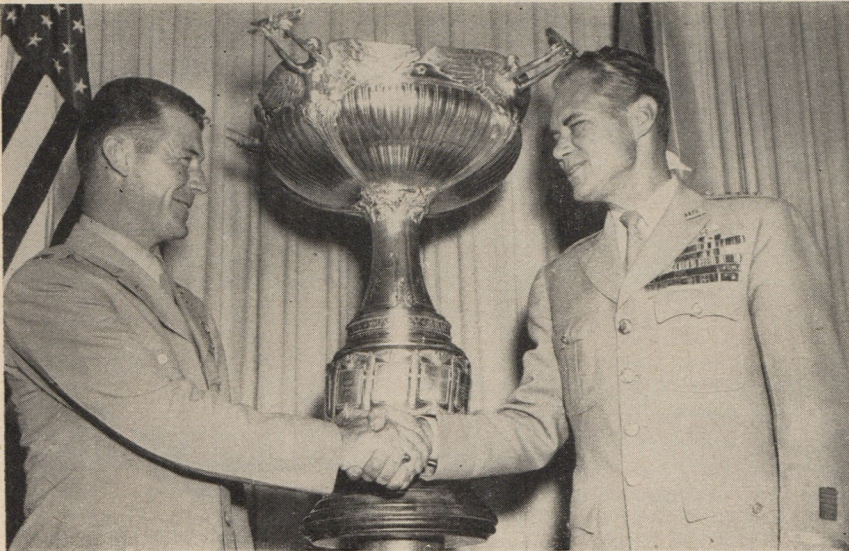
Price Owen, chief test pilot for England's Armstrong Siddeley aircraft factory, climbs into the cockpit of the new and strikingly efficient Balloil, powered by a Mamba gas turbine engine. The engine weighs but 1000 pounds and has 1000 hp. The engine in the car, by comparison, weighs 3000 pounds and has only 16 hp.



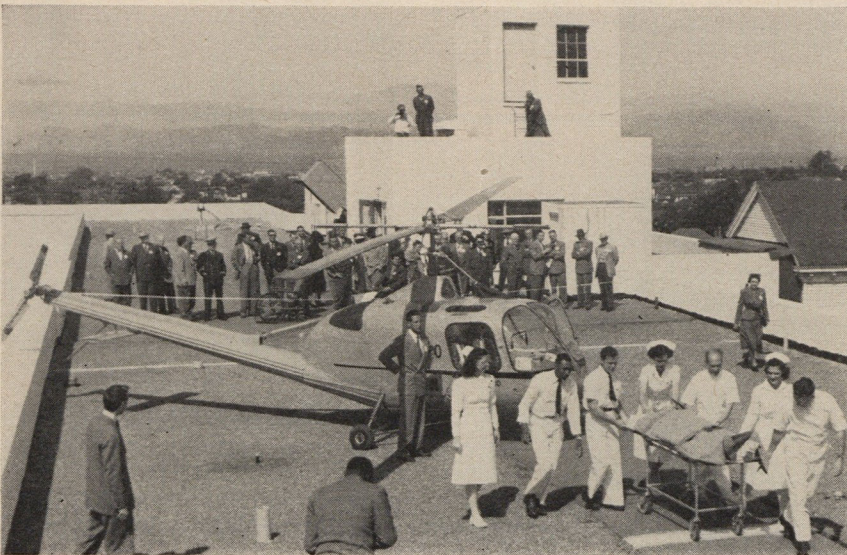
Another British development, this one in the personal plane field, is the new "spin-proof" Chrislea Super Ace, now in production at Exeter, England. Plane will carry four people with ample luggage room. Skis or floats can be used interchangeably with regular gear. Note car-like roominess and good vision.

RECON SHOTS

Random camera records
of the events of the month
in the air from the four
corners of the globe



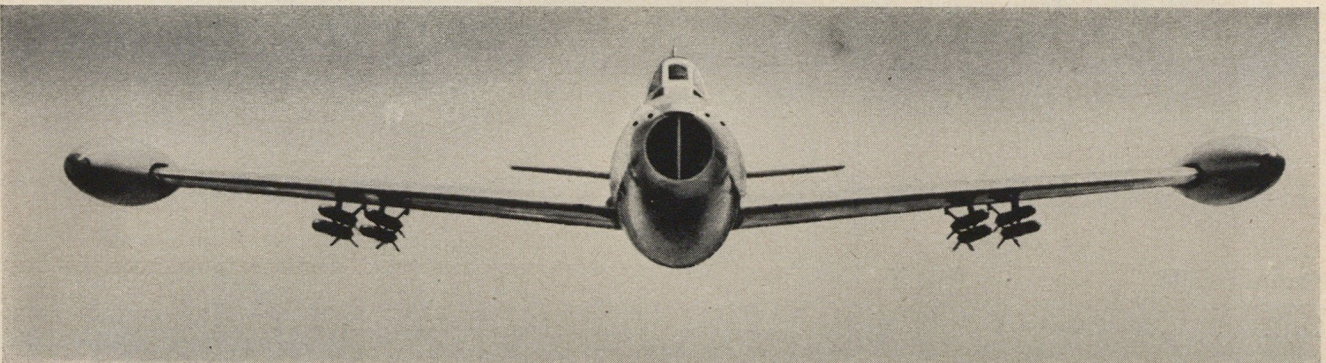
General Hoyt Vandenberg, Chief of Staff of the USAF, congratulates Capt. Charles E. Yeager after the latter was presented the Mackay trophy for the "most meritorious flight of the year." Basis for award was Yeager's 1947 flight of the Bell XS-1.



In California, where innovations are not uncommon, an ambulance-of-the-air recently demonstrated feasibility of flying patients to nearby hospitals. This one was picked up at Palo Alto airport and flown to roof of Berkeley hospital 30 miles distant.



First director of women in the USAF is Lt. Col. Geraldine P. May, of Albany, N.Y. Col. May was sworn in June 16th.



Republic's F-84 Thunderjet displays new fangs in the form of eight High Velocity Aircraft Rockets slung under wings.



70,000 HOURS *IN THE AIR . . .*

The unmatched record of 70,000 hours in the air reflects the ruggedness and dependability for which Sikorsky helicopters are known the world over.

SIKORSKY AIRCRAFT

BRIDGEPORT, CONNECTICUT

ONE OF THE FOUR DIVISIONS OF UNITED AIRCRAFT CORPORATION

afa news

CALIFORNIA

The Grand Old Man of the Air Force was welcomed into the Air Force Association recently when General of the Army Hap Arnold accepted the post of Honorary Squadron Commander for Life of the active San Francisco, California, Squadron.

In a brief ceremony at Fourth Air Force Headquarters, Hamilton Field, the General was presented with a handsome scroll, along with his AFA membership card and pin, from Tom Stack, Squadron Commander of the San Francisco outfit.

The large scroll, etched on parchment and mounted in a black frame, conveyed the feeling back of the presentation in its opening phrase—"In respectful recognition of your forty years of faithful devotion and sacrificing effort to the cause of American aviation and to the fostering of the AAF. . . ."

More than 100 members of the Squadron signed the scroll—"As a testimony of the incomparable esteem and high regard of the men you so gallantly and devotedly led throughout the years of World War II. . . ." The signers represented men who had served in all of the 16 wartime Air Forces—bomber men like Kavanaugh, George, Russell, Disher, Lewis, Huber, McNulty and Dickerson; fighter pilots like Prator, Snead, Hamblin, DuBose, Noon, Pisani, and Black; men who had ditched or bailed out like Collins, Elliott, Bridgeman, Hansen and Stack; groundmen like Flynn, Ypton, Curia, Coburn and Griffin. It was the type of Air Force cross-section you find throughout AFA, all in one Squadron, all with their names lined up on the scroll they had given the "old man."

ILLINOIS

Chicago's South Shore Squadron No. 1 has elected the following officers: John A. Waters, Commander; Edger Zimont, Vice Commander; Rose Lizotte, Secretary; Robert J. Ryan, Treasurer. The following council members were also elected: Henry P. Opitz, Bernard E. Epton, Carter W. Hazzard.

The Pure Oil Squadron No. 13 of Chicago has elected the following: Arthur B. Leach, Commander; Stanley F. Niedbalec, Vice Commander; Roger A. Johnston, Treasurer, and Council Members Don S. Russell, David H. Young, Sr., George D. Hitchcock, and Raymond A. Muldoon.

LOUISIANA

The newly-chartered Shreveport Squadron has elected the following: J. G. O'Brien, Commander; Ben F. Turner, Vice Commander; Breon P. Morse, Secretary; Raymond R. Flowers, Treasurer, and Council Members W. T. Lepper, Sidney Meyers, H. J. Rowen, and Lloyd C. Blackburn. Squadron mail should be addressed to Col. Lester L. H. Kunish, an Associate Member, at Barksdale Air Force Base, La.

ATTENTION PVTS. AND GENERALS—Drop your rank, pick up your hats and join the gang at New York September 24-25-26 for the biggest event of the year—the second annual convention of the AFA. See pages 22 and 46 for details.

MICHIGAN

Officers of the new Battle Creek Squadron are J. W. Fredericks, Commander; Frank W. Ward, Vice Commander; Robert B. Logan, Secretary, and William L. Klum, Treasurer. The council members are Frederick A. Chantrey, Glenn D. Sanderson and George Price.

NORTH CAROLINA

Hickory Squadron No. 1 has been re-

activated with Robert N. Bowles as the Commander; Paul Rudisill, Vice Commander; Thomas J. Tillery, Secretary. Anyone interested in joining the outfit is asked to contact Secretary Tillery at Route 2, Box 113, Springs Road.

NEW JERSEY

The new Passaic-Bergen Squadron has elected the following: Thomas H. McKiernan, Commander; John J. Currie, Vice Commander; William Angiono, Secretary; James Pasquariello, Treasurer, and Council Members Charles B. Claeys, Remo Cinquino and Charles Olbon. The mailing address is 2 Park Avenue, Paterson 1, N. J.

Montclair Squadron's Information and Education Committee has recently completed distribution of an aviation book list, prepared by the committee, to the libraries and schools of Montclair, Glen Ridge and Verona, all paid up Squadron members, the Editor of the local paper and to the Montclair Development Board.

NEW YORK

A fast-moving business schedule has been drawn up by Wing Commander Casey Jones for the first New York state AFA conference on Saturday, August 21, at the Hotel Wellington in Albany. The conference will feature adoption of a Wing Constitution, presentation and discussion of resolutions, and election of Wing officers. All state squadrons are expected to be represented. Reservations should be made with E. P. Ribero, 416 Delaware Ave., Delmar, N. Y.

Joint sponsors of the conference are the Albany and Schenectady Squadrons, both of whom have recently elected new officers, as follows: Albany—Earle P. Ribero, Commander; Robert Laut, Vice Commander; Catherine Abbott, Secretary; Frank Murdaugh, Treasurer. Schenectady—Charles F. Woods, Commander; William Royer, Vice Commander; Samuel Silverman, Secretary; Raymond Zymkowski, Treasurer.

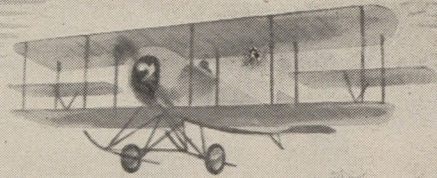


The Air Force's one and only "Old Man," Hap Arnold, accepts his appointment as Honorary Squadron Commander for life of the San Francisco squadron of the Air Force Association from Tom Stack, active chief. Scroll was signed by 100 of "your boys."

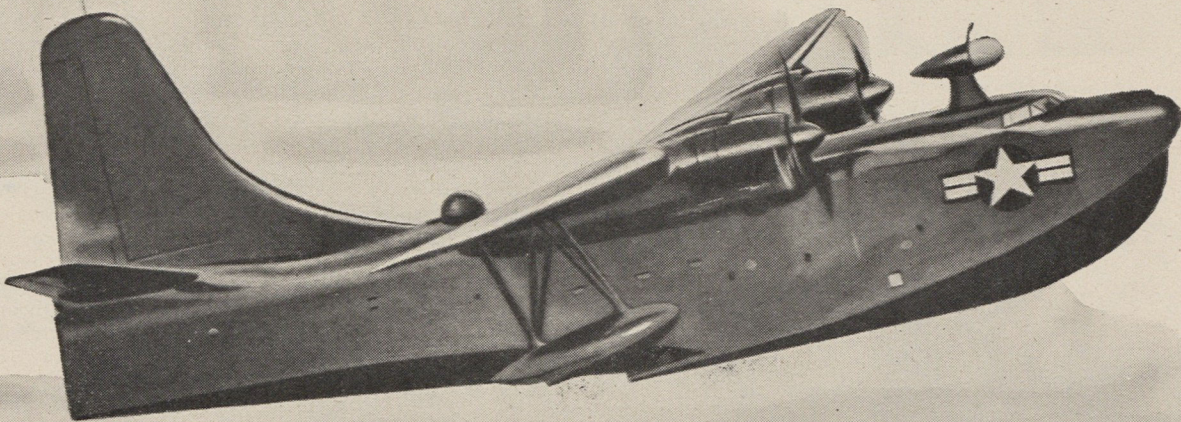
In Research and In the Air

Rely on

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YESTERDAY . . . As early as 1913, Martin was conducting cooperative aircraft experiments with U. S. Military Services. This plane, America's first armored aircraft, was built in that year by a company that has grown along with America's air might.



TODAY . . . The new Martin XP5M-1 Navy flying boat features a long afterbody hull which reduces pitching and bouncing and cuts take-off time and distance. Rescue work in rough seas will be greatly improved by this new Martin craft which has successfully completed its early flight tests. Powered by two 3,500 horsepower engines, it is expected to have a greater range, when completely developed, than presently similar flying boats.

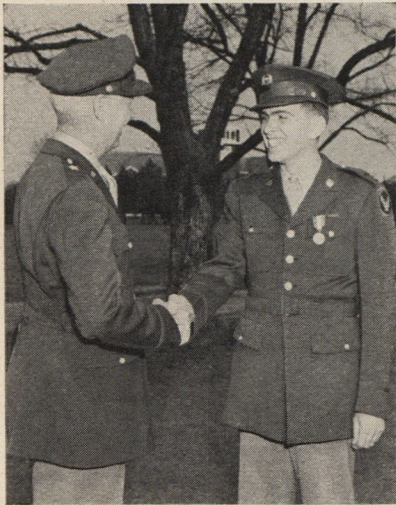
Tomorrow . . . as in the past, great aircraft will come from Martin. And look to Martin for sensational advances in aircraft, rocketry, electronics, rotary wing aircraft, plastics, jet propulsion and many other far-reaching fields. Our Military Services can rely on Martin for results! The Glenn L. Martin Company, Baltimore 3, Maryland.

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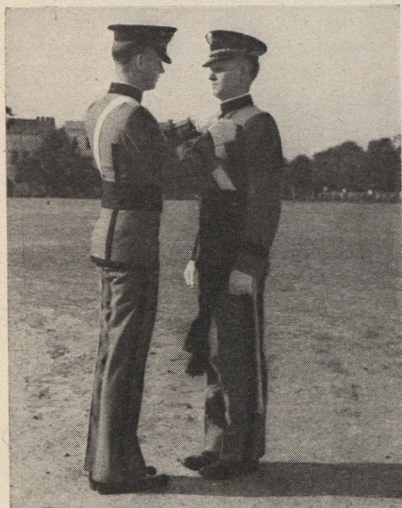
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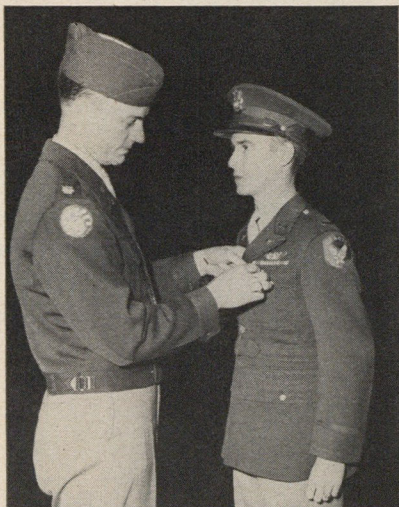
Aircraft Since 1909



At Oregon State the medal went to Harry West, a former Army sergeant. Brig. Gen. Ned Schram, C/S of 4th AF made award.



At The Citadel in South Carolina, the presentation was made to J. F. Cheatham by his ROTC commander, J. C. Miller.



Francis Stokes, who plans regular AF career, won honor at Western Kentucky State. Maj. William Lindley officiated.

For Outstanding Achievement

Honor Air-ROTC cadets from coast to coast line up to receive the new AFA silver medal

Pictured on these pages are some of the 80 Air-ROTC students in colleges and universities from Leland Stanford in California to Yale in Connecticut who have been selected by the professors of Military Science and Tactics at their respective schools to receive the Air Force Association's first annual award for outstanding achievement. The silver medal, conceived by AFA last spring, will henceforth be given each year to the first year student in the advanced Air-ROTC course who has displayed superior attributes in character, leadership, initiative, bearing, discipline and related traits. A first year student in advanced Air-ROTC is one who has completed two years of regular ROTC plus a year of specialized Air Force training, which automatically makes him a Junior in his scholastic work.

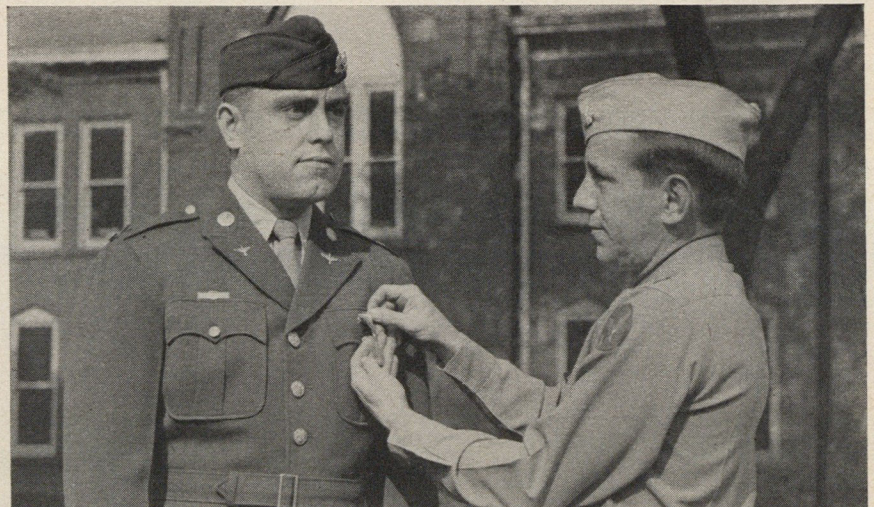
It is not surprising that nearly 100 percent of the men who won the award in the first year of its presentation are veterans. It is interesting to note though, that a good number of them served in components other than the Air

Force. Many were in the Infantry. A surprising number served with the Marine Corps, and a few saw duty with the Navy. Most of the medal winners who *did* serve with the Air Force during the war spent at least a few months overseas. Some were there for over three years. Their wartime occupations followed no particular pattern. Some were gunners, some armorers, some engineers and some plain old pencil pushers.

Now that all of them are out of service and back in school, their career ambitions are as diversified as were their wartime jobs. Some of them are planning to be farmers—one is majoring in poultry husbandry. Some are studying law, others administration. At home some of them have wives and families. At least one of them has acquired three new sons since his discharge. Others aren't yet married. About the only common denominator in the group is the fact that all of them are working their darndest to get a commission in the Reserve. With the record they have made to date, few of them should have any trouble.



AFA's Air-ROTC award.



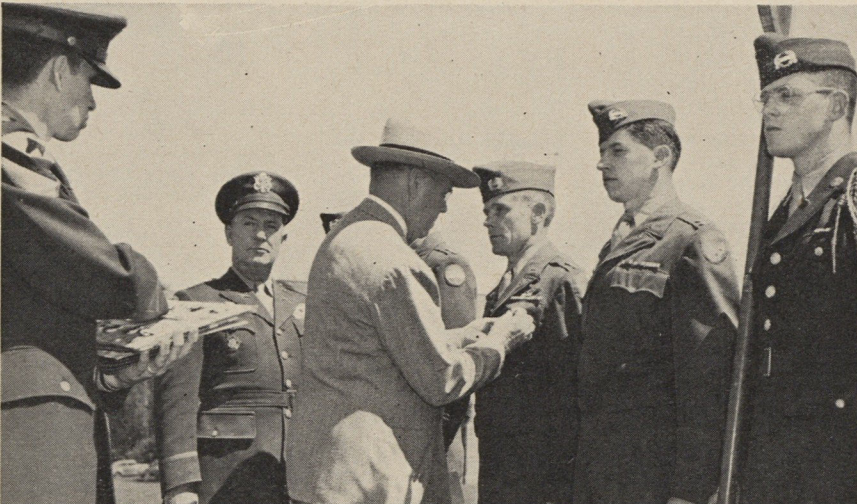
One of several former Navy men to win medal was Victor Davis of University of Akron who is receiving award here from Lt. Col. George Norman. Davis plans to enter the regular Air Force and take pilot training. He is 24, married and has a daughter.



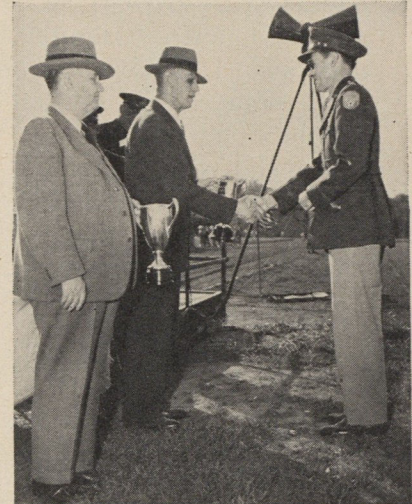
Honorary Cadet Colonel Carol Eberle of the University of North Dakota excitedly pins AFA medal on wrong side of recipient Philip O. Hertsgaard who doesn't seem to mind a bit. Hertsgaard was an AFA sergeant during the war, is now majoring in Commerce.



Col. James Luckett pins awards on Lehigh's John Palmer, 20-year-old geology student, soon to join the regular USAF.



At Iowa State the winner was Cadet Captain Willard Mitchell, who receives the award here from the University's president, Charles E. Friley. Mitchell was a B-29 engineer during the war. He is now married, has two sons, attends Iowa under GI Bill.



Retired Col. B. E. Brewer congratulates Kentucky's William Toombs Jr. who has added AFA's award to many others won.



Two medals instead of one were awarded at Johns Hopkins. Here Col. Robert Krueger (i. civvies) makes presentation to Henry Wagner, winner for school year 1946-47. Clarence Seaton, standing at ease on extreme right, won for the terms of 1947-48.



William Adkins, former infantry sergeant, was awarded medal at Williams, Mass. He had two years duty in Italy.

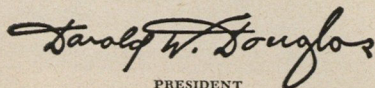
AIR views

Replacement spares for the DC-3, DC-4 and DC-6 commercial models and C-47 and C-54 military models, valued at more than \$2,000,000 a month, are currently being shipped to some 350 customers operating in excess of 3,000 Douglas airplanes in all parts of the world.

To handle this large flow of spare parts quickly and efficiently, Douglas maintains a capable spare parts organization of 400 people. Each month they speed deliveries of some 20,000 items weighing approximately 650,000 pounds. And to facilitate operations, modern tabulating methods were recently introduced throughout the Douglas spare parts division.

Also, increasing use is constantly being made of air freight in the dispatching of spare parts. Today 60 to 75 per cent of all commercial spare parts are sent by air.

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RENDEZVOUS (Continued from page 6)

William L. Cushing. I served under him with Air Transport Command, North African Ferrying Division, La-Senia Army Air Base, Oran, North Africa. The date was 1945. I was chief mechanic of Ordnance Third Echelon Garage. S/Sgt Herman J. Petersen, Jr., Sqdn A 2002d AF Base Unit, Stewart Field, Newburgh, N. Y.

FROM ENGLAND: I would like to contact through AIR FORCE any USAF veterans who served in England who would be kind enough to give me information as to the aircraft (including serial numbers, codes, etc.), Stations, missions flown, etc., by squadrons, for the purpose of compiling an account of their activities for Registration Research. John J. O'Dwyer, Air Movements, 31 Queens Road, Clevedon, Som., England.

CALLING 312TH BG'ERS: All former members of the 312th Bomb Group (L) please transmit your names and addresses to the undersigned for the purpose of making a roster, and for the planning of a reunion in the near future. Capt. E. A. Hambleton, 8th AFB Unit, 1st Region I.G. Langley AFB, Hampton, Va.

CARRIER: Would appreciate help in locating Bill Laferty, who was with me in Class 43-B at Shaw Field, South Carolina. He hails from in or around Rochester, N. Y. 1st Lt. Robert B. Burns, 75th Troop Carrier Squadron, Greenville Air Force Base, Greenville, S. C.

HISTORY WANTED: Will former members of the 44th Fighter Squadron who served with the unit during the war communicate their names and addresses to the undersigned. I am also trying to locate pictures of the men and events that surrounded the splendid history of this squadron. M/Sgt Joseph A. Besso,

Instructor, Department of Military Science and Tactics, Harvard University, Cambridge, Mass.

HI CAP! I would like to locate an AAF friend of mine, Capt. Willard E. Jordan. He was stationed at Blytheville, Ark., for about two years and left there late in 1944 or early 1945. His home was somewhere in Southern Louisiana. Jim Browning, 100 Edgemore Ave., Sebring, Fla.

GOODFELLOW: I am writing in the hope of locating a friend of mine, Richard B. Fulwider. When last contacted, he was a flight officer at Goodfellow Field, Texas. That was in July, 1946. I would appreciate any information concerning his present address if he is still in service, or his permanent home address. Martin H. Lechner, 51 J. Arbor Villa, Stockton, Cal.

KEESLER VICTIMS: I would like to hear from former members of Cadet Class 45-A who started out at Keesler Field, Miss, and attended Slippery Rock State Teachers College, Pa., Nashville, Tenn., Columbus, Miss. Especially, I would like to hear from those who graduated with me at Turner Field, Albany, Ga., on March 11, 1945. Purpose: Reunion. Wm. P. Hall, Jr., P.O. Box 1311, Beckley, W. Va.

THIS IS WORTH \$7: Can you help me locate Homer Heimbaugh, with whom I was stationed at Oswego, N. Y., with the 324th C.T.D. from October, 1943, to February, 1944. His home is somewhere in Illinois. I owe him seven dollars, and would like to send him the money. John Spoelhof, 111 Rotterdam, Muskegon Heights, Mich.

"HUMP": I would appreciate any help I could get in locating Maj. Joel B. Grimshaw, who served with the 1333rd AAF Base Unit, Assam, India,

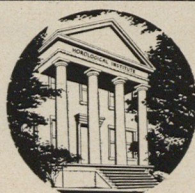
in 1944-45. Also would like to hear from any other EM or officers who were stationed there during the "Hump" operation. Henry D. Meyer, Jr., 2761 West 9th St., Los Angeles, Cal.

LOST RING: I graduated from Army Cadet Training at Blytheville Army Air Field, Blytheville, Ark., in the class of 44-A. I lost my class ring and would like to purchase another, but do not know the name of the company. If any of the fellows can furnish me the name of the manufacturer who supplied these rings, I would appreciate the information. John B. Connell, 137 E. 2nd St., Weston, W. Va.

ATT: SARGE: I would like the present address of M/Sgt Jeff Chambliss, who was weather forecaster with the 12th Weather Squadron in North Africa, Sicily and Italy. I had a letter postmarked Oklahoma City, but without a return address. Robert Scrimgeour, 607 Wyoming Ave., West Pittston, Pa.

B-17ERS: Would like to hear from anyone who has information about Louis B. Slanina of Clifton, N. J., and Jack Sittler of Sacramento, Calif. Both fellows took phase training with me at Pyote, Texas, and Herington, Kansas. I went to Scotland with them on the Dominion Monarch, and lost track of them at Stone, England. Charles A. Stein, 214 Milton Drive, San Gabriel, Calif.

GUAM AIR DEPOT REUNION: Plans are under way for the third annual reunion of the flying officers who were attached to the Guam Air Depot at Harmon Field. The success of this grand affair can only be attained by the presence of all. The date is September 3-5, and the place is Ft. Wayne, Ind. For further details, write: Thomas W. Roberts, 44 Layman Ave., Indianapolis, Ind.



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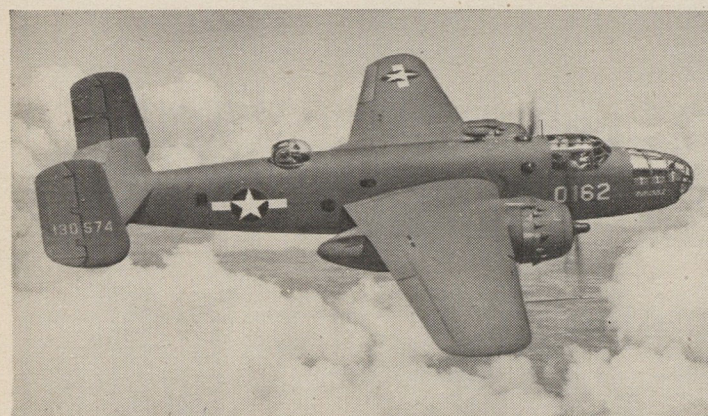
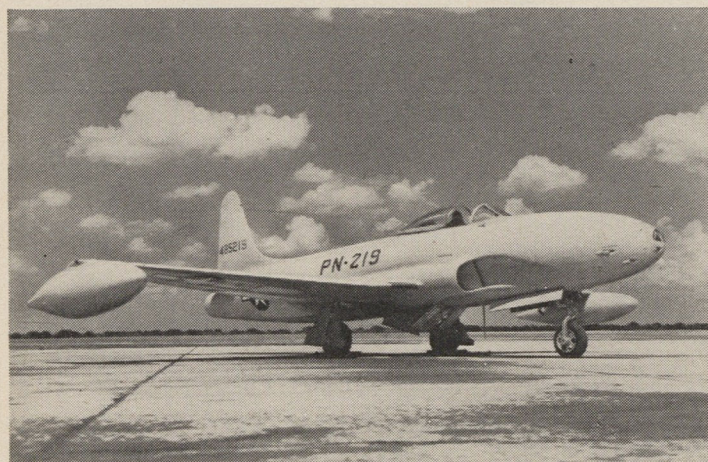
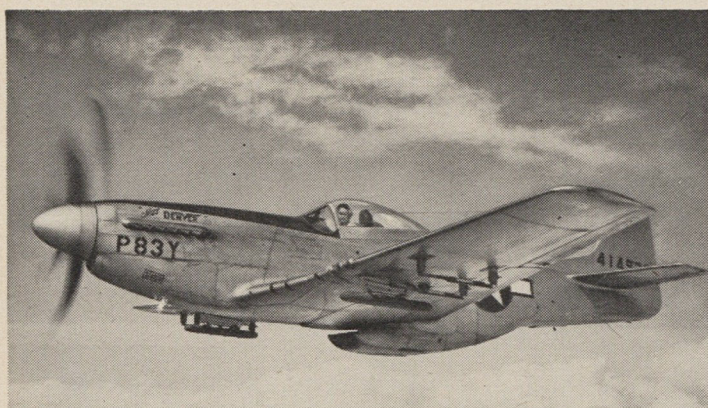
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IN RESERVE *(Continued from page 8)*

training I was sent to Las Vegas, Nevada, Flexible Gunnery School and took training as a tail-gunner on a B-17. I was attached to the 483 Group (H), 15th Air Force in Italy, where I flew 35 combat missions as a tail-gunner.

I never suffered any ill effects from flying. I was discharged (honorably) from the Army at Laredo, Texas AAF as a staff-sergeant.

Now I would like to enlist again in the cadet program. I am now 22 years old and in my first year at college. I know that two years of college, or passing an examination is required now.

Any information you can give me as to my eligibility will be greatly appreciated.

Robert G. Love
Bellingham, Washington

● *From the contents of your letter it appears that you are eligible to reapply for Aviation Cadet Training. You should write to the Aviation Cadet Examining Board at McChord Field, Washington for copies of DA AGO Form 60. They will assist you in making applications and can also answer the question of whether you are eligible to reapply.*

Gentlemen: I am a Major in the Ordnance Department Reserve. Some months ago I applied for transfer to

the Air Force on the basis of the fact that my commissioned service during the war was with the Air Force as an Ordnance officer. To date I have heard nothing. I shall appreciate any advice you can give me.

John W. Braun
Asbury Park, N. J.

● *It is difficult to explain why you haven't heard from your request. By now your letter should have gone from the Air Force to the Adjutant General for action. We can only suggest you send a tracer through to TAGO.*

Gentlemen: I was discharged on a CDD but have had the disability corrected by an operation. I served less than six months on active duty. Am I eligible for enlistment in the Inactive Enlisted Reserve?

Ralph Balzer
Schulenburg, Texas

● *You are eligible for enlistment in the Air Force Reserve providing you meet physical standards and have not passed your 35th birthday. If you possess technical skills needed by the ERC you may be accepted for enlistment up to your 45th birthday, if such enlistment is authorized by the Air Force commander concerned.*

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(Convention dates: September 24-25-26) Date _____

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ROOM RATE (per day) DESIRED _____

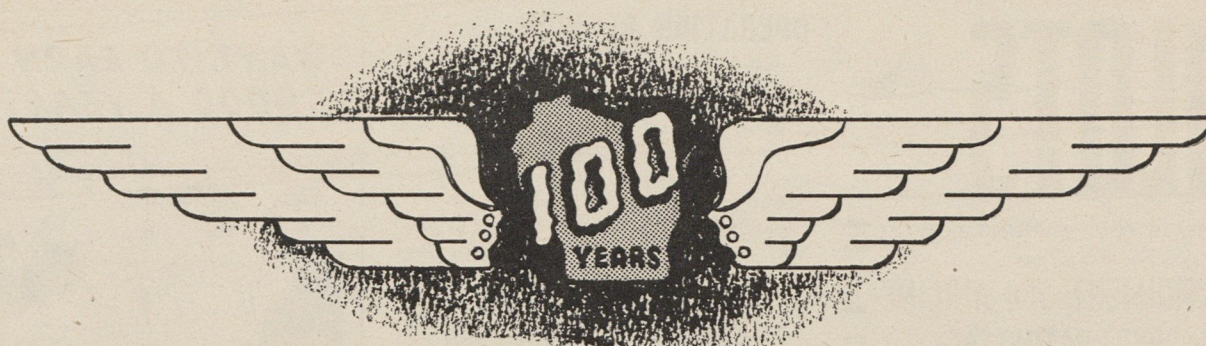
NO. IN PARTY _____

If the hotel and/or type room specified above are no longer available, it is understood that I will receive the best alternate accommodations.

I would like to be identified with the
numbered Air Force, or equivalent command.

THANK YOU

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AAA Midget 100 mile race.....	Aug. 8
AAA Big Car 100 mile race.....	Aug. 15
AAA Big Car 200 mile race.....	Aug. 29
AAA Big Car Sprints.....	Aug. 10-11
AAA Stock Car Sprints.....	Aug. 21
AAA Stock Car 100 mile championship race.....	Aug. 22
Hot Rod Sprints.....	Aug. 9

Harness Racing

Mid-west Harness races.....	Aug. 16-17-18-19
Grand Circuit races.....	Aug. 23-24-25-26

Motorcycle Racing (AMA)

Governor Trophy Championships.....	Aug. 18
Wisconsin Centennial Championships.....	Aug. 27
15 Mile National Championships.....	Aug. 28

National Thrill Shows.....	Aug. 13-20
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OPERATION REUNION

(Continued from page 35)

and then the main operation began.

Back in Italy ground crews had worked day and night outfitting Fortresses with special racks for carrying passengers in the bomb bays. Several planes were equipped for litter cases, since it was known that some of the prisoners of war were in hospitals, around Bucharest.

By the time these planes were ready to leave Italy, the rescue party had rounded up hundreds of American airmen in Bucharest. They were transported to the airdrome and lined up around the perimeter of the field in groups of twenty at intervals of 150 feet. There they waited for the B-17s.

The first sight of American planes was a flight of P-51s which swept in and gave them a royal buzz. Then the fighters climbed up over the field and began circling for the Fortresses to come in.

The bombers arrived and taxied to the first group. Twenty Americans sprinted out and tumbled into the B-17. Another Fortress followed and picked up the next group. They came in three waves, at one-hour intervals, cutting their engines but ten minutes between landing and take-off.

In the first wave were two planes which carried medical supplies and Lt. Col. William R. Lovelace and Major Raymond J. Beal, in charge of evacuating the wounded. These two officers spent a hectic three hours gathering up patients and transporting them back to the airdrome in time to make the last wave.

In all, ninety-eight wounded airmen were among the 1166 men taken out of Bucharest in the first two days of the rescue. On the third day the last remaining Americans, and those who had arranged for the evacuation, were flown out. In the three days of the operation, there was no man in Italy more pleased than Maj. Gen. Nathan F. Twining, commanding general of the Fifteenth Air Force, and no one watched the returning men unload with greater satisfaction.

"Thank God you're back," he told them as they stepped out upon their airfield again. "We sweated you out a long time."

As for the men, some kissed the ground; others kept shaking hands with everybody, and grinning at their comrades; while some were too overcome by emotion to say or do anything.

And the men who flew the 500 sorties of the main operation? One Fortress pilot spoke for all of them: "I'd like to do it every day," he said. He gulped slightly, but he wasn't embarrassed. "Did you see the look on the faces of those guys when they stepped out on our field? That made it the best mission I ever flew."

From *AIR FORCE DIARY*, edited by James H. Straubel and published by Simon and Schuster, \$3.75. Copyright 1947, by Army Air Forces Aid Society.

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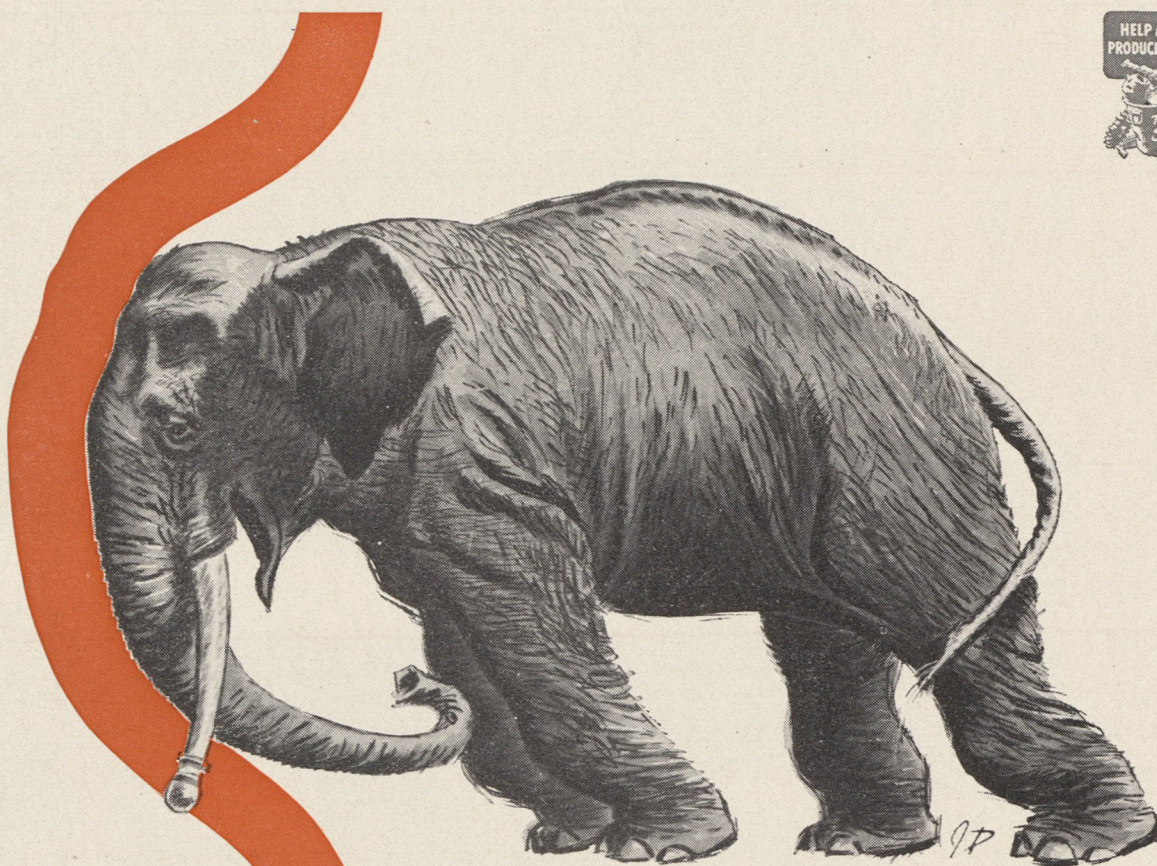
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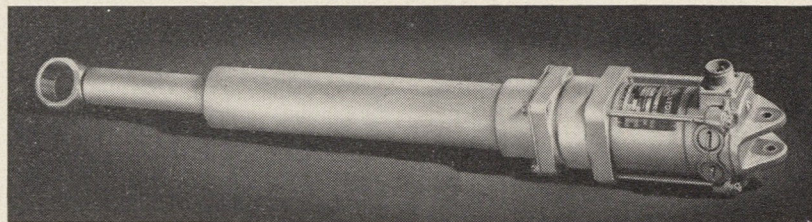
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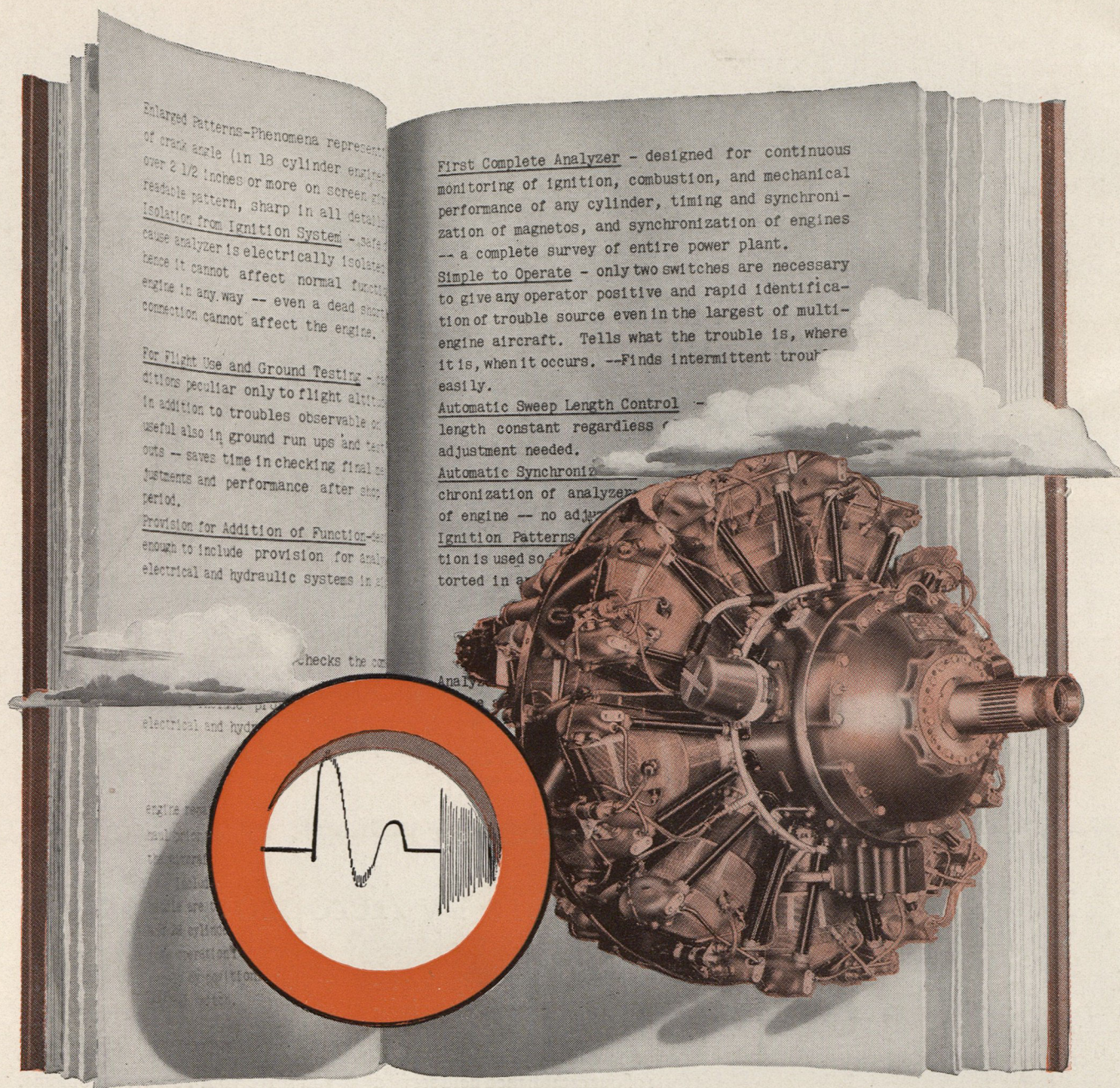
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