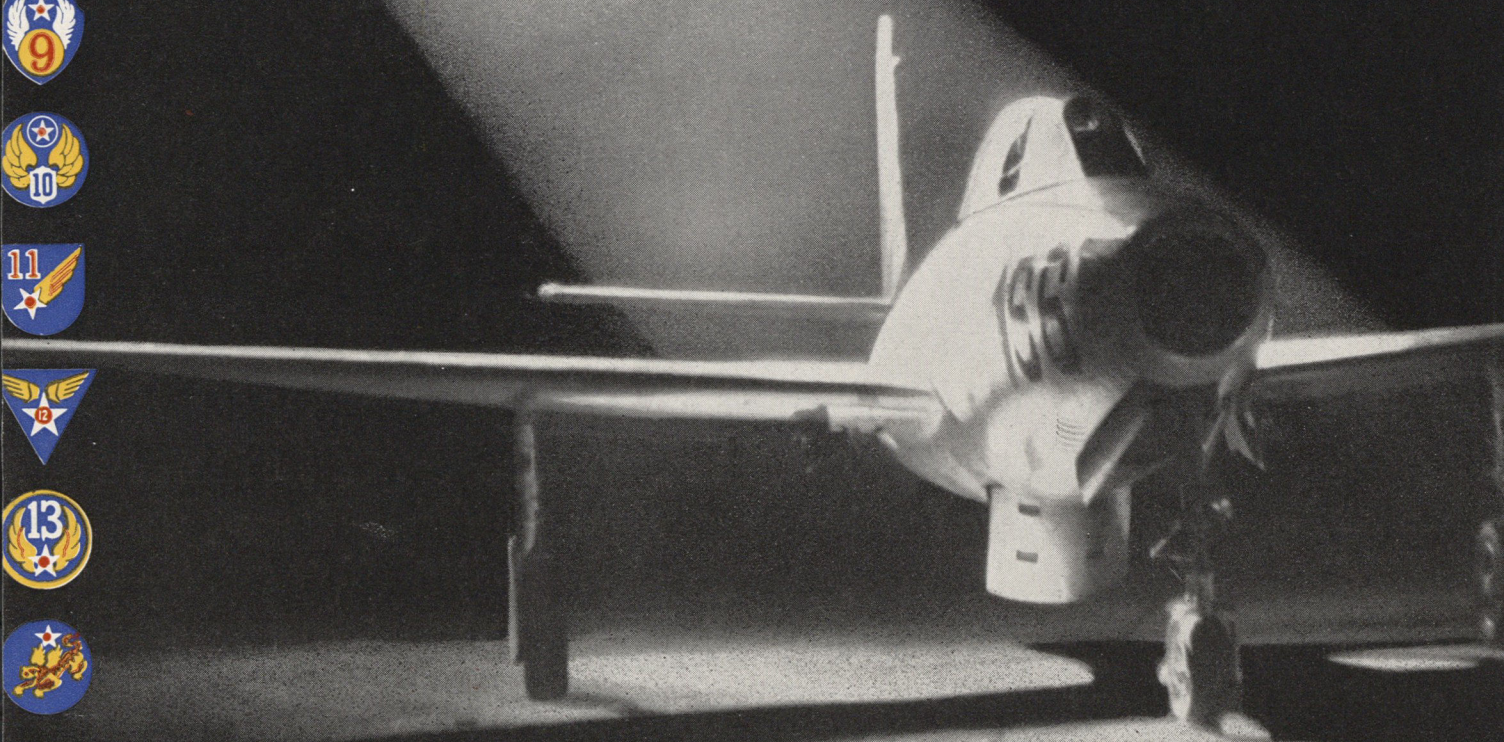


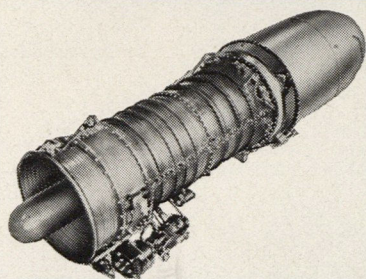
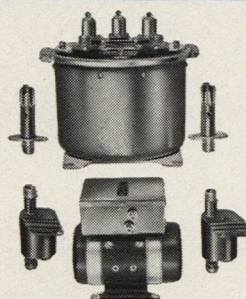
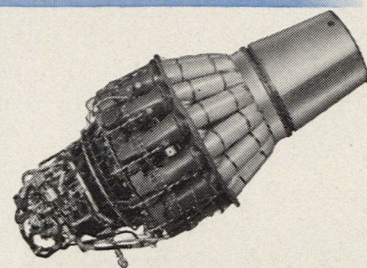
AIR FORCE

THE OFFICIAL JOURNAL OF THE AIR FORCE ASSOCIATION, NOVEMBER, 1949



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manufacturing facilities, and resources which form the Scintilla Magneto organization. We believe the past and present performance records of Bendix-Scintilla Ignition Systems warrant primary consideration by aircraft engine manufacturers in every category.

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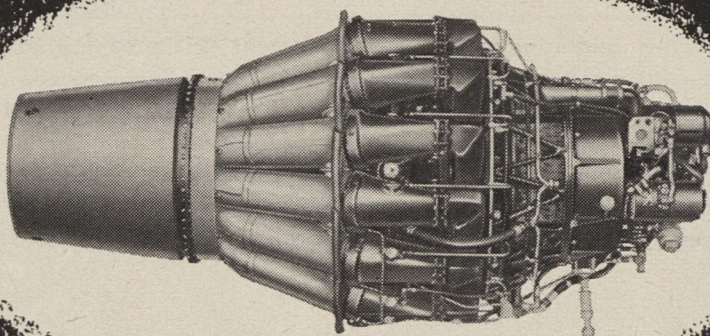
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*Allison aircraft turbine engines deliver more thrust per dollar
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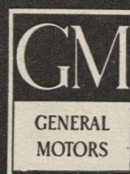
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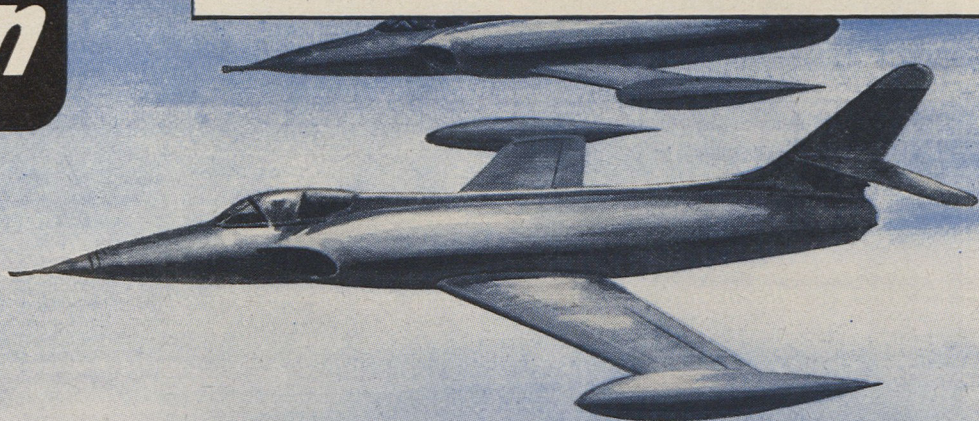


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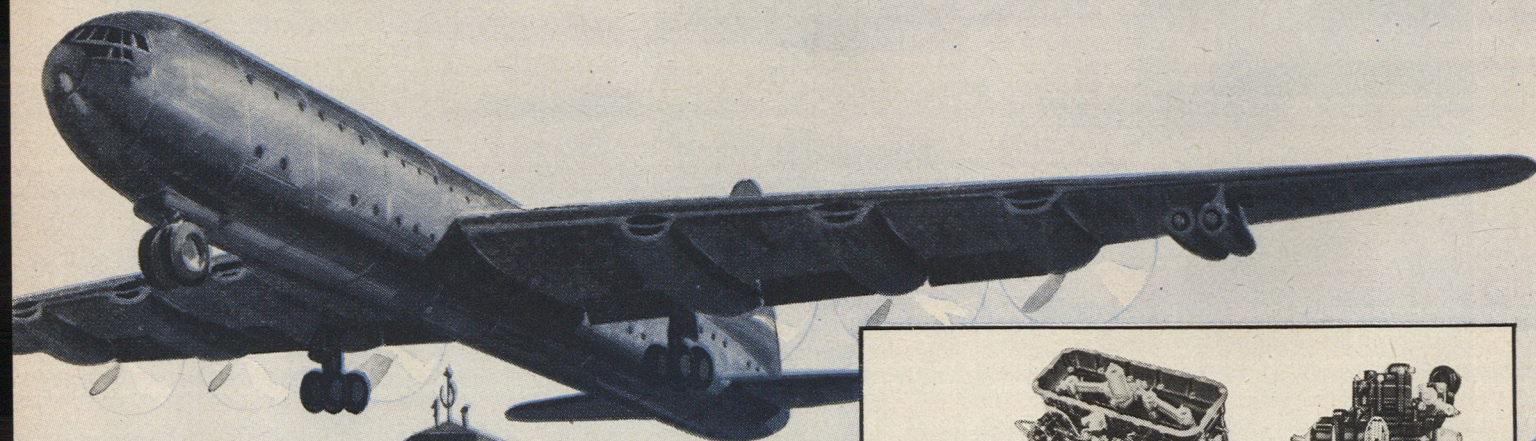
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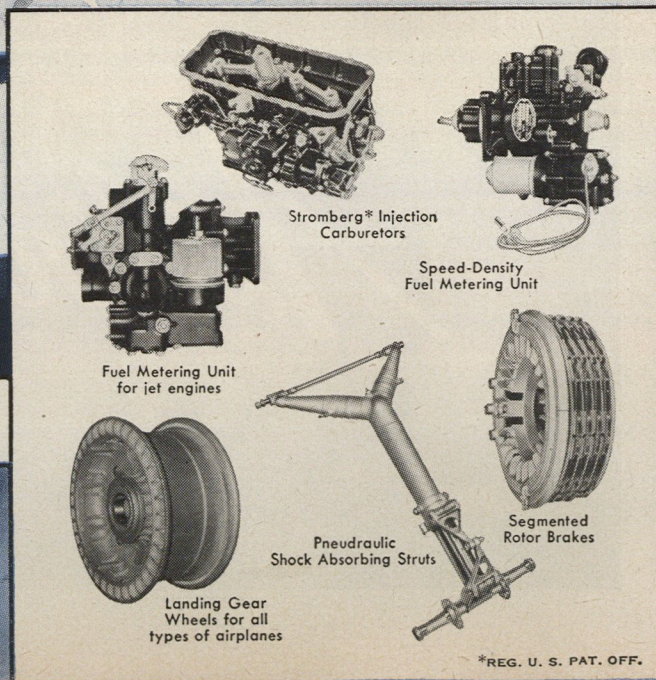
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AIR FORCE

THE OFFICIAL JOURNAL OF THE AIR FORCE ASSOCIATION

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THIS IS AFA

- The Air Force Association is an independent, non-military, airpower organization with no personal, political or commercial axes to grind; established and incorporated as a non-profit corporation February 4, 1946.
- **Active Members** are men and women honorably discharged from military service who have been assigned or attached to the US Air Force or its predecessor services, or who are currently enrolled in the Air Force Reserve or Air National Guard. **Service Members** (non-voting, non-office holding) are men and women currently assigned or attached to the US Air Force. **Associates** (non-voting, non-office holding) are men and women not eligible for Active or Service Membership who have demonstrated an interest in furthering AFA's aims and purposes, or in proper development and maintenance of US airpower.

ITS OBJECTIVES

- To preserve and foster the spirit of fellowship among former and present members of the Air Force, and to perpetuate the identity and group solidarity of wartime Air Force units large and small.
- To assist in obtaining and maintaining adequate airpower for national security and world peace.
- To keep AFA members and the public at large abreast of developments in the field of aviation, and to stimulate community interest in Air Force activities and installations.

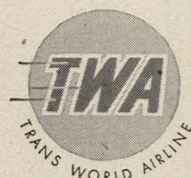
"A NATION'S AIRPOWER IS ITS TOTAL AVIATION ACTIVITY, CIVILIAN, MILITARY, COMMERCIAL AND PRIVATE, POTENTIAL AS WELL AS EXISTING."

H. H. Arnold



The Lockheed Constellation

**NO OTHER TRANSPORT
RE-ORDERED SO OFTEN!**



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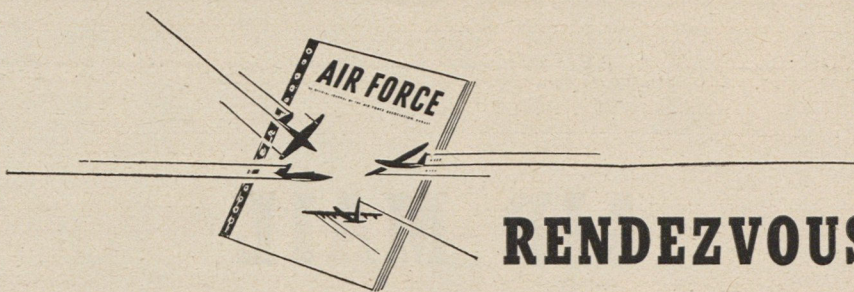


The Lockheed Constellation is the world's most re-ordered four-engined transport. Most of the 14 major world operators that have purchased Constellations have re-ordered this luxury airliner again and again, some as often as six times. Such repeat orders prove that Constellation customers are satisfied customers. "The proof of the pudding is in the eating!"

Most recent purchaser of Constellations is the Chicago & Southern Air Lines, which recently bought five Constellations. In 1949 alone, five major world airlines ordered a total of 41 new Constellations.

The dependable, profitable operation of Constellations over more than 5,000 million passenger miles, including nearly 20,000 Atlantic crossings, constitutes a *tried and proven* record that has created orders and re-orders. The constant world-wide demand has kept the Lockheed Constellation production line in continuous operation.

Burbank, California



Where the Gang gets together

IDEAL GRAVEL CRUNCHERS: Would like to hear from Lt. Arthur W. Schultz, last known to be at Smyrna Air Base, Tenn.; also Lt. Claude F. "Hoppy" Hopkins, William "Red" Staley, Kermit "Applehead" Newbauer and William Spencer, all former members of the crew of "My Ideal", 410th Bomb Sq., 94th Bomb Gp. Also those "gravel crunchers" Francis F. Ranzoni, Arthur Robinson, Scooter Burke and other officers of the 410th. *Dick Lake*, 519 North 70th St., Seattle 3, Wash.

CHAPLAIN KILLED: Fr. Michael S. Ragan (Captain), former Air Force Chaplain, of the 91st Bomb Group at Basingbourne, England, was killed in an automobile accident in Ohio last August. Father Ragan had been stationed at the Dearborn Veterans Hospital in Detroit for the past year. Any former 91st Grouper desiring ad-

ditional information, contact J. Addison Bartush, c/o Shedd-Bartush Foods, Inc., 14401 Dexter Blvd., Detroit 6, Mich.

YONDA IS YONDER: Looking for the home address of Cpl. Ken Yonda from Cleveland, Ohio. I knew him at Muroc AFB, Calif. Cpl. Leslie Gerber, 132 East High St., Carlisle, Pa.

REUNION: 81st Base Headquarters and Air Base Alumni and H A G S Alumni 4th Annual Reunion to be held at Harlingen, Texas between February 15th and 28th, 1950. For particulars write to Norman MacCauley, Sec., 260 Boyd Street, Camden, N. J.

ANNIVERSARY BALL: The 15th Air Force Society is presenting its third anniversary ball on Friday, November 18 in the main ballroom of the Warwick Hotel, Philadelphia. Hope all former Fifteeners will attend. Outsiders wel-

come. 15th AF Society, PO Box 7622, Phila. 1, Pa.

SIXTEENS UP: Would enjoy hearing from anyone in the 16th Bomb Sq., 16th Bomb Gp. Bernard J. Kjelstad, 335 Morse Street, Antigo, Wis.

CALLING CAL: Trying to locate Howard C. "Cal" Alverson, former tailgunner on our B-25 in 823rd Bomb Sq., 38th Bomb Gp. Last heard from, he was discharged at Manila, P. I. Robert L. Webb, 3314 66th Ave., Oakland 5, Calif.

RESERVES WANTED: The 63rd Troop Carrier Wing, Medium USAFR, is in need of personnel to fill T/O vacancies in all phases, especially maintenance and supply. Interested men living in greater New York and New Jersey, contact 2230th AFRTC at Floyd Bennett Naval Air Station, Brooklyn, N. Y. or phone Navarre 8-2400, ext. 99.



Speaking of Rendezvous, try to top this one—a reunion after 25 years of five of the first Air Service pilots to fly around the world. Standing in front of a picture of one of the Douglas planes in which they made the trip are Erik Nelson, Leslie Arnold, John Harding, Gen. George Kenney (a guest), Maj. Gen. Fredrick Martin, and Henry Ogden. They met in Santa Monica, Cal.

LOOKING FOR SOMEONE? ANY ANNOUNCEMENTS TO MAKE? WRITE RENDEZVOUS AND RENDEZVOUS READERS WILL WRITE YOU.

AIR MAIL

Quotes from your Dollar Letters

"... At present my husband is overseas but I feel that with such a worthy cause at stake, I should take immediate action in my husband's behalf. . . . Please accept my check for five dollars. . . ."

Mary Herschok
Perth Amboy, N. J.

"Sure I'll help—and my wife sez to send along a dollar for her, too."

Dan Reading
San Leandro, Calif.

"... I feel that Airpower and the organization have a common cause—and that we of the Air Force Association have a big job ahead of us. I am proud to be a part of the team—a firm believer in Airpower and the Air Force Association."

James E. Pendleton
Portsmouth, Ohio

"If we don't knock it out on the first round, send out another letter."

L. C. Parker
Atlanta, Ga.

"Have ten cows milking and 60 dry. Will send a larger contribution when the old gals get back in action."

Edison Osborne
Peach Bottom, Pa.



"... The USAF can use an organization like this to get the straight facts to the public without having to worry about 'hurting the wrong party's feelings.' Air Force Magazine goes the rounds of the dormitory at Haverford College. Most of the men are really interested in the dope they get from a non-political sheet."

Joseph Brown
Clarksboro, N. J.

"... Enclosed please find my contribution of one dollar. In the event that you do not meet the required quota, please feel at liberty to call on me for a further contribution."

Brand McIntyre
McChord Field, Wash.

"... I sincerely hope that the Association receives a 100% response on this venture to get out of the hole and into the black. Nobody can do a decent job

in a hole; I know—I'm in one so deep I can't see out of it . . . Another buck won't hurt. . . ."

Demetrios Karnezis
Randolph Field, Tex.

"... Wish I could send more than this at one time—will send this amount again after pay day."

T-Sgt. Bertha M. Barta
Lackland AFB
San Antonio, Texas

"... Enclosed is \$2.00—a dollar from me and from Mr. A. W. Schlichting of this organization. I thought your letter was so excellent that I passed it around and Mr. Schlichting voluntarily contributed his bit even though he is not a member of our Association and has never been in the Air Force . . ."

Edward C. Weatherhead
Athens, Ohio

"... Enclosed please find my contribution which I heartily give, even though G. I. students haven't much to spare. . . ."

Henry A. Egierd
New York City

Vought's Tow Target

Gentlemen: Noting the story entitled "Gunners to Get Crack at New Three Dimensional Air Target" in the September issue of Air Force, I am writing to inform you that an X-27A tow-target has been developed by Chance Vought Aircraft since 1946. Intensive tests and improvements by Vought engineers have made the target the fastest in existence, as Air Force and Navy fliers can testify. You are correct when you say that the target is a Navy design, as it was designed for the Navy by Chance Vought, but the engineers who have labored on it for three years would be grateful if you would mention also that the Navy asked Chance Vought to develop and design the X-27A to fly in excess of 450 mph.

Keith Baker
Public Relations Manager
Chance Vought Aircraft

• *Our apologies to Chance Vought. Our news source did not mention its connection with this project.*

Look Out Below

Gentlemen: I just finished your September issue of Air Force and was curious to know when a B-26 was ever built by Douglas. (see picture on page 28.) I think the credit for this fine ship should go to the Martin people. Those ROTC cadets in the picture can't really be hitting the deck. They look more like

they were taking a ten-minute break. From their position I sure as hell feel



sorry for them if they ever get in combat.

A B-26 Veteran
Houghton Lake, Mich.

• *The plane in the picture was known to you during the war as the Douglas A-20. It was recently re-designated the B-26 by the Air Force.*

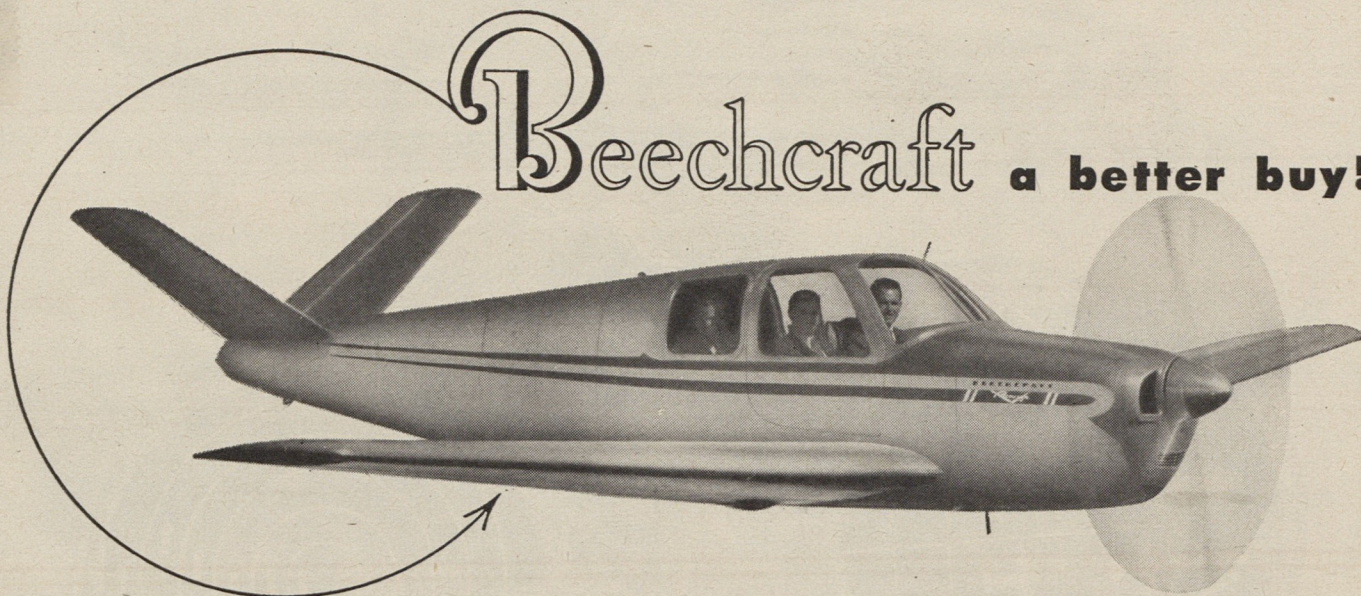
Mr. Lawrence Replies

Gentlemen: Permit me to call attention to inaccuracies and unwarranted implications in your editorial entitled, "Shooting the Breeze" which appeared in your October issue. You state that your readers are curious to know why I have been writing articles explaining the Navy's viewpoint. Some of your readers and you yourself seem to think that one has to be affiliated with the Navy League in order to understand the viewpoint of the Navy. I have never been a member of the Navy League or of the Air Force Association or of any other pressure group in Washington or elsewhere. Nor are there any "business arrangements" or connections between U.S. News & World Report and any associations or pressure groups. Reprints of our articles sometimes are mailed out as a matter of routine, by those requesting them. We take no responsibility for such distribution. A little more than a year ago I was defending the Air Force viewpoint and particularly that of Secretary Symington in his right to go over the head of Secretary Forrestal in order to win a 70-group Air Force appropriation. Nobody at that time attacked me on the ground that I must have been a member of the Air Force Association. In another part of your October issue you say: "Navy writers David Lawrence, Hanson Baldwin and others spoke highly of Worth's 'fine record'." I have never laid eyes on Cedric Worth and never communicated with him in any way at any time. I have never written anything about his record because I don't know a thing about it. I never heard of the Cedric Worth memorandum until it was made public.

David Lawrence
Washington, D. C.

It's the "EXTRAS" that make this

Beechcraft a better buy!



- ★ **Extra speed** — The Beechcraft Bonanza achieves its high speed *without engine overload*—170 mph cruising speed at 8,000 feet using but 56% of the maximum rated take-off power. You buy a plane to *make time*. In a Beechcraft, you *get it*!
- ★ **Extra ruggedness** — Beechcraft Bonanza framework is stronger than conventional construction. Shock and stress tests far surpassing CAA requirements have proved the extra ruggedness of every inch of the Beechcraft Bonanza—from landing gear to cabin roof!
- ★ **Extra economy** — Extra low fuel consumption of 9.5 gallons per hour at cruising is part of the Beechcraft Bonanza's operating economy. Another vital "extra" is low maintenance due to freedom from engine overload. The Beechcraft Bonanza saves your money!
- ★ **Extra safety** — The Beechcraft A35 Bonanza has been dived under radio control at 275 mph—and pulled out unscathed at 3 G's! On the ground, the Beechcraft Bonanza's wide tread, long wheel base, and cross-braced struts defy the roughest handling, the roughest terrain.
- ★ **Extra performance** — No airplane yet designed can beat the high performance of the Beechcraft Bonanza—its unexcelled combination of speed, range, and fuel economy. Its flight characteristics make it one of the easiest planes in the world to handle!
- ★ **Extra power** — The extra margin of power in a Beechcraft Bonanza comes from aerodynamic design which requires but 56% of the engine's power at cruising. Never before has so little power been needed for such high performance by so rugged a plane!
- ★ **Extra range** — The extra range you get in a Beechcraft Bonanza—750 miles—makes it *real transportation*. Equipped for long distance flight, it is the most practical of all planes for business use—with a *commercial* margin of safety, speed, and range!
- ★ **Extra utility** — The Beechcraft Bonanza is a business plane, engineered for extra usefulness as a business vehicle. It can be operated the year around. It can get into small, unpaved landing fields as well as modernized airports. It is ready to go—365 days a year!
- ★ **Extra comfort** — From the moment you step (not climb!) into a Beechcraft Bonanza through its wide, auto-type door and settle yourself in its uncrowded 4-place interior, you're conscious of superb comfort. Its sound-proofing is the standard of comparison!
- ★ **Extra luxury** — Skilled design and placement, with superb interior appointments, make the Beechcraft Bonanza an aerial limousine. You'll lean back and relax and enjoy air travel as never before! Its only rival for sheer luxury is the multi-engined airliner itself!

Compare these performance features

- Top speed, 184 mph
- Cruising speed, 170 mph
- Range, 750 miles
- Service ceiling, 17,100 feet
- Fuel economy, 9½ gal. per hour

Compare these comfort features

- Exclusive retractable step
- Limousine entrance
- Insulated, sound-proofed cabin
- Quickly removable rear seat
- Luggage compartment accessible two ways

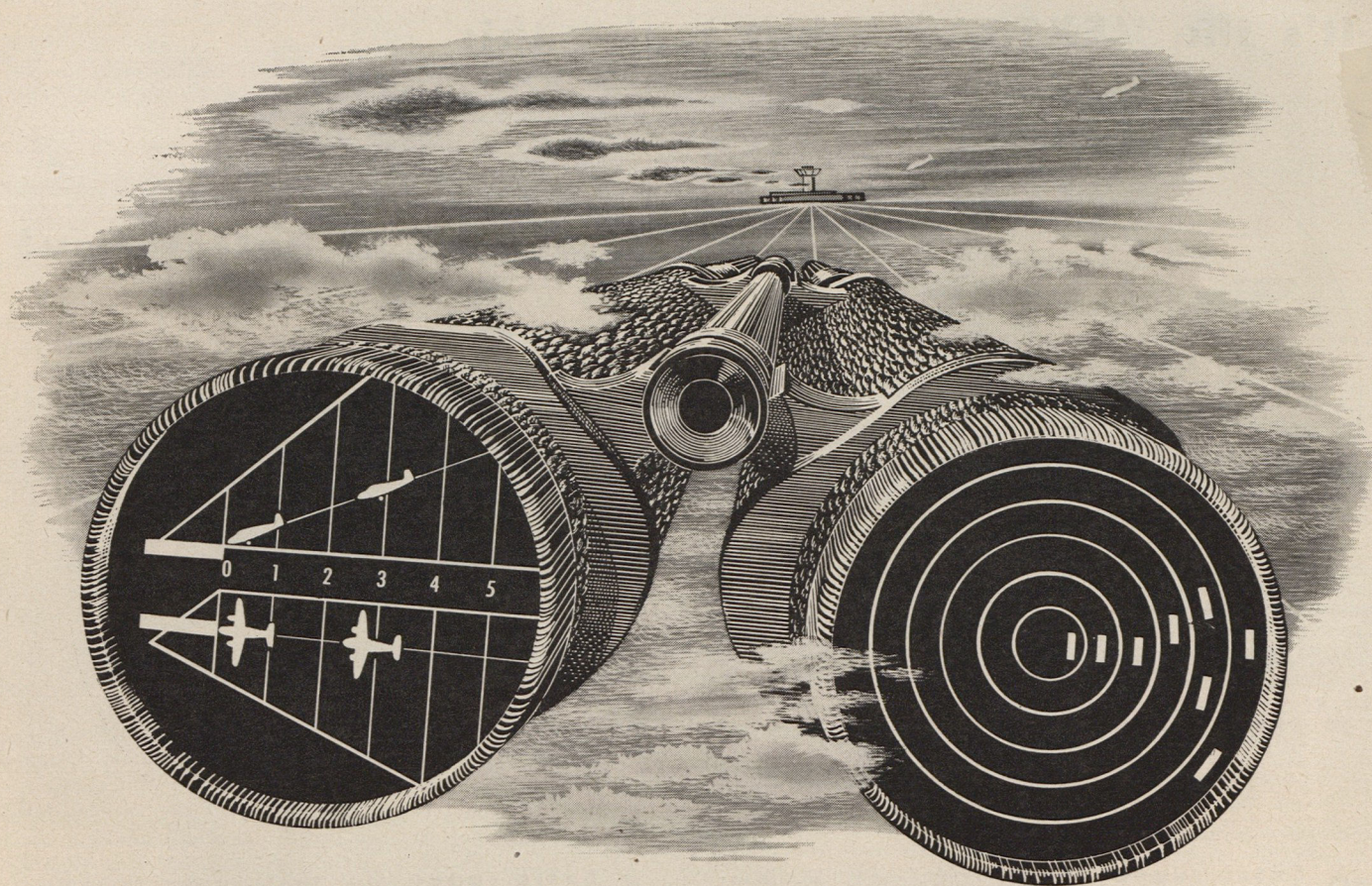
Beechcraft

BONANZA

MODEL A35

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Without GCA, the traffic controller must rely on each pilot's report of his estimated position. In bad weather the pilot cannot accurately check his DR position with ground points.

With scores of position estimates received at random, the controller must then mentally chart each aircraft's course, keep a mental pattern of each aircraft's ever-changing position, give crossed-finger decisions based on his mental estimates.

GCA eliminates this complex mental computation and hazardous guess work. With GCA, the tower controller *sees* each aircraft's *exact* position easily, accurately, safely. The pilot can rely on tower instructions with confidence and safety.

The simple and fail-safe operation of GCA makes it aviation's most important navigation aid. Gilfillan considers the development of GCA for the USAF and the CAA one of its finest achievements.

PIONEER DEVELOPER AND MANUFACTURER OF GCA FOR THE USAF AND THE CAA

GCA is the official and primary navigational landing aid
of the USAF, USN, USMC, RCAF, & RAF



Gilfillan
LOS ANGELES

Airpower in the News

THE B-36 INVESTIGATION
(Continued from October)

WHEN CHAIRMAN CARL VINSON CALLED THE HOUSE ARMED SERVICES COMMITTEE TO ORDER EARLY LAST MONTH AFTER AN EXTENDED RECESS, it was apparent to all concerned that the job for which the group had originally convened was nearly at an end. The men responsible for procurement of the B-36 had been cleared of all the odious charges of malfeasance. The plane itself had been demonstrated to be the best presently available to do the job intended. After clearing up a few odds and ends, the committee might easily have adjourned and gone home. Indeed the committee's counsel, Joseph Keenan did just that. He turned in his summation which Vinson called "masterful" and which recommended among other things the dismissal of Cedric Worth (author of the "anonymous" black paper), and then asked to be excused. Chairman Vinson granted his wish, and then himself terminated the hearing insofar as it pertained to the B-36 and the investigating authority granted the committee under House Resolution 234.

THAT MIGHT HAVE BEEN THE END. BUT IT WASN'T. The day before the committee reconvened, Navy Captain John G. Crommelin admitted that it was he who had surreptitiously given press representatives copies of a confidential letter from a top Admiral to Navy Secretary Matthews charging that unification practices were sabotaging both Navy morale and national security. With the nation's press in high alarm, Vinson and his committee had no alternative but to hear the complaint through to its bitter end. Making it clear that the testimony to follow was to be "divorced completely" from the B-36 investigation just concluded, Vinson called first on Secretary Matthews, then on Admiral Arthur Radford and an impressive string of supporting witnesses winding up with the Navy's Chief of Operations, Admiral Louis E. Denfeld.

NAVY SECRETARY MATTHEWS LED OFF WITH A VICIOUS DENUNCIATION OF HIS SERVICES RECALCITRANT AIRMEN. They were faithless, insubordinate and "guilty" he said. He suspended Captain Crommelin and ordered him confined to the city of Washington.

HAVING HAD A PREVIEW OF THE TESTIMONY WHICH ADMIRAL RADFORD PLANNED TO LAY BEFORE THE COMMITTEE, Matthews urged the committee to accept it only behind closed doors. Not that the Radford statement actually violated security, but to give it in open hearing, Matthews contended, would "disclose serious differences of policy and proceedings in the Pentagon, and would be extremely harmful to national security." In consideration of Matthews views, the committee first heard Radford in secret session, and then voted nine to six to have him repeat his testimony in the open. The lid was off.

ADMIRAL RADFORD HELD A PACKED HEARING ROOM--SPECTATORS AND COMMITTEEMEN ALIKE--IN HIS GRASP A FULL DAY. His points were many. Some of them difficult to follow:

1. The B-36 was a bad plane--a "billion dollar blunder." It was "slow, expensive and very vulnerable." It could neither drop bombs with any accuracy from altitudes of 40,000 feet or above, nor could it defend itself against enemy fighters without "unacceptable losses."
2. Air Force emphasis on its strategic mission had resulted in neglect of fighter aircraft--"the essential defense of our own homeland."
3. Even if the B-36 was a good plane, and there was no sacrifice of fighter development, it was time to re-evaluate the effectiveness of strategic bombing. There was doubt in the Admiral's mind whether the US

(Continued on page 10)

Airpower in the News CONTINUED

could win the "peace" in any war in which it had indulged in the wholesale slaughter of women and children. (Note: Admiral Blandy later in the hearing thanked God that in his career he had never been called upon to conduct such an operation. But under cross questioning as to whether or not planes operating from a super carrier could penetrate the Russian heartland, Blandy said he would like to have the opportunity to prove that they could.)

4. The cancellation of the Super Aircraft carrier UNITED STATES by secretary Johnson after Congress had appropriated the money for it was "not in accord with our American tradition of exploiting to the maximum our capacity for ingenuity, progress and vision."

5. The Navy was getting the short end of the stick in deliberations of the Joint Chiefs of Staff because it was out-voted two to one--Army and Air Force against the Navy. (The Navy didn't have "full partnership," it was said. Since what they were opposing was a majority vote in the JCS, what they really seemed to want was veto authority, not partnership).

6. The cutting of Navy appropriations was bad for Naval morale. It was causing great concern all up and down the ranks. (Radford had no opinion as to why appropriation cuts in the Army and Air Force had no noteworthy effect on morale in those branches.)

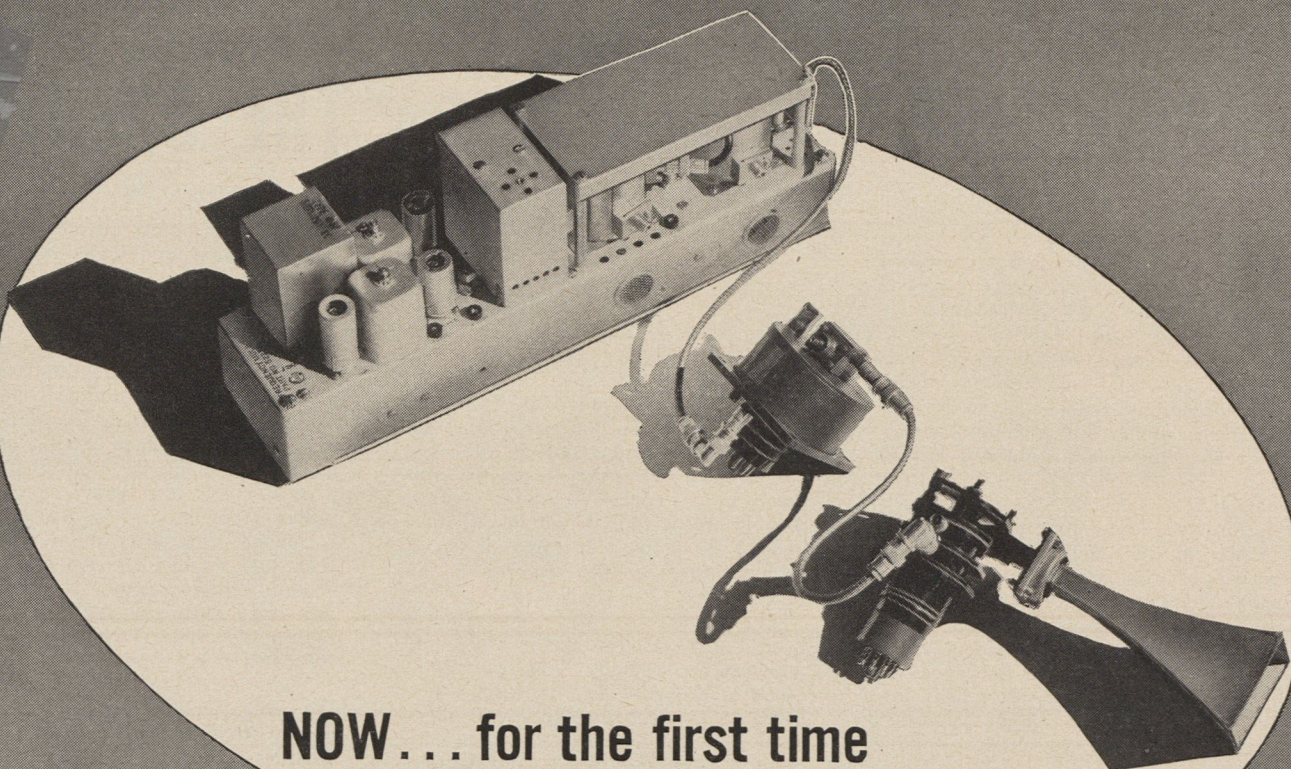
AT THE CONCLUSION OF RADFORD'S TESTIMONY, CHAIRMAN VINSON MADE A PROPOSAL:

1. Amend Unification Act to provide:
 - (a) Secretary of Defense must obtain congressional approval for any administrative cutbacks in appropriated funds.
 - (b) Final estimates of any one military department must be submitted to the Congress along with what is granted by the Secretary of Defense and the budget.
2. Build a fire under the special weapons evaluation board in reference to the B-36.
3. Call upon the President to have a study given by the National Security Council to what our national objectives should be in any future war.
4. Have a board appointed (as General Hap Arnold suggested) to evaluate strategic air warfare.
5. Take action in regard to the 1950 budget to insure that the Navy funds are not withheld without congressional concurrence.
6. Require joint training between Air Force and Navy Air.
7. Request reconsideration of super carrier question (or pass a law requiring its construction).

IT WAS CLEAR THAT THE NAVY HAD SCORED VICIOUSLY AGAINST THE AIR FORCE. BUT SOMETHING ELSE WAS EQUALLY PLAIN. From then on in, there would be a war within a war--the Air Force versus the Navy, plus Chairman Vinson against Secretary Johnson. The Georgian was obviously provoked to the boiling point over what he considered Johnson's high-handed method of usurping Congress' constitutional authority of raising and maintaining Armies and Navies. He was strong for an adequate Air Force, but it was easy for all to see that he had full intention of pinning Johnson to the cross for cutting Naval appropriations without referring the matter to Congress. He suspected, and said as much, that Johnson was trying to effect a "saving" of \$800,000 (which he had promised he would do) by making arbitrary cuts. Vinson maintained that anybody, including his own committee, could make a cut, but that a real saving was something else again.

AND SO AS THE FIRE SMOLDERED IN VINSON'S MIND AND HEART, the Navy continued with a carefully planned parade of witnesses to give detail to Radford's broad as-

(Continued on page 47)



NOW... for the first time

SUBSTANTIAL POWER

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Now, with two new Sperry Klystron tubes, stabilized frequency control is possible at 10,000 mc. with 1 watt continuous wave power output. These multiplier tubes, the SMC-11 and the SMX-32, permit direct crystal control at microwave frequencies with this power level.

Starting with a 5 mc. crystal, the frequency is multiplied to 830 mc. by use of an *Exciter*. The SMC-11 Klystron multiplies the 830 mc. to a frequency of 5,000 mc. The SMX-32 then multiplies this frequency to 10,000 mc. with the same accuracy which exists in the control crystal ($\pm 0.0005\%$).

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SHOOTING

MOANS AND GROANS

As the frustrated Admirals sputtered and fumed across the front pages of the nation, the Navy's full-dress rebellion was laid bare for all to see.

This well-staged revolt against Unification and established defense policy was, unhappily, tailor-made to advance the cause of our only potential enemy.

It is neither comforting nor surprising to learn that the *Daily Worker*, official voice of the Communist Party in America, found that the moans and groans of the angry Admirals fitted rather neatly into its own propaganda pattern. This Communist organ summed up its reaction to the whole affair in this expressive statement: "The Admirals' dispute shows that what we (the Communist Party) have been saying and doing was right. We need more of it, with the millions taking part".

One could hardly argue that the United States of America needed more of it. To the free nations of the world who look to the US for leadership in unifying their joint defensive efforts, this untimely display of disunity could only reflect unpardonable weakness. To Soviet Russia, whose own unified defense system was doing quite nicely in the fertile field of atomic weapons, it could only mean, on the one hand, an unexpected but heartening exhibit of military vulnerability, and, on the other, propaganda material which its undercover agents couldn't match in a month of Armed Forces' Days.

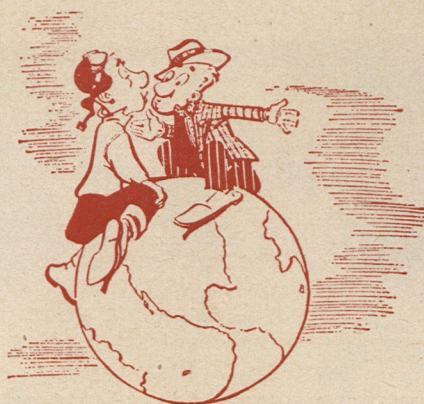
To a nation which has accepted the heavy yoke of world leader, such considerations as these must come first in any sincere appraisal of the Navy's testimony before the House Armed Services Committee last month.

LAND, SEA and AIR

These sober aspects of the case serve notice that we no longer can approach this controversy as if it were an armed service quiz game, or pass it off as inter-service bickering.

Nor does it seem reasonable that minor adjustments in our Unification structure will correct the situation. Perhaps no single step will do the trick, but we think we know where the starting point must be. We think it high time that our leaders got down to some fundamentals on this Unification business, to the media through which modern warfare must be conducted—land, sea and air—and then proceed from there with organization, personalities and all the rest.

This means three services, each of which operates in, and whose personnel specialize in operations within, its own



medium. It means an Army operating on the ground, a Navy operating on and under the water, and an Air Force operating in the air. It means the ultimate in coordinated, unified effort. And it means the abandonment, once and for all, of two competing air forces, each trying to do the airpower job in its own way.

The revolt of the Navy, centering as it does in two air forces—their roles and missions, equipment, employment of aircraft, procedures, etc.—brings into focus as never before the need for a single, unified national air force embracing both land-based and carrier-based aviation. All the harping of the Admirals on Capitol Hill adds up to that conclusion.

FROM AN AIR FORCE AIRMAN

As Jimmy Doolittle has explained, "By putting all Air under one head we can substantially reduce the total expenditure required and greatly increase the flexibility and defensive and offensive potentialities of our Air units."

To those who worry over names and the like, he proposes, "As long as it is completely separate from the other services, it doesn't matter whether our Air Force is called the US Air Force or the Naval Air Force. It could well be the National Air Force, thus retaining the Navy designation of NAF. Personnel, equipment and facilities would be pooled and we would end up with one integrated Air Force".

To those who are concerned over the place of carrier aviation in such an organization, Doolittle explains, "The carriers, which are merely mobile air bases, could still be operated by the Navy. Carrier-borne aircraft would be manned and serviced initially by former Navy personnel, and always with personnel specially trained in that type of work. One specialized branch of the Air Force would cooperate with the Navy just as a specialized branch, the Tactical Air Force, now cooperates with the Army".

And to those who have economy uppermost in their minds, Doolittle adds that with a single Air Force, "Not only could we get along with less of everything, including supporting forces, facilities and services through combining the two, and thus save millions, but the personnel, equipment and practices remaining would be made up of only

THE BREEZE

the best, hand-picked from both; and therefore substantially increased effectiveness would be achieved through economy".

FROM A NAVY AIRMAN

A single Air Force program was compromised out of the original Unification Act as a concession to the Navy, and it is generally believed to be opposed by Navy men on the basis that under it carrier aviation would not receive proper recognition.

Today, after little more than two years and a major revision of the Unification Act, we hear the Navy officially expressing even greater fears over the future of carrier aviation—though a Navy Air Force remains.

There are Navy airmen who foresaw the present controversy, and who have argued that in the long run carrier aviation would fare better within a single national air force than as an arm of the nation's sea force. These Navy airmen are represented by Commander Allen M. Shinn (USN), a man we have quoted on these pages before, and whose beliefs have become more and more pertinent as the Unification struggle has developed.

Commander Shinn has argued brilliantly—from a Navy point of view and with the best interests of carrier aviation in mind—that all US airpower must be contained in a single organization, "a truly national, unified Air Force, composed at the outset of all phases of US military aviation". In fact, he devoted a 9,000 word article to that subject back in 1947, when he was in command of Carrier Air Groups at Hampton Roads, Va.

Commander Shinn looked ahead over the years in these words: "... People as a whole and the Congress in particular have accepted by now the proposition that there are three broad divisions of military effort delineated by medium of movement—land, sea and air. It is not probable that the Congress will continue to vote and the people continue to support appropriations for airpower in the Navy, together with appropriations for a US Air Force. Non-partisan, patriotic Congressmen, motivated by a desire to assure the people full value received for monies appropriated, but perhaps not technically acquainted with the various categories of airpower, logically will be inclined to favor aeronautical appropriations for the Air Force but not for the Navy. The people as a whole are so inclined, and this inclination will become stronger as the need for financial economy in the government becomes more pressing. For a few more

years, for as long as the magnificent achievements of carrier aviation in the Pacific war can be recalled successfully to public mind, the Navy may be able to obtain substantial appropriations for naval aviation, but these will be obtained only by ever-increasing effort and against ever-increasing opposition. The end result will be a gradual but sure withering away of the naval aeronautical organization, probably before naval aviation has outlived its usefulness to the nation, with possibly dangerous decrease to national security".

Looking even further ahead, he added, "As long as Naval Aviation and the surface Navy are contained within the same agency the tug of war will continue as to whether to concentrate that agency's effort upon aircraft, or upon surface and sub-surface vessels. As the Air Force becomes more firmly inbedded as *the* instrument for operation of national airpower, the tug of war within the Navy will be resolved in favor of surface and sub-surface development.

KNOCK! KNOCK! KNOCK!

Commander Shinn has reported that his views on a single air force are shared by many Navy airmen. "It is impossible to be in close contact with the Navy's flyers," he explains, "and not realize the depth of their belief in unification of the country's airpower".

These are not, however, the Navy airmen who get called before Congressional committees. These men are at the working level of the Navy establishment, and their views are not shared by the top command. As the same old squabble continues year after year, they remain on the sidelines.

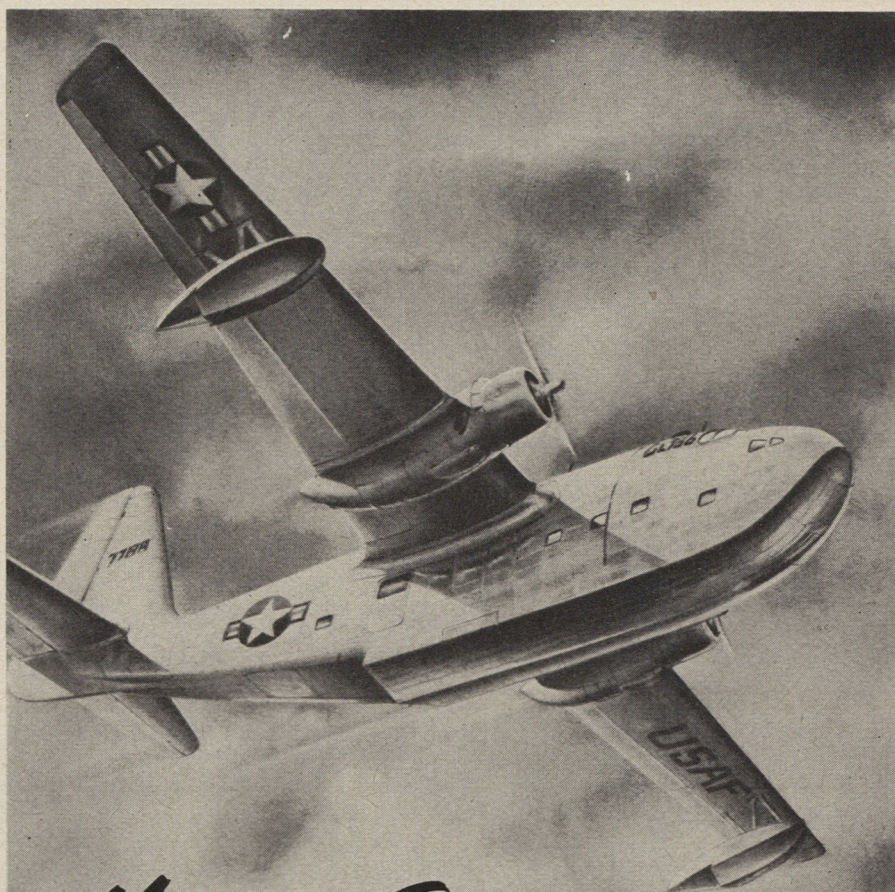
The logic of their position will ultimately prevail. All our progress to date under Unification points to that end. But how long will the Navy continue to fight the issue? And to what end? Certainly, if we are to believe what we hear, the present system has not satisfied either the Navy or its airmen. If carrier aviation is, indeed, the point in question, why not consider, at least, its possible future under a single air force? Seems strange that with all the man hours and tax money devoted to the cause of carrier aviation these recent weeks, no one thought of that.

Our hunch is that if the movement toward a single air force isn't started at the top somewhere, the top will be prodded into it by an irate public that is sick of duplicity and waste, sick of destructive competition, sick of arguments over roles and missions, sick of mutiny within its defense establishment.

We used to hear the phrase that solid Unification would come about only by "knocking some heads together". How about knocking some organizations together? J. H. S.

CREDITS

COVER: Republic Aircraft; Pages 15-20—USAF; Page 21—Acme, USAF; Pages 24-27—Republic Aircraft; Pages 28-33 USAF; Pages 34-35, Pacific Press, AFA, Royal Hawaiian; Pages 44-45, USAF.



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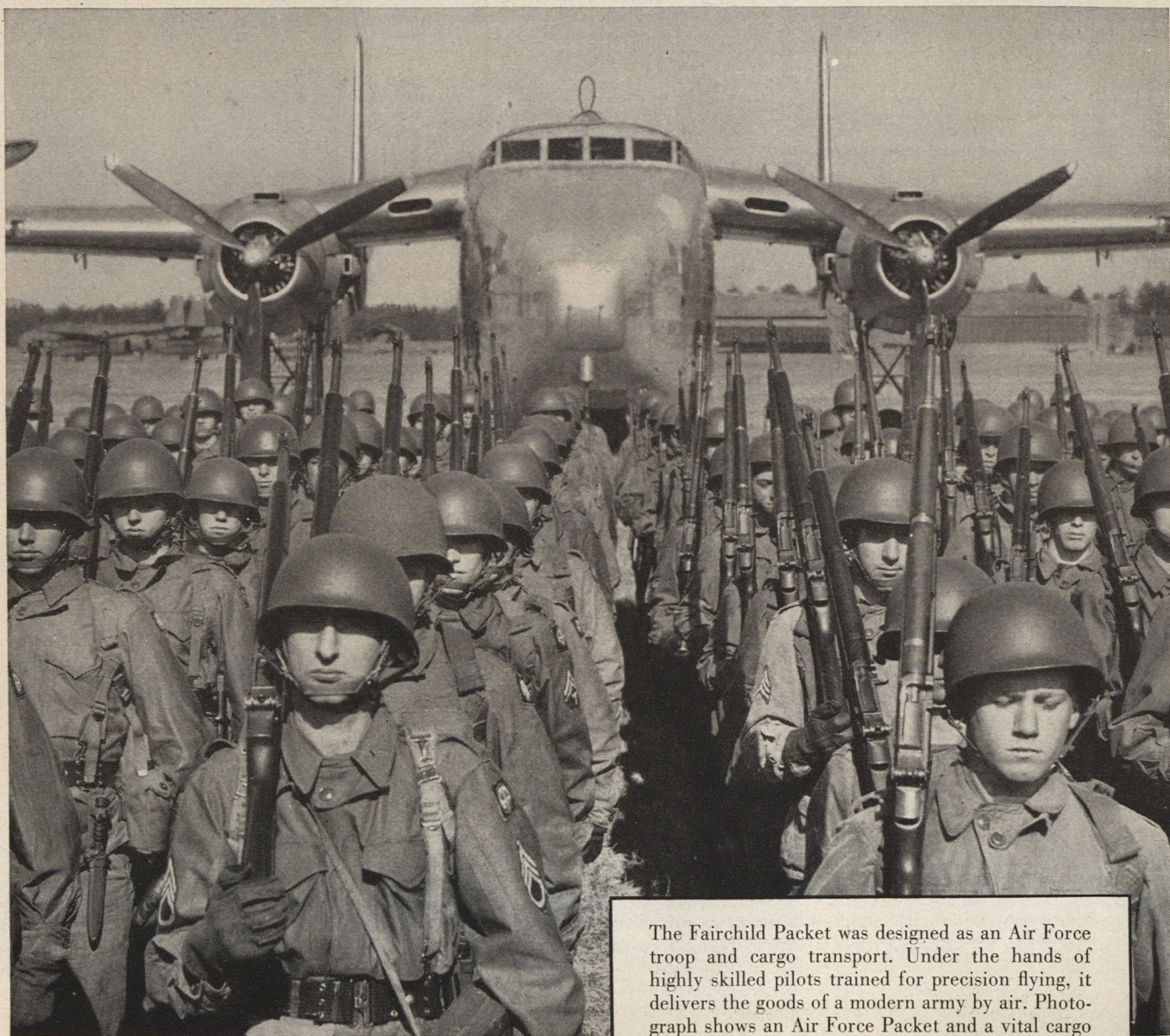
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BLUEPRINT for BETTER LIVING

TRADITIONALLY, the US citizen who bears arms for his country has enjoyed a far higher standard of living than the man in uniform in any other country in the world. He has been better fed, better clothed, better housed and better paid—almost to the point of being regarded as “pampered” by some of his less fortunate contemporaries in other lands. The American soldier’s well-being has long been regarded by his superiors as part of the investment in national security—as much a part of the arsenal as guns, tanks, and planes.

It may be because of this very tradition that the American people, or their legislators at least, have been slow to accept reports of living conditions in the military establishment—especially the Air Force—which come close to downright squalor. The pay is still as good as ever, as a matter of fact, even better; the quality of the food has not diminished, nor the

The lack of decent housing for American soldiers has been called the most

serious threat to our security. At last something is being done about it

BLUEPRINT FOR BETTER LIVING CONTINUED

abundance of good clothing. The problem has been housing. And in the Air Force it has been so serious that one high ranking general recently commented that it is of far greater concern to him personally than any inadequacy we may have in numbers of combat aircraft. A look at the "horror series" of pictures on these two pages will give you an idea of what he means.

The history of the housing shortage in the Air Force is not difficult to understand. In the late Thirties there were 30-odd AF installations. They were of permanent design and included on-post housing facilities for both the soldier and his family. They were communities within themselves, with playgrounds, landscaping, and probably a cannon of some vintage sitting out beneath the flagpole. They were places like Maxwell, Randolph and Mitchel.

Then came the war, and the landscaping and the cannon were forgotten. Overnight the 30 installations became 800. Family housing went with the cannon. Barracks were the order of the day, and the more GIs you could get in one building the better it seemed to be.

That was all right for the exigencies of the moment, but when the war was ended the Air Force, instead of going back to its original 30 posts, kept nearly 70 of its war-time make-shifts. Not one of them provided family housing. Airmen with wives and children had to make a choice:

Take what was offered in nearby communities (at whatever price was asked).

Improvise with a trailer or whatever facilities the AF could provide until something better turned up.

Split up the family and live apart.
Get out.

Considering the alternatives, a surprising number stayed in.

Try as it might, the Air Force could not get congressional approval in its regular yearly budgets for on-post government housing in anywhere near sufficient quantities. At best, Congress could be coaxed into granting enough money to take care of two per cent of the need in any one year. At that rate the Air Force figured the houses it *did* build would be in shambles by the time the project was complete.

With congressional appropriation a lost cause, the Air Force did as best it could. Sometimes it looked the other way while desperate GIs spent their own time and money converting abandoned barracks into family quarters—a procedure which at best was not "covered" in regulations. Sometimes it "sponsored" associations of servicemen who incorporated for the purpose of providing "mutual assistance in the procurement, erection, maintenance, repair, operation, disposition and administration of low-cost housing."

Grabbing at any straw, the AF in the Fall of 1948 tried to mould the Federal Housing Act of 1948 to its purpose.

But it didn't work. Under the provisions of the act, the FHA had to be satisfied that the housing it authorized could be absorbed *not* by military personnel, but by the civilian community in the event the military post was abandoned. This applied whether the air field was a permanent installation or otherwise. As a result, only two areas in the entire Air Force got any help—Fort Richardson, Alaska, and San Antonio. Even here the assistance was far from what was needed.

By the first of this year, it became painfully clear to the Air Force that none of its piece-meal efforts were going to suffice. In spite of all that could be done, airmen who had planned to make a career of the Air Force began to lose heart and drop out as soon as their enlistments ended. It was plain that only by going back on a broad, service-wide basis and grafting to the air bases by that part of their anatomy which was left out in a hurried wartime birth, would the problem ever be solved.

While the shortage was not peculiar to the Air Force, it was more aggravated there—primarily because of greater expansion—than in either of the other two services. It was for this reason that the Air Force was named by the Secretary of Defense early this year to monitor a survey in all three services to determine what the requirements were, and how best to solve them.

In actuality, the Air Force didn't have to wait to take a survey. It could recite from memory, if not from its files, what its own problem was. Likewise, the other services had an equally ready answer. Within the Air Force there was need for housing for 114,000 families. The Army and Navy with less expansion than the AF, had somewhat lesser requirements.

Since Congress had indicated a reluctance to provide money for housing in yearly defense budgets, the monitoring "task force" had to come up with some other solution.

It was at about this stage of things that Senator Kenneth S. Wherry of Nebraska stepped into the picture. The Senator, whose state has several large military bases including headquarters of the Strategic Air Command, reasoned that one of the best ways to keep those bases permanently located right where they were, was to see that adequate housing was provided. With this assumption—one which couldn't have been more accurate, by the way—the Senator began drafting legislation of his own. Someplace short of submitting it to the floor, he called in the Air Force team for consultation. By then, the Air Force was pretty well along with a scheme of its own. For some time the Air Force monitors and the Senators office worked together to resolve the two schemes into one. The eventual consolidation, completed early this year, formed the basis for the now famous "Wherry Bill" which was signed

(Continued on page 19)

THE HORROR



An "apartment" in Alaska. Its occupant helps protect our northern approaches.

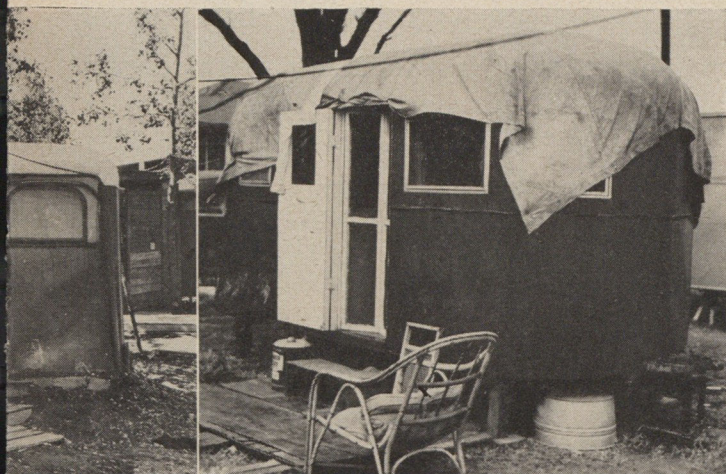


The proverbial chicken coop—tidy, but covered with snow. Heat is by wood stove.



Wives of military personnel at an undisclosed base chop wood for cooking, heat.

SERIES . . .



A trailer like the one above is comparative luxury. This one has lights and water run in by garden hose.

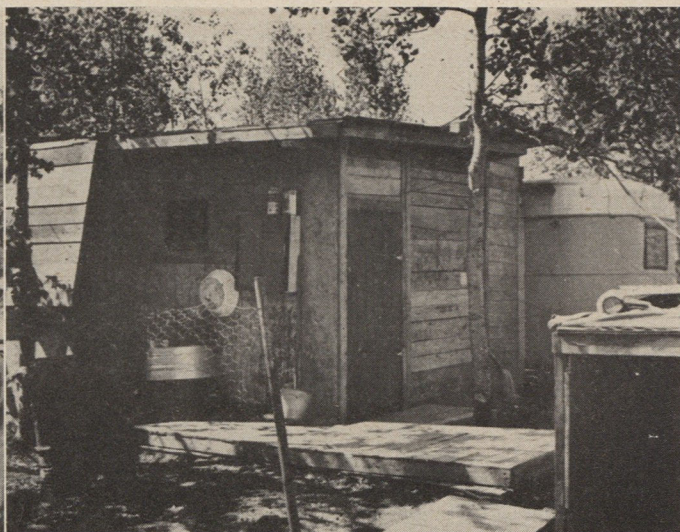
These are a few of some 150 pictures that have become known in Washington as "The Horror Series." Some were collected officially, like those brought back from Alaska by touring Congressmen who knew that only with pictures could they convince their colleagues of the incredible squalor they found. Others are unofficial, having found their way into the file from GIs demanding that something be done. These aren't exceptional examples. They're typical.



A captain and his family rent this basement apartment at Anchorage for \$175 a month paid a year in advance.



A GI's family tries to make a home of this shack a stone's throw from one of Florida's beautiful beaches.



This shack and trailer are occupied by two separate military families. Neither has running water or plumbing.



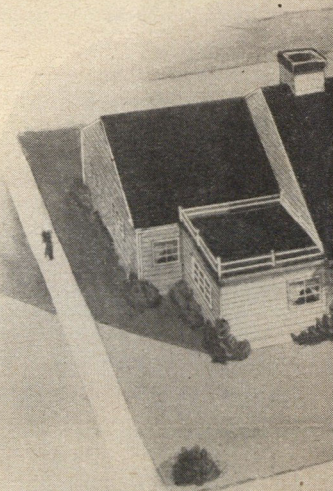
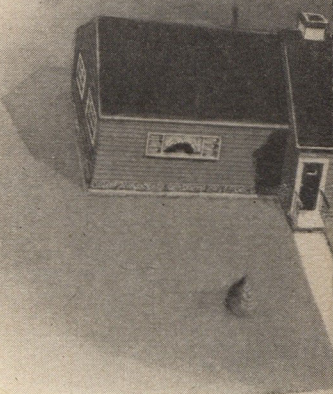
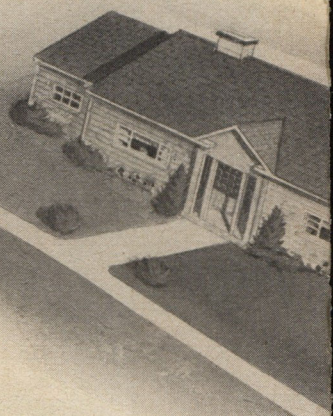
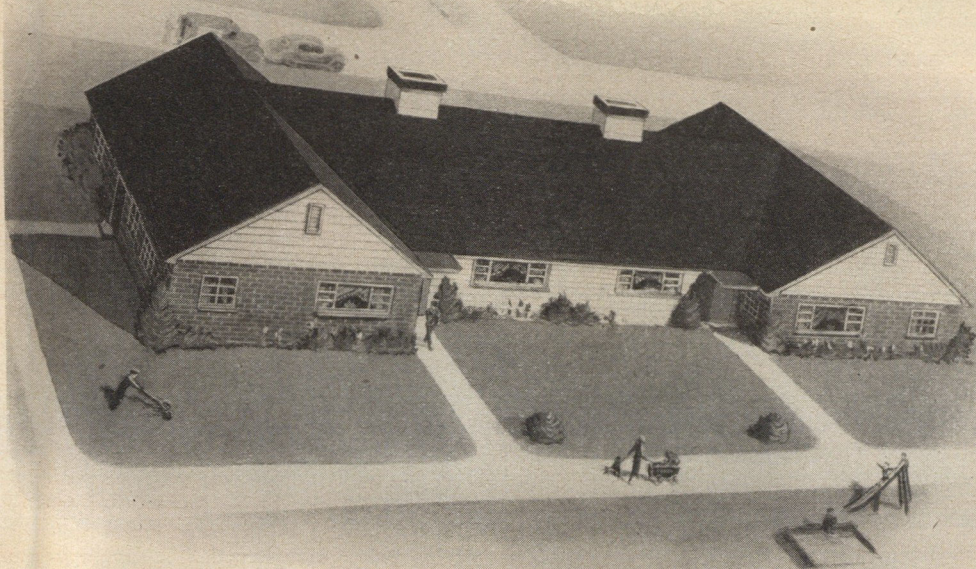
This is home for the "dependent" of a Chanute Field airman. Note the water heating on hot-plate at left.



Interior view of one room tar-paper shack occupied by AF Sgt. and family. There is no plumbing. Rent: \$60 monthly.

... AND THE NEW DEAL

A far cry from the "homes" on the preceding pages, these are some of the houses already approved for construction at an air base in continental US. Made available to officers and men alike on a priority basis, they will rent at moderate prices agreeable to the commanding officer of the post, the Air Force and FHA. Houses of this type, built under the newly-enacted Wherry Bill, will soon spring up at some 35 to 50 fields both at home and overseas.



BLUEPRINT FOR BETTER LIVING CONTINUED

into law by the President last August 8.

The Wherry Bill authorizes the construction *by private capital* of about 60,000 family housing units in all three branches of the service, at a cost of \$500,000,000. It is primarily designed to alleviate housing problems of junior officers and top-grade enlisted men.

Construction may be either off-post (in which event it must be immediately available to the base) or it may be on-post (in which event the builder will lease the property from the government).

Much of the building will be of multiple-unit, garden-type apartment construction, although at some installations, individual family houses like those on pages 18 and 19 may be built. The legislation limits the average cost of individual housing units to a \$9,000 value for mortgage purposes.

Ownership and operation of the housing developments will remain with the organization doing the building. The houses will *not* be built for sale to GIs. They are for rental only, at rates agreed upon by the builder, the commanding officer of the base involved, and the FHA.

How It Works

At any given Air Force base where there is a housing shortage and where "permanency" has been certified, a housing program can be begun substantially as follows: (Note: Permanency has nothing to do with whether or not the field was built on a "temporary" basis during the war. It involves only the AF's intention of keeping the field open barring any unforeseen cuts in appropriations).

► Any interested builder (who has shown himself to be responsible and to have the capacity to construct, manage and maintain a development) discusses the requirements of the individual base—the number and size of the units, rents, etc.—with the commanding officer of that base.

► The builder submits his plans for the proposed development to the commanding officer of the base.

► If approved by the commanding officer of the base as satisfactory to the needs of that base, the proposal is submitted to Headquarters USAF where it is examined carefully to determine whether it meets the requirements of the Pentagon task force.

► If the proposal is approved by Headquarters, the Air Force executes a lease to the builder for the required land if government owned land is to be used. If privately owned land adjacent to the base is to be used, the builder must lease or purchase the land from its owner.

► The AF gives the selected sponsor with documentary evidence as to the permanency of the installation, its planned level of activity, and the soundness of the proposal for presentation to FHA.

► The builder requests FHA mortgage insurance for the development.

► The builder gets necessary loans from banks or investors under FHA insurance, and actual construction is begun.

Under the provision of the program, neither the government nor the Air Force have to ask for bids. They can look at each proposal as it is submitted and grab the first one that satisfies their purpose.

The Schedule

GIs who might fret lest there be too few interested builders can relax. At the moment between 35 and 50 AF installations have been certified as permanent and therefore "eligible" for housing. The builder response has been such that the Air Force hopes to be able to shut off the submission of proposals before the year is over. Allowing two months for administrative processing, actual building should begin the very first of the year and be completed not more than nine months thereafter. The first construction probably will begin at Westover, Mass., Victorville, Calif., Holloman, N. M., and Maxwell, Ala. (Note: As added incentive to the builders to hurry construction along, they have been given an 18 months grace period after the agreement is completed before they have to begin amortizing their mortgage. Whatever rent they can pocket by completing the housing before the 18 months is up can be filed as gravy.

Welcome as the new program is, it will fall short of meeting the full requirement.

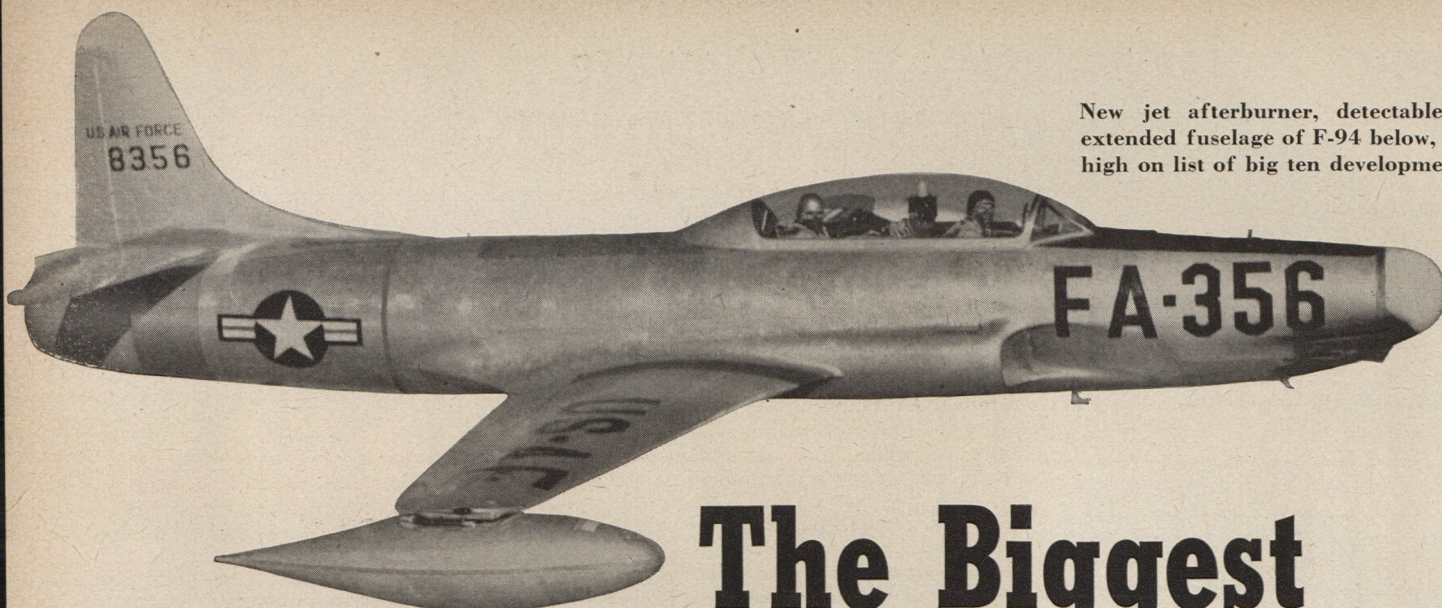
In the first place, the Air Force took its estimated requirement and cut it in half at the very beginning. Its reasons were these: As new housing becomes available in any given community, the worst of the housing slums will be abandoned, and housing which is now "inadequate" only because of exorbitant rent will tend to become "adequate." Then too, the Air Force does not wish to disrupt the economy of its civilian neighbors any more than necessary. Where possible, it is only too happy to take advantage of housing provided by the community.

Another reason for the conservative beginning is that the AF still has hopes of getting greater housing appropriations out of Congress in its regular yearly defense budget. There are many obvious advantages in building your own housing on your own base—just as was done with those original 30 fields.

Then too, the military establishment reasoned that regardless of the problem, half a billion bucks was enough to experiment with at one time. Both the AF and the other services felt it would be most prudent to get a little experience before getting in any deeper.

And so there may be a lot of GIs nearly as bad off next year as they are right now. If that is the case, and if the President is satisfied that the program has been successfully administered up to then he has the authority to up the original \$500 million to a flat billion.





New jet afterburner, detectable in extended fuselage of F-94 below, was high on list of big ten developments.

The Biggest Technicalities

Again this year AIR FORCE asked the technicians at Wright Field to name the year's ten outstanding aeronautical developments. After some debate, they have come up with these answers

The progress of aviation is measured in many ways. To the casual observer it is figured in terms of sleek new aircraft designs, or in a new speed record; in a new transport plane that carries 20 more passengers than the last one, or in a new altitude mark. These are the obvious milestones—the ones that are posted quite regularly in the morning headlines. More often than not, however, these front page achievements are the end results of technical developments which seldom if ever catch the layman's attention.

A miniaturized radio tube, for example, can reduce the size and weight of a radar set, which in turn can make it possible to carry a greater load of gas, which can result in a new non-stop distance record. The world will hear of the record, but only a few will ever know about the tube.

Last year at this time, AIR FORCE asked the men it considered best qualified to answer—the technicians at Wright Field—to name ten of the most outstanding aeronautical developments since the end of the war. Nearly without exception their answers dealt with the "behind the scenes" inventions of which nine out of ten men on the street had never heard. This year we have asked those same men to give us a reading on the most important advances since the last report. Here are their answers. Were it not for security restrictions, the list would undoubtedly be altered in some regard. But excluding the dope that would give "aid or comfort" to a potential enemy, the ten

developments listed below are, in the estimation of the experts, the best yardstick of military air progress in the last 12 months.

THE JET AFTERBURNER

High on the list of the year's achievements, is the perfection of the jet afterburner—a gimmick which makes it possible for the USAF's new fighters to get off the ground quicker, climb faster, and carry bigger loads than was heretofor possible. Actually what the afterburner amounts to is a supercharged ramjet.

In general terms the afterburner provides a "reheat cycle" which takes the hot gases after they have passed through most of the moving parts of the engine, makes them hotter, expands them and kicks them out of the tailpipe at souped-up velocities.

Powerplant people consider it one of the most important gains since the advent of the jet engine.

LIQUID OXYGEN

Weight and space saving, plus increased safety factors are being accomplished in military aircraft today because of a new oxygen converter system. It uses a liquid form of oxygen instead of the gaseous type.

By comparison, engineers point out, the gaseous type oxygen supply unit for one B-17 weighs 400 pounds when fully charged. Liquid oxygen plus the

new converter system, weighs only 130 pounds. There is also a saving of about 80 per cent in space.

Perhaps more important than space and weight saving factors is the 44 per cent increase in oxygen available for human consumption. The increase is possible because when changing from a liquid to a gas, the relative volumes are in a ratio of 1 to 800. One cubic foot of liquid oxygen provides 800 cubic feet of gaseous oxygen upon vaporization—the basic principle of the new converter system.

The additional oxygen available because of the new system, is virtually a *must* in trying to achieve the long range missions (12,000 miles) which are now being talked about.

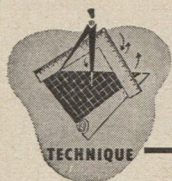
The converter which makes all of this possible consists of a metal container for the liquid oxygen with a vaporizing coil and necessary safety valves.

In addition to the converter itself a liquification plant that can be contained in one trailer-truck and can be moved to advanced bases to make oxygen available has also been developed. The mobile unit which is equipped for the manufacture of oxygen has its own power plant, air compressor, air purifier, refrigeration unit and air separator.

NEW HELICOPTER BLADES

After more than two years of extensive research and development, new rotor blades made of fiberglass have come into being to give the helicopter improved performance and utility.

By Douglas J. Ingells



TECHNIQUE

Developed for the Air Materiel Command by the Cornell Aeronautical Laboratory at Buffalo, N. Y., the new blades have proved both aerodynamically and structurally superior to many conventional types now in use.

They will lift more weight for the same horsepower under specific conditions, tests have shown, than the best blades of similar size thus far investigated. This increase in lift can be utilized to step up the useful load the helicopter can carry, either in added passengers, cargo or fuel.

The novel blades are approximately 22 feet long and have an average width of 20 inches. They are molded integrally in a single operation and utilize a lightweight, high-strength "sandwich" type construction developed by the aircraft industry during the war years.

The efficient performance of the helicopter blades is attributed in part to the reduction in the horsepower previously wasted overcoming the aerodynamic drag inherent in conventional type blades. The horsepower now becomes available for added lift.

The gain is realized because the molding process produces a blade with an extremely smooth surface which conforms within the thousandths of an inch to scientifically accurate airfoil shapes. And, the sandwich type construction used, gives the blade a rigid cross-section which is not deformed from its correct aerodynamic shape by structural loads or aerodynamic forces during flight.

MORE FIREPOWER

Shying away from any detailed discussion on armament not only because of security reasons, but because it is a priority problem with them, the Wright Field experts, nevertheless classed new machine guns and cannon as a major development.

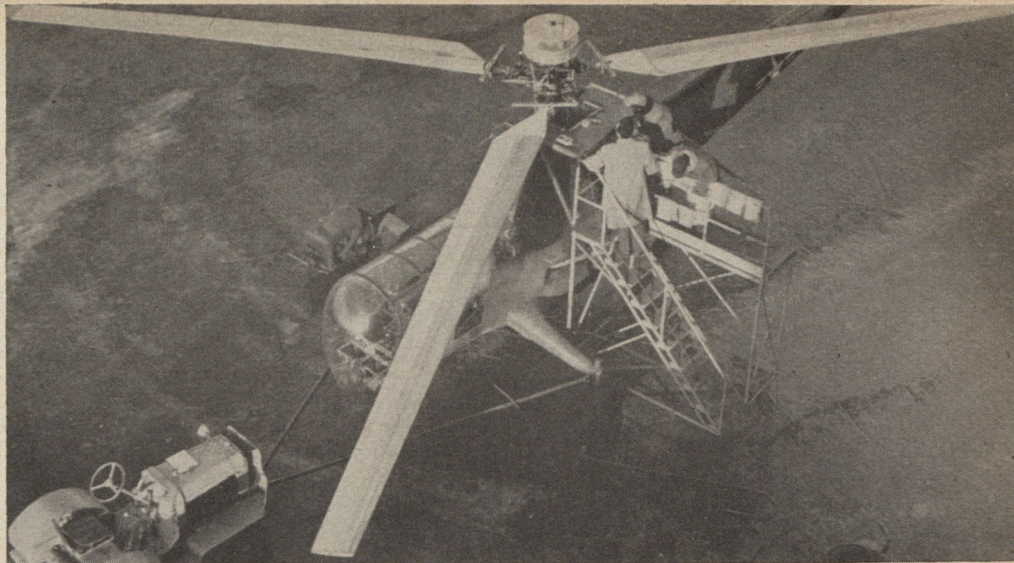
A new, higher velocity, longer-range .50 caliber machine gun has "recently" been put into real operational utility. Little can be said about the gun, but this much the technicians have known: It gives an in-service fighter like the F-86 of today with only *six guns* the equivalent firepower of a wartime P-47 with its *eight-gun* installation!

The experts also classified the adaptation of the 20-mm cannon into turret installations (two and four guns) such as those which give the B-36 its firepower as a major development.

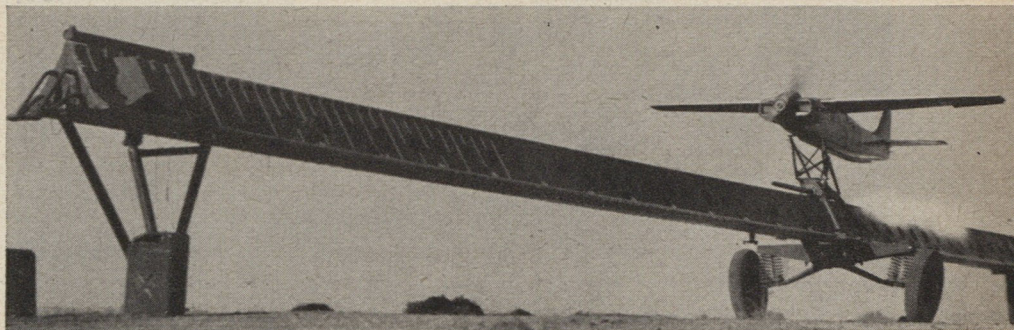
ELECTRONIC SIGHTING

Sky battles, fought as the great sea battles of World War II were fought—with ships not even seeing each other and using radar detection means—came nearer reality in 1949.

The installation of "centralized fire control" systems in the B-50 bomber and the B-36 were named as major im-



Invented by the Cornell Aeronautical Laboratories of Buffalo, N. Y., the new rotor blades made for helicopters out of glass were rated as another leading achievement. New blades have less drag than old, make greater lift possible.



Although its perfection had less to do with aeronautical advance than with training techniques, the OQ-19A target plane (above) was given high rating.



The perfection of night photography techniques (above) was the end result of years of research. Below, a bomber crew compares old gaseous oxygen tanks with new liquid oxygen converter. The two systems have equal oxygen capacity.



THE BIGGEST TECHNICALITIES CONTINUED

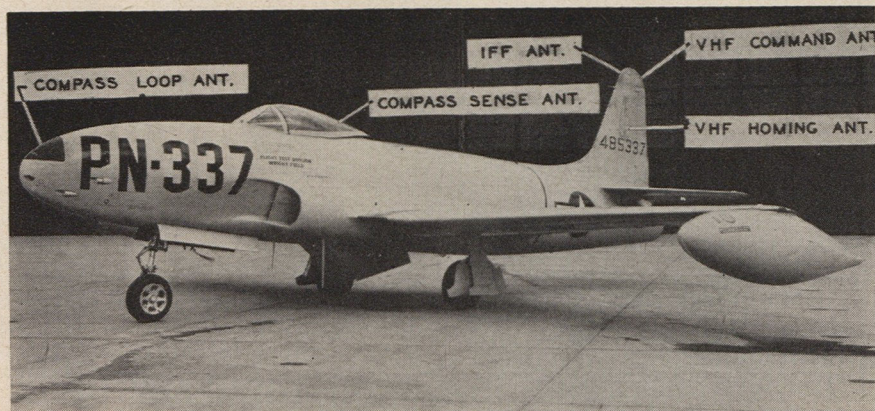
provements, but classification has kept their principle under shrouds.

Servo-mechanisms are being built so that all of the information required to automatically calculate drift, air speed, wind, altitude, distance from target and trajectory can be fed into *one calculator* which makes corrections.

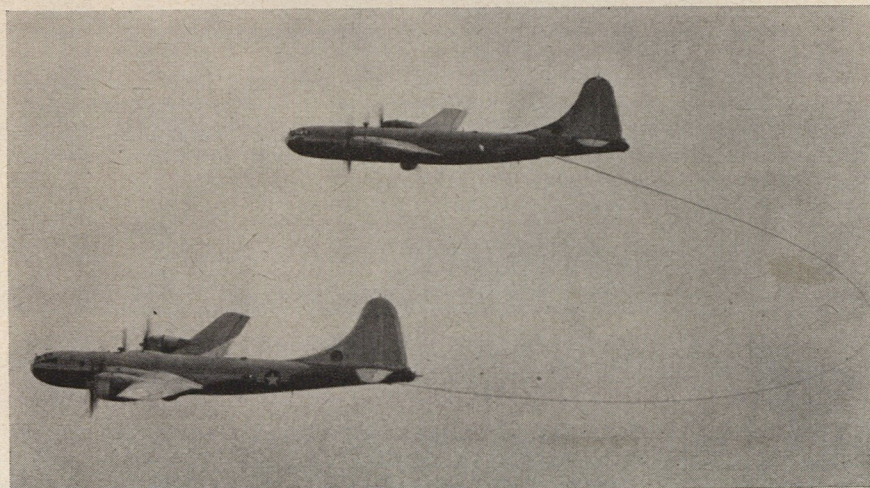
Radar is the key-word in the new systems. Recognizing a target miles away, always a bugaboo for gunners and bombardiers using optical sighting instruments, has been greatly reduced by the new electronic and radar equip-

mechanisms—to help turn night into day—has greatly improved the technique of night flash photography. The technique replaces old type photo-flash bombs and parachute flares which sometimes endangered recon-crews.

Developed by the AMC aerial photographic laboratory in co-operation with industry and the Ordnance people, the new technique centers around a photo-flash cartridge which looks like a 20-mm shell. Inside is a special chemical powder compound for producing a brilliant light.



Flush antennae reduces drag, minimizes icing dangers, adds protection from precipitation static, and removes pilot's fear of losing external gadgets.



Perfection of air-to-air refueling system ranked high. New procedure, still secret, is outgrowth of trailing hose technique used by Lucky Lady, above.

ment now being installed.

Other techniques have boosted "hit" insurance for bombing-eliminating virtually all of the "human error" with electronic mechanisms.

The armament people also pointed to improvements in the bomb release mechanism, bomb bay door operation, internal rack installations and ground handling devices for bombs up to 25-tons as major contributions.

NIGHT PHOTOGRAPHY

The development of a small powder-filled cartridge and special launching

Released automatically by firing mechanisms that can be timed for specific intervals, the cartridge is capable of producing the equivalent of about 50,000,000 candlepower. The shells explode away from the plane at a safe distance and light up nearly the entire horizon.

Specially developed synchronization devices for the big aerial cameras permit picture shooting at the height of the brilliance of the explosions.

FLUSH ANTENNAE FOR PLANES

The advent of high-speeds and the

necessity for removing all protuberances from aircraft fuselages has resulted in the development of new flush-mounted radio antennae for all types of airplanes. It has been estimated that at top fighter speeds, it took 200 horsepower to overcome the drag of old-style antennae alone.

Air Materiel Command Electronic engineers have perfected several different kinds of the zero-drag instruments:

► A flush-type "pick axe" antennae which rides inside the aircraft tail protected by a plastic radome. Shaped to follow the conventional tail lines, it draws its name from a resemblance to the familiar pick axe.

► A slot type antennae which hides itself behind a simple slot opening in the aircraft skin, but is completely submerged in the structure and covered with a dielectric material.

► An antennae which, in reality, is the entire fuselage of the plane itself. This particular system was developed to accommodate low frequency equipment which requires an antennae as large as the aircraft it serves.

In addition to streamlining, the flush antennae has other advantages including the elimination of icing dangers, added protection from precipitation static, the sealing out of moisture, and freedom from the fear that external antennae will be broken off at high speeds.

RADIO CONTROLLED RESCUE BOAT

The development of a new radio-controlled air-sea rescue boat, dropped from sea-search planes is putting the odds of survival in favor of downed airmen.

The boat is 26 feet long and shaped to the contours of a B-29 belly from where it is dropped, floating to the water under a large parachute. It is an advanced design "Flying Dutchman."

Powered with a four cylinder gasoline engine, the boat can accommodate in calm or angry seas, for days if necessary, all of the crew of our largest bombardment planes. This includes the B-36 with its sixteen man crew.

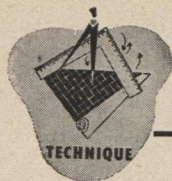
What makes the boat (Type A-3) really new, is its means of radio control which has just been perfected.

Using the new system, the boat is dropped from the sea-search aircraft by automatic release mechanisms. Static lines open a large parachute. After it lands on the water, remote control systems located in the mother craft take over. An operator in the plane starts the motor. Then, he steers the boat directly to the survivors on the water in their rafts, stops the engine until they can climb aboard. Starting the engine again he puts the craft on desired course.

After that the men in the boat can operate it manually. Or, in cases where they are too fatigued from hours of being stranded afloat, the mother plane and its remote control system can bring the craft to port.

HIGH SPEED TARGET PLANES

A high-speed target airplane, remote-



TECHNIQUE

ly controlled and designed to simulate the evasive antics of fighter aircraft is regarded as an important advancement in aerial gunnery technique.

The plane, designated the OQ-19A is the fastest target plane ever developed. It has a speed of 220 miles an hour and weighs about 300 pounds. It will fly at high speed for a full hour at sea level without refueling and can be operated anywhere within the limit of sight.

Remotely controlled from either the ground or the air the OQ-19A is capable of high speed dives, loops, rolls, wing overs and steep banks. At a 200 yard range it has the appearance of a normal sized fighter plane flying at 500 yards distance. It was specifically designed for flexible gunnery practice. A high-wing monoplane, the model OQ-19A is powered by a four-cylinder air-cooled, eighty pound engine developing approximately 60 horsepower. It runs on a mixture of gasoline and oil. It is launched by a rocket which boosts it along a 60-foot catapult to a speed of 80 miles an hour for take-off.

Landing is accomplished by a 32-foot diameter cargo-type parachute which can be released by the control operator.

Developed by the Radioplane Co., Van Nuys, Calif. to specifications of the Air Force, the new high-speed target is regarded as a decided advancement in training of gunners.

AIR-TO-AIR REFUELING

The development of a new "boom system" of refueling aircraft in flight, may be one answer to the range problem that is most pressing to USAF strategists.

Devised by the technicians of the AMC and the Boeing Airplane Company the new system is much faster than those previously in use. As quickly as possible it is being substituted for present equipment now in service.

The flight of the *Lucky Lady II*, round-the-world non-stop using a British refueling system with modifications led to the development of the new Air Force refueling technique.

The new fast fueling device consists of a series of telescoping pipes instead of the old-style trailing hose. How much fuel can be transferred and how quickly, is regarded as secret, but experts have said that it is "two or three times" as fast as the old hose system.

Because it is equally usable for extending the combat range of fighters or bombers, the new system is expected to result in a far wider use of air-to-air refueling than previously was contemplated.

Manufacturers of jet fighters are already modifying their designs for use of the "boom system."

TECH TALK By Douglas J. Ingells

A Wright Field engineer, on his own time, he wants it known, has perfected a series of ornithopter models which indicate that the day of flapping wing flight is not too far distant. He has been granted a patent on his design and principle. One of the models having a wing spread of more than three feet has proven capable of lifting more than three times its own weight. It takes off, flies and lands just like a bird. Plans for a man-carrying machine of this type call for: Wing span of 15 feet, tandem mounting like the wings on a dragon fly; a pod-like fuselage, single-place; and a small gasoline engine for amplifying vibration forces which flap the wings—the inventor's secret. Weight, about 450 pounds. Estimated speed—between 100-120 mph!

The Dayton Aircraft Products Co. has designed and is building for the air force a special mobile dolly for carrying all types of propellers now in use on military planes. A heavy frame-work structure that looks like a miniature dirigible mooring mast with its wheeled triangular construction, the dolly is capable of carrying two of the large 19 foot, six inch propellers (B-36 fans) at one time. It is designed to facilitate ground-handling of the props. Mechanism can also be adjusted to take any size large propeller.

The advent of high-speed supersonic designs which necessitate very thin airfoil section capable of absorbing extreme air forces and temperatures has led the Air Force engineers to study the possibility of all-metal wings built like propeller blades. Wing construction might become a simple matter of stamping out two halves and putting them together—no spars, no ribs.

A B-36 is now being outfitted as a high-altitude photo recon airplane. At Wright Field photo technicians are putting various type cameras into the belly and at other positions on the big bomber. Because of its size the plane probably will become a flying laboratory for numerous camera tests. Its known high-altitude performance will also give engineers a chance to try out latest lenses, range finders, automatic camera mechanisms at altitudes never before attainable in an aircraft large enough to permit detailed test observations.

AF's improved centrifuge, currently is being used for some interesting heat-cold experiments. Experts at Wright Field have designed a special cab for the centrifuge. It has special refrigeration and heating system which can simulate cold of certain altitudes and the hot conditions of high speed aircraft. The "flying doctors" believe they may learn some new data about pull-ups and blackouts with their new temperature regulated spinning machine.

If and when Congress passes the "Wind Tunnel Bill" and authorizes the Air Force to go ahead with its plans for an Air Engineering Development Center (AEDC) the first phase of the new project will include:

(1) A high altitude, high-speed engine test facility. (2) A wind tunnel for propulsion unit evaluation and other aerodynamic facets at speeds up to a Mach. No. 3. (3) A super fast wind tunnel for hypersonic research.

AEDC is now out of committee. It has been approved by all parties concerned and the Bureau of the Budget. Latest figure is \$100,000,000 for the establishment. This is far below original request.

US aircraft industry is trying to get the government—probably through military orders for new jet-propelled cargo types—to foot the bill in development of commercial jet transports needed to "stay in the game" with Britain whose new jet airliners are threatening US world leadership in this field. The Boeing Stratocruiser is a good example of what can be done. It came into being first as a C-97, air force cargo giant, cargo version of the B-29. Interesting is the fact that most of our wartime bombers all had cargo version counterparts.



1. Performance of the 33rd Fighter Group, like all AF units, depends upon skilled specialists to keep the planes flying. The experience level at Otis is high. Above, M/Sgt. John K. Beckner (center) has 27 years on an Air Force line behind him. Here he confers on one of mornings' problems with Sgts. Robert Martiss, Walt Kniecik, Bill Minkel and Frank Stewart.

THUNDER over the Cape

The noise in Washington may be over the AF's bombers, but up on Cape Cod

the 33rd's Thunderjets are making a good sized racket of their own

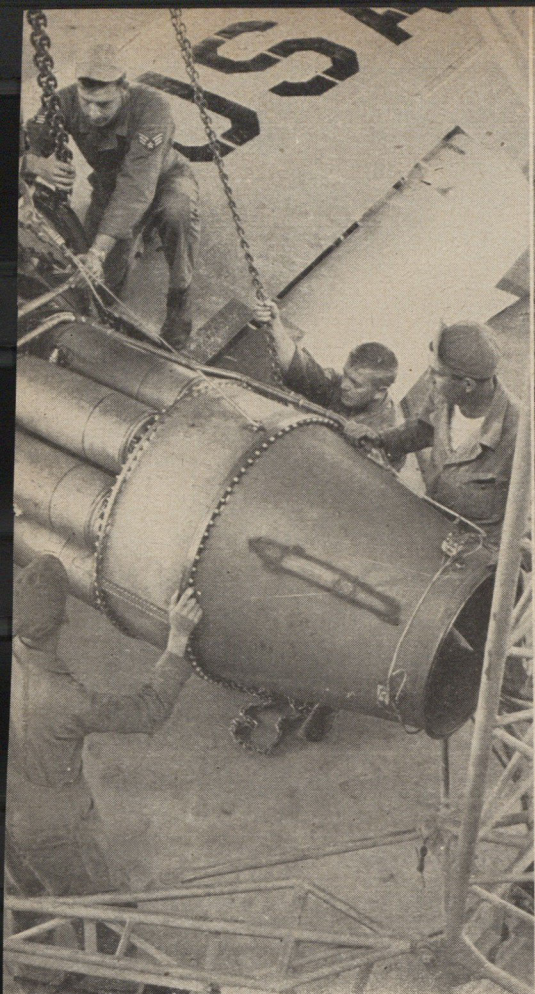
4. Below, an unusual study of Otis airmen inspecting cooling shroud which insulates the frame of their plane against intense heat of engine and tailpipe.



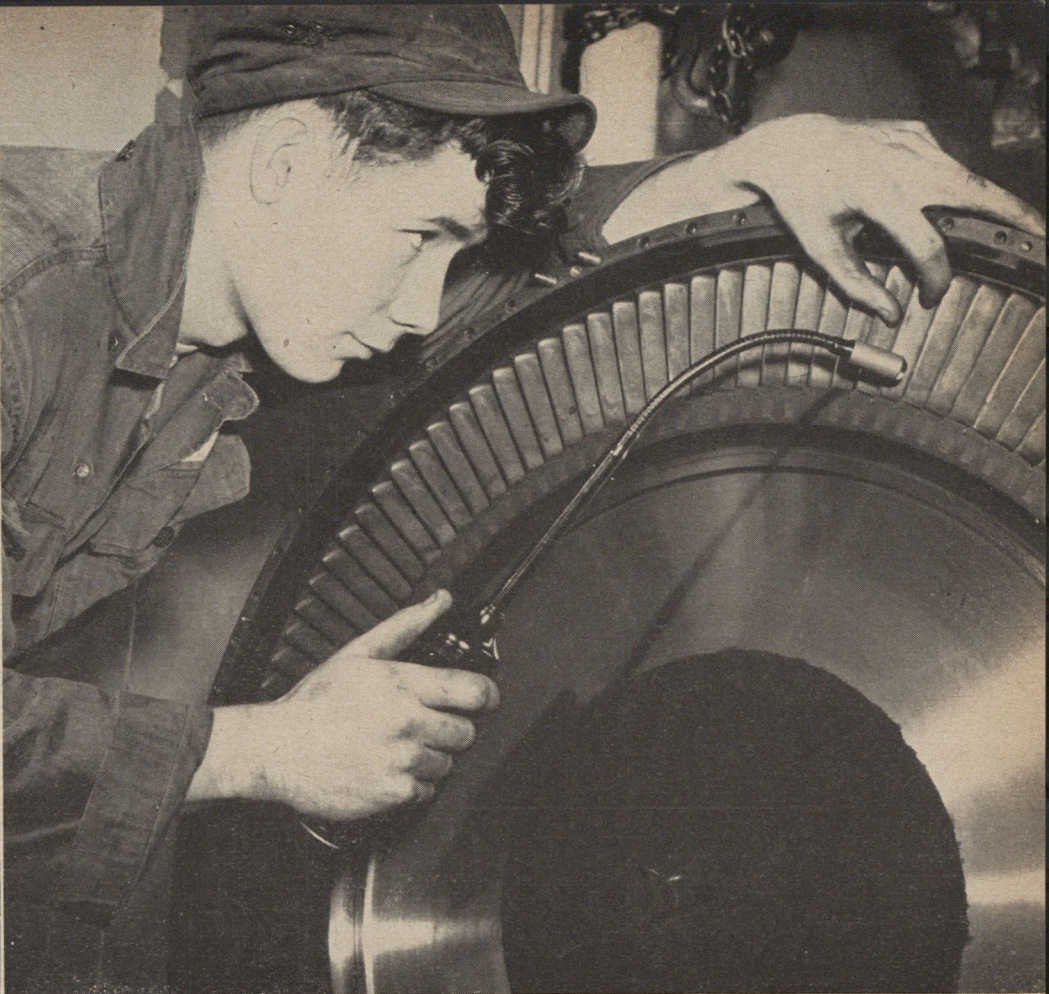
IN a symbolic sort of way, the picture on the cover of this month's **AIR FORCE** is not as accurate as it might be. For as everyone knows, the spotlight of public attention is focused less on fighters these days than it is on bombers and the strategic concept. And unless the Navy gives up its current cold war, it is likely to stay that way for some weeks or months to come.

None-the-less, within the Air Force itself, the situation is somewhat reversed. The spotlight of careful scrutiny is less on the bomber than the fighter. And for good reason. The Air Force is satisfied—even if the Navy isn't—that its bomber concept far out paces its fighter

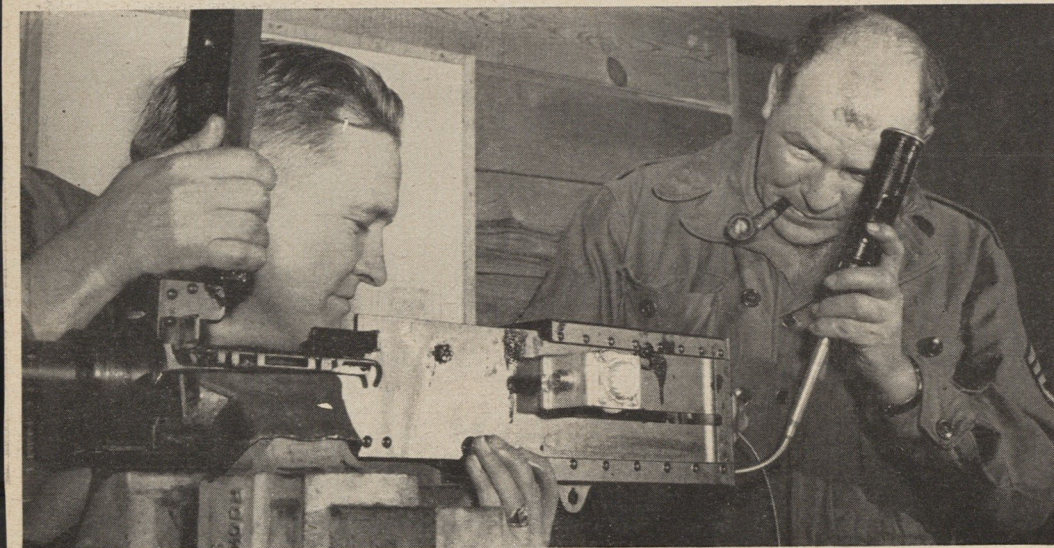
(Continued on page 26)



2. On this particular morning this particular jet has reached the 200 hour mark. Hence it will get complete inspection—which begins like this.

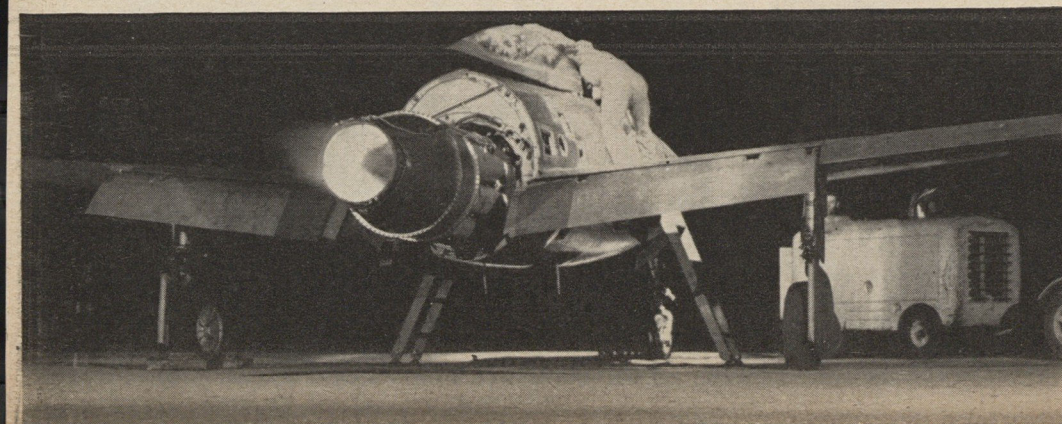


3. Cpl. J. W. Kelso, of Duluth, Minn., conducts a detailed inspection of each blade or "bucket" of the jets' turbine wheel which takes power from escaping jet gases to operate compressor and accessories. Evidence of cracks or fatigue mean shipment of the engine to an overhaul depot—probably Tinker AFB, Okla.



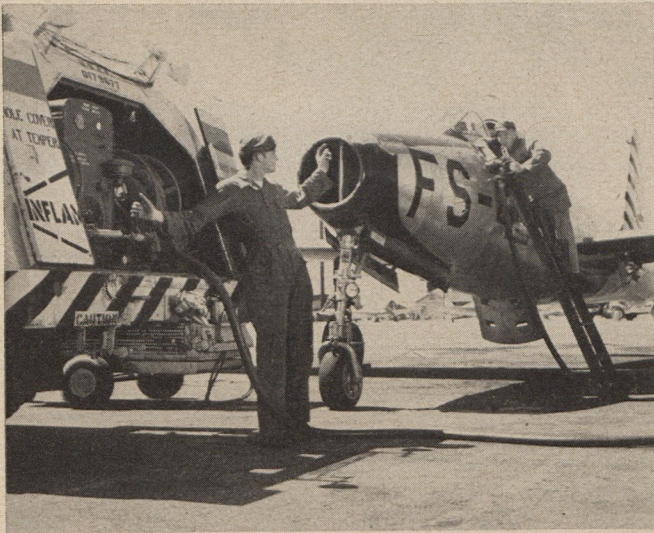
5. M/Sgt. Carter Shanklin and T/Sgt. Gil Clark, above, have been armament experts for ten years. Here they go over Thunderjets 50 cal. M-3 machine gun.

6. The inspection over, the crew fires up again to check on plane's operation.



7. After satisfactory engine run-up, airmen replace tail section. Jet is now ready for its engineering test flight and return to the line.





8. Ready for the day's mission, this Otis Thunderjet takes on a load of fuel—650 gallons of it. Pfc. Vernon McKinney mans the truck while Sgt. Henry Minch feeds the plane.

THUNDER OVER THE CAPE CONTINUED

program. The pressure is on the fighter boys now to catch up.

The AF now has 17 day fighter groups, all but three of which are equipped with jet planes the equal of any in the world. One of these 17 is the 33rd, based at Otis AFB, Massachusetts. The pictures on these pages were taken during a typical 24 hour period at Otis as the 33rd spread its thunder over the Cape and out to sea.

They have a saying at Otis. A fighter is no good today, if it doesn't have fire coming out of both ends—jet exhaust to the rear, and gunfire forward. In anticipation of the high degree of skill necessary to make a kill in any future war, the men of the 33rd are concentrating heavily on aerial gunnery.

Next priority on the 33rd's training schedule is Ground Controlled Interception. Begun somewhat clumsily during the war, the technique of guiding a fighter pilot to the enemy by directions from the ground has now reached a stage of high secrecy. The problem is enormous in view of the fact that radar warning systems can detect approaching enemy aircraft only a few hundred miles distant, and further in view of the new speeds with which the enemy's bombers can close that short gap. The fighters only chance, at least the only chance so far devised, is in plenty of hustle and rigid discipline to split second procedures. The final answer to the problem may be in new designs still on the drawing board. In the meantime, maximum efficiency from both men and equipment—the kind demonstrated by the 33rd—is a darn good interim substitute.

9. In the briefing room Capt. Royal Koons goes over a few gunnery procedures before taking off on practice flight. Maj. Jack West, squadron commander, kneels at left center.



Pilots of the 33rd Fighter Group provide one of the sharpest

10. The mutual confidence between crew chief and pilot is one of things that makes the 33rd a great team. Here Sgt. Minch turns his plane over to its pilot, Lt. Stan Converse.

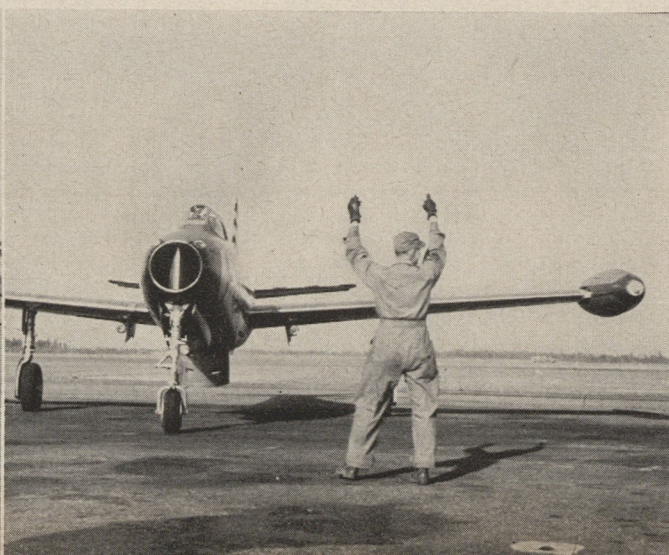


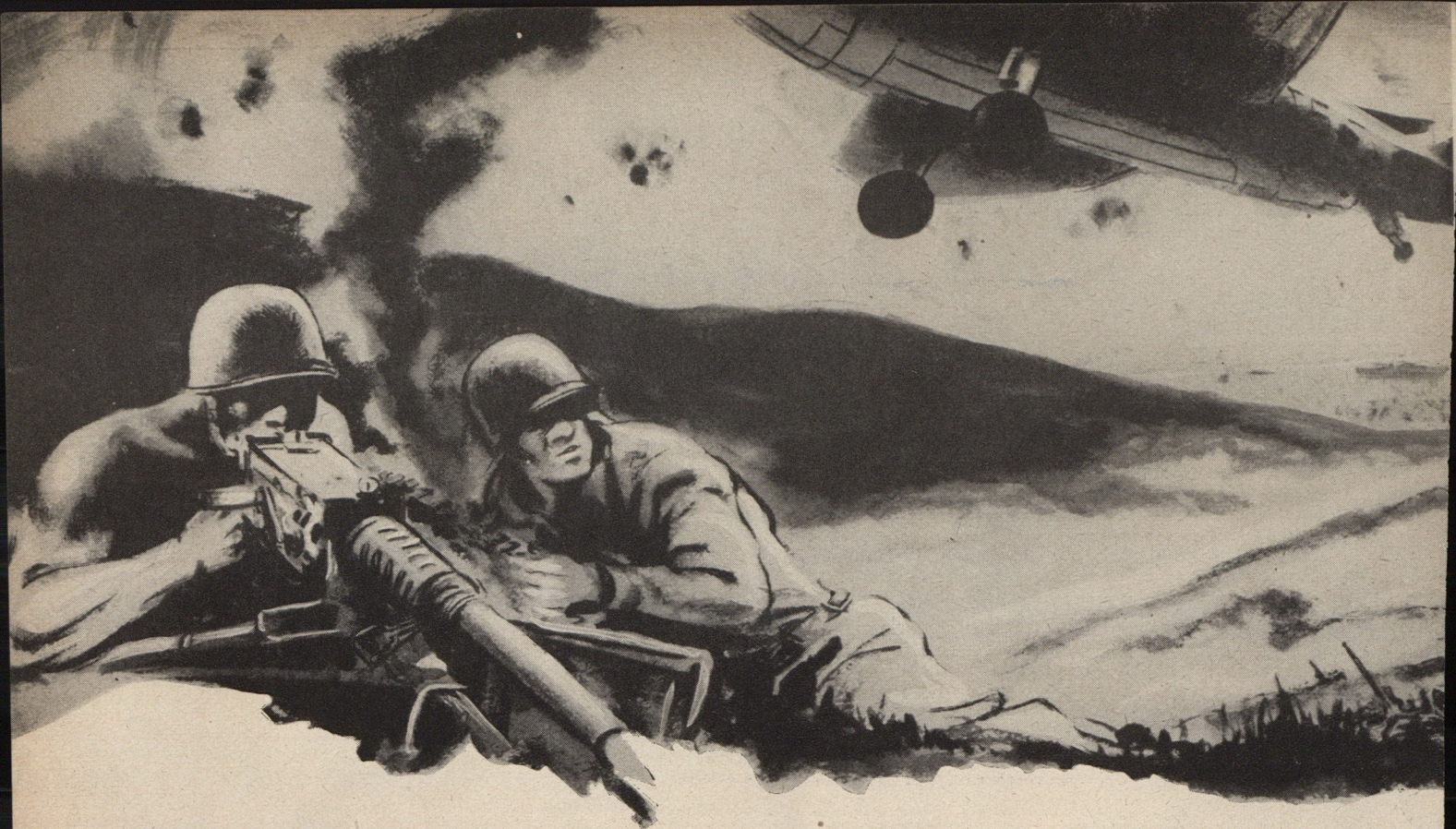


formation pictures on record. With their powerful Thunderjets they will roam from Maine to New Jersey, and far out to sea.

11. Ready to roll. Pilots aboard, last minute checks on engines are made before crewmen return to the line. While their own planes are out, Otis airmen help their buddies.

12. Day's end and all's well. After the mission, above, is over, the plane returns to the custody of the line crew. Tomorrow the maintenance cycle will begin all over again.





BACK TO THE PHILIPPINES

Autumn, 1944: The Allies began to close in. American troops captured Aachen—their first major German city. After three and one-half years of Nazi occupation, Athens, birthplace of democracy, was finally liberated. The United States proclaimed the end of martial law in Hawaii and deep in Asiatic waters, on the eastern coast of Leyte, Air Force GIs proved once again that you can't get anywhere without the guys on the ground.

The re-establishment of the AAF in the Philippines was unheralded by the roar of planes, by bombing, or by strafing. On A plus 2, a Coast Guard LST nosed shoreward and deposited on White Beach, Leyte, personnel and equipment of the 308th Bomb Wing (H), which constituted the First Air Task Force of the Far East Air Forces. The only Army airplanes were two L-5s and one L-4—all three in crates.

But the role played by sweating Air Force GIs in a frantic, five-hour emergency grind on the Tacloban strip near Leyte Beach will become a classic of the Philippine campaign.

It happened on A plus 5. For three days the ground echelon of the 308th had been slaving through the turmoil and confusion of a beach-head landing, the battle of trucks and jeeps with mud and mire, the threat of air raids without means of retaliation, the utter dependence on the infantry and artillery of the Sixth Army slowly pushing the Japs back beyond a sniper-wide perimeter. To carrier-based planes had been assigned the role of supplying air cover for the first few days of the inva-

sion. With the 308th had come no combat planes, but with it was the operational and planning organization, the brains and nerve center that would finally direct the land-based air assault against the Japs.

On A plus 5, Tacloban strip was the only landing field available in the area. Aviation engineers assigned to the Air Task Force had been working on it feverishly for three days. It was decided to widen and raise the runway. All night the engineers unloaded hundreds of truckloads of soft dirt along the length of the strip. Early in the morning their heavy scrapers and bulldozers were in a fever of activity. It was a rush job. The strip had to be made ready to receive AAF Fighters that were due two days later.

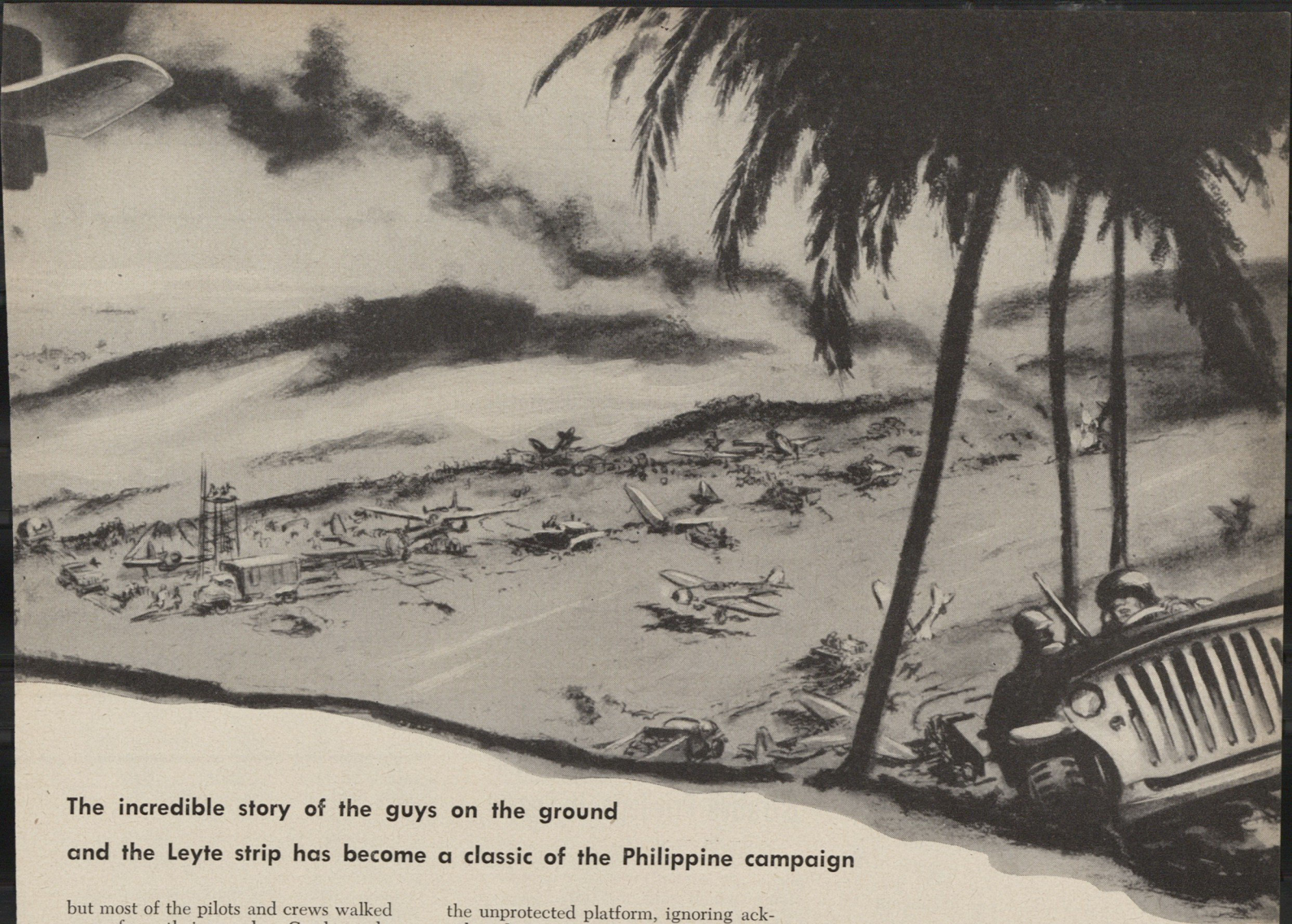
Then, shortly before 0800, their control with the Seventh Fleet flashed an urgent priority message to the 308th Bomb Wing. There had been an encounter off Leyte Gulf with a Japanese naval task force. Three jeep carriers were being shelled. The carrier planes operating in the air had no place to land and those still on the carriers were taking off immediately to escape destruction. All would shortly be out of gas, bombs, and ammunition unless they could come in at Tacloban strip. The other alternative was to crash-land at sea. The first demonstration had come that the Jap was going to put up a desperate fight for Leyte and the Philippines.

Because of the night's work on the strip, it was in no shape to take planes of any sort, but the engineers did what they could to work over the rough spots. A service squadron of the Fifth Air Force was camped along the beach, awaiting orders to move forward to another strip the moment it was taken from the Japs. Its personnel were alerted. Refueling units, crash trucks, and ambulances were made ready. Intelligence, supply and operations officers scattered over the area to unearth bombs and ammunition. A radio chief of a Fifth Air Force Fighter Control Sector and another of the Army Airways Communications System rushed to the beach and set up their portable communications equipment to guide the planes.

Fifteen minutes after the warning had been flashed to the strip, the first plane—a torpedo bomber—circled overhead. The emergency communication setup did not have his frequency. The pilot came in unassisted for a nerve-racking but miraculously safe landing. He told how he had just returned to his carrier when the shelling had begun, had taken off again without refueling or bombing up.

As he announced that the other planes would be arriving any minute, a roar came out of the north. Ten, twenty, thirty Navy planes appeared. The sky was full of circling fighters and bombers. The first pilots had given their radio frequency, but before communications could be established several planes, their gas exhausted, came in one on top of the other. Soft spots on the strip took their toll of planes,

By Maj. Herbert O. Johansen



The incredible story of the guys on the ground and the Leyte strip has become a classic of the Philippine campaign

but most of the pilots and crews walked away from their wrecks. Crash trucks raced up and down the runway while crews hauled wrecks out of the way under the wheels of other incoming planes. Flares were sent up to mark the end of the strip. Men frantically waved white flags to indicate bad spots and to warn incoming planes of the debris in their path.

Gradually some sort of order came out of chaos. Planes were being brought in at a rate of about one every two minutes. Then all hell broke loose as the Japs staged the first of several sneak air attacks.

The planes aloft were helpless—their guns empty, their gas tanks almost dry. Still, amid Jap strafing and solid curtains of ack-ack, they continued to land. Crews on the ground refused to be turned from the task. A plane would hardly maneuver into place along the edge of the strip before a refueling truck was alongside. Service crews were on the spot with bombs and belts of .50-caliber ammunition. Others pitched in to make emergency repairs to damaged wheels and wings. Armorers defused bombs in crashed planes even while they burned. Whenever there was a brief lull between landings, engineers went out across the strip with graders and rollers, pulling off only when the wheels of incoming planes touched the ground yards away. An emergency control tower was in operation less than two hours after the construction had begun. For more than five hours operations personnel sat atop

the unprotected platform, ignoring ack-ack and enemy strafing.

The first plane had landed at 0830. Two hours later fifty-nine planes were ready to take off again, gas tanks filled, repairs made, with bombs and ammunition for their guns. During a period of less than twenty hours Tacloban strip, which had been declared unserviceable that morning, had handled more than 200 landings and take-offs.

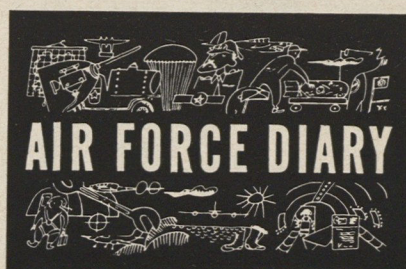
But the aviation engineers faced another night of labor, and the task of laying several thousand feet of landing mats that had been rushed ashore from ships in the harbor. Nor was there rest for the service squadron and ground crews. Numerous planes had still to be made ready for take-off, major repairs had to be effected. It was a grim night, for reports came in that the naval battle still raged. If the Japanese task force got through, it might threaten the entire Philippine landing operations.

The Navy pilots and their crews were grim, too, as they took their first food of the day at the 308th mess. They were grateful for the generous rations of wine that somehow materialized from nowhere. Not one of them blamed the condition of the strip for their crackups. Their apology was that most of them had not used a land strip for six months or more. The comment of the AAF boys was unanimous: "Those Navy guys sure can handle those planes."

That Wednesday and the following day were important ones in the Pacific war. Navy pilots returning from mis-

sions at sea the second day reported that the Jap Naval Task Force had been turned back, badly battered. Our hold on the Philippines was secure from sea attack.

Friday was another day of memorable activity for Tacloban strip. The last of the Navy planes had taken off and headed for their carrier bases as gangs of aviation engineers, naked to the waist, sweat rolling off their sun-blackened backs, laid landing mats at a furious rate. As noon approached, some few feet separated the two ends of the strip. The gap lessened, and as the last section was fastened into place a loud cheer filled the air. The weary engineers joined in turning their heads skyward. A formation of P-38s had come out of the south and was beginning to circle overhead. After two and a half long years, AAF planes were about to land in the Philippines.





IN RESERVE

Pay Boost Now Law—Morale Not So Low After All

Hike is applicable to Air Reservists on pay status for inactive duty training periods. Bill includes other reservist benefits

If, as certain people have contended on Capitol Hill recently, morale in the Navy is at dangerously low ebb, the fact was certainly belied last month by the grins that spread from Navy to Army to Air Force over passage of the long-labored pay bill. Beginning in October, the pay scale of officers and GIs will be hiked in amounts ranging from \$5.00 to \$250 . . . per month. (Note: AFA members interested in a complete breakdown of the new scale may get the information by sending a card to AFA Headquarters in Washington.)

Reservists who are members of the Organized Air Reserve and who participate in inactive duty training will have their training period pay raised in the same ratio as airmen on active duty.

Also of special interest to reservists: **►** An amendment to the original bill introduced by Senator Edwin C. Johnson of Colorado which permits members of reserve components who are retired or granted retirement pay for disability to be given the same pay, rights, benefits and privileges as retired regulars.

► Another amendment by Senator Johnson which equalizes the physical retirement pay of reserve officers with those of regulars when the disability occurred in line of duty in time of war or national emergency. This provision is applicable at the present, since technically the war has not yet ended.

One of the more important features of the bill—aside from any pay raise—is the new longevity set-up. There is no longer any standard longevity formula. For each grade at a given length of service a stated pay is prescribed.

Minutemen Row Over Administrative Privilege-It Seems

The Department of Defense released one of its briefer press statements last month which said, in full: "General Finch was relieved from duty by General Cramer. Subsequently, at the direction of Secretary of the Army Gray, he was restored to duty pending further study."

It referred to Maj. Gen. Kenneth F. Cramer, Chief of the National Guard Bureau, and Maj. Gen. George G. Finch, Chief of the Air Division, National Guard Bureau. They are No. 1 and No. 2, respectively, in the Bureau's chain of command.

Neither General was talking about the incident, nor were their subordinates in the Bureau, nor members of the Air Force.

Normally this leads Washington correspondents to bigger and better stories, but in this instance silence prevailed.

Correspondents could report merely a disagreement between the two Generals which widened into an open breach over questions regarding jurisdiction over the Air National Guard, and particularly with regard to General Finch's authority in dealing with the state Adjutants General. It was suggested that General Finch hadn't cleared all his communications with the states through General Cramer, and that General Cramer had put out an order to be sure of such clearance.

General Cramer, so the reports had it, issued orders relieving General Finch from duty, but the latter, taking the position that General Cramer did not have the legal right to dismiss him, reported for work as usual the next morning. Meanwhile, General Cramer had sent a message to all state Ad-

jutants telling them General Finch was out as Air Division Chief. Along about that point, so this report goes, the whole thing reached top level, meaning Secretary of the Air Force Symington and Secretary of the Army Gray. The latter told General Cramer to rescind the dismissal order, and that led to the Department of Defense press release we started with, and that leaves everyone as confused as he was at first.

Johnson Fills Roster of Civilian Components Policy Board

Appointments to the all-powerful Civilian Components Policy Board were announced last month by the Department of Defense. Loaded with more brass than a boiler works, the board is composed of five officers (Reserve or Regular) and a top civilian from each branch of the service plus an executive officer and a chairman (William T. Faricy, appointed some weeks ago).

It will be the duty of the Board to study reserve problems on a broad Department of Defense level, and to make recommendations for standardizing programs in all branches of the service.

From the Department of the Army: Karl R. Bendetsen, Special Assistant to the Secretary of the Army, and Generals L. T. Gerow, L. M. Kreber, N. E. Hendrickson, J. O. Adler and H. M. Milton.

From the Department of the Navy: Dan A. Kimball, Under Secretary of the Navy, Admirals Frank Watkins and I. M. McQuiston, Captain George Parkinson, and Marine Colonels M. J. Maas, and C. H. Cox.

From the Department of the Air Force: Harold C. Stuart, Assistant Secretary of the Air Force, Generals J. P. McConnell, E. H. Zistel, V. E. Bertrandias, Thomas O. Hardin, and Colonel O. H. Stout.

AF Announces Policy Revision on Integration of Reservists

The Air Force has announced a revision of its policy covering the integration of extended active duty officers into the regular establishment. Principal changes in the program are:

► The release of only one "integration list" each year instead of two.

► Added emphasis upon youth and education, in line with the announced policy of the Air Force to build its future officer corps on young men with high educational qualifications.

No reduction in the overall number of Regular commissions to be offered.



Corollary Reservists in California give the AF's F-86 a fast once over. No, Henry, they didn't get to fly it.

Profs Can Learn Too . . .

to extended active duty officers is anticipated through changing from a semi-annual to an annual integration program.

The keen competition for these commissions, the increasing number of applications, and the relatively small number of commissions that can be offered each year were instrumental factors in bringing about the changes in the program.

These factors preclude the issuance of the Regular commissions at this time, and prescribe the selection of one list each year instead of two to attain better comparison of applicants, and a logically better selectivity.

By postponing selection of a new integration list until next spring the Air Force expects the competition to include many former servicemen who left the service after the war, completed their education, and have returned with intentions of making the Air Force a career, as well as the graduates of the post-war aviation cadet and ROTC programs, who are just becoming eligible for consideration.

ConAC Announces Vacancies in JAGD Reserve Department

Openings for qualified officer-lawyers in the AF Reserve's newly established Judge Advocate General's Department Reserve, were announced last month by the Continental Air Command.

Applicants for the Air Force JAGD Reserve appointments and assignments must be United States citizens and over 21 years of age—but must not have reached the maximum age for their particular appointed grades—which, for first lieutenants is 32; captains—36; majors—44; lieutenant colonels—50; and colonels—54.

In addition, for appointment to a first lieutenant's grade in the AF JAGD Reserve, an applicant must be a graduate of an approved law school and be a member of the Federal bar or of the highest court of a State or Territory of the United States.

For appointment or assignment in grades above that of first lieutenant, applicants must possess the qualifications required for first lieutenant plus additional years of legal experience. For the grade of captain, this is four years; major, eight years; lieutenant colonel, twelve years; and colonel, sixteen years.

Age and professional requirements waivers may be granted by the USAF's Judge Advocate General, when justified by an applicant's demonstrated military or civilian training and experience.

Eligibles for the USAF JAGD Reserve appointments include all former and present Air Force members, excepting Regular commissioned officers. Qualified persons without prior military experience are also eligible.

Individuals interested in applying for appointments can obtain blanks from the Continental Air Command, Mitchel AFB, New York, or from Headquarters of any of the numbered Air Forces.



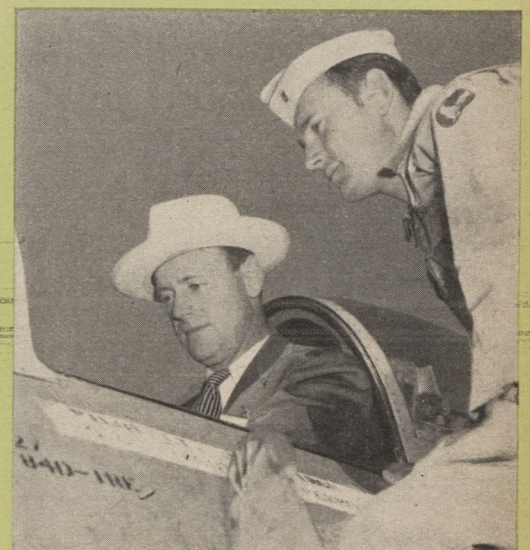
Just to "get the feel" Professor E. A. Atkinson of Montana State University, Missoula, Montana, tries on a crash helmet and oxygen mask. He was disappointed there were no two-place jets handy for a flight. Lt. Clyde Reynolds of 78th Fighter Group assists.



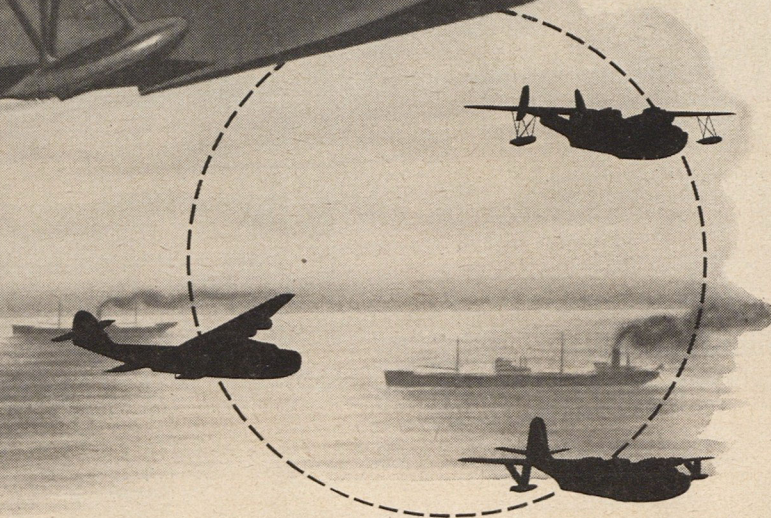
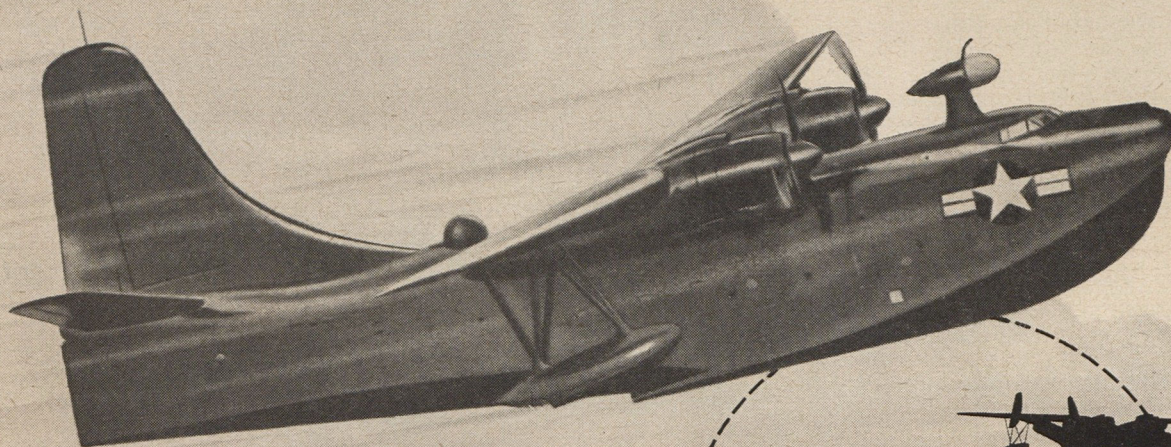
Captain Edward Sharpe, another 78th Fighter Group pilot, explains the workings in detail of an air speed indicator to Nelson Wahlstrom, University of Washington.

The idea of "Operation Professors" was born last summer. It was a plan to bring the college professors of a few of the schools giving Air-ROTC instruction out to summer encampment along with their cadets for the purpose of (a) seeing how well the youngsters adapted themselves to Air Force life, and (b) picking up a few pointers that might come in handy back in the classroom.

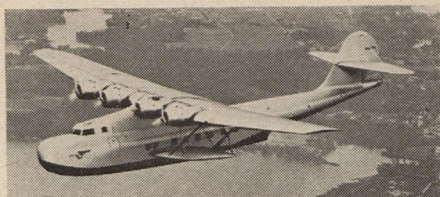
The experiment was held at Hamilton AFB, California, and with such success that it was an open question as to who benefited most from the encampment—the teachers or the pupils. For two days presidents, deans and professors from 16 west coast schools poked around the AF's speediest jet planes, listened to lectures, watched aerial rat-races and generally got into the business of airpower up to their crash helmets. With the experiment successfully behind it, the AF is already planning to expand "Operation Professors" to a nation-wide basis as soon as possible.



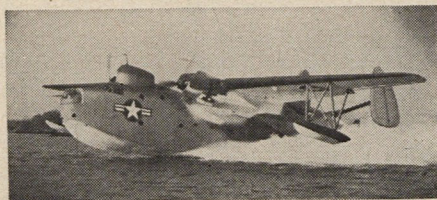
Prof. Max Worthington investigates the cockpit of one of the 78th's F-84 Thunderjets. Lt. J. P. Finch, one of 78th's crack pilots, does briefing.



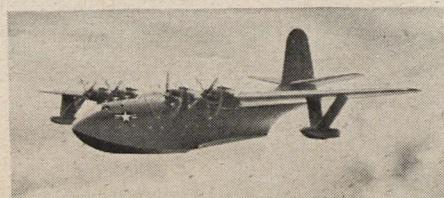
RUGGED NEWCOMER to a Select Circle



1934—THE CHINA CLIPPER, first of the big Martin flying boats to fly the Pacific, was the first over-ocean luxury liner, confirmed the practicality of regularly scheduled over-ocean transport flights.



1937—THE MARINER LINE, begun in this year, had no peers in World War II as patrol bombers and search planes. And hundreds of Martin Mariners, including PBM-5 shown above, still serve the Navy.



1948—THE CAROLINE MARS, world's record-holder for total passengers carried in a single flight, is today's giant descendant of the original "Old Lady" Mars, largest flying boat in the world when it was built in 1942.

WITH its strikingly longer afterbody hull and husky construction, the new Martin XP5M-1 is designed to operate from any of the Earth's open waters 95% of the year! This rugged patrol craft makes safer landings with less pitching and bouncing. Tail surfaces are protected from waves by added buoyancy in the stern. Take-off time and distance are shortened. And the hull is designed to eliminate "skipping off" in landing.

Ideal for patrol work over rough seas, this husky twin-engine plane is expected to have greater range than any other flying boat in its class when completely developed. It's the latest in a great family of Martin flying boats! THE GLENN L. MARTIN COMPANY, BALTIMORE 3, MARYLAND.

Martin

AIRCRAFT

Builders of Dependable



Aircraft Since 1909



IN RESERVE

Harold Stuart Gets Asst. Sec. Job Plus Woes of Air Reserve

Harold C. Stuart, who has served as special consultant to Secretary Symington since last May, has been named Assistant Secretary of the Air Force.

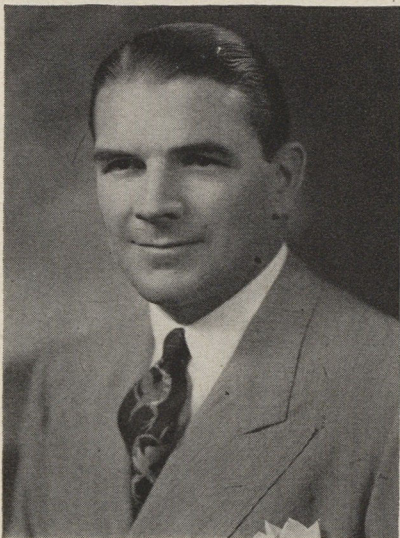
In this capacity he becomes Secretary Symington's top man on Air Reserve policy, and is the senior Air Force representative on the Civilian Components Policy Board of the national defense establishment.

Stuart will handle, in addition, all policy for the Air Force relating to Civilian Components, including Air National Guard, as well as civil aviation matters.

A Life Member of Air Force Association, Stuart was Wing Commander for AFA in Oklahoma up to the time he came to Washington from his home in Tulsa. In the Air Force he fills the position last held by C. V. Whitney, now Undersecretary of Commerce, a founder and former Director of AFA. In his new berth, Stuart is expected to work as closely as ever with the Association.

Stuart, who is 37, left the Air Force as a lieutenant colonel early in 1946 after four years' wartime service. He served as staff intelligence officer of 9th Headquarters and later with combat intelligence forces in England, France and Germany, then with the SHAEF mission in Norway as staff intelligence officer.

Graduated from the University of Virginia in 1936, Stuart practiced law in Tulsa until 1941, then served as judge of the Tulsa Court of Common Pleas until entering the service in 1942.



As new Assistant Secretary of USAF, Harold Stuart, former AFA Wing head, will be the top man in Reserve.

HIGH BULWARK...



Nearly a decade of highly-specialized experience is behind the design and production of these Northrop Scorpion F-89 all-weather interceptors, the U. S. Air Force's new high-altitude fighters.

Hundreds of Black Widow F-61s, first planes designed specifically as night fighters, were engineered and built by Northrop and served on both fronts during World War II.

The Scorpion F-89, now in production, is a fast-climbing air destroyer designed and built by Northrop's experienced engineers and craftsmen as a worthy successor to the famed Black Widow. With electronic search equipment, heavy armament, rapid climb and very high speed, it can defend our homeland against attack by today's bombers.

NORTHROP AIRCRAFT, INC., Hawthorne, Calif.





AFA NEWS

New Jersey Wing Holds 3rd Annual Convention

President R. S. Johnson Presents Wing with Original AFA Charter Testimonial Dinner to Gill Robb Wilson Highlights Program

The Honorable Alfred E. Driscoll, Governor of New Jersey, was guest speaker at a New Jersey AFA Wing testimonial dinner to former state Aviation Director Gill Robb Wilson on September 25 at the Berkeley-Carteret hotel in Asbury Park. The event was part of the New Jersey Wing's third annual convention.

The Governor stated that the future of his state is dependent upon its becoming the international air freight terminal for metropolitan New York and Philadelphia. Governor Driscoll praised Mr. Wilson for his services to the aviation industry as well as to New Jersey while its aviation director.

"Gill Robb Wilson has been the mouthpiece of aviation," he declared.

AFA President Robert S. Johnson claimed the Russian atomic bomb episode to be no reason for worry to this country and urged that the organization members keep their eyes on the American Air Force. He stated the purpose

of the Air Force Association was to see that the United States has adequate air power in both military and civilian phases.

Brig. Gen. Robert L. Copsey, present state aviation director, presented Mr. Wilson with the AFA Wing's first trophy award for his service to aviation. General Copsey declared much of our air power today to be the result of inspiration given by Mr. Wilson, who pioneered for air power expansion.

Upon receiving the trophy, Mr. Wilson said he felt it a privilege to devote his life to "a cause which has the potential of maintaining the peace of the world." "Intellectual sweat" and human lives have both been needed to achieve America's aviation leadership, and he urged the Association to continue to press for adequate commercial and military air forces.

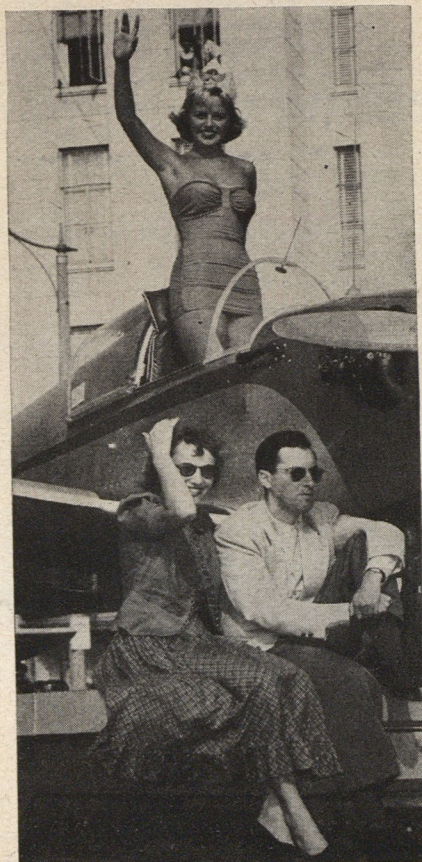
A plaque was awarded to the Wright Aeronautical Corporation on behalf of the Wing by Irving B. Zeichner, At-

lantic Highlands, retiring AFA New Jersey Wing commander and a member of the organization's board of directors. The award, also the first to be given by the New Jersey unit, was made in recognition of the company's aircraft engine research program.

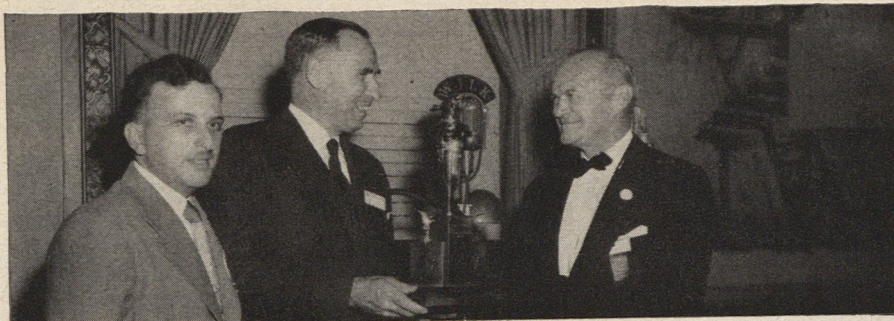
The New Jersey Wing also elected officers for its forthcoming organization year, replacing Mr. Zeichner with Warren DeBrown, Red Bank, as its commander. Other new officers included Morris Blum, Newark, and Melvin Brackendorff, Atlantic City, as vice commanders; John Currie, Passaic-Bergen squadron, treasurer, and James Doeler, New Brunswick, secretary.

Honored guests at the testimonial dinner to Mr. Wilson included Governor Driscoll, General Copsey, Colonel Pachyuski, commanding officer at Watson laboratories; Wayne D. McMurray, editor of The Press, and State Senator J. Stanley Herbert.

Other convention highlights included: a showing of the latest Air Force films, including one of the much-discussed B-36 bomber; a symposium on the status of the air reserve in New Jersey; an interview with Robert S. Johnson over Station WJLK; and a reunion cocktail party.



Mary H. Peterson, Santa Monica AFA Queen, in "Quias de Oro" parade. Seated, Mrs. Bud Riley, Norman Lynn.



Brig. Gen. R. L. Copsey presents N. J. Wing's first trophy award to Gill Robb Wilson at convention ceremony. Irving B. Zeichner witnessed the presentation.



AFA President Bob Johnson presents permanent charter of N. J. Wing to Irving B. Zeichner, retiring wing commander. Left to right, Gill Robb Wilson, Zeichner, Gov. Driscoll of N. J., Johnson, Brig. Gen. R. L. Copsey, N. J. Aviation Director.

AFA STATE ROUNDUP



CALIFORNIA

Los Angeles: New officers of the AFA's ATC Squadron 1, were announced recently.

They are Forrest Blalock, commander; Ken Mann, vice commander, E. William Santelman, secretary; A. B. (Pat) O'Brien, treasurer; and directors David Moir, Phil Caldwell, Arthur Kelly and James Warren.

Richard C. O'Brien, 746 No. Lafayette Park Place, was named commander of the ETO Squadron, AFA, at a meeting held in the Army-Navy Officers' Club, Los Angeles, on September 10.

Other officers include: H. G. Oaks, vice-commander; James Powell, secretary; Bernard T. Peters, treasurer.

Councilmen are: A. H. Messersmith, G. A. Woolard, L. Coutt and H. O'Neill.

DISTRICT OF COLUMBIA

Washington: Lt. Col. C. L. Tseng, Chinese AF, Air Attache, was the guest speaker at the September 15 meeting of the Cardinal Squadron, AFA, in Washington.

Colonel Tseng gave the official translation of the Chinese characters on the leather emblem given to our airmen flying in China to identify them to the Chinese people in case of forced landings.

The English translation is as follows: "This foreigner comes to China from the USA to help us fight. All military and civilian personnel succor him with all your might. Commission on Aeronautical Affairs Serial Number."

He explained that the Commission on Aeronautical Affairs, the issuing authority, was the name formerly applied to the Headquarters of the Chinese AF.

NEW JERSEY

Stirling: Members of the former Stirling Naval Cadet Corps and Troop 59, Boy Scouts, were entertained recently by local Union-Morris Air Force Association Squadron at DeFilippis Hall. Operational films on the recent war were shown by members of the US Army and Air Force recruiting station, Plainfield.

Approximately 80 youths and adults attended. Further discussion on proposed model flying club for the youth of this vicinity consumed the balance of the program.

NEW YORK

Staten Island: Planes going to waste on Army fields throughout the country should be used for National Guard training, Eric Stuve, commander of Staten Island Squadron, AFA, declared at a meeting in Stapleton, recently.

Many of the planes are deteriorating through idleness, he said. They are for the most part obsolete, but Stuve expressed the opinion that they could be useful for training aviation students.

Vincent Drury and Salvatore Scature reported on a meeting of the associa-



Jimmy Stewart and his bride, former Gloria Hatrick McLean, are greeted in true "Aloha style" by members of Hawaii Wing as they arrive at Honolulu Airport for honeymoon. Left to right, George Unmacht of Honolulu Chamber of Commerce; AFAers S. E. Fern, M. Donahue and E. E. Johnston; Jimmy and Gloria Stewart.

tion's New York State executive committee in Manhattan last month.

Brooklyn: "Operation Wing Ding" was shown at a meeting of the 1st Brooklyn Squadron, AFA, held recently in the American Legion clubhouse. AFA President Robert Johnson spoke.

PENNSYLVANIA

Wilkes-Barre: Clyde Davis, 24-32 E. Northampton Street, was elected com-

mander of the Greater Wilkes-Barre Squadron, AFA, last month.

Other officers elected were: William Cushner, vice-commander; William De Rose, secretary; and Robert W. Sloan, treasurer.

Council members include: J. Henry Pool, Stanley K. Walborn, Michael G. Solomon, Burton S. Johnson, Ralph Brown, Joseph C. Hudak, Fred Pool and John Welker.

RESOLUTION AND REPLY

AFA RESOLUTION

Passed by 1949 National Convention Air Force Association
At Chicago July 1st thru 4th
MESSAGE TO "HAP" ARNOLD

WHEREAS, We of the Air Force Association who have served with and under General of the Air Force (formerly General of the Army) H. H. "Hap" Arnold, regret his absence from our convention, enforced by the strain of his tremendous war-time responsibilities and contribution as the creator of the Army Air Forces and builder of the foundation of the United States Air Force, and miss the inspiration of his presence; therefore, be it
RESOLVED, That we wish him the best of health and great happiness in his well-earned retirement, we hereby instruct the President of the Association to convey to "Hap" Arnold the respect, affection and good wishes of this convention and the members of the Air Force Association, and to send him a copy of this resolution.

AIR FORCE ASSOCIATION
Robert S. Johnson

GENERAL ARNOLD'S REPLY

Dear President Johnson:

Thanks a lot for the Resolution of the Air Force Association.
You all know how much I appreciated the cooperation of every man and woman who served in the Army Air Forces. Without their combined efforts we never could have achieved our power and strength. I was proud of every Command that served under me.
Thanks, again, for the Resolution.

Sincerely yours,
H. H. ARNOLD,
General of the Air Force.



AFA'S SQUADRON LEADERS- THEIR CONTACT ADDRESSES

Listed below are the names, leaders and contacting addresses of the 175 chartered AFA Squadrons from coast to coast and in Hawaii. The listing has been requested by AFA members, both in and out of Squadrons, who feel that thousands more would join their local AFA unit if they just knew whom to contact. It is true that these 175 Squadrons are only a start toward the number needed to do the job the Air Force Association has set about. Every member is urged to contact the Squadron nearest him, if at all possible, and participate in local AFA activities.

ALABAMA

FLORENCE SQDN.

E. E. Patterson, Cmdr.
P. O. Box 96
Rogersville, Ala.

MOBILE SQDN.

C. P. Powell, Secy.
P. O. Box 165
Mobile 2, Ala.

ARIZONA

PHOENIX SQDN.

Mel Goodson, Cmdr.
1702 N. 15th Ave.
Phoenix, Ariz.

ARKANSAS

MONTICELLO SQDN.

Jack Shelton, Cmdr.
Monticello, Ark.

CALIFORNIA

ALTADENA SQDN.

James Gilmore, Cmdr.
2300 N. Lake Ave.
Altadena, Calif.

ORANGE COUNTY SQDN.

Billy D. Ray, Secy.
8042 E. Taylor St.
Buena Park, Calif.

SAN JOSE SQDN.

Bernard Barrett, Cmdr.
661 Emory Ave.
Campbell, Calif.

PACIFIC AIR FORCES SQDN. (L.A.)

Robert Enger, Cmdr.
11829 Pacific Ave.
Culver City, Calif.

ROGER-WILCO SQDN.

A. Weber, Temp. Secy.
120 W. Washington Blvd.
Liver City, Calif.

FRESNO SQDN.

Dean Woods, Cmdr.
P. O. Box 1266
Fresno, Calif.

INGLEWOOD SQDN.

G. A. Ballantyne, Cmdr.
107 S. La Brea
Inglewood, Calif.

LONG BEACH SQDN.

Court Prowell, Jr., Cmdr.
1068 American Ave.
Long Beach, Calif.

L. A. ATC SQDN. NO. 1

E. M. Ellingson, Cmdr.
Box 10096 Airport Station
Los Angeles 45, Calif.

L. A. SQDN. NO. 1

Earl R. Ewine, Jr., Cmdr.
505 Andrix St.
Monterey Park, Calif.

L. A. SQDN. NO. 2

John Visscher, Cmdr.
456 Westminster Ave.
Los Angeles 5, Calif.

ETO SQDN. OF L. A.

Richard C. O'Brien, Cmdr.
746 No. Lafayette Park Pl.
Los Angeles 26, Calif.

SAN GABRIEL VALLEY SQDN.

I. L. McElliot, Cmdr.
2321 Repetto Ave.
Montebello, Calif.

SACRAMENTO SQDN.

Joseph Schlegel, Cmdr.
3161 Marysville Road
N. Sacramento, Calif.

EAST BAY SQDN.

Jack Dunne, Cmdr.
300-12th St.
Oakland, Calif.

SANTA MONICA SQDN.

William E. Tobias, Cmdr.
175 Pier Ave.
Ocean Park, Calif.

SOUTH BAY SQDN.

Glen T. Noyes, Cmdr.
733 Esplanade
Redondo Beach, Calif.

CONTRA COSTA SQDN.

James F. McNeill, Cmdr.
526 Civic Center St.
Richmond, Calif.

RIVERSIDE SQDN.

Scott W. Carl, Cmdr.
3326 7th St.
Riverside, Calif.

SAN BERNARDINO SQDN.

David W. Barrows, Cmdr.
444 E. Orange St.
San Bernardino, Calif.

SAN DIEGO SQDN.

Leroy G. Atkinson, Secy.
1314 Palmer Court
San Diego, Calif.

SAN FRANCISCO SQDN.

Mike Kavanaugh, Cmdr.
431 Ralston St.
San Francisco, Calif.

STOCKTON SQDN. NO. 1

Clements Mayer, Cmdr.
442 N. Sutter St.
Stockton, Calif.

VAN NUYS SQDN.

Stiles B. Merrill, Cmdr.
7942 Norwich Ave.
Van Nuys, Calif.

SAN FERNANDO VALLEY SQDN.

Robert C. Snider, Secy.
8843 Van Nuys Blvd.
Van Nuys, Calif.

COLORADO

PIKES PEAK SQDN.

Henry C. Mulberger, Cmdr.
c/o Atomic Research Corp.
T-380 Peterson Field
Colorado Springs, Colo.

CONNECTICUT

HARTFORD SQDN.

Ragnar Hanson, Cmdr.
55 Elm St.
Hartford 15, Conn.

NEW HAVEN SQDN.

John J. MacAulay, Cmdr.
Box 999
New Haven, Conn.

FLORIDA

FORT PIERCE SQDN.

Marion A. Ramsey, Cmdr.
Box 716
Fort Pierce, Fla.

AIR SEA RESCUE SQDN.

James C. Rosser, Cmdr.
2411 Tigertail Ave.
Miami, Fla.

TAMPA SQDN.

Mrs. H. K. Wells, Secy.
P. O. Box 1792
Tampa, Fla.

GEORGIA

ATHENS SQDN.

Ben A. Hodges, Secy.
376 S. Church St., Apt. 3
Athens, Ga.

AUGUSTA SQDN.

Edward E. Zeigler, Cmdr.
c/o Sears Roebuck Co.
Augusta, Ga.

IDAHO

BOISE SQDN.

Clarence Fuller, Cmdr.
1120 Fort
Boise, Idaho

POCATELLO SQDN.

William S. Hill, Jr., Cmdr.
P. O. Box 227
Pocatello, Idaho

ILLINOIS

AURORA SQDN.

Robert Powell, Secy.
431 Galena Blvd.
Aurora, Ill.

SQDN. NO. 41

George W. Wilson, Secy.
4003 N. Broadway
Chicago, Ill.

CHICAGO SQDN. NO. 43

Charles F. Stebbings, Cmdr.
102 East Chestnut St.
Chicago 11, Ill.

STATE STREET SQDN.

Arnold H. McKay, Vice Cmdr.
c/o British Overseas Airways
37 S. Wabash Ave.
Chicago 3, Ill.

PURE OIL SQDN. 13

Arthur B. Leach, Cmdr.
35 E. Wacker Drive
Chicago, Ill.

ANG SQUADRON. NO. 1

Wilson V. Newhall, Cmdr.
5400 W. 63rd St.
Chicago 38, Ill.

SOUTH SHORE SQDN. NO. 21

Edgar Zimont, Cmdr.
6806 Cornell Ave.
Chicago 49, Ill.

UNITED AIRLINES SQDN.

K. E. Swanson, Cmdr.
5959 S. Cicero
Chicago, Ill.

NORTH SHORE SQDN. NO. 40

Howard H. Rosenheim, Cmdr.
626 Oakton St.
Evanston, Ill.

PARTICIPATING SQDN. NO. 54

W. P. Bunnell, Cmdr.
P. O. Box 126
Fox River Grove, Ill.

KANKAKEE SQDN.

Lawrence D. Weeks, Secy.
556 Oak Street
Kankakee, Ill.

SANGAMON SQDN.

Russel L. Stickney, Cmdr.
Rm. 302, United Mine Wkrs. Bldg.
Springfield, Ill.

INDIANA

TRI-COUNTY SQDN.

William C. Edwards, Cmdr.
2017 O Street
Bedford, Ind.

EVANSVILLE SQDN.

Charles C. Huppert, Cmdr.
825 S. Elliott Street
Evansville 13, Ind.

80TH SQDN.

Paul L. Marshall, Jr., Cmdr.
314 Gregory
Munster, Ind.

SOUTH BEND SQDN. NO. 1

S. J. Crumpacker, Jr., Cmdr.
P. O. Box 806
South Bend, Ind.

TERRE HAUTE SQDN.

Robert J. Kadel, Secy.
28 South 7th St.
Terre Haute, Ind.

IOWA

AMES SQDN.

Robins Jackson, Cmdr.
1501 Summit
Ames, Iowa

CEDAR RAPIDS SQDN. NO. 1

Robert N. Ettinger, Cmdr.
2635 Bever Ave., S. E.
Cedar Rapids, Iowa

DAVENPORT SQDN.

Herbert R. Elliott, Cmdr.
P. O. Box 418
Davenport, Iowa

DES MOINES SQDN.

Don E. Songer, Cmdr.
3804 Forest Ave.
Des Moines, Iowa

KEOKUK SQDN.

Irwin R. Lindner, Cmdr.
Municipal Airport
Keokuk, Iowa

PELLA SQDN.

Lee W. Vriezelaar, Cmdr.
116 Broadway
Pella, Iowa

SIOUX CITY SQDN.

W. R. Haines, Cmdr.
308 14th St.
Sioux City, Iowa

KANSAS**MANHATTAN SQDN.**

Gail F. Farrell, Secy.
513 Leavenworth Ave.
Manhattan, Kansas

WICHITA SQDN. NO. 1

William S. Oman, Cmdr.
738 South Dellrose
Wichita, Kansas

KENTUCKY**ASHLAND SQDN.**

William A. Mordica, Jr., Cmdr.
2256½ Winchester Ave.
Ashland, Ky.

COVINGTON SQDN. NO. 1

Allan M. Broadbent, Secy.
P. O. Box 82
Covington, Ky.

LEXINGTON SQDN.

Elmer I. Thompson, Cmdr.
Dixie Court
Lexington, Ky.

PADUCAH SQDN. NO. 1

Robert Dodson, Secy.
2310 Jefferson
Paducah, Ky.

LOUISIANA**NEW ORLEANS SQDN.**

Louis G. Dutel, Jr., Secy.
823 Perdido St.
New Orleans, La.

SHREVEPORT SQDN.

B. F. Turner, Vice Cmdr.
2026 E. Texas St.
Bossier City, La.

MARYLAND**BALTIMORE WAC SQDN.**

Miss Lillian Beard, Cmdr.
203 N. Front St.
Baltimore, Md.

BALTIMORE SQDN. NO. 1

James W. Blackhurst
1 W. 22nd St.
Baltimore 18, Md.

GREATER CUMBERLAND SQDN.

William G. Burns
Box 584
Cumberland, Md.

MASSACHUSETTS**ARLINGTON SQDN. NO. 1**

Robert Hauser
10 Cleveland St.
Arlington 74, Mass.

BOSTON SQDN.

Albert A. Eldridge
180 Marlborough St.
Boston, Mass.

CAMBRIDGE SQDN.

Elmer F. Walsh
107 Aberdeen Ave.
Cambridge 38, Mass.

CHICOPEE SQDN.

E. W. LeClair, Cmdr.
Box 271
Chicopee, Mass.

FALMOUTH SQDN.

Albert H. Fiedler, Cmdr.
26 Walker St.
Falmouth, Mass.

MALDEN SQDN.

Robert F. Maycan, Cmdr.
70 Cedar St.
Malden 48, Mass.

SALEM SQDN.

Edward R. Tufts, Cmdr.
3 Horton Pl.
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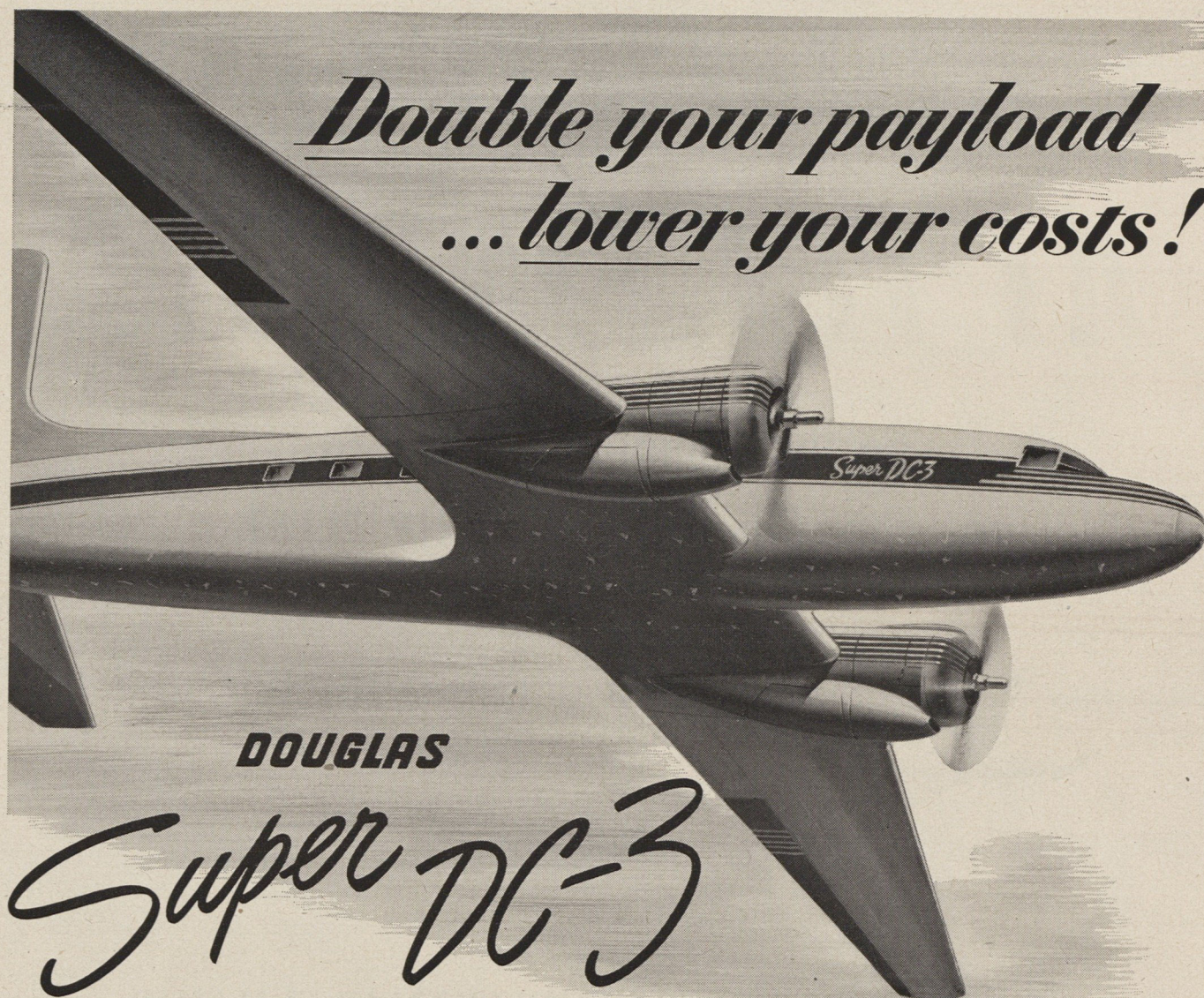
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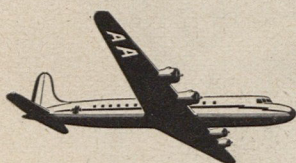
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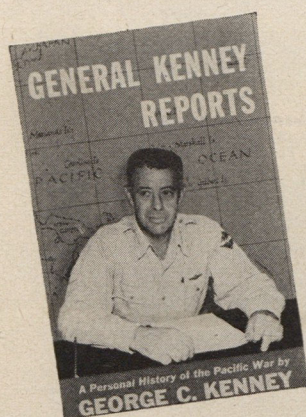
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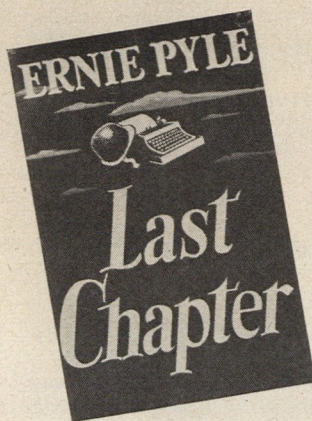
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49. SEE HERE, PRIVATE HARGROVE. By Marion Hargrove. Now in its 15th printing, this classic of Army life is still going strong. Maybe you want to forget your yardbird days, but chuckle over this one anyhow.

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50. LAST CHAPTER. By Ernie Pyle. This is the story of the trip Ernie didn't have to make. He was a tired, jittery man when he returned to the States and he wanted nothing better than a rest. But the War Department asked him to go to the Pacific for his mere presence was an infallible morale booster. Ernie couldn't say no. He covered the Pacific until a sniper's bullet got him.

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54. MacARTHUR AND THE WAR AGAINST JAPAN. By Frazier Hunt. This is the heroic story which began in July 1941 when MacArthur was given the almost impossible task of preparing the Philippines for immediate war and carried up to the landings at Hollandia in April 1944. Hunt was a personal friend of MacArthur and had access to many official records. The result is a warm and graphic account of the early days of the Pacific War.

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61. TO HELL AND BACK. By Audie Murphy. America's most decorated GI recounts his personal experiences in the foxholes and dugouts of World War II. The story of the little men who had only their friends and their weapons between them and the enemy.

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62. SLIGHTLY OUT OF FOCUS. By Robert Capa. Pretty hard to describe what this book is about. It has hundreds of photos Capa took throughout the fighting in the ETO. They rate with the best ever taken. It has a text of what happened to Capa and what happened to Capa probably never happened to anyone else. A thoroughly enjoyable and beautiful book which every vet of the European war will treasure.

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64. THE ART OF FLIGHT INSTRUCTION. By Edward C. Bailly, Jr. With a rare ability for writing simply about the problems of flight, the author has distilled into this book the essence of his long experience in teaching hundreds of Air Force and private people how to fly.

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65. THE GALLERY. By John Home Burns. This is a novel about wartime Naples—of GIs and Italians, of love and dirt and misery. It is a shocking, bitter, powerful yet hopeful novel of the conquered and their conquerors. Burns has written a passionate indictment of what war does to human dignity.

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66. AIR VICTORY. By Harold Hinton. This is a must for your aviation library. Harold Hinton, noted correspondent for the *New York Times*, has detailed the story of how the weapon of airpower was forged from its earliest beginnings through World War II. It is the story of men and machines, of planners and dreamers, fighters and flyers.

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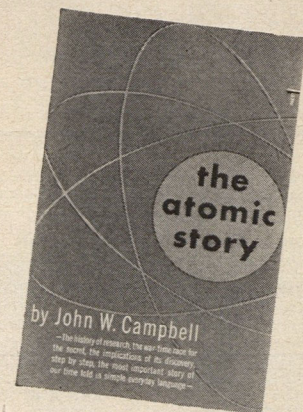
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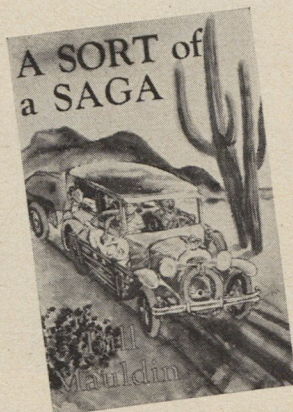
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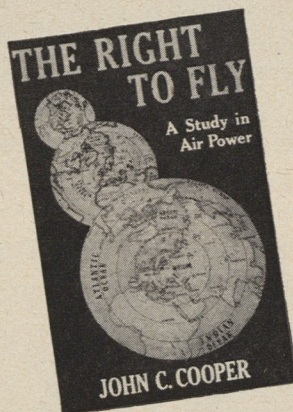
AIRMAN'S SHELF



76. A SORT OF A SAGA. By Bill Mauldin. Here is the latest Mauldin book, just published and destined to outsell all his others. Bill has gone back to his childhood days for this one. It's a tale of the southwest—Arizona and New Mexico, mostly. Bill writes with the same honesty and wit he has always shown, but this book omits all arguments of war, peace and politics. Illustrated with his own drawings, of course. **\$3.50**

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78. GENERAL GEORGE S. PATTON, JR. By James Wellard. A biography of the very controversial and almost legendary Patton. An irascible and often unjust man but such a fighter and leader that Eisenhower couldn't overlook him. **\$3.00**



79. THE RIGHT TO FLY. By John C. Cooper. A beautifully gotten out book on airpower and international aviation from the first World War until the present. Contains a chapter on aviation in the Soviet Union which should be of special interest at this time. Thoroughly documented with the texts of international treaties and illustrated with numerous charts. **\$5.00**

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81. THE AIR OFFICER'S GUIDE. This is a new edition of the famous military encyclopedia designed for Air Force officers of all grades. Here, in one book, are all the facts vital to your profession along with a healthy amount of good sound advice. The text is profusely illustrated with hundreds of charts, photos, maps and color plates and contains actual shots of various types of aircraft. **\$3.50**

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84. THE GATHERING STORM. By Winston Churchill. One of the most important books of the year. Churchill is surely one of the great figures in world history. He is also a writer without peer and what he has to say about the events leading up to the great war must be of interest to every student of history. You'll find that Churchill the philosopher and Churchill the phrase-maker are an unbeatable combination. **\$6.00**

85. THE ARMY AIR FORCES IN WORLD WAR II. Vol. I—Plans and Early Operations. This book, assembled by the Historical Division of the AAF, charts the course of our youngest military service from a handful of men and ancient machines at the beginning of the war to a force of unprecedented range and striking power. **\$6.00**

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87. THE NAKED AND THE DEAD. By Norman Mailer. Perhaps the most widely read of all war novels, this book has been the center of a controversy that has rocked the literary world, and the book-reading public. To read this book is to have a violent opinion about it. Some say it is the dirtiest, filthiest piece of trash they have ever read. Others say it ranks with the few really great war novels with its realism and clarity. Nobody ever said it bored him. **\$4.00**

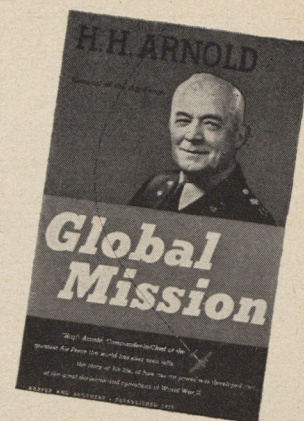
88. PURPLE HEART VALLEY. By Margaret Bourke White. There were many purple heart valleys on the world's battlefronts. This particular one was in Italy, and from the mountains where the German 88s were, the valley caught hell. Margaret Bourke White went into the valley with her camera and her reporter's eye and this book is a pictorial record of what she saw. **\$3.00**

89. FROM FIJI THROUGH THE PHILIPPINES. A pictorial history of the 13th Air Force. One of the handsomest books to come out of World War II. In a series of 96 brilliant paintings, 16 of them in full color, the artist has brought to life the entire sweep to the Philippines. A magnificent permanent record. **\$10.00**

90. GUARD OF HONOR. By James Gould Cozens. Here is the 1949 Pulitzer prize winner. It is a very busy, very masculine novel of three tense days at the big air base in Ocanara, Florida, in 1943. The people who really matter in this book are he-men drawn to life and fascinating in conflict. **\$3.50**

91. A TENT ON CORSICA. By Martin Quigley. This is an airman's novel. Anyone who ever flew a mission, sweated out a buddy or tanked himself up on a three-day pass will find this a vividly familiar story. There haven't been many "Air Force" novels and this one you will want to own. **\$2.75**

92. MacARTHUR'S JAPAN. By Russell Brines. A well-written, documented account of the situation in present-day Japan, and the attempts of Douglas MacArthur to bring some degree of democracy to that country. Required reading for those who would understand the great problems of the Far East. **\$3.50**

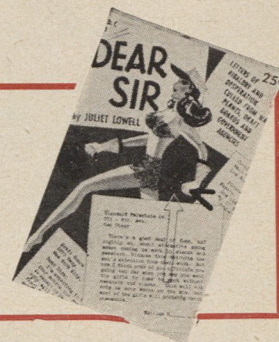


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For hundreds of feet along the mountainside, pieces of aircraft form their own monument to the OSS and their dead.



For the Norwegians, the only way up the mountain was by foot using a pack horse to carry camping equipment (above). Wild Bill Donovan and his party took the easier way. It was 15 minutes by seaplane (below) or seven hours by jeep.





Speaking at the unveiling, General Donovan, to the right of the monument, addresses the four hundred spectators.

"...FOREVER YOUNG"

Norway and the United States join in the dedication of a monument honoring 12 Americans who died in the struggle against Germany

Deep in the mountains of northern Norway, atop a peak where cold, icy winds blow even during the summer, lies the wreckage of an Air Force plane. Four years have dimmed the aluminum's gleam, but not the memory of those who perished there.

On a particularly dark night in the waning days of the war, that same aircraft had circled the mountain. On board were four OSS men who were to be dropped behind enemy lines. The pilot contacted the ground party, made one pass over the drop area and was circling for another when they crashed.

Twelve bodies were recovered by Maj. William E. Colby, commander of the small OSS ground mission and Herbert Helgesen, a Norwegian underground worker. Since the ground was snow covered and frozen, they covered the bodies with rocks.

A short time ago, Colby and Helgesen returned to that mountain to take part in the dedication of a monument erected by the Norwegian government and constructed of those same rocks which were first used to cover the bodies.

It was a simple ceremony. There are no roads up the mountain and it's a long trek by pack horse. But 400 mountain folk joined American and Norwegian officials in the dedication. Mr.

Leon G. Dibble of Round Lake, N. Y. whose son co-piloted the ill-fated aircraft, and Mrs. Ilene A. Robertson of Jamestown, N. Y., sister of one of the OSS men who never lived to make the jump made the long trip from America. Norwegian patriots like Jan S. Baalsrud, Gunnar Sonstebj—Oslo's ace saboteur and Ole Halvorsen who worked in London on the committee which planned all Norwegian underground activities, came to pay their respects to these Americans who died in the common fight.

Maj. Gen. "Wild Bill" Donovan, wartime OSS chief, stood by as Col. Erik Quam of the Norwegian Army removed the American flag from the monument revealing a simple plaque inscribed with the names of the twelve. The dignitaries, in turn, stepped forward and addressed the crowd, and the Mayor of Snaasa, the village nearest the mountain top, accepted an American flag from the US Air Attache to be placed in the church beside the Norwegian flag, as a symbol of unity between the two nations.

Near the end of the ceremony, the wind brought forth an icy rain which beat against the monument, and the sentiments of the crowd were perhaps best expressed by Mr. Dibble: "These boys will be forever young".

Many of the Norwegian mountainfolk who attended the ceremony hiked for two days to pay their tribute to the dead.



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The Airman's Bookshelf

A Sort of a Saga

By Bill Mauldin

William Sloane Associates. 301 pp.
Illus. \$3.50

There was a time when Bill Mauldin was probably the best known GI in the whole Army. He was as well known as Eisenhower and good for many more laughs. Even the officers liked Willie and Joe, those unshaven, GI-happy doggies. There was no question—Mauldin had it.

Came the end of the war and Bill started to flounder. The problems of peace were not as simple or clear cut as those of the GI. They weren't as easy to satirize. Newspaper syndicates began dropping Mauldin left and right and though Bill never lost his sense of humor, he did begin to wonder what had happened to him.

In *A Sort of a Saga*, Mauldin says to hell with problems of war and peace and politics, and writes about people. That the people happen to be his family—Mom, brother Sid, Bill himself and Pop, especially Pop, makes them all the more real. Bill knows people and he loves people and *A Sort of a Saga* is a sort of a masterpiece.

It was a fabulous childhood, moving about Mexico, Arizona, and New Mexico, following Pop on his various projects, never having any money to speak of, yet never really being hungry. Bill's earliest memory is of sitting on the bank of a little river in Parral, Chihuahua, Mexico, when he was three years old, finishing the last of a pack of Chesterfields. According to three witnesses, he had knocked it off in a little more than an hour.

He has other memories, too. Most of them have to do with animals like a goat which wouldn't drink anything but dishwater, horses, rattlesnakes, and assorted dogs—the traditional companions of small boys.

But the central figure in the book is really Pop, whose "projects" ranged from trying to get gold out of a tired old mine, raising citrus trees without water and building tourist cabins in a most uncooperative climate, to dynamiting swamps (he was a fast man with a detonator) and manufacturing gasoline engines out of "spare parts". All in all he sounds like a swell Pop.

The book is illustrated, of course, with Bill's own drawings. Mauldin has become more of an artist and less of a cartoonist. His pen and ink sketches blend well with the text and some of them can stand by themselves.

Mauldin's style has a candor and a simplicity that any writer might envy. He never uses two words if one will do and has the priceless gift of being able to snatch the essential element of a scene which makes any additional description superfluous.

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USCG ANNOUNCES 1950 ACADEMY EXAMINATIONS

Competitive examinations for appointment to the United States Coast Guard Academy at New London, Connecticut, will be held in major cities throughout the United States and its territories on February 20 and 21, 1950. Applications are desired from high school seniors who can qualify physically and who will have graduated by June, 1950 with a minimum of 15 credits. Of the 15 credits, 7 are in required subjects as follows: 3 units of English, 2 units of Algebra, 1 unit of plane geometry, and 1 unit of physics. The physical requirements include the following: 17 to 22 years of age; 66 to 76 inches in height, with weight in proportion; 20/20 vision, uncorrected for each eye; normal color perception; and a minimum of 20 serviceable natural teeth.

Coast Guard Cadets pursue a 4 year course of instruction leading to a Bachelor of Science Degree in Marine Engineering with eligibility for commissions as Ensigns in the Coast Guard. Upon graduation and when commissioned, officers are assigned to active duty.

Detailed information may be obtained from school principals or by writing to the Commandant (PTP), United States Coast Guard, Washington 25, D. C. Deadline for applications is January 15, 1950.

Airpower in the News CONTINUED

sections. For the most part they sang different choruses of the same song. They took obvious care to profess (a.) their belief that the military establishment should be topped by a civilian and (b.) that the civilian now at the head of NME had done them wrong. More significantly, they blew alternately hot and cold on strategic bombing.

OUTSTANDING AMONG THE WITNESSES WERE ADMIRALS HALSEY, KING AND BLANDY. Excerpts from their testimony:

HALSEY: "The primary aim of all our military force must be to defeat the decisive elements of the enemy's armed force. Attacks on remote civilian targets contribute very little to that defeat. A war with the least damage to ourselves and our allies cannot be fought by carrying on separate campaigns against industrial and civilian populations."

BLANDY: The Super Carrier UNITED STATES "was designed to incorporate the most modern features and the latest and best weapons and equipment developed as a result of experience in the hard school of modern warfare; a ship designed to be part of a force which could pick its own fight at a time and place of its own choosing. The aircraft it was intended to operate could have conducted strategic bombing if the occasion required; like other naval units, carrier air is flexible and can be used for many tasks."

KING: "The carrier task force is a combination of strength that is unmatched in mobility and versatility. Its planes can operate from the deck of a ship at sea or from an advance land base, and they can bomb with accuracy both land and sea targets! The design and characteristics of these planes enable them to perform both strategic and tactical functions."

FOR A WEEK THE NAVY VASSALATED BETWEEN THE "IMMORALITY" OF STRATEGIC BOMBING, AND THE DESIRE TO GET A CHUNK FOR ITSELF. A dozen-odd witnesses gave testimony, and so carefully was it planned that only once was there a backfire. That was when Commander Eugene Tatom suggested that "you could stand in the open at one end of the north-south runway at the Washington National Airport with no more protection than the clothes you have on and have an atom bomb explode at the other end of the runway without serious injury to you." More deliberate analysts doubted that this was quite so.

THE WHOLE THING COULD HAVE BEEN DISMISSED AS THE RANTINGS OF WHAT SECRETARY MATTHEWS HAD CALLED THE "INSUBORDINATE" FEW. But then came Admiral Denfeld. It had been expected that Denfeld, a member of the Joint Chiefs of Staff, would support the decisions of the JCS and would defend the basic structure of the military establishment as constructed by the National Security Act of 1947. But for reasons sufficient to himself (perhaps because he feared losing control of his staff as Matthews had done) Denfeld chose to fall in with the others who had preceded him. His statement was an echo and summation of all that had gone before. The B-36 was not all it was cracked up to be. The Navy should be left alone to buy a super carrier or whatever else it wanted within its appropriation. The Navy should be taken in as a full partner. Strategic bombing should be re-evaluated, and so on.

WITH DENFELD ON RECORD, ONE THING WAS CLEAR AT MONTH'S END. Defense Secretary Johnson and the National Security Act were on trial for their lives. In the meantime, the Air Force seemed content to sit back and let nature take its course. The battle had long since passed out of its operational radius. Air generals were ready to answer the Navy's charges point by point if asked to, but first there were questions of far broader scope to be resolved.

CLASSIFIED

Space in this department is made available to AFA members without charge as one of the Association's personal services. It is reserved exclusively for members seeking new employment. Ads will be run for two issues unless a "kill" request is received within two

weeks after the first issue. If members desire insertion beyond two issues regular rates will apply. Ads must be limited to six lines of seven words each. Address insertion requests giving full particulars and qualifications to Classified Adv. Dept., Air Force Magazine,

901 16th St. NW., Washington 6, D. C. Insertion will be made in the earliest possible issue. Inquiries regarding the ads will be forwarded promptly to the individuals placing them. The Air Force Association assumes no responsibility for any statements made.

PHOTOGRAPHER, ex AF, age 34, 16 years experience news, commercial, industrial, motion-pix photography; completely equipped, car; seeks permanent position with progressive organization. References. Box E-T-1 Air Force. 2

JUNIOR ELECTRICAL ENGINEER, age 26, former 4-engine pilot with AF pilot's license, would like position as engineer or pilot. Will consider all offers, go anywhere that family can accompany. Write Box E-L-10 Air Force. 2

EX-AF LT. COL. MAINT. & ENG. OFFICER, age 37, 18 years exp. major airline, CAA Air carrier inspector & airline consultant, desires position with airline or corporation using airplanes. References. Write Box E-M-11 Air Force. 2

EXPERIENCED CARPENTER age 31, married, all around handy man, seeks work in U. S. or Europe. Go anywhere for steady work. Write Box E-G-6 Air Force. 2

EX-AF MAJOR, 34, desires administrative or sales position, 2½ years export experience general merchandise. Prefers non-travel at present. Salary of minimum importance. Will attend school if necessary. Write Box E-L-11 Air Force. 2

FLIGHT INSTRUCTOR single eng. land, sea glider; Ground instructor Link, Metro, Nav, Aircraft & Engine. Have 2-place glider. Desires job as pilot-salesman or instructor with glider. Age 25, married. Ex- AF ROMG. Write Box E-H-4 Air Force. 2

AF VET, former bombardier, 27, married, experienced in shorthand, typing, secretarial work, formerly railroad chief clerk, doctor's secretary, one year's experience in industrial traffic dept., will accept job with future anywhere. Write Box E-H-5 Air Force. 2

AF-ATC VET with 8 years research, study, training & experience in all phases of airline operations, desires connection with commercial airline or feeder line in or near mid-west. Write Box E-G-5 Air Force. 2

SALESMAN, ex-B17 flight chief, 39, desires line or lines on commission basis for representation in Chicago. Best references. Write Box E-D-5 Air Force. 2

BBA GRADUATE, 26, 5 years college, accounting major, 1 year experience, 2 years office experience, good appearance, neat, aggressive, will travel. Write Box E-S-11 Air Force. 2

EX-AF SINGLE & TWIN ENGINE PILOT suffering from rare blood disease known as fly-itis. Only known cure—flying. Will take anything, anyplace but prefer income tax-dodging millionaire who will overpay. Write Box E-H-6 Air Force. 2

PROFESSIONAL WRITER, experienced medical, fiction, article fields, is also long-time pilot & ground instructor (all ratings current). Air WAC

vet., with own car. Location, northern N. J. Write Box E-P-2 Air Force. 2

TELEVISION STUDENT, age 27, completing 1½ years of study & lab work in radio and TV, 1 year college, 2½ years AF radio experience, desires position with TV station, remote unit or radio and TV maintenance. Will travel. Write Box E-K-3 Air Force. 2

INDUSTRIAL DESIGNER, TRANSPORT PILOT, age 31, Pratt Institute Grad, 6 years practical experience as designer, 3 years as pilot, desires opportunity as designer with aircraft manufacturer preferably in Southwest or west coast regions. Write Box E-K-4 Air Force. 1

AF VET, age 30, single, desires position as manufacturers representative for refrigeration or allied field. 3 years with Nash-Kelvinator Sales Corp. Schooling in mechanics, safety engineering, production control and refrigeration. Write Box E-M-12 Air Force. 1

ATR PILOT, age 32, 5200 hours, extensive background in civilian instruction and air transportation, prefer job as company or feeder line pilot. Write Box E-W-2 Air Force. 1

EX-AF AIRPLANE & SUPPLY SGT, 7 years service, young, seeks employment anywhere in Brazil. Speaks Portuguese & Spanish fluently. Salary secondary. Write Box E-R-3 Air Force 1

SUITABLE ASSOCIATE WANTED to control 25% of stock in established aviation corporation in downtown Washington. Needed qualifications: executive, technical and sales ability, with moderate financial backing. Write Box AS-1 Air Force. 1

ELECTRICAL ENGINEER, 31, former AF pilot, 3 years experience as electrical test engineer with aircraft manufacturer, desires position in electrical manufacturing industry. Write Box E-C-5 Air Force. 1

PHOTOGRAPHER-WRITER-PR MAN, presently with an international wirephoto service, desires same type work in Orient. Free to travel, single, AF vet, has equipment. Write Box E-H-7 Air Force. 1

MECHANICAL ENGINEER, 29, desires responsible position. Experience in design, development, testing, manufacturing, writing. Have worked as assistant chief engineer. Can get along with personnel, shop and office. Write Box E-J-11 Air Force. 1

AIRLINE PILOT, 3000 hrs multi-engine experience, desires job as executive or company pilot. Former AAF heavy bomber pilot. 2 yrs scheduled airline flying. 2 yrs college, age 28, married. Write Box E-L-12 Air Force. 1

EX-AF NAVIGATOR-INTELLIGENCE OFFICER, 30, desires administrative or sales position, 3 years college plus experience, will travel, salary secondary to permanent job with progressive co. Write Box E-M-13 Air Force. 1

ELECTRICAL ENGINEER, former Army Airways Communications System officer, BEE degree June 1949, desires position in communications engineering preferably in East but will go anywhere in U.S. Single. Write Box E-R-5 Air Force. 1

AF VET NAVIGATOR, 28, 6 yrs airline experience, 5 yrs trunk line operations, 1 yr traffic manager feeder line, desires position with feeder line. Experienced in operations, route surveys, CAB exhibits, prospectuses, public relations, etc. Write Box E-R-4 Air Force. 1

AF VETERAN, 11 years experience in establishment of agents or offices for transportation companies, would like position with air cargo company. Married but free to travel. Write Box E-M-14 Air Force. 1

AF VETERAN, graduate of Robert Morris School of accountancy and business administration, desires employment this country or foreign. Age 22, high school graduate, single, references. Write Box E-M-15 Air Force. 1

ACCOUNTANT, all phases, university graduate, 4 years practical experience, desires position anywhere that has a future. Married, CBI veteran with pilot's license. Write Box E-M-16 Air Force. 1

CHEMICAL ENGINEER, B.S. with honor June 1949, former AF Navigator, desires research, development or engineering work anywhere in U.S. Age 24 and member of Tau Beta Pi. Write Box E-M-17 Air Force. 1

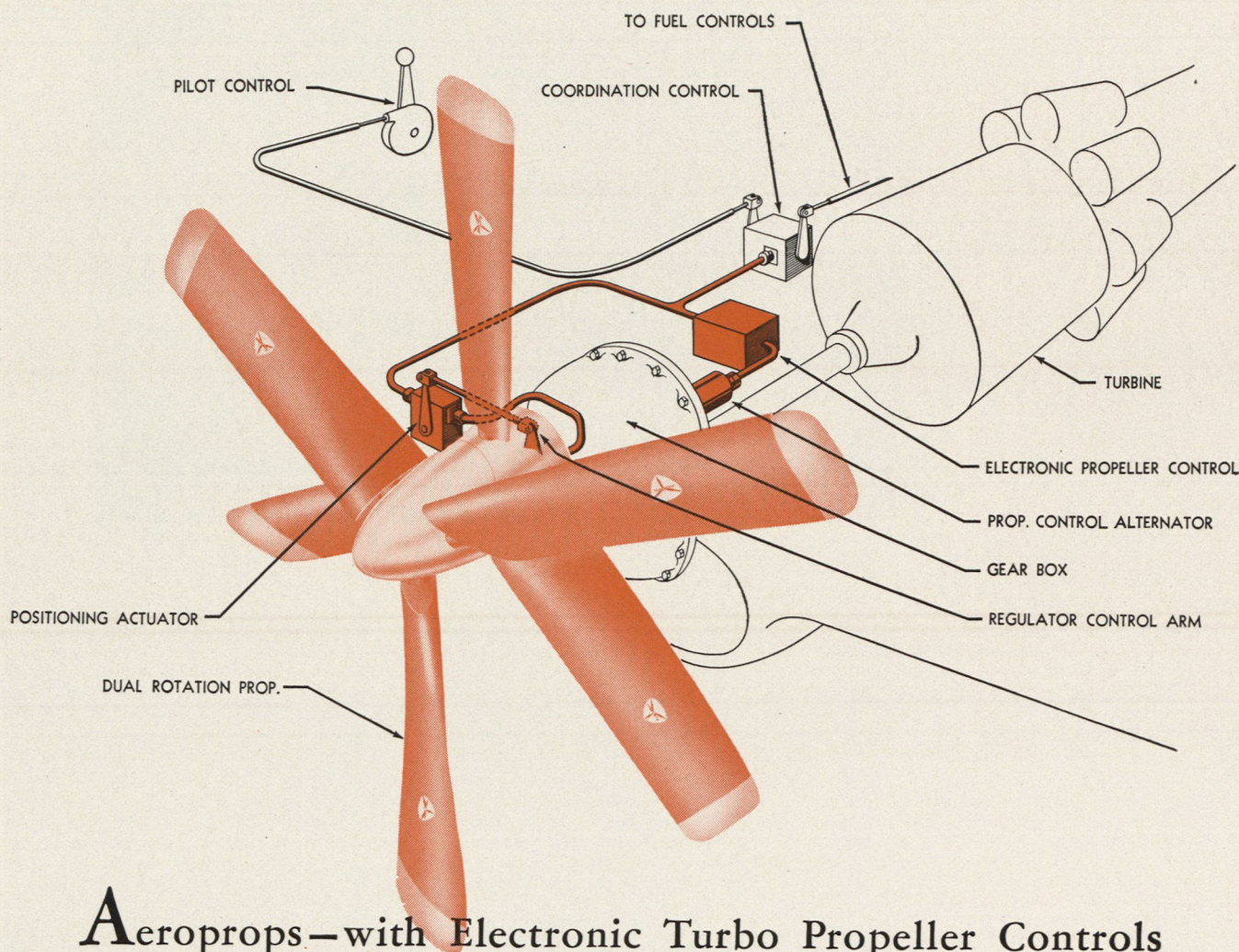
RECENT GRADUATE, 26, B.S. Mech. Eng., Univ. of Illinois, upper 1/3 class, experience in testing aircraft engines also in production methods related to automobile industry. Location open. Immediate availability. Write Box E-B-4 Air Force. 1

AF VET, college grad (Feb. 1950), age 25, single, seeks overseas position with firm, prefers Pacific location. Will consider others. Ambitious and anxious for position with future. Write Box E-B-5 Air Force. 1

AF VET, age 30, 3 years investigator experience, liability insurance business, wishes position. Knowledge of typing and shorthand. Would go west. Also qualified and on New York City patrolman list. Married. Write Box E-D-6 Air Force. 1

EXPERIENCED GUARD, patrolman MP, ex-CID agent, desires position. 12 years experience in investigation, security survey, bodyguard and special police. Permanent position accepted, prefer Wash, D. C., Utah, Calif., Nev., Hawaii. Write Box E-D-7 Air Force. 1

MECHANICAL ENGINEER, aeronautical option, 31, Sept. grad. of Univ. of Pitts., desires trainee position with established firm leading to engineering work or sales. 4 yrs. experience in retail dept. store sales and adjusting. Write E-F-2 Air Force. 1



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