

# AIR FORCE

THE OFFICIAL JOURNAL OF THE AIR FORCE ASSOCIATION, AUGUST, 1947



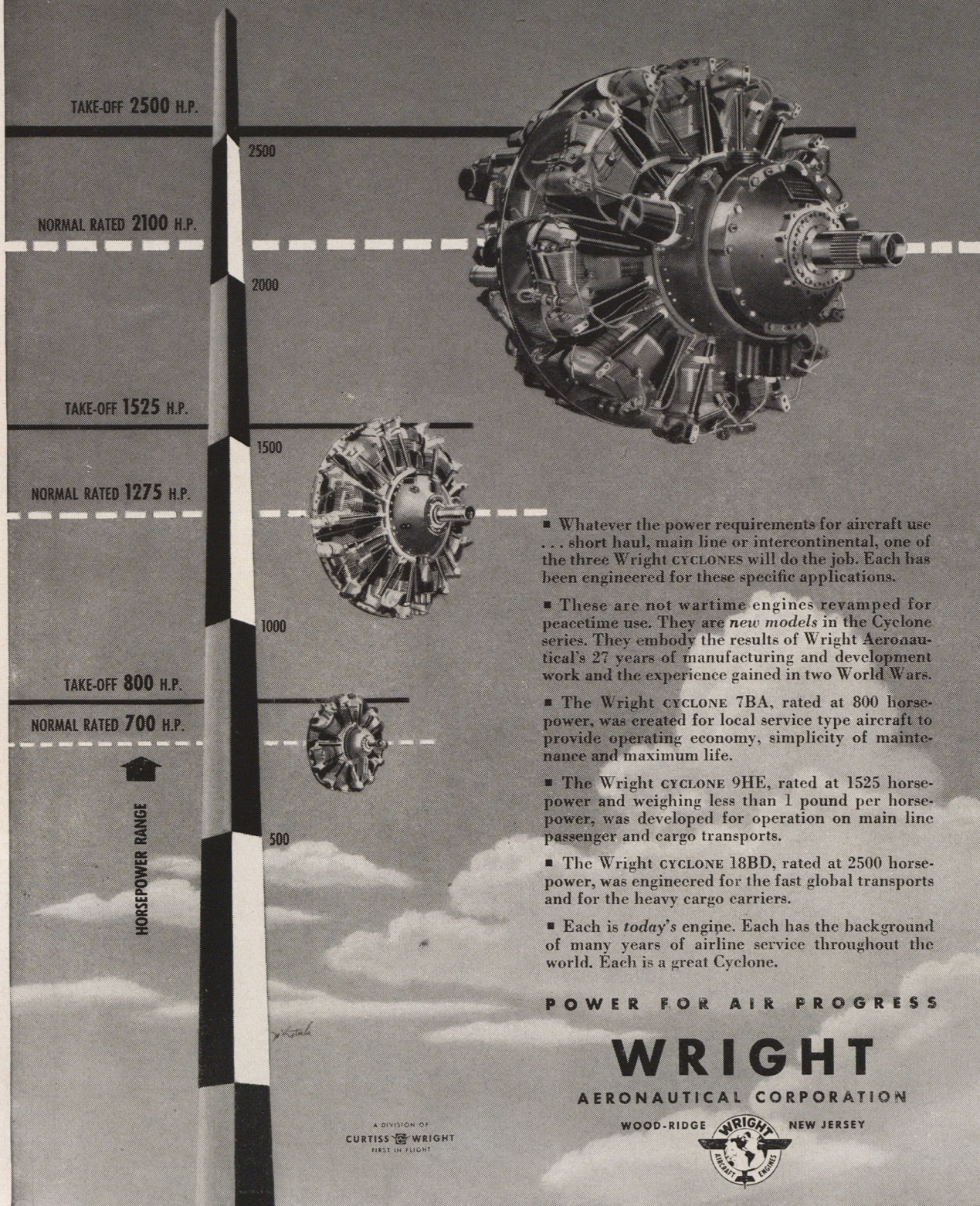
MARTIN'S SIX-JET XB-48

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# 3 Great Cyclones



■ Whatever the power requirements for aircraft use . . . short haul, main line or intercontinental, one of the three Wright CYCLONES will do the job. Each has been engineered for these specific applications.

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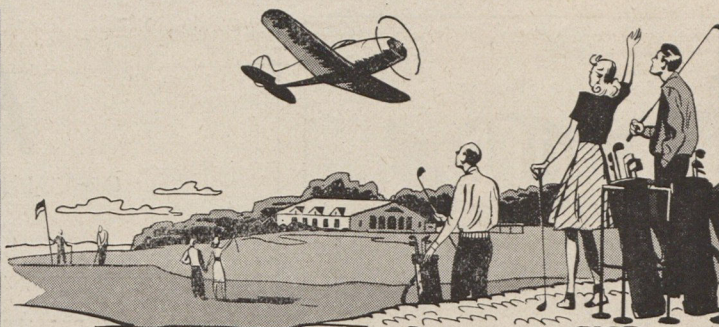
■ The Wright CYCLONE 18BD, rated at 2500 horsepower, was engineered for the fast global transports and for the heavy cargo carriers.

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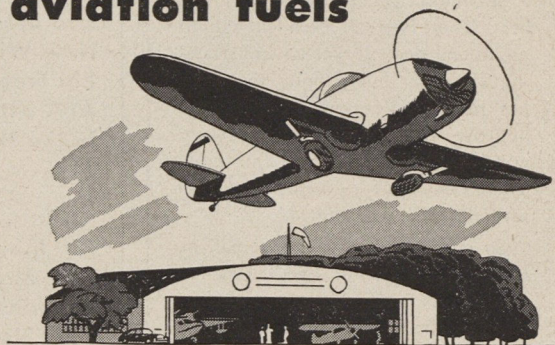


## How to avoid crankcase foaming

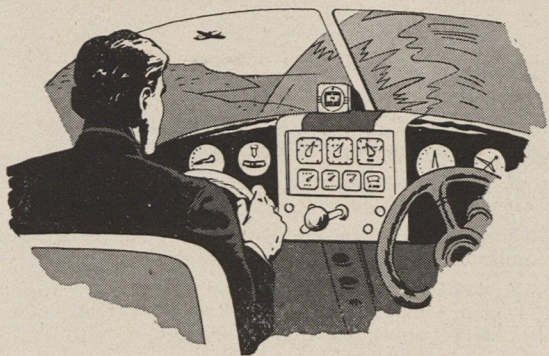
Moisture condensation in your aircraft engine increases crankcase foaming many fold. To avoid this possibility pilots should keep the oil level up to the full mark. In addition to minimizing condensation this practice will help keep oil temperatures lower. One of the many reasons pilots depend on RPM Aviation Oil is because its "defoaming" compound greatly reduces this trouble under all operating conditions.

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## Proper instrument care pays off in safer flying



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AUGUST, 1947







## Pin Money

50¢

There was a time when Air Force Association emblems were at a premium because of serious wartime metal shortages, the manufacturer couldn't get them to us, and we in turn couldn't get them to AFA members. There weren't even enough to go around once. It was an embarrassing situation, but happily the crisis has passed. We now have a good healthy stock of our distinctive wings-and-circled-star emblems. There's enough for everybody to have several if they're wanted.

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### EXTRA!

We now have on hand a good supply of safety clasp type pins designed especially for women members. Same size, same price as the regular screw clasp pin. If you prefer this model please indicate in your letter.

## Air Force Association

1616 K Street, N.W.,

Washington 6, D. C.

# AIR FORCE

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MILITARY SERVICES COUNT  
ON MARTIN RESEARCH**

Working in close conjunction with our Military Services since 1913, The Glenn L. Martin Company has pioneered in many fields of aviation and advanced scientific research. The success of this association has been proved by the combined and individual achieve-

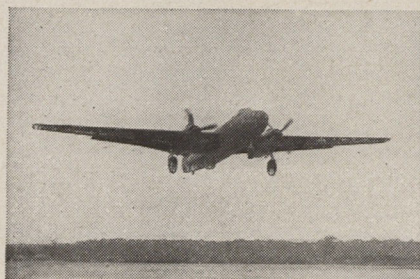
ments of these outstanding organizations. Look to Martin cooperative research for new developments in advanced fields. These new discoveries will help us in our efforts to maintain a free and peaceful world. THE GLENN L. MARTIN COMPANY, BALTIMORE 3, MD.

**Martin**  
AIRCRAFT

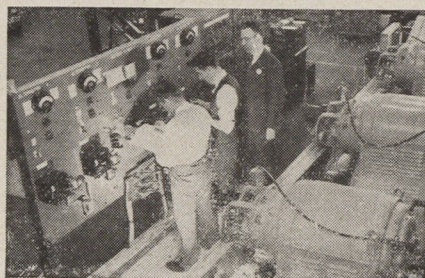
Builders of Dependable



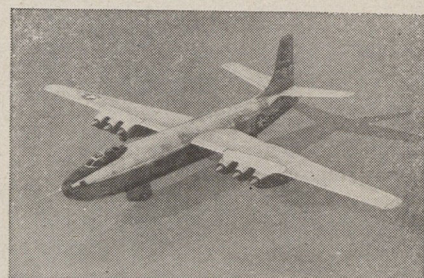
Aircraft Since 1909



**FOR THE NAVY . . .** The recently announced XP4M-1 is the Navy's newest land-based reconnaissance plane. Powered by two conventional and two jet engines, this plane has a top speed of well over 350 m.p.h. Other Navy aircraft built by Martin include the PBM-5 and PBM-5A Mariners, the JRM-2 Mars and the AM-1 Mauler.

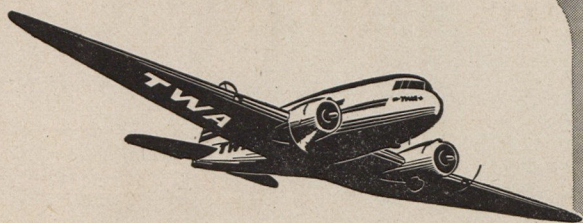


**MARTIN RESEARCH . . .** was responsible for many wartime developments in advanced scientific fields. Now, further studies are being carried on in electronics . . . Stratovision broadcasting . . . plastic raw materials . . . new methods of propulsion . . . construction materials and alloys . . . rocketry . . . guided missiles and trans-sonic speeds.



**FOR THE ARMY AIR FORCES . . .** A new jet bomber . . . the long-range, extremely high-speed Martin XB-48. Powered by six jet engines, the XB-48 is the largest conventional multi-jet plane yet constructed. It is pioneering a new "bicycle-type" landing gear developed by Martin for high-speed aircraft. Another Martin research first.





# **FLY TWA** to the **AIR FORCE** **CONVENTION**

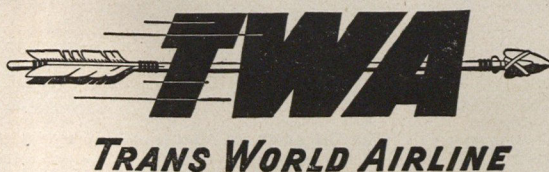
★ **FASTEST, FINEST WAY** to go to the first annual AFA Convention is, of course, to fly—and no airline flies faster, or offers finer service, than TWA.

★ **MOST FREQUENT SERVICE** direct to Columbus is provided by TWA—whose vast number of daily flights from principal cities, coast to coast, is matched by no other airline.

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*Contact the nearest ticket office of TWA or a connecting airline—or see your travel agent.*

**Every TWA passenger flight also carries mail and cargo**



## **Air Mail**

### **Must Be The Heat**

Dear Mr. Editor:

Have just seen an advance copy of **AIR FORCE** Magazine for July, 1947. I know that times are tough everywhere in the aviation business and reductions are the common thing, but I question whether you should have reduced the designation of the Republic Thunderjet from P-84 to P-82 without greater consideration. This is likely to get everyone confused, from the designer to the contracts officer of the Air Matériel Command, since the P-84 designation is now, undoubtedly, deeply engraved in everything from blueprints to letters of intent.

In addition, there are many of us who are growing to love the old number, thanks to the extensive advertising and publicity of Republic, in your and other publications. Also, if the British see this, they are likely to think we have still another airplane under wraps which will be competition for them in attempting to recapture the world's speed record from Lockheed's P-80.

The Thunderjet is, according to all reports, a really fine airplane. Leave us not handicap it with two different numerical designations. Goodness knows, the real P-82, a North American product, has two fuselages and two of almost everything else, including pilots. If Republic doesn't register a serious complaint, they will be fully justified in calling themselves the Democratic Aviation Corporation from now on.

J. S.

*Oh, if this were only the Army again we could put the derelict proofreader who failed to catch the error on KP until Christmas. Our apologies. The cover picture in the July issue is, of course, the P-84 Thunderjet, not the P-82 as indicated.*

### **Simple Answer**

Gentlemen:

The symbolism is OK but the main fault of Project 611's lack of moola is not a string-tied, broad-hatted, cigar-smoking fellow in Washington or any combination of these fellows because, all in all, the Congressmen are the people. No matter how you look at 'em, and no matter how remote Capitol Hill seems to Main Street, those guys do only what the people want or they lose their jobs. Now, howdoya get the Congressmen to vote more cabbage for 611, Reserve airbases, etc.? Simple, make the people give the money, acting through their Congressmen, of course.

Edward J. Carlin, Jr.  
Philadelphia, Pa.

*No argument here. By the way, have you written your Congressman lately?*

### **General Error**

Gentlemen:

In the June issue is a picture on page 23 that was done by Major Milton Marx. It is said (by the caption, that is) to be Brig. Gen. Roger Ramey. I may be wrong, but I believe it is in reality a picture of Lt. Col. James R. Wiley, the CO of the 1st Air Transport Unit. Would you make a check into this matter and let me know whether I'm wrong or right? I would be very appreciative if you could find the time to do so.

Cpl. T. H. Matteson  
Andrews Field  
Washington, D. C.

*After checking with artist Milton Marx, we find a general condition of error. The officer depicted was neither Brig. Gen. Ramey nor Lt. Col. Wiley, but Major Paul Fackler, the Weather Officer at Bikini.*



Make your reservations early!

# AFA CONVENTION

Columbus, Ohio, Sept. 15-16

## HOTEL RATE SCHEDULE

### NEIL HOUSE

Singles .....	\$ 4.50 a day
	5.00 a day
	6.00 a day
Doubles .....	5.50 a day
	6.50 a day
	7.00 a day
Twins .....	6.00 a day
	6.50 a day
	9.00 a day
Rooms for 3 .....	10.50 a day
Rooms for 4 .....	12.00 a day
	15.00 a day
Rooms for 6 .....	16.50 a day

### DESHLER HOTEL

Twins .....	6.60 a day
	7.70 a day
	8.80 a day
	9.90 a day
	11.00 a day
	13.20 a day
Doubles .....	6.05 a day
	6.60 a day
	8.80 a day
	9.90 a day
Singles .....	3.85 a day
	4.40 a day
	5.50 a day
	6.00 a day

### FORT HAYES

Twins .....	6.50 a day
	7.00 a day
Doubles .....	6.50 a day
	7.00 a day

### SENECA HOTEL

Singles .....	3.50 a day
	4.00 a day
Doubles .....	6.00 a day
	7.00 a day

### SOUTHERN HOTEL

Doubles with bath .....	3.50 a day
	4.00 a day
Doubles without bath .....	2.50 a day
	3.00 a day

### CHITTENDEN HOTEL

Doubles with running water .....	4.25 a day
Doubles with shower .....	4.25 a day

AUGUST, 1947

## INSTRUCTIONS—MAIL NOW

Cut out this Reservation Request and mail in three-cent envelope to:  
Air Force Association Convention Headquarters  
c/o Columbus Convention Bureau  
Virginia Hotel  
Columbus 15, Ohio

Upon receipt of request, you will be mailed a confirmation.

### RESERVATION REQUEST

#### FOR AIR FORCE ASSOCIATION CONVENTION

Columbus, Ohio.

Date .....

(This request must be mailed immediately, otherwise time will not permit clearance and confirmation.)

(Convention dates—Mon. Sept. 15th-Tues. Sept. 16th)

NAME .....

ADDRESS .....

CITY ..... STATE .....

SQUADRON NUMBER ..... SQUADRON LOCATION .....

ARRIVAL DATE ..... DEPARTURE DATE .....

FILL IN HOTEL DESIRED .....

FILL IN ROOM RATE DESIRED \$ ..... per day

IF DOUBLE ROOM TO BE OCCUPIED BY ANOTHER AFA MEMBER, FILL IN NAME

.....

Cordially,

AIR FORCE ASSOCIATION CONVENTION COMMITTEE

(Do not fill in below this line)

Date received ..... Hotel assigned .....



# This Month

## The Cover

This month's cover is the new Martin XB-48, recently test flown at Middle River, Md., at which time it was still the world's most powerful flying machine. Between its six J-35 axial-type jet engines, it can generate a third more boost than the world's largest conventionally powered aircraft, the XB-36.

Roughly as large as a B-17, the XB-48 is considered a

medium bomber in the new concept of air warfare, which is taken by well-informed sources to mean that it can carry an A-bomb a mid-range run or between eight hundred and a thousand miles.

## Big Doings in Big D

If the AFA squadron to which you belong is looking for something to do, may we suggest you turn to page 34 and study the Dallas Program. In the few short months since its activation, the "Big D" unit has become one of the most active squadrons in the entire association. It knows what it's going to do and how it's going to do it. The Dallas "communal public relations plan" as outlined in "AFA With a Texas Accent" establishes a mark for all to shoot at.

J. H. DOOLITTLE  
PRESIDENT  
W. S. FITCH  
EXECUTIVE DIRECTOR



**Air Force Association**  
1603 K STREET, N. W.  
WASHINGTON 6, D. C.

PHONE: NATIONAL 2525  
NATIONAL 2694

Dear Member:

From time to time I have utilized Air Force magazine to keep you informed on Air Force Association matters. Now I have something important to report about the magazine itself. Effective this issue, the Association takes over the publishing of Air Force. Up to this time, the magazine has been published for the Association, under contract. Now we have our own publishing organization within the Association, and will conduct all editorial, business, circulation and advertising activities of the magazine ourselves.

We have "called back" James H. Straubel, an AAF veteran, to direct this entire program and serve as Editor of Air Force. Straubel was the founder of the magazine back in 1942 and was its Editor throughout the war. Key members of the publishing staff remain with us, including Executive Editor Ned Root and Technical Editor Bill Friedman. The reader response to Air Force during its first peacetime year has been heartening. It has been a difficult year in the publishing business, and we are appreciative of the job accomplished by our contractor, the Phillip Andrews Publishing Company. Air Force has become the strong voice of the Air Force Association.

Already it is truly a "magazine of influence", representing more than 100,000 AAF veterans from every walk of life, from every section of the country—all actively engaged in the continued support of military and commercial air power in the United States.

We have even bigger and better things planned for Air Force. In taking over the publication of the magazine, we will give more power to its two-fisted editorial policies, more strength to the entire publishing program. On the circulation side, we will do everything possible to maintain regular and speedy distribution of copies each month.

In bringing Air Force within the family circle, we bring it closer to the Army Air Forces, to the aviation industry, to commercial and private aviation—closer to you. Remember, it is your magazine. We depend on you for comments and suggestions.

As ever,

*J. H. Doolittle*  
J. H. DOOLITTLE.



**Every Business  
in America  
is on a  
"Main Line"**

—with the Beechcraft

**BONANZA**

**B**USINESSMEN in the smaller towns are the most numerous purchasers of the new Beechcraft Bonanza. Why? Because the Bonanza offers them transportation opportunities even better than those enjoyed by businessmen in the large "main line" city.

Denied the arterial highway and the main rail and air lines, the Bonanza owner in the small community simply hops over them, goes straight to his destination—any destination—at close to airline speed. He goes in splendid comfort, too. For the four-place Bonanza, with its limousine-like appointments, is as quiet as an open-window car skimming along at 55.

The-go-when-you-want-to-go

utility of the Bonanza saves time and it saves money. Operating costs dip as low as *one cent* per passenger mile. It is fully equipped with lights and radio for day or

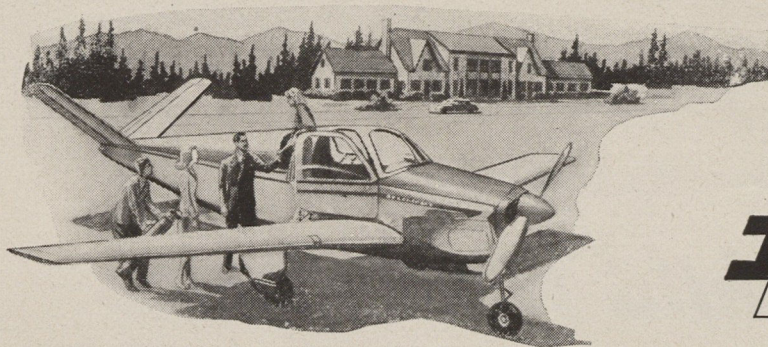
night, all-season flight. Designed for business use, the Bonanza is a new transportation "equalizer" that puts *any* business on the "main line."

Your Beechcraft distributor will be glad to demonstrate the Bonanza for you—and to discuss its adaptability to your transportation requirements. We are still filling a large backlog of orders. Additional ones will be filled in sequence. Beech Aircraft Corporation, Wichita, Kansas, U.S.A.

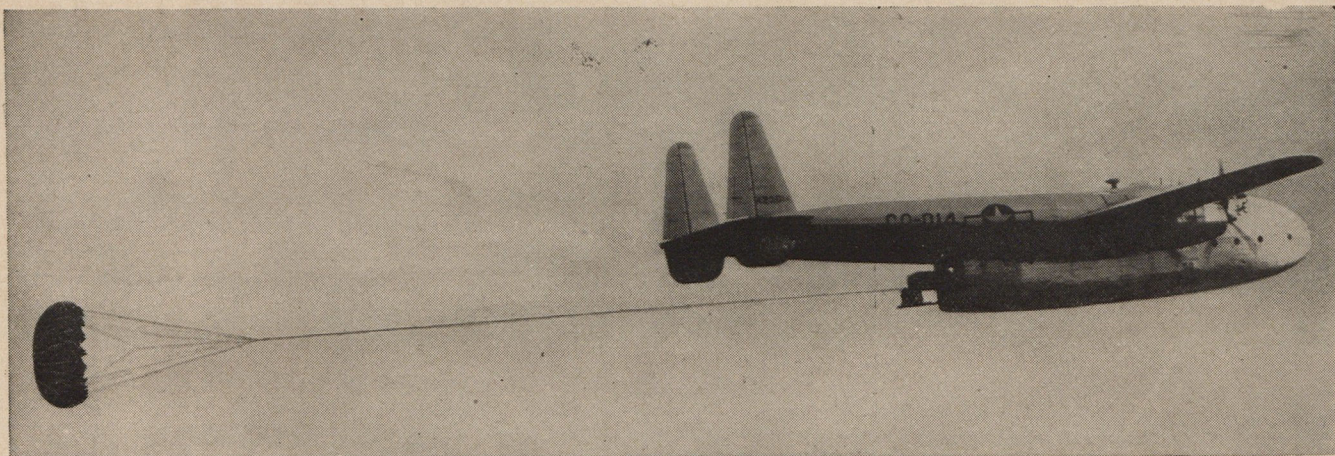
BEECHCRAFT  
**BONANZA**  
MODEL 35



• Top Speed, 184 mph; Cruising Speed, 172 mph; Range, 750 miles







## THERE'S BEEN A BIG DROP IN HOWITZERS



No telling what the Army Air Forces will do next with the Packet.

They've transported Airborne Troops and Air Transportable Infantry. They've towed gliders, carried weapons and cargo on maneuvers that are setting the pattern for the swift mobility of our peacetime army.

The Packet has carried jeeps, trucks, even helicopters.

Now, through the ingenious application of ribbon parachutes, a Packet can deliver a 75 mm. howitzer — by air — ready for action to forces deployed on the ground. Engineers of the Air Materiel Command rig a small "extractor" 'chute and a 90-foot ribbon 'chute to the gun. The little one pulls the cargo load backward through the big rear doors of the Packet. Once in the clear, the big 'chute blossoms and the load of more than a ton floats safely to earth.

This method, the AAF has announced, makes possible air-delivery of cargo limited only by the size of the Packet's large rear doors.

The spectacular abilities of the Packet have made it a highly efficient tool in the hands of cooperating Air Forces and Ground Forces.

They are abilities conceived by Fairchild engineers — abilities that stem from a quarter century of aviation experience that creates "the touch of tomorrow in the planes of today."

 **Fairchild Aircraft**

Division of Fairchild Engine & Airplane Corporation, Hagerstown, Maryland

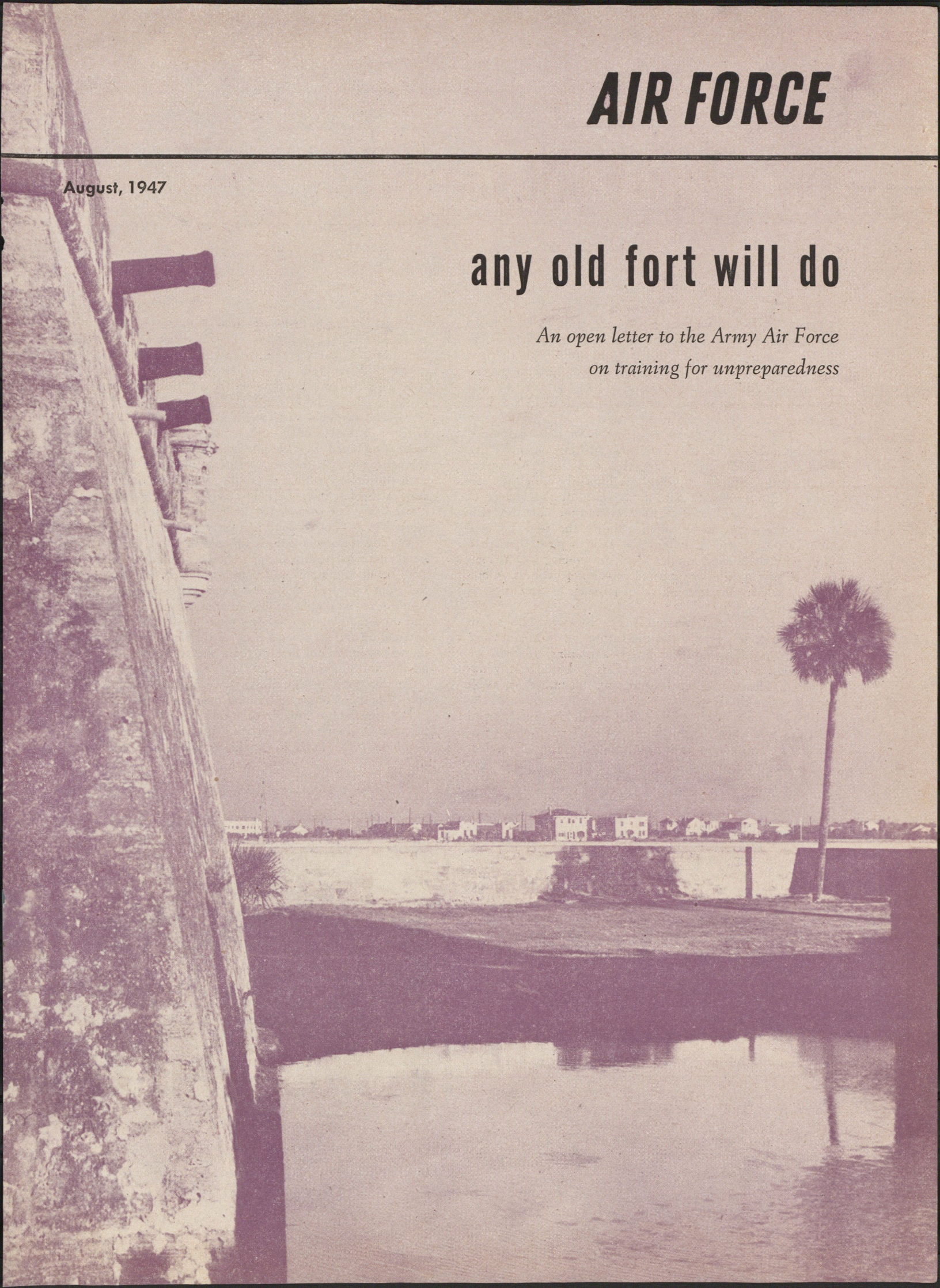


# AIR FORCE

August, 1947

## any old fort will do

*An open letter to the Army Air Force  
on training for unpreparedness*





# any old fort will do—

*It's risky business to play the tough  
guy role in world affairs when your  
punch is no stronger than the AAF's*

**B**EING hardboiled without having the stuff to back it up always presents a problem—in a barroom and on a battlefield. In recent months, many of us have been riding a mental merry-go-round trying to figure out how to put together our national toughness in foreign affairs and our national weakness in military affairs, and wind up with anything more than a case of the jitters.

As AAF veterans, we've naturally been most concerned over the new air force and how it would function under this kind of national security policy. War made the AAF a powerful, well-equipped offensive machine—the mightiest air force in the world, we used to boast. But the feeling of strength which infiltrated all units in wartime now threatens to undermine the organization. Under the new national security policy, the AAF must be able to push through a bluff without holding a pair. Come an emergency, its men must be psychologically prepared for unpreparedness. Obviously, a whole new training setup is needed. And there is no time to lose.

After much concentration on looking backward rather than forward to solve a problem of the future, we've finally come up with, in addition to the jitters, a training program we think must be followed if the AAF is to be efficiently unprepared. Hear us out on this program. It's rather a neat bit of destructive thinking.

First, it's only fair to explain that we didn't exactly stand up and cheer when the tough-guy role in foreign affairs materialized. To some of us it even smelled a little of combat. But all of us hoped, and maybe prayed a little, that the boys around the international conference table would be able to get together without kicking each other in the shins once too often.

Whatever our personal feelings, it wasn't hard to see that most of the people liked this national toughness and thought it the best way to insure peace. The people's own representative in such matters—the Congress—said so.

Going on from there, we took it for granted that the people would want a strong military organization to back up their strong words. Anything else seemed foolish, indeed. And we naïvely assumed we had helped prove to everyone's satisfaction that the guts of any military organization is its air force. It all seemed as simple as that.

Well, you know the answer. Despite warnings from some of the best brains, the military was permitted to fall apart, and with it the air force.

It just didn't add up. But Congress was very definite, and patiently explained the necessity of holding down military appropriations in order to save money. And so we finally conceded the people must want it this way.

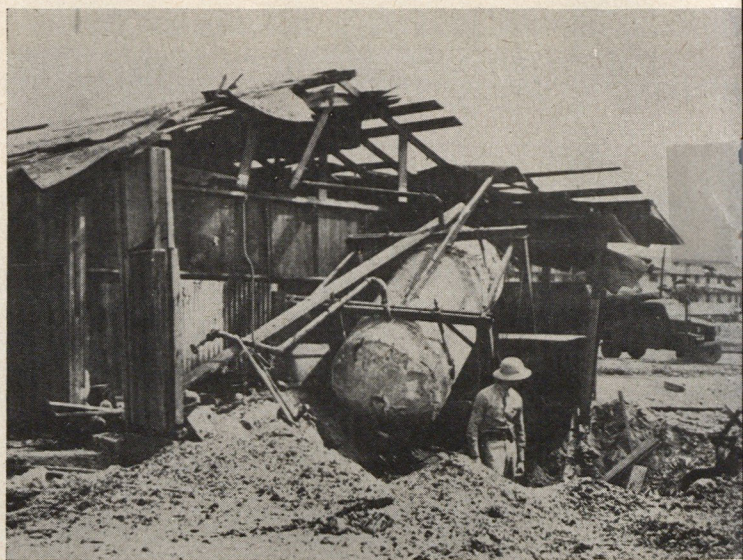
In desperation we began to peer through the overcast for the answer. The people must have something up their sleeves. Congress must be an Old Fox, must know more than it cared to say. Atomic energy, of course. That was it. You didn't need a strong military organization as long as the atoms were with you.

Then talk began to float around about the length of time it would take to develop an efficient atomic military outfit. Being on the practical side, we asked ourselves foolish little questions like: How do you get atomic bombs where you want them without building up the air force along with the bombs? Then some of the brain men reported that the age of rockets was years away and men like Dr. Vannevar Bush, Director of the US Office of Scientific Research and Development, explained that despite all the progress in military weapons, a war in the near future would have to be fought with the same type weapons and in pretty much the same way as the last one. Unlike Teddy Roosevelt's doctrine of speak softly but carry a big stick, this whole business now seemed to us like talk loud and carry an atomic illusion.

We added the whole thing up once again. If the AAF was impotent, what would happen should a national emergency arise before the atoms and rockets could be put together in the right mixture? We knew from past experience that it would take the people quite some time to organize themselves and their industry to a fighting pitch, to draw draft numbers and tool up and get women back on the rivet guns. We knew that someone would have to hold the traditional fort while all this was going on.

At this point in our thinking we became profoundly inspired—and our proposed training program is the result.

Holding the fort brought to mind the RAF over the Channel, the dogfeet on Bataan, the guys in the snow before Stalingrad—and, in the AAF, the 19th Bombardment Group.



"... trainees would learn, in the opening lectures, to be completely surprised by the opening attack of war." Even the latrines at Hickam Field (above) took it from the Jap bombers on Dec. 7, 1941.





You remember the 19th—the outfit that got caught in the Jap's initial attacks on the Philippines, and got kicked around the Southwest Pacific fighting what is politely known in military circles as a “delaying action.”

Well, suddenly it dawned on us that the AAF's peacetime training should be directed by members of the 19th Group. Why? Because under the new national security policy the whole AAF must know how to get kicked around. Come an emergency, it must scrap offensive action and become experts at taking a beating. And who were better qualified to teach such things to the AAF than the guys of the 19th Group?

When we looked up the records and found that of the 1300 men in the 19th when war came, only about 350 got out of the Philippines and considerably less than half that number survived the war—we knew for sure that our training program was solid.

So we're recommending here and now that the men of the 19th—those few who are left—be called back for special training duty, as instructors in our program, that their course of instruction serve as basic training for AAF recruits and as refresher training for combat veterans.

Trainees would learn, in the opening lectures, to be completely surprised by the opening attack of a war. The 19th Group was introduced to it at Clark Field in the Philippines on December 8, 1941. It had been on a war alert since November 14. All planes had been grounded except for daily reconnaissance patrol, planes on the field had been dispersed, even foxholes had been dug. Yet, these instructors will explain,

even when the report of the attack on Pearl Harbor was received, they found it impossible to believe. Lt. (now Maj.) Donald Miller noted: “You never saw a more stunned bunch in your life. We had all expected war, but when it really came we were dazed.”

And prospective holders-of-the-fort would be told to expect a good going-over in the first blow. As Miller scribbled in his diary back then: “The resulting scene, the burning inferno left in its wake, will be remembered forever by those of us surviving. The men whose charred bodies are still lying out there on the field by the skeletons of the planes they died protecting—they were buddies of ours.”

Trainees would be given to understand, right off the bat, that fort-holding is a man-sized operation. In the event of another emergency, the situation might be different, the equipment more modern, and the locale a new one. But these are minor matters. The situation will still stink to high heaven, the equipment will still be obsolete by all sensible standards—and any old fort will do.

It was the job of the 19th Group to defend the Philippines, Java, Bali, Borneo, Sumatra, the Celibes and Australia. On the morning that war arrived, the United States had a grand total of thirty-five heavy bombers in the Southwest Pacific, all assigned to the 19th and all based in the Philippines. The bombers were B-17Cs and Ds. By the time the month ran out the United States had just ten bombers in the Southwest Pacific. Trainees in this course would march up to the blackboard, one by one, and stare at the map and see how much territory they would be expected to cover with ten planes.

Instructors would explain that there's no use crying over spilled blood, and advise students to pick themselves up after the first knockdown and prepare to fight back—simply because there's nothing else to do. It makes no difference that there is very little around to fight back with. While holding the fort so the people back home can prepare themselves for a war that's already on the fire, trainees should not expect ground troops to defend their airfields, intelligence data or weather information. They would be expected to repeatedly take off and land in the midst of enemy bombings, as did the 19th. They would keep their planes in the air at all times because they are safer up there than on the ground. Enemy aircraft will always be in the neighborhood and if the new boys are lucky and have some cloud cover, as blessed the 19th, they may be able to keep from being wiped out entirely the first few days of the fracas.

It would not take long to explain the equipment situation. Trainees would be expected to make replacements when replacement parts are almost non-existent. Ground crews would learn to improvise on their improvisations. The ground boys of the 19th changed the wheels of a B-17 without a jack by blocking the wings with oil drums and railroad ties and digging a hole deep enough for the wheels to be loose. Replacement planes might arrive, the instructors would report, but it's best not to expect them. Hoping just adds to the

*(Continued on page 46)*



“... carry a big stick,” said Teddy Roosevelt, top center, but today the biggest stick of all, the AAF, has been “pickled” and set aside to decay. We are talking loud and carrying only an atomic illusion.



# CONVENTION TIMETABLE

*Columbus holds its breath and awaits C-day,  
the mid-September event when the AAF's  
alumni invade for their Convention*

**BY GEORGE HADDOCK**



Major General Curtis E. LeMay mixes it up with the boys at Guam on the occasion of opening of the 20th Air Force enlisted men's club. Gen. LeMay will be on hand to do more mixing at Columbus.

**A**LL airlines and roads lead to Columbus in September. Traffic cops, railroad switchment and the men in the tower at the Columbus airport are getting their rest while they can. They don't expect much on the 15th and 16th of September when Air Force Association members and other AAF veterans descend in large number on Ohio's Capital.

The Columbus convention committee has its arrangements just about completed, and is prepared to handle the hundreds of AFAers expected to represent the interests of the more than 100,000 Association members who have served with the Army Air Forces.

J. H. Doolittle, president of the Association, has expressed his confidence that the first annual meeting of the AFA will mean much to the future of the organization.

"Ever since January, 1946, when the Air Force Association was first organized, we have looked forward to the time when qualified members from all over the nation could meet and

weld themselves into a strong and purposeful organization," Doolittle said.

"During the war, the spirit of cooperation, comradeship and teamwork that existed in the Air Forces was responsible in large measure for the effectiveness of the AAF. Those qualities plus an understanding of the significance of air-power gained at first hand in wartime, are certainly worth preserving as an asset to the United States and to the future defense of our country.

"Our organization has grown to a membership of more than 100,000 and in September we have our first opportunity to meet as a group to determine the future course of the association, and to democratically elect the officers and directors who will carry out the AFA policies and programs in 1948. I am confident that our work in Columbus next month will be beneficial both to our members and to the nation and to the peace of the world."



An important milestone in World War II was reached when US planes under Lt. Gen. Ira Eaker began shuttle-bombing missions between Allied and Russian bases. Eaker will be in Columbus in mufti instead of uniform.

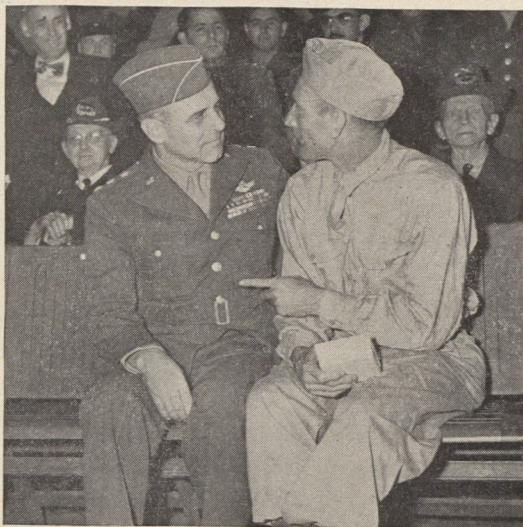


Both General Carl Spaatz and Eddie Rickenbacker, top ace of World War I, felt good when Rick got Medal of Merit from Sec'y of War Bob Patterson. Both AFAers will be on hand to add to the general cheer at Columbus.





It was a solemn moment when Maj. Gen. Hoyt S. Vandenberg, shown with Brig. Gen. V. M. Strahm, took command of Ninth Air Force. His Columbus convention appearance will be more cheerful.



Warriors' gatherings, great and small, are old campaigns to AFA's Jimmie Doolittle, surrounded by vets of four wars. At Columbus, he is expected to retain his record for adding life to the show.



"Ike" Eisenhower was noted for his desire to exchange views with all servicemen, even West Point undergrads, as in the picture above. He is coming to Columbus to swap a few with AFA'ers.

AFA Wing and Squadron delegates and the members at large from California to Maine are expected to start arriving in Columbus on Sunday, September 14, although the registration for the convention will not begin until Monday, the 15th.

Convention headquarters are to be established at Columbus' famous Neil House Hotel, and early arrivals will be able to gang up there to meet old friends and get fortified for the next two days of action.

Hilarity and informality should get a head start because Joe E. Brown, the movie and stage comedian, has accepted an invitation to Columbus and has advised the Convention Committee that he will arrive Sunday and stay as long as he can. As big as his mouth is, Joe Brown's heart is bigger. His son was in the AAF and was killed in a crash in California; yet, during the war, the comedian spent many days at the front entertaining combat soldiers, going on several AAF mis-

sions in the Pacific, once spending four nights on Bougainville belling from foxhole to foxhole.

Planes from Wright Field will fly over the city Monday morning to signal the start of the convention, which also will represent the first postwar reunion of the Army Air Forces. From 9:15 a.m., until noon on Monday, September 15, delegates and members will register at convention headquarters at the Neil House. Arrangements for this phase have been coordinated with the Convention Bureau of Columbus, which is providing assistance to the AFA meeting.

Governor Thomas J. Herbert of Ohio, who has been named honorary general chairman of the convention, will deliver the address of welcome to AFA members at a luncheon scheduled for noon, Monday, at the Neil House. AFA President Doolittle will respond, and introduce honor guests. Governor Herbert was the first State governor to join the Air Force Association, being eligible for membership because of his service as a combat pilot during World War I.

Serious business of the convention will begin with the afternoon session, scheduled for 2 o'clock at Columbus' Memorial Hall. The Army Air Forces Band will open the ceremonies and will be on hand throughout the convention. At this, and at the other business sessions scheduled for Tuesday morning and afternoon, the course of the Association in 1948 will be determined, officers and directors will be elected, and, if necessary, changes in Association procedure and structure will be voted upon.

Major General Howard C. Davidson, director of the Army Air Forces Aid Society, will be one of the speakers at the 2 p.m. business session. In his letter accepting General Doolittle's invitation to speak, General Davidson said:

"I appreciate this opportunity to appear before your association to explain to the members the aims and objectives of the Army Air Forces Aid Society. I feel sure that our two organizations can work very closely together to their mutual benefit and for the good of the Army Air Forces."

The basic purpose of the Aid Society is to collect and hold funds and to relieve distress of personnel of the AAF and their dependents, including dependents of honorably retired or discharged and deceased personnel, to provide for their education, and to secure employment for honorably retired



Comedian Joe E. Brown rubbed elbows with GI's of all ranks during his all-front tour, checking on such things as Lt. Gen. Millard Harmon's status in the Short Snorters. He'll be on hand at Columbus to check some more.

(Continued on page 44)



# AIR FORCE DIARY



*Here is the first permanent record of the air conflict—over a hundred of the best stories to appear in AIR FORCE during the war*

**N**EWEST and most unique book to come out of the air war is *Air Force Diary*—a collection of more than a hundred of the best stories appearing in *AIR FORCE* magazine during wartime.

This is the first, and to date the only, permanent record of the world's first full-scale aerial conflict as seen through the eyes of the men who fought it. All of these air war classics were written on the spot by members of the AAF between Pearl Harbor and VJ-Day.

The book, in the words of its anthologist, James H. Straubel, editor of *AIR FORCE*, is "a family diary written by more than sixty relatives for readership within the family circle—a sort of scrapbook on the doings, during working hours, of Brother Tom and Uncle Ned and Cousin Charlie."

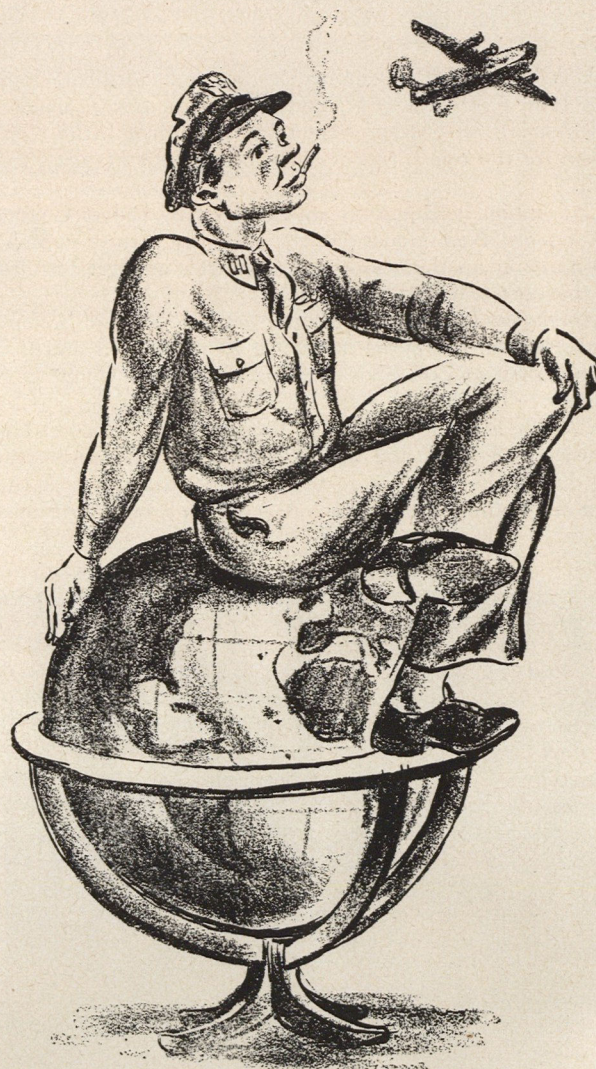
Like most family diaries, it does not attempt to present a day-to-day recording of events. There are wide chronological gaps in its nearly 500 pages for the simple reason that inspired writing is not spaced and timed as battles are. And the collection does without the functional-type articles—training critiques, news of the enemy, orientation information—which were the backbone of the wartime magazine.

The book is divided into ten chapters, each dealing with a different phase of the air war. One chapter has to do with combat missions, another with air transport operations, another with ground crew activities, etc. Much of the book is made up of personal experience stories by men who never had written for publication before, but its authors include such well known magazine names as Arthur Gordon, now editor of *Cosmopolitan*; Luther Davis, now an MGM screen writer; Mark Murphy, now with the *New Yorker*; Sam Taylor and Beirne Lay, Jr.

Historians in the age of remote-controlled, radar-guided, jet-propelled, crewless aircraft probably will conclude that the stories compiled in *Air Force Diary*—stories of planes kept in the air by sweat and blood—are significant as the record of a group of flying men who shared with their machines the full force of the enemy's blows.

All royalties from the sale of the book go to the Army Air Forces Aid Society.

In the belief that AFA members have a personal interest in stories such as these, *AIR FORCE* magazine will run an excerpt from the book each month, beginning with Regensburg Mission (opposite page). This story by Beirne Lay, Jr. was selected to inaugurate the series because: 1. August is the fourth anniversary of this famous mission, and 2. the article is considered by many to be one of the finest to come out of the war.



ILLUSTRATED BY MAJOR RAYMOND CREEKMORE



# REGENSBURG MISSION



*An excerpt from Air Force Diary, Regensburg Mission is a copilot's report to his CO on "the greatest daylight aerial battle in history"*

**BY COLONEL BEIRNE LAY, JR.**

A few days earlier the oil refineries at Ploesti, Rumania, had been bombed by 162 low-flying, Libyan-based B-24s in one of the war's most spectacular raids. The occupation of Kiska by US and Canadian troops had been completed after a protracted aerial campaign waged by the Eleventh Air Force. The tiny island of Pantelleria in the Mediterranean had already surrendered to air power, and in another month the actual invasion of Italy itself would be undertaken. It was August, 1943, and the heavies of the 8th Air Force were out to level industrial facilities in Regensburg, South Bavaria. . . .

**W**HEN our group crossed the coast of Holland at our base altitude of 17,000 feet, I was well situated to watch the proceedings, being copilot in the lead ship of the last element of the high squadron. With all of its twenty-one B-17Fs tucked in tightly, our group was within handy supporting distance of another group, ahead of us at 18,000 feet. We were the last and lowest of the seven groups that were visible ahead on a southeast course, forming a long chain in the bright sunlight—too long, it seemed. Wide gaps separated the three combat wings.

As I sat there in the tail-end element of that many-miles-long procession, gauging the distance to the lead group, I had the lonesome foreboding that might come to the last man about to run a gauntlet lined with spiked clubs. The premonition was well founded.

Near Woensdrecht, I saw the first flak blossom out in our vicinity, light and inaccurate. A few minutes later, two FW-190s appeared at one-o'clock level and whizzed through the formation ahead of us in a frontal attack, nicking two B-17s in the wings and breaking away beneath us in half rolls. Smoke immediately trailed from both B-17s, but they held their stations. As the fighters passed us at a high rate of closure, the guns of our group went into action. The pungent smell of burnt powder filled our cockpit, and the B-17 trembled to the recoil of nose and ball-turret guns. I saw pieces fly off the wing of one of the fighters before they passed from view.

The members of the crew sensed trouble. There was something desperate about the way those two fighters came in fast, right out of their climb without any preliminaries. For a few seconds the interphone was busy with admonitions: "Lead 'em more . . . short bursts . . . don't throw rounds away . . . there'll be more along in a minute."

Three minutes later, the gunners reported fighters climbing up from all around the clock, single and in pairs, both FW-190s and ME-109Gs. This was only my fourth raid, but from what I could see on my side, it looked like too many fighters for sound health. A coordinated attack followed, with the head-on fighters coming in from slightly above, the nine- and three-o'clock attackers approaching from about level and the rear attackers from slightly below. Every gun from every B-17 in our group and the one ahead was firing, crisscrossing our patch of sky with tracers to match the time-fuse cannon-shell puffs that squirted from the wings

of the Jerry single-seaters. I would estimate that seventy-five per cent of our fire was inaccurate, falling astern of the target—particularly the fire from hand-held guns. Nevertheless, both sides got hurt in this clash, with two B-17s from our low squadron and one other falling out of formation on fire, with crews bailing out, and several fighters heading for the deck in flames or with their pilots lingering behind under dirty yellow parachutes. Our group leader pulled us up nearer to the group ahead for mutual support.

I knew that we were already in a lively fight. What I didn't know was that the real fight, the onslaught of Luftwaffe 20mm cannon shells, hadn't really begun. A few minutes later, we absorbed the first wave of a hailstorm of individual fighter attacks that was to engulf us clear to the target. The ensuing action was so rapid and varied that I cannot give a chronological account of it. Instead, I will attempt a fragmentary report, salient details that even now give me a dry mouth and an unpleasant sensation in the stomach when I recall them. The sight was fantastic and surpassed fiction.

It was over Eupen that I looked out of my copilot's window after a short lull and saw two whole squadrons, twelve ME-109s and eleven FW-190s, climbing parallel to us. The first squadron had reached our level and was pulling ahead to turn into us, and the second was not far behind. Several thousand feet below us were many more fighters, with their noses cocked at maximum climb. Over the interphone came reports of an equal number of enemy aircraft deploying on the other side. For the first time, I noticed an ME-110 sitting out of range on our right. He was to stay with us all the way to the target, apparently reporting our position to fresh squadrons waiting for us down the road. At the sight of all these fighters, I had the distinct feeling of being trapped—that the Hun was tipped off, or at least had guessed our destination and was waiting for us. No P-47s were visible. The life expectancy of our group suddenly seemed very short, since it had already appeared that the fighters were passing up receding groups, with the exception of one, in order to take a cut at us.

Swinging their yellow noses around in a wide U turn, the twelve-ship squadron of ME-109s came in from twelve to two o'clock in pairs and in fours, and the main event was on.

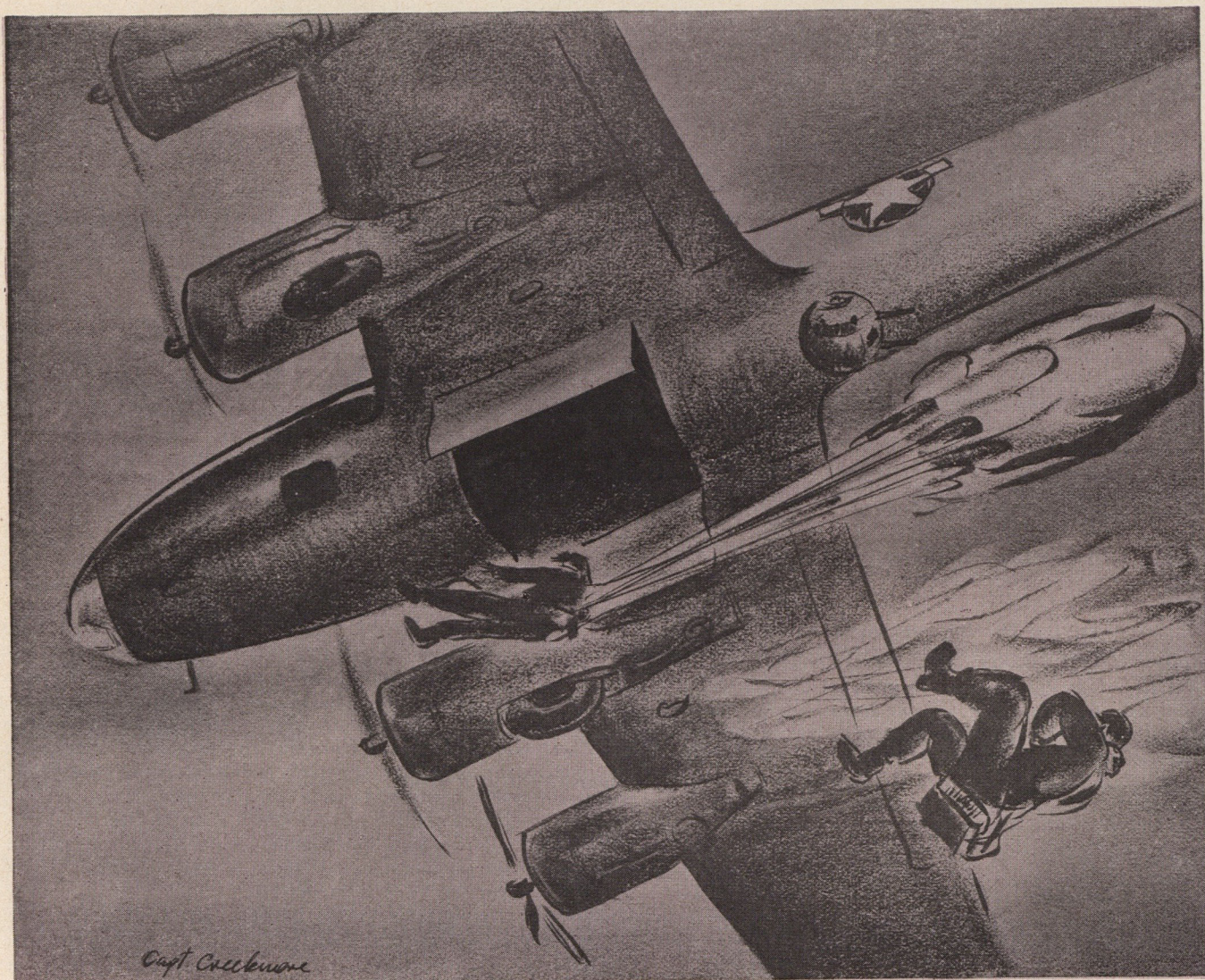
A shining silver object sailed past over our right wing. I recognized it as a main exit door. Seconds later a dark object came hurtling through the formation, barely missing several props. It was a man, clasping his knees to his head; revolving like a diver in a somersault. I didn't see his chute open.

A B-17 turned gradually out of the formation to the right, maintaining altitude. In a split second the B-17 completely disappeared in a brilliant explosion, from which the remains were four small balls of fire, the fuel tanks, which were quickly consumed as they fell earthward.

Our airplane was endangered by hunks of debris. Emergency hatches, exit doors, prematurely opened parachutes,



# REGENSBURG MISSION



"... one bailed from the nose, opened his chute prematurely and nearly fouled the tail."

bodies, and assorted fragments of B-17s and Hun fighters breezed past us in the slipstream.

I watched two fighters explode not far below, disappearing in sheets of orange flame, B-17s dropping out in every stage of distress, from engines on fire to control surfaces shot away, friendly and enemy parachutes floating down, and, on the green carpet far behind us, numerous funeral pyres of smoke from fallen fighters, marking our trail.

On we flew through the strewn wake of a desperate air battle, where disintegrating aircraft were commonplace and sixty chutes in the air at one time weren't worth a second look.

I watched a B-17 turn slowly out to the right with its cockpit a mass of flames. The copilot crawled out of his window, held on with one hand, reached back for his chute, buckled it on, let go, and was whisked back into the horizontal stabilizer. I believe the impact killed him. His chute didn't open.

Ten minutes, twenty minutes, thirty minutes, and still no letup in the attacks. The fighters queued up like a breadline and let us have it. Each second of time had a cannon shell in it. The strain of being a clay duck in the wrong end of that aerial shooting gallery became almost intolerable as the minutes accumulated toward the first hour.

Our B-17 shook steadily with the fire of its 50s, and the air inside was heavy with smoke. It was cold in the cockpit, but when I looked across at our pilot—and a good one—sweat was pouring off his forehead and over his oxygen mask. He turned the controls over to me for a while. It was a blessed relief to concentrate on holding station in formation instead of watching those everlasting fighters boring in. It was possible to forget the fighters. Then the top-turret gunner's twin muzzles would pound away a foot above my head, giving an imitation of cannon shells exploding in the cockpit.



A B-17 ahead of us, with its right Tokyo tanks on fire, dropped back to about 200 feet above our right wing and stayed there while seven of the crew bailed out successively. Four went out the bomb bay and executed delayed jumps; one bailed from the nose, opened his chute prematurely, and nearly fouled the tail. Another went out the left-waist gun opening, delaying his chute opening for a safe interval. The tail gunner dropped out of his hatch, apparently pulling the ripcord before he was clear of the ship. His chute opened instantaneously, barely missing the tail, and jerked him so hard that both his shoes came off. He hung limply in the harness, whereas the others had showed immediately some signs of life after their chutes opened, shifting around in the harness. The B-17 then dropped back in a medium spiral, and I did not see the pilots leave. I saw it just before it passed from view, several thousand feet below us, with its right wing a solid sheet of yellow flame.

After we had been under constant attack for a solid hour, it appeared certain that our group was faced with annihilation. Seven had been shot down, the sky was still mottled with rising fighters, and target time was still thirty-five minutes away. I doubt if a man in the group visualized the possibility of our getting much farther without 100 per cent loss. I know that I had long since mentally accepted the fact of death and that it was simply a question of the next second or the next minute. I learned first-hand that a man can resign himself to the certainty of death without becoming panicky. Our group firepower was reduced thirty-five per cent, and ammunition was running low. Our tail guns had to be replenished from another gun station. Gunners were becoming exhausted and nerve-tortured from the prolonged strain, and there was an awareness on everybody's part that something must have gone wrong. We had been the aiming point for what seemed like most of the Luftwaffe and we expected to find the rest of it primed for us at the target.

Fighter tactics were running fairly true to form. Frontal attackers hit the low squadron and lead squadron, while rear attackers went for the high. The manner of their attacks showed that some pilots were old-timers, some amateurs, and that all knew pretty definitely where we were going

and were inspired with a fanatical determination to stop us before we got there. The old-timers came in on frontal attacks with a noticeably slower rate of closure, apparently throttled back, obtaining greater accuracy than those that bolted through us wide out. They did some nice shooting at ranges of 500 or more yards, and in many cases seemed able to time their thrusts to catch the top and ball-turret gunners engaged with rear and side attacks. Less experienced pilots were pressing attacks home to 250 yards and less to get hits, offering point-blank targets on the breakaway, firing long bursts of twenty seconds, and, in some cases, actually pulling up instead of going down and out. Several FW pilots pulled off some first-rate deflection shooting on side attacks against the high group, then raked the low group on the breakaway out of a slideslip, keeping the nose cocked up in the turn to prolong the period the formation was in their sights.

I observed what I believe was an attempt at air-to-air bombing, although I didn't see the bombs dropped. A patch of seventy-five to a hundred gray-white bursts, smaller than flak bursts, appeared simultaneously at our level, to one side.

One B-17 dropped out on fire and put its wheels down while the crew bailed. Three ME-109s circled it closely, but held their fire, apparently ensuring that no one stayed in the ship to try for home. I saw Hun fighters hold their fire even when being shot at by a B-17 from which the crew was bailing out.

Near the IP, one hour and a half after the first of at least 200 individual fighter attacks, the pressure eased off, although hostiles were near by. We turned at the IP with fourteen B-17s left, two of which were badly crippled. They dropped out after bombing the target and headed for Switzerland. The No. 4 engine on one of them was afire, but the plane was not out of control. The leader of the high squadron received a cannon shell in his No. 3 engine just before the start of the bombing run and went in to the target with the prop feathered.

Weather over the target, as on the entire trip, was ideal. Flak was negligible. The group got its bombs away promptly on the leader. As we turned and headed for the Alps, I got a grim satisfaction out of seeing a column of smoke rising straight up from the ME-109 shops, with only one burst over in the town of Regensburg.

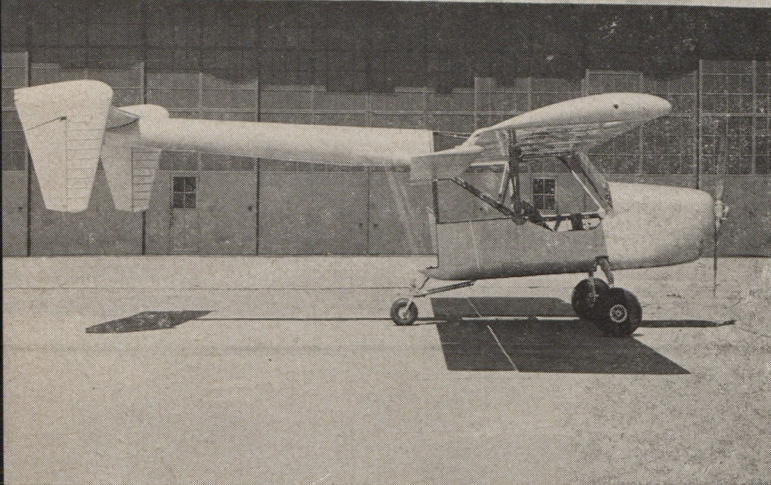
The rest of the trip was a marked anticlimax. A few more fighters pecked at us on the way to the Alps. A town in the Brenner Pass tossed up a lone burst of futile flak. We circled the air division over Lake Garda long enough to give the cripples a chance to join the family, and we were on our way toward the Mediterranean in a gradual descent. About twenty-five fighters on the ground at Verona stayed on the ground. The prospect of ditching as we approached Bone, short of fuel, and the sight of other B-17s falling into the drink, seemed trivial matters after the nightmare of the long trip across southern Germany. We felt the reaction of men who had not expected to see another sunset.

At dusk, with red lights showing on all of the fuel tanks in my ship, the seven B-17s of the group still in formation circled over Bertoux and landed in the dust. Our crew was unscratched. Sole damage to the airplane: a bit of ventilation around the tail from flak and 20mm shells. We slept on the hard ground under the wings of our B-17, but the good earth felt softer than a silk pillow.



"... it appeared our group was faced with annihilation."

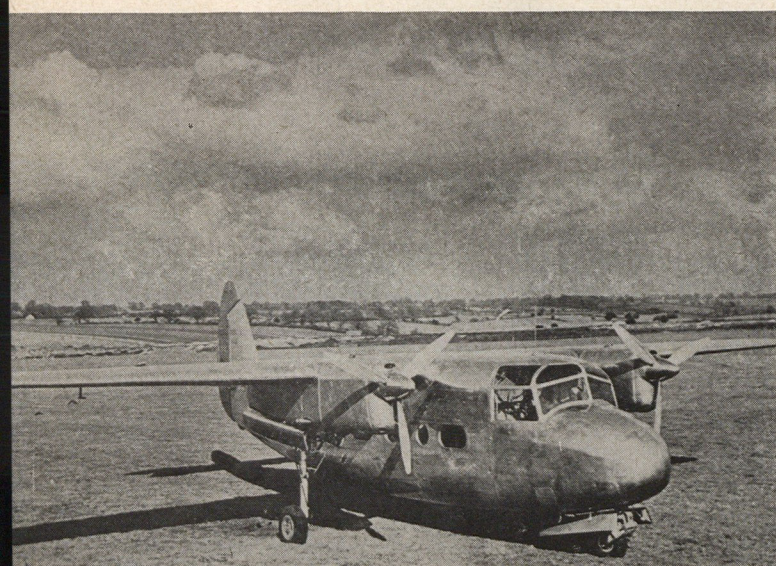




Boeing's latest, the XL-15, is built with full-span flap and "retractable" ailerons for minimum take-off and slow-speed performance. Gondola fuselage offers maximum visibility for reconnaissance, spotting, aerial photography.



Winner of first prize as best small taxi and feeder plane at recent Paris International Air Show, the four-place 150 hp Dutch-built Fokker has a cruising speed of 140 mph. The new type is pusher for safety and forward visibility.



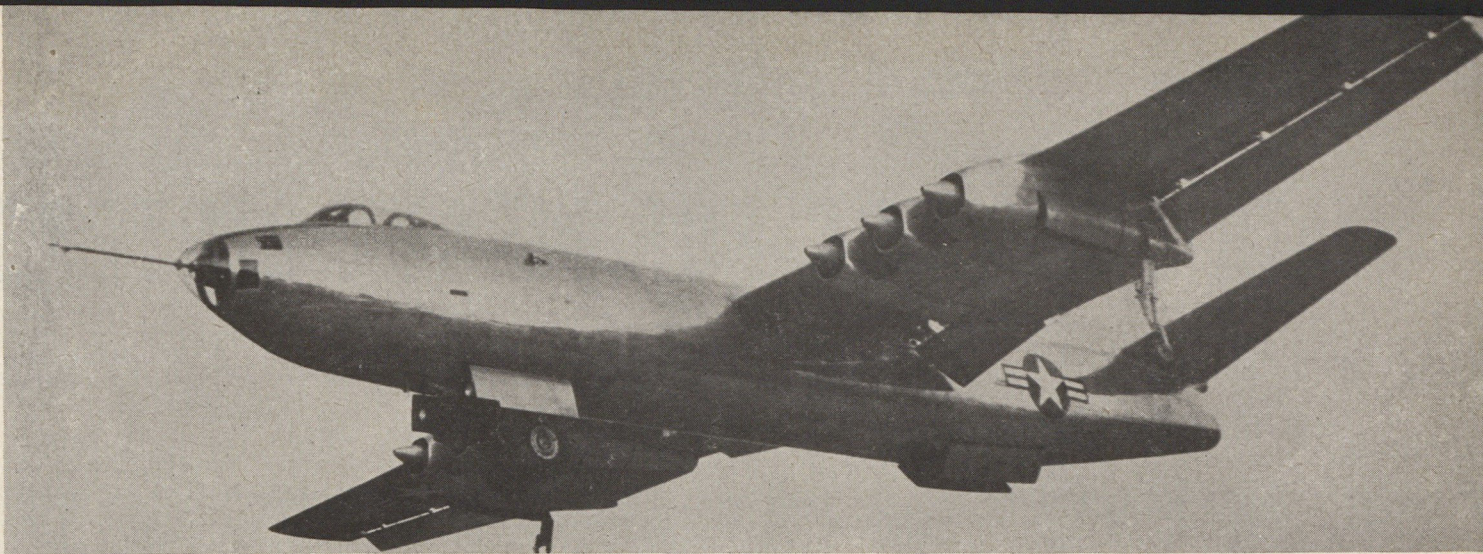
Britain's latest light transport, the Percival Merganser, powered by two 296 hp engines. Eight place, it has a top speed of 193 mph, cruises at 160. Built primarily as a charter and short-run transport, it can convert to cargo.

## BULLETIN BOARD

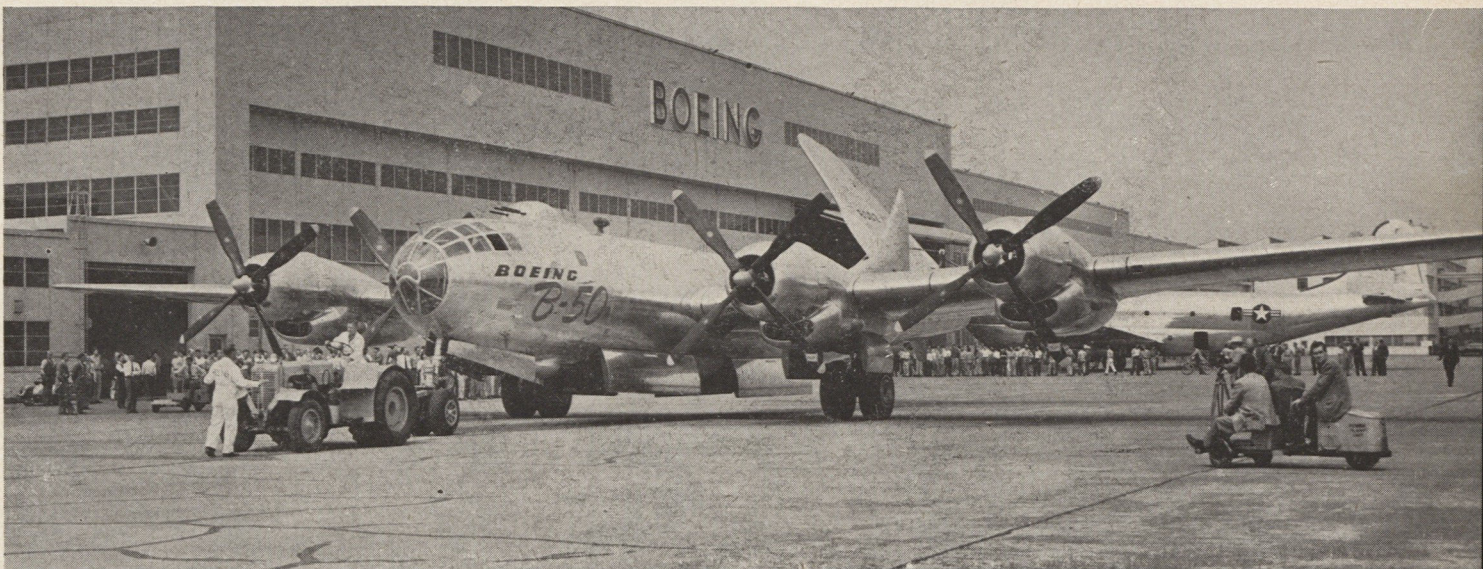


Col. Albert Boyd of Air Matériel Command climbs out of his P-80R at Muroc, Cal. after breaking world's speed record. Above, the speedy Lockheed Shooting Star hitting the new mark of 623 mph.

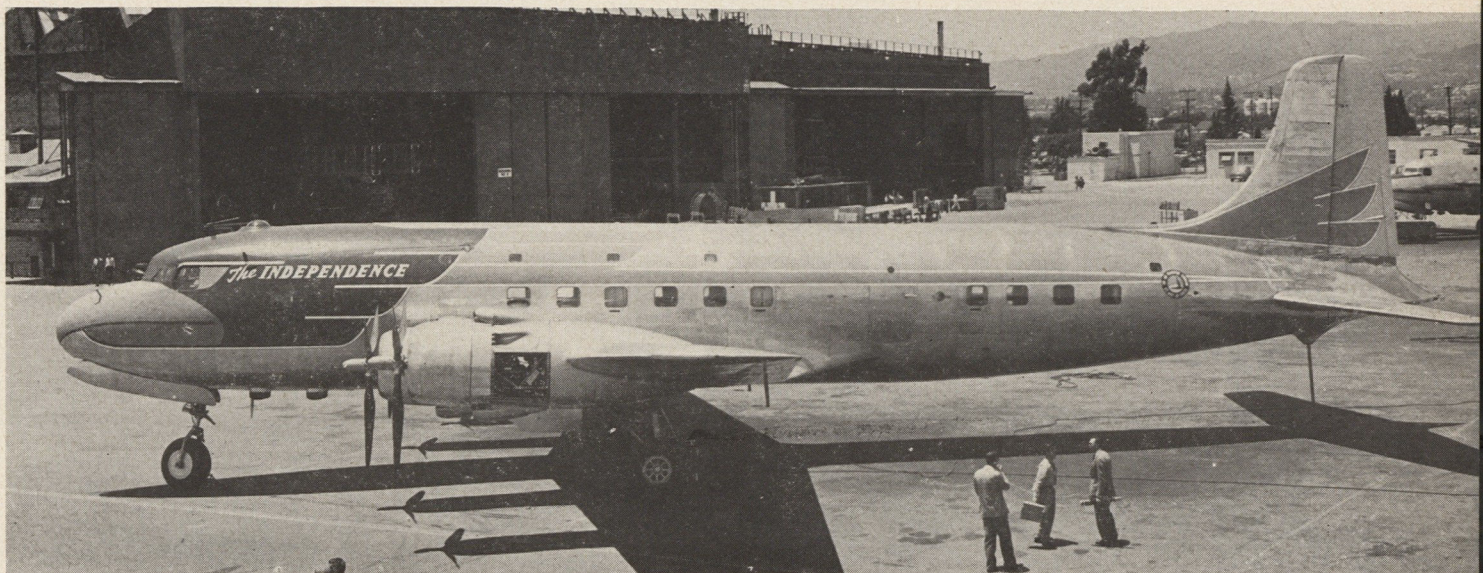




**Largest jet bomber** flown to date, Martin's XB-48 behaved very well on its initial test run at Middle River, Md. It is shown above, making its initial landing, with its tandem-mounted landing gear just emerging from inside the fuselage. Note the full-span type flaps.



**Successor** to the famed B-29, the first of Boeing's B-50s rolls off the production line at Seattle. Heavier powered and heavier armed, the new Boeing Superfort uses a folding tail to allow it into average AAF hangar. The B-50 will be the Air Forces' standard heavy unit.



**Delivery paint job** completes the new Flying White House, the Douglas DC-6 *Independence*, which will take over for the famed "Sacred Cow" in the near future. Faster, more luxurious than the old executive DC-4, it carries all known air born avigational equipment.



# AIR POINTERS FOR WEST POINTERS

*In the early stages of the last war the ground generals had a tough time*

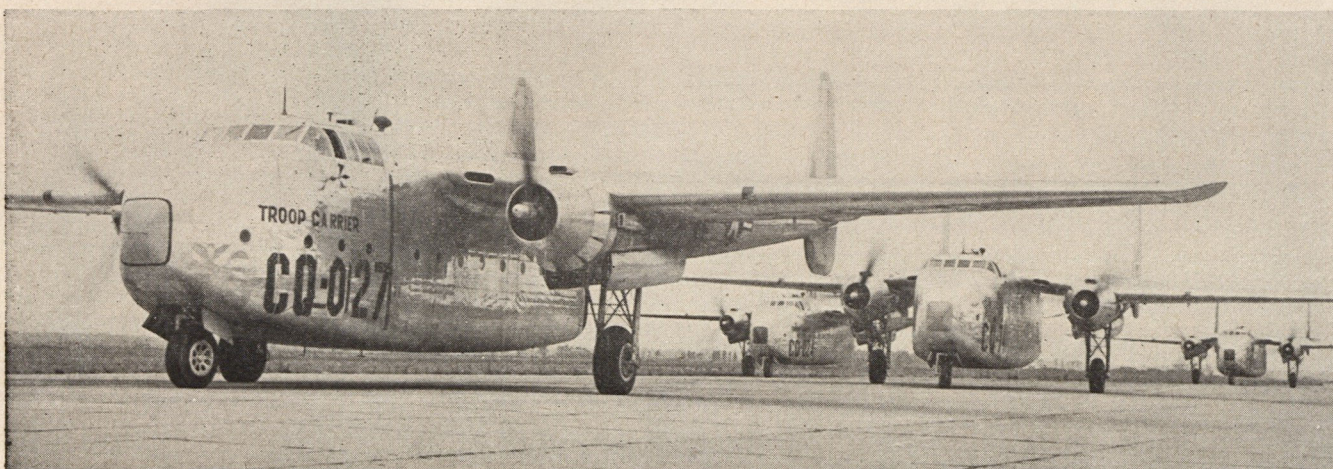
*learning what air power could and couldn't do. Today West Point is indoctrinating future officers with tours like this*

**BY BEN NEWBY,** *Ninth Air Force Information Specialist*

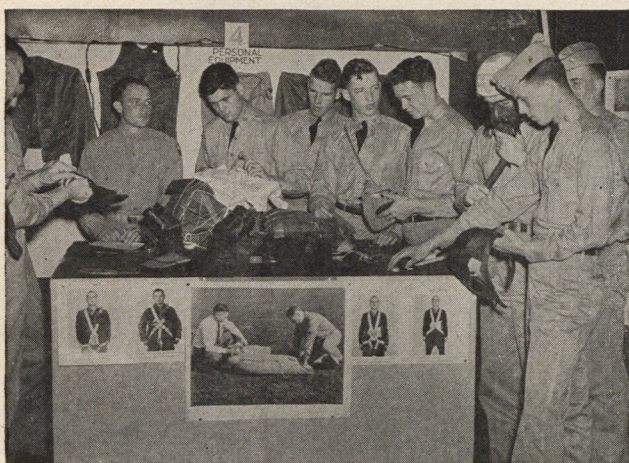
**W**HILE some 300 of the Army's West Point cadets gathered at Stewart Field, N. Y., last June and made last minute preparations, "Flying Boxcar" C-82 pilots and crews of the Ninth Air Force checked maps and readied planes for taking the cadets on the first leg of a twenty-eight-day indoctrination tour of AAF bases.

An innovation in tradition-bound West Point's summer curriculum, the tour was initiated through joint cooperation of the Army Air Forces and the Ground Forces. Under the supervision of the Tactical Air Command, the aerial tour was conducted to indoctrinate each cadet with an appreciation of the capabilities, and doctrines of military aviation.

Designed primarily for those cadets who will *not* graduate into the AAF, the tour itinerary included six AAF bases.



1. Cadet-laden Flying Boxcars of the Ninth Air Force line up for take-off from Stewart Field, N. Y., on first leg of 28-day indoctrination tour of AAF Tactical and Strategic Air Command bases.



4. At Langley Field, Va., cadets view latest personal equipment for air crew members of AAF. Cadets selected for tour were those who will probably not be assigned to AAF after graduation.



5. For the most part it was a rugged twenty-eight days. But C. Betts (left) of Holtwood, Pa., and J. F. Hodes of Washington, D. C. find time to do a few handstands at Myrtle Beach, South Carolina.



where Air Force leaders made an all-out effort to present to the cadets the basic principles of air power from an Army Air Forces point of view.

Five stations of the Tactical Air Command and one of the Strategic Air Command were visited. All types of military aviation were shown to the students and they were permitted as far as practicable to participate in training missions at each field visited. The first step was at Langley Field, Virginia, where demonstrations of reconnaissance aviation by Lockheed FP-80 Shooting Stars and Douglas A-26 Invaders were viewed by the cadets.

At Lawson Field, Fort Benning, Ga., one squadron of fighters from the 20th Fighter Group and one squadron of A-26 light bombers from the 47th Bomb Group demon-

strated softening up of Paratrooper Drop Zones, using bombs, guns and rockets.

At Pope Field, the cadets were taught the varied phases of AAF troop carrier activity including aerial resupply, air evacuation of wounded, glider towing, and hauling of airborne troops and equipment. As an added feature, all cadets were taken for rides in CG-15 cargo gliders.

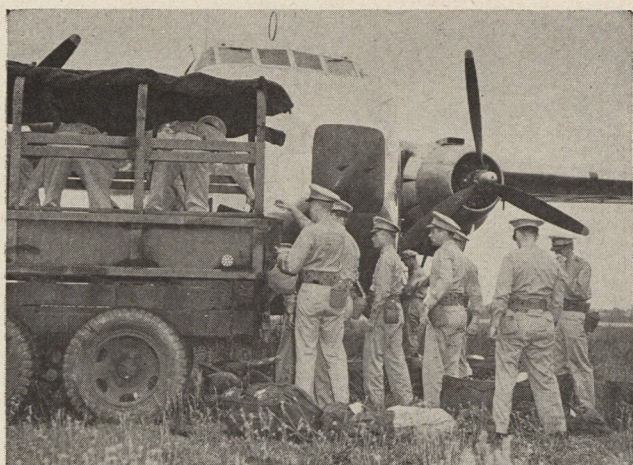
Although the full results of the West Point Air Indoctrination project cannot be assessed until some future date, the broad scope of AAF activity and training included in the itinerary enabled the future Army leaders to see in action all categories of military aircraft used by the AAF's Tactical Air Command—from fighters, bombers, and troop carriers to photo-recon planes.



2. In spacious Fairchild Packets, West Pointers had enough room to stow baggage, parachutes and themselves. The C-82 is capable of transporting 42 fighting men and all their equipment.



3. At one of the Tactical Air Command's bases carefully pressed cadets study intricate sighting and control mechanism which operates remote control turrets of the Douglas A-26 Invader.



6. Back to work, cadets don "under arms" uniform to load baggage in Packet. In all, six bases were visited. Cadets learned much of the capabilities as well as the limitations of military air power.



7. Back home as fresh as the day they left, cadets prepare to bail out of forward door of C-82 Flying Boxcar.





# NEWS

## CALIFORNIA

Santa Monica Bay Squadron announces a change in its meeting night and the completion of arrangements for a new and larger meeting place. The Squadron, effective with the June meeting, now assembles the first Wednesday of each month at Veteran's Hall, 1428 17th Street, Santa Monica. Plans are now being made for the participation of the Squadron in Air Force Day ceremonies on the Coast.

## INDIANA

From Indiana last month came word of the organization of a Squadron at Terre Haute and announcement of the election of the following officers: Eugene Wind, Commander; William Champion, Vice-Commander; Robert J. Kadel, Secretary and Treasurer. Other former Air Force men in Terre Haute are requested to write to Secretary Kadel at 2915 South 6th St., to find out more about the Squadron.

## IOWA

Although many Squadrons have discussed buying a private plane, the Davenport, Iowa organization is doing something about it by completing arrangements for the purchase of a light aircraft from Squadron funds for personal flying by members. According to present plans, the first aircraft is to be a light, two-place plane of the Cub class with additional and larger ones added as required by the Squadron.

The Davenport Squadron also reports a thirty-eight per cent increase in membership as the result of a recent newspaper and radio publicity program.

## MARYLAND

Four Air Force Association Squadrons in the Baltimore, Maryland area, combined forces to attend a dance given by the Air-WAC Squadron in the Southern Hotel last month. Members of the Air-WAC Squadron in charge of arrange-



Patients and participants reflect some of the gaiety which was order of the day when the New York All-Wac Squadron organized a picnic for Halloran Hospital inmates. Squadron Cmdr. Mary Gill stands left. Comedian Ole Olsen (center) put on two-hour show, while AFA President Gen. James H. Doolittle (right) joined in fun.

ments were: Miss Hilda McCann, former Captain on duty with the 8th Air Force, and Miss Muriel Miller, former WAC Corporal in Air Cadet Training. Even the music was provided by a band composed of all AFA members under the direction of Hayes Russel. Organizations represented were: The Baltimore Squadron, The Johns Hopkins University Squadron and the Glenn L. Martin Squadron.

## MASSACHUSETTS

The Arlington, Massachusetts Squadron, organized in December 1946, announces the election of a new slate of



Members of Buffalo squadron place AFA inscribed wreath on monument in Memorial Day ceremonies. Left to right: H. B. Forbes; J. A. Murek; Angelo N. Castanza; Earl T. Robinson.



Major Thomas F. Witt, acting air inspector at Kelly Field, places colorful AFA decal on windshield of his automobile. Decalcomanias were recently distributed to members through squadrons.



officers. New Commander is Charles E. Fiske, who served one year as Secretary of the Squadron prior to being elected to his present position. Vice-Commander is Lee Denault; James White, Secretary; Alise Kirsis, Treasurer. For further information about the Squadron, members in the Arlington area may contact White at 24 Woodbridge St., Cambridge.

Two new Squadrons were also activated in Massachusetts during the month. First was at Worcester where Harold A. Fink was elected Commander; Charles W. Gustauson, Vice-



**Davenport, Iowa** squadron members meet to plan plane purchase. Left to right, first row: J. E. VanHootgen; E. Bergbauer; H. E. Manke; H. E. Elliott; H. W. Strahan; L. F. Lakeman. Back row, left to right: P. A. Penotte; D. Haugan; P. Downing; R. E. Costello; L. E. Siders; G. R. Trumbull; J. Tillotson; C. Barker.

Commander; George I. Alberts, Secretary; Robert C. Mee, Treasurer. Commander Fink, at 12 Windsor St., will answer inquiries about the Squadron to former Air Force men.

The other new Squadron in the state was at Malden where the following officers were elected: Commander, Robert F. Maycan; Vice-Commander, Joseph R. Cafarella; Secretary, Carleton M. Holden; Treasurer, James A. Murphy. Address of the commander is 70 Cedar St., Malden 48.

#### NEW HAMPSHIRE

Lakes Region Squadron No. 1, New Hampshire, was



Grouped around Brig. Gen. G. H. Beverly, Air Matériel Area CG, are first permanent officers of San Antonio squadron. Left to right: Frank Mooty; W. N. Hensley; W. Draper; H. Holzmann.

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chartered on May 15 and now meets regularly on the first Monday of each month. Officers of the Squadron are: Commander, J. Clinton Roper; Arthur A. Allen, Vice-Commander; Elliott W. Chase, Secretary; Alden B. Curtis, Treasurer. Squadron address is: Elliott W. Chase, Secretary, RFD 4, Laconia, New Hampshire.

#### NEW YORK

The Rochester Squadron met the Buffalo Squadron in a



Officers of Baltimore and Johns Hopkins squadron "sit one out" at recent Air-Wac sponsored dance in Baltimore. Left, front to back: Mrs. Robert Fowler; Mr. and Mrs. C. Gascoyne; Mr. and Mrs. William Hammond. Right, front to back: Robert Fowler; J. R. Mitchell; Mrs. Dorothy MacNamee and Mrs. John Marshall Boone.

friendly "Quiz of Two Cities" radio program in June. The radio contest originated in the studios in the respective cities and was broadcast in both, but the final effect was that of the two teams facing each other. According to Commander Dave Whalen the contest engendered considerable interest and may result in a return engagement.

#### OKLAHOMA

Added to the growing list of Squadrons in Oklahoma is the newly activated organization at Stillwater, which was chartered in May with members totalling forty-seven. E. Lowell Chrisman was elected Commander; Vernon S. Kirk is Vice-Commander; Vernon R. Mitchell is secretary and David C. Hartley is treasurer. Squadron address is Vernon Mitchell, Secretary, 1405 Husband St., Stillwater.

#### OREGON

From the Great Northwest comes the charter of another AFA Squadron. This time, it is the Eugene, Oregon Squadron, which meets the first Monday of each month. Squadron Commander is Anthony J. Conroy. Norburn E. Whittington is Vice-Commander, Mrs. Agnes C. Wilbur is Secretary and Grayce Dunagan is Treasurer. Check with Commander Conroy at 1319 E. 15th Street, Eugene, for the time and place of the next meeting.

#### VIRGINIA

Newest Squadron to be chartered in the State of Virginia is at Lexington, home of famous VMI. Organized in May, the Squadron announced the election of Kensley R. Thompson as Commander. Other officers include: Jack M. Burnett, Vice-Commander; Henry M. Barker, Secretary; Havard S. Myers, Treasurer. Commander Thompson has invited other men and women in the Lexington region who served in the

(Continued on page 44)





Adventure starts. Alaskan Air Scouts Miles Hyland, Stan Horton and Don Irwin board an Army bus at Anchorage for the first of their four days' encampment with the AAF's 57th Fighter Group.

# RED BLOOD AT GREEN LAKE

*Officers and men of the 57th Fighter Group volunteer time and services to acquaint youth with role of air power*

**L**IKE most other phases of Air Force activity, the Air Scout program has taken a terrific financial shellacking. Originally it was hoped by the air generals that sufficient funds would be available to "sponsor" a good healthy number of Air Scout squadrons from coast to coast in much the same manner that the Navy sponsors Sea Scouting. But since "adequate funds" were not forthcoming, the Air Force has been largely reduced to "cooperating with" rather than sponsoring scout units.

But here and there this passive cooperation blossoms out into something positive. Now and again conscientious AAF officers who recognize the importance of acquainting the youth of the nation with the fundamental concepts of air power, volunteer on their own hook to do something about it.

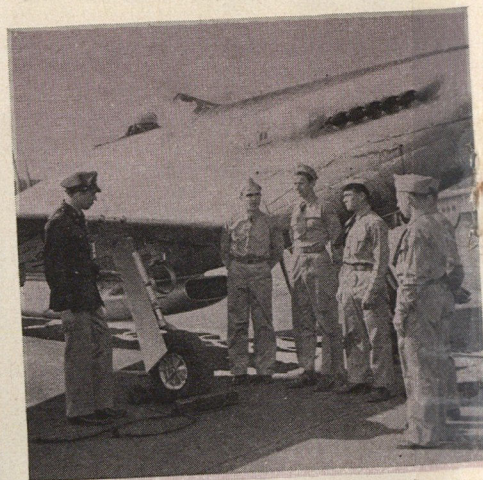
Such was the case at Fort Richardson, Green Lake, Alaska, recently when the officers and men of the 57th Fighter Group invited forty-two Alaskan Air Scouts from the cities of Palmer and Anchorage to make a four-day encampment on the base. Aside from being royally entertained (see pictures) the scouts attended lectures on weather operations, navigation, rescue methods and jet propulsion and were briefed on link training, Ground Control Approach, aerodynamics, aircraft engines, propellers, instruments, electricity and sheet metal.



"With Square Corners." Crew Leader Duane Huntley learns GI way of making bunk from M/Sgt. M. J. Clarey of Alaskan Air Command.



Scoutmaster Gribble, holding notebook, lines up his 42-man command in front of the Chugach Theater at Ft. Richardson for evening movie.



A real Mustang pilot explains the characteristics of the P-51 to the air scouts from Anchorage and Palmer. This is D. Huntley and crew.





Supervising officer uses a parka, but the Alaskan air scouts defy the temperature to take a plunge in Green Lake. Lineup are: Don Chitty, Clarence Patrick, Wilfred Polk and Floyd Newkirk.



Stoking up. At the Green Lake recreation camp, Palmer Air Scouts join 57th Fighter Group officers in a hamburger roast as part of their trip.



Capt. Rafael Ramirez explains the use of the radio-equipped "weasel" for rescue to Scouts D. Oliphant (foreground) and A. Lahnum.



How to feed Air Scouts. Bob Prescott shown after drawing special outdoor mess hamburgers, ice cream and pop. Where's that Mess Sergeant?



# CROSS-COUNTRY

## Fifinella Reunion

Plans are being completed for the second annual reunion of the Order of Fifinella, the organization of ex-Wasps, which will be held this year at Ponca City, Oklahoma. The first such convocation, held last year at Piper Aircraft's plant at Lock Haven, Pa., drew a large number of former girl ferry pilots. This year's four-day get-together, scheduled for late in August, is expected to draw over 150 participants, according to President Betty Jane Williams.

## US Civil Aircraft

Total registered civil aircraft in the United States and Territories now number more than 81,000, the highest in our history, T. P. Wright, Administrator of Civil Aeronautics, has announced.

Broken down by states, the compilation of our civil aircraft as of January 1, 1947 shows California leading the list with a total of 8456 and Texas close behind with 7789. Vermont with 144 civil aircraft has the smallest number followed by Rhode Island with 181. Aircraft in the Territories number 654.

## Fort Warren Becomes AAF Base

Fort Francis E. Warren, near Cheyenne, Wyoming, which has been a military post for seventy-eight years and permanently operated by the Fifth Army, became an Army Air Forces base on June 1.

The historic post is planned for use by the AAF as the site of the School of Aviation Engineers, now located at Geiger Field (Spokane) Washington. The topography of the surrounding area is considered satisfactory for such a school.

The original reservation was named Fort D. A. Russell



Army engineers, seeking to control the Mississippi, enlisted the aid of aerial photographers from the 55th Recon Group at McDill Field, Tampa. Above, view of inundation at Grand River, Mo.



Distance no object. Wayne L. Troutner of Winslow, Ariz., uses a Stinson Voyager to deliver dry cleaning in scattered communities of his area. Above, making a pick-up at the famed Hopi House.

when it was set aside for military purposes seventy-eight years ago but the name was changed in 1929 to Fort Francis E. Warren in honor of the late Senator Francis E. Warren of Wyoming.

## AAF Weather Forecast for Firing of V-2s

A small but efficient weather station has been installed at the White Sands, New Mexico, Guided Missiles Proving Ground by the Air Weather Service of the AAF.

The weather station is unlike other stations in that the technicians at White Sands are primarily interested in meteorological conditions of the upper air regions rather than weather close to the earth's surface which affect normal air traffic.

For this reason, Captain John Smith, CO of the unit, and his enlisted weather technicians use the latest in radio and electronic weather-detecting equipment. Large, 2000-gram neoprene balloons carry delicate instruments to about 100,000 feet with ground radio receivers, direction-finding equipment, and surveillance radar units correlate weather conditions at extreme heights.





AFA's Jimmie Stewart looks over a P-51 which Joe De Bono will enter in Bendix Race late in August. Stewart, former 8th Air Force Group CO, is the backer of this stripped-down Mustang entry.

One of the major projects at White Sands is the series of captured German V-2 rocket firings in which leading scientists of major research organizations place various types of recording instruments in the warheads of the rockets in science's efforts to solve some of the mysteries of the upper atmosphere. The importance of weather forecasting for these rocket firings is vital to the success of the V-2 program. Captain Smith was selected for the assignment because of his knowledge of physics, mathematics, and meteorology.

Four complete forecasts ranging from seventy-two to four hours before each V-2 firing are required to insure the success of the program. The forecasts have the following purposes: The seventy-two-hour forecast is for the necessary planning and set-up of the supplies for the day of the firing. A forty-eight hour forecast determines whether it is advisable to take the assembled rocket down to the launching site or leave it in the assembly hangar. A twenty-four-hour forecast determines the rate of installation of the instrumentation and

whether to continue with the scheduled program. The final forecast determines the practicability of fueling the rocket for firing.

### Olympic Participation

Since 1896, athletes of the world have tried to get together every four years for real international trials commemorating the Olympiad of Athens. Three times during that period, wars have interfered, but the nations of the planet have usually recovered sufficiently to put the game back into play. In 1948, London will be host to the athletes of the world. Since 1912, the Army has sent competitors to the Olympiad, some of whom brought distinction not only to themselves but to their service.

The Army is making a full-scale operation of its participation in the XIV Olympics, having created an Army Olympic Control Committee with Brig. Gen. Russel R. Reynolds as chairman, using the Olympics as part of the service's general athletic program.

The Army's participation program concerns itself particularly with those sports with direct relation to military training. These include boxing, wrestling, fencing, swimming, skiing, rifle and pistol shooting, equestrian events and the modern pentathlon. The Committee's job is to select athletes for participation in the London meet through elimination meets and through plain athletic scouting.

Some of the brightest Army prospects come (naturally) from the ranks of the AAF. These include the strongest competitor for a place on the modern pentathlon team, Lt. Col. John C. Habecker of Marshall Field, Kansas, and Lt. R. C. Newell of HQ 20th Fighter Group for javelin and the 60-yard dash honors. Former West Pointer Maj. Benjamin C. Cassidy, currently in Germany, shows promise in the 400-meter hurdles.

### Army Orders Light Planes

The Aeronca Aircraft Corp. of Middletown, Ohio has been awarded an Army contract to build 439 planes for liaison duty and organic observation purposes for the Army Ground Forces and for National Guard ground force organizations. The type, known as Model 7BC, is generally similar to the standard Aeronca Champion, but is plexiglas enclosed forward, top and sides, for maximum vision. The type is powered by an 85 hp Continental engine instead of the usual 65 hp power plant.

## FLORIDA'S BEACH STRIPS



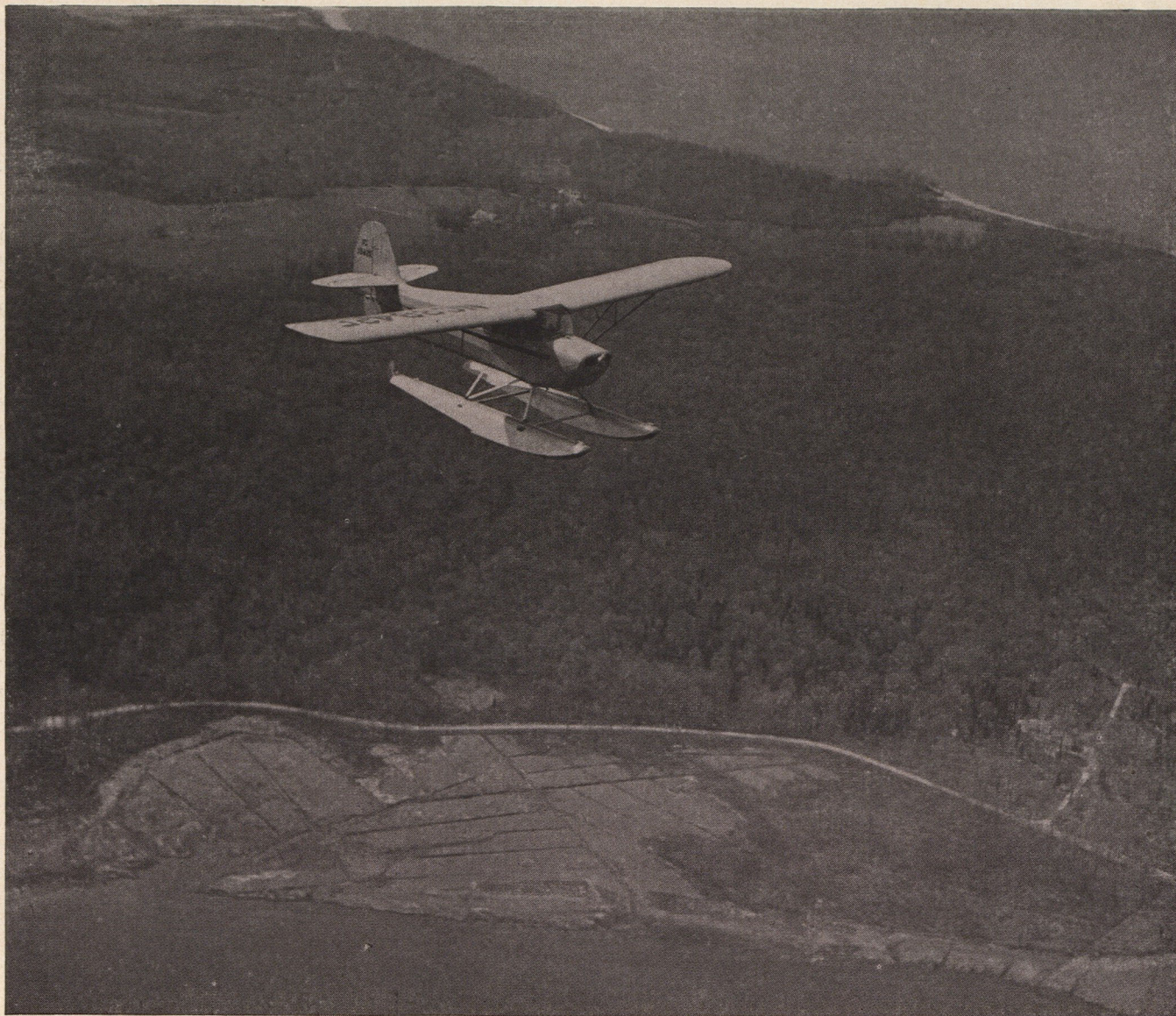
Summer, beaches, gals are an old combination. Personal aircraft, however, put a new face on an old habit. Private pilots use tidal strip at St. Augustine as runway for the day's outdoor fun.

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Left, Seabee pilot lifts his aerial date out of his amphibian after sandstrip landing. Right, another couple alighting from their Cessna. At right "stag" Taylor Craft pilot greets some comely lasses.





The new Aeronca Scout, shown above on float test trials over Oyster Bay, Long Island, is a less expensive version of the Chief, is aimed

at the flying school market. Side-by-side seating, 80 per cent of its parts are interchangeable with other planes in the Aeronca line.

## NEW WINGS

*Improved performance and cockpit comfort feature new personal aircraft*

**D**ESPITE the ominous figures on sales possibilities for personal aircraft for the remainder of 1947, new types are making their appearances at the usual rate; an average of four a month.

After more than a decade of use, Piper Aircraft has done a fundamental reshaping of their famed J-3 Cub. The new craft, the PA-11, outwardly is little different from the famed predecessor. It is still a braced high-wing monoplane, powered by a 65 hp Continental engine.

Most of the changes are the result of consumer suggestions and affect the airframe itself. The fuselage is still welded steel tubing, but the wings have gone from the clas-

sic wood spars and stamped dural ribs, to dural spars, riveted nicral ribs and chrome vanadium tie rods. The ailerons are now all metal structure, covered in fabric.

Landing gear and wing support struts are thinned in section, thereby cutting down parasite drag.

Probably the most significant single change is in the engine positioning. The entire power plant has been lowered four inches at the propeller line, greatly improving forward vision, particularly in taxiing position.

Within the cockpit, redesign concerned itself chiefly with passenger comfort. There is small doubt that the old J-3 was not the paragon of cabin luxury, but the PA-11 has effected many improvements. To start with, both seats have been moved rearward, adding some leg room. The front seat has been raised two inches and has been approved for solo flying, thus breaking the long-standing rule that Cubs must be soloed from the rear seat.

Other improvements include standardization of airfoam rubber cushions, formerly extra equipment mold-rubber sealed doors and windows and a cabin heater which allows

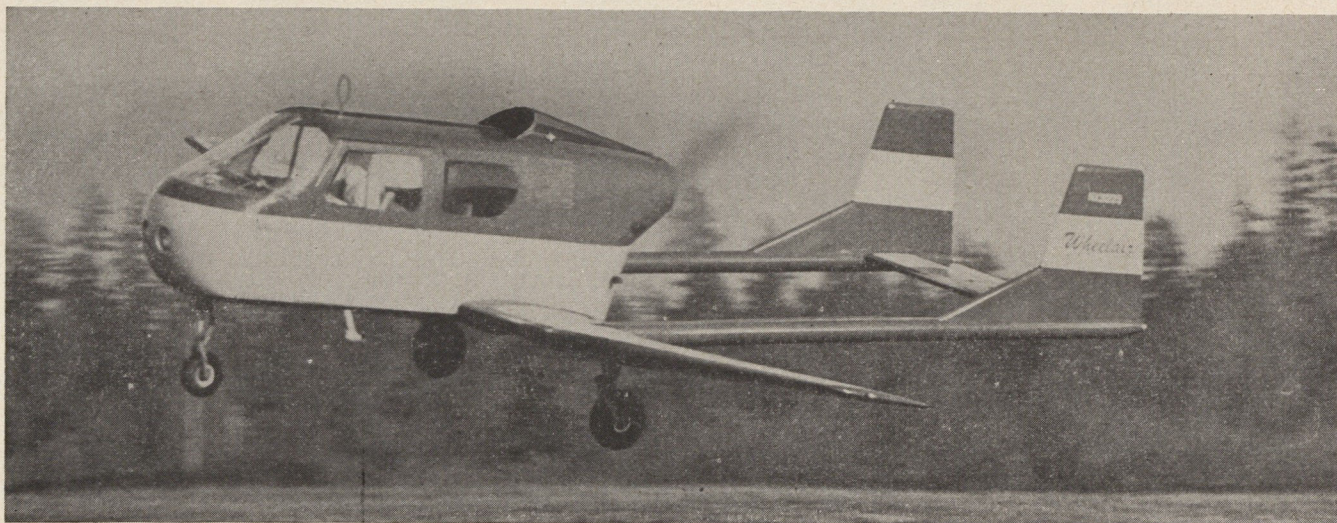
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With the Model 195, Cessna re-enters the 4-place class which made the company's reputation a quarter of a century ago. All-metal and

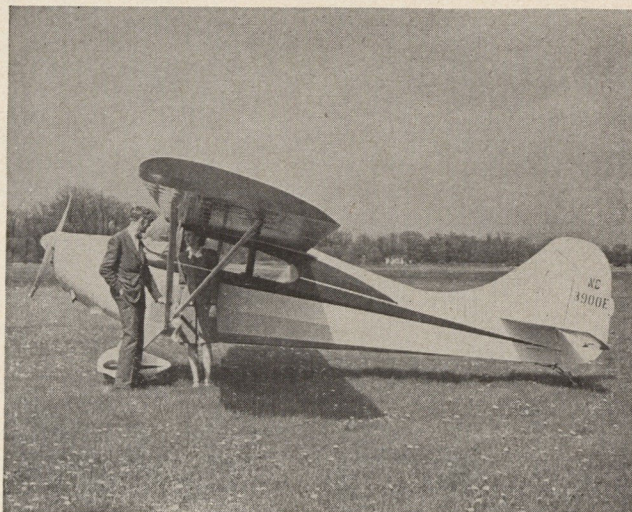
using the single-spring landing gear, the new type retains a strong family resemblance to the original design by pioneer Clyde Cessna.



Winner of the Popular Science private plane design contest, the Wheelair 111A is flight tested at McChord Field, Tacoma. Four-

place, the craft uses a two-control system and is stallproof and spin-proof. The new non-conventional design is of all-metal construction.

Successor to the famed J-3 cub, the new Piper PA-11 contains such improvements as full cowl, increased leg room, improved vision and better cruising speed and range. The wing is all-metal construction.



Aeronca's new SuperChief uses 85 hp Continental engine instead of 65. Cabin comfort and performance have been improved without the sacrificing of parts standardization within the Aeronca line.





At minus seventy, APGC crews examine landing gear of a B-29 for operating conditions inside the giant climatic hangar at Eglin Field in Florida. GI clothing for arctic conditions is tested at the same time.

## BIG FREEZE AT EGLIN

*Air Proving Ground Command's big icebox simulates Arctic*

It can open a cavernous mouth and swallow the biggest plane built. Once it shuts its maw, it can freeze the contents solid or parboil it, drench it in tropical rain, blow local williwaws over it or subject it to any combination of conditions science can describe or the imps of weather create. Down at Eglin Field, Florida, where this creation sits facing the blue waters of the gulf, the enlisted men who serve this newest pillar to progress call it "the cooler." Its official name is Climatic Hangar, Air Proving Ground Command.

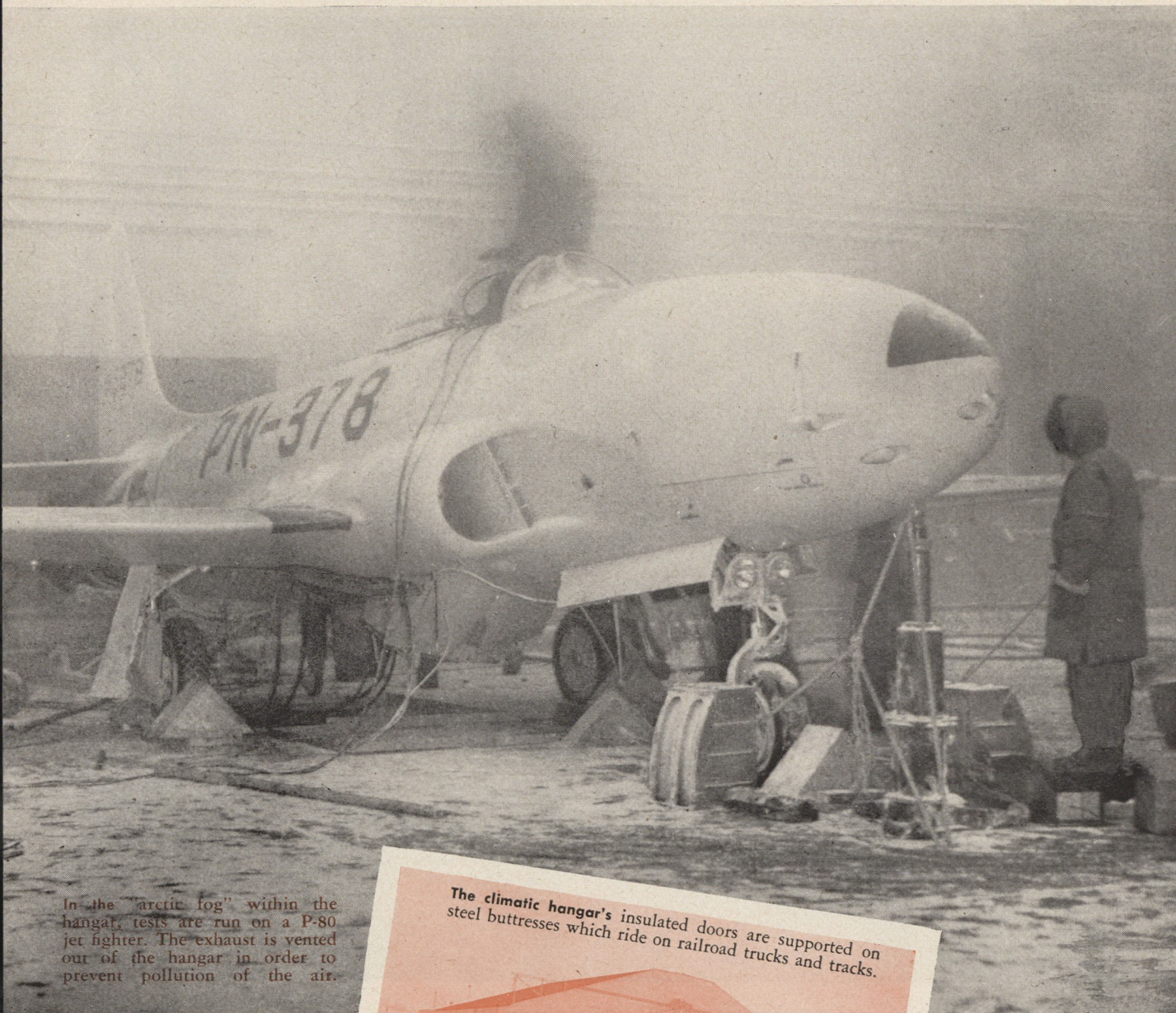
On the outside, the facility looks pretty much like any other hangar. The doors look as if they had a scaffold and a miniature railroad in front, but aside from that it looks fairly common. However, any resemblance to any other hangar on the planet is no fault of the APGC. The "cooler" is unique. Its purpose is to reproduce operating conditions anywhere on the globe.

Back in the days when we were delivering lend-lease airplanes to Russia via Alaska, we discovered how much we still

had to learn about operating aircraft in the cold. The obvious technique for testing planes in Arctic weather was to take them to where nature provided her own refrigeration. There was only one catch. The gremlins that foment weather are as unreliable in the Arctic as they are on picnic Sundays. It is *really* cold only part of the year even in the land of the midnight sun. This fact cuts the testing season down a big slice. To add to these woes, testing cold is a relative matter, and even well-planned testing expeditions, like last Winter's famed Operation Frostbite must arrive at a general location, then sit down and wait until the thermometer decides to drop to usable levels. When one considers the cost in men, matériel and time, it is easy to see how a device for taking the gamble out of climatic testing saves not only money but time, which is the essence of all modern military problems.

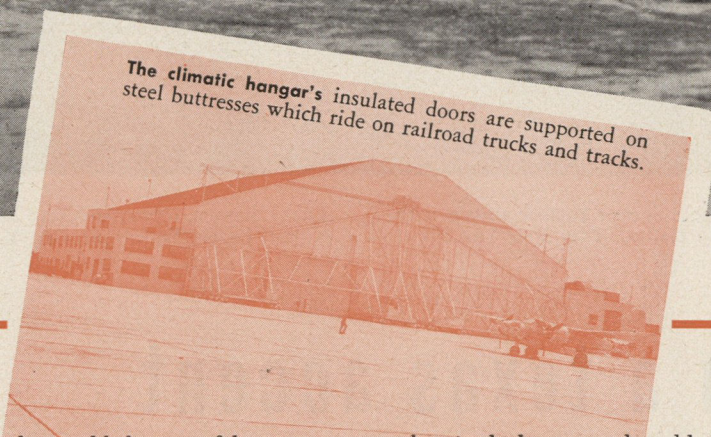
Back in those lend-lease days, the AAF consulted Col. Ashley McKinley, former lead pilot on Admiral Byrd's trips to the cold domain, as to the means of licking this testing





In the "arctic fog" within the hangar, tests are run on a P-80 jet fighter. The exhaust is vented out of the hangar in order to prevent pollution of the air.

The climatic hangar's insulated doors are supported on steel buttresses which ride on railroad trucks and tracks.



problem. Instead of asking for the establishment of bases on the Antarctic Plateau, McKinley suggested that the best, most practical and least expensive method for conducting cold country tests would be to completely insulate a large hangar and condition the air inside to simulate any condition required. In other words, take the weather indoors where it could be controlled.

Work was begun on the Climatic Hangar nearly four years ago but was slowed down considerably when the tide of war took the accent off cold country flying. Peace had its problems too. When priority went up on the structure, delays like the Allis-Chalmers strike held it back some more. Finally, it was completed early this Spring, and the first experimental project, consisting of cold weather tests on a B-29, C-82, P-47, P-51, P-80, R-5 helicopter and sundry tanks and automotive equipment have just been completed.

The walls and doors of the giant icebox are insulated with thirteen-inch layers of fibreglass, enclosed in 22 gauge

galvanized sheet metal welded on the inside and soldered outside. Inside, the insulator is supported by a wooden frame. The ceiling is similar in structure to the walls, but is an independent unit, hung from the roof trusses ceiling by a pattern of chains. The floor is made up of cellular glass blocks, over which a surfacing of three five-inch layers of concrete slabs has been laid in a hot asphalt binder.

The main doors, sectional in arrangement, are carried on independent steel buttresses, which are attached to standard railroad trucks and are moved on tracks by means of an electric motor system. Within the hangar, all of the operational functions of the airplane are tested. It should be noted that most of the modern airplane's climatic problems occur on the ground. In the tropics, the air cools off rapidly as the plane climbs, while in Arctic temperature inversion takes the ship into warmer air as it climbs. Most problems occur in starting the craft. For that reason, flight character-

(Continued on page 43).





Two of AFA's national directors—both former combat airmen with the 8th Air Force—met recently in Dallas. They were ex-Colonel

Jimmy Stewart, center, and Tom McHale, right, one of the founders of the Dallas Squadron. Rex V. Lentz, commander, looks on.

## AFA with a texas accent

BY AL HARTING

**A**t the first meeting of the Dallas squadron of the Air Force Association, a bespectacled fellow near the rear of the auditorium rose and, in a loud voice flavored with the twang of the East Texas cotton country, demanded to be heard.

"Mr. Chairman," he bellowed, "there's been a lot of talkin' here tonight about the 'social' aspects of this organization. I want to say that if this is going to be one of those tea-drinkin', sweet-talkin' outfits that exist just to dance the light fantastic, then I'm pullin' out right now. I got a belly full of societies like that. What I want to get into is a club with both fists up, that recognizes the fact that airpower won the last war—that it's falling to pieces in America today—and that if those of us who know something about it don't get up on our hind legs and raise hell, this country is going to be destroyed by somebody else's airplanes."

With this, the red-faced gentleman tucked up the tail of his gray pinstripe suit and sat down. The other 150 present cheered his speech-making and, to further show their approval, went on to elect him vice commander before another twenty minutes had passed.

Norris Hiatt, former 9th Air Force staff officer and present Veterans Administration training chief in Dallas, had sounded the keynote for this stiff-jawed pack of Texans.

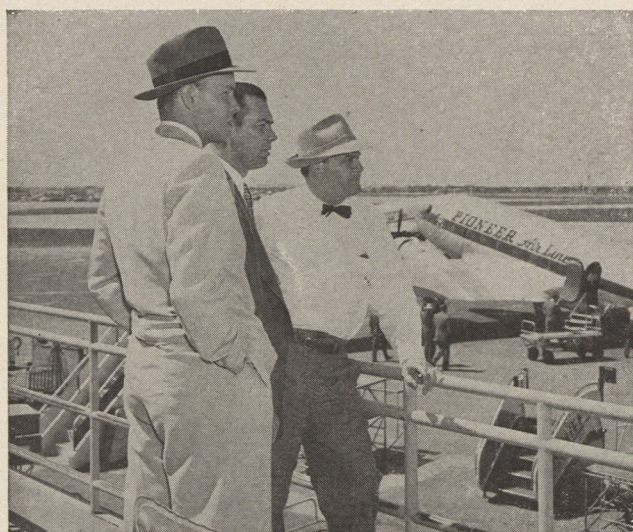
Still undergoing the pains of organizational childbirth, the AFA down in Dallas nevertheless has saddled itself up to weed out maverick thinking in the field of military and commercial aviation. If there's any time left over, there may be a party or two—but they don't talk about that now.

This first session produced another important foundation stone upon which the Dallas squadron is building an aggressive long-range program.



# The Dallas Program

1. To cooperate with municipal and private interests and with the Chamber of Commerce in building a progressive program of aviation development in the community.
2. To form a Speakers Bureau, comprised of former Air Force men and women, whose services will be available to luncheon clubs, schools and civic organizations.
3. To participate in Boy Scout affairs and boost youth interest in aviation through aviation classes and forums and such events as model airplane contests.
4. To collect and write the first complete aviation history of the City of Dallas, to be printed in pamphlet form and distributed to schools and to businessmen through the Chamber of Commerce.
5. To support military aviation installations in the area.
6. To sponsor annually a great inter-American air show.
7. To assist newspapers and magazines in coverage of civil and military aviation.
8. To maintain constant vigilance nationally and to give full support to the Air Forces in keeping up its peacetime strength.
9. To help in the formation of AFA squadrons in other cities.
10. To conduct squadron tours of private aviation installations in the Dallas area.
11. To sponsor the annual Air Force Day.
12. To establish a downtown "Air Force Club" as a meeting place for AFA members.



Looking over municipal airport for special report to the Chamber of Commerce are Al Harting, civic participation head, Jim Wycoff, airport chief, and G. W. Jalonick III, V.P. of Southwest Airmotive.

AUGUST, 1947



First ex-WAC members of the Dallas AFA Squadron affix their names to the unit's charter. From left, Martha J. Blanchard, Marilyn Reber, and Barbara Jackson. They are now getting new WAC memberships.



Swank meeting place for the Dallas AFA directors is the penthouse atop the new Mercantile Bank Building. Surveying Dallas skyline are AFAers James Aston, Holland Pendergrass and P. B. Garrett.

*AFAers in the Lone Star State have launched one of the most energetic programs in the US*

After the first two officers had been elected, a little fellow in sunglasses and bow-tie stood and asked if the pair had held commissions while on active duty.

He barely had completed his question when a neighboring vet jumped up, shook his right forefinger in the quizzer's startled face and yelled, "Who cares?"

"I care," the other gulped. "I don't want to see a lot of brass taking charge of this thing."

This was the signal for another of the first parley's many impromptu airings of opinion.

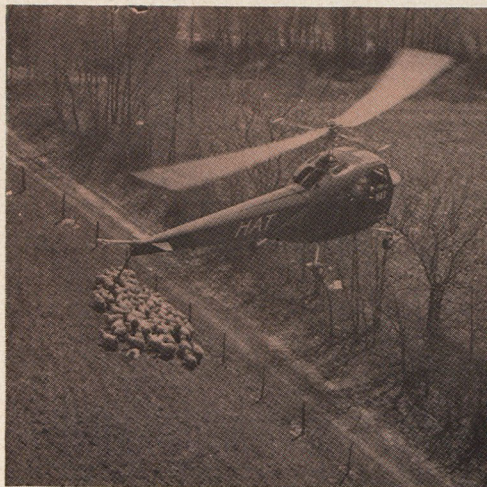
"My friend," the second started, "it's my interpretation of AFA that there's no such thing as rank. Can you tell by looking at these fellows whether they were GIs or officers?"

The anti-brasser admitted he couldn't.

"Well, neither can I," his interrogator thundered.

*(Continued on page 48)*

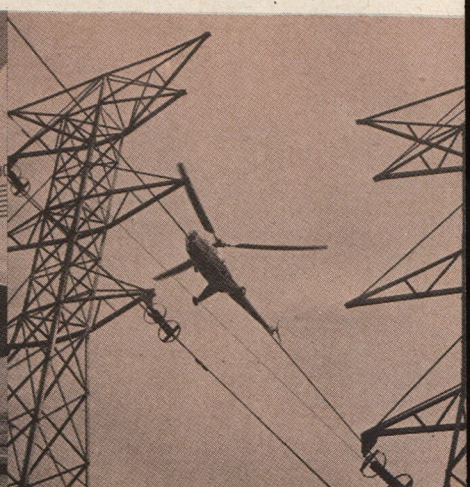




Helicopters can be used for purposes beyond the hope of fixed-wing aircraft which cannot slow down, or hover. Such jobs include herding sheep.



Most air lines are considering helicopter shuttle service between terminal and airport. Some are inaugurating experimental service.



One of the first practical jobs given helicopters was patrolling oil and high tension lines. Hovering allows inspection for damage.

# in the hat

*A typical ex-AAF pilot adds the GI-Bill's educational grant to his war-won flying skill, and comes up with a helicopter rating, in short, the key to a new career*

BY WILLIAM S. FRIEDMAN

**H**is name was Michael Koleman. He came from Beaver Falls, Pa. In the AAF, he had been a Second Lieutenant, flying C-47s and C-46s over the Hump. When the war ended, Mike took stock: He was twenty-eight, married, and had no time to waste. He had 1100 hours of twin-engined flying time, but so did countless other pilots. If he wanted to prosper, he decided he would have to augment his flying skill with something most other pilots didn't have.

Then about the time he had made up his mind to find something that would distinguish him from the mob of winged men who came out of separation centers, he ran across an article in a magazine telling about a school near Philadelphia that checked veteran airmen out in helicopters. That was it. The rotating wing airplane was for him. A man with an active business imagination could dig up a couple of workable angles whereby the skill of a pilot and the space versatility of the rotating wing could add up to a living and a future.

And so off he went to school—to the Helicopter Air Transport School at Camden, New Jersey to be exact—to study the art of flying helicopters. That was six months ago. Today Koleman has a 'copter of his own on order, and as soon as it's delivered he's going into business for himself. He's confident that all his dreams and more are coming true.

The course at Helicopter Air Transport (HAT for short) consists of a minimum of lecturing and a maximum of flying. Ground course consists of twenty hours of prepared



Back on dual. After flying "the Hump" in a C-46, Michael Koleman returns to primary instruction on a Sikorsky S-51 at HAT's flying school at Camden, N. J. Most of the students are former servicemen.





Progressive police officials see application for helicopters in their field, not only for observation, but also in actual criminal pursuit.



HAT's flying courses are given either in the two-place 178-hp Franklin-engine Bell 47s (front three craft) or in 450-hp Pratt & Whitney Wasp engine 4-place Sikorsky S-51s, like the top two ships.

work on the history and background of rotary wing, theory of flight and major assemblies such as controls and transmission. This is followed by a term of practical familiarization with the maintenance problems of the helicopter, and a final, complete mechanical familiarization with the machinery.

There are three kinds of courses at HAT. One uses the two-place 175 hp Franklin-engined Bell B47B, a second employs the four-place 450 hp Sikorsky S-51. Both of these courses are twenty hours in length. The third course contains twenty hours in the Sikorsky, and five in the Bell. The school owns a twin-rotor Platt-LePage which will be used at a later date for twin-disc training.

The actual training is conducted under the direction of Lt. Col. Frank Cashman, formerly of Wright Field, holder of the world's helicopter distance record. Most of the other instructors are AAF trained. Capt. Henry Eagle and Lt. Ken Bloom got most of their time on AAF R-5s. Lt. Gene Lush, and Flt. Off. Ray Beer flew R-4s from the tiny flight decks of the famed Aircraft Repair Units, the floating depots that serviced aircraft in the Pacific. Lt. Fred Feinberg also flew rotowings in the Philippines.

Originally, 500 hours of flying experience were prerequisite for entry into HAT's school. Currently, a helicopter engineer is taking the course starting from scratch. How long it will take him to solo is a problem many experts are watching with considerable interest.

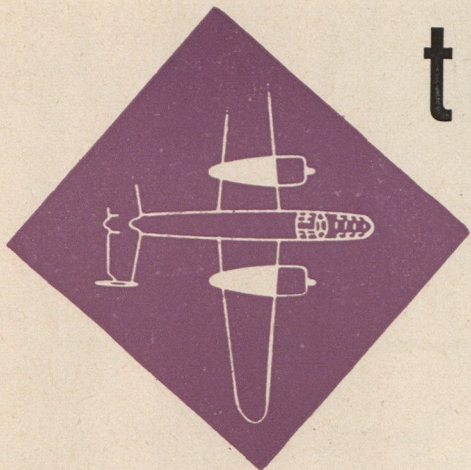
As Mike Koleman discovered when he starting flying the S-51, the HAT course is aimed at getting the student a top rating on the day the CAA inspector comes around. He started, like any other student, by learning to taxi the machine. This is followed by vertical takeoff and ascent to about twenty feet, the usual turns and considerable practice on emergency landing with the power off and the main disc autorotating.

At the end of twenty hours comes the CAA inspector. The student is checked out in both vertical and running takeoffs and landings, turning right and left on a spot, flying a controlled square course, spot landings, and quick stops in the air, where the plane decelerates from 50 or 60 mph to zero forward speed without losing altitude.

Once the student has his rating, he is graduated. Many students came to Camden with definite arrangements set up

(Continued on page 46)





# tech topics

*Speed sensity carburetion and free altitude reminders*

*feature this month's frontier in technical progress*

## Four-Engine Service

The servicing of multi-engined aircraft has always been a capital-consuming part of airline operation. In the past, up to 25 per cent of the total outlay involved in starting an airline operation was involved in maintenance and overhaul facilities, while arrangements for modification always depended on nebulous arrangements with manufacturers.

Back in 1939, Lockheed Aircraft founded a foreign Parts and Service organization in Amsterdam, Holland, to service their aircraft operating in Europe. This unit proved to many operators that it was cheaper to let some outside agency do heavy servicing of transport equipment than to keep individual crews and shops.

In line with this theory, Lockheed has created an independent organization known as Lockheed Aircraft Service, Inc. Its function is to service multi-engined equipment for air lines, private operators or anyone else owning that class of equipment.

Complete shops for handling ships in the Constellation-Douglas DC-6 and larger class have been established at Burbank, Calif., MacArthur Airport, Long Island, and Shannon Airport, Eire. This system is augmented by offices in Geneva, Kansas City, Miami and New York. Field Service representatives are based at LaGuardia Airport, Paris, Amsterdam, Caracas, and Wilmington, Delaware.

Creation of this class of service facility eliminates the

Specialized power plant sheds for 4-engined equipment feature Lockheed Aircraft Service's installation at MacArthur Field, N. Y.



"heavy" phase of maintenance. It may mean that ultimately, air transport operators may be able to eliminate most of their shop investment, because it may be cheaper to farm out everything but the routine first and second echelon servicing



Lighter and less fatiguing than the usual "over-the-head" unit, the new Telex Monoset earphone resembles a doctor's stethoscope.

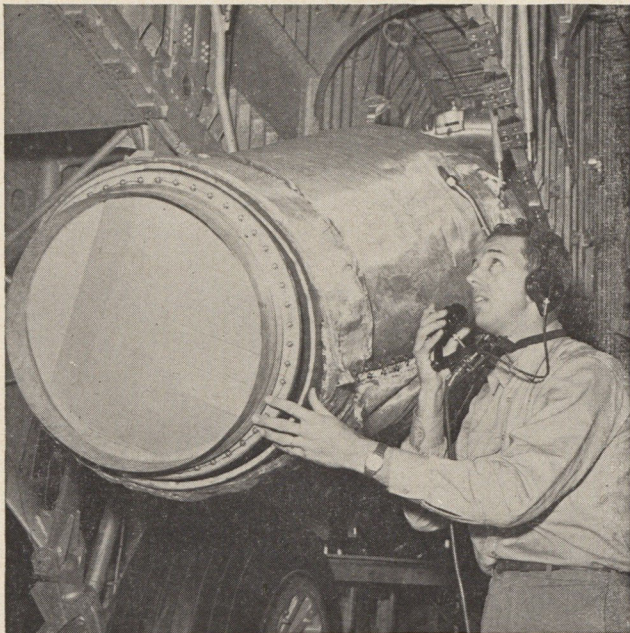
of their aircraft. This will leave larger amounts of capital available for aircraft safety equipment and sales promotion, thereby expanding the usefulness of the air transport system to the traveling public.

## Three for One

Three different instrument panel setups are being made available for Stinson 150s in line with a new production technique which applies mass production principles to the usual custom-built process of individual instrumentation. The usual procedure in aircraft is to make up a standard instrument panel. Any deviation or addition is extra and usually expensive. Stinson has made up a choice of three instrument panels presented to cover virtually all indication functions.

The standard board has eight instruments: compass, tachometer, altimeter, air speed, with the usual temperature, pressure, fuel and amperage gages. The primary blind flying panel has eleven dials, the standard set in which a sensitive altimeter is substituted for the conventional one, plus a clock,





Northrop has simplified the problem of servicing the 8 turbo power plants in the giant XB-49 by building a track and hoist system into their jet flying wing. Thus, despite the close-set enclosed installation, the big axials can be lifted and replaced with ease.

turn-and-bank and rate-of-climb. The last mentioned is the new non-venturi DC motor type.

The advanced blind flying panel has the vacuum-venturi type attitude gyro, a direction indicator instead of the conventional aperiodic compass in addition to the other instruments. All three of these panels are integral mounts, and can be interchanged in the field as well as at the factory.

### New Carb System

A new approach to the aircraft carburetor problem has been offered by Bendix in the form of the Speed Density system, which meters the fuel in response to variations in engine rpm, intake manifold pressure and temperature and exhaust back pressure rather than variations in mass air flow through a fixed venturi, as in the conventional carburetor.

The principal elements of this system are a vane-type engine driven pump, a centrifugal pressure regulator with a

temperature unit and pressure responsive assembly, as well as an accelerator pump and fuel discharge nozzle. Recognizing that the airflow into an internal combustion engine is affected by the rpm and manifold pressure, the speed density system operates with a variable metering orifice controlled by the manifold pressure while the metering head across this variable fuel orifice is controlled by engine rpm.

Bendix claims the following advantages for the idea; first, a gain in power at critical altitudes, provided the efficient air intake is used, because the throttle valve is the only air flow restrictive. Second, a fundamental advantage over the airflow system in that the metering head is not limited by the venturi suction available. Third, it is possible to meter over the entire operating range, for like fuel injection, it does not require a separate idling system, as does a conventional float carburetor.

The system may be used with either direct or timed injection of fuel for all reciprocating engines from 60 hp up. Modifications permit their use for jets and gas turbines.

### Fly Right

CAA regulations governing contact flying on the civil airways require the maintenance of specific altitudes depending on the magnetic heading being flown. As a permanent reminder as to "who" should be "how" high, Pacific Airmotive Corp. has provided a tiny circular sticker which can be pasted either atop of the compass card or near the instrument on the panel. The PAC Altitude reminder is simply an adhesive-back paper circle, divided into four 90 degree parts. Zero to 89° are indicated for odd altitudes, 90° to 179° are at odd plus 500 feet. 180° to 269° are to be flown at even altitudes, while 270° to 359° are flown at even plus 500 foot levels. These stickers are furnished to pilots free on request.

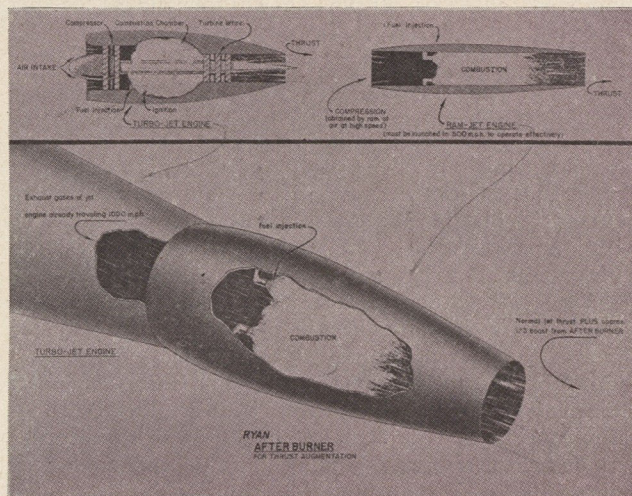
### Airways Stethoscope

Flight control operators and pilots are offered a bit more comfort during their on-duty hours by a new headset for communications equipment. Trade-name the *Monoset*, the new product of Telex, Inc. of Minneapolis resembles a doctor's stethoscope, and is worn under the chin rather than over the head in the conventional manner. The unit is extremely light. It consists of only one phone unit, from which two tenite hearing tubes radiate. The under-the-chin configuration eliminates ear pressure, thus reducing head fatigue. Volume control permits the wearer to determine his own signal level.

Views of the 3 typical instrument panel setups available for the Stinson Voyager. They are interchangeable.



Power output from turbojet power plants can be boosted a third by appending an afterburner system to accepted jet unit. Top two pictures show the operation of turbo and ram jet units. Below, a combination, which, in essence, is theory of afterburner operation.





# Who's Who in the AFA

INTRODUCING

*Philip G. Cochran*

**P**HIL COCHRAN acts like a man who is waiting for a late train and is trying not to lose his temper about it. He chews his gum as if he were mad at it, and paces back and forth incessantly as if there were something he should be getting on with whether there is or not. The twinkle in his eye and the handsome smile which made him a natural prototype for Colonel Flip Corkin in *Terry and the Pirates*, are not apparent until you've talked to him for a little while. His impatience is the thing you notice first. It's a quality that got him a lot of medals during the war—along with a rebuke or two. And now that he's back in civvies, the same characteristic will probably make him a successful businessman.

Phil was born in Erie, Pa. in 1910. The first distinguishing event of his career was the landing of a soprano chair in the choir at St. Andrews Catholic Church. In high school, Phil displayed little aptitude for sports. He wasn't big enough. Weighing only 114 when he entered Erie Central, about the best he could do was second string quarterback. As a scholar he will admit to nothing more than having been "very average."

His army career as a fighter pilot started in 1941 at Mitchel Field. He was a member of the 33rd Squadron of the 8th Fighter Group. Later he was given his own squadron—the 65th of the 57th Fighter Group which was destined to win fame and glory for its role in chasing Rommel across the African desert. Cochran, though, was ill when the 65th shoved off for overseas duty so he was left behind at Mitchel.

It was while he was at Mitchel that Milt Caniff, creator of *Terry and the Pirates*, looked him up to discuss a mythical Air Force character Caniff wanted to include in his strip. He was looking for a prototype and by the time the discussion was over, Cochran was it. During the war Cochran saw Caniff at rare intervals. At such times as they did get together Flip would tell Milt what he was up to in a general sort of way and let the latter take it from there.

When Cochran finally did get to Africa it was with a "squadron" of replacement pilots for the 33rd Fighter Group headquartered at Casablanca. Cochran, by now a Major, was the senior officer of the group and as such was the provisional CO. Headquarters for the unit was set up at Rabat about sixty miles outside of Casablanca—but not for long. Within three weeks the entire replacement unit was absorbed by the parent 33rd Group.

In June of 1943 he was ZI'd and assigned to the First Air Force. Shortly thereafter he was called to Washington by General Arnold for the purpose of organizing a highly secret air unit to go to the assistance of General Charles Wingate in Burma. At first the unit, referred to as "Project Nine" was to consist of L-type planes exclusively which were to be used to evacuate Wingate's wounded. But Cochran, who had learned in Africa that there could be such a thing as "guer-

rilla" warfare in the air, asked Arnold for something more. He wanted a "task force"—B-25s, C-47s, P-51s, helicopters, gliders and the works. Arnold okayed his plans, and by November of the same year Cochran had organized the world's first Air Commando Group. What happened after that in Burma is history. They did everything known in the air book but high level bombing. They were the first to use rockets on their P-51s. They had the first B-25s with nose-cannons. They had the audacity to establish bases behind the enemy's lines and destroy his lines of communications with the rear. Singlehandedly they kept the Burma Road open when it would have been impossible to do so "conventionally."

Since war's end then, Mr. Cochran, who looks just as dapper in grey flannel suit and red tie as he did in uniform, has been busy organizing Skymotive, an airplane repair depot in Chicago. "It will be a damn good outfit," he says, and you can bet it will.



As Flip Corkin in *Terry and the Pirates*, Phil Cochran was good for many a chuckle; enemies in Africa and Burma weren't amused.





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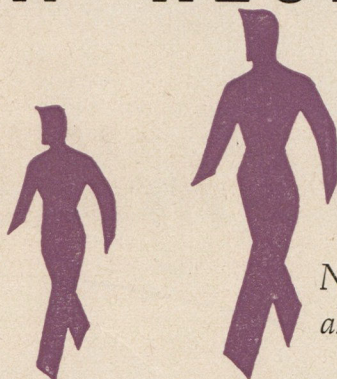
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# IN RESERVE



*News of significance to AAF Reserve personnel about extension studies, bonus laws and ROTC*

## Air Force Extension Course

A comprehensive and systematic course of study, to assist the Air Force Reserve Officers in the assimilation of knowledge qualifications to prepare them as far as practicable for their wartime duties and to assist them to meet the requirements of promotion, will be available at the beginning of the school year, 1 July 1947.

Those Reserve Officers who were active in the years prior to the past war may recall the scope and the type of instruction which the Air Force Extension Course will again make available. For the newer members of the Air Force Reserve it may be helpful to elaborate on the over-all plan and the general makeup of the Extension Course as it is now being produced.

The Air Force Extension Course consists of a six "series" of subcourses, each series corresponding to levels of instruction as follows:

Series	Designed for
10	Precommission
20	Second Lieutenants
30	First Lieutenants
40	Captains
50	Majors
60	Lieutenant Colonels

Each series consists of "subcourses" arranged in a logical and progressive order according to the training and educational qualifications of the various classifications and specialties concerned and in which qualification is required for initial appointment or promotion to the higher grades. The course parallels as far as practicable the instruction given in the resident courses at the Air University and other Air Force schools, in so far as this instruction is applicable to the wartime duties of Air Reserve and Air National Guard officers, and is adaptable to instruction by extension course methods.

## State Bonus Laws

The latest information available concerning state bonus legislation is as follows: To be eligible for a bonus, veterans must meet both service and residence requirements, however, determination and eligibility requirements rest with the state authorities administering the bonus program. To date there are seven states and the territory of Alaska which have authorized a bonus to veterans of World War II: Illinois, Massachusetts, Michigan, New Hampshire, Rhode Island, Vermont and Connecticut.

For information and applications, interested veterans should write to:

Illinois—Adjutant General's Office, Springfield, Ill.

Massachusetts—Bonus Division, Treasurer and Receiver-General, State House, Boston, Mass.

Michigan—Office of Veterans Affairs, 411 West Michigan Ave., Lansing 15, Mich.

New Hampshire—Adjutant General's Office, State House, Concord, N. H.

Rhode Island—Chairman of the Veterans Bonus Board, Room 127, State House, Providence, R. I.

Vermont—Veterans State Bonus Division, State House, Montpelier, Vt.

Connecticut—Treasurer of the State of Connecticut, Hartford, Conn.

Alaska—Commissioner of Veterans' Affairs, Juneau, Alaska.

Bonus legislation of the states mentioned above contains provisions under certain conditions for payment of the bonus to the next of kin of service personnel killed, or who died in service during World War II.

## Air ROTC News

The expansion of Air Scouting within the framework of Senior Scouting at or near education institutions where Air ROTC units are established is progressing in a most gratifying manner.

The primary purpose of this program is to select high school seniors for eventual participation in Air ROTC. Individuals who have experienced the most success in the promotion of this thought have developed the unit largely from membership secured from among seniors in high school. The college freshmen and sophomores should be encouraged to participate on the basis of furnishing these Air Scouts with the kind of voluntary leadership which is essential to local success. Another point which leads to local success is the procurement of enthusiastic adult leadership from among the staff members of the college or businessmen of the local community. In all instances where this leadership is strong, enthusiasm predominates and enrollment is heavy.

Results of this type of leadership and enthusiasm are shown in the 4th Air Force area by the hearty cooperation of the colleges, universities and the Air ROTC units at these schools. To date the following schools have established Air Scout Squadrons: Montana State University, University of Nevada, Washington State College, University of Arizona, and University of California at Los Angeles.



## NEW WINGS

(Continued from page 31)

the plane to be operated in street clothing at minus ten degrees temperature.

The improvements in general performance can best be judged by studying them in tabular form.

Cub Model J3C-65	Cub Model PA-11
Span: 35 feet, 2.5 inches	35 feet, 2.5 inches
Length: 22 feet, 3.5 inches	22 feet, 4.5 inches
Fuel capacity: 12 gallons	16.5 gallons
Top speed: 83 mph	100 mph
Cruising speed: 73 mph	87 mph
Range: 200 miles	over 300 miles

In line with the same general policy, Aeronca Aircraft has expanded its two-place line to three airplanes by putting a new model midway between their tandem-seating Champion and the luxury Chief line. The new design is called the Scout. The line alteration began recently with the increase in power in the Chief, when the 65 hp Continental was replaced with an 85 hp power plant. The new type, called the Super Chief, invested the increased power in better cruising speed and climb, while the major interior changes were the addition of draftless cabin ventilation, mechanical starter, toe and parking brakes, muffler and adjustable seats.

There were still plenty of operators who were satisfied with the performance of a 65 hp lightplane and who had no real use for a lot of the extra luxuries that were standard in the Super Chief. To satisfy this field, the Scout was added. Eighty per cent of its components are interchangeable with either the Champion or the Chief. Essentially a side-by-side trainer, it is pointed at a maximum of operational and maintenance economy.

Two four-place designs entered the private field during this period. One was the Wheelair 111A, Puget Pacific's production version of Don J. Wheeler's winning design in *Popular Science* magazine's plane design contest.

The Wheelair is a four-place all-metal low-wing pusher monoplane, powered by an opposed six 160 hp Lycoming engine. Its design uses a fixed tricycle landing gear and supports the tail on two booms. These end in double rudders, with the elevator-stabilizer structure between them. This boxes in the propeller, which is a ground safety feature.

The pusher design allows the pilot's position to be set completely ahead of the wing's leading edge, offering unusually good vision.

The 111A is the first four-place airplane to be rigged with the simplified two-control system which eliminates the rudder control and makes turning merely a matter of banking. The nose wheel is fully steerable. The new craft has a 37-foot span and 26-foot over-all length. Gross weight, including 160 lbs of baggage is 2505 lbs, with 50 gallons of fuel. Range is 600 miles. Top speed is 135 mph.

Cessna Aircraft, pioneer in four-place cabin types for personal use, has returned to the field that gave the name Cessna eminence for a quarter of a century. The new designs, the 190 and 195, bear a strong family resemblance to the pioneer Seimens and Warner engined high wing monoplanes of the early twenties. Like their ancestors, the craft are full-cantilever high-wing monoplanes, built to squeeze the maximum performance out of a reasonable power.

Airframes on both craft are virtually identical, the main difference being in power plants. The 195 carries a 300 hp Jacobs which yields a top speed of 190 mph, while the 240 Continental engined 190 tops 170.

The 195 has a 27-foot 4-inch over-all length, 36-foot 2-inch span and a gross weight of 3350 lbs. Standard equipment includes constant speed propeller, instrument flight panel, two way radio, cabin heater and landing lights. The landing gear is fixed.

## BIG FREEZE

(Continued from page 33)

istics require little investigation. Jet engines can be operated in this hangar by means of a special air supply system which can deliver 8600 lbs of cold air per minute to the particular unit. A vent is made in the side of the building to allow the tailpipe to stick out, thus relieving the ventilating system of the enormous burned-air load imposed by jet power.

Aside from the main room, a special power plant chamber with all-weather characteristics has been appended to the main hangar. Here not only conventional aircraft, but turbo, prop, intermittent and ram jet engines can be run under a variety of weather conditions, including simulated sand, rain, snow and sleet conditions. In the lean-tos a series of special weather rooms has been constructed, in which special conditions can be tested on a small scale and over long periods of time. Largest of these is the all-weather room, in which the temperature can be dropped from plus seventy to minus forty in six hours, and to minus seventy in a full day. Rain-simulating equipment can handle anything from a thin mist to a fifteen-inch per hour tropical downpour, accom-



Within the temperature-controlled altitude chamber, pressure can be dropped to simulate 100,000 feet. Photographer shown above is shooting while thermometer, shown behind him, indicates  $-40^{\circ}\text{F}$ .

panied by winds of up to 35 mph. This room can be partially filled with water, and is generally used to test such equipment as clothing and life rafts.

There are smaller chambers in which conditions of extreme heat, cold, jungle, tropic-marine and desert conditions, with all their varying cycles, can be tested.

The strato-chamber is one of the fastest acting units ever built to simulate climb and high-altitude conditions. Temperature can be dropped from plus seventy to minus seventy in twelve minutes. Pressure can be reduced to fifty thousand feet in twelve minutes, and to 80,000 on demand. Under certain conditions, pressures to 100,000 feet can be attained.

Expensive as the facility appears on the surface, the giant icebox has begun to prove even on the first run that it can save the taxpayer's money. One has only to look at the cost of sending an air force to Alaska to sit out test weather that comes when it dernsite pleases to realize that this is no way to stay in the business of air force operation.



## AFA NEWS

(Continued from page 25)

AAF to join the Squadron. Contact Thompson at Box 1174, Lexington, for information about the next meeting.

### WASHINGTON

Hoppi-copter inventor Penticost gave a personal and special demonstration of his newly designed last word in personal air transportation at a recent meeting of the Seattle AFA Squadron. The Hoppi-copter contraption is merely a light metal frame with a small engine and overhead rotor. To take off, the inventor merely revs up the engine, twists the overhead vanes, and jumps into the air. From then on, the flight resembles that of a helicopter.

### WEST VIRGINIA

At a special meeting, the Beckley Squadron in June, outlined a four-point program for the observance of Air Force Day on August 1, in West Virginia. According to present plans, the day will get under way with an air show. In the evening will be a banquet featuring an AAF general officer. Following the dinner will be a dance at which time a light aircraft will be given away. The plane will be given away at a drawing, for which tickets will have been sold in advance.

The Beckley Squadron is also making progress in trying

to obtain a cargo-type plane to be used as a laboratory and workshop for a model airplane club sponsored by the organization.

### WISCONSIN

Mr. Elmer A. Behling, Fifth Air Force pilot, who was recently named by General Doolittle to lead the organization of an AFA Squadron in Milwaukee, was graduated last week from the Life Underwriting School of the Massachusetts Mutual Life Insurance Co., which he represents.

### WISCONSIN AND MINNESOTA

The membership records section wasn't quite sure just where to locate the newly activated Twin Ports Squadron . . . so it's filed under both Wisconsin and Minnesota. And on examination of the list of elected officers, that must be right. Commander Robert C. Pommerville is from Duluth, Minnesota, and Secretary Robert L. Williams is from Superior, Wisconsin. Meetings are held on the third Monday of each month, and since both cities are included in the region, former Air Force men both from Duluth and Superior are invited to write to Secretary Williams at 402 3rd Street, Superior, for information about the Squadron.

## CONVENTION TIMETABLE

(Continued from page 15)

or discharged personnel and their dependents and the dependents of deceased personnel.

First organized social event will be Monday evening at 5 p.m., when all convention registrants will be guests at a cocktail party in the ballroom of Hotel Deshler.

From there, the AFA members will go back to the Neil House Hotel for a banquet, where General of the Army Dwight Eisenhower is scheduled as the principal speaker. The present Army Chief of Staff, who is to be the president of Columbia University in 1948, will be introduced by General Carl A. Spaatz, commanding general of the Army Air Forces. General Spaatz will head a large delegation of AAF general officers which will include Lt. Gen. Ira Eaker, recently retired; Lt. Gen. Hoyt S. Vandenberg, deputy commanding general of the AAF and former commanding general of the 9th Air Force; Maj. Gen. Fred Anderson, Assistant Chief of Air Staff and former deputy commanding general of the Strategic Air Forces in Europe, and many others.

The period following the banquet is to be left free of planned events in order to provide time for Association members to renew old acquaintanceships and have fun on their own.

The story of the Air Reserve training program, what has happened to it thus far, and what the prospects are in the future will highlight the business session opening the second day of the convention at 9:30 a.m., Tuesday morning. Lt. Gen. George E. Stratemeyer, commanding general of the Air Defense Command, will talk on that subject following disposal of the Association business affairs scheduled for discussion at the morning meeting.

Lunch on the second convention day, at the Neil House, will feature a talk by Capt. Eddie Rickenbacker, America's No. 1 fighter pilot ace of World War I and now the president of Eastern Air Lines.

Maj. Gen. Curtis E. LeMay, assistant chief of the Air Staff in charge of research and development, will speak at the final business session at Memorial Hall on Tuesday, at 2:30 p.m. The latest word on jets, rockets, guided missiles, six-engine aircraft and other aeronautical developments is ex-

pected to be covered by the former Commanding General of the 20th Air Force. Other speakers providing information of interest and value to AFA members and the public also are to be scheduled.

The final banquet on Tuesday night at the Neil House will wind up the scheduled convention events. At the dinner, General Doolittle will present the newly elected Association officers and directors. The convention committee also is lining up a substantial program of entertainment features.

A nominating committee named by the Board of Directors is working on the preparation of a slate of officers and directors to present to the convention, and, of course, nominations will be in order from the floor during the business sessions devoted to elections. Elections, naturally, represent one of the most important jobs to be accomplished in Columbus. Other problems concern the establishment of honorary or patron memberships, the extension of membership eligibility to newly created Air Reserve officers, to enlisted reservists and to former members of the WASP.

In the year and a half of its existence, the Air Force Association has strongly supported the principle of unification of the armed services with separate and equal status for the air arm, and in speeches and in articles in *AIR FORCE* magazine the AFA has constantly emphasized the necessity for such a move if the nation is to be defended adequately.

The fact that airpower is the key to our defense still remains a principle that must be understood and accepted by the American people, and the AFA thus far has dedicated much of its effort to the education of the Association membership and the public at large in the development of air power.

It is hoped that the convention at Columbus will re-state and support these aims as part of the 1948 AFA goal, and add too to the scope of the Association program.

Elsewhere in this issue of *AIR FORCE* magazine will be found a form to fill out to reserve your room in Columbus on September 15 and 16. If you don't have a good time there, it will be because you couldn't come. Let's keep the gang together.





## Ever wish you were Aladdin?

You remember him...

He was the lucky fellow who found a magic lamp. It gave him everything he wished for—from diamond-crusted palaces to a sultan's daughter as his bride.

You've probably wished a lot of times for a miracle like this to happen to you. Maybe not for out-of-this-world treasures, but for something that will take care of the things that are bound to come up.

Like medical expenses, or college for the kids. Or maybe just for the nice, safe feeling it gives you to have some extra money put aside for the future.

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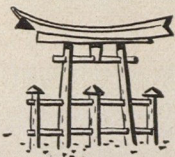
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## IN THE HAT

(Continued from page 37)

before they arrived. Some have sold power companies on the idea of flying patrol over their lines. Ex-AAFer Bill Murray came to school at the expense of a helicopter company which wanted him as test pilot. The Republic of France sent Jacques Quignard to HAT as the first of a group of pilots who will do research on rotating wing for the Armée de l'Air.

Under the current arrangement, former service personnel can get \$500 toward the course under the GI Bill of Rights. It is hoped, however, that the time provision of Public Law 346 will be modified in the future, to permit qualified pilots to take the entire course at public expense.

As Mike Koleman discovered, the HAT student goes away with more than just his flying time. Because the company is essentially a growing organization, he has learned to fly with an outfit devoted to the job of making the helicopter an instrument for profit. Like anything new, the actual useful function of the helicopter has not been completely determined. There are some things for which the helicopter is eminently suited. For instance, one oil company has a Bell 47 chartered to explore for oil in the swamps of Louisiana. Formerly swamp boats would have to pole through the region, driving a pipe into the swamp silt, and examining the sample. The location from which the sample was taken would have to be located on a map by exact ground surveying methods. This is an expensive and laborious method.

Use of the helicopter speeds and simplifies this process. First the area is divided into squares by gridding an aerial map of the surface to be explored. Two directional receiving stations are set up at points 90 degrees apart on the edge of the area. The helicopter is equipped with a transmitter, and is set on floats instead of wheels.

The 'copter is flown to an exact location in each grid where it is landed, and the sampling tube dropped to take a specimen of the bottom. The exact position of the helicopter is located by radio triangulation, and the results of the test plus the exact position of the sample can then be located on the map. With Bell charter at \$75 per hour, the company using it for this oil exploration job is estimated to be saving 50% in money and 90% in time—quite a saving.

So the new 'copter pilot leaves Camden, to do a variety of jobs, from dusting crops to patrolling pipe lines. How well the joint GI and government investment will pay off depends on how useful the rotary wing can be in our mechanized civilization. In the meantime, ex-AAFers like Mike are coming in to HAT's school, betting dough and destiny that the dream of the "ambitious eggbeater" will pan out.

## ANY OLD FORT

(Continued from page 13)

misery. When they do come, fort-holders should bolster themselves for the letdown. When the 19th got replacements, in Java, they were LB-30s with no lower guns, no armor plate to talk about, no leakproof tanks. The tail guns didn't have sufficient swing to be of real value, and had only 25-round ammunition guns. The lone 50 caliber gun in the nose wouldn't shoot up or down, and the LB-30 couldn't function effectively above 15,000 feet. The 19th learned how to solve problems with the remotely controlled gun turrets in the B-17Es by a simple device—they took out the entire turret. They installed a wooden gun in its place, jokingly referred to it as their "death ray," and tried to fool the enemy into believing they were real guns. Trainees would be expected to have the same imagination, and the same sense of humor.

On the psychological side, trainees would learn to live from day to day, to feel quite sure that tomorrow would be

AIR FORCE



the last. This state of mind is essential. And if they follow the advice of their instructors from the 19th Group, they won't talk much about death, although they will all feel sure it's just around the corner. Required reading on the subject would be this entry in the 19th's diary, written during the heat of combat: "Men at war rarely die laughing. They are doomed to die tired, hungry and afraid. Then, and only then, are they vulnerable."

Study in public relations would be confined to cryptic comment from the instructors about the news that fort-holders can expect from back home. When the men of the 19th were getting their worst kicking around from the Japs, taking it on the chin and accomplishing little, they could always turn on the radio and hear about how they were striking the enemy with great success. News broadcasts from the States indicated that half the Jap fleet was being sunk in every attack by the 19th. Trainees would learn to get mad as hell at reports like that.

Withdrawal is an important element in a delaying action, so the students would learn a lot about evacuation procedures—from instructors who were forced to leave 500 men of their Group behind on Bataan when the 19th evacuated the Philippines in shuttle hops to Australia. The trainees wouldn't have to be told how the men left on Bataan were treated by the enemy.

And students would be prepared for the mass of decorations due the holders of a fort. Such citations read like this one awarded the 19th Group: "Displaying magnificent courage and devotion to duty, it engaged the enemy that was greatly superior in numbers at every point and fought its limited equipment to destruction. Despite heavy losses, air and ground echelons continued to function at maximum effectiveness and extracted a toll from the enemy far out of proportion to their meager means." It is a great citation, richly deserved, and the instructors would no doubt explain that they hope never to get another one like it.

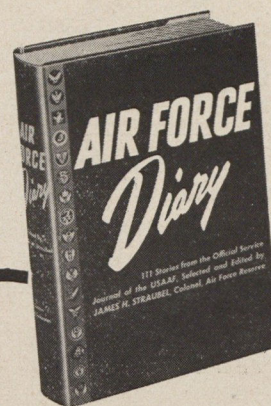
So much for basic training, a rather easy course of study dealing solely with holding the fort should war come in the near future, administered without much trouble by the simple process of looking—and thinking—backward. With high marks and low morale, our trainees should step right into advanced training, but frankly we haven't a thing to offer. The advanced course calls for instruction on how to handle oneself under our current national security policy should war come a few years hence or thereafter.

This one has us stumped. Our trainees would understand that America feels she can marshal her productive forces in time to turn the tide of affairs. This so-called "marshaling," a neat military word, depends on two things: time and immunity from attack, both of which we had in the last fracas. Looking ahead, we find both these elements gone. Search as we might, we can't find anything on this planet to give us either time or space to swap for seconds.

No one in his right mind can assume that a potential enemy is less wise than he, or believe that his antagonist's industrial capacity or reserve is inferior—until he has really indisputable evidence to support this belief. If we assume we will have planes capable of delivering atomic bombs anywhere on the planet and returning to base, we must also assume that other nations will have similar equipment. This means that our industrial potential is vulnerable and subject to worse treatment than we gave the industrial heart of the Third Reich.

The way we add it up, modern techniques and modern political philosophy have eaten up the time-space cushion we had in the last war. Our industry is bared to the enemy, and we can defend it only with the men and machines we have at hand, trained and ready for action the day, the hour, the minute a war occurs.

That means we must depend on what we've got, and Brother, that's where we came in.



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## AFA WITH A TEXAS ACCENT

(Continued from page 35)

"We voted for 'em because we liked their looks in civvies. I say let's forget all about rank and get on with the show."

He added something about having "kissed the horse from both ends," as a GI and later as an officer, and that he hadn't felt himself a better man at either extremity. This brought down the house, with considerable hand-clapping.

Endorsing his sentiment, the charter attenders later cheered when his name was announced among the sixteen members of the board of directors. He is Robert S. Cox, an insurance salesman. Rank: Unknown.

It was interesting to note that, voting purely on the "looks" of those on hand at this first meeting, the squadron put tall, lean Holland Pendergrass in the secretary's slot. He was a sergeant and B-29 crew chief during the war, and now supervises a crew at a concrete pipe plant.

Prior to ending the election, each man present stood and, with no reference to previous rank or achievement, introduced himself by name and civilian occupation. This informal roll call was a real lesson in Americana—there were bankers, brokers, pilots, city employees, a pool hall operator and a hair dresser. The proverbial "butcher, baker and candlestick maker" sat side-by-side. Ex-colonels and ex-buck privates rubbed elbows in a new peacetime camaraderie and none to this day can tell you how high on the "TO" his neighbor rose when the chips were down in the skies over Europe and the Pacific. Nobody cares and, besides, it's against the rules to bring the matter up.

It's because of rugged individualism like this that Rex V. Lentz, squadron commander, and others firmly believe that there's a future for AFA in helping shape the aviation destiny of their community and the nation.

Probably like most AFA groups in the country, the one in Dallas started with a letter, this one addressed from a friend in Washington, D. C., to Bill McCraw, former attorney general of Texas and more recently a colonel in command of a seagoing aircraft repair depot in the Pacific. Asked to start the Dallas organization, McCraw declined because his new civilian duties as a national Variety Club executive kept him out of town most of the time. He called on his friend, Jimmy Lovell, popular columnist with the *Dallas Times Herald*, and the two of them recommended to AFA headquarters that Tom McHale of the Chamber of Commerce be named to the national board and that he active-

ly launch a new Dallas AFA squadron.

Advertising director of *Dallas Magazine*, McHale is a short, hefty dynamo who, in his forties, fought with the 8th Air Force as a waist gunner and spent eighteen months as a POW. With his appointment to the board stuck away somewhere under the heap of papers on his desk, McHale went into action with as much vengeance as he'd displayed behind the 50s on his Flying Fortress.

In less time than it takes to tell about it, "Mac" had rounded up nine interested Dallasites, among them Rex Lentz who invited the party to hold its preliminary session in the penthouse of the Mercantile National Bank, of which he is special services director. On hand, in addition to these two, were Lovell; Elgin Crull, assistant city manager; James Aston, former city manager and now vice president of the Republic National Bank; Bob Temple, assistant city finance director; Bill DeSanders, official in a new car sales agency; Ulmer Newman, insurance man and retiring head of the Dallas chapter of the Air Reserve Association, and Al Harting, director of public relations at Southwest Airmotive Co.

Over their chile and tamales, the group agreed that Dallas definitely should have an AFA squadron. It was pointed out, though, that the unit wouldn't "just grow" like Topsy, and that those on hand that day would have to give it birth by functioning as an active, organizing nucleus.

Lentz said that the Mercantile Bank auditorium would be available without charge as a meeting place, and Lovell volunteered to get busy with the publicity. A date for the initial open session was set and both the *Times Herald*, through Lovell, and the *Dallas News*, through several ex-AAF reporters, were generous in printing advance announcements.

Crossing their fingers, the nine organizers sweated it out nervously in the bank corridors as meeting time approached. With no list of names from which to work, their publicity on the session had been strictly a case of shooting in the dark. Fifteen minutes before the announced starting time of 7:30 p.m., none would have bet a plugged nickel that more than ten or fifteen additional enthusiasts would attend. Then, with less than five minutes to go, the "delegates" began arriving, in flights of two or three. Lentz remarked that he felt at home at last, since he'd never been to an Air Force powwow which started on time and he saw no reason for this particular one being an exception.



McHale, as national director, mounted the rostrum and briefly outlined the reason for the meeting and the nature of the AFA program as he'd had it explained to him in letters from Willis Fitch and Clyde Matthews at headquarters. These objectives were clarified further by Lt. Col. Vic Byers, stationed at Randolph Field and attached to AFA for organizational duty. He was especially helpful in getting the Dallas squadron off to a good start.

In opening the election of officers, McHale made it clear that they would serve for six months only—"until we get to know one another well enough to hold a real and permanent election just prior to the national AFA convention in September." Besides naming Lentz as commander, Hiett as vice commander and Pendergrass as secretary, the group elected Robert D. James as treasurer. He is an airline copilot.

With a potential roster of hundreds, a membership drive has been started under the leadership of James K. Wilson, Jr., son of one of the city's leading retail store owners. He started things off with a bang by getting AFA plugs into the store's radio commercials and newspaper ads. He has secured a complete list of AFA pin-wearers in Dallas from the national headquarters and now has gone to work on them in an effort to have 100 per cent representation at the next monthly meeting. National records show that about 350 AAF vets in the city have paid their dues, and local officials believe they can push that total up to 1000 or more. Col. Shearer is cooperating with his Hensley Field staff, including AFA announcements in all material mailed to his lengthy Air Reserve training list.

Already among the active members are three former WACs and four veterans of the Air Corps in World War I. These "elder statesmen," as Lentz calls them, are Paul Carrington, well known attorney and three-time president of the Dallas Chamber of Commerce; P. B. (Jack) Garrett, president of the Texas Bank & Trust Company; Donald O'Neil, an investment banker, and Stanley Foran, advertising director of the Dr. Pepper Company, whose much-publicized talk on "Americanism" will be the squadron's next regular offering. Carrington, Garrett, and O'Neil are members of the squadron's board of directors.

All in all, it's a blend of everything that Dallas has to offer in the way of youthful enthusiasm and mature experience. This squadron is as "USA" as the 4th of July. In keeping with Lone Star tradition, it fully intends to be the biggest and best in the nation. Further, its members and officers steadfastly believe that reaching this mark is a lead-pipe cinch.



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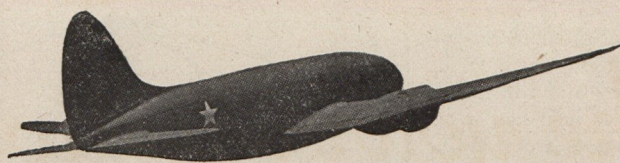
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# PLANE BONERS

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As a B-25 pilot prepared to land from a test flight following a 100-hour inspection, the right gear failed to lock down. He left the pattern and tried emergency procedures, but all attempts to get the gear locked were futile although it appeared to be down fully. The pilot alerted the tower for crash equipment and landed. The right gear collapsed and the plane skidded off the runway as the copilot cut the switches. The B-25 received major damage, but no one was injured.

*Comment:* Although plenty of human error figured in this accident, it wasn't the pilot's fault. Investigation revealed that the main landing gear retracting cylinder had been installed improperly during the 100-hour inspection. It was out of adjustment so much that the right gear could not lock down. The gear had been raised and extended eight times after the new strut was installed but no one bothered to check the cylinder or locking pins visually. If aircraft inspections are to mean anything, they must be thorough.

An A-26 pilot and a passenger took off from a base in Japan on an over-water surveillance mission. The pilot descended to low altitude to identify a boat. Not far past the boat, the A-26 struck the water and the pilot hauled back on the control column and gained 500 feet of altitude. Both propellers were bent badly and the engines would not deliver enough power to keep the plane airborne. The pilot headed for shore but could not make it. The A-26 was ditched and its occupants were picked up by a fishing boat.

*Comment:* Charge one perfectly good tactical airplane up to unnecessary low flying. Low flying any place is bad, but over calm, glassy water it's worst. Altitude judgment is practically nonexistent over smooth water. Always keep a comfortable margin of altitude when flying over water and you won't go wrong. This pilot is pondering his mistakes while he awaits appearance before a flying evaluation board.

A National Guard pilot was making his initial flight in a fighter type airplane. He took off in a P-51 on a

local clearance and left the local flying area immediately. Forty minutes later, the plane crashed in a canyon where the pilot had been buzzing a mine entrance. He was killed instantly.

*Comment:* Buzzing is always dangerous. It is especially dangerous for inexperienced pilots in fast tactical airplanes. This pilot had only 305 hours total time, had been out of the service more than a year, and most of his flying experience had been as a C-46 copilot. Poor flying technique, lack of experience, and violations of regulations resulted in a major disaster. Make sure all the odds are in your favor before you fly.

A pilot entered the cockpit for his first flight in a P-51. Before starting the engine, he completed the cockpit check but left the throttle full forward. As he started the engine, he moved the mixture control to the RUN position. The engine began to run at full power and the plane crept forward. The pilot applied brakes and reached to retard the throttle. He inadvertently pulled the propeller pitch control instead of the throttle and the fighter nosed up.

*Comment:* Cockpit checks are for one purpose: to make sure that everything is in order before starting engines. One omission or error can cause plenty of trouble. In this case the pilot must have ignored the checklist or he would have placed the throttle in the correct position for starting the engine. In spite of inexperience, pilots can remove a lot of hazards from flying if they'll remember to make careful checks and use checklists at all times.

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- By sponsoring this year's celebration of Air Force Day — August 1st — the Air Force Association has shown its progressive interest in helping the public to gain a better understanding of the significance of Air Power in peacetime. Through your efforts and active participation this Air Force Day offers an opportunity to bring home, more clearly than ever, the continuing need for leadership in the air.

- National AFA plans center in Washington and will include air shows, demonstrations and displays, followed by an Air Force Day dinner. In addition, each of the 48 AFA State Wings are planning dinners, and will co-operate with AAF bases and civic organizations in making the celebration nation-wide.

- As a member of the Air Force Association, you are doing much to build the support it takes to keep your Air Forces equal to their vital peacetime mission. You can continue to help by advising young men in your community on the opportunities available through enlistment in the Army Air Forces.

**CARL SPAATZ**  
Commanding General  
U. S. Army Air Forces

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