

AIR FORCE

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



FIRST JETS IN ALASKA . . . Page 28

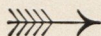
THE HIGH COST OF **LIVING**

The Price Of National Security Goes
Up And Up. Here's Why . . . Page 11



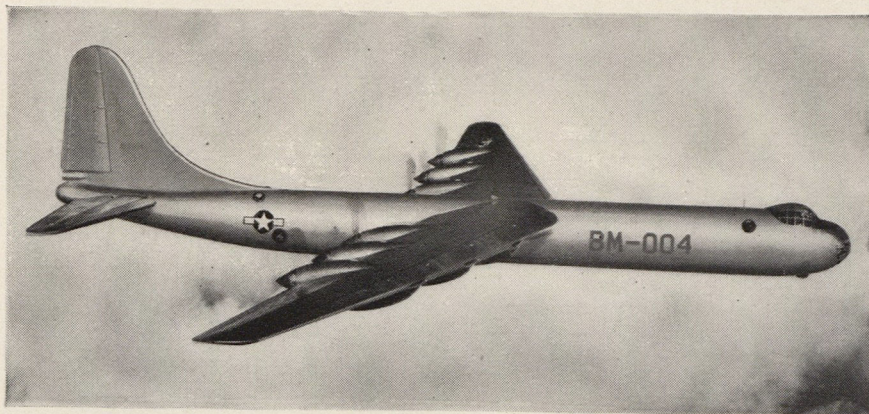
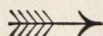
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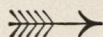
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This Month

The Cover

The Lockheed P-80 pictures on the cover and on pages 28-31 are the very first jet shots to come out of our north-



ern outposts in Alaska. They were taken especially for Air Force within a week after the planes arrived at Ladd Field. Rushed to the states by courier, the photos were considered so timely and so dramatic that

AIR FORCE editors decided to scrap the original cover shot and substitute this.

Bubbling

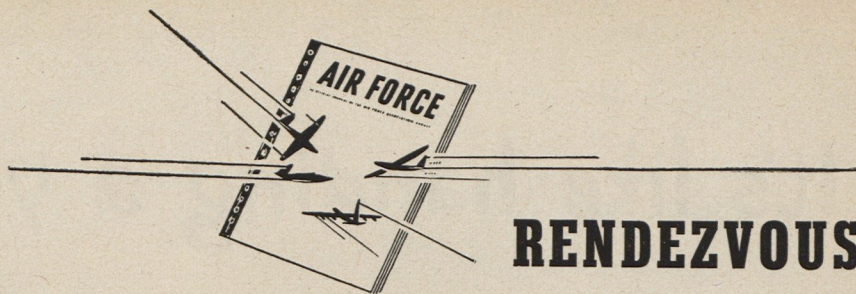
Doug Ingalls (The High Cost of Living, page 12) returns to the pages of AIR FORCE this month for the first time since the war. He was a staff member of the wartime magazine and, as an expert on Wright Field and related subjects, wrote and edited from his station in the Wright Field office of AIR FORCE.

That "expert" moniker is more than idle chatter. Doug has poured out thousands and thousands of words on Air Force subjects, has come to know Wright Field and its inner workings as well as any man. His current book, "They Tamed the Sky" (Appleton-Century), is full of the many stories he has collected in years of research and writing (though Doug is only 30), and an overall report on his favorite aviation center.

Doug lives in the city where aviation and Wright Field grew up, Dayton, Ohio. There he got his start behind a typewriter, with the *Dayton Daily News*, where he served as Aviation Editor. He has written for all the recognized aviation magazines, done special articles for many cosmopolitan newspapers, and at one time was Assistant Editor of *Flying*. As a free lance writer he has branched out in recent years and has been published in *The Saturday Evening Post*, *Collier's*, *Coronet*, *Pageant*. Prolific is an understatement for Doug as a writer, just enthusiastic is an understatement for Doug as a person. He bubbles over, behind and in front of a typewriter. We think "High Cost" is nice bubbling.

UN Please Note

There's a short sequel to the dramatic story of the crash of the 13th Air Force baseball team in the mountains of Luzon (Lucky for Some, page 40). The sequel has to do with a typhoon which hit the area of the crash sometime later rendering homeless many of the natives who had befriended and cared for the hapless crash victims. Hearing of the incident, the members of the ball team hurriedly organized a mercy detail supplied with food, and at last reports had sent it on its way—a lesson in international relations the world's diplomats might well heed.



Where the Gang gets together

MUSK-OX PHOTOS: There were a number of officers and men from the 9th Air Force at Bergstrom Field with me on the Canadian Army-Royal Canadian Air Force EXERCISE MUSK-OX in Canada during February and March of 1946. I have photographs taken during the maneuver, including shots made above the Arctic Circle, which many of them might like to have. If I could make a couple of inches in your *Rendezvous*, I believe several of them might be able to get in touch with me. *Gil M. Billings, Wake Forest College, Wake Forest, N. C.*

POPULAR CAPTAIN: As an enlisted man, I served under an officer, namely Capt. Joseph P. Tustin, in the 50th Service Sq. Since my discharge in 1945, I have received so many letters from former mates concerning the whereabouts of this popular officer that I feel it would be very helpful to many men if AIR FORCE would print this information. Capt. Joseph P. Tustin, who did such great work during the last war as Special Service Officer for the 50th Service Sq. and the 97th Bomb Group, 12th and 15th Air Forces, is now Civilian Historian for the 12th Tactical Air Command, APO 62, where he is doing a wonderful job for the occupation troops. He has just completed writing an historical book concerning the complete history of Bad Kissigen, a city in Germany, which is where his group is now stationed. To date he has sold well over 1000 copies and has donated all proceeds to the Air Forces Aid Society. This gesture is typical of Captain Tustin's character and untiring efforts for troops serving under him. For you many men who wish to renew correspondence

with Captain Tustin, his address is: Hq. 12th Tactical Air Command, Historical Section, APO 62, US Army. *A. E. Rausch, East Greenbush, N. Y.*

ITALIAN BUDDIES: I would like to locate the following men who were in Italy during the war: Maj. Edward D. S. Sullivan, Adjutant, Hq. 82nd Fighter Group, Camp Gallantina, Province of Lecce, Italy, in the year 1943; and 1st Lt. Verner W. Hanson and Samuel Goldstein, with the 359th Aerial Sq., APO 520, in Foggia, Italy, in the year 1944. *A. Chimenti, 110 Sherman St., Lynbrook, N. Y.*

CIVIL SERVICE: I served in the 4th Air Force as a radio mechanic and radio repairman and am now trying to get a Civil Service appointment. For this I need the present address of Lt. Max Helpert. I served under him at Portland Army Air Base. *Clarence D. Morrison, 4881 Orchard Ave., Ocean Beach 7, San Diego, Calif.*

OLD BUDDIES: I wonder if it would be possible for me to regain contact with some old buddies. I would like to hear from Jim Mitchell, Lt. Guy Clark, Captain Simpson, Popsy Miedma, Louie Napolitan, and any other buddies I had in the 55th (P-80) Fighter Group. *James J. Mensching, 2549 Westervelt Ave., Bronx 67, N. Y.*

P.O.W. PAL: I was a prisoner of war in Germany. One of my friends was a prisoner also in the same camp. I have been looking for him ever since I was discharged, but with no success. Think he resides in New Jersey. His name is Rene Merriot.

Melvin Milbauer, 1602 West 10th St., Brooklyn, N. Y.

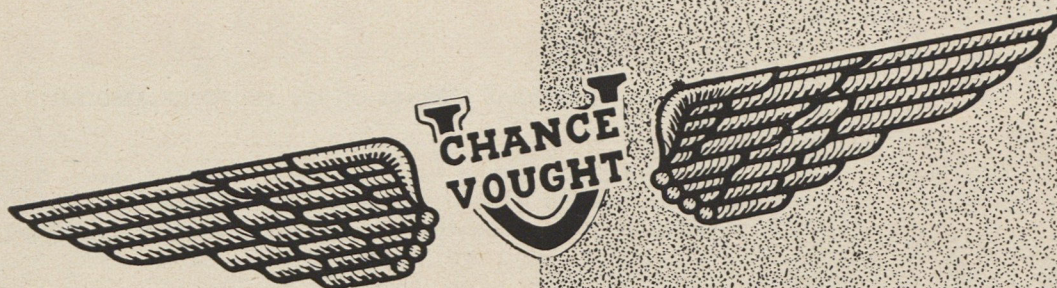
FROM FLORIDA: I would appreciate the present address of one Lt. James Thompson from Chattahoochee, Fla., enlisted or drafted at Seattle, Wash., took training at Santa Ana, Calif., was one of the first 500 to solo. That's all I know of him. *Roy L. Williams, 3243 33rd Ave., S., Seattle 44, Wash.*

INJURY CLAIM: Some time ago my husband wrote to ask the address of Capt. Alfred C. Bennett, M.C. The address sent was incorrect. The other address needed is for Capt. O'Donnell, M.C. We need both addresses on a claim for injuries. *Mrs. Arthur Philip Sherman, Hotel Rossiter, Apt. 343, 1221 W. Seventh St., Los Angeles 14, Calif.*

CAPTAIN FROM ZAMBOANGA: I would like to find the address of the Captain who was co-pilot on the Catalina "Snafu Catcher" that picked up my crew after we ditched our B-25 "Goin' Hard" near Zamboanga, Mindanao, P.I., March 4, 1945. He took a series of pictures of the ditching, but I could never find him afterwards to get a set. *Thomas P. Cockrell, Beta Theta Pi House, Gainesville, Fla.*

KILLED OVER EUROPE: I would like to hear from anyone who was a member of the 601st Sq., 398th Bomb Gp. stationed in England in September 1944 and who knew my son, 2nd Lt. Warren J. Wade, a pilot who was killed in a raid over Germany in that month. His plane was the Shady Lady. *Charles H. Wade, 95-05 104th St., Ozone Park, N. Y.*

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THE history of the 2nd Bombardment Group started at the First Corps Observation Training Center, organized at Amanty Airdrome, France, in 1918. On 10 September 1918, it was redesignated as the 1st Day Bombardment Group, Hqrs, and was disbanded in November 1918, and ordered home for demobilization.

The Group saw action in three major conflicts during World I, at St. Mihiel, Lorraine, and Meuse-Argonne.

The 1st Day Bombardment Group was organized at Ellington Field, Texas, in 1919. Hq Det. 1st Day Bombardment Group was redesignated as Hq Det. 2nd Group (Bomb), on 31 March 1921 and in accordance with War Department Circular No. 24, 1924, it was consolidated with the 2nd Bomb Group Hq.

Hq, 2nd Bomb Group, was redesignated as Hq, 2nd Bomb Group, Heavy, on 20 August 1943, and was subsequently inactivated on 28 February 1946. This designation was changed to Hq, 2nd Bomb Group, Very Heavy, on 5 April 1946, and the Group was activated 1 July 1947.

Battle Participation Credits for World War II included Africa, Italy, France, Balkans and Anti-submarine.

AWARDS

The Group was awarded two Distinguished Unit citations for outstanding performance of duty in action against the enemy over Germany and Steyr, Austria, on 25 February and 24 February 1944, respectively.

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FEBRUARY, 1948

AIR FORCE

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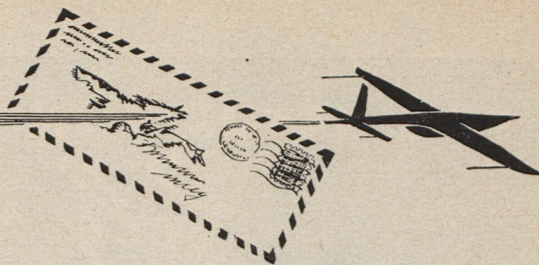
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AIR MAIL



Milk Wagon

Gentlemen: I have just received the December issue of *AIR FORCE* and I was glancing at Cross Country when I noticed a request for information about the B-17 "Milk Wagon." I flew about four missions on it. The "Milk Wagon" was attached to the 708th Bomb Squadron of the 447th Bomb Group and not to the 301st as implied. The 447th was based at Rattlesden, England. Actually I believe that the "Milk Wagon" completed 138 missions without a single abortion of any kind, although only 129 bottles were painted on its nose.

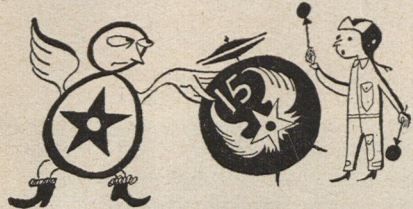
I believe that the crew chief of the plant was Technical Sergeant Oranski from Pennsylvania. The "Milk Wagon" was a testimonial to the great maintenance system and to the fine mechanics of the 8th Air Force. I believe there was a brief article about the "Wagon" in one of the 3rd Air Division publications of around May 1945.

Dan R. Bavelaar
Chicago, Ill.

Stolen Thunder

Gentlemen: In your October 1947 issue of *AIR FORCE* you stated that on Air Force Day the B-29s which flew over Tokyo were from the 8th Air Force in Texas. To my knowledge, the only 8th ships left in the theater were grounded due to mechanical reasons. The rest of them flew to Andrews Field from Yakota Air Base to be there for Air Force Day.

The B-29s were from Guam, Yakota and, I believe, Okinawa. Also, the 342nd Bomb Squadron from the 15th Air Force, 97th Bomb Group, flew from Smoky Hill Air Field in Kansas in time to join the formation over Tokyo.



We in the 15th are tired of the 8th stealing our thunder. Even at that, most of the B-29s were from stations over there.

S/Sgt. Roland H. Lefebure
342nd Bomb Sq., 97th Bomb Gp.

● **Headquarters USAF** advises that reader Lefebure is absolutely correct. We suspect that the original release was submitted by 8th Air Force.—ED.

Full House

Gentlemen: In your December issue, the report by Dr. Paul M. Fitts and Capt.

Richard E. Jones is giving me fits too. The article "Psycho-Analyzing 460 Pilot Errors" stated as follows: "On take-off in a C-47 with approximately 50 persons on board..." Now, what I want to know is this: How in hell did he get 50 people in a C-47 without stacking them like a cord of wood, and still take off? No wonder the engine quit. I would



too! On all C-47s ever flown by me, 28 people aboard was a full house, and I've logged some 2000 hours in C-47s of the 22nd Troop Carrier Squadron, 374th TC Group, with the 5th Air Force in SWPA. Even Troop Carrier Command draws a line at more than 30 passengers on a C-47.

Ronald R. Templin
South Bend, Ind.

● **We agree with reader Templin** that 50 passengers in a C-47 leaves little room for gin playing but it is far from the world's record. There are reports that C-47s employed in evacuation missions in Burma during the war carried as many as 69 passengers on a single flight.—ED.

Off Base

Gentlemen: I want to call your attention to the misspelled name of Lackland in your October issue. Incidentally, it is a *base* not a field.

S/Sgt. L. C. Morgan, Jr.
Lackland Air Base
San Antonio, Texas

● **AIR FORCE** stands corrected.—ED.

Procedure

Gentlemen: What is the procedure for making application for entry into the Regular Air Force? Is there any possibility of a pilot with only approximately 900 hours 4-engine time being recalled to active duty?

Fred B. Nutmeyer
Dallas, Texas

● **The possibility for recall** is dependent upon circumstances. At present hundreds of Reservists are awaiting their opportunity for a two-week training period at camp. Air Force facilities are very meager in comparison with the demand. Application for admission to

the Regular Air Force is made on WD AGO Form 16.—ED.

Significant

Gentlemen: We noted with a great deal of interest the December issue of *AIR FORCE*, and its intelligent presentation of the YB-49's debut.

We are most appreciative of the significant handling you awarded this new airplane.

Al Cline
Director of Public Relations
Northrop Aircraft, Inc.

No Help

Gentlemen: My family and I have been having quite a serious discussion and I would like to have your help in settling it.

The question is: What is the difference between a direct order and a lawful order? In this instance, if a non-commissioned officer came into my barracks and asked me to sweep under my



bunk, and I refused, can he give me a direct order to stand at attention?

Carl Merdolicchio
Brooklyn, N. Y.

● **Sorry, the Air Judge Advocate** says he can't give opinions on hypothetical cases! Honest. We asked him.—ED.

Missing

Gentlemen: In your November issue I noticed an article, "Situation Normal," by Lt. Bert Stiles. We were overseas together and he was reported missing when I came home. I was quite surprised, therefore, to see his article.

Wm. W. Behrend
Trenton, N. J.

● **All "Air Force Diary" articles** appear with the same credit lines they carried when first published in *AIR FORCE* during the war. "Situation Normal" was written by Lt. Stiles shortly before he was reported missing from a fighter sweep over Europe. His death has since been officially confirmed.—ED.

Wrong Bomber

Gentlemen: Have just received the December copy of *AIR FORCE*. As a dyed-in-the-wool B-17 loyalist, I can only cry "Shame!" at the way you treated us in

(Continued on page 8)

How to travel 3,000 miles a week ...and like it!

by David N. Laux, Vice President
Sports Afield Magazine



"In Detroit recently," says Mr. Laux, "my business finished, I offered a friend a ride back to New York in Sports Afield's 4-place Bonanza. But he had other plans. I took off at 2:30 p.m. and reached my country club near New York at 6. Just to needle my friend, I phoned him in Detroit where he was *still waiting*—with a night's travel ahead!

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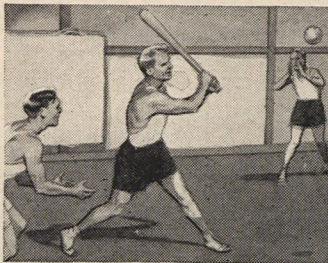
For further information, contact your local National Guard unit or write to the Adjutant General of your state.



He's a veteran of World War II, served overseas 2 years, came out as a buck sergeant. Thought his outfit was the best in the service.



Married, has one child, a steady job with good pay. Rents now, plans to buy a home later. Extra National Guard pay helps budget.



Likes sports, plays on National Guard indoor baseball and basketball teams. Studies in spare time to further chances in business life.



Wife likes dancing. They get a sitter, go to most National Guard dances. Evening costs little. They enjoy "getting out" with friends.



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AIR MAIL *(continued)*

the story "Hell Over Bizerte" from "Air Force Diary." We know Lieutenant Locker did not write the story naming B-24s as the participants on the mission in question, so the mistake must be yours. The group that made that mission was the 97th Bomb Group based at Biskra, Algeria, No. Africa. The 97th never did and, God willing, never will use B-24s.

I know whereof I speak since I rode No. 342, "Stinky," during that mission and we were in the element directly ahead of Borders and Locker when Borders blew up. The force of the explosion almost tossed us over on our back. If I'm not mistaken you've probably got the entire original personnel of the old 97th down your neck for the mistake, so I'll not add to your woes with any bitter remarks, but will look forward to a correction of this mistake which is the unkindest act of 1947 to an old B-17 man.

Mel R. Stumm
Alexandria, Minn.

Gentlemen: In your December issue you have a story about B-24s, taken from "Air Force Diary." I was a member of the flight in which Lieutenant Borders' airplane blew up over Bizerte, and it sure wasn't a B-24 outfit—it was a B-17 outfit. If that isn't proof enough, I know a man who has a picture of Borders' plane blowing up. Is this a mistake on the part of "Air Force Diary" or AM FORCE Magazine?

John A. Lynn
Albuquerque, N. Mex.

Gentlemen: I passed over your article "Hell Over Bizerte" because it was a story about B-24s. I wouldn't read it, for I knew I would have no interest in it. However, curiosity got the best of me; so, I went back and read it.

I think poor Tom Borders would agree with me that Lieutenant Locker is still "flak-happy" and I am sure "Fozzy" will agree with me, too, that Tom was flying a B-17 in No. 2 position.

Otherwise, I thoroughly enjoyed the vivid recollections created by the article.

Chris Karas
Minneapolis, Minn.

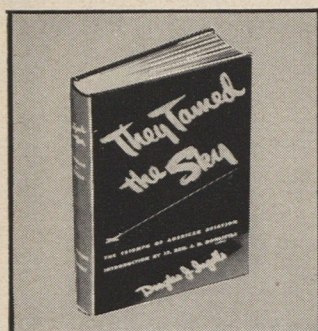
● We bow to the men who were there. From these and other comments, it seems that they were B-17s and not B-24s. Like all "Air Force Diary" articles, this was reprinted from the pages of the wartime Air Force Magazine. It said B-24s and we had no reason to question its authenticity until now. If Lieutenant Locker is "in the audience" we wish he would clear up this matter for us.—ED.

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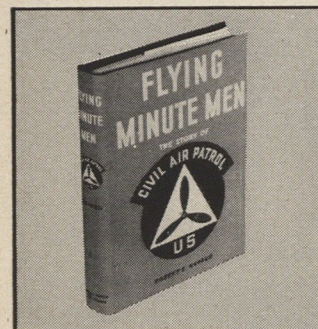
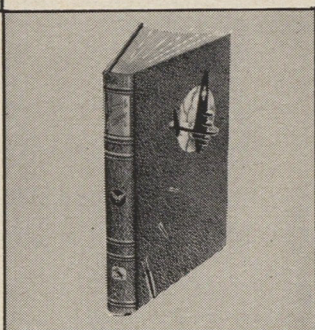
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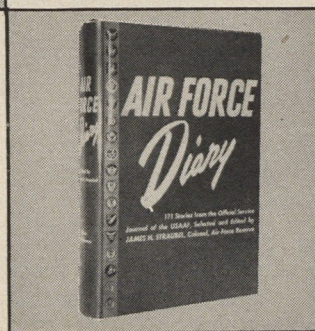
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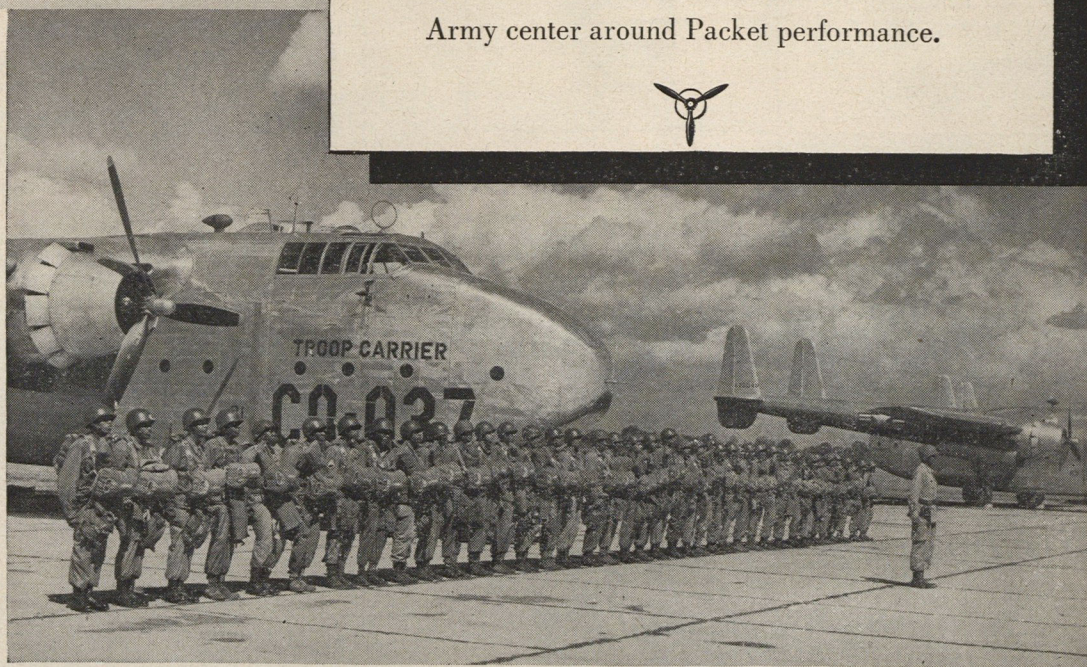
That's a 3-platoon complement of C-82's, the famous Fairchild Packet.

They are carrying 123 men, a fast-hitting, air transportable infantry unit.

The Packet is on duty in ever increasing numbers with the new Army. It lends wings to troops being trained for swift mobility and close ground-air cooperation.

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AIR FORCE

FEBRUARY, 1948

PRICE LIST

1 doz eggs	\$.89
1 qt milk	\$.26
1 lb butter	\$ 1.00
1 lb sirloin	\$.89
1 jet bomber (B-47)	\$1,500,000

THE HIGH COST OF LIVING

We have been scowling through the first of the month bills, and that intangible something called inflation seems tangibly everywhere. Staples of the bread, butter and egg variety are priced out of this world and going higher. Price tags on the little pleasures of life are unbelievable. A 10 cent hamburger costs as much as 40 cents; the cheapest seat at the neighborhood movie 65 cents; a shave and a haircut \$1.50. That's in New York City, but it isn't much better west of the Hudson.

A national expense item comes to our attention in the form of the 60,000 word report of the President's Air Policy Commission, just released at this writing. In

this country we have grown up in the tradition of supply and demand economics. The report says, in effect, that with world conditions as they are the demand for air power is far greater than the supply of air power, that the supply must catch up in the next five years. It strongly recommends appropriations for the US Air Force which at first glance may seem fantastic to the average taxpayer.

It brings to mind this item in the Statement of Policy of the Air Force Association: "In our support of air power as peace power we call for the expenditure of vast sums over and above those (Please turn the page)

currently allocated to the Air Force. This prompts us to remind the public at large that we too are taxpayers and as interested as anyone in minimizing the tax burden. But we also are sold on life insurance. While recognizing that peacetime air power is expensive, we know that wartime air power is far more costly. We believe that air power is one expense we cannot afford to skimp. It is the price of security, the price of peace."

Every taxpayer has the right to know how his money is being spent, whether it is being allocated wisely within the defense establishment, whether it is being used for out-moded or modern weapons. And he has the right to know the costs of

modern weapons in dollars and cents. The Air Policy Commission's report by an independent and distinguished fact-finding body is the most penetrating analysis of the problem to appear in many years (it will be featured in the next issue of AIR FORCE). Meanwhile, much can be learned from a study of the costs and procurement procedures relating to one of our newest bombers. The article beginning on these pages does just that. In the firm belief that air power has become a staple of life, we've called it "The High Cost of Living," with emphasis on living. We think you'll find it engaging and significant reading.

The Editor

sents the total expenditure for our entire aircraft program throughout World War I. The comparative cost of airpower between two wars is obvious.

Now 600 million is a lot of money. But it is peanuts, relatively speaking, for any nation which develops and maintains adequate airpower for today and tomorrow. Even in the last war the smaller nations could afford few aircraft. Now the cost of planes has risen to the extent that the little countries might as well not try to maintain air forces. The ante is too big. The chips come too high. Only the most powerful nations can afford to sit in the game.

Consider the Boeing XB-47, which made its first flight not so long ago. It's bigger than a Fort, about as big as a Superfort. It carries five tons of bombs, to the Fort's three. It has six jets, to the Fort's four props. Its radically swept back wings—classed as Buck Rogers design in the last war—suggest great speed. And the speed's there, well over 500 mph, to the Fort's top of 300. In fact, the XB-47 is faster than the best fighters of the last war.

How much will production B-47s cost? In a word, plenty. The Procurement Division of the Materiel Command, at Wright Field, is very cautious about giving an estimate. It must be. The plane hasn't flown all the tests which will determine the

THE HIGH COST OF LIVING

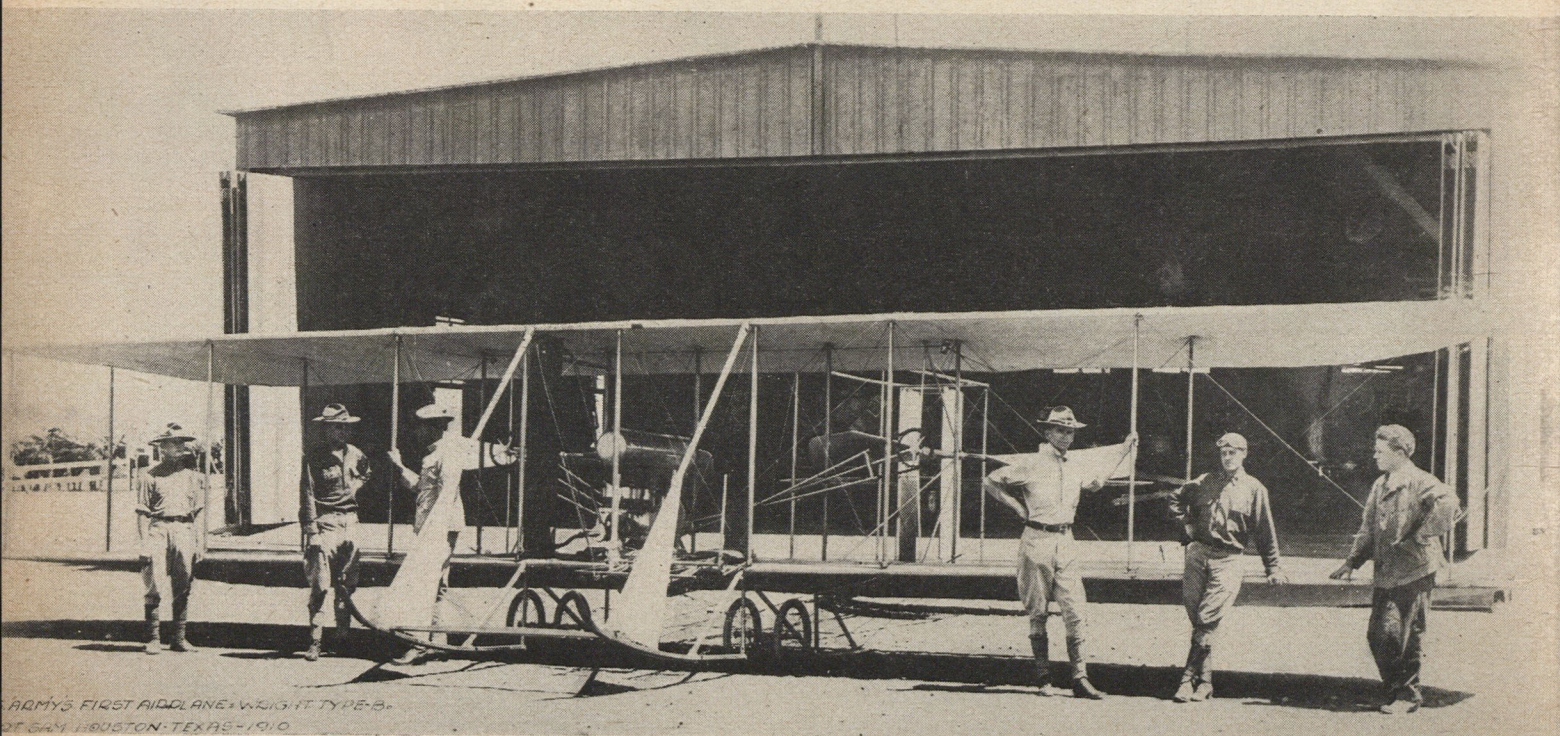
The price of airpower continues to spiral, but paying it is the best way to avoid a nose dive

By Douglas J. Ingells

During the late war the cost of airpower was socked home to us by the sobering thought that a heavy bomber, a Fort or Liberator, cost about \$250,000. Late in the conflict, when we plastered Berlin with more

than 2000 bombers and fighters on single missions, we had an airborne investment of perhaps \$600,000,000 up there over the German capital at one time. That figure, \$600,000,000, is chosen deliberately. It also repre-

In 1908 we paid \$25,000 for our first army plane . . .



ARMY'S FIRST AIRPLANE—WRIGHT TYPE-B—
AT CAMP HOUSTON, TEXAS—1910



... In 1947 we paid \$5,000,000 for our first B-47

design-and-construction modifications that will fix the production cost. And future labor-and-materials costs are also uncertain. So let's put it like this, say the Procurement experts. If we were to order 100 B-47s, and if cost factors didn't increase more than we now expect, each plane would cost about \$1,500,000.

That sum would have bought at least six Flying Fortresses. And \$150,000,000, for 100 B-47s, would have bought 600 Fords. State it tactically. Even with the B-47s bigger bomb-load, a reasonably heavy strike against an enemy center—say a mission of 600 B-47s—would mean an airborne investment of \$1,000,000,000, or almost twice the aircraft dollar value of the monster 2000-plane missions of the last war.

If that kind of money is to be laid out for airpower, we want to make sure of getting a dollar's worth of airplane for every dollar we spend. And we get it—by long-range strategic and tactical planning, by

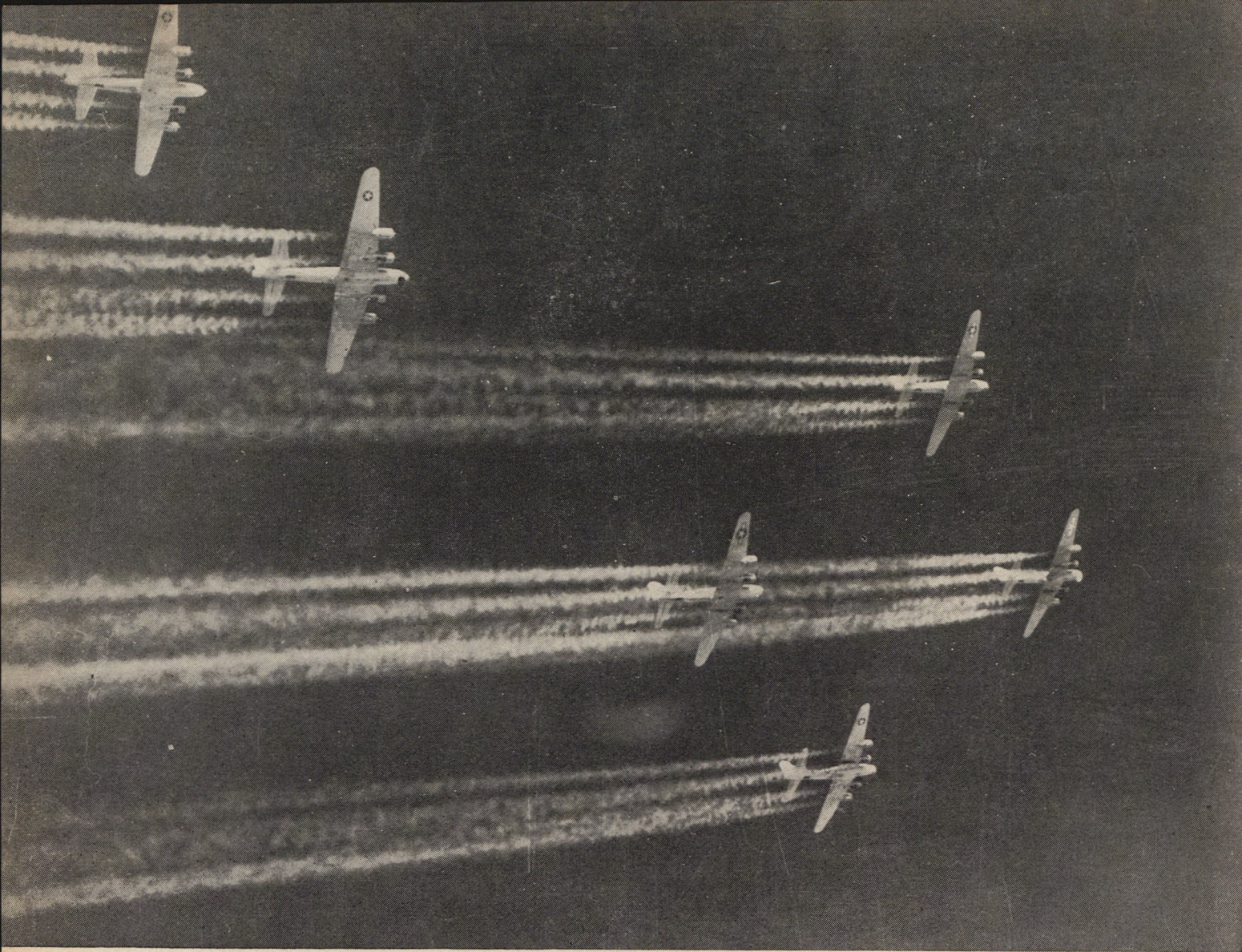
step-by-step progress in experimental development, and by rigidly controlled contracting in all phases of procurement. These principles apply, with proper modifications, to all the vast variety of things needed by the Air Force—engines, fuel, armament, turrets, fire-control systems, radar, radio and navigation equipment, bombsights, wheels, brakes, tires, flying clothes, rescue devices and so forth, down to nuts and bolts. But the B-47 will be considered here because, as a complete plane, it gives a more rounded picture of the system which operates in virtually the same way for all USAF planes.

Headquarters in Washington starts with a careful consideration of the entire pattern of international relationships and world strategy, using all of the top-secret intelligence information available. Questions are raised. What is the most probable enemy nation, or combination of nations? Who are our probable allies? What are the geographic factors re-

lating all of these prospective enemies and allies? Most important, what are the operational ranges—in distances from the US to intermediate bases in potential allied countries, and to major objectives in potential enemy countries? What would the ranges be without intermediate allied bases? What would the maximum range be? That last one is the easiest to answer. Our biggest bombers, at least, must be able to fly to any point in the world, drop their bomb-loads, and return to US bases.

More questions, equally important. Must we be ready to fight again in five years or less, or in ten, fifteen, twenty or more? If soon, we must apply our most advanced ideas to produce planes in quantity for that earlier emergency. If later, we can defer quantity production until still more advanced research, experimental and design problems are solved. What defensive weapons will

(Please turn the page)



The 2000 bomber and fighter missions we sent over Berlin late in the last war represented a total investment to the taxpayer of \$600,000,000, but it was peanuts compared to cost of airpower now.

THE HIGH COST OF **LIVING**

(Continued)

our potential enemies have by then, whenever "then" is? Jet planes, rocket planes and guided missiles appeared during the last war, setting far higher performance standards. They would be much further developed by the start of another war. Assuming that our enemies would be as smart as we are, or smarter, what performance characteristics must our attacking bombers have to cope successfully with such new defense weapons?

Such basic questions confront the Requirements Division, A-3 Section, USAF, in Washington. No one plane can provide the answers to all of them. But several planes can. In the bomber classification the old principle applies in a sense—light bombers for short range, medium for longer, heavy for longest. But the

ranges have been vastly increased.

Though about as big as a Very Heavy Bomber of the last war, the XB-47 is a medium bomber by the new standards. After all factors in the world-strategy situation were weighed, its minimum performance requirement came out as follows: tactical radius, 1300 miles; bombload, 10,000 lbs.; service ceiling, 40,000 ft.; tactical altitude, 35,000 ft.; maximum speed, 500 mph; average speed, meeting all other requirements, 400 mph. These speeds, of course, indicated the use of jet engines.

Performance requirements of this type result from conferences between the Air Force general staff and the chiefs of all Commands—Materiel, Strategic, Tactical, Defense, Transport, Training, Proving Ground and Air University. The opinion of the Command most concerned with any type of plane may

carry the most weight, but all Command opinions influence the final result. Materiel Command's contribution to these conferences is vitally important because Materiel will be responsible for all engineering and procurement and is also intimately familiar with the needs of all Commands.

Requirements, once determined, are forwarded to Materiel, at Wright Field. Its Engineering Division calls in those contractors whose size and experience qualify them to handle the project from design proposal to completed production contract. All this, due to great care in shaping the requirements, may take a lot of time. The strategic and tactical need for the B-47 was conceived in January 1945, but contractors were not asked for design proposals until November, even though the war continued during most of those months.

The contractor usually submits his

design proposal within ninety days. It consists of drawings, specifications, a production schedule and prices for preliminary models. Now the project has reached the point where some real dough is going to be laid out. It was \$2,000,000 in the case of the B-47. For experimental-flight and static-test planes? Oh, no! The \$2,000,000 was just for drawings, specifications, wind-tunnel models and a full-scale wood mock-up. That's right, modern airpower is a blue-chip game. But we'll see in a minute just why it costs so much to sit in and draw the first cards.

Phase One begins. Materiel's Engineering Division, knowing from contact with the Budget and Fiscal Office that funds are available, issues a Purchase Request (formerly an Authority For Purchase, AFP). This goes to the Procurement Division, which asks the contractor to submit a formal contract proposal. Negotiations begin between the contractor and the legal and production experts of the Procurement Division. The contract must be made in accordance with rigid Federal laws. It must safeguard the Government against excessive cost and the contractor against undue loss. It does that by stating in minute detail exactly what and how much is expected of both the Government and the contractor—and when it is expected. It's that simple in principle. But it may be very complex in form. A formal contract may well be longer than a best-seller novel.

During the war the Letter of Intent frequently preceded the formal contract. It started immediate action, helped to get planes and equipment into combat at the earliest possible moment. But that's all out now. So is renegotiation of contracts. All contracts are now formal ones. In experimental projects especially, the interests of both parties are served by more active and inclusive Government control of expenditures under the contract. Government auditors survey all cost figures closely. Projects often are handled on a cost-plus-fixed-fee basis.

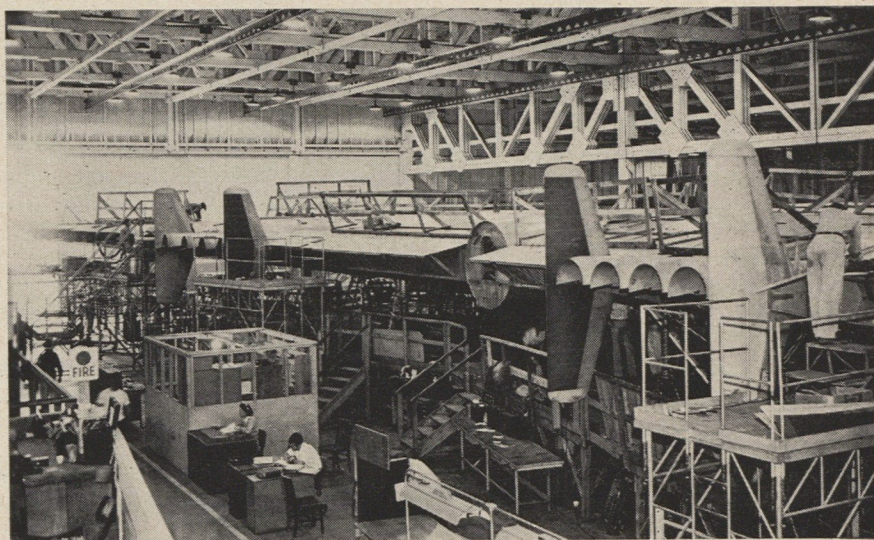
Phase One usually takes about a year to complete. Let's see what we got for our \$2,000,000 on Phase One of the B-47 project. We got perhaps a half-million man-hours, in the costly time of engineers, draftsmen, technicians and highly skilled workmen. We got 10,000 to 12,000 very complicated detailed drawings. The typewritten specifications supplied would make a volume two feet thick.

The full-scale wood mockup was complete to the last detail, and contained many real things, such as controls and seats in the cockpit. It gave the plane a three-dimensional reality impossible to realize from drawings, and invaluable in correcting and improving design and structural features. We got six wind-tunnel models—fuselage, wings with flaps, in-board and outboard nacelles, and the complete plane. Wind-tunnel models, made with infinite care as to scale, cost from \$50,000 to \$200,000

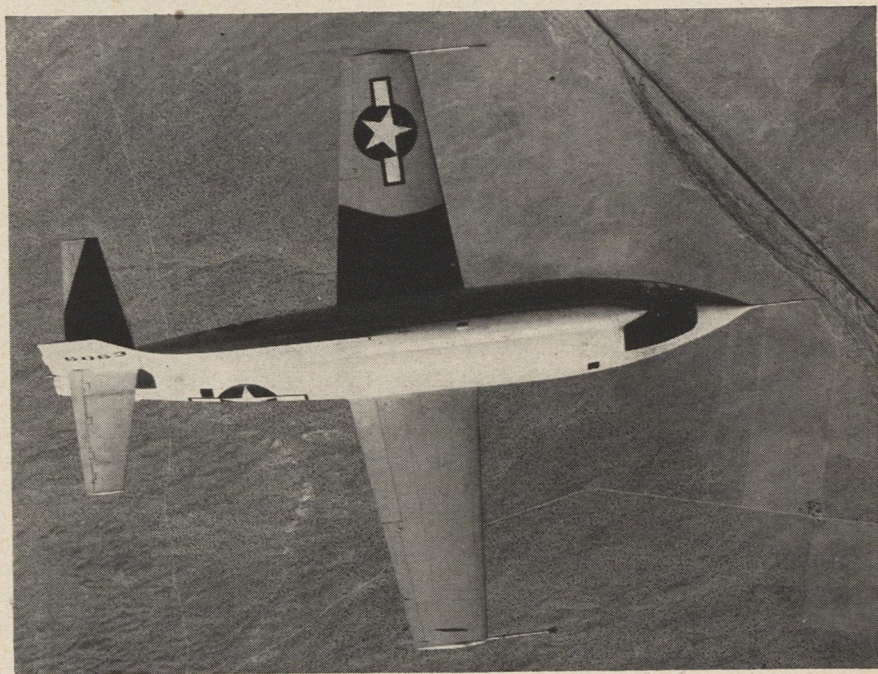
each, depending on their size, complexity and detailed scaling. And the contractor also supplied voluminous detailed reports on the wind-tunnel tests of these models, tests which are very costly in the high-speed tunnels demanded for today's and tomorrow's planes.

As Phase One of the B-47 project progressed, on acres of drawings, in volumes of tabulated specifications and reports, in mockup, models and tests, there was constant contact be-

(Please turn the page)



Another expensive post war project for the Air Force has been the building of Northrop's two flying wings, the XB-35 (reciprocating) and XB-49 (jet), above.



Subject of considerable discussion of late, the XS-1, reportedly the first plane to crack the sonic barrier, was one of USAF's most expensive research projects.

THE HIGH COST OF LIVING

(Continued)

tween Boeing and Wright Field engineers. Errors were corrected, improvements made, changes effected to meet expanding strategic and tactical requirements. During that relatively simple drawing, model and mockup stage every effort was made to get the most for our \$2,000,000.

Then came Phase Two. We bought only two airplanes. But they cost \$8,000,000. The original estimate was only \$6,000,000. But a lot of things happened meanwhile. Labor and material costs increased beyond all expectations. There were great and swift advancements in aeronautics, notably in the field of jet propulsion. The greater power and speed thus available had to be incorporated in the developing XB-47. The widening utility concept increased the range requirement very largely, as compared with the original 1300 miles. And certain changes were made to give the plane utility in functions other than bombardment. The whole process strove to establish the B-47's performance characteristics, not by the concepts of 1945 but by the probable needs of 1950 to 1955. For all that, an additional cost of \$2,000,000 doesn't seem so large.

The cost of the two XB-47s did not include that of Government Furnished Products such as engines, instruments and other items listed above. But since much of the most expensive equipment need not be installed in X-planes, the total cost of the GFP was a small factor in the XB-47 project. The entire operation, of course, was conducted under the same rigid contract requirements and safeguards that marked Phase One.

No static-test model of the XB-47 was built. This is because the whole development of jet bombers is still in the experimental stage. Production models will pass through many major modifications. Static-test data, obtained at great cost for the plane itself and the painstaking test work, would have little meaning for the later extensively modified production planes.

Flight test of the XB-47 was a part of the Phase Two operation and contract, and the cost. Boeing test pilots were required to make the first three or four hours of test flights, or more if basic faults developed. Air Force pilots would make the next ten to twenty hours of flights, or possibly more, in the varied performance tests. All such test flights were

to be made at Muroc, with Boeing and Air Forces personnel working in close cooperation throughout.

There will be little or no service test of the B-47, in the old sense of a small quantity of planes being ordered for that purpose and tested over many months prior to the placing of a production contract. This too is for economy. Phases One and Two required 3,000,000 man-hours over a period of three years. At all times hundreds, and at some times thousands, of workers were engaged on the project. Such large forces of skilled workers can't be held in idleness, pending production work, while service tests are carried out.

The total cost of Phases One and Two, which produced only two XB-47s, was \$10,000,000. Back in the 1930's we got three XB-17s, one for static test, for about \$750,000. That looked like a whopping figure then. But it didn't look so big after we had spent hundreds of millions for B-17s during the war. And it looked still smaller when we thought about what the Forts accomplished. Production B-47s will cost a lot more than B-17s. But they'll do a lot more too. All new types will cost more, and do more, than comparable earlier types.

This XB-47 cost is not out of line with that for other modern air weapons. Phases One and Two for the P-86 fighter cost \$4,800,000. The development of X-models for tomorrow's light bombers will cost less than that of the XB-47. But the heavies will cost more. C-types will cost somewhat less, size for size. And as all types improve in performance, as production planes, there will be additional costs. It used to be said that it cost \$1,000,000 and a year of research and experiment to increase the speed of a propeller-driven fighter by 10 mph. It will cost at least that much in the case of the planes of the future.

And now we're taking about subsonic planes. What the supersonic jobs will cost, no one knows. But you can get some idea from the Air Force's own estimate that it will cost \$100,000,000 to produce a plane, maybe the XS-1 or XS-2, capable of practical and repeated supersonic flight.

With Phases One and Two completed, the B-47 project goes back to the Requirements Division, in Washington, for reconsideration, again with all Commands participating.

We have more than we bargained for in the XB-47. As in the development of any X-plane, the contractor

has made sure of exceeding the performance demanded in the original requirements. That's one reason why the speed is well in excess of 500 mph. But many other improvements, at least five or six major ones and more smaller ones, have been made as the result of the contractor's or Air Force's ideas while the project was in work. Actually the XB-47 is today what would have been a B-47E or B-47F under the old and much slower system of service modifications.

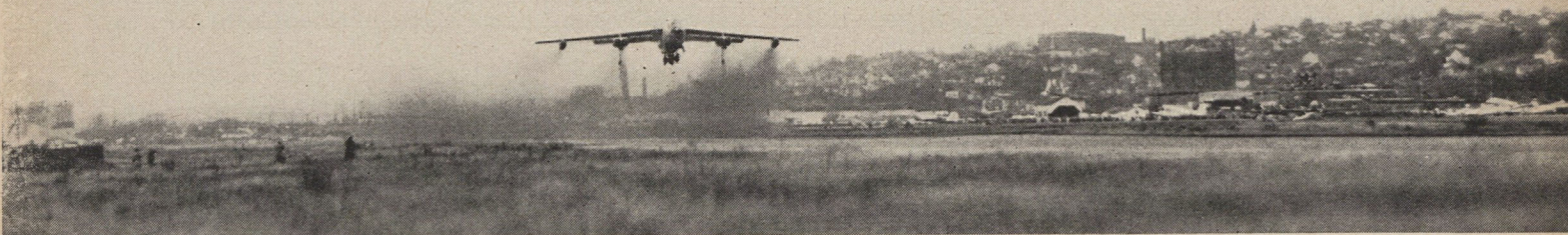
Will the XB-47 go into production as the B-47? We must face the possibility that it won't. The science of aeronautics has advanced so far and fast during the three years covered by Phases One and Two that the B-47, a futurity long-shot in 1945, might be considered obsolete by today's standards. The entire project might be washed out. In fact, it might have been washed out after Phase One. There might never have been an airborne XB-47.

But the probability is the other way. The XB-47, as things now stand, shows the best potential of any plane in its category. So very likely it will go into production.

If and when that happens, the project will again pass through Wright Field's Engineering and Procurement Divisions, and a new contract will be negotiated. If 100 B-47s are ordered, the price may be \$150,000,000. But that has to be a guess. It might be less. And it might be more by the time the contract was completed, due to the generally rising scale of the national price structure.

During the war several projects for a basic type of plane were launched at the same time with different contractors. In that way, needed mass production—swarms of planes for combat—could be doubled, tripled or quadrupled. When the need for a medium jet bomber was conceived, early in 1945, four such projects were launched—for the North American B-45, the Consolidated-Vultee B-46 and the Martin B-48, as well as the Boeing B-47. Each project, of course, went through its own engineering and procurement process.

The Air Force would still prefer to launch projects with two different contractors for any new type of plane, largely to get the advantages of two sets of engineering minds working on the same problems and producing more performance advantages in the finally approved production models. But peacetime economy



XB-47 TAKEOFF . . .

wooooooshh ►

demands the employment of only one contractor on a project.

It may still seem that \$10,000,000 is a lot to spend for Phases One and Two on a plane which may never go into production. The justification lies in the time factor. Eight years passed between the conception and mass production of the B-29 Superfort. But Phases One and Two have put the XB-47 within two years of mass production. And from the standpoint of national security, \$10,000,000, or even a much larger sum, is a small insurance premium to pay for that saving in time.

It has never been cheap to produce a new type of plane. Back in 1908, when the cost of labor, materials and everything else was a mere fraction of today's figures, the Government paid the Wright Brothers \$25,000 for a military airplane. It wasn't a radically new and differ-

ent type. It was virtually the same plane on which the Wrights had worked, at their own expense, for about ten years, and had flown for five years. The Government had a lot of bids on that job, ranging from \$850 up to \$10,000,000. The Wrights got the contract principally because their plane would fly and the others wouldn't, which sounds like common sense whatever the cost.

But it wasn't a cheap deal. The performance requirements were as follows: tactical radius, 65 miles; payload, 350 pounds; speed, 40 mph; altitude, unspecified. For such performance \$25,000 seems like a lot of money, even today. But no one in his right mind thinks that the Government didn't get its money's worth on that deal. And incidentally, the basic legal safeguards in that first contract are the same that are used today in all Air Force contracts.

That's still the Air Force procurement idea—to get our money's worth. We have to spend a lot more money, and at vastly increased costs for everything. But we also demand, and get, much more performance for our money. Airpower never was a game for pikers. It certainly isn't today. And as the price of airpower goes up and up, it is well to remember that victory always costs less than defeat.

XB-47 TAKE OFF . . . *Heading straight your way (above) the Boeing XB-47 takes to the sky from its home base in Seattle. To get some idea of what it would have been like if you had been standing at the edge of the runway at the time, turn the next four pages. As indicated here, the Stratojet broke ground after a much shorter run than has been normal for jets in the past.*

AFA Looks To You

President Tom Lanphier looks to the squadrons to make AFA the strongest organization of its kind

By Thomas G. Lanphier, Jr.
AFA National President

During the first two years of life of the Air Force Association, both the growth of squadrons and the expansion of membership have been convincing evidence of the interest in the AFA among those men and women who have served with the US Air Force.

I think we are all aware that a large percentage of the present membership has been obtained through direct mailing by the National Headquarters. These mailings were based on lists of men and women who were separated from the Air Force. Now that these lists have been exhausted, most of the future growth of AFA will depend on action by squadrons and individual members.

As I see it, there are three methods by which we can continue to develop our Association into the strongest and most active organization of its kind. These are:

- ▶ Members who belong to the national Association but who are not now affiliated with a squadron should take the initiative of joining the squadron nearest their home.
- ▶ Members who find that a squadron does not exist in their community should talk over the desirability of having one with other Air Force men and women they know, and then take steps to activate a local squadron. (Write to National Headquarters for an organization kit.)
- ▶ Squadrons should grow constantly, increasing the membership of the local organization, gaining new members for the National Association.

Now let's take these problems one at a time and see which apply to you and how you can help.

First, if you are one of the very large number of men and women who have joined the AFA, receive your AIR FORCE magazine monthly, but have not become a member of a squadron, won't you investigate the possibility of doing so, today? The officers of the AFA all feel that you are sincerely interested in the aims and purposes of the Association, or you would never have joined.

But by becoming only a national member, you are enjoying only a fraction of the benefits and pleasures of belonging. The AFA is the civilian component of the US Air Force. Its members speak your language, enjoy the things you do, want you to join them by actively taking part in association affairs. Join a squadron and give the benefit of your assistance. You will then be on the road to obtaining the most from your membership in AFA.

Second, if there is no squadron in your community, don't sit by and wait for someone to start one. (In many cases, someone may be trying to establish a squadron in your community. If you will drop a line to National Headquarters, you can learn if anyone is now trying to activate a squadron in your area.) If there is no squadron either formed, or in the process of formation, take the initiative yourself. Write to National Headquarters and report that you are interested in organizing a squadron in your community. You will find the Headquarters gang anxious to work with you and ready to give suggestions which will be helpful to you. They will also provide you with an organization kit which contains all the information and material necessary to set up a squadron and get it into operation. Only twenty former Air Force men and women are required to obtain a charter in the AFA. By getting six or eight of your Air Force acquaintances together, I know there will be little difficulty in obtaining the minimum number for a charter.

Third, squadrons which are already established and active provide the finest possible potential for an expansion of membership. We know for a fact that thousands of former Air Force men and women still have not even heard of the AFA; we know that many other thousands in large communities do not know of the existence of a squadron in their area. Finally, we know positively that these men, when contacted, are anx-

ious to join the AFA, take an active part in a squadron and express the thought that they have just been waiting for an organization like the Air Force Association.

And the best part is that it isn't necessary to attempt blindly to enroll new members. We all know that it is best to work on a personal basis—to send personal invitations to meetings and other activities. So, here are some of the sources squadrons have found helpful in getting names and addresses of former Air Force personnel:

- ▶ Reserve lists which include the names of all men taking Air Force Reserve training in the area are available at either the office of detachment commander of the unit in your area or at the reserve branch of the numbered Air Force having jurisdiction over your State.
- ▶ The Air National Guard commander in your area can provide you with a list of Air Guardsmen in the region and will often help recruit members of the Guard for your squadron.
- ▶ Local draft boards may be able to provide the names of those men who served with the Air Force.
- ▶ In some communities, the Chamber of Commerce has compiled a list of veterans and the branch of service in which they served.
- ▶ Airlines, aircraft manufacturers and aircraft parts manufacturers in your area can give you the names of the men working for them who served in the Air Force.
- ▶ Other civilian organizations with a primary aviation interest can provide the names of former Air Force personnel who are eligible for membership in your squadron.

The National Headquarters can make available lists of all present members of the national association who live in any given region. By cross-checking your membership list against the list of all members, you can determine the men who are not now members.

Through all publicity media (radio, newspaper, posters, window displays, direct mail, etc.) you can call the squadron to the attention of all Air Force men and women in the community.

One of the soundest methods to arouse interest in a squadron in the community is a program of activities. Some of the dozens of successful programs of squadrons throughout the nation include: sponsoring Air Scouts, the CAP, model clubs; incorporate aeronautical education in local high schools, support



XB-47 TAKEOFF . . .

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and take the leadership in the construction and expansion of local flying facilities; outline and back a program of progressive aviation development for a community; establish light aircraft flying clubs for members; organize and sponsor an active reserve training unit for the Air Force.

The National Headquarters now has on hand a series of five pamphlets designed to provide activities. These include the five committees: Legislative, Program, Membership, Public Relations and Finance. Others are being prepared to cover subjects of general interest.

In the meantime, if your squadron has an idea for some specific program and is not quite sure how to develop it, write to National Headquarters. The office there will be glad either to advise you or refer you to another squadron commander

who has worked on the same program and has gained experience.

Here is what one squadron did to increase its attendance at meetings and improve its program:

AFA's Westchester Squadron No. 1 of New York recently jumped its attendance from 65 at the October meeting to over 400 a month later. On November 12th the crowd nearly overflowed the meeting place in the small theater in the County Center at White Plains. Squadron Commander John H. Caldwell credits the six-fold increase to a nine-point program. These are the tenets.

► The plans were laid early. Although the Westchester Squadron meets on the second Wednesday of each month, plans for the November meeting were begun six weeks in advance.

► A hot subject—jet propulsion—was selected for the program. Upon re-

quest, First Air Force arranged speakers and a movie. The basic program idea was shaped to appeal to every Air Force man regardless of former rank or job. First came a colored motion picture on the theory and operation of jet power, originally prepared for jet pilots and personnel by Lockheed. The film was laid out as a primary indoctrination tool, and answered many of the spadework questions.

The film was followed by a question-and-answer period on the general subject of jets. The original targets for these questions were to have been a pilot, an engineer and a personnel officer from a P-84 Thunderjet Group at Dow Field, Bangor, Maine. These men were prepared to fly down especially for the meeting, but unfortunately were weathered in. In their place, Maj.

(Please turn the page)

John Best of Hq. First Air Force, who flew the acceptance tests on P-80s, came to the meeting as pinch hitter. This pointed up the wisdom of having an alternate available.

► Invitations were sent to 3100 former AAF men, 2500 of whom were listed as members of the Air Reserve in Westchester County. This list represented only about 20% of the former AAF men who lived in the county.

► Meeting notices, sent in the form of the usual penny postal cards, were made to "sell." Before the copy for the card was written, several squadron members called about 50 individuals who were known to be AFA members, but had never attended squadron meetings. From these men the committee discovered the stock answers as to why some men did not come out for squadron activities. Along with the usual answers indicating sheer inertia, answers like this guided the committee:

"But I don't know anyone in the county who is a member . . . Can I attend meetings if I'm not a member of the Squadron? . . . Isn't AFA for officers only? . . . I don't want anything more to do with any more military outfits! . . . If I attend, will I have to drill?" Copy on the invitation cards answered objections.

► Two weeks in advance of the meeting, press releases for weekly papers were sent to 15 squadron members living in small towns of the county. Each of these members released the piece over his own name and address. Five days before the meeting a release went out to all eleven of the county's daily papers, followed up by telegrams.

The day before the meeting a telegram, plugging the meeting but worded like a radio commercial, was sent to Arthur Godfrey for his popular early morning chatter and music program over WCBS in New York. Godfrey read the telegram word for word.

► To create a friendly interest in advance of the meeting, squadron members in 30-odd towns in Westchester County made phone calls to each of a list of five AFA members who had never attended a squadron meeting. The caller offered to arrange transportation.

► Of the 65 paid-up members in the squadron 35 were assigned specific jobs for the meeting. There was a committee of greeters at the railroad station to see that members who arrived by train were provided transportation to the meeting hall. Ten men were at the door wearing lapel tags identifying them by name and town. Their job was to see that newcomers met the rest of the members. One man ran a motor pool. He registered those who had return space available in their cars, and arranged for men who came by bus to get lifts home.

► Ex-Air Force men who had not joined AFA and AFA members who were not affiliated with the squadron were given a chance to sign up. Underneath a large sign—"Pay Dues Here"—five members were placed to handle newcomers. Receipts had been filled out in advance—all except the name—to expedite the work. Two other members filled out "locator cards" to aid in keeping track of all Air Force veterans, members or not. Another desk was set aside for general squawks. Bulletin

boards covered recent publicity on the squadron, etc.

► The atmosphere was kept informal, in keeping with the lack of formality that characterized the wartime air force, and at no time during the meeting was any reference made to former military rank. Because most of the people came for a program rather than a business session, the meeting started with the movie, followed by the speaker and the question period. A brief business session was held, and the meeting ended with the tapping of the beer keg. This was the only gavel that sounded at the meeting. As a matter of fact, the Westchester squadron doesn't own a gavel, and doesn't intend to burden itself with this kind of formal gear.

The nine points evidently worked. The 600% increase in attendance was proof enough. In addition, a post-meeting tally showed that 42 members of the national association signed up with the squadron, and 11 totally new members came in that evening. Even so, Squadron Commander Caldwell was somewhat disappointed with this showing on new membership. Looking back on the meeting, he feels sure the new member percentage could have been increased appreciably with these changes in procedure, which he passes along for consideration by other squadrons: 1. More room to work in; at the Westchester meeting the crowded conditions around the membership tables made it impossible to do a proper "selling" job. 2. More people on duty at the membership tables. 3. More promotional material on AFA and on the local squadron at this point of sale.

One Jump Ahead of the Shroud

No one wants to join this club, but the members are glad to be in

Some of the members, like Col. S. U. A. Amoss, recall their initiations into the Caterpillar Club with a smile. "We jumped from about 2500 feet into an overcast above Paris that seemed to have no ceiling," Amoss relates, "When I pulled

my D ring it seemed to me that I waited much too long for the chute to open and I flung the ring from me and muttered, 'Jesus Christ.' Just then the chute opened with a jerk and I looked up and said, 'Scuse me, Jesus.'"

Some of the stories aren't so funny. S/Sgt. William P. Lordi was injured beyond the point of helping himself in a B-24 mission over Germany late in 1944. When the order came to bail out, Lordi's nine crew mates gathered around him, spilled



XB-47 TAKEOFF . . .

wooooooshh ➤

his chute within the flaming plane, tucked the canopy under his arm and then dropped him gently through the bomb bay. The chute opened immediately, but just as it did so, the plane exploded. Lordi floated safely to earth. The other nine men were blown to bits.

But between the humorous and the tragic, the dramatic and the commonplace, there is a wealth of human interest that makes the Caterpillar Club one of the most fascinating and unique fraternities either in or out of aviation. Certainly no other organization will challenge the Cats' distinction of having the world's most unattractive initiation.

The first parachute jump on record was made from a balloon in 1908. The first emergency jump from a plane was made by Harold R. Harris in Dayton in 1922. (For some unaccountable reason our pi-

lots in World War I had no chutes until the very end when General Billy Mitchell succeeded in having a few assigned.)

Shortly after Harris made his initial jump a couple of newspaper men and a parachute engineer at McCook Field, Ohio, hit upon the idea of forming all emergency jumpers into a club. The not too inspired association of the silk in the parachute and the silk-worm in its cocoon suggested that the organization might be called the Caterpillar Club. And so it was.

For a while the parachute engineer kept records of all emergency jumps as a hobby. Later he sold them together with the caterpillar design to a parachute manufacturer in New Jersey who for many years—until 1946 in fact—took funds out of his own pocket to perpetuate the idea, presenting pins, certificates of

jumps, etc., to eligible members.

In 1943 the Club was incorporated in New Jersey and officers were elected to represent it until after the war, at which time active chapters were begun.

Today the Caterpillar Club, headed by Harold L. Foster of Columbia, S. C., has 1400 members. Many thousands more, primarily airmen who jumped during the war, are eligible, and it is in the herculean task of rounding up these extra thousands that Club officers are now most actively engaged. Aside from this, their primary mission is one of flying safety—a mission which they plan to prosecute with all their energies as soon as they get over the organizational hump.

Among its present members are such well known aviation figures as Jimmy Doolittle, Lewis H. Brereton, *(Please turn the page)*

Ira Eaker, and Charles Lindbergh. Doolittle "joined" in 1929 when he was test flying a Curtiss Hawk he had planned to enter in the Thompson Trophy Race. In the process of wringing it out before the race one of the wings collapsed and Jimmy went over the side, landing in the town of Olmstead Falls, Ohio.

General Brereton signed up in May of 1928. He was a major at the time and was returning from maneuvers at Kelly Field to his home base at Bolling, when one of his two engines caught fire and blew up in mid-air. Brereton was one of four of the ship's occupants who bailed out successfully. A fifth was killed.

The Air Force's retired Chief-of-Staff, Ira Eaker, became eligible in August of 1930. Serving as an engineering officer at Bolling Field, Eaker was one day spin-testing a fighter—a fighter that Eaker suddenly realized wasn't going to pass its exam. He fought to bring the ship out of its dive until there was only a thousand feet between it and terra firma. At that point he decided it was a lost cause and bailed out.

Prior to 1925, Charles Lindbergh had made numerous exhibition jumps around the country, but it wasn't until March of that year that he made a jump in an emergency. Nine days before his graduation from Kelly Field he was flying in a nine-plane formation. Trying to make it as tight as possible, he and a Lt. C. D. McAllister locked wings. For a moment Lindbergh tried to maneuver himself out of the predicament but McAllister decided "to hell with it" and jumped. Lindbergh followed in short order.

T/Sgt. Charles H. Pohlman has no claim to being one of the better known Caterpillars but he is certainly one of the most heroic. In applying for membership, Pohlman stated simply that he was serving as an engineer gunner on a B-24 on a combat mission against the oil refineries in Ploesti in July 1944 when the Liberator in which he was flying was put out of the running by flak. "We received a direct hit in the right wing," Pohlman testified. "Our ship lost altitude steadily and it seemed certain that we would not clear the mountains ahead, so we were ordered to bail out. All chutes opened with no trouble and all crew members landed safely." Not an unusually exciting adventure for Cat members, but there was more to it than Pohlman had indicated.

According to the Sergeant's crew mates, the big bomber was headed

for certain disaster when the bail-out order was given. In rapid succession the men started leaving the ship but the tail gunner, a Sergeant Lea, was severely wounded and couldn't get into his chute. The B-24 was flying at 7000 feet. Mountains 9000 feet loomed straight ahead. Pohlman worked fast. He took off the gunner's heated shoes and put on regular GI shoes. Then he stood him up, hooked on his parachute, and carried him to the camera hatch. Standing ahead of the wounded man, and holding tightly to the latter's parachute harness, he jumped backwards and, with a tug, pulled the gunner with him. Once clear of the plane Pohlman pulled the ripcord of the



"The instructions I had been given in fine print were to no avail."

half-conscious man's chute, delaying the opening of his own chute so he would reach the ground ahead of the tail gunner, ready to care for him.

In spite of Pohlman's great heroism, however, the incident had a heart-breaking climax. Although he reached the ground safely, Sergeant Lea died in the hospital sometime later as the result of wounds sustained in the air.

There are many stories such as Pohlman's. In a mission over France in 1944, Lts. Donald Gott of Arnett, Okla., and William Metzger of Lima, Ohio, pilot and copilot, respectively, of a heavy bomber, gave their lives without hesitation in an effort to save the lives of two members of the crew. Flying over Metz, a direct flak burst mortally wounded the plane and seriously injured the radio op-

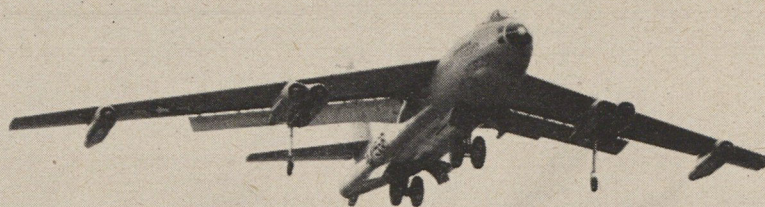
erator. It also ripped to shreds the engineer's parachute. Rather than abandon the plane with the injured radio man, the pilot, Lieutenant Gott, decided to attempt a crash landing. Lieutenant Metzger, the copilot, quickly made up his mind to ride with the boss. He calmly turned to the engineer, handed him his own parachute and told him to scram. Within a few seconds after all the crew, except Gott, Metzger and the radio operator had bailed out, the plane exploded, killing the three remaining men instantly.

One of the things that strikes the casual observer who thumbs through the Caterpillar records is the poignant understatement with which some of the men recall the greatest emotional experiences of their lives. Here is Lt. Richard P. Cooley's story: "While test-hopping a P-38 in a power dive, the dive flaps failed to function and the plane attained compressibility. Unable to get out of the dive I decided to bail out just as the plane started to invert. I remember reaching for the canopy release and that is all. The next day I awoke in the hospital. A spectator who picked me up claimed that my chute opened 30 feet from the ground. It was unusual that my chute opened at all, in that my right arm was torn off as I left the plane."

The humorous stories related by Club members are almost limitless. There is, for example, the story of the colonel who bailed out only to hear the sergeant holler after him just as he was leaving the ship, "Hey Colonel, come on back—everything's all right after all."

And then there was the member who landed in the yard of a western US ranch house in 1945. He was in the act of gathering up his chute when an elderly lady came out with a broom in her hand. Thinking that he had probably been mistaken for an invading German, the brand-new Caterpillar hollered out, "Don't shoot, Grandma. I'm on your side." "I know, son," replied Grandma, "but stand perfectly still. Don't move a muscle till I sweep my way to you. This danged yard is full of rattlesnakes." And sure enough, it was.

John M. Capps, tail gunner on a B-24 flying over Germany, fell into a yard filled with another kind of rattlesnake. "After jumping," he recalls, "I did everything I could to guide my chute so that I would land in a wooded area I had spotted. But the instructions I had been given in fine print were to no avail. I landed in the middle of a Nazi airport."



XB-47 TAKEOFF . . .

wooooooshh ➤

One of the things for which Yank airmen were famous during the war was the ingenuity they often displayed in difficult situations. Lt. Richard G. Hefner carried this quality even to bailing out of a doomed plane. Flying near Sarasota, Fla., in 1943, his B-26 developed serious trouble, and upon instructions from the ground Hefner ordered his crew to bail out. Fearful lest the plane crash in the residential area of Sarasota, he lingered after the rest of the crew had gone over, found a piece of string, one end of which he tied to his parachute harness. The other end he affixed to the master ignition switch and then he jumped. The jerk on the string automatically cut the engines. He had headed the bomber away from the city and thus with a piece of string averted danger of the airplane falling in the town.

Of course there are many "tall"

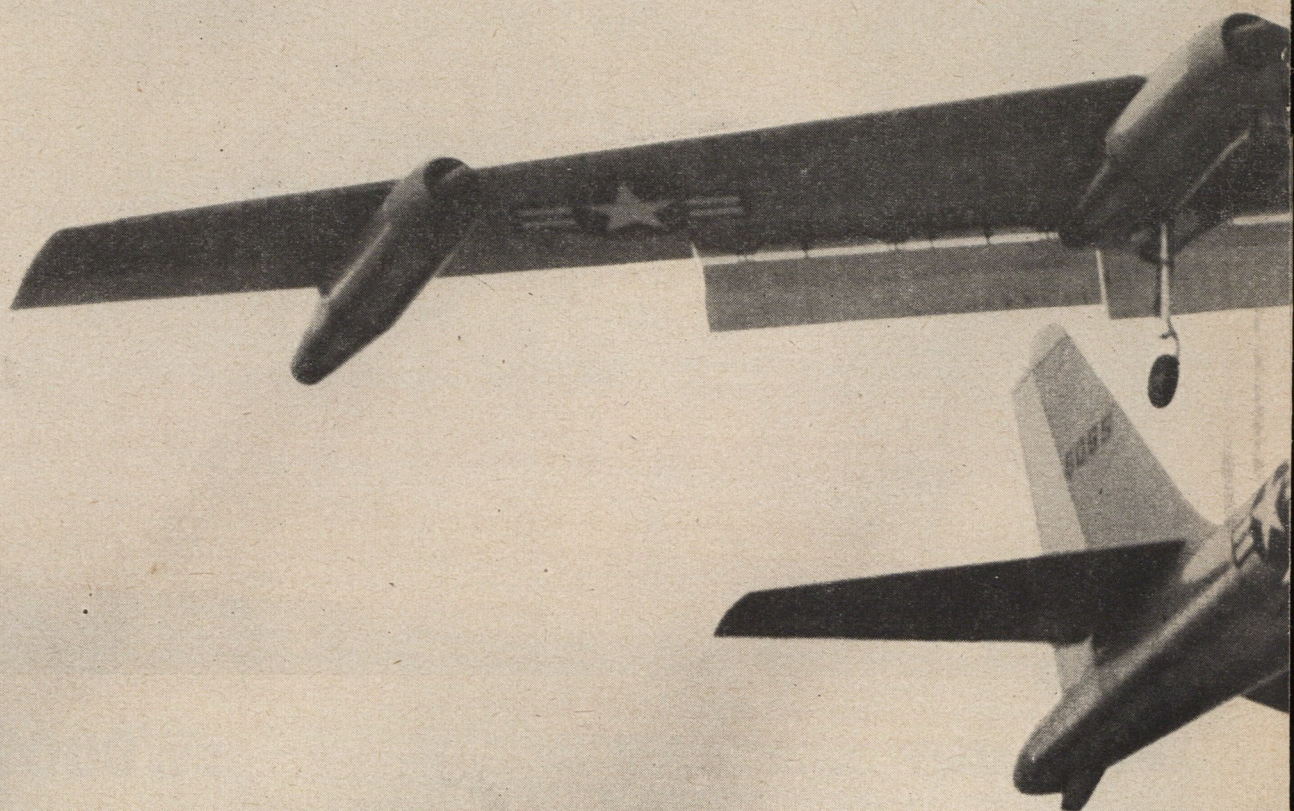
tales, too. Ernest L. Elwell, for example, made an emergency jump from a Navy plane in April 1943. The pilot of the ship, unnamed, was knocked unconscious, but luckily for him he fell into the shrouds of Elwell's chute and both landed safely.

Perhaps one of the strangest tales of all, though, concerns a certain Capt. Albert Wahl of Mt. Vinson, N. Y., whose membership is now pending. Wahl didn't bail out. He was thrown out, and without his chute. It happened in 1943 when Captain Wahl was flying the hump as a passenger in a C-87. The plane was loaded with gasoline and ammunition. Suddenly, for no apparent reason, and without any sort of warning, it exploded in mid-air at an altitude of 500 feet. Wahl was flung clear as though he had been shot out of a gun. The next thing he remembers was being dug out of

four feet of mud in a rice paddy by a "bunch of good guys." His discharge papers read, "fractured spine incurred as a result of combat injury sustained when he fell 500 feet from exploded plane without parachute." Caterpillar officials say he is eligible for honorary membership.

ELIGIBLE?

If you have made an emergency jump from an airplane you are eligible to join the Caterpillar club—but it must have been an emergency. Just for fun doesn't count. Write The Caterpillar National Headquarters, Broad Street Bank Building, Trenton, New Jersey. An application blank for membership will be mailed you promptly.



XB-47 Take off . . .

After a ground run of 4500 feet, the Air Force's new Boeing XB-47 roars into the wild blue yonder at Seattle on its maiden flight. Test pilots Bob Robbins and Scott Osler reported after-

ward that the big ship—the fourth of the USAF's new string of jet bombers to take to the air—responded “quite conventionally” to controls. The XB-47 is classed as a medium bomber, although it is larger than a B-17 and only slightly smaller than the B-29. It is reported capable of carrying the



most powerful bomb in current production. Speed is "in the 500 mph class." The plane is powered by six General Electric J-35 turbo-jet engines.

To overcome the plane's inherent lateral instability, caused by the Busemann 35 degree "arrowhead" wing, the leading

edge slat is rigged to open automatically when the flaps are extended for take-offs or landings. Note in the picture above the tandem-type landing gear which hasn't yet been retracted, and the nine Aerojet rocket units for Jet-Assist-Take-Off just forward of the insignia on the fuselage.

Angels Don't Shoot Guns

Neither do they swear, boast, gamble or land in the guardhouse—but Shorty Gordon, “best damn gunner in the group,” did

By Maj. Bernard W. Crandell

February, 1943. The late Lt. Gen. Frank M. Andrews was appointed Commanding General of all US forces—land, sea and air in the European Theatre. The 12th Air Force and the RAF in North Africa were merged into the Northwest African Air Force under the command of Lt.

tons, pedals, and petcocks. The gunner gets what room there is left, squeezing in between the guns, legs thrown forward, left foot on the range pedal and right foot on the interphone switch. His knees rest so close to the bolt mechanisms that their action during combat often

time he touched his guns to coax them back into action. But he hasn't missed a mission yet.

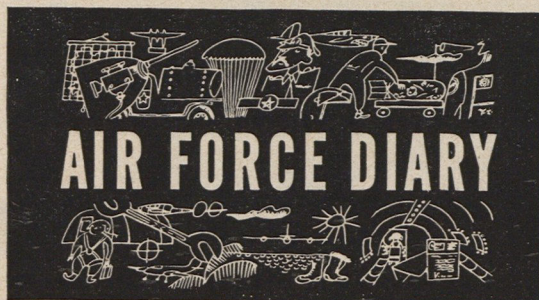
Before Shorty's virtues get out of proportion, let it be said that Shorty is no angel. Because angels don't get drunk and angels don't say, “I'm the best damn gunner in this group,” and angels don't land in the guardhouse, and angels don't gamble or bootleg. And angels, as we all know, don't shoot guns.

Shorty, you see, may be short, but he isn't sweet. To be exact, he is five feet two inches short, which—believe it or not, you Air Force experts—may be a bit too small. Most gunners find a ball turret like a strait jacket, but Shorty slips in easily. In fact, he claims he's the only gunner this side of the Atlantic who can wear a parachute inside the turret. He needs a chute to fill up space. When he doesn't wear one, he uses a pillow to prop himself up to the sights.

Shorty's pals get a laugh over those pillows. He's always had to use them for one thing or another. Back in the United States, at an air base in the desert, a 1931 Chevy came tooting home with them every night. On the rear seat rested the inevitable case of beer, and on the front would

be Shorty, a ridiculous figure propped high on pillows, peering over the edge of the windshield. Shorty still prefers his pillows to a parachute—if the mission looks easy.

Shorty had to come over by boat. That boat ride mortified him—the best gunner in the group having to travel by water. Back at Muroc he



Gen. Carl Spaatz. Major Gen. Jimmie Doolittle was named chief of NWAAF's strategic arm, and Marshal Sir Arthur Coningham head of the tactical branch. Over in the Pacific Brig. Gen. F. Twining had just been appointed CG of the 13th. These were the top level operations of early 1943. And then there were the operations of one Shorty Gordon which were more or less on a level all their own...

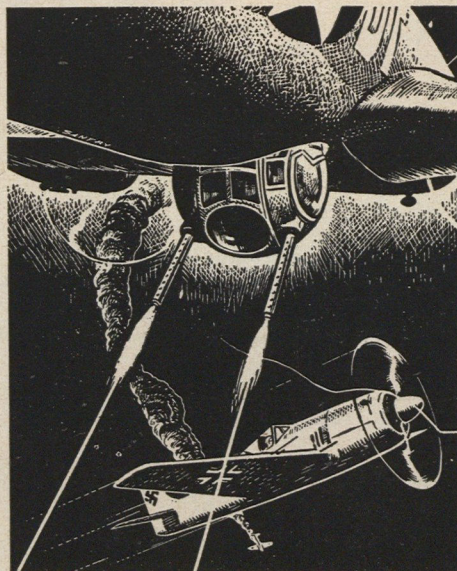
At the pay table the signature behind the \$172.80 is Staff Sergeant Lee C. Gordon, but when he's hanging up there under the belly of a Fort 20,000 feet above Germany, switching his long-barreled .50s at the buzzing Focke-Wulfs and Messerschmitts like a cow bothered by flies, he's plain Shorty Gordon, a hell of a good gunner.

When he's not flying he's talking about it, so, figuratively at least, Shorty Gordon lives in that ball turret.

Two-thirds of his turret projects from the bottom of the B-17 to meet attacks from below. In it are two .50-caliber machine guns, several hundred rounds of ammunition, a range mechanism, gun sight, switches, but-

tears his clothes. Remarkable as this strictly GI invention may be, it is not nearly so popular in a particular Fortress squadron in England as the twenty-year-old kid who operates it.

For Shorty hasn't missed a mission yet. His feet have been frozen and his electrically heated baby-blue jumper has failed him at 45 degrees below zero. He has had to work all night inside the wing of a Fortress and go up to fight the Luftwaffe the following day. He has had to beg, wheedle, or steal his way to a gun position in another ship when his own was out of commission. He has worked on frozen guns at 24,000 feet while fighters were boring in and flesh was tearing off his fingers each



Drawings by Pete Santry



"The Focke-Wulf was starting to roll over and go into its usual dive . . ."

had been telling the boys in the barracks that he was going to be in the "Big Push," and a boat ride was an inglorious start to Shorty's personal invasion of Europe.

But Shorty was in a new crew before the group went out on its first mission. And he had happy hunting for a while. But the fifth time *Cunningham's Coffin* thundered back from the Continent it was in a state

of salvage even before it landed. Normally, a crew waits until its Fortress is replaced. But Shorty couldn't wait.

He started bumming rides on other B-17s.

Any old Fort would do, and if the ball turret wasn't open for him, why, he'd take the tail gun. Even a waist gun. And if no position were open, Shorty would try to sell some other

gunner the idea of letting him take his place.

From *Cunningham's Coffin* Shorty went to *Boom Town*. Then to *Little Joe*, and then the *Sunrise Serenader*, the Fort that came home from the second raid on Germany with one wing dangling from a direct hit by a 20-mm. explosive shell in the main spar. Shorty was scared that time.

(Continued on page 42)



With red noses and tails glistening in the sun, four Lockheed P-80s head north for the winter.



Twenty-five, count 'em, twenty-five, USAF Shooting Stars line up beneath Alaska's ominous skies.

Shooting Stars in the Arctic Night

Here are the first pictures of the first jets assigned to our northernmost frontier

No less a prophet than Billy Mitchell once said, "He who holds Alaska holds the world." Since Mitchell, the Air Force has developed the "polar concept" and has spent a great deal of time familiarizing itself with Arctic warfare. In consideration of these things, and in view of the fact that international relations are getting no less tense as time goes on, it would be easy indeed to over-dramatize the recent six months' assignment of the 94th "hat in the ring" P-80 squadron to Ladd Field in Fairbanks. Surely it cannot be denied that the Lockheed Shooting Stars would be nice to have around in the event our northern approaches were threatened.

But it is quite probable that the reassignment of the ready-to-shoot jets from the palm lined runways of March Field, Calif., to the snow covered strips of Alaska is not so much a strategic redeployment of men and equipment as it is another step toward making the Air Force an all weather service. In this instance, as the USAF's announcement originally inferred, Alaska is serving more as a laboratory than as a frontier.



The 94th's Maj. G. I. Ruddell, Operations; Lt. Col. D. E. Hillman, CO; and Maj. C. L. Peterson, Maintenance.



A long way from its home in Southern California, a lone P-80 shivers under its tarpaulin jacket.



Shooting Star crew installs batteries prior to take-off. Planes were modified to start on gas.



One of the 94th's Shooting Stars comes to earth enroute to Alaska for a few moments to refuel.



It was never like this in California! A P-80 crew pre-heats cabin and engine before take-off.



In approved Arctic attire, pilots of the 94th pose for their first group portrait in the snow.



Sikorsky's new two-place S-52 helicopter, recently approved by CAA, features all-metal rotor blades.

Midget Gyropilot

Research engineers of Westinghouse Electric Corporation ended 1947 by unveiling a lightweight automatic pilot compact enough for use in the average personal airplane, but sufficiently sensitive for application in transport aircraft and guided missiles. Tradenamed the Gyropilot, the device weighs only 35 pounds installed, and can fly any preset course until the instructions are changed. The Gyropilot can nose up or down, turn or hold course, leaving the pilot free for navigation, communication or any other aerial chore which may require his attention.

The midget autopilot was developed from the gyrostabilizer used during the war for aircraft turrets and tank guns. Its major advantage over the conventional gyropilot, according to Dr. Clinton R. Hanna, associate director of Westinghouse Research Laboratory, is the fact that it is not effected by violent maneuvers of the aircraft. The Gyropilot employs three separate but coordinated gyroscopes, one for each principal axis of motion. These are rate gyros, rotors that are responsive to changes in angular velocity. Position gyros customarily used in automatic pilots are sensitive only to change in absolute angular position. Held in gimbals that allow them freedom of motion in all directions, position gyros have a tendency to tumble or lose control when forced more than 60 degrees out of position. Rate gyros, on the other hand, are fixed to the airplane and can be subjected to virtually any maneuver without loss

of control. Furthermore, the rate gyro is not affected by high acceleration rates, which suggests their use in guided missiles and pilotless aircraft, in addition to the obvious application to personal and commercial aircraft.

Because of its relative sensitivity to electric response and its insensitivity to acceleration, the Gyropilot can be used for guided and radio controlled high-speed missiles.

In actual operation, the main control of the Gyropilot is a relatively small box, with a throttle-like push-pull handle. Push in is nose down, nose up, is pull out, while rotation right and left turns the plane.

New Helicopter

The new two-place Sikorsky helicopter S-52 was recently approved for commercial operation by the CAA, according to a recent announcement by B. L. Whelan, general manager of the Sikorsky Division of United Aircraft. The license, as currently operative, is valid for both night and day operation.

The S-52 incorporates several departures, including all-metal rotor blades, and a degree of fuselage streamlining seldom incorporated into rotating wing aircraft.

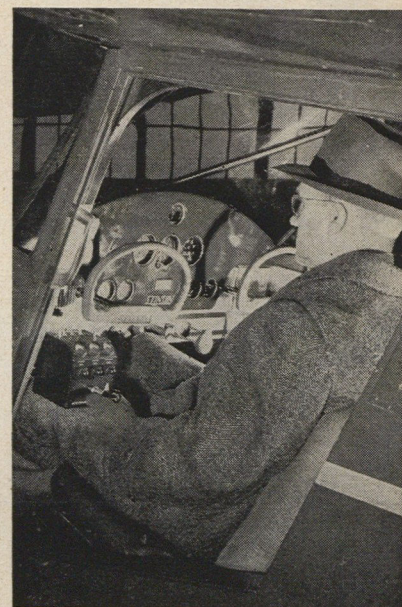
Powered by a 178 hp Franklin engine, the S-52 has cruising speed of 87 mph and a 265 mile range. Gross weight is 1900 lbs. Dual controls can be used from either seat.

Navy Gets Nene Fighter

The US Navy has taken delivery on the first Grumman XF9F-2, the new

Panther fighter, which is the first American jet aircraft to be powered with the 5000 lb/thrust Rolls Royce Nene engine. The Panther is reported to have take-off run not much longer than the war-famed Bearcat. This is attributed by Grumman engineers to the use of the droop-snoot wing. This innovation, thoroughly tested on P-38s during the war, uses a movable leading edge which lowers in conjunction with the flap, thus increasing camber and improving take-off characteristics.

The Panther originally demon-



Westinghouse engineer K. A. Oplin demonstrates new 35-lb gyropilot.



tech topics

Midget gyropilots, droop-snoop jets and metal rotoed 'copters lead month's progress

strated was powered by a British power plant using American accessories. The unit will be produced in the US by Pratt and Whitney. One of the unique features of the F9F design will be a power section that can take either the Pratt & Whitney-built Nene or the Allison J-33 engine. While these jet planes are not identical, they can be interchanged in the field without the use of special tools or adapters. The Panther uses a close approach to the Navy's standardized cockpit. Top speed is in excess of 600 mph.

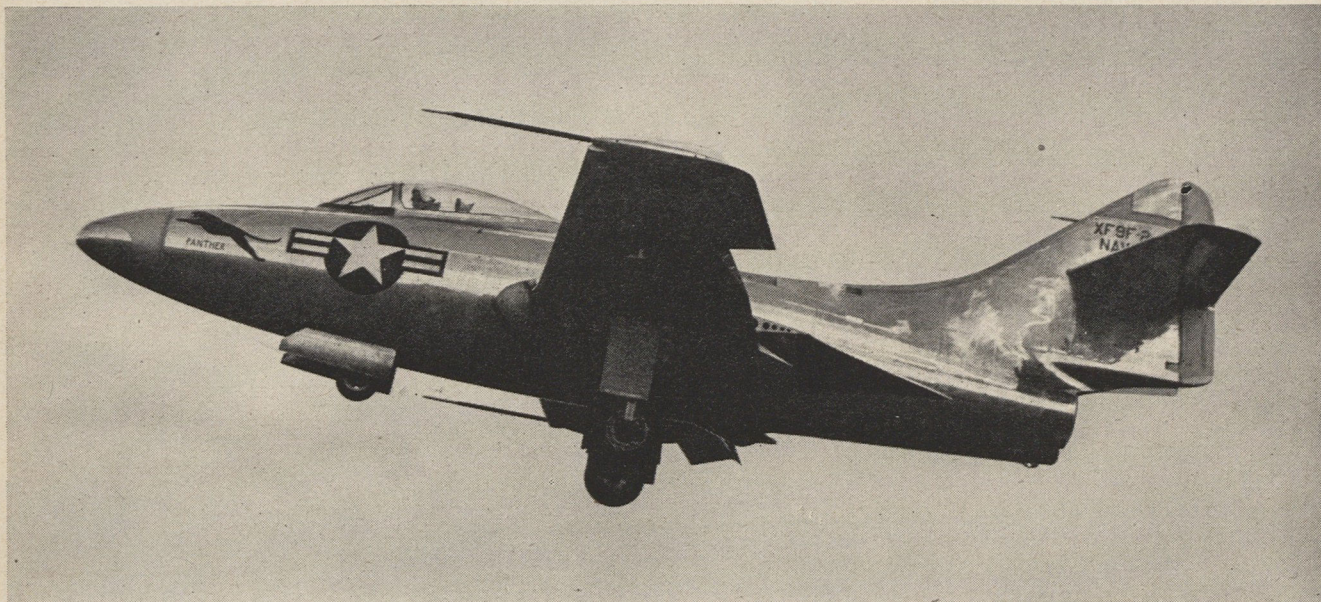
P-80 Gunnery Score

Lockheed P-80s flown by pilots of the 56th Fighter Group, stationed at Selfridge Field, have achieved a 55 per cent hit score out of 11,000 rounds of ammunition fired air-to-ground, and 37 per cent out of 45,000 rounds fired air-to-air, demonstrating the superiority of jet aircraft as a firing platform, once the pilots are indoctrinated in the jet's shooting characteristics.

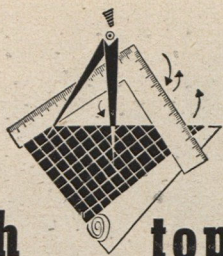
Lt. Col. David C. Schilling, CO of the 56th Fighter Group, in commenting on the satisfactory results

Camera catches smoke from spinning wheel as it drops to concrete in Lockheed's landing gear test rack.

achieved during their five months of gunnery practice, stated: "The P-80's speed is roughly twice as fast as any aircraft we have previously used for strafing, making it difficult to hold the plane on target. Speed also makes the plane more sensitive and bouncy to rough air at low altitudes." Despite this difficulty, Schilling's group averaged 55 per cent in their air-to-ground firing, which stacks up well against the 15 to 20 per cent average hits in combat. "Where the P-80 really shines though," Schilling stated, *(Please turn the page)*



Newest US carrier fighter, the Grumman Panther, is powered by a Pratt & Whitney-built Rolls-Royce Nene jet engine. Its fast take-off is effected by novel wing with movable leading edge.



tech topics

continued

"is in air-to-air combat. The Shooting Star is stable and with no torque to contend with, we can lay our shots right on the target."

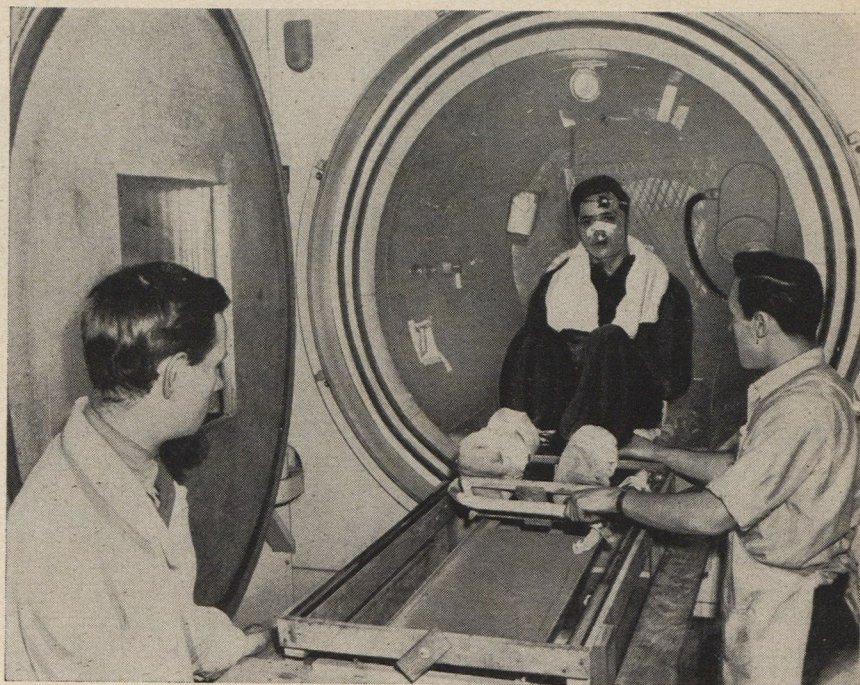
New Radio Charts

The US Coast and Geodetic Survey has announced the publication of 45 separate charts comprising the radio facilities available for air navigation in the United States. Reproduced in standard 8 by 10½ inch loose-leaf pages the charts show such data as civil airways, airport traffic and approach zones, air traffic control limits, minimum safe altitudes and mileage. On the reverse side of each chart there are tables of data on all stations in operation. Radio facility charts are being made available through the Department of Commerce at \$4.50 per set, or ten cents per chart per year.

The Survey also published an extensive table of air-line distance between US cities. It was developed in response to an increased demand for distance computations, based on the more accurate ellipsoid, rather than on the conventional sphere. Cities which are authorized stops on airline routes plus additional cities that may, in the future, become important in the transport scheme, are represented. More than 120,000 distances are listed. The publication is entitled, *Air-Line Distances Between Cities in the United States*, and is available through the Superintendent of Documents, Government Printing Office, Washington, D. C., at \$1.75 per copy.

Radar for Traffic Control

Airways surveillance radar, newly applied to commercial air traffic, is now getting its field service test in the New York area. Located on the Queens College campus, the station is one of the most powerful in operation today. The equipment was turned over to the Civil Aeronautics Authority by the Air Force. The set was converted to its current use by the Airborne Instrument Laboratory, an experimental agency representing all the airlines of the nation. The



Part of an experimental program to probe the effects of supersonic speeds, human guinea pig Sidney Friedlander is rolled out of a heat chamber at UCLA after having been subjected to 250°F for 14 minutes. He suffered no lasting ill effects.

scheduled airlines and the CAA hope that surveillance radar will help considerably in speeding up approaches and cutting down stacking. It will also be used in studying the interrelation between traffic capacities of the airways, airspeeds, airline cross-overs and holding delays.

The equipment selected was the CPS-1 unit, chosen over several other types because it provides close measurement in distance and direction as well as sky coverage up to 40,000 feet. It is reliable to a distance of 100 miles.

The station's indicating equipment comprises a number of 12-inch plan position indicator radar scopes, which also can be adjusted to expand the

sector display. When adjustment is made, various types of artificially provided signals can be displayed alongside of the regular radar pips. This kind of equipment can be modified to eliminate the usually troublesome ground-return signals, leaving only the radar echoes from moving objects and the artificially provided signals on the scope.

In operation, the radar picture created at the Queens College station is supplemented by an electronically provided "video map" of the airways and radio ranges. The combined picture is relayed to the CAA's traffic control center at La Guardia Field, by a specially developed micro-wave radio circuit.



The Chase Avitrucc, the XCG-18A, is the world's first all-metal assault glider. It has an 86-foot span and is 53 feet long and has a gross weight loaded of over seven tons. The new Avitrucc is twice the size of the famed wartime invasion glider.

who's who IN THE AFA

By Oliver Townsend

Visitors to the Pentagon Building in Washington find an atmosphere of briskness and efficiency around the new United States Air Force's departmental headquarters that is more often associated in the popular mind with mid or lower-Manhattan than it is with the District of Columbia.

One of the principal reasons for this businesslike approach to Air Force management is the group of men who have been appointed to control the administration, policies and destinies of the fledgling department. Recruited from the worlds of industry, commerce and law, where they have long since proved their managerial ability through the achievement of outstanding success, these men look upon the Air Force as "one of the world's largest businesses"—and they run it that way.

One such business leader, who, as Assistant Secretary, administers the Air Force's civil and military-diplomatic affairs, is Cornelius Vanderbilt Whitney, scion of two of America's foremost families, and a man who has achieved conspicuous success in his own right in such diverse fields as aviation, mining, agriculture, forestry, cattle raising, horse breeding.

To his new position, which he assumed last September 24, Mr. Whitney brings a wealth of pertinent business experience. He was one of the founders of Pan American World Airways System, and served as its chairman of the board and chief executive officer from 1928 to 1941. He is chairman of the board of the Hudson Bay Mining and Smelting Company, Canada's second largest concern; president of Whitney Industries, a lumbering company with headquarters in northern New York State; president of C. V. Whitney Farms, a cattle raising and horse breeding activity in New York and Kentucky; owner of C. V. Whitney Stable, which currently ranks third as a money-winner on the American turf, and chairman of the board of Marine Studios, which operates the famous oceanarium, "Marineland," at St. Augustine, Florida.

In addition, Mr. Whitney serves as a director of the Metropolitan Opera Company of New York, and

as a trustee of the American Museum of Natural History and the Whitney Museum of American Art. He backed the Beryllium Corporation of America in 1934, an action which later proved to be of vital importance of the national preparedness program; "angeled" the first technicolor short, "La Cucharacha," and such motion picture successes as "Gone With the Wind" and "Rebecca," and played polo with a team that won two national championships.

from Groton preparatory school in 1917.

"I was just like kids are today—I wanted to fly," he recalls. "World War I was on in Europe, and my best friend, Tommy Hitchcock, was already overseas with the Lafayette Escadrille. I wanted to get in the show."

Just 17 at the time, he secured his father's permission, enlisted in the Aviation Service of the Signal Corps, and was sent to Benbrook

INTRODUCING



Cornelius V. Whitney

In spite of these varied activities in the worlds of business, agriculture, art and sport, Mr. Whitney has managed to find time to gain a thorough first-hand knowledge of military aviation. A pilot in World War I and an Air Force combat intelligence officer and planner in World War II, he looks upon aviation as his "first love." There is ample justification for this view, since it was to the field of aviation that he turned upon his graduation

Field, Fort Worth, Texas, for training. The air training program of that period was considerably different than it is today. After one hour and forty minutes of more or less informal instruction, Cadet Whitney was ordered to "take 'er up solo" for 25 take-offs and landings. He recalls with a chuckle that after three of these landings, he deemed it necessary to taxi the plane in—only to be confronted with an irate

(Continued on page 46)

CROSS



COUNTRY

Director Resigns

President Tom Lanphier announces that the Board of Directors has accepted the resignation of Willis S. Fitch as Executive Director of the Air Force Association, effective January 1, 1948. Fitch had been with AFA since its inception. He opened the National Headquarters office in Washington, D. C. on January 24, 1946, and the Association reached its present stature during his term of office. A pilot in World War I, he directed aviation cadet recruiting during the last war. Clyde Mathews, formerly assistant to the Executive Director, is Manager of the AFA office in Washington, D. C.

Contract Roundup

Substantial new contracts awarded at the end of 1947 gave hope to some stability in the aircraft production phase of our airpower panorama. Fairchild Engine and Airplane Corp. led off with a \$22,000,000 order for 37 of the new-type C-119 Packet transports. This craft is generally similar to the widely-used C-82 but is powered by the 3250 hp Wasp Major engines rather than the 2100 hp units.

Boeing Aircraft received an AF

contract for an additional 82 B-50 bombers, which brings the total number ordered to 215.

Ryan Aeronautical announced that their already substantial contract for the development of guided missiles had been increased by \$1,070,000. This is the third jump Ryan has received since the beginning of their commitment. While details of Ryan's missile project are not releasable at this time, engineers describe it as a vector containing "a built-in brain," capable of doing its own "thinking" once launched.

New Records

Jacqueline Cochran, wartime WASP commander, established two new women's speed records and two international marks in a surplus North American Mustang during December. The craft was a standard P-51B. It was not modified in any way except that the guns were removed and fuel tanks installed in the emplacements.

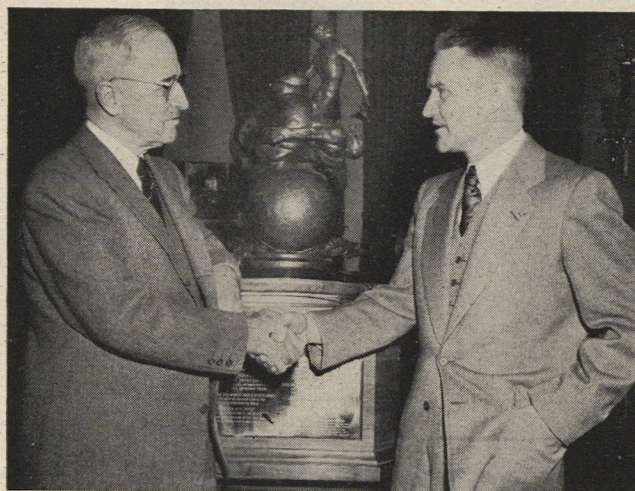
On December 10 Miss Cochran flew a 100 kilometer course (62.136 miles) at 469 mph. The course was laid out over the Coachella desert near Palm Springs, California. This run established two marks, the

world's record for reciprocating engines over the 100 kilometer course, and the women's record for the same distance.

In commenting on the flight Miss Cochran said, "This flight was made primarily for the fun of it, and to see what accurately measured top speed for the distance I could get out of the last war's fine fighter, the Mustang. The jet plane record for 100 kilometers is about 28 mph faster than my time today, which isn't much if you consider that my airplane was designed fully seven years ago and fought the last war, whereas we must be progressing with an eye to our future security. If I have brought public attention to the need for constant, intensive development, the flight was well worthwhile. Naturally, I pulled the engine for far more than it was expected to take."

Miss Cochran's recent record surpasses the 100 kilometer national and women's international record which she established in 1940, when she covered the course at 292.6 mph in her AP-7 at Acomita, N. M.

On December 17th Miss Cochran established a new three kilometer straightaway course record for wom-



President Truman presents the Collier trophy to Lewis A. Rodert of NACA in recognition of latter's work in development of heated airfoils to prevent the formation of ice.



Capt. Frank M. McMullen in the cockpit of the C-54 in which he flew a load of cholera serum from Tachikawa Air Base, Japan, to Cairo, Egypt, during the recent epidemic.



en. The flight was made at Indio, California, on the shores of the Salton Sea, actually below sea level. This flight clocked 413 mph, which was also the international mark for reciprocating engines.

New Committeeman

Professor W. B. Leach of the Harvard School of Law has been appointed a member of AFA's Research and Development Committee headed by Cass Hough of Plymouth, Michigan. Leach, who was Chief of the Operations Analysis Division, Hq. AAF during the war, will be remembered by AIR FORCE readers for contributions he has made to the magazine including *The Bear Has Wings* which appeared in the February, 1947 issue.

Andrews Citation

In a simple but impressive ceremony in Washington, the British government represented by Lord Inverchapel, the British Ambassador, recently presented the widow of the late Lt. Gen. Frank M. Andrews with a citation commemorating the general's service in the European and Middle East Theaters. The citation (Please turn the page)



Lt. Gen. J. E. Hull, who has been chosen Commander of the task force conducting atomic experiments at Eniwetok.



Here is a portion of the audience which attended the "Cotton Bowl Preview" meeting of the Dallas squadron of AFA. Gathering in the downtown Reserve Officers Club, members and guests watched movies of the exciting SMU-TCU game, and heard remarks by two of the tilt's top stars, all-American Doak Walker and SMU's captain, Sid Halliday. Squadron Commander J. K. Wilson, Jr., believes that this mixture of business and pleasure accounts for their large turnouts.

ARKANSAS

The Monticello, Arkansas, Squadron, just a year old this month, has elected its second group of officers. Squadron Commander is Jack Shelton, former Vice Commander. Louis I. Watts is the new Vice Commander. William O. Moore is Secretary and Treasurer William F. Ross was re-elected for another term of office.

CALIFORNIA

East Bay Squadron's December 17 meeting at Berkeley Veterans Memorial Building was another "open house" for members, their wives, and guests, featuring a program of songs by the Shell Oil Company glee club and a quiz program of the "Information Please" type on Air Force topics, designed for "audience participation." The Squadron is going ahead with several projects outlined for the year, including formation of an AFA Flying Club, and preparation of a public education program. The Flying Club will be organized early this year with 20 members who will contribute to the purchase of a 65 hp two-place plane. Club headquarters will be the Oakland Airport. The Squadron's private pilots are being organized by Walden J. Thompson, Training Com-

mittee Chairman, who anticipates an active "operational year" in local flights. National AFA members in the East Bay cities not yet in the Squadron are being contacted by Squadron committees and are invited to get in touch with George D. Mantell, Commander, 2807 Windsor Drive, Alameda. Ray Beeler, Membership Chairman, can be reached at 4538 Reinhardt Drive, Oakland.

The San Francisco Squadron reports that in eight months it has increased its membership exactly 1000%. The Squadron also announced that an average of 73% of its members attend regular meetings. And that's good for any organization. In the field of civil aviation, the Squadron supported and named a committee to investigate and suggest negotiations whereby Search and Rescue Services for flyers lost in the Bay Area can be improved. At the same meeting, the Civil Aviation Committee was authorized to support a move by private pilots for an airport in the city of San Francisco.

ILLINOIS

The Aurora, Illinois, Squadron, first chartered in April 1947, elected its first

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CROSS



COUNTRY

tion, done in script and framed, was given in lieu of other decoration since no British medals other than the Victoria Cross (extreme gallantry in face of the enemy) can be presented posthumously. The text read:

"From November, 1942, to February, 1943, General Andrews commanded the US Army Forces in the Middle East. Under his skillful command, the 9th US Army Air Force played a vital part in the allied air offensive, carrying out with conspicuous success the bombing of enemy ports and other targets, and destroying numerous enemy fighters. The resolution and devotion to duty displayed by General Andrews in the direction of these operations are beyond praise.

In February, 1943, General Andrews was appointed to the command of the US Forces in the European Theater of Operations. In this capacity, his outstanding knowledge of every phase of air power was an invaluable asset to the Allies in the early stages of the planning of the combined air offensive against Germany. His tragic death in an aircraft accident deprived the Allies of a great-hearted and brilliant leader, whose memory is venerated by all

who had the privilege of working with him.

(sgd) A. V. ALEXANDER

Minister of Defence

London, S.W.1.

28th October, 1947

I.A.S. Elects Northrop

John K. Northrop, noted plane builder and aviation pioneer, was elected the sixteenth president of the Institute of the Aeronautical Sciences, the professional society of air engineers and scientists. Northrop succeeds Preston R. Bassett, President of the Sperry Gyroscope Company.

The Vice Presidents for 1948 are Clarence L. Johnson, chief research engineer of Lockheed, Smith J. DeFrance, Engineer-in-Charge of NACA, R. P. Lansing of Bendix Aviation and Earl D. Osborn of Edo Corp. Sherman M. Fairchild will be treasurer for 1948.

Jack Northrop, whose "Flying Wing" designs are regarded in many quarters as the most advanced types currently under construction, has among his engineering achievements the design of the famed Lockheed Vega, the first multi-cellular metal monoplane, the famed North-

rop Alpha, as well as the famed Black Widow and F-15.

202s to Venezuela

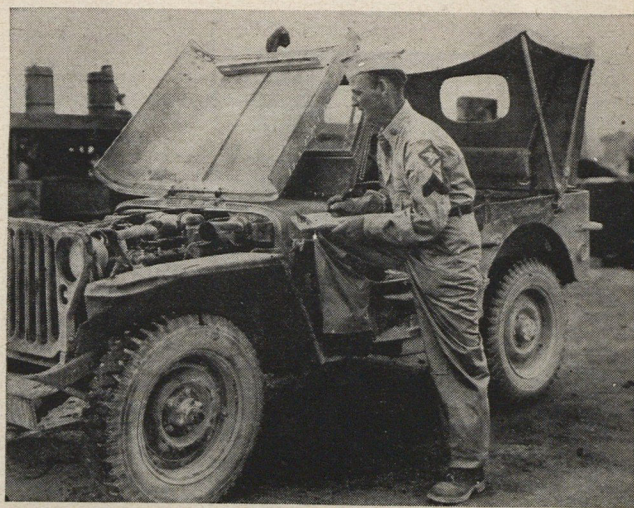
Two of the newest type Martin 202 twin-engined monoplanes were officially delivered to Linea Aeropostal Venezolana at the Washington National Airport on December 19th. This is the second Latin American air line to take delivery on this first civil air transport to be approved by the CAA since the close of the war. (Linea Aerea Nacional, Chile, took delivery of four 202s early in November.) Capt. Antonio Maldonado, the Venezuela line's chief pilot, took delivery of the fleet, and flew the lead ship to Caracas. The first ship will be used for crew training, after which it will be used on the Trinidad - Caracas - Maricao - Balboa run. The LAV 202s are rigged to carry a crew of three and 36 passengers.

New Cessna

Cessna Aircraft Company of Wichita, Kansas, invaded the low-price four-place range as primary test flights were conducted on their latest model, the 170. The new design is an all-metal braced high-wing



Brig. Gen. Emil Kiel of Scott Field shakes hands with M/Sgt. William E. J. Quinn during retirement ceremonies after 30 years of Air Force service. Two of Quinn's sons are Lieutenant Colonels, and one daughter is a Nurse Corps Captain.



After seven years, Sgt. Elmer Banks of Lexington, Ky., vehicle inspector at the Kadena (Okinawa) motor pool, still likes khaki. He was Mr. #158, the first man to have his number drawn from the Selective Service fishbowl in 1940.



afa news

continued

monoplane generally resembling the standard 140s but generally scaled from the two- to four-place.

The new job is powered by a 145 hp Continental engine. At current reading the Model 170 should retail for \$5475 (flyaway factory). Following traditional Cessna practice, no performance figures will be issued until the place is approved by CAA. Initial delivery is expected in March.

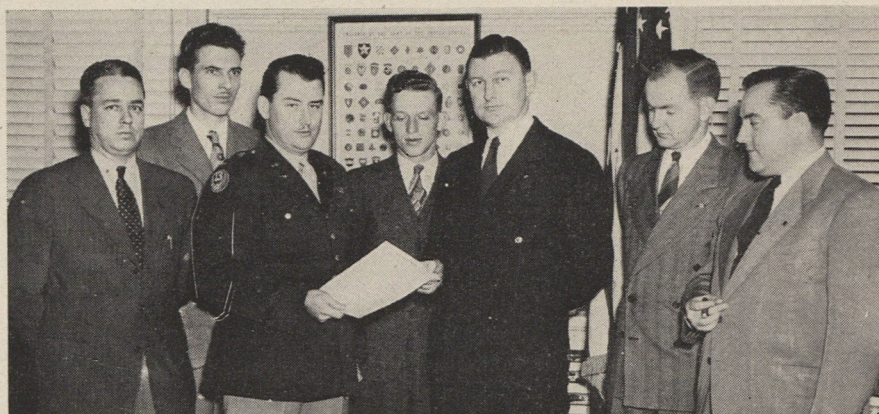
More Thunderjets

Major General William D. Olds, chief of the 9th Air Force's Tactical Air Command, announced that the 20th Fighter Group, stationed at Shaw Field, Sumter, S. C., would begin receiving P-84 Republic Thunderjets beginning in December, and continue to take deliveries until all of the P-51s in current use were replaced by jets. This is the second USAF group to be P-84 equipped, the first being the 14th Fighter Group stationed at Bangor, Maine.

The 20th Fighter Group was reactivated from the famed 362nd, Col. Joseph L. Laughlin's battle-starred 9th Air Force unit. Its current commander is Col. W. G. Cummings, Jr. The Group's present mission includes dive bombing, strafing, smoke laying, napalm bombing and rocket firing.

New Sales Policy

In addressing stockholders of Beech Aircraft Corporation at the annual meeting at Wichita, Kansas, Walter Beech, pioneer plane builder, outlined virtually a new policy in merchandising of transport aircraft. Beech pointed out that, while several major airlines had expressed interest in the new model 34, the Twin-Quad, the company intended to negotiate no contract with any purchaser until firm, non-cancellable contracts could be entered into on the basis of demonstrated performance and guaranteed specifications. This differs from the rather loose sales policy popularly used after the war, which got many of the major plane builders to set up major production lines, only to face cancellations at a later date.



Officers of the newly-formed Greater Cumberland Squadron look on as the group organizer, Lt. George J. Gocke, presents the charter to Commander William C. Burns. In the group are: (l. to r.) William Coble, Councilman, John Pfeiffer, Secretary, Lt. Gocke and Com. Burns, John B. Jett and J. Paul Nose, Councilmen. Simon Rosenbaum, the Treasurer, was not in the picture. During the meeting, the 13th Air Force's famed motion picture, "Air Pattern Pacific," was shown.

group of permanent officers following the temporary service of the founders of the organization. The officials for the coming year are: Glenn Commons, Commander; Felice Shoemaker, Vice Commander; Robert Powell, recording Secretary; Richard J. Remiyac, corresponding Secretary; and Ralph Weber, Treasurer.

The newest Squadron from Illinois is at Kankakee where an organization meeting was held on November 12. The charter was officially granted on November 20. Officers of the new Kankakee Squadron are: William K. Giroux, Commander; Father Joseph W. Peoples, Vice Commander; Lawrence D. Weeks, Secretary; Ernest J. Vollmer, Treasurer. Secretary Weeks invites interested former Air Force men and women in the Kankakee area to contact him at 556 Oak St.

KENTUCKY

As the result of a dance held by the Covington Squadron in November at the Country Club, funds were raised to help the organization carry out a program of air-marking the city. The Squadron is also making progress toward selecting a permanent and private meeting place. Meetings are held the last Friday of each month and Commander Arthur A. Bingham, 3714 Glenn Avenue, has requested all Air Force men and women not presently members

of the Squadron to contact him for further information.

MARYLAND

The Cumberland, Maryland, Squadron which has been in the process of formation for less than a month, received its charter on December 1 with 45 chartered members. The following officers were elected: William C. Burns, Commander; William H. Johnson, Vice Commander; John R. Pfeiffer, Secretary; Simon Rosenbaum, Treasurer. National members in the Cumberland area may obtain information about the Squadron by writing to Greater Cumberland Squadron, AFA, Box 584.

MICHIGAN

Inadvertently, the Jackson, Michigan, Squadron has failed to receive credit as a chartered Squadron and as an active organization in AFA activities. Way back in March, 1947, the National Headquarters had worked with the Squadron in its organization efforts. Then, recently, we learned that the application for charter had actually been mailed to the headquarters eight months earlier. The commander came to the Washington office to ask why he had failed to receive information on AFA activities. Then, we learned that the charter had never been received and presumably had been lost in the mail. Steps were taken at once to issue a new

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Mountains, forest and rice-paddies make up the terrain of the Tingalyan district of North Luzon's Cagayan Valley. Onto this surface, 27 members of the 13th Air Force baseball team made an involuntary parachute jump from a Curtiss-Wright C-46 transport plane.

Deserted in air by crew and passengers, this C-46 landed so gently that its panel clock was still ticking and Japanese pottery in the abandoned baggage was intact when found.





Tragedy stalked the rescue party. This ambulance, sent to remove the only fatality, lost the road and dived over a 125 foot cliff, seriously injuring all three occupants. They were evacuated by helicopter.



Ground rescue parties had to ford turbulent streams in the Bontoc area to reach the abandoned airplane. A typhoon complicated their work, added to the party's discomfort, and ruined one of the trucks.



Lt. Nations explains to Brig. Gen. Robert C. Oliver, 13th AF's Chief of Staff, how he conducted the air briefing in the lost C-46 that resulted in the remarkable mass bailout over Luzon.



Lucky for Some

The 27 members of the 13th Air Force baseball team had just gotten out of the soup with the Okinawa club that afternoon last October, and now they were on their way home from the "Rock" to Clark Field on Luzon Island. Only now they were in soup thicker than anything they had had to contend with on the baseball diamond—real soup, 11,000 feet of it. They were flying in a C-46 somewhere above the mountainous area of Northern Luzon, and on top of the overcast an electrical storm had knocked out the plane's long-range navigation and radio beam equipment. Their radio communications instruments were still working, but nonetheless they were lost. At 2350—just a few short hours since they had been down there on the baseball diamond worrying about nothing in the world except the score of the game—Capt. E. B.

Cearley, the pilot, radioed Clark that he didn't know his position and that he had only 15 minutes of fuel left. Some of the boys tried to make gags about their luck in belonging to an Air Force with 13 for a number, but their humor fell a little flat.

At Clark Field the radar ground control approach was alerted and attempted without success to locate the aircraft by radar. In addition all planes in the area were ordered to look for the C-46 and guide it to a known position. Although radio contact was maintained, the lost plane was not sighted.

Shortly before 2350 First Lieutenant Nations—the baseball coach—took charge of bailout briefing. Already a member of the Caterpillar Club, he warned that if it became necessary to jump, the men must not move

(Continued on page 47)

ANGELS DON'T SHOOT GUNS (Continued from page 27)

He had returned to the station from a forty-eight hour pass on the afternoon before the raid. He had had little sleep. He went to his ship, spent two hours cleaning his guns, and was about to hit his bunk when the engineering officer called for him. A supercharger needed changing on one of the Forts, and Shorty was the only man small enough to climb inside the wing and crawl out to the engine and do the job. Shorty worked most of the night inside the wing of that B-17, in there between the spars, compressed, cold. But working. He was finished at 0400 o'clock. Just enough time for breakfast. Then the briefing.

He was tail gunner on that trip, and his guns froze up over the North Sea on the way in. That was the day the mercury at 22,000 feet was 45 below. That was the time he took off his electric gloves to work on his guns. The waist gunners could see Shorty back in the tail, bent over his frozen .50s, but they couldn't see what the metal was doing to his hands. Every time the moist-side surfaces of his fingers touched the barrels, skin welded to steel. And when Shorty pulled his hands away, the steel didn't rip an inch.

"I won't be able to use these guns, Lieutenant," Shorty called over the interphone. "But I'll sit back here and tell the boys where the fighters are coming from."

That day Shorty became a broadcaster. He gave a play-by-play description of the longest battle the Forts ever had over Europe. He had no sooner announced his broadcasting intentions when . . .

Wham! It was a concentrated attack by FW-190s, ME-109s, 110s, 210s, and even JU-88s. In they came, and Shorty was on the air, warning to his job like a professional when the horses are heading for the wire. He was slightly excited at the time, he admitted later. In fact, he became unintelligible in spots, and the other gunners couldn't quite follow his dazzling description of the seventy-five-minute battle between the Forts and the Luftwaffe up there in the cold blue sky. They tried to tell him to get the hell off the air, but his interphone switch was locked in position, the fight was just beginning, and Shorty was already heading for the wire.

Shorty saw everything that day. He saw things happen that had never happened before. He saw a Fortress drop out of formation with four Focke-Wulfs after it. The Fort took violent evasive action. It swung

up and over, into a complete barrel roll. Fighters do that; not Fortresses. It took Shorty several minutes to get his voice down to a scream to describe it. A few minutes later, an FW collided with a Fortress head on.

"The Focke-Wulf was starting to roll over and go into the usual dive away from our formation when his wing hit the wing of a ship in the element below us," Shorty recalls. "The impact cut the wing off the fighter and knocked the wing off the Fortress just past its No. 4 engine. The Fort started into a circle, then went into a tight spin. It broke in two right at the middle, and the ball turret went spinning down, looking like a baby's rattle. Then the wreckage exploded."

Returning across the North Sea, Shorty's ship had dropped back to protect a Fort limping along on three engines, when a Focke-Wulf landed the cannon shell that nearly tore off the wing. They got the fighter that did it, and they eventually landed safely, although the *Sunrise Serenader* was such a mess it couldn't be taxied off the runway.

It was after that raid on Germany that other gunners at the card game down in the Nissen hut paused be-



"Of course my ball turret man has more missions to his credit than both of us . . ."

tween deals to ask Shorty if the "Big Push" finally was on. They had waited months to hear it, and were so amused when Shorty said, "Yes," it was an easy moment for him to finger out the card he needed for "21."

Shorty never is lucky at cards, although he gives them all the charm he can muster. Even his "Salt Mine"—in Shorty's squadron at least—is any special article that brings luck to

his cards. Shorty's once was a dilapidated, dirty old mechanic's cap with long strings that hung down in his face. This eyesore was what he wore to bring luck at black-jack. But he found he couldn't rely on it. It lost him too much money. So now the tattered cap has been replaced by a new Salt Mine, a cat that hangs around the hunt in the evenings.

The other gunners view Shorty as a combination comic strip—Katzenjammer Kid one minute, Superman the next. On the dance floor, Shorty's number fours can burn more timber than a forest fire. At one of the squadron dances he entered the jitterbug contest. His partner, a WAAF, couldn't stand the pace and gave up after the first thirty minutes, but Shorty was just getting his second wind. He went on jitterbugging by himself, to win first prize. It turned out to be a fancy toilet kit.

Shorty has a girl, too. Two inches shorter than he is. And he wants to get married. Shorty has known her for three months now and would have married her before this, but didn't want to "just jump into something." Army regulations here say you can't marry until you have officially stated your intentions, then waited two months. Shorty thinks he'll file his intentions any time now.

Shorty had a time convincing his fiancée's parents that he was not an ordinary Yank, the type about whom they had heard stories. "But I began playing darts with her old man, drank ten quarts of his beer, and we got along fine," Shorty explained. "And her mother wept when she heard I was going out on combat."

Combat is one thing he wouldn't be without. He'll take a good fight any time he can get it. They're grudge and blood fights because every man up there has had friends who never came back. Shorty is no exception. He hates their guts. He came face to face with a Jerry once.

It was on the Romilly raid. An aircraft-repair depot at Romilly-sur-Seine was the target. Shorty nearly didn't make the trip. He couldn't get one of his guns together, and the pilot was standing there beside him, saying he was afraid they wouldn't be able to go if all the guns weren't functioning. But Shorty pleaded.

"Now, Lieutenant," he argued as he sweated over the stubborn .50-caliber, "I can shoot them damn Jerries down with one gun just as well as two. I'll even go up without any guns."

Shorty and his guns went, of course, and before they reached

France both guns were working. On the way in, the bombardier spotted two FW-190's coming in head on and called out the direction of the attack.

"I turned my turret to the front and raised my guns," Shorty says. "Then Lieutenant Cunningham pulled up the nose so I could get at them, and there was an FW about a hundred feet away. His wings looked like they were on fire because all his guns were going at once. I thought I was a goner then, but I got in a quick burst. He flipped over as he went past. I tried to swing after him and get in another burst, but he was going too fast. He was only fifty feet away, and I got a glimpse of the pilot in the cockpit. He was wearing goggles and a leather mask over his face. He was looking at me, and I was looking at him. That's all there was to it. But I was damned scared at the moment."

Shorty Gordon went cold all over in that split second he was looking into the eyes of the enemy. But it was a thrill. It was that sort of excitement he craved when he was risking his neck as a "gow" driver back on the flat desert race tracks of his sunny California, roaring along behind the wheel of a souped-up little Model A.

Shorty had doubted whether he could find excitement in the Air Forces because his country was then at peace. But he took a chance on it October 22, 1940, at Fort McArthur, California, and got into the 9th Squadron of the 7th Bombardment Group.

When the 7th left Salt Lake City for foreign service in November, 1941, Shorty was left behind—in the guardhouse. An MP had accused him of being improperly dressed, and Shorty, with his love for casual dress, and fighting, had resented it. Well, three months at hard labor didn't dim his appetite for the Air Forces. In fact, Shorty claims he had a wonderful time in the guardhouse, especially after he became a parole prisoner and was free to carry on a lucrative little beverage trade with the sergeant of the guard.

On the last day of his sentence he was planning to ask for a transfer to the Philippines. From there he intended to hop to Burma and join up with the Flying Tigers as a ground man. But on that day he heard about Pearl Harbor. That was all he wanted. He got into the first heavy-bombardment group he could find, left his job as an armorer to take up gunnery, and found himself between a pair of .50s in the ball turret.

Unless you have been squeezed

into a small glass ball for four or five hours at 20,000 feet, it's hard to understand what happens when the cold and the cramps and the fighters set in.

Some ball-turrets gunners will tell you of the time the door on the turret opened and left them literally hanging on to their guns against a 160-mile-an-hour wind.

And some will tell you of their pals, bunk dreaming, who see fighters coming at them, with wings afire, and flak bursting around so thick you can walk on it. It's a good thing that all gunners tell each other they're "flak-happy." Joking about it eases the strain.

Shorty Gordon eases his nerves after a mission by taking a triple Scotch—"more, if I can get it." Then he might go off on a forty-eight-hour pass to see his girl. The one he's going to marry after that twenty-fifth mission.

March 1943

Shorty Gordon has been reported missing from a raid on Germany. Crews in other ships of his formation saw his Fortress go down, one white parachute billowing out above the plane. Shorty was wearing his chute on that trip.

July 1943

We have just received a report that Shorty Gordon, missing from a raid on Germany, is a prisoner of war.

March 1944

Staff Sergeant Lee C. Gordon, AAF ball-turret gunner, is the first American to be awarded the Silver Star for escaping from a German prison camp and reaching Allied territory with valuable information.

Flying with the Eighth Air Force's 305th Bomb Group, Gordon bailed out of his Flying Fortress when the plane was disabled by fighters and flak over Wilhemshaven on February 26, 1943. He was captured and taken to a Frankfort prison camp for interrogation.

While being transferred to another camp late in March, Gordon and seven other prisoners escaped by jumping from a train, but were recaptured a few days later.

The Sergeant escaped again on June 1 and rode through Germany on a bicycle for three days before he was picked up. He made his third and successful escape attempt from the prison camp at Moosburg on October 13, 1943, and reached the United Kingdom February 27, 1944

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AFA NEWS (Continued from page 39)

charter and credit this Squadron with being chartered at the earlier date. Officers are: Robert C. Williams, Commander; William R. Caldwell, Vice Commander; Roy F. Brown, Secretary; and Joseph A. Steele, Treasurer. Secretary Brown's address is 901 East Michigan Avenue.

MISSOURI

The chartering of the First St. Louis AFA Squadron on December 9 has been announced. Meeting first on November 19, the Squadron was chartered with 48 members less than a month later. Officers include: R. W. McFerrin, Commander; John R. Flint, Vice Commander; Frieda M. Bohn, Secretary; and O. L. Persechini, Treasurer. National members living in St. Louis who desire additional information about the Squadron are invited to drop a note to Commander McFerrin at 5258 Page St., St. Louis, Mo.

NEW JERSEY

Air-minded Passaic, N. J., residents had their first chance over Armistice weekend to see at first hand just how a B-29 operates. The exhibit, which was arranged by the New Jersey Wing of the Air Force Association and was sponsored by businessmen and industrialists, came from Wright Field, Ohio.

NEW YORK

The Albany Squadron, which is now a year old, has elected a new slate of officers. Earle P. Ribero, formerly Secretary of the organization, was named Commander. John W. Austin is Vice Commander; Miss Claire F. Carpentier, Secretary, and Charles F. Gallagher is Treasurer. National members and other Air Force men and women in the Albany area who would like further information about the Squadron may write to the Commander at 416 Delaware Avenue, Delmar, New York.

First Brooklyn Squadron, AFA, arranged and observed "Brooklyn Aviation Week" December 8-14 with the objective of highlighting functions and activities of both civil and military aviation. Borough President John Cashmore proclaimed the week as official on Borough records.

New York's WAC Squadron held a Christmas party December 13 at Haloran General Hospital and Milton Berle M.C.'d headline entertainment. In addition to door prizes, each patient attending the party was given a present by the girls of the Squadron. This party was only one of the many for which this Squadron of women Air Force veterans has become noted.

At the first election held by the Squadron, Miss Mary Gill was chosen to serve as Commander. Other members of the newly elected staff are: Miss Helen Barnes, Vice Commander; Miss Margaret West, corresponding Secy.; and Miss Dorothea Culley, Treasurer. These newly elected officers as well as

their new recording secretary and council members assumed office in January.

The Show Business Squadron, which was formed in Manhattan and is composed of men and women who have served in the Air Force and who are now connected with the entertainment business, was chartered on December 19. This Squadron, the first of its kind within AFA to be composed of a professional group not working for the same company, is commanded by William S. Roach. Roach also organized and commanded the Columbia University Squadron when he was a student of law there. Other officers of the Show Business Squadron are: Ezra Stone (the Henry Aldrich of radio), Vice Commander; Frank A. Oberndorfer, Secretary; Norman Frank, Treasurer. The Squadron meets the first Thursday of each month. Persons in the vicinity of New York interested in this Squadron are invited to contact Commander Roach at Suite 1605, 152 W. 42nd St., New York 18.

The AFA welcomes the Rensselaer Polytechnic Institute Squadron, Troy, into the group of Squadrons located at leading colleges and universities throughout the Nation. This organization was chartered on November 25 and announces the following slate of officers: Alan T. Mickel, Commander; Gordon B. Wheeler, Vice Commander; Richard E. Legee, Secretary, and Roger D. Davies, Treasurer. Students at R.P.I. who are interested in joining the Squadron are asked to contact the secretary at 159 North Lake Avenue, Troy.

New officers were elected at a recent meeting of the Queens AFA Squadron. The slate includes: Joseph J. Goetz, former Vice Commander, was elected Commander; David S. Levison is Vice Commander; Elinor A. Geils was named Secretary; Walter C. Noack was re-elected Treasurer. Other officers include: William C. Grevlich, Sergeant-at-arms and John W. Poissant, Chaplain. Commander Goetz asks former Air Force men and women in the Queens area who are interested in joining the Squadron to contact him at 127-04 102 Road, Richmond Hill 19, New York.

The Westchester Squadron tried something new in squadron activity when they spotted the article entitled Building the United Nations Air Force in the December issue of *Air Force*. The squadron invited Brig. Gen. Ernest Moore, Deputy, US Air Force Representative, to the United Nations to appear before the group on its December 10th meeting and stand interrogation on the subject of military requirements of UN. The session was one of the most interesting on record and may serve as a pattern for future meetings.

OHIO

The Cuyahoga Founder Squadron of Cleveland, sponsored its second Model

Airplane Contest at the Central Armory, January 3. The Indoor Air Meet is given by the AFA Squadron in conjunction with the Cleveland Press and will consist of 10 different events for three or four different kinds of models from several age groups.

Progress is also being made on the Squadron's Aviation Educational Program. The first lecture was presented at Euclid Short High School by General Frank P. Lahm. General Lahm, who is active in AFA affairs, is the first officer of the Air Force to participate in a military flight, holds the second aviator's license issued in the United States and is topped only by Orville Wright, with whom General Lahm participated in the first aerial flight. Aviation films and other visual aids completed the program.

The Greater Toledo, O., Squadron is now conducting an intensive membership campaign in order to gain additional assistance in carrying on an active aviation program in its area. First objective of the Squadron is to obtain a higher class airport for the city; second aim is to acquire better training facilities for the 445th Light Bomb Squadron Reserve unit; and third goal is to compile a book on the air history of Toledo.

PENNSYLVANIA

The Blair County Squadron, Altoona, Pa., has announced the election of a new slate of officers for the coming year. Arnold Love was named Commander. Former Commander John Good was elected to Executive Council. Melvin Irwin was elected Vice Commander and former Vice Commander Donald Slep was named as a member of the Executive Council. Will Ketner was re-elected as Secretary and Donald Nelson was re-elected as Treasurer.

The Mifflin County Squadron, under the command of Randall Leopold, has put emphasis on youth aviation projects, and has extensive plans to bring to its county the first air show in its history. The Squadron now sponsors an Air Scout Squadron with members providing instruction and leadership. A program whereby Air Force films are presented regularly in eight high schools in the area is also carried on. Plans call for expanding this program in the near future. At the November meeting, all members were presented with Victory Medals and each was interviewed briefly about his Air Force experience. Newspaper and radio men were present and a recording made at the time was broadcast over a local station as a public service the following day. Stirred up a lot of interest in AFA.

On December 8, the York Squadron held its regular monthly meeting, which was attended by 50 members. Victory medals and American defense medals were issued to those present at the annual election of officers. Those elected

to serve for 1948 are as follows: Commander, Harry E. Gnau (re-elected); Vice Commander, Richard Barnett; Secretary, Kathryn Welsh (re-elected); Treasurer, Robert Meisenhelder.

RHODE ISLAND

The Woonsocket Squadron, AFA, which has undertaken one of the most ambitious youth aviation programs in the Nation, has announced that the first phase is already completed and that the remainder of the project will be started soon. The overall program, which included sponsorship of the CAP, Air Scouts and a Model Club, was designed to interest youths from 10 to 21 years of age.

TEXAS

The following officers of Dallas Squadron, AFA, were elected at the regular November meeting: Commander, James K. Wilson; Vice Commander, Al Harting; Secretary, Tom Hunter; Treasurer, Howard Adleta. Directors for three-year term—James Lovell, Robert Temple, Earl Thompson, Haskell H. Cooper, James Aston, Rex Lentz. Directors for two-year term—George D. McClure, Holland Pendergrass, Elgin Crull, Robert Cox, Tom Penry. Directors for one-year term—Laurence Melton, Howard West, Dr. Oran V. Prijean, Donald O'Neill, Enid Barron.

Wilson succeeds Rex V. Lentz, newly appointed Texas Wing Commander, whose services to the Squadron during its organizational period were highly lauded. A resolution expressing the Squadron's gratitude was passed and read at the December meeting.

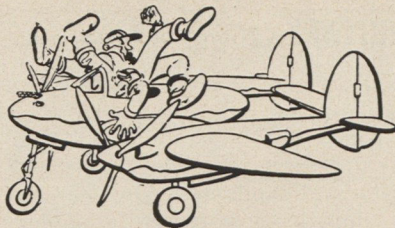
Wilson said that the Squadron immediately will launch a program designed to improve military and civil aviation in the Dallas area; to render helpful services to AAF veterans' families, to disabled AAF vets and to those still interned in the nearby Lisbon Veterans Hospital. Also projected was a program of air education among youth of the city.

WEST VIRGINIA

Members of the Beckley Squadron last month visited former members of the Air Force who are patients in the Pinecrest Sanitarium and presented them membership cards in both the National Association and the local Squadron, along with recent copies of AIR FORCE Magazine. When a Squadron committee recently visited former Air Force men at the sanitarium, the first request of these vets was for AIR FORCE Magazine so they could learn about new developments in the Air Force and the doings of former members. The Squadron now provides for weekly visits to the sanitarium.

WASHINGTON

The fall social program of the Seattle Squadron was inaugurated with a boat trip on Lake Washington, complete with a snack bar, dance, and all the trimmings. Another big social event was given during the New Year holidays.



PLANE BONERS

Analyzed by Veteran Pilots

After landing, an AT-6 bounced and the left wing dragged the runway. The airplane turned to the left and skidded sideways on the right wing-tip and gear. As the AT-6 slowed down, the pilot removed his shoulder harness and safety belt. The airplane was wrecked and the pilot suffered major injuries.

Comment: Although this pilot displayed poor technique on recovering from a bounce, his injuries might have been unnecessary. Safety belts and shoulder harnesses were placed in planes to protect pilots.

An L-4 pilot took off on a proficiency flight from his home base. After shooting landings for forty-five minutes, he flew toward a nearby range of hills. He reduced power, applied carburetor heat, and glided about 400 feet. When the throttle was opened and carburetor heat removed, only partial power was available so a forced landing was made. The airplane was wrecked completely.

Comment: This pilot tried to violate all the rules in the book. No parachutes were carried. The tachometer and airspeed indicator were inoperative. The altimeter was unreliable. No clearance was filed. No passenger list was left in operations.

A well-qualified fighter pilot took off in a P-51 from an overseas airbase. After becoming airborne and retracting the wheels, the pilot held the nose down and picked up speed. About 1000 feet beyond the end of the runway, he pulled up sharply. While in a nose-high inverted position at about 1200 feet, the P-51 stalled and went into an inverted flat spin. After two turns the pilot bailed out. The pilot was injured when he struck the ground and the fighter was wrecked.

Comment: This pilot violated AAF regulations by performing acrobatics at a low altitude and suffered the usual consequences. Regulations were designed to protect pilots. Abide by them and enjoy a long, safe flying career.

A C-45 pilot was cleared for a CFR, cross-country flight. Occasional thunderstorms and a stationary front on the left of his course were forecast. While in flight the pilot noticed storms ahead so he altered his course to the left in an attempt to reach an alternate point. It became dark and he encountered IFR conditions. Attempting unsuccessfully to change his flight plan to IFR by radio, he decided to descend and fly under the overcast. The pilot continued to descend as the ceiling lowered and the plane crashed into a small hill. Luckily, the occupants of the plane escaped serious injury.

Comment: Here's another example of the serious consequences of trying to maintain contact under instrument conditions. The pilot would have been better off to have filed an IFR clearance in the first place.

A pilot took off on a round-robin flight in an AT-6. After takeoff, he joined a formation of other AT-6s and followed it for a while. Then he proceeded on his way, but could not find his first turning point. He finally oriented himself and discovered he was sixty miles off course. He decided to return to his home field but ran out of gas and attempted an emergency landing at an inactivated field. He undershot the airport and crashed into a truck.

Comment: The pilot flew the whole mission with the mixture control in FULL RICH, so he ran out of gas. This accident resulted from gross negligence and utter disregard for regulations.

WHO'S WHO IN THE AFA: C. V. WHITNEY (Continued from page 35)

instructor who informed him in very unsympathetic language that he still had 22 "touches and go's" to accomplish.

"But it's out of gas," complained the neophyte airman, indicating the instrument panel, "the gauge registers zero."

"Of course it registers zero, you damned fool," shouted the instructor, checking the instruments, "that's the altimeter!"

Despite this interruption, the youthful cadet managed to pass the remainder of his flight tests without incident, and, at 17, became what the "Believe-It-or-Not" Bob Ripley describes as the youngest flyer to win his wings in the history of the American Air Corps.

Commissioned a second lieutenant, Whitney remained at Benbrook Field, and at 18 was named its chief instructor in advanced flying, including formation work, battle tactics and acrobatics. In 1918 he finally got his transfer to the fighting front in France, only to be halted at Mitchel Field, Long Island, by the signing of the Armistice.

After his discharge from the Aviation Service, ex-Lieutenant Whitney enrolled at Yale University where he won a "Y" for rowing and completed the kind of education expected of a young man of such distinguished lineage. For the purposes of the record, it is worth noting that the new Assistant Secretary's father was Harry Payne Whitney, son of William C., who founded one of America's great fortunes in oil, tobacco and utilities, and served as Secretary of the Navy under President Grover Cleveland. His mother, Gertrude Vanderbilt Whitney, was one of the United States' best-known sculptors, and a direct descendant of Commodore Cornelius Vanderbilt, one of America's foremost industrial pioneers.

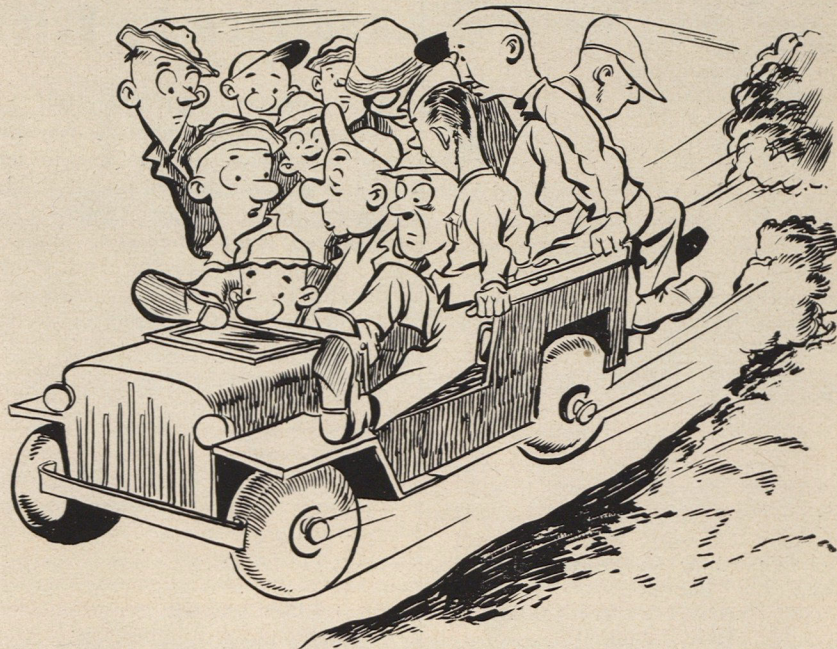
The public spotlight that is inevitably focussed upon a family of this stature did not escape young Whitney, and it is chiefly responsible for the fact that his intimate family name of "Sonny"—which came about through the inability of his childhood playmates to pronounce Cornelius—has been publicly identified with him during the greater part of his lifetime.

There's no denying that Whitney's birth on February 20, 1899, was very definitely associated with the proverbial "silver spoon." But if there is any indication that he ever intended to rest upon his hereditary laurels, it cannot be found by a

close scrutiny of his intensely active business and military career.

After his graduation from Yale, "Whit"—as he was then called by his friends and colleagues—decided to embark on a career in mining.

use of their new process, operated them so successfully that today Flin-Flon ranks second in Canada in the production of zinc, third in copper, and has produced thousands of tons of gold, silver, metals.



Crowded? You ought to see it when we have a driver!

With characteristic thoroughness, he chose to learn the business from "below the ground" up. Although his father had large mine holdings, it was to a firm of different ownership that he applied for a job. He was hired and put to work in a mine at Comstock, Nevada, where, after many months underground, he worked his way up to the position of assistant foreman.

Resigning this employment, he made a tour of the Rocky Mountain region, working in mining camps and gaining experience in the art and business of separating mineral wealth from the earth's surface. It was this experience that eventually led to his association with Roscoe Channing, Jr., and the development of a new "flotation process" for profitably working marginal mines. After perfection of this process, Channing and Whitney acquired an option on the low-grade copper and zinc deposits—abandoned by other companies—at Flin-Flon, in northwest Manitoba. The original trip to Flin-Flon involved a 100-mile canoe journey and covering of 70 miles of rough country on foot with heavy packs. But the two young entrepreneurs made the trip satisfactorily, opened the mines, and, through the

Already a successful mine owner, Whitney, in 1927, returned to his first love, aviation. Together with his old friend from Yale, Juan Trippe, a fellow flying enthusiast, he borrowed \$200,000, obtained an air mail contract, and formed the Aviation Corporation of the Americas, forerunner of the present pan American World Airways System. This duo, with Charles Lindbergh, who had just caught the imagination of the entire world with his solo flight from New York to Paris, trail-blazed Pan Am's first routes from Key West to Havana and the Canal Zone at the controls of their own airplanes. As the airline continued to grow, Whitney personally assisted in exploration and site-choosing expeditions to Central and South America. He became chairman of the board and chief executive officer of Pan Am in 1928 and served continuously in this capacity until World War II, when he severed all connection with the corporation preparatory to going on active duty as an Air Force major.

Mr. Whitney's military career has been just as noteworthy as his record in American business. Commissioned in February, 1942, he was sent to India as combat intelli-

gence officer with a squadron of Flying Fortresses. After four months in the Asiatic sub-continent he was transferred to the newly-formed Desert Air Task Force in Egypt, where he won a battle star for his participation in the Battle of El Alemain and a Distinguished Service Medal for his contribution as task force combat intelligence officer in the Allied drive across North Africa.

In July, 1943, Whitney—by then a colonel—was ordered to Washington where he became chief of the Special Projects Branch of the Operational Plans Division, Office of the Assistant Chief of Air Staff for Plans. While on this duty he received temporary assignments to various parts of the world, attended, as a member of General Arnold's staff, the Cairo and Teheran conferences, and participated, as an Air Force observer attached to the staff of Secretary of the Navy Forrestal, in the landings at Iwo Jima.

For his services in the Operational Plans Division, Colonel Whitney was awarded the Legion of Merit. For his participation in the Iwo Jima landings, where he witnessed the famous Mt. Suribachi flag-raising, he earned the right to add an invasion arrowhead to his Pacific theater ribbon.

Today Assistant Secretary C. V. Whitney, from a fourth-floor Pentagon office overlooking the Potomac, directs civil and military-diplomatic affairs for the nation's first Department of the Air Force. He is a member of the President's Air Coordinating Committee and the State-Army-Navy-Air Force Coordinating Committee, and administers Air Force matters pertaining to the National Security Council, the War Council, the State Department, and such Air Force affiliated organizations as the Air Force Reserve, the Air National Guard, the Air ROTC and the Civil Air Patrol. His sympathy toward the aims and ideals of

the Air Force Association is amply demonstrated by the fact that he is a director and one of the founders of this organization.

One of Mr. Whitney's principal functions—and one which he deems of particular importance—is to serve on Secretary Forrestal's newly-appointed Committee on Civilian Components. This group is at present studying the various civilian components of the National Military Establishment with a view to recommending changes in composition and organization that will eliminate inequalities and result in the most efficient and economical use of existing facilities. Summed up, the mission of this committee is to "see that unification works" on the departmental level.

Friendly, approachable and with a deceptive air of leisureliness that belies the drive that has kept him at the top of the business world, Mr. Whitney is eminently qualified to handle with fairness and diplomacy the civil, military and political matters which come under the purview of his office. His reasons for accepting these full-time responsibilities, which keep him on the job daily until after six at night, are, as he puts them:

"First, to do what I can to make sure that the United States never again dissipates its air strength the way it did after World War I, and second, to do everything in my power to make unification work."

As Assistant Secretary Whitney sits at his Pentagon desk before a huge painting of a B-24 in North Africa and outlines these reasons for taking a government appointment that cannot help but interfere with the administration of his wide business interests, his listener is impressed by the feeling that he means what he says—and that what he says might well be the watchword of everyone concerned with American air power and national security.

LUCKY FOR SOME (Continued from page 41)

about in the mountains below until daylight. Nations himself would jump first, then Sergeant Buckingham, Corporal Baker, Sergeant Butkovich, and so on.

Soon after midnight Captain Cearley decided to abandon ship. The aircraft had been in the air eight hours and fifteen minutes and had five minutes fuel remaining in either wing tank. As the passengers prepared to jump a break in the clouds revealed jagged peaks below. Crew

members made a futile attempt to orient their craft as the passengers made a last minute inspection of their parachutes.

The bail out order was given by the pilot to Major Bounds, the navigator, who relayed it to the passengers. The ship's occupants were lined up in semi-circular order by Lieutenant Nations who took his place at the head of the line after final instructions were issued. He

(Please turn the page)



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LUCKY FOR SOME *(Continued from page 47)*

stepped to the door, and without a backward glance dived into the storm.

When the last passenger had left the plane the crew members bailed out. Captain Cearley was the last to leave his ship, after setting the automatic pilot in operation. When he jumped the plane was approximately 12,000 feet above Northern Luzon and probably about 25 miles east of the town of Bontoc. During the bailout period he had flown the aircraft in a slow 360 degree turn with an indicated airspeed of 110 mph. This was a vital factor in maintaining a small dispersal area over which the occupants were scattered. As Cearley swung in the air above the mountains, his watch read 2430, Saturday morning.

S/Sgt. J. D. Simmons was killed in the jump. Injury to the rest of the passengers and crew was minor. All the occupants were slightly scratched by trees and jungle undergrowth into which they jumped, and there were a few broken bones, but nothing more. They had jumped in such a relatively small area that it was not difficult to locate one another shortly after hitting the ground. The jumpers did not know that they were landing in the Tinglayan district of Cagayan Valley.

Lieutenant Nations said he "just dived head-first, tucked my knees under my chin, and then when I was clear of the plane, pulled the ripcord. It was dark and I landed unexpectedly. When I got my bearings I found that I had sprained an ankle and that I had landed just 10 feet from the edge of a cliff. I was rather surprised a few minutes later when I looked up and there was an Igorot, all painted with blue, carrying a shield and wielding a spear.

"He just raised his spear and said 'Ho'."

S/Sgt. A. E. Blair, who suffered a foot injury, said he was somewhat prepared for the jump; they had known for about an hour and a half that they would have to bail out.

"It didn't seem to take very long to reach the ground. I was looking up at the mountains around me and suddenly I hit the ground."

"When I gathered my senses, I found that I was about 2000 feet up the side of a mountain next to a rice paddy. In a few minutes an Igorot came and took me to a barrio called Tuglao. I slept for about four hours. It wasn't until morning that I saw any of the rest of the group." Commenting on the welcome he received, Blair said that the Igorots wanted

him to remain for two or three months to teach the villagers. "I couldn't help but notice that a lot of fellows went to church next morning," he observed. "In fact, one fellow went to church for the first time in two years."

S/Sgt. J. W. Buckingham, who followed Lieutenant Nations out, had bought a cigarette case in Japan and had it in his shirt pocket at the time he struck the ground. It probably saved his life. As he hit, a bamboo shoot pierced his "Mae West," a cigarette package, and a sheaf of papers, but stopped at the case. There was a large dent in it.

Cpl. U. B. Moore spent a sleepless night in a tree top, 100 feet above the ground. His camera still hung from his shoulder when rescued.

In the meantime all surface craft and aircraft in and about the island of Luzon had been alerted. Nichols Field, Clark Field, Sangley Point, Philippine Air Force, and surface vessels were ordered to stand by for an early morning search. All crash boats were contacted and ordered to prepare to assist in the search. Naval aircraft and surface vessels in the P.I. area were placed on alert by the Naval Command. Local radio stations broadcasted requests for information concerning the missing craft. Pan American Airlines flights and Trans Asiatic Airlines from Guam were alerted along with all other craft with a Manila QAB. Okinawa Air Sea Rescue was given the distress signal and advised to stand by. Manila Port Control alerted inbound and outbound vessels to exert every effort to locate survivors or wreckage of 8263. Commercial radio stations appealed to the Philippine people to be on the alert for survivors or plane, and to report to the nearest agency of the US or the Philippine Government. Thirty-nine planes were in the air at dawn on September 20th.

At approximately noon an Emergency Rescue B-17 radioed that it had sighted a completely intact aircraft whose tail assembly read-8263. No sign of life was observed. It lay in the Cagayan Valley approximately 130 miles northeast of Clark Field.

The search immediately was concentrated in a land area of approximately 100 miles radius and in coastal water 20 to 30 miles out.

Capt. Robert M. Shoemaker, pilot of the Emergency Rescue B-17, radioed the aircraft's position to Clark Field where a ground rescue party of 50 men were preparing to depart for the area.

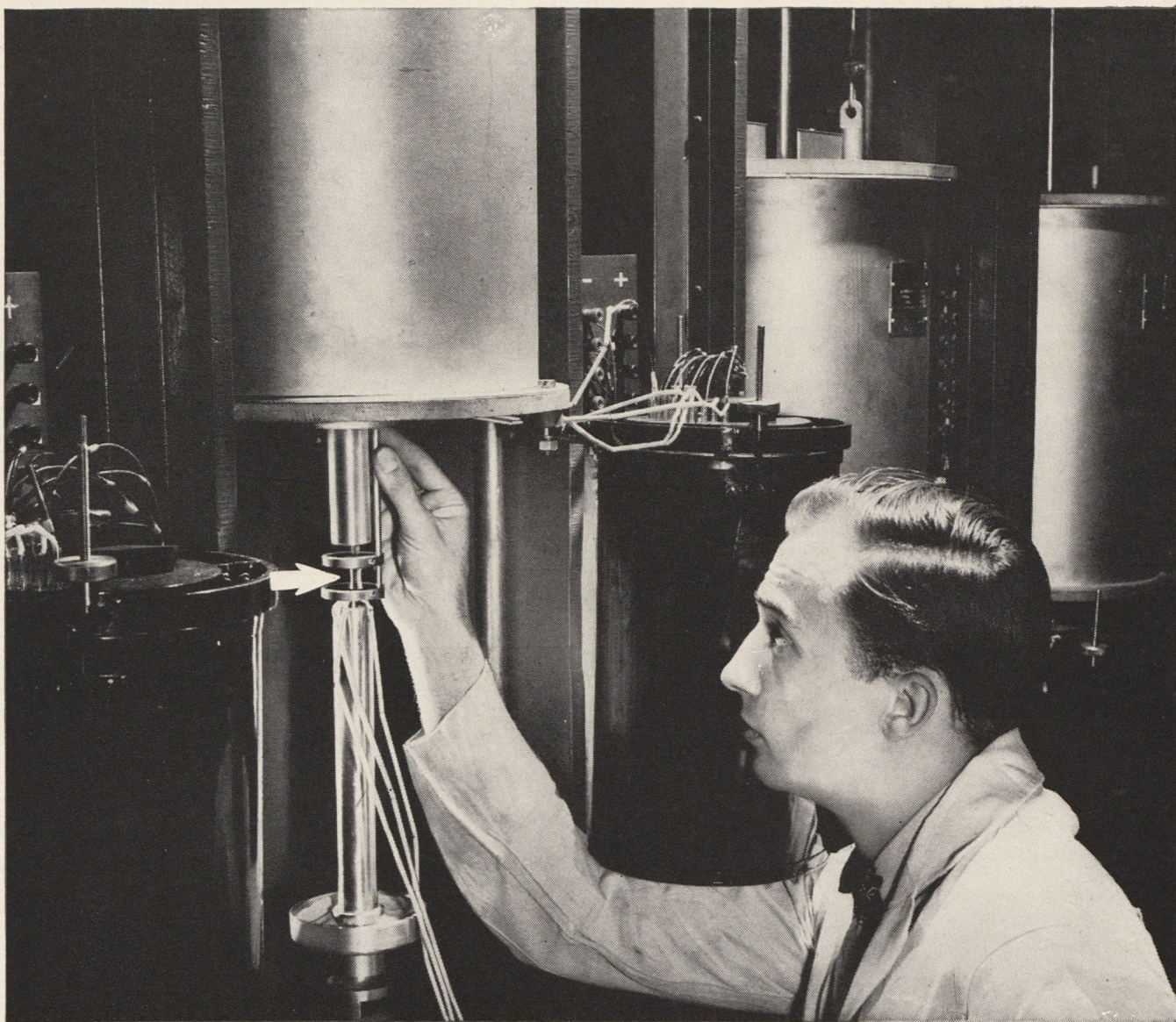
In the meantime the parachutists

were wandering around rice paddies and jungle searching for some sign of civilization. Maj. James T. Bribble made his way to Bontoc Saturday at 0930 hours, and radioed Clark Field that he was safe. At Bontoc he organized Igorots into a search party to round up the missing men. The Igorots were willing and cooperated to the extent that Sunday afternoon all were accounted for except Cpl. Vernon Meadows, the radio operator. The search continued for Meadows until Monday evening when he was found safe, high atop a pine tree.

The ground party reached the aircraft Sunday noon but found no one. They did find, however, that the airplane had made a belly landing after flying some 40 miles from the abandonment. The craft had landed straight ahead, damaging only the props, flaps and fuselage. The clock on the panel was still ticking.

While all this was taking place, an ambulance was dispatched to return the body of Sergeant Simmons. En route to Bontoc, the ambulance hurtled from a treacherously slick mountain road and plunged off a 125 foot cliff near the town of Banaue. The occupants of the ambulance, Capt. Emil Pagliarule, Winthrop, Mass., Cpl. Charles Anderson, Wichita, Kan., and Pfc. E. C. Litzenberg, Oakland, Calif., were injured to the extent that air evacuation by helicopter was requested. However, weather conditions over Luzon made air operations into the area impossible. Banaue, in northern Luzon is about 120 miles from Clark Field, too far for a helicopter to fly to and from Clark. It was decided to relay to the area three L-5s and one R-62A. These planes took off from Clark and flew direct to Bayombong, a wartime airstrip 30 miles from the evacuation point. From here the L-5s returned to Clark to pick up cans of gasoline for the helicopter. The injured men were found in a small house on the side of the cliff, elevation 5400 feet. The helicopter had to land in a very small area which was marked by stones on the ground. Each landing was made about 10 feet from the house. The injured were placed in the litter on the side of the helicopter and flown to Bayombong. Litter-bearing L-5s flew them on into Clark Field for hospitalization. The entire evacuation operation began at 0800 hours and was fully completed by 1700 hours; helicopter flying time was 8 hours and 15 minutes.

The jungle rescue was completed. The score of the baseball game? No one remembers.



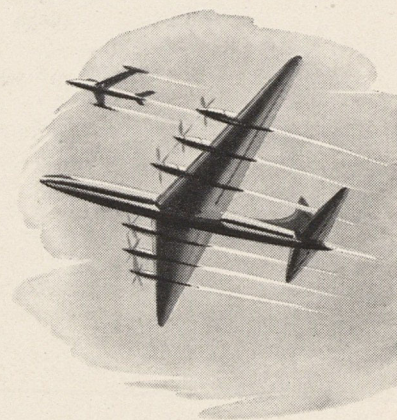
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
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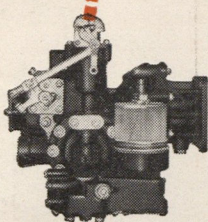
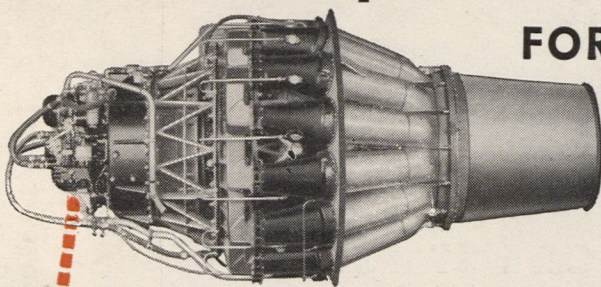
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