THE RACE FOR INTERCONTINENTAL BALLISTIC MISSILES

AIR FORCE

THE MAGAZINE OF AMERICAN AIRPOWER

UNDERGROUND AIR FORCE—
REPORT FROM SWEDEN

•

KOREAN AIR WAR
IN PICTURES

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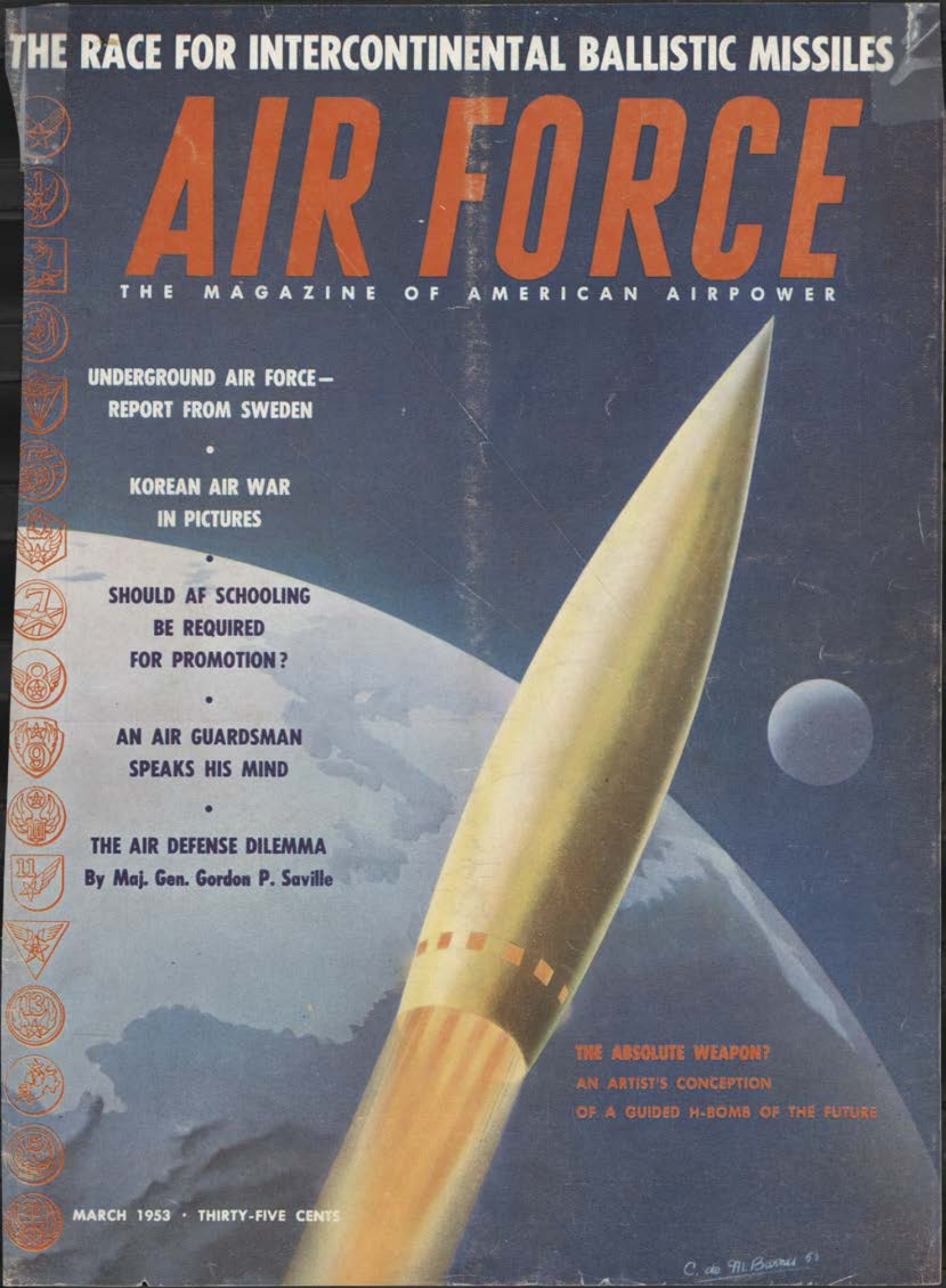
SHOULD AF SCHOOLING
BE REQUIRED
FOR PROMOTION?

•

AN AIR GUARDSMAN
SPEAKS HIS MIND

•

THE AIR DEFENSE DILEMMA
By Maj. Gen. Gordon P. Saville



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Arma has worked closely with the Air Navigation Development Board and the Civil Aeronautics Administration in developing this Pictorial Computer for use in proposed advanced systems of air navigation and traffic control. For 35 years Arma has worked hand in hand with the Army, Navy and Air Force—and more recently with the Atomic Energy Commission—in developing important military control systems. *Arma Corporation, Brooklyn, N. Y.; Garden City, N. Y. Subsidiary of American Bosch Corporation.*

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TIME WAS when warplanes were "flaming coffins," when a bullet in the fuel tank brought destruction—which accounted for 75 per cent of all aircraft downed in World War I.

Goodyear pioneered the reduction of this hazard when, in 1920, it perfected the first successful bullet-sealing tank—using a thick wrapping of soft, expandable rubber around the tank to seal bullet holes. Goodyear research has progressed far beyond this bulky beginning that has meant so much to the safety of planes and pilots alike.

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NOW fuel tanks by Goodyear are not only bullet-sealing, but light in weight and crash-resistant. Goodyear research has produced improved materials for the tanks themselves, and synthetic rubbers and compounds which not only seal bullet holes instantly—but have the necessary resistance to the "slosh" and deteriorating effects of aromatic fuels as well.

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AIR MAIL

Brooklyn AF Aftermath

Gentlemen: Early last year AIR FORCE carried an article by David Shawe entitled "An Air Force Goes From Brooklyn." It told of the activation of the 106th Bomb Wing (L) of the New York Air National Guard, and its development during the first year in the Strategic Air Command at March AFB, California.

The recall period of the wing ended on Nov. 30, 1952, and now the Brooklyn Air Force is back at home base, Floyd Bennett Naval Air Station. On Dec. 14, 1952, ceremonies marking their return were held and citations awarded to outstanding members of the wing, including its commanding officer, Col. Lewis Curtis, for his duty with the Far East Air Force. Letters of commendation from Gov. Thomas Dewey, Col. Charles Bicking, CO of March AFB, and Maj. Gen. Emmett O'Donnell, CG of the 15th AF, were read to the members of the wing and visiting spectators.

Officers and airmen of the wing are now concentrating their efforts on reorganization in a Guard status, and an extensive development program has been initiated. I thought your readers might be interested in this further news about the Air Force from Brooklyn.

James K. McKillop
106th Bomb Wing, NYANG
Brooklyn, N. Y.

SOC

Gentlemen: I'm deep in the heartland of the south, attending the Squadron Officer Course of the Air Command & Staff School at Maxwell AFB, Ala.

Like many recalled Reservists, I had little current knowledge of opportunities offered by the Air Force educational system. Soon after our arrival, and subsequent completion of multiple-choice examinations, we learned that this was to be quite different from flying and other service schools most of us attended during World War II. Instructors immediately began to refine and develop our respective abilities to *think* clearly, *communicate* ideas to others, and to *cooperate* in the accomplishment of objectives. As these skills were being improved, they were supplemented by our learning to recognize and solve problems; an appreciation of team spirit and the methods by which it is developed; the need for integrated staff action and completed staff work.

Tremendous group spirit is generated by group action and discussion in problem-solving – and an intensive team athletic program. The atmosphere is at all times relaxed and friendly – with more than enough work to keep the most "eager" student fully occupied. Subjects are interesting and well-planned, if somewhat hampered by a lack of facilities. Extra-curricular classes and counseling are available for self-improvement, based upon individual needs and desires. In general, I believe that we are here exposed to the whole Air Force mission and its attendant problems for the first time. More specifically, it is probably the most important experience of my service career to date, excepting my flying training. The nine-week course, however, does not allow sufficient time to absorb the wealth of material offered.

Lt. Frank Stevens
Maxwell AFB, Ala.

Mainbrace

Gentlemen: I have read with great interest the article "There Is No Easy Way Out" in the January AIR FORCE. As an argument in favor of land-based as opposed to carrier-based planes it seems very impressive, although I suppose one would have to be a military expert to fully appreciate the points made.

There are, however, a few misconceptions in the article that should be corrected.

To begin with, I should like to point out that the present Norwegian government has been in power since the fall of 1945. True enough, there have been individual changes within the cabinet since then, but the elections in 1949 gave the Labor Party an even bigger majority than the elections four years earlier. Thus your statement that "the 1949 promise to the Russians was made

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by a government now out of power" is not in accordance with established facts.

Furthermore, it is not correct when you state that the above has been pointed out by influential editorialists. With the exception of a couple of Communist papers plus maybe one middle-sized daily in Trondheim, virtually the entire Norwegian press has been, and is, behind the Government in its stated policy of not being willing to grant foreign bases on Norwegian territory in peacetime.

I don't know, of course, what "authoritative sources" you are referring to when you profess to know that "the Norwegian cabinet will be called upon by Foreign Minister Halvard M. Lange to junk the no-base policy in 1953." I am afraid your sources are highly unreliable. Rumors to the effect that Norway is planning a change in her attitude on this particular point have been popping up regularly. Time and again they have been officially denied by the Prime Minister, Mr. Oscar Torp, and by the Foreign Minister, Mr. Halvard M. Lange.

This is to inform you that those denials still stand. No changes in Norway's policy are contemplated — all "authoritative sources" notwithstanding.

Tor Myklebost, Press Counselor
Norwegian Embassy
Washington, D. C.

• *Mr. Myklebost states correctly that the Labor Party has been the governing party in Norway since the end of World War II. What we had in mind was the cabinet change on November 13, 1951, whereby Prime Minister Einar Gerhardsen was succeeded by the present Prime Minister, Oscar Torp. It was the Gerhardsen cabinet which made the original commitment to the Soviet Union against permitting NATO-manned bases in Norway. We are well aware that the public position of the Norwegian government remains unchanged. But holding to a formal position does not preclude re-examination of the policy by those Norwegian officials responsible for the nation's defenses. We continue to believe that such a review has been initiated.— The Editors.*

Gentlemen: In the January issue of AIR FORCE Mr. Kelly stated that there was pressure on him as a result of certain articles printed by the magazine.

I know how it is when certain organizations may jump at you if you say a little too much for their liking. Maybe they would like you to be a little more hush-hush about things, but the public should be presented with the facts and it is the duty of somebody to reveal them in true form.

It is difficult for the public to get the true picture of government doings merely from reading the papers, and your coverage of "Exercise Mainbrace" was excellent. Everyone who has read it should know pretty well how we stand as far as land bases and aircraft carriers in Northern Europe are concerned. I appreciate such articles and believe I'm not the only one.

Jerry Chermack
Whittier, Calif.

AVIATION PROGRESS MARKED—Here at Kitty Hawk, N. C., the aviation world recently paid tribute to the Wright Brothers for their achievement of powered flight in a heavier-than-air machine in 1903. And among the aviation pioneers taking part was Igor Sikorsky, whose aircraft have made a major contribution to air progress.

AROUND THE WORLD WITH THE FLYING JACK-OF-ALL-TRADES

ROTARY-WINGED PACK TRAIN—Airlift of vital construction materials, key personnel, and survey teams is routine on the Aluminum Company of Canada's vast smelting and power development project in the rugged Kitimat region of British Columbia. In a few hours big Sikorsky S-55s, operated by Okanagan Helicopters, Ltd., can haul loads mule trains would need days to deliver.

EASY DOES IT—A big H-19 Sikorsky carrying wounded men settles gently to the lawn in front of the Naval Medical Center in Bethesda, Maryland, ending a mercy flight which began on the battlefield. Regular transfer of Korea casualties arriving at nine military air terminals in the U. S. direct to service hospitals is planned by the Military Air Transport Service.

"SKY PILOT"—Ministering to the spiritual needs of men at sea is often difficult because of rough seas and the distance between ships in a fleet. But with helicopters such as the Sikorsky HO3S-1 shown above, chaplains can move from ship to ship with ease and come aboard by landing or by rescue winch.

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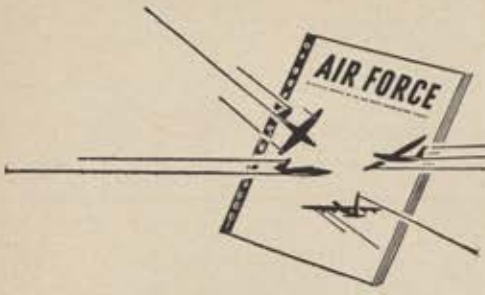

RENDEZVOUS

Where the Gang gets together

YUGOSLAVIAN RESCUE: While in Yugoslavia last year someone asked me to help locate an American pilot they had lost track of since the war. In the summer of 1944, after a four-motored bomber raid in Rumania, this pilot, whose name sounded like Capt. Scoursi, Skursi, or Skoursi, and his crew bailed out and landed near the town of Pish (?) in Yugoslavia. He was hospitalized for an injury to his foot and was cared for by Yugoslavs, probably Partisans. He and others of his group were evacuated by plane back to his base at Foggia, Italy. About six feet tall, he is believed to have been from the New York area. Can anyone give me a clue as to his correct name and address? The person wishing this information assisted him in escaping from the Germans in Yugoslavia. *Lt. Col. Morgan Sibbett, 1120 Greenwich St., San Francisco 9, Calif.*

449ERS: Former members of the 449th Fighter Sqdn. of Suichwan, China, 1943-44, please contact me for reunion and a squadron history. We also plan a memorial for Col. G. B. McMillan. Widhelm, Lawson, Bledsoe, Frank, Tribby, Miller, and all of you — I need your addresses. *Ken D. Warner, La Porte Municipal Airport, La Porte, Ind.*

CHECKERTAIL CLAN: The world famous 325 Checkertail Clan will have its eleventh annual reunion in Washington, D.C., July 31 thru Aug. 2, 1953. For further details write *J. Sidney Wolf, Chairman, 3401 Broad Branch Terrace, N.W., Washington 8, D.C.*

EX-POWS: I am seeking the names and addresses of American ex-prisoners of war. We have organized a chapter under American Ex-Prisoners of War here in New York City. *Mr. Jan Brown, 1567 Fulton Ave., New York 57, N. Y.*

PHOTOS A HOBBY: Due to a loss of hearing during service in the Air Force, I have to be content with keeping up with the advancement in aviation and the USAF by reading AIR FORCE Magazine and collecting airplane photos, which is a hobby with me. I would like to correspond with anyone who has a like hobby or anyone who knew me while in the USAF from Dec. 7, 1939, to Dec. 29, 1945. I was known as "Smilin' Jack" Bennett. *Gaylon L. Bennett, Rt. 2, Xenia, Ill.*

491ST BOMB GROUP: Anyone know where I can purchase a group history of the 491st Bomb Group? *William O'Connell, 278 Pick St., Elmhurst, Ill.*

12TH AF HISTORY: I'm interested in obtaining a history of the 12th Air Force overseas. Can anyone help? *E. V. Boyer, 517 Jackson St., Port Clinton, Ohio.*

20TH AF HISTORY: Can anyone help me acquire pictures and histories of the 314th Wing, 330th Bomb Grp., 20th Air Force, during 1945? *Robert J. Kimball, 65 Highland Ave., Walden, N. Y.*

"SQUADRON MARKINGS" FOLLOW-UP: In your September '52 Rendezvous column Roger A. Freeman in England requested information on squadron markings. I answered, giving what information I could, but fell short of the mark. Mr. Freeman is historian on the USAAF for "Air-Britain" and is particularly interested in the 379th BG (H), 8th AF. He hopes someday to complete a history of all the bomb groups of the old 8th AF. As Freeman puts it, "There were a lot of groups and all made quite a bit of history." So, on Mr. Freeman's behalf, and because I'm particularly interested in seeing a history of the group published, I'm asking the following questions about the 379th:

1. What planes, besides The Hellion, Birmingham Jewell, and London Avenger completed over 100 missions? What squadrons were they from?
2. A history of the COs from Col. Lyle back.
3. What were the squadron letters painted on the fuselage near the waist door? Were these discarded for squadron colors and if so what were they?
4. Were any members of the group awarded the Medal of Honor?
5. Any other interesting facts?

We'll appreciate any and all help. *Lawrence L. Prince, 2909 Studebaker, Long Beach, Calif.*

To insure appearance in a given issue, Rendezvous items should be in this office approximately six weeks prior to publication. For example, copy for May issue should be in our hands by March 15.—The Editors

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Boeing Stratocruisers brought double-decked luxury to the airways of the world. And in the four years they have been in service, Stratocruisers have become staunch veterans of nearly 100,000,000 miles of dependable travel on civilian routes alone. During this period, more than 1,750,000 passengers have traveled aboard the big Boeings.

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The Stratocruiser inherits the proud tradition of such earlier Boeing airliners as the 247, America's pioneer all-metal, twin-engine transport, the famous 314 Flying Boat, and the 307 Stratoliner, as well as historic military aircraft such as the Flying Fortresses and Superforts of World War II.

Today Boeing is amassing an unmatched backlog of experience in the field of large, multi-engine jets, through the B-47, first airplane of its size to enter the over-600-miles-an-hour class, and the giant new B-52 eight-jet heavy bomber. These two planes have given Boeing over 14,500 hours of jet wind tunnel research, and over 5000 hours of jet test and research flying.

Out of this unparalleled experience, Boeing's prototype "Project X," America's first-announced jet transport, is being developed. This company's 36-year history of imaginative engineering, of design and production integrity, gives promise that Boeing's jet transport will be another outstanding aircraft.

Fleets of Boeing Stratocruisers are in service on **Pan American World Airways, United Air Lines, Northwest Airlines** and **British Overseas Airways Corporation.** For the Air Force, Boeing builds the B-50 Superfortress, B-47 Stratojet, C-97 Stratofreighter and the B-52 Stratofortress.

BOEING
STRATOCRUISER

Shooting the Breeze

EDITORIAL bobbles are like weeds—you pull out one here and then after going to press you find two more have sprung up over there. We weed at a furious pace but something (a typographical error, or a misspelling, or an error of fact) manages to sneak into just about every issue.

We had a dandy last month, in the article "Target: Mom!", which tells how the Communists are practicing emotional blackmail on the next of kin of American airmen downed in Korea. On page 24, describing the technique the Reds use, we said, "Pictures and news stories of captured men are widely circulated through the Red *Cross*." Of course it should have said "Red *press*," meaning Communist newspapers, magazines, pamphlets, etc.

It was particularly distressing to us because just a few paragraphs earlier we'd pointed out that the Communists refuse to furnish information about POWs through the International Red Cross.

Fortunately, we caught this bobble early enough to change all the copies we could lay hands on, but still many were distributed containing the error. If your copy had the misprint in it, this is our apology to you, just as it is our apology to the Red Cross whom we notified first off in case any anxious queries should come their way.

We're happy to say, though, that the article on emotional blackmail was well received, indeed. Some of the reactions to it will appear in our next issue.—END

AIR FORCE

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FEATURES

DEPARTMENTS

THE COVER

The intercontinental ballistic missile, depicted on this month's cover by artist Chuck Barnes, is not a reality as yet. But based on what the Germans were able to do with their V-2 rockets, plus what the scientists are able to tell us about space flight problems, it is possible for it to be built within this decade. The big problem: who gets it first, us or the Russians—see page 25.

HOW TO GET AIR FORCE

There are several ways you can be sure of receiving AIR FORCE every month. Anyone can subscribe by clipping the coupon and sending it to us with $4. Or if you were in the Air Force, you are eligible for AFA membership. The $5 yearly dues include the magazine. If you are now on active duty, $5 per year brings you a Service Membership. The cost is $3 per year for AF-ROTC and CAP cadets. Associate Members of AFA pay $15 their first year and $10 thereafter. Details on page 80.

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AIRPOWER IN THE NEWS — BY JAKE CULPEPPER

AVIATION CADETS — AF may broaden aviation cadet training eligibility to include civilian high school graduates. Personnel officials, who admit bottom of the barrel has been reached in lining up qualified applicants, are facing critical situation with regard to the aircraft observer program. There are now enough qualified men to fill pilot training slots through September of this year if an expected 2,000 are received from the AF-ROTC source. The 10,000-man pilot program is scheduled to begin in late spring or early summer.

IKE'S AIDE — Maj. William G. Draper, 32, air aide to the President, will double as Gen. Eisenhower's personal pilot as well. . . . AF's C-121 Constellation No. 8610, an ultra-plush job, to transport the President and his top government advisors, is serving as President Eisenhower's personal plane. . . . Mr. Truman's plane, "The Independence," has joined fleet of aircraft assigned to Special Air Missions group at Bolling AFB, Washington, D. C.

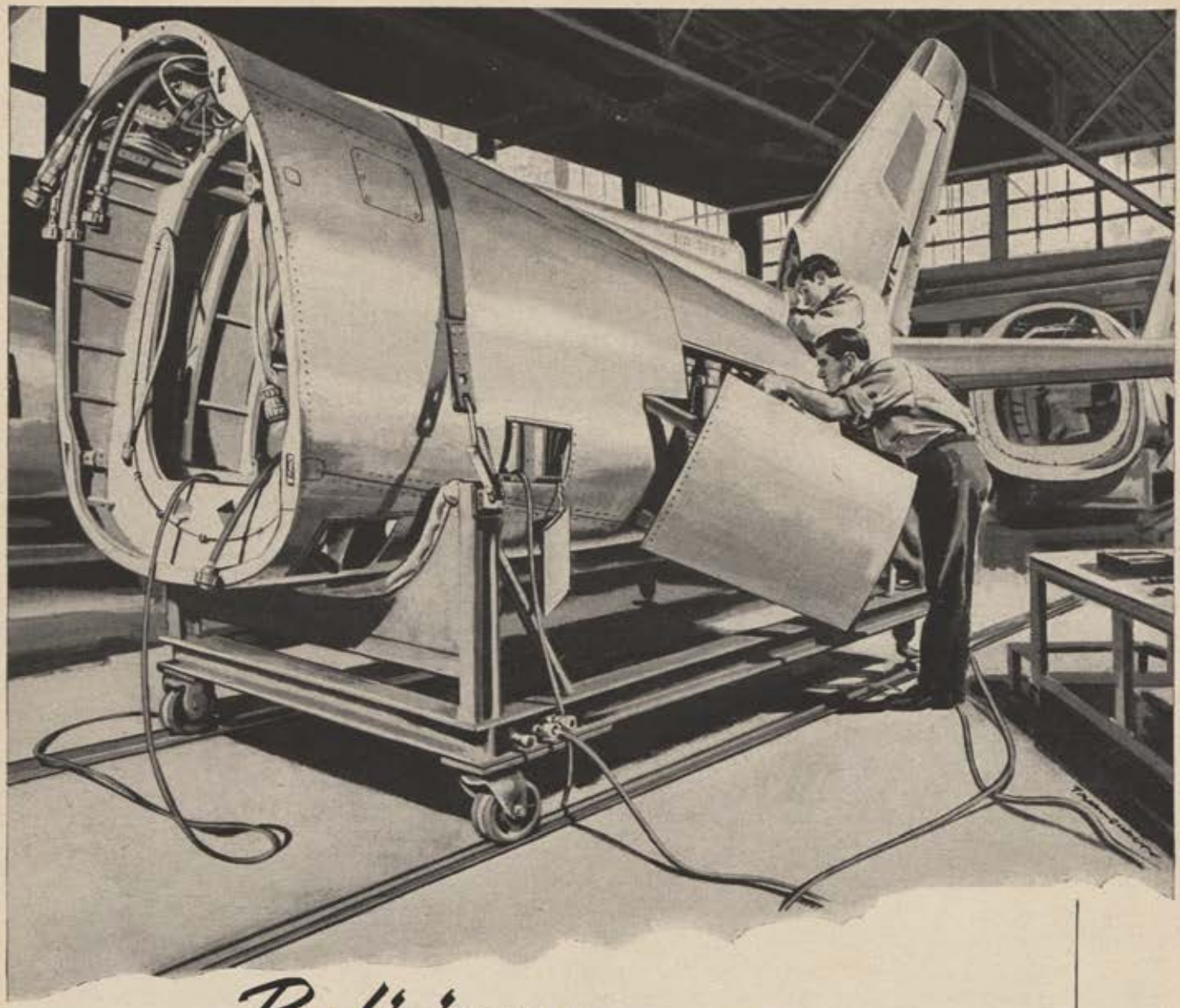
RE-ENLISTMENT program shows a slight upward trend for FY '53 despite the advantages offered to separatees by the new GI Bill. Lt. Gen. L. S. Kuter, AF personnel chief, is placing emphasis toward re-enlistment of those who entered service during Korean war, but who were not prompted by the career program. Through this, he expects to salvage a good portion of training costs which might otherwise be lost. Consideration is also being given to broadening re-enlistment eligibility period during which a person may retain his current grade from the present thirty days to ninety.

TRANSITION — AF has coined new word, "airmunitions," which means "AF warfare items of ammunition including explosive, biological, chemical, radiological, and atomic weapons." . . . Army is planning to build an airport specifically designed for helicopters. . . . Long-range program in dental research is underway in the AF. . . . First provisional air transport group headquarters exclusively for air evacuation was activated at Brooks AFB, Tex., a short while ago. . . . Sampson AFB, N. Y., has a new policy of a split shift with sacktime in between which, it says, will make mess attendant duty (KP) more pleasant for basic trainees.

CAREER PROGRAM — Second complete cycle of airman proficiency tests will get underway this month. AF estimates show that if airmen effectiveness can be increased by as little as two and one-half percent by more accurate placement in jobs, $13 million can be saved over and above the cost of testing program. . . . Many AF commanders in the field are urging another change in grade structure which would result in certain technicians reaching top pay grades without acquiring non-commissioned officer status. . . . New regulation which will spell out the responsibilities of non-commissioned officers is in the works at Hq. USAF. . . . In further attempt to increase prestige of its NCOs, AF will design new chevrons for airmen first, second, and third classes.

GOOD-WILL — Col. George S. Howard's USAF Band squeezed in four concerts for Icelandic citizens on recent trip to Reykjavik where his group entertained Americans stationed at the isolated base. . . . Citation of Honor was presented to MATS several weeks ago by National Foundation for Infantile Paralysis recognizing MATS' cooperation during past two years "in transferring polio patients for treatment and in flying essential equipment into epidemic areas during emergencies." . . .The General

(Continued on page 13)



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Performance of the Liftmaster is further proof of Douglas leadership in aviation. Planes, produced in quantity *to fly faster and farther with a bigger payload*, are a basic rule of Douglas design.

Depend on *DOUGLAS* **First in Aviation**

Henry H. Arnold Educational Fund will sponsor college careers of twenty-one dependent children of AF personnel for the 1952-53 school year.

BOOTSTRAP — 60,000 AF people, sixty percent of them airmen, are enrolled in off-duty study courses from Bermuda to Saudi Arabia and from Japan to Germany. Soon Thule and two other Northeast Air Command bases will be taking part in the program. Total of 114 accredited colleges and universities are cooperating with the AF in providing both ZI and overseas people with chances to further their education. During last year, in addition to those enrolled in Operation Bootstrap, there were 50,000 new enrollments in group study classes and 100,000 in US Armed Forces Institute correspondence courses. Total of 1,617 officers and airmen has taken advantage of the six months' TDY at civilian colleges offered by AF to those who need but a few academic hours to get degrees. Of this number, 911 have already been awarded degrees and 400 are now enrolled in various colleges.

BASES — AF has finished shifting all its jet fighter bases in Germany to positions west of the Rhine River. . . . Smoky Hill AFB, Kan., Forbes AFB, Kan., and Lockbourne AFB, Ohio, have been added to the permanent list of AF installations. . . . San Marcos AFB, Tex., may be renamed Edward Gary AFB, if Hq. USAF adopts recommendation of local Chamber of Commerce. Lt. Edward Gary was first Hays County man to lose his life in WW II. . . . Oscoda AFB, Mich., will be renamed Wurtsmith AFB in honor of Maj. Gen. Paul B. Wurtsmith, who was killed in crash of B-25 in North Carolina during 1946.

FEAR OF FLYING policy, as announced by AF last spring, remains unchanged. However, AF has consolidated in a single regulation, AFR 36-70, all existing material on the subject plus a new provision of Armed Forces Reserve act.

AF FINANCE — AF now has a finance bible, AF Manual 173-20, a one-package encyclopedia containing nearly all the answers that affect the wallet. . . . Forty airmen at Offutt AFB are taking an educational course in profit investment and stocks. . . . AF finance chief Maj. Gen. John R. Gilchrist's new payment system of mechanically processing majority of AF checks will result, he says, in significant savings to the AF, the Treasury, and to GAO.

COMING UP — New range station and homer will be set up on off-shore route to Alaska in general area in which the C-124 bound for Elmendorf AFB crashed last fall. . . . AF will hold its first annual barbershop quartet contest at Selfridge AFB, Mich., on June 5 and 6. . . . Department of Defense is considering the voluntary inter-service transfer of both Regular and Reserve officers. Final plan must be approved by Congress.

BRIEFS — Brig. Gen. Samuel Russ Harris, Jr., is new commander of Arnold Engineering Development Center, Tullahoma, Tenn. . . . PAA's Capt. Charles F. Blair, first man to fly a single engine plane over North Pole on flight from Norway to Alaska, has been appointed by AF to teach fighter pilots his simplified system of "packaged" celestial navigation. . . . Lt. Col. Moncel Monts is new head of Defense Department's AF press desk at the Pentagon. . . . Institute of Aeronautical Sciences gave this year's annual Robert M. Losey Award to Dr. Vincent J. Schaefer, weather scientist of GE Research Laboratory, "in recognition of his research in the field of cloud physics and seeding."

SENATE COMMITTEE ON ARMED SERVICES

Sen. Leverett Saltonstall, 60, from Massachusetts, heads the group that will conduct hearings on reorganizing the Defense Department. Scholarly and well-to-do, he gets along with just about everybody.

LEVERETT SALTONSTALL

Chairman

HOUSE COMMITTEE ON ARMED SERVICES

Rep. Dewey Short, 54, is a former Methodist minister from Missouri. A keen student of defense problems, his committee has first crack at ideas submitted by the Pentagon to the House.

DEWEY SHORT

Chairman

THE WATCHDOGS OF DEFENSE POLICY

THERE are four men in the new Republican Congress who, with their respective committees and subcommittees have a good deal to say about the size and quality of the Air Force and the other services. They're the watchdogs of defense policy and defense spending. Much power rests with these chairmen. They can set the pattern for our defense effort under the new Administration. Here's what these key men look like and a little background on each one of them.

ARMED SERVICES SUBCOMMITTEE OF HOUSE COMMITTEE ON APPROPRIATIONS

Rep. Richard Wigglesworth, 61, from Massachusetts, has long been an active force in Congress. He was a star quarterback at Harvard and served in France during World War I.

RICHARD WIGGLESWORTH

Chairman

ARMED SERVICES SUBCOMMITTEE OF SENATE COMMITTEE ON APPROPRIATIONS

Sen. Homer Ferguson, 64, Michigan's economy-minded senior senator, has a reputation as a fact-finder and a talent for investigation. He must find ways to cut defense costs.

HOMER FERGUSON

Chairman

Aeroproducts reports...

AEROPROPS KEEP GOING DESPITE SEVERE FLAK DAMAGE

OFFICIAL U. S. NAVY PHOTO

Lieutenant (jg) Robert C. Notz, USN, inspects the Aeroprop blade that brought him safely back from a North Korean target. Flying from fast carrier Task Force 77, Lt. Notz' AD fighter-bomber was hit by Red flak during a low level attack. A bite approximately 18 inches long was taken out of the trailing edge of the blade deep into the rib section. The blade remained intact and enabled him to reach a repair base. A new Aeroprop blade was installed without removing the propeller and the ship was returned immediately to combat.

OFFICIAL U. S. NAVY PHOTO

Now Lieutenant Commander Lynn DuTemple knows why his AD *Skymaster* raised such a howl when he brought it aboard the USS *Princeton* off Korea. A 37mm enemy anti-aircraft shell had torn a gaping hole completely through one blade of his Aeroprop. LCdr DuTemple had just completed his fourth bombing run on Hamhung railroad bridge when the flak ripped through his prop blade and shattered his canopy. The pierced Aeroprop blade did not alter its performance enough to reveal the damage until the plane had reached its carrier base.

THESE INSTANCES OF COMBAT DAMAGE EXEMPLIFY THE DURABILITY OF AEROPROPS . . . THE METICULOUS ENGINEERING AND CAREFUL FABRICATION OF ALL AEROPRODUCTS PROPELLER EQUIPMENT. THIS SAME SERVICE . . . AND THE "VISIONEERING" FOR AIRCRAFT OF THE FUTURE . . . ARE AVAILABLE TO ASSIST YOU WITH ANY PROPELLER PROBLEM IN THE SUBSONIC, TRANSONIC OR SUPERSONIC RANGES.

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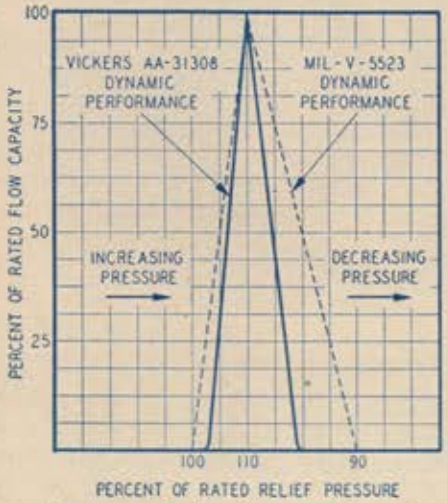
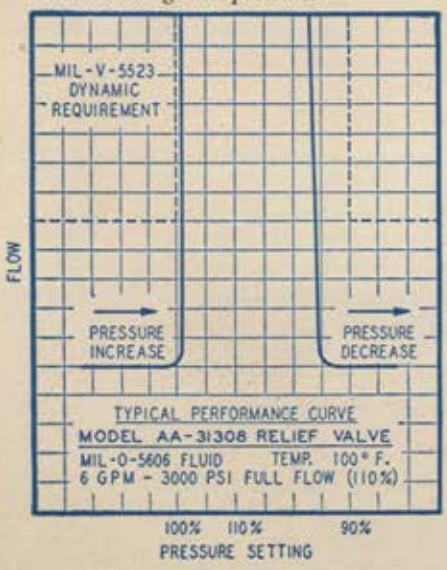
Vickers Model AA-31306-H
AN-6279-6CD

Vickers Model AA-31304-H
AN-6279-4CD



Pressure variation from cracking point to maximum rated capacity of Vickers Two-Port Balanced Piston Relief Valve is considerable less than permissible under Specification MIL-V-5523. Consequently less pressure differential is required between relief valve setting and unloading valve pressure.



Curve showing extremely low internal leakage of Vickers Two-Port Balanced Piston Relief Valve.

These VICKERS RELIEF VALVES

TWO PORT • BALANCED PISTON

Conform to Specification MIL-V-5523

The Vickers Two-Port Balanced Piston Relief Valves illustrated here conform to Specification MIL-V-5523. Their rated capacities (2, 5 and 9 gpm) are greater than required by this Specification (1.5, 3.5 and 6 gpm respectively).

The curves at the left illustrate two important characteristics of these valves: (1) very low pressure variation from cracking point to maximum rated capacity, and (2) extremely low internal leakage (less than required by Specification MIL-V-5523). Smoother operation and greater accuracy throughout a wide range of pressure adjustment are other significant advantages. Operating pressure range is adjustable from 500 to 4500 psi without parts change.

These valves are also available in four-port models and can be provided with a vent control for unloading the system pressure. For further information about the complete line of Vickers Balanced Piston Relief Valves write for new Bulletin A-5204.

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6223

ENGINEERS AND BUILDERS OF OIL HYDRAULIC EQUIPMENT SINCE 1921

Wing Tips

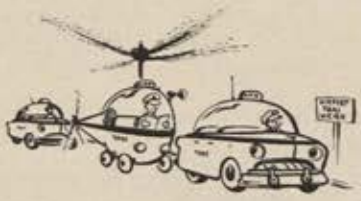
This year airline travelers will be introduced to the fastest of the conventional aircraft before the jets arrive. One will be the Super Constellation, carrying 59 persons in a plush version, or 99 tourist passengers. The other is the DC-7. Speed of the new planes will be in the neighborhood of 400 mph.

° ° °

Italy has built the world's first big jet-propelled dirigible. It is 184 feet long.

° ° °

One out of every four airline passengers who hail a taxi at New York airports in the year 1960 will be hailing a helicopter. That's how the Port of New York Authority sees it from here.



° ° °

Introduction of commercial jets may herald the return of the flying boat. Heavy jet aircraft require very long runways, complicated landing gear, and runway thickness of about two feet. And jets have a blowtorch effect on runways during takeoff. Using natural water approaches to big cities would meet the airport problem economically and provide convenient terminals.

° ° °

Since Lindbergh's 1927 solo flight to Paris, American aircraft manufacturers have produced more than 450,000 planes.

° ° °

Private pilots like to fly the Pennsylvania Turnpike's concrete beam from Pittsburgh to Harrisburg, and so many small planes have made emergency landings in bad weather along this busy highway that a landing strip is now being built alongside the road halfway between the two cities. The strip is long enough to accommodate a DC-3.

° ° °

An estimated 2,000 different items are now being carried by air freight. Air freight shipments have an average weight of between 150 and 300 pounds.

° ° °

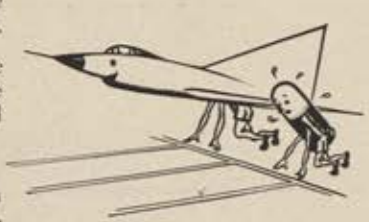
The Army is getting deliveries of the new four-passenger Helioplane, which can cruise at speeds as low as 35 mph and operate from strips as short as 100 yards.

° ° °

Airport traffic control towers at civil airports handled more than 16 million landings and takeoffs last year. Air carriers accounted for 4.7 million, military aircraft 2.8 million, and private aircraft 9.1 million.

° ° °

A new supersonic plane can fly twice as fast as a pistol bullet.



° ° °

Coach travel on the domestic airlines was up 89 percent over 1951. One quarter of all air travel in the US is now at bargain rates.

° ° °

When the jetliner Comet comes into the airport loading area, 140 feet of clear space must be maintained between the jet orifice and any other object because of the heat of the jet blast.

By Wilfred Owen

PEOPLE

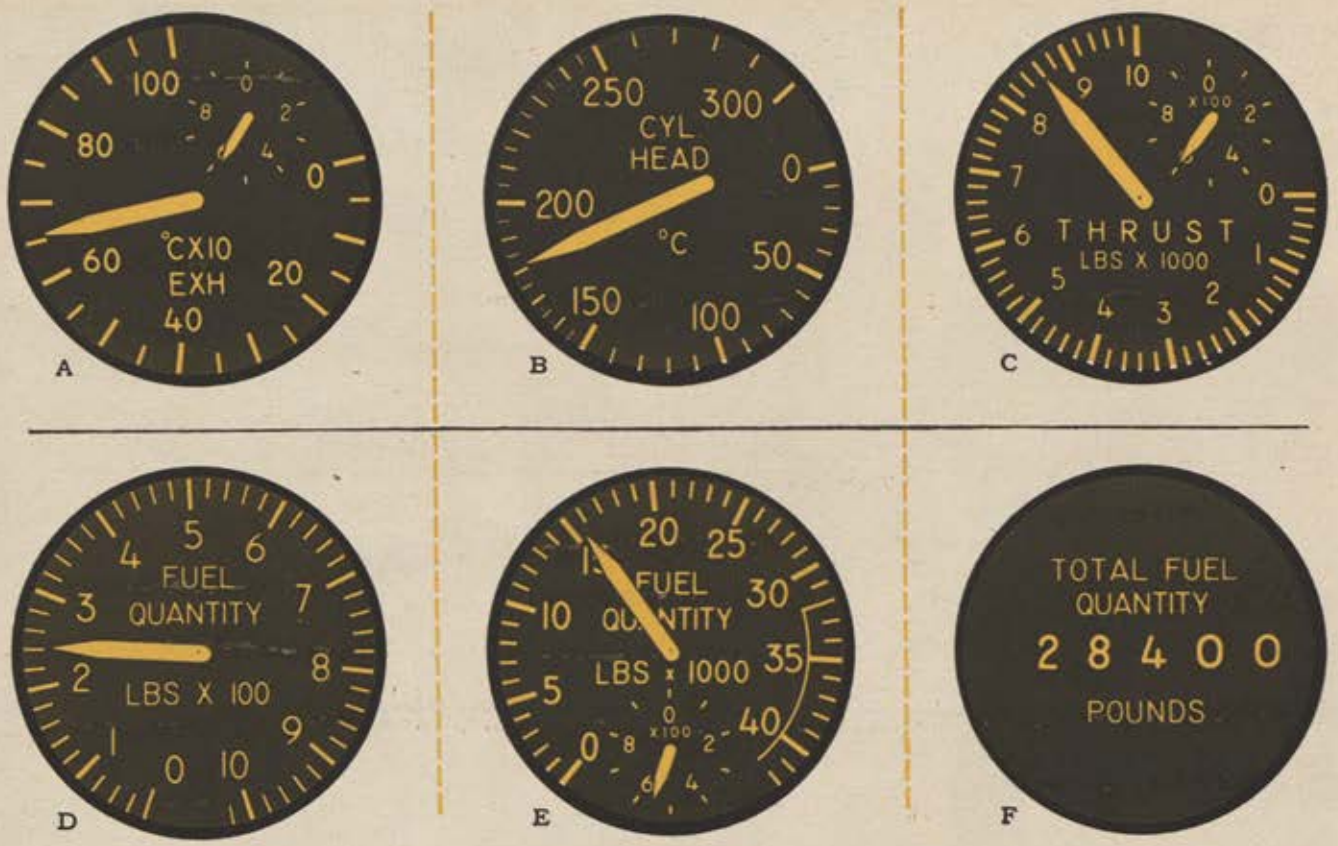
In The Air News

Capt. Dolphin Overton III, with the hottest streak ever seen in MIG Alley, made ace by bagging five MIGs in four days. He became the 24th jet ace of the Korean war on his next-to-last combat mission. Earlier he'd flown 100 missions in F-84s, then volunteered for a tour in Sabres, with the 51st F-I Wing, to "get a crack at those MIGs." His home is Andrews, S. C.

1st Lt. Harold E. Fischer, Jr., who became history's 25th jet ace January 24, the same day Captain Overton also got MIG number five. Fischer, who first scored against the MIGs last November, bagged his fourth Red jet the day before he made ace. His wife lives in North Las Vegas, Nev., and his father in Swea City, Iowa.

Maj. Richard W. Burt, Director of Operations of the Utah Wing of CAP, who climaxed an intensive ground and air search for a missing C-46 in January by spotting the wreckage of the transport on Bear River Mountain, in Idaho. Thirty-seven Korean veterans died in the crash. Burt discovered the wrecked plane on the sixth day of the search.

Lt. Col. Edwin L. Heller, one of the top fighter pilots of WW II (19½ German planes in the ETO), who is missing in action in Korea where as an F-86 pilot he had 3½ MIGs to his credit. The Red radio at Peking claims he parachuted safely and was captured. Heller, 33, of Wynnewood, Pa., got two MIGs and a promotion from major just the day before he was shot down.



Do you know this panel of experts?

These Avien gages tell an important story to pilots—and purchasing men

Remember the days of "ball and needle" instruments?

The men in today's cockpits need far more accurate gages of fuel, temperature, thrust and other quantities. Instrumentation has become a new science—a science in which Avien is a vital part.

Every month, Avien produces over 10,000 major instrument components for the aviation industry.

We'd like you to meet some of our panel members:

A—This is the Jet Tailpipe Thermometer, first of its kind to use the servo principle. Result: long scale and a gage unaffected by lead characteristics.

B—Cylinder Head Temperature Indicator. Again, first to use the servo principle for long scale and greater accuracy.

C—Jet Engine Thrustmeter that computes gross thrust from measurements of tailpipe pressures and ambient pressures.

D—One of more than fifty fuel gages made by Avien. It measures fuel quantity by weight, eliminates moving parts in fuel tank.

E—Another Avien fuel gage with a "sensitive" or vernier indicator to provide readability to 0.1% of contents.

F—This is a Counter Indicator, also readable to 0.1% of tank fuel. You can see how it tells the fuel story at a glance.

Avien has made these gages smaller, simpler, lighter, more reliable, more accurate.

It took three kinds of engineering to make them that way.

Application Engineering—that "custom-builds" gage systems to individual aircraft. Installation Engineering—that supervises and often re-engineers right at the installation stage. Field Engineering—that checks and re-checks Avien gages *in service*.

This triple-play is happening on bases all over the country. Avien equipment is now specified for over 45 military aircraft.

Avien has design imagination. It has modern facilities. It has top management and production teams.

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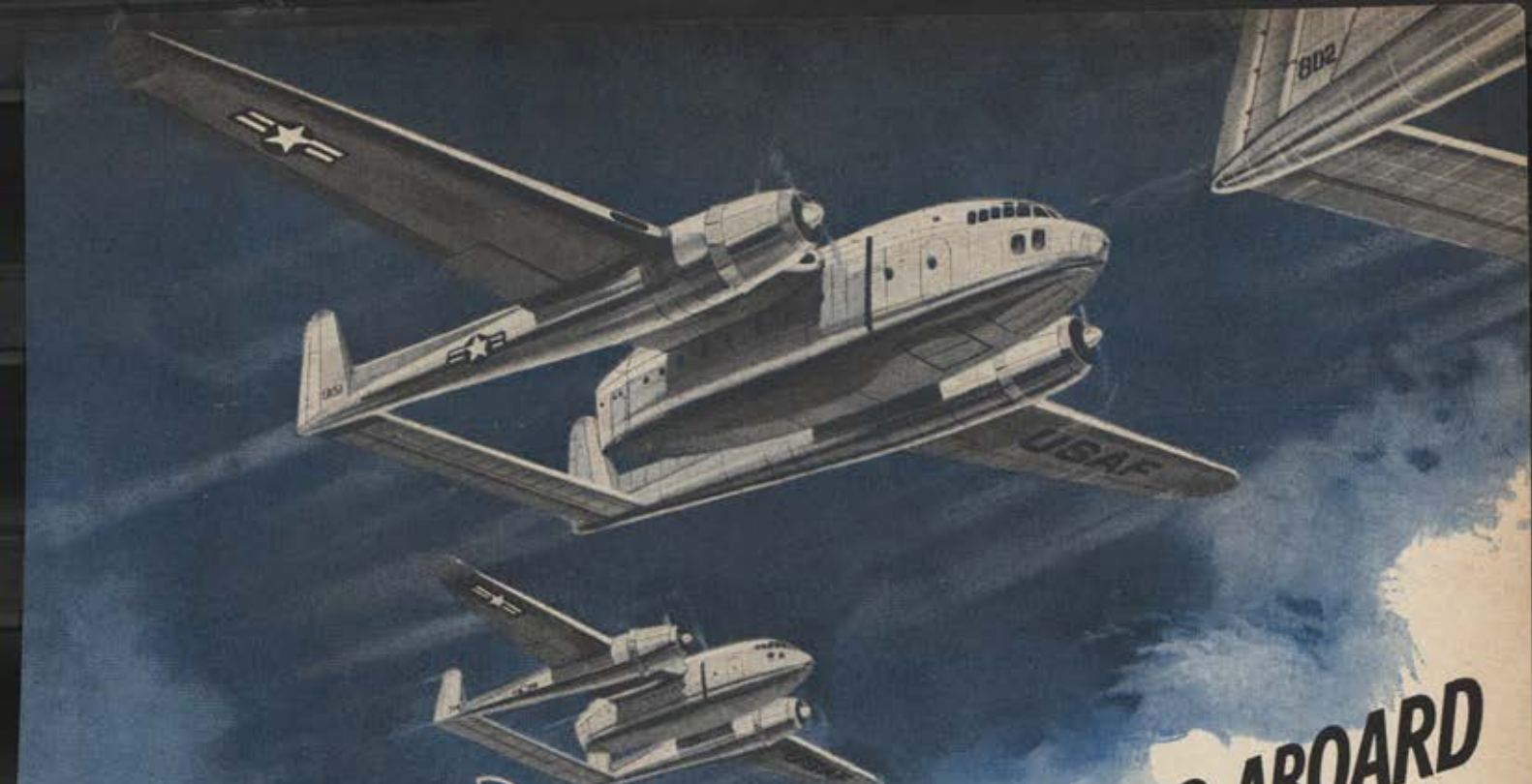
Right now the need for blood is urgent. In hospitals —at home and overseas— many men require four and six transfusions during delicate operations. And the blood *must be there*—when it's needed. So give the most precious gift of all—*your* blood!

Be assured that giving blood is neither difficult nor distressing. And what a thrill there is in knowing that you've performed a really unselfish act! So call your local American Red Cross today and make an appointment. And tell your friends and neighbors about your experience. Let them share the wonderful feeling Americans get when they roll up their sleeves—and give blood.

But—

WHAT HAPPENED TO THAT PINT OF BLOOD YOU WERE GOING TO GIVE?

Call Your American Red Cross Today!



UNSEEN HANDS ABOARD THE FAIRCHILD C-119

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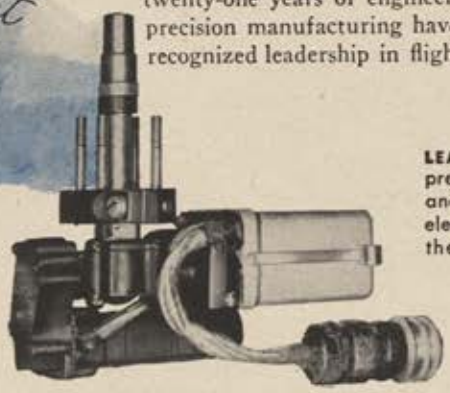
In the field of electro-mechanical actuation and controls, twenty-one years of engineering development, design, and precision manufacturing have earned for Lear a position of recognized leadership in flight control.



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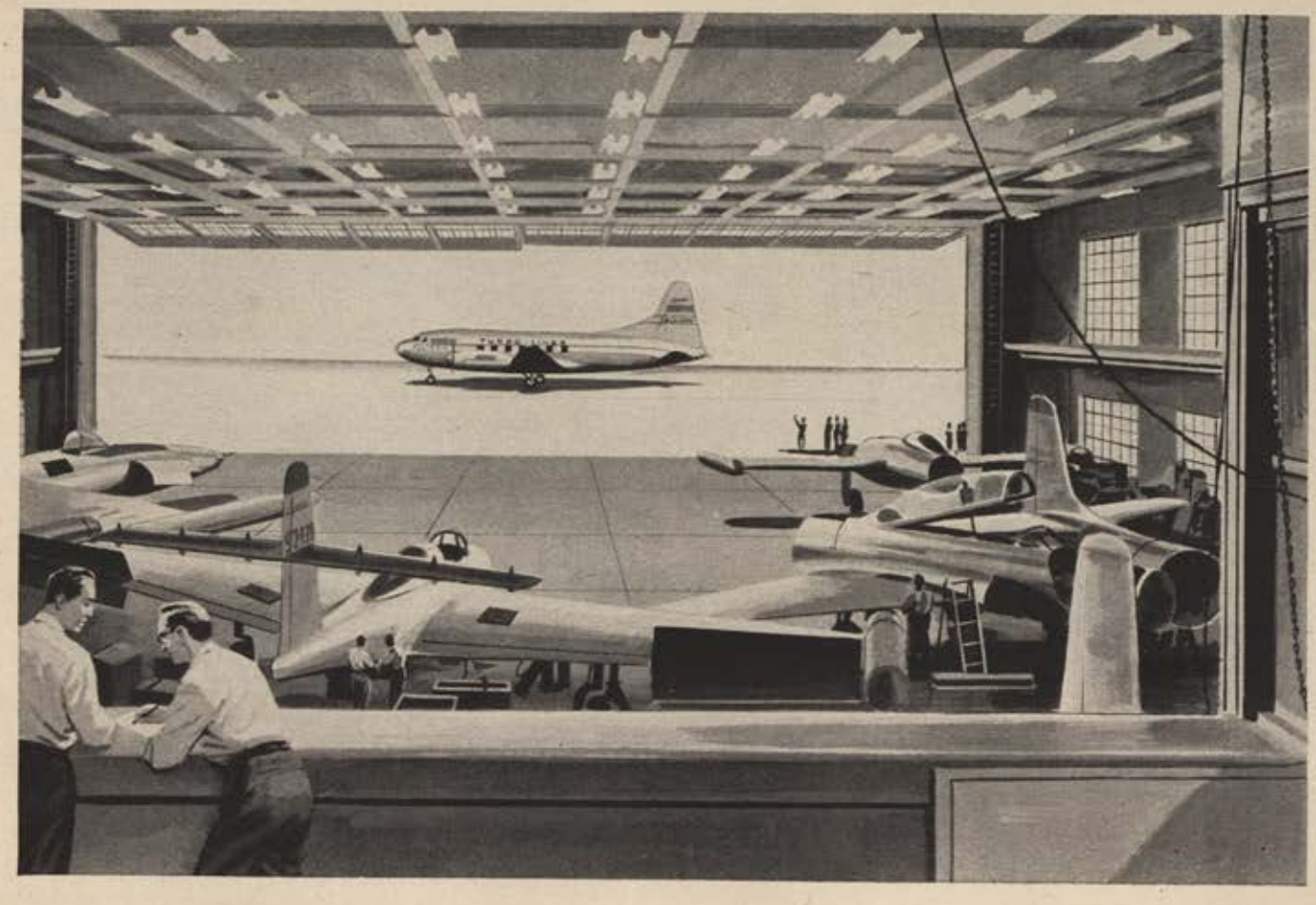
ROTARY ACTUATORS | POWER UNITS | ELECTRIC MOTORS | SCREW JACKS



We do more than build engines

Maybe you've never thought of it this way, but here at Allison we believe an aircraft engine builder's responsibility goes way beyond the product he builds. We think of our job as helping to create the kind of engine installation which will enable airplane and engine to deliver their best performance long after they have been delivered to operating activities.

That's why we have—in addition to *engine* engineers—a group of specialists whose job is to assist aircraft manufacturers in getting the most out of the jet engines we build. This group includes structural designers, aero-dynamicists, stress analysts, engineering test pilots—men with solid experience in all phases of aircraft design and construction.

Working at our flight test facility in Indianapolis, these men install our engines in flying test beds and check engine installations in finished planes. Engine control settings are worked out to fit particular airplane conditions and air intake and exhaust systems are studied to be sure of the best possible environment for the engine.

Such specialists are an important part of Allison's great engineering team, which is backed by the GM Technical Center in Detroit, and by the engineering staffs of other GM divisions.

This tremendous pool of engineering knowledge and experience helps explain the continuous improvement in the already superior performance of Allison jet engines—engines that have flown more hours in the air than any other make of jets.

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Time of Decision

Bernard Baruch

The excerpts below are from a speech by Bernard M. Baruch to a graduating class of the Armed Forces Staff College. We feel the elder statesman's words are pertinent to the problems of today and will benefit our readers.

—The Editors.

FOR nearly half a century, I have been associated with members of our armed forces and in all that time have never met a so-called "military man" who was not as fervently desirous for peace as the ordinary civilian. . . .

. . . I resent—and oppose—any effort to reduce the military to secondary citizenship, as I would any effort to impose secondary citizenship on anyone because of occupation, race, color or creed. . . .

. . . This is not the time to decontrol prices and other mobilization disciplines. It is the time to decontrol politics and selfishness.

This is not the time to scuttle and run. It is the time to stand fast and see the struggle for peace through.

This is not the time to try to evade the fair share of the burden which each of us should bear. It is the time to make a real effort— which has not yet been tried —to distribute the burdens of the cold war and of Korea fairly. . . .

. . . It is one of the marvels of American history that our armed forces have never failed us in time of war, considering how we treat them in time of peace. . . .

. . . In ancient, primitive times, it was the practice to beat or kill a courier who brought bad news. That is somewhat the plight of the military today. It has fallen to them to warn the American people of the greater danger of war which we face. . . .

. . . In the past, we thought of peace as the normal state of affairs and war as a fitful interruption, which we rallied to overcome, and then returned to our relaxed, peacegoing ways. Today there is no peace. As far into the future as we dare look, we cannot see an end to this nightmare attrition of neither war nor peace. . . .

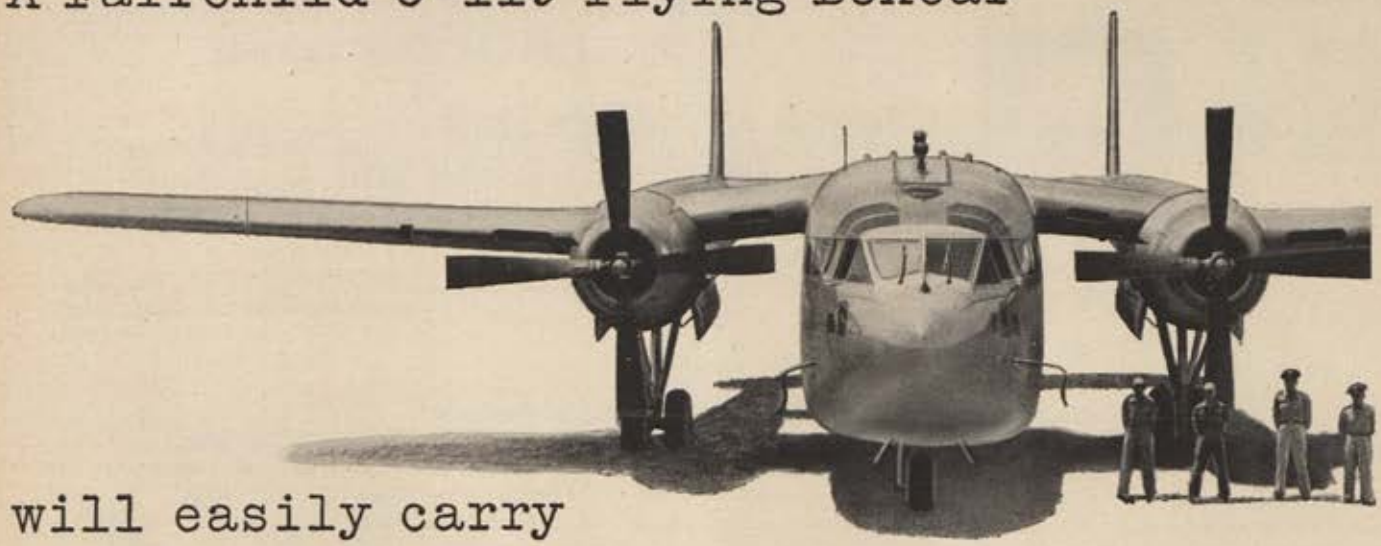
. . . Unless we are adequately armed nothing else that we undertake can avail. If we are to build a lasting peace, we must first be able to keep the peace.

It is well to remember that thus far not a single country in the world has embraced communism voluntarily. All who have succumbed have had it forced upon them at the point of a gun. . . .

. . . Those who shirk the disciplines necessary to build our defenses are the ones who imperil our liberties. . . .

. . . In our lifetime we have suffered less from our so-called "militarists" than from a civilian refusal to face up to the realities of military power.—End

A Fairchild C-119 Flying Boxcar

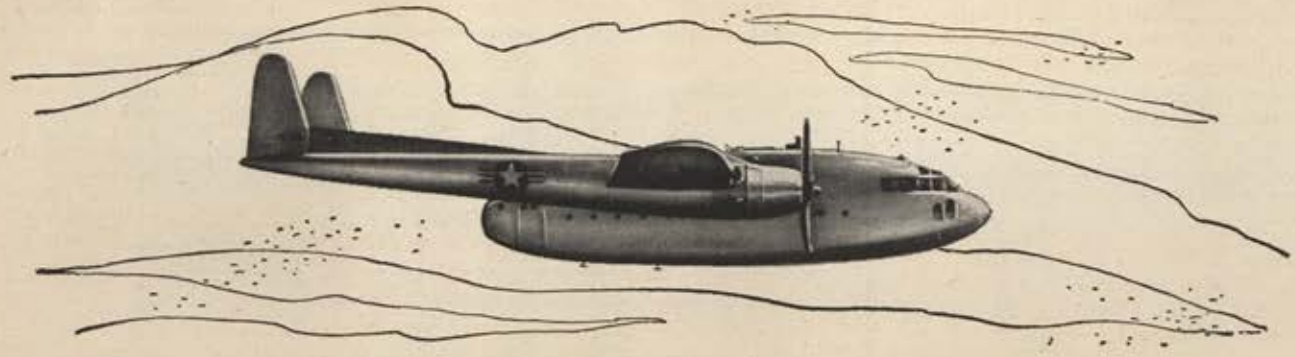


will easily carry

four 250 gallon water trailers (loaded)

plus eight supply men into forward combat

areas...and it is <u>being</u> done day after day!



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FAIRCHILD *Aircraft Division*

HAGERSTOWN, MARYLAND

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AIR FORCE

From the porter's lodge at the entrance to a Swedish underground aircraft factory workers descend by escalator to the workshop level. The factories are A-bomb-proof.

By Arne Thoren
Washington Correspondent, Stockholm "Expressen"

billion, a comparable figure for Swedish air is about $150 million. To help take up the slack, the Swedes claim to have fewer men on the ground for each flying unit than perhaps any other air force in the world.

Backbone of the Swedish air force at present is the Swedish constructed jet J-29, *Flygande Tunnan*, or "Flying Barrel." This was the first European jet with sweptback wings to be mass produced. The first Barrel was tested in September 1948, and first delivered in 1951. Already there are several wings of this type, and the entire order from the air force consists, according to unofficial figures, of more than 500 planes. The J-29 has a British engine, the de Havilland Ghost, producing about 5,000 pounds of static thrust. It is built under license in Sweden. The Swedes experimented with their own jet engine but soon discovered that it was cheaper to buy the British design.

The top speed of the Flying Barrel — so called because of its shape — is around 660 mph, which puts it up in the class with the Sabre F-86E and F-86F that control MIG Alley today.

Besides the Barrel the Swedish air force has a number of British de Havilland F.B. Mk. 50 Vampires, twin-boom, single-seat fighter. Recently deliveries began on seventy de Havilland 112 Venom all-weather jets. Until recently Sweden also had a number of propeller-driven American F-51 Mustangs but these have now been replaced by J-29s. And when the Swedish attack plane, the Lance, reaches the mass production stage it will not be long before the entire Swedish air force is jet-propelled.

The first Lance began test flights last November. It is considerably larger than the J-29 and is designed for far greater speeds, officially reported as "more than 700 mph." The Lance has a two-man crew and its electronic equipment makes it the first Swedish-built all-weather fighter. During attack flights it can carry up to a ton of bombs.

Sweden's delta, the Kite, was built for research purposes. It has an extremely low aspect ratio, and the wing actually has a planform of two triangles, a "double delta" design.

The Kite has no stabilizer but the center of gravity can be moved during flight by pumping liquid from tanks in the nose to tanks in the tail or vice versa. So far the delta

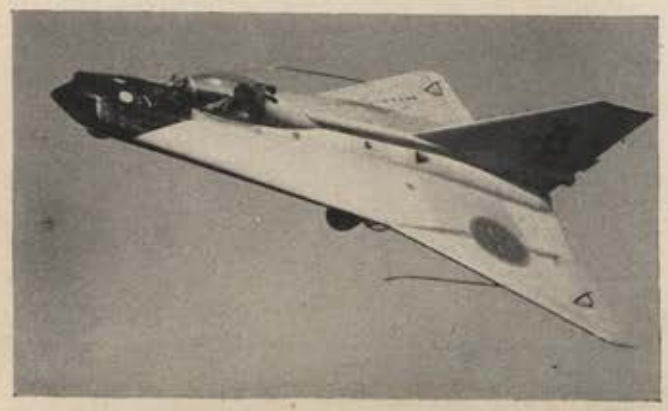
(Continued on following page)

Above, one of the underground workshops. The factories are lighted by a combination of mercury vapor and incandescent lamps. Air conditioning keeps the temperature comfortable no matter what the weather outside. Below, another inside view of the workshop.

The SAAB-18B, used for attack and recon, is the heaviest plane in the Swedish air force. It packs a 57mm cannon.

The Lance, a two-seater, all-weather jet, goes into mass production in about a year. A Rolls-Royce Avon powers it.

Sweden's first jet, above, the J-21R, was test-flown in 1947. Below, the SAAB-210 Dragon, delta research plane. It uses a drag parachute to reduce speed for landing.



has been tested only at comparatively low speeds.

Sweden's seventeen wings are divided into four groups with different areas of operation but which can be quickly concentrated within a small area against an attacker. In addition to the permanent wing bases there are a number of secret so-called "war-air-fields" *(Krigsflygfält)*, which have been constructed in peacetime but would only be used in war. They permit fast and effective shifting of the forces.

The operations of the fighter wings is completely radar-controlled. A tightly knit radar screen along the coast is supplemented by an organized air observer corps which is under the command of the air force.

The Swedish air force has been independent since 1926. The country has one of the world's largest and best air academies *(Ljungbyhed)*, where Swedish air officers are trained in a surrounding and spirit similar to the American West Point or Annapolis.

Facts and pictures regarding the wings based in underground hangars are understandably secret. In isolated instances a few of them have been shown to foreign visiting air officers, among them several high representatives of the American air command.

Not only the Swedish air force is based underground. Its jets are also built in underground factories blasted out of rock. The main factory at Linköping (there are several others at different places in the country) consists of workshops, inspection rooms, storage rooms, washrooms for the workers, two large dining rooms, space for heating and air conditioning units, water reservoirs, a reserve power plant, and transport tunnels of different kinds.

Raw materials come in through long sloping tunnels and the completed planes are brought up the same way. When larger planes are involved, the wings and fuselage are fabricated underground and assembled on the surface. Employees descend to factory areas through other tunnels. After they have passed a security control point, they ride escalators down to the workshop level. In addition there are a number of elevator shafts and emergency stairways.

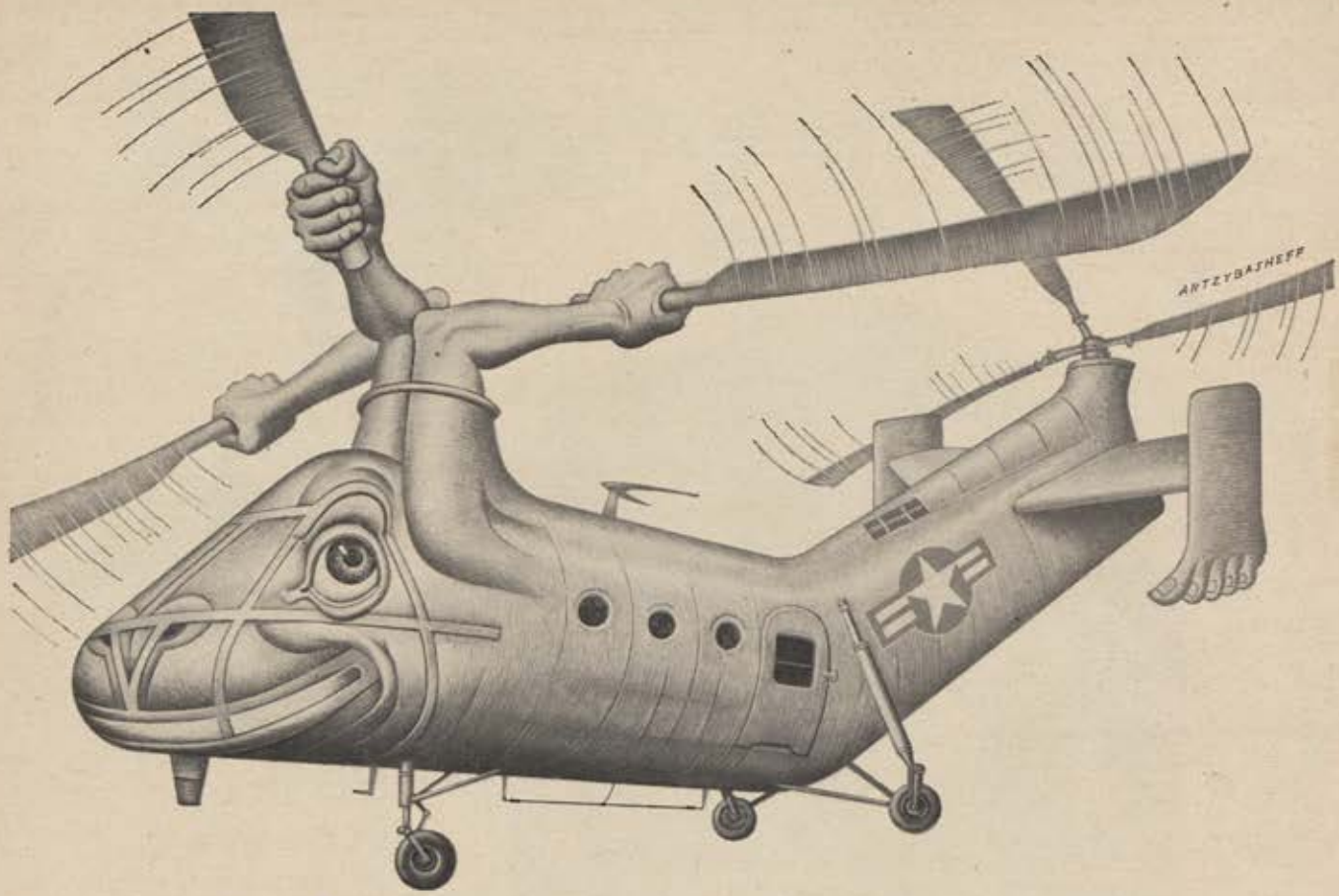
The underground plants are fully air conditioned, a rarity in Sweden. Air conditioning is needed because little of the heat generated in the factory can pass out through the concrete walls and the surrounding mountain shell. The air conditioning so functions that operations can be continued even in case of a gas attack. Then the air intake would be decreased and only enough air supplied to replace the oxygen loss. The air would pass through gas filters which have been built into the suction vents.

The employees have no idea of weather conditions "up on the earth." They can, however, keep up-to-date from multi-purpose clocks, which not only tell the time but also register the weather, the temperature, and the wind velocity.

These underground installations, planned and built during World War II, have been in continuous production ever since. The workers' health has been closely studied and compared with reports from above-ground factories. It has been found that those who work underground feel as well or better than their "above ground" colleagues.

The Swedish air force daily becomes stronger and better prepared. Last summer when Swedish planes were shot down over the Baltic, the government's answer to the unfounded accusation that Swedish planes had violated Russian territory and fired on Russian planes stated that the Swedish air force is determined to continue to fly over free waters and that they intend, if necessary to defend this right with force.

The Western world should take satisfaction from the fact that the Swedish bastion in the east—even if it is not officially on the NATO team and its commanders do not sit at the Western conference tables—is still fully prepared to defend its freedom and its independence.—END



How a helicopter hangs by its "elbows"

Straight up, straight down, forwards, backwards, or just hovering—the Piasecki "Work Horse" Helicopter's peculiar flying maneuverability rests in its rotor assemblies. It is these flexible "elbows" that adjust the pitch of the 'copter's great blades. Each unit involves more than 625 separate parts. To machine and assemble them, Piasecki depends on Lycoming for precision production.

Lycoming stands ready to assist you whether you have a metal product that needs speedy precision or volume fabrication—or "just an idea" in the rough or blueprint stage. Long famous for its metal-working skill, Lycoming continues to meet the most exacting requirements in a wide diversity of fields, both industrial and military. *Whatever* your problem—look to Lycoming!

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LOOK TO LYCOMING FOR RESEARCH FOR PRECISION PRODUCTION

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AVCO MANUFACTURING CORPORATION

For flexible "elbows" —rotor assemblies that control the maneuvers of its H-21 Helicopter—Piasecki looks to Lycoming's precision production

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Please send me further information on Lycoming's varied abilities and facilities.

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Most ANG jets, like this F-84, stayed on active duty.

THE AIR GUARD'S COMING BACK

With most wings being released, the problem now is to rebuild the ANG, starting almost from scratch

By Col. Willard W. Millikan, ANGUS

A FRIEND of mine recently built a house. He put a lot of his own sweat and toil into it. To my wife and me, who live in an apartment, it seemed just about perfect and we told him so.

"Sure," he replied. "We like it fine. But if I had it to do over again I'd make some changes."

I thought of that in writing this article. Seven years ago the Air National Guard was created out of Air Force veterans and surplus airplanes. Today we are in the position of "having it to do over again." Maybe we can come up with some improvements.

After twenty-one months on active duty, twenty-two of the ANG's twenty-seven wings are, or soon will be, back home. USAF kept our airplanes, and many of our officers and airmen have volunteered to remain on active duty. So most of the returning wings are starting again almost from scratch.

This is our chance to look back on our experiences, to re-examine the program and avoid past mistakes.

Present plans approved by USAF call for an ANG composed of twenty-seven wings – eighty-five squadrons – plus thirty-four other units of tactical control, engineer aviation, and communications. Aircraft control and warning squadrons, part of the pre-Korea ANG, are now manned full time by the Air Defense Command and not by the ANG.

In rebuilding the ANG, one of our foundation stones must be the confidence and support of officers and airmen in the active duty Air Force, not just at the top but at every echelon. Prejudice on either side is a luxury neither of us can afford. The ANG is dependent on USAF for its materiel and instruction. In return it develops and maintains an organization ready to join USAF elements in combat in time of war or national emergency.

The first obstacle immediately ahead is the shortage of airplanes to equip ANG units. We took with us on active duty more than 2,000 airplanes. Sixteen ANG wings had jets – F-80s and F-84s. All but a handful of those planes stayed on active duty.

To keep up an adequate reserve of fighter planes in Korea and Japan, USAF has stripped many of its squadrons in the states and has cut back its allocations to NATO countries. It's a cinch the majority of new planes will go to existing and potential hot spots overseas and to rebuild strength of regular squadrons. After that – possibly not in this order – come NATO, the ANG, and the Reserve.

Short of a truce in Korea and a general lessening of tension elsewhere, the only logical alternative is to speed up production. But that doesn't appear to be in the cards now.

Another tough problem: Where will we get our pilots?

Before we were called to active duty, pilots weren't hard to find. But two years have passed – two years in which USAF has recalled a lot of pilots. Those who don't plan to stay on active duty not only are two years older but we're kidding ourselves if we expect any appreciable number to rejoin active reserve forces units. We can look for some youngsters, graduates of postwar cadet classes released after three-year tours, but postwar classes graduated only a trickle.

The ANG answer to the pilot shortage is to recruit its own aviation cadets, send them to USAF's pilot training schools, and get them back into ANG units. Regulations providing for this are now in effect.

With all due regard for improvements in pilot training, we'll have to work harder with our new pilots than we did with our combat veterans. Flying safety and training discipline must be strict, with plenty of time concentrated on combat tactics.

Our whole operational training program needs tightening. My pilots found when they went on active duty that, though they had logged instrument requirements every quarter, they were below USAF standards in instrument flying. As soon as we entered on active duty we did a lot of brushing up *fast* on GCA and on operating under minimum conditions.

I promise that my wing is going to be proficient in instruments when we get the equipment to go operational, and I strongly recommend that other

(Continued on following page)

Col. W. W. Millikan

ABOUT THE AUTHOR

Colonel Millikan is 34, an Iowan who joined the Air Force as an aviation cadet in 1940, washed out and switched next day to the RAF to complete his pilot training. He served with the Eagle Squadron, transferring to the USAAF when the United States entered the war. Credited with 15 kills, he was taken prisoner in 1944 when his wingman collided with him over Germany. In February 1951 he was recalled as a squadron commander, was soon elevated to fighter group commander at Otis AFB, Mass. He was released in October 1952 to reorganize and command the ANG's 113th Fighter-Bomber Wing. In civilian life, Colonel Millikan is Washington representative for Goodyear's Aircraft Products division.

ANG wings put this requirement high in training priorities. In fact – and in this I'm sure I speak for all ANG commanders – we urge that USAF tactical commands supervising ANG training insist on the same instrument standards for the ANG that they apply to their own units.

The same holds true throughout our training. Man for man, apart from SAC's hand-picked personnel, I'd rate the ANG's skill level perhaps a little higher than that of our counterparts on active duty. USAF's personnel turnover is greater than ours. About thirty percent of USAF personnel are tied up in pipelines while ours are almost 100 percent available for duty. And the high percentage of veterans in our ranks raises our experience level above that of the average USAF unit. But our men are civilians, keeping up their military careers on their spare time. It's easy to slip on professional standards unless USAF keeps us jacked up.

We look to USAF to keep us up to date on latest developments in operating procedures, and for frequent inspection to recommend means for us to overcome our deficiencies.

USAF has the authority and the responsibility to enforce our adherence to its standards. If ANG commanders are unable to develop and maintain those standards, it's up to USAF to direct that they be replaced. If USAF "overlooks" Guard shortcomings, we will be the victims – we and the people who depend on us to help defend them.

The fact that many responsible USAF personnel have permitted relaxed standards among ANG units in the past indicates to me that they are not really aware of the ANG mission.

The ANG is part of the "Ready Reserve," to be available for combat in an emergency. We are not part of the active duty USAF. But our assigned role doesn't differ too much from that of USAF combat units.

The peacetime mission of USAF combat squadrons is one of training and preparing itself for readiness in an emergency. It, too, is a "Ready Reserve." Its significant difference is that it can be based at strategic points outside the US and its possessions, which ANG units cannot.

USAF leaders saw it that way in the period before the Korean war. In the spring of 1950, units of the ANG comprised seventy-five percent of the fighter strength available for defense of the US. Relying largely on the ANG to hold the line at home, USAF deployed its fighter squadrons in Europe, Alaska, the Caribbean, and the Far East in support of our international commitments.

The soundness of this concept was proved in Korea when the USAF was able to launch fighter operations from Japan on the day the North Koreans struck and intensify those operations without letup. If those squadrons had been based in the US it would have taken days for them to reach bases in the Far East, and weeks before support echelons and supplies could have been brought in to maintain full scale operations. And, by withdrawing them from the US, our defense against air attack might have been fatally weakened.

Gen. Nathan F. Twining, USAF Vice Chief of Staff, underlined this point in stating: "The contribution of the Air National Guard to the Air Force since Korea has been essential to the degree of success the Air Force has met in its global commitments."

We feel that the ANG is not a second line of defense but that, properly equipped and trained, it is capable of fulfilling a first line mission in air defense of the US.

In addition to air defense assignments, ANG's plans include designation of a few wings, including the one I command, as fighter-bomber wings. We are earmarked for support of National Guard ground forces and our recall to duty would be geared to theirs. In the meantime, however, these wings are also to be equipped and trained for emergency air defense missions at home.

During my recent active duty tour, I found that USAF personnel asked many questions about the ANG which need answering.

Here are some of them. How can the ANG work effectively since it's under state control and limited by state boundaries? What about politics in the ANG? And those fast ANG promotions? Why not combine the ANG with the Air Reserve? Why should USAF give up planes that the ANG flies only on weekends?

These questions deserve straight answers. Let's take them one by one.

State control and state boundaries. They're no bar to ANG operations. If ADC directs an intercept exercise in the Middle Atlantic states, its 26th Air Division issues operational orders to appropriate ANG wing commanders. They in turn order their squadrons throughout those states to participate. No state adjutant general is in this chain of command.

In brief, USAF directs tactical employment of ANG units, while the state AG handles the paperwork connected with ANG people and materiel.

Local ANG unit commanders may conduct operational missions on their own initiative, or at request of the

(Continued on page 42)

Sharpshooting guardsmen tally their scores on the target sleeve after a successful afternoon's training in air-to-air gunnery.

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state, but these missions follow SOPs from the appropriate USAF command and further the unit's operational training objectives.

The National Guard engages in politics. Regrettably true. Efforts to weaken the Guard have occurred time and again in our history. But from Washington's time to the present, it has been a fundamental American principle that we won't maintain a large peacetime force.

The Constitution reserves "to the states, respectively, the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress." The National Guard has often been forced into politics to maintain this principle.

We're charged with playing politics, too, on appointment of officers, particularly unit commanders. Again, true. But in my active duty tours I have seen politicking by USAF officers for specific duty assignments, and I've seen the same in the business world. Politics is a necessary means in our society to assure that an individual under consideration has not only the basic qualifications but also an enthusiasm for the job and is likely to work harmoniously with others.

The ANG's twenty-seven wing commanders have been selected from a pool of qualified USAF officers on inactive duty that probably numbers in the thousands. But the important question is not how a man was selected but what are his qualifications? No ANG officer, from second lieutenant to general, can draw pay and be eligible to accompany his unit on active duty until USAF approves his qualifications and he is granted Federal recognition.

State governments may appoint or promote individuals in the state national guard without USAF approval, but they cannot be paid from Federal funds or enter on active duty. One simple check is this—only a federally-recognized ANG officer is authorized to use the letters "ANGUS" after his grade. The "US" means that USAF rates his qualifications equal to those of officers of his grade on active duty.

Those fast ANG promotions. Promotions have come more rapidly to some in the ANG than to others, but the proportion is no different than in USAF. For every lucky ANG officer there are others who have actually accepted grade demotions to belong to the ANG. Unlike USAF, we can't fill an ANG slot with an officer of a higher grade than is provided in the T/O.

Besides, a new regulation requires ANG officers to meet the same time-in-grade provisions required or *permanent* promotion of regular USAF officers. We believe this is unfair for it gives ANG nothing comparable to active duty temporary promotions. Many of our returning officers who would have been eligible for early USAF promotion on active duty must now wait years to become eligible.

Why not combine ANG and Air Reserve? There are many practical reasons to retain both, as the Congress has many times reaffirmed. USAF itself should appreciate at least one. Unlike the air reserve budget, funds for the ANG are not lumped in with those of USAF. In time of budget cuts, USAF has often diverted reserve funds to the regular establishment. But, while it has considerable jurisdiction over how ANG funds will be employed, it cannot divert those funds from ANG uses.

How does this benefit USAF? In hard times for USAF, as in 1949 and early 1950, the ANG can, more than ever, help plug the gaps in our essential air defense.

What happens to air reserve activity when the USAF budget is cut was illustrated in that period of 1949-50. Though its original budget contained an appropriation for reserve activities larger than that for the ANG, the Air Force actually spent less than a third of that amount on its Reserve, and many reserve training units were eliminated. In contrast, ANG's full appropriation went into its expansion program with the result that it was at peak strength when the fireworks started in Korea.

The ANG also benefits from some appropriations by state legislatures. Many ANG units are based on state-owned property and housed in state-owned hangars, facilities developed at little cost to USAF but important to USAF's combat effectiveness.

Does ANG use its airplanes effectively? Anyone who calls an ANG pilot a "weekend flier" is, frankly, unaware of the facts. My facts are pre-Korea since we have few airplanes to fly now, but the old figures are impressive.

Take the number of airplanes and pilots assigned to an ANG squadron, add in the time required for flying safety meetings, briefings, keeping up with tech orders and other regulations, subtract aircraft normally out of commission, and you'll find that ANG pilots can't even theoretically compile their 60-2 requirements by flying only scheduled ANG drills.

At a cost to the taxpayer of less than one-seventh that of a pilot on active duty (we get no subsistence or rental allowance) the ANG pilot maintains the same minimum flying proficiency as a regular.

The 121st Fighter Squadron of the D.C. ANG was equipped with F-84Bs and Cs just before we went on active duty. Any maintenance officer will agree that those models were tough to keep in commission, but still our squadron averaged 300 jet hours a month; in one month—not during our summer camp—we hit 600 hours.

There may be other points of misunderstanding about the ANG that I haven't touched on here. If so, I'd like to know what they are and I promise a direct reply. Better still, I suggest you talk with any member of the ANG, on or off active duty, and satisfy yourself at first hand that the ANG is working toward the same objective you are—to help build airpower strong enough to deter war and capable of swift, sure retaliation if war should be forced upon us.—END

Guardsmen on active duty install a camera mount in the nose of an RF-80, one of the planes belonging to the 117th Tactical Recon Wing, the first USAF recon outfit to be assigned to Europe.

A sleepless night in the making for the Red aggressors. Silhouetted against the setting sun in Korea, crewmen of this B-26 light bomber of the 3d Bomb Wing prepare their airplane for another assault against Communist military targets.

SHOOTING WAR

B-29 aerial gunners never know when they'll have to use their .50 calibers in the night air war over North Korean targets, and it pays to have the twin fifties ready for whatever happens.

The men on the Korean flight line are like the postman who works through rain, snow, sleet, and hail. And keeping the F-86s ready for combat is a round-the-clock job, especially during the bitter Korean winter. Nobody knows that better than A/3C Edward J. Gallagher from Detroit, a crew chief with the 51st F-I Wing.

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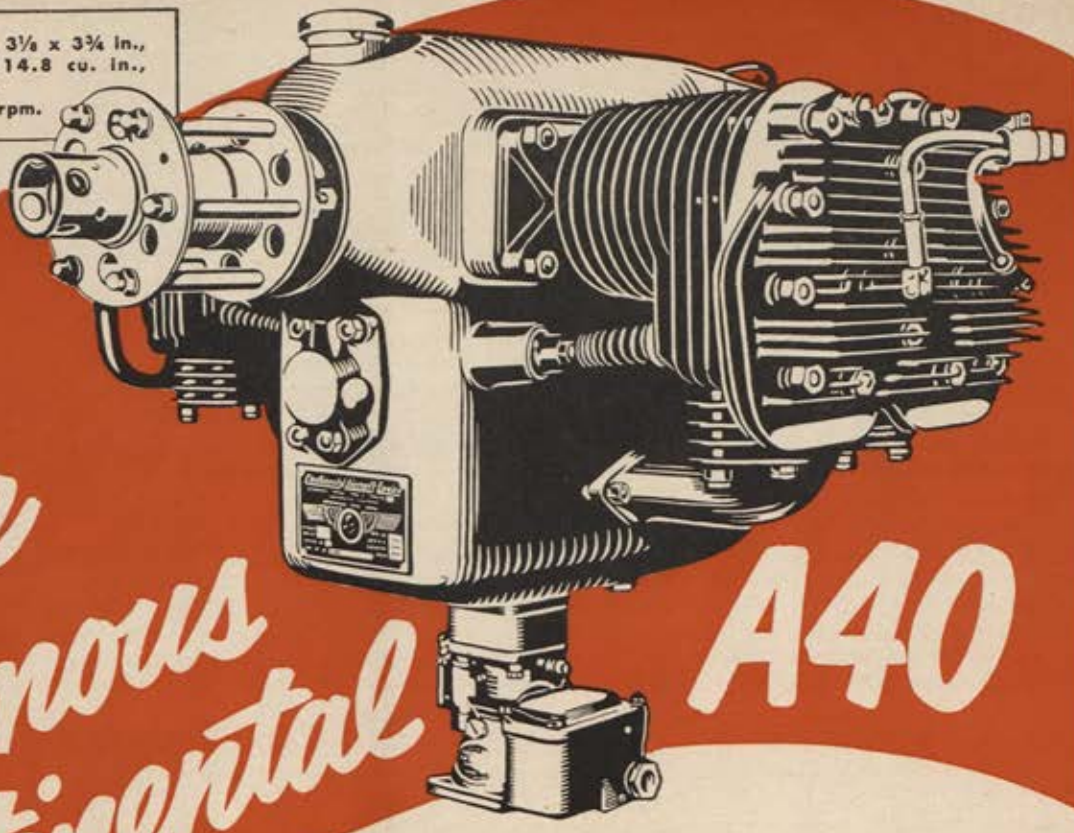

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Nineteen fifty-three, golden anniversary of Kitty Hawk, is a fitting time to take note of factors which have furthered man's conquest of the air . . . High in any list of such factors, of course, is Continental Motors' introduction of the famous A40 power plant, pioneer precision-built aircraft engine of moderate price. It is doubtful if any other single development since the Wright Brothers' first powered flight has done so much to put the world on wings . . . It is a tribute to Continental engineering and workmanship, that so many of these old-timers are still in service, and also that their fine successors, listed at left, are first choice for the general use aircraft of today.

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F-84 Thunderjets of the 474th Fighter-Bomber Wing roar off with a full load of bombs earmarked for Communist targets up North. The versatile 84s also fly close air support for UN ground operations.

IN KOREA

No let-up for airmen in the Far East, and no respite for the Reds

Of course it rains the day you hit Korea again after a five-day rest leave in Japan. These fighting men are unloading from one of the huge C-124 Globemasters of the Combat Cargo Command that are in daily use on the Korean airlift. They carry up to 200 passengers or 25 tons of supplies and equipment.

Close call for a B-26 crew. Lt. Thomas Semans, the pilot, hugs a 500-pounder that didn't explode when he made a wheels-up landing after being damaged by flak. His crew members share his affection for the bomb.

An F-86 of the 4th Fighter-Interceptor Wing gets a shot of 300-degree heat. During the Korean winter, ground crewmen with the Sabre-jet outfit continually battle the weather to keep the jets flying. Here they use a portable unit to heat both the engine and the outside of the aircraft, which must be kept free from ice.


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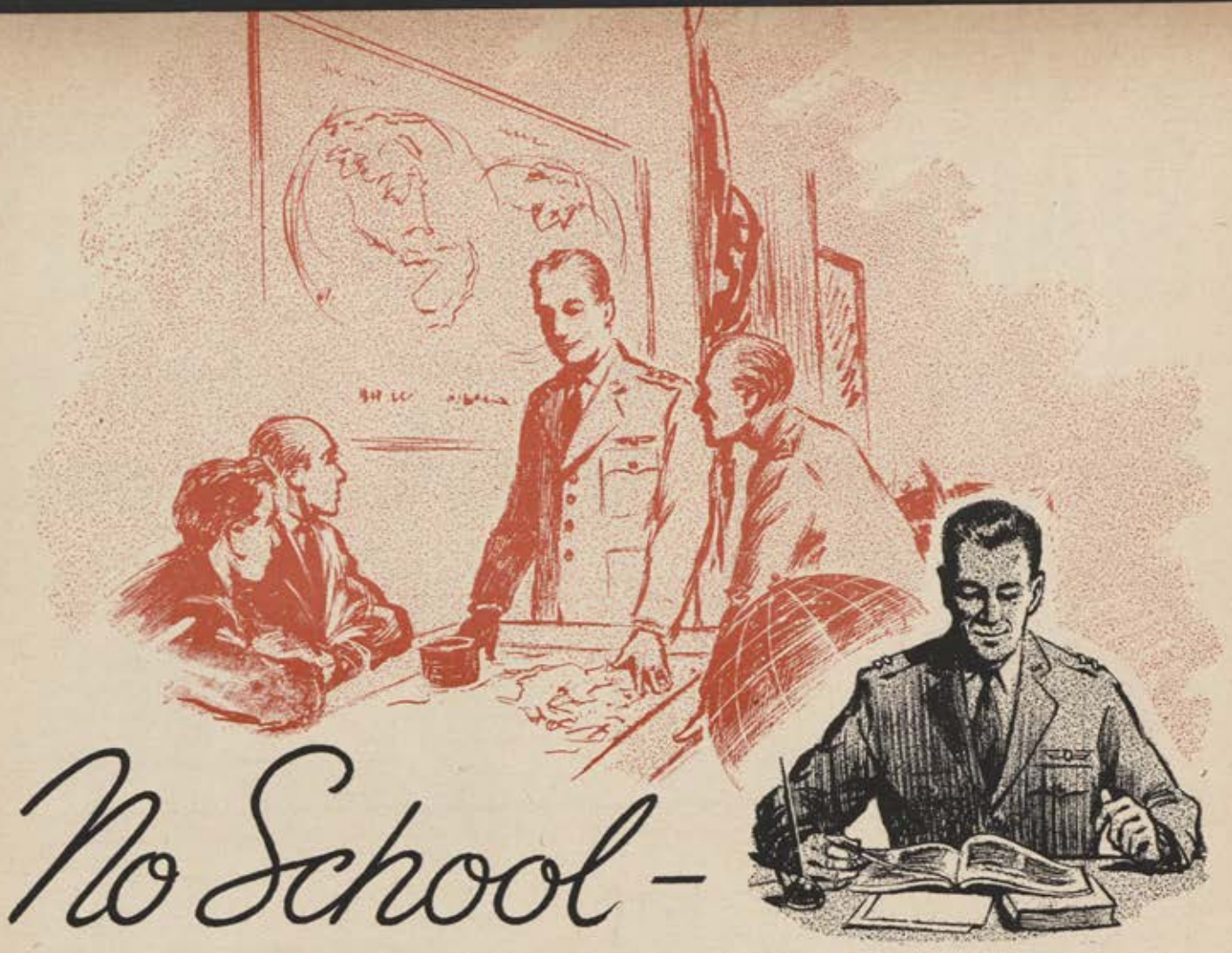


No School — NO PROMOTIONS

Here's a plan to whip the AF's educational deficits by gearing an officer's progress to schooling

By Lt. Col. Wendell A. Hammer

WHY, OF ALL the capable young officers in the Air Force, did they send that lieutenant to the Squadron Officer Course? What chance have I to get to the Air War College? How can four thousand graduates of the Field Officer Course perform duties calling for fifteen thousand?

These are questions which touch the career of practically every officer of the Air Force. Simply phrased the problem is — which officers should receive instruction in the general service courses of the Air Force?

That the problem is important to each of us is supported by cold fact. For under present eligibility criteria and student quotas, assuming an Air Force of the same size as at present, not more than one in seven of us who become eligible during the next twenty years will attend the Squadron Officer Course; not more than one in three, the Field Officer Course; and not more than one in eight will reach the Air War College. And, under existing selection procedures, luck and expediency primarily determine who these will be.

That the problem concerns the Air Force planner is buttressed by equally bleak fact. According to a recent study, an Air Force of the present size needs at any given time approximately 80,000, 15,000, and 2,125 graduates, respectively, of the three courses or their correspondence course equivalents (offered by the USAF Extension Course Institute). When this need is balanced against the foreseeable student output, it becomes apparent that the Air Force will be continuously short in graduates by some 65,000, 10,000, and 1,500, respectively.

To correct this situation I would require an officer to complete the Squadron Officer resident or correspondence course before promotion to the permanent or temporary, reserve or regular, grade of major; make completion of either Field Officer course, a similar prerequisite for colonel; and the Air War College or Senior Officer correspondence course for brigadier general.

The powerful motivation exerted by the promotion system would, without doubt, erase the Air Force's educational deficits in short order. It would also provide for an obligation which our officer corps has thus far failed to accept.

Practically every responsible professional group, including the officer corps of the Navy, makes educational advancement either a tacit or explicit condition to advancement in the profession. For us to refuse to do so simply reflects our professional immaturity, if not irresponsibility.

This proposal, furthermore, would permit the general service courses to function as they were originally intended — as a coordinated program

(Continued on page 49)

STARTLING FACTS ABOUT GILFILLAN GCA RADAR

A Gilfillan GCA Radar now costs less than $375,000. But one Gilfillan GCA Radar on Iwo Jima alone, saved *100 B-29 aircraft,* valued, even at that time, at $600,000 each—a total of $60,000,000.

One Gilfillan GCA Radar in the Azores, during a period of 6 hours, saved *three C54s, seven C47s, and two B-25 aircraft.*

On the Berlin Airlift one Gilfillan GCA Radar landed *54,000 aircraft* during a ten-month period.

Eight civilian GCA Radars in the United States are officially credited by the CAA with saves of *77 aircraft under extreme emergency conditions.*

The 14 U.S. and foreign airlines operating through Gander, Newfoundland have, by mutual decision, selected Gilfillan GCA Radar as the exclusive navigational aid. This Gilfillan GCA Radar has a perfect record of 14,000 safe landings.

Gilfillan GCA Radar equipment is used in landing *2,000 planes every day* around the world.

Even these few examples, taken from a phenomenal record of more than 3 million Gilfillan GCA landings, make one fact unmistakable: the value

of safely landed aircraft *alone* completely overshadows the original Gilfillan GCA Radar cost.

To this must be added the incalculable value of human lives, of international good will, of increased public acceptance of air travel.

Gilfillan GCA Radar is the official landing aid of the U.S. Air Force, the U.S. Navy, the U.S. Marine Corps and the air forces of Australia, Belgium, Canada, Denmark, Great Britain, Italy, Netherlands, Norway, Portugal and South Africa.

Only Gilfillan GCA Radar is standard equipment among 24 nations of the free world.

In GCA and Radar Research,
Design and Production—the FIRST name is...

Gilfillan GCA Los Angeles

geared to the officer's progress through the increasing responsibilities of his career. To the extent that these courses enable him to meet these responsibilities more successfully—and such is their sole defensible justification to Congress and to the taxpayer—every officer should participate.

True, objections to this proposal come readily to mind. How, for instance, would officers be selected for the resident courses? Would those who have the intelligence and initiative to complete the correspondence courses early be given preferential consideration? Or would the laggard be favored? Any reasonably sophisticated officer knows that in practice one or the other would be favored. If it were the laggard — and some have actually advocated such under our present selection procedures—the advantages of the proposal would disappear in the resulting chaos. This objection obviously cannot be ignored. How I would meet it will be explained later.

Other objections do not stand up so well under close scrutiny. The charge that educational advancement is not a valid criterion for promotion is blunted by its acceptance by other professions, and by our discouraging search for more satisfactory promotion criteria.

The assertion that many officers do not have time for the correspondence study involved, and that the hard workers would thus suffer in promotions pales to an absurdity when the duty assignments of present correspondence enrollees are reviewed. Sixty percent are on active duty, more than a third of these are regulars, and the percentage of overseas personnel enrolled, including those in Korea, is higher than the percentage of stateside personnel. Among these, moreover, are a substantial number of officers in especially exacting and time-consuming assignments.

Some say this proposal would lead to wasteful duplications because an officer might complete both the resident course and its paralleling correspondence course. However each course would supplement rather than duplicate the other. Each has intrinsic advantages which make it a basically distinct educational program. The resident course features group association, direct instructor contacts, and instructional aids. The correspondence course features study within an actual operational situation and flexibility to match the student's best learning pace. Furthermore, the relatively short resident courses must now devote a great deal of their time to orienting and providing basic information to their students. If their students had completed a common correspondence course, the school's job would be simplified.

Actually, some duplication need not be wasteful, for the resulting expansion in the correspondence courses would cost little. Officers enrolled would remain at their assigned duties. And repetition is a time-honored and effective learning technique.

The very human desire for promotion would insure that the long-range educational requirements of the Air Force and the professional educational obligations of its officer corps will be met. But what other considerations must govern who should receive instruction in the general service courses? Certainly a good selection system should:

Insure that officers who attend the resident courses are capable of benefitting the Air Force from their instruction. Selection procedures which permit operational misfits, quota fillers, perpetual school-goers, and similar parasites in these courses cannot be longer tolerated.

Insure full use of both the resident and correspondence educational resources of the Air Force. While resident course quotas are probably as large as conditions will permit, correspondence enrollments could be multiplied at not appreciable added cost.

Meet the educational needs of the Reserve and Air National Guard, as well as of the Regular Air Force.

Be adaptable to combat and operational requirements of the Air Force.

Be realistic and workable in the face of monetary and manpower restrictions, not geared to artificial or irrelevant standards, and easily understood and administered.

Be fair—non-discriminatory among officers of like potential value to the Air Force.

Be flexible enough to allow commanders reasonable freedom of choice in filling student quotas, to adjust to sudden increases or decreases in resident course quotas; and to allow substantial changes or modificatons in the resident courses.

Encourage individual initiative.

In this light it is clear that: Every officer should be given the educational foundation provided by the general service courses as he progresses through his career; furthermore, the officer who is capable of benefitting most from such instruction should be afforded an opportunity to build upon this foundation.

This conclusion is, of course, only a partial solution. The pay-off lies in how it is to be carried out. This is equally clear and simple.

Age, grade, promotion-list, and other eligibility requirements now in effect could be retained; we have already noted how promotion procedures would be incorporated; and students could be selected for the resident courses as follows:

When an officer completes a correspondence course, a percentile score indicating his relative standing among all other graduates during a given period of time would be entered on his Form 66. That is, if thirtieth in a class of three hundred, his score would be 90; if eightieth, his score would be 66.7.

Headquarters USAF, as now, would assign student quotas to the respective commands. These quotas, however, would be based on the relative number of eligible officers within the command who have paralleling correspondence course scores above a given figure, say fifty.

Separate boards of senior officers at each command would nominate officers to fill its quota, plus alternates, for each of the three resident courses (and paralleling non-Air Force schools). Each board would consider only those officers whose correspondence course scores meet the standard fixed by Headquarters USAF. For instance, the command quota for the resident Squadron Officer Course might be thirty-five. If the number of eligible officers whose scores for the Squadron Officer Correspondence Course were above the cut-off mark of fifty were ninety-six, the board would consider all factors, including effectiveness reports, pertaining to these ninety-six. It then would name enough to fill the quota and alternate slots.

The commanding general would review these selections in the light of command circumstances and make final nominations to Headquarters USAF. Thus, every officer who attends a resident course will, by his record, have demonstrated his value to the Air Force, and have proved his ability to benefit from such instruction.

This procedure would begin three years from the date of its approval. This would permit each officer to complete the correspondence course appropriate to his grade and requisite to his promotional needs.

This is my solution. You may not agree. But one thing is clear. The interests of each individual officer of the officer corps as a profession, and above all, of the Air Force, cannot permit further delay.—END

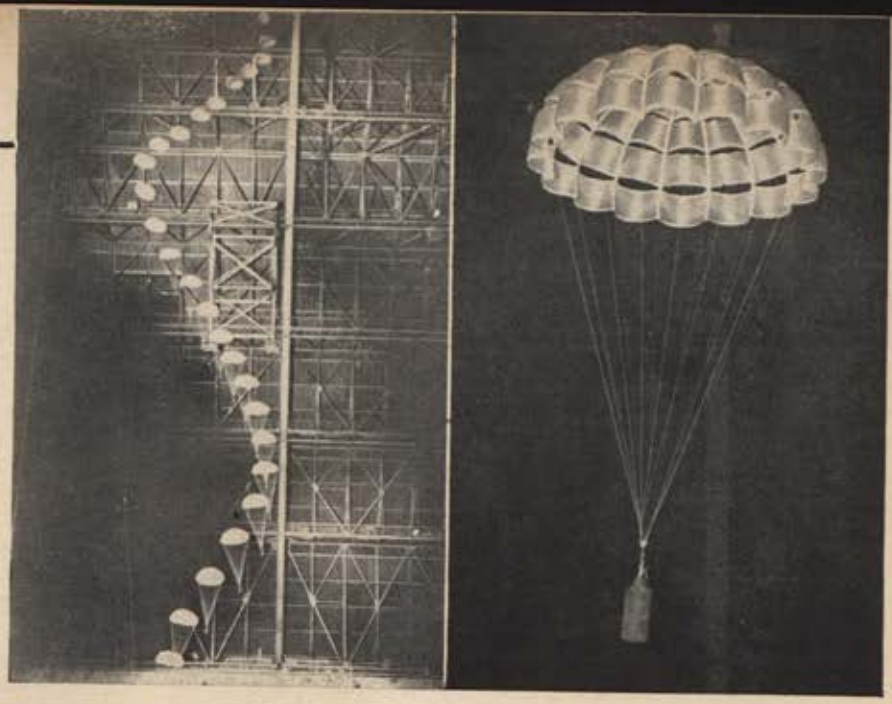
TECHNIQUE

So Round, So Firm

The 72-ton stator (stationary outer frame) of what the builder — Westinghouse — says will be part of the world's most powerful motor dwarfs a workman at the East Pittsburgh plant where the 83,000-hp unit is nearing completion. It'll be used with another 83,000-hp giant and two smaller ones in a new USAF wind tunnel at the Arnold Engineering Development Center. The total rating for the four-motor drive will be 216,000 hp, and the whole power unit will weigh more than 1,000 tons. The motors will be installed in tandem fashion in a rotating machine nearly as long as two football fields.

Safer Instrument Hood

An instrument flying hood made of plywood panels now offers greater safety for pilots taking instrument training. It was developed by two TAC flying safety officers, Lt. Col. L. J. Mecure and Capt. A. H. Francis at Langley AFB. Below, what the instructor sees, while at right is the student's view from behind the shutter type hood. The hood can be applied to any plane with side-by-side seating and can be removed in seconds for visual landings. It eliminates the need for goggles and colored headshields.



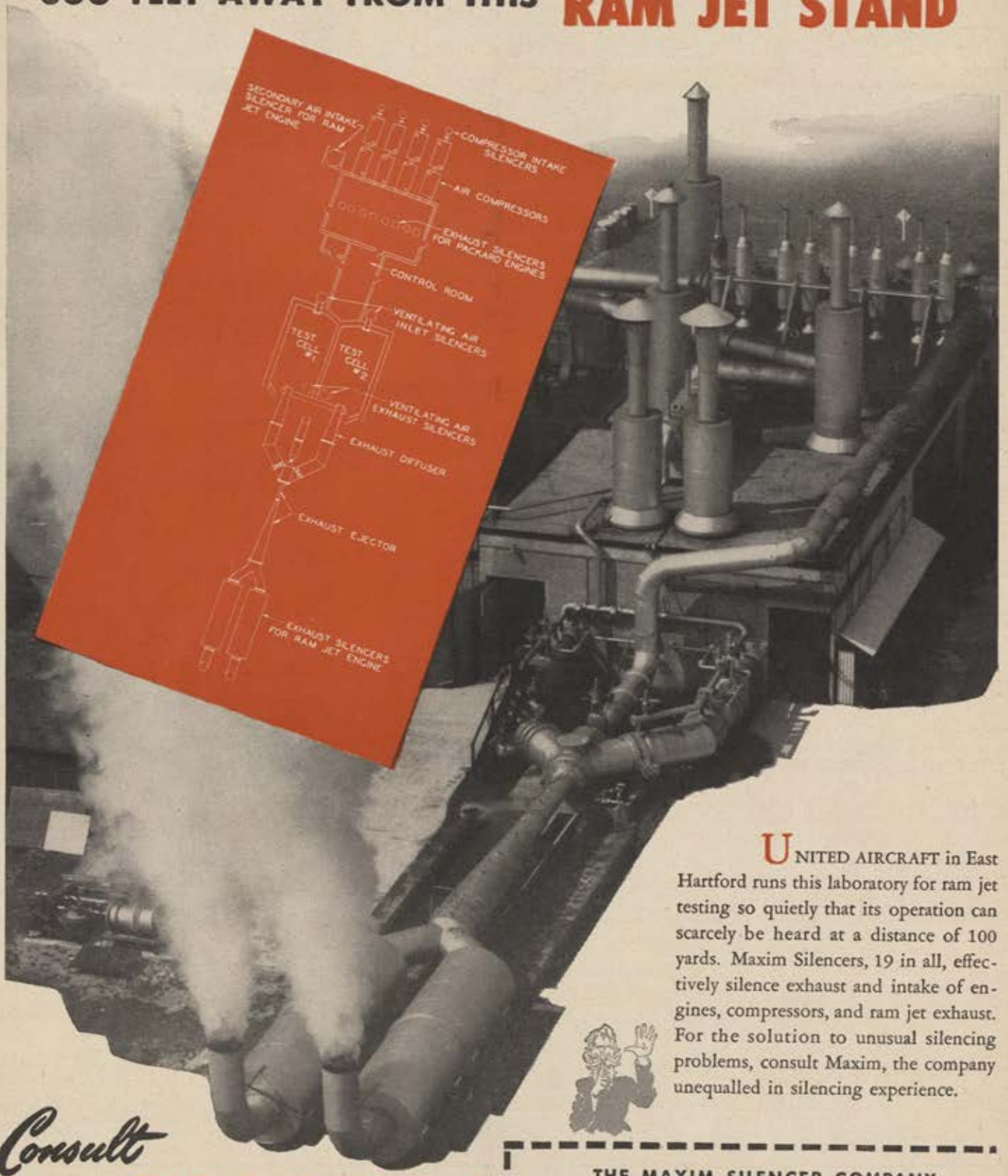
Free-Falling Models in 'Chute Studies

The free-falling tendencies of various types of parachute models are under study by ARDC at Goodyear's huge airship dock in Akron. At left, strob flashes catch a standard flat-circular 'chute in its 175-foot drop. Also being tested are types developed by Germany in WW II and some of the USAF's latest designs. At right, a ring slot 'chute. The airship dock is free from wind currents that would hinder studies of flight paths, stability, and opening characteristics.

Cessna Developing Jet Trainer for AF

Cessna's Model 318 has the nod from ARDC for further development and should become the AF's first jet trainer. Till now, combat planes or modified combat types have been used for jet training. The light, all-metal plane has two 900-lb thrust Marbore 352 centrifugal-flow turbojets, designed by French Societé Turbomeca and built by Continental Motors. Speed should top 350 mph.

YOU WOULDN'T KNOW AN ENGINE WAS RUNNING 300 FEET AWAY FROM THIS RAM JET STAND



UNITED AIRCRAFT in East Hartford runs this laboratory for ram jet testing so quietly that its operation can scarcely be heard at a distance of 100 yards. Maxim Silencers, 19 in all, effectively silence exhaust and intake of engines, compressors, and ram jet exhaust. For the solution to unusual silencing problems, consult Maxim, the company unequalled in silencing experience.

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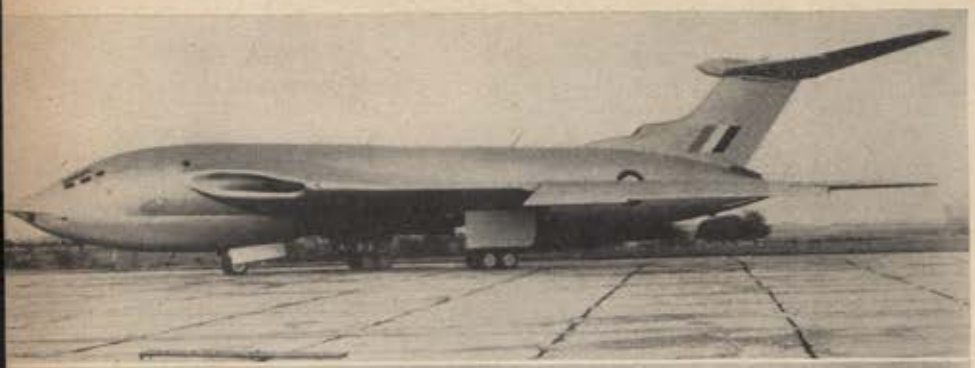
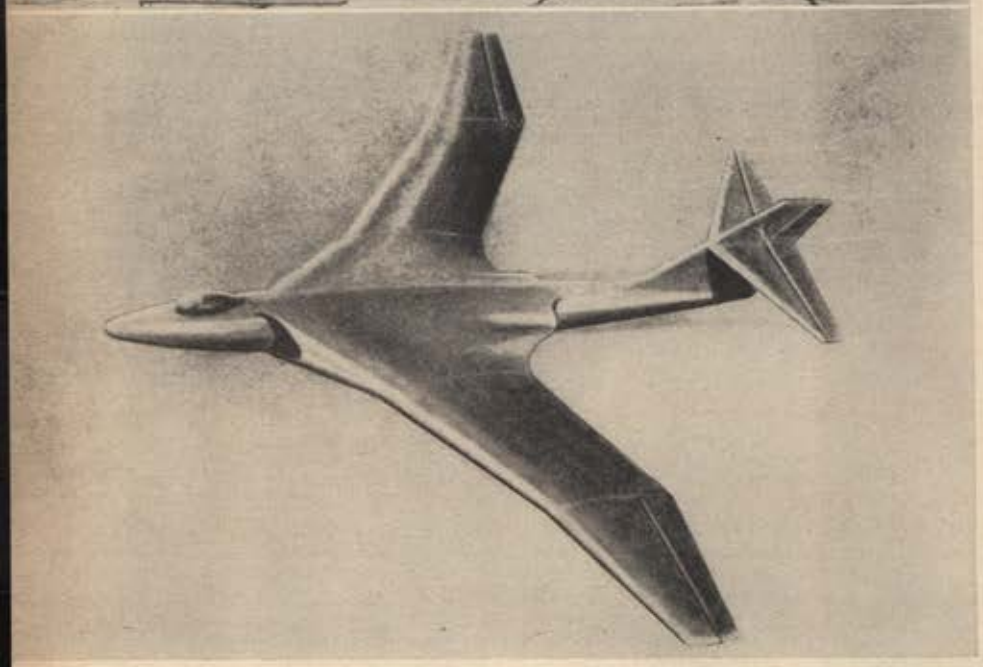
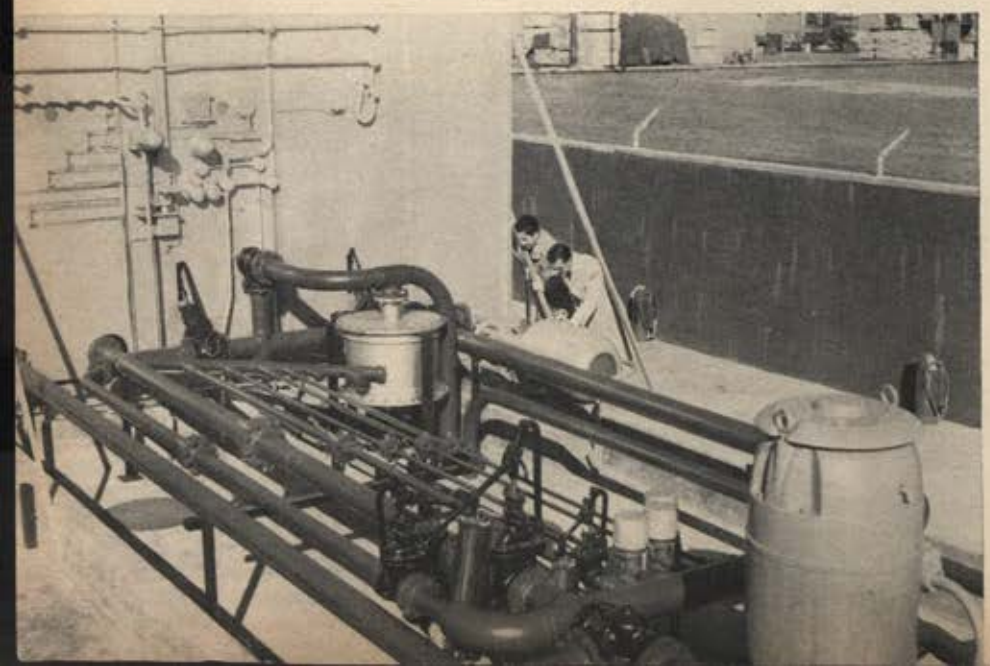
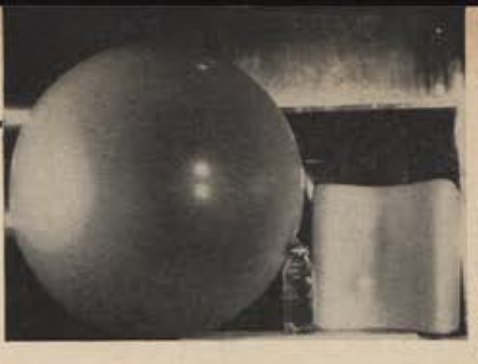




Crescent Wing Finds Favor in Britain

The British are coming up with a series of crescent wing planes, designed, they say, to take advantage of the best features of the delta, sweepback, *and* thin, straight wings. Above, the Handley-Page Type 80 bomber, powered by four Sapphires. It was ordered into quantity production even before making its first flight. Below it, an artist's notion of a design Short Brothers and Harland are working on. The principle of the crescent wing is to reduce wing drag and allow higher and faster flight. Handley-Page also has a crescent jet-airliner on the drawing board.





More for Your Money

What was just a quart of air at sea level becomes a couple of gallons when sent 80,000 feet "up" in McDonnell's new altitude test chamber, while the foam rubber head rest at the right expands to seat cushion size. Such tests are helping McDonnell engineers solve design problems presented by wide variations of altitude and temperature. The test chamber, said to be the largest in the US, has a temperature range from minus 100 to 165 degrees above, and humidity from 15 to 95 percent.

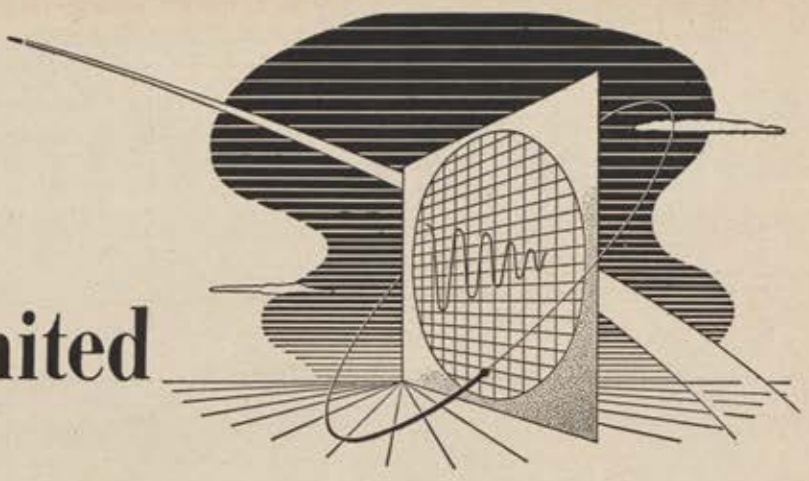
How the X-5 Works

A multiple exposure shows how the wings of a Bell X-5 experimental plane are swept back. The X-5, first plane able to vary wing-sweep in flight, has made more than sixty test flights at Edwards AFB, Calif., furnishing Bell Aircraft, the Air Force, and NACA valuable data on the aerodynamic effect of altering the degree of sweepback while in the air. Note that the shadow of the pitot tube is out of kilter. This has nothing to do with sweepback.

Faster Refueling

A unit for testing valves and other fuel system components for high speed fueling of aircraft is in use at Parker Aircraft Co., Los Angeles. The facility supplies fuel at controlled rates up to 1,200 gallons per minute to determine the characteristics and performance of components. The program is aimed at speeding up fueling operations for giant bombers, carrier planes which are generally stored below decks with empty fuel tanks, and for planes that are refueled in-flight.

horizons unlimited



Inhibitions must be stifled if creative development is to have full freedom of expression. Only with a young, imaginative, "of course it can be done" attitude are the great advances of this modern era accomplished.

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Today, industrial and government orders almost fill the Ketay plants on both coasts. Currently in production is the miniature highly precise Ketay Resolver—a type which opens new horizons in automatic control operations. Ketay developments are geared to performance above and beyond present military standards—which, in turn, were set by earlier Ketay product capabilities.

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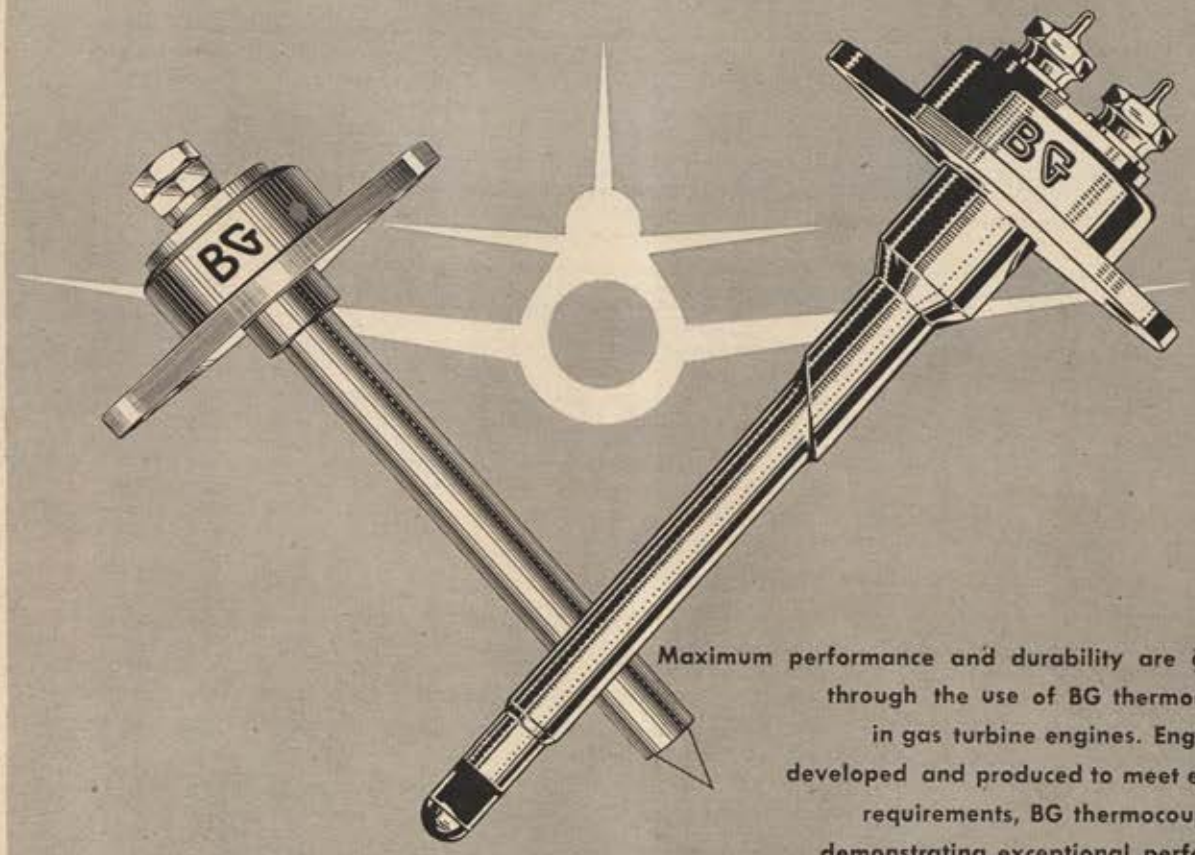

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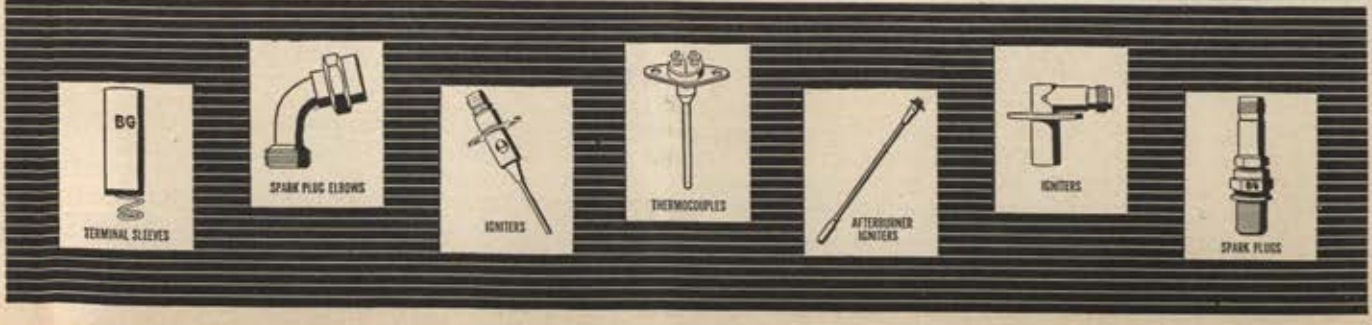

TECH TALK

By Richard Skinner

If you should find a container full of fruit flies in your backyard one of these days, don't blame the Russians or start screaming about germ warfare. It'll just be part of an Air Force project to learn more about the effects of cosmic rays at very high altitudes. All you have to do is follow the directions on the container to return it to the AF. ARDC is going to launch research balloons from West Coast sites. They'll carry pressurized containers of the harmless fruit flies, as well as instruments, to measure weather between 50,000 and 100,000 feet up. When the balloons drop back to 30,000 feet, the containers of flies will be parachuted to earth. Then the flies will be used in studies on the biological effects of cosmic radiation. Serious danger from the radioactive particles that constantly shower down on the earth's atmosphere from outer space begins at 70,000 to 80,000 feet. Scientists don't know their precise source.

The stork has won a race with a Grumman Albatross, beating the SA-16 out by about 250 miles as the amphibian was airlifting an expectant mother the 500 miles from the Alaskan village of Bethel to the military hospital at Elmendorf AFB. A baby girl was literally air-born. A flight surgeon aboard the 71st Air Rescue Squadron plane fashioned an effective incubator from an Arctic parka with an oxygen mask and heating pad sealed inside.

If you live in Los Angeles, San Francisco, Portland, Seattle, Miami, or New York, you may not know it but you were "attacked" from the air not long ago by a B-47 Stratojet undergoing very long range flight tests.

The Stratojet flew forty-seven simulated combat missions in 81 days, over thirty-three states, and covered 217,800 miles — nearly nine times around the world — as it reached the halfway point of its 1,000-hour "shakedown" program. Eighty-three percent of the missions involved in-flight refueling from a KC-97, during both day and night. All take-offs and landings were at Wichita, with Boeing test pilots at the controls.

A plastic called Ensolite, said to be superior to foam rubber or felt, is being studied by the Navy in its search for a new headgear to reduce the danger of head injuries.

The latest use for lightplanes is in prospecting for uranium. An aerial search in eastern, central Pennsylvania has been conducted with AEC's blessing by low-flying planes whose instruments include a scintillation type counter to record radioactivity from the ground.

A sort of high altitude sunflower has been designed by University of Colorado scientists, enabling an instrument in a high altitude rocket to keep pointing toward the sun. It has permitted the first photograph to be made of the powerful ultraviolet radiation given off by the hydrogen in the sun's atmosphere — or, as the scientists say, the first pictures of the sun's spectrum in extreme ultraviolet wavelengths. The electronic-mechanical device was carried in a rocket fired fifty miles up from Holloman Research and Development Center, N. M.

MOBILIZATION NEWS

BY JAKE CULPEPPER

INDEFINITE APPOINTMENTS — AF policy at present is not to offer a second chance to officers who reject indefinite Reserve appointments, including those whose current commissions do not expire within the next few months. Of those active duty Reservists who had answered letters offering these appointments as of last December 31, eighty-seven percent had accepted. Only thirteen percent of the pilots and eight percent of the observers who had replied said no. In FEAF, acceptances ran slightly higher than the over-all AF average, and the ratio of those declining ran as low as half that of some ZI commands.

ACTIVE DUTY — AF expects to be near its goal of an all-volunteer Air Force by end of June this year. By then, no airmen will be serving the AF in an involuntary status, and very few involuntarily retained officers will be around. . . . Several thousand Reserve officers, both rated and non-rated, are needed for voluntary active duty immediately. Age limitation has been upped from twenty-nine to thirty-two for qualified Reservist pilots or former pilots in the grades of first or second lieutenant who would like another go at active duty flying. Applications from AF Reserve captains and above, under thirty-six years of age, also will be considered provided they have at least 500 hours of pilot time, excluding student, civilian, and foreign military pilot time. At least 250 of the 500 hours must have been as first pilot.

DIRECT COMMISSIONS — Direct Reserve appointments will go to more than 1,000 qualified scientists and engineers before mid-1953.

BUDGET — Budget proposed for FY '54 would give the Air National Guard $128 million as compared with $106 million appropriated in FY '53. Average personnel strength was set at 43,086. This includes 2,168 pilots, 2,630 other officers, and 38,288 airmen. Average strength under current budget is 25,298 men, including 1,501 pilots, 1,231 other officers, and 22,566 airmen. . . . Combined with the $11,000,000 carryover from FY '53 appropriation, funds estimated available for AF Reserve and AF-ROTC during next fiscal year total $34,000,000. That portion of the requirement to finance AF-ROTC encampment in summer of '54 will also be a carryover into FY '54.

AF-ROTC — Applicants are needed soon to replace about 170 professors and assistant professors of air science and tactics who complete their tours in AF-ROTC program. Reservists applying for this duty must be serving in an indefinite Reserve appointment and have a minimum of four years of active duty remaining to serve at the time application is submitted. Although the vacancies will not occur until June, those interested may apply immediately in compliance with AF Reg 35-26, dated July 17, 1952. . . . Peak enrollment in the AF-ROTC is expected to increase from 141,800 in FY '53 to 157,000 in the next fiscal year. This will include 109,200 basic and 48,500 advanced cadets. AF-ROTC plans to graduate 11,500 students in 1953, 17,000 in 1954, and 27,000 in 1955. . . . Robert M. Thurston, former chief of AF-ROTC Branch at Pentagon, has joined the staff at AF-ROTC Headquarters, Air University, Montgomery, Ala.

WAF — The number of WAF airmen assigned duty in most overseas commands will increase this year. . . . 795 of the 983 WAF officers on active duty are Reservists. Only 172 of the enlisted WAF are Reservists while 12,519

(Continued on page 59)

Almost *any* space will take it

So compact that it can be adapted to fit almost any available space, the Harrison aluminum-plate-type oil cooler may be used for a variety of cooling jobs—to cool the fluid in the hydraulic systems of all sorts of planes . . . to cool helicopter engine and gearbox oil . . . to cool turbojet and turboprop compressor bearing and turbine bearing lube oil.

Light, compact, strong—able to withstand pressure to 400 psi—this Harrison oil cooler has been designed especially to meet the needs of modern aircraft. One of its features is a thermostatically controlled valve that by-passes the oil until a pre-determined temperature is reached.

Manufacturers of engines and airframes are invited to write for specific performance data.

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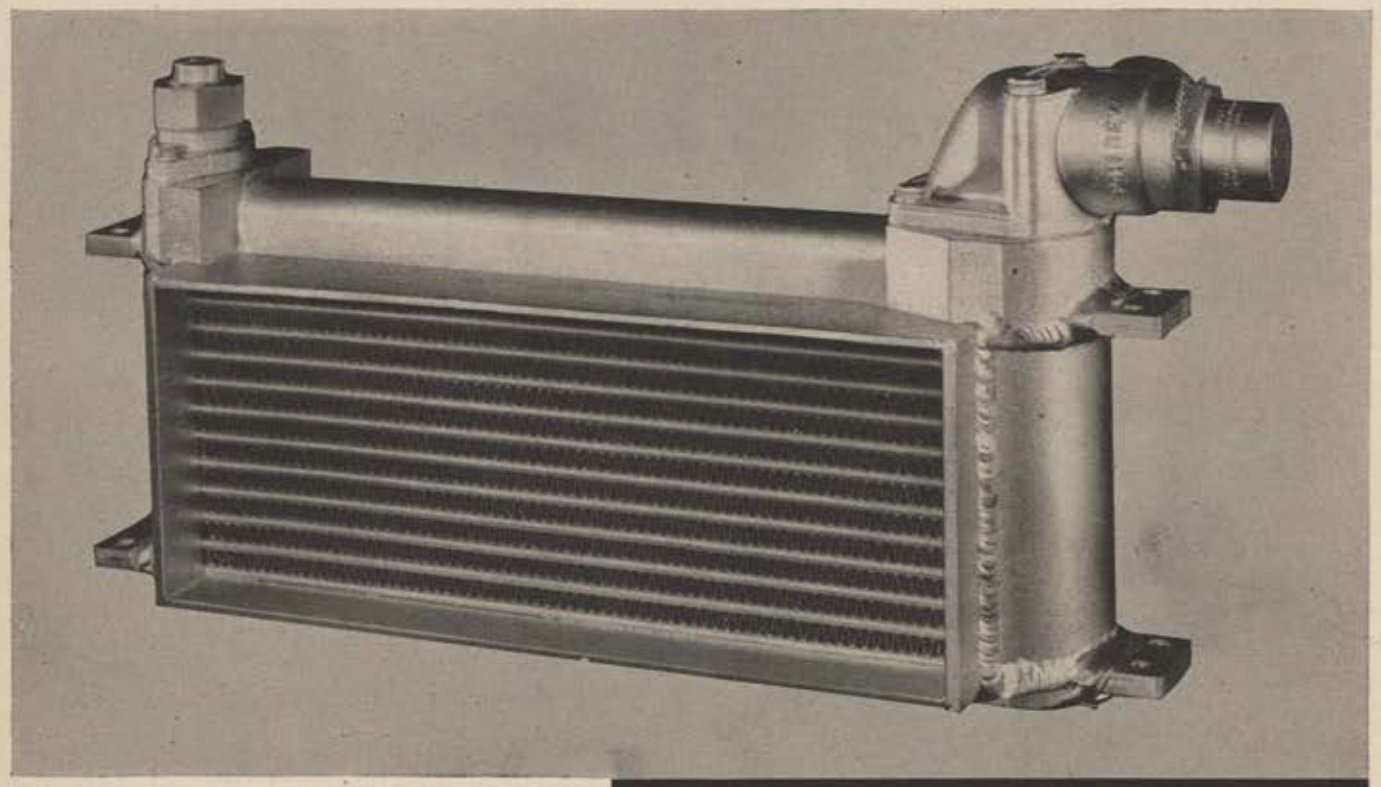

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are Regulars. The AF Nurse Corps has 2,352 Reserve officers and 408 Regulars. Combined total of women serving in AF is 16,584.

TRAINING — Two weeks active duty training is in store for twenty-five AF Reserve wings during July and August this year. Units consist of nine troop carrier, six fighter-bomber, six pilot training, two tactical recon, and two air depot. . . . About 160 mobilization assignment and 500 mobilization designation vacancies for AF Reserve officers are open within the various offices of Hq. USAF; Office, Sec'y of AF; and Office, Sec'y of Defense. To land one of the assignments, a person does not have to live in the Washington area. Arrangements to train with some local USAF or AF Reserve activity can be worked out in almost all instances. Write Director of Military Personnel, DCS/P, Hq. USAF, Washington 25, D. C., Attn: AFPMP R-1, through ConAC numbered AF of assignment.

PAY — A rise is anticipated by AF officials in the average total of Reserve personnel receiving training pay from an estimated total of 14,889 in 1953 to 34,209 during FY '54. Of this total, 19,747 will be airmen (compared with 7,628 in FY '53); 3,614 rated officers (the FY '53 total is 2,272); and 10,848 non-rated officers (FY '53 total 4,989).

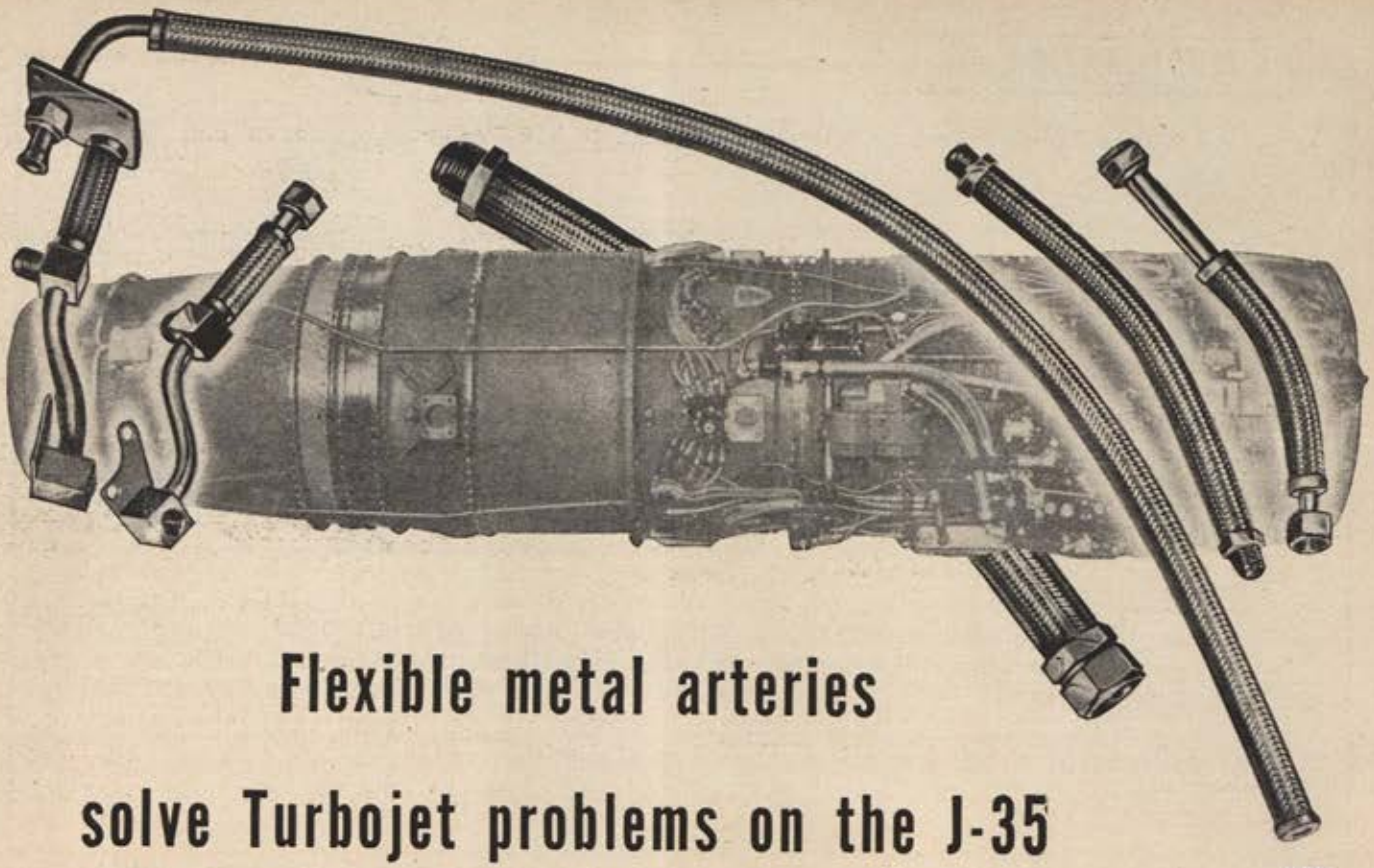
HIKES — Nearly 9,000 AF Reserve Officers not on active duty have been promoted in the past two years, and selection boards have been meeting at five places throughout the nation to consider final O.K. for advancing several hundred more. Promotions in 1951 and 1952 included: 3,634 to first lieutenant; 3,881 to captain; 1,098 to major; 119 to lieutenant colonel; and sixty-two to colonel. . . . AF has promoted 30 percent of personnel listed as missing in action in Korea.

RETIREMENT — The voluntary retirement of Reserve officers after twenty-nine and a half years of active Federal service is now permitted by the AF. Officers with less than twenty-nine and one-half years of service who fully substantiate hardship claims may be retired.

CIVILIAN EMPLOYMENT — AF continues to recruit for all types of civilian engineers, scientists and aircraft technicians, which are urgently needed at most AF bases in the nation. . . . Those interested in the career opportunities within the AF will find a simple guide in a new fifty-five page booklet entitled "Careers for Civilians." The missions of the various AF commands and the kinds, locations, salaries and advantages of AF jobs are described in the illustrated booklet. Copies may be seen at the civilian personnel office at any AF base but are not available for individual distribution. . . . A new wage board supervisory pay plan, which will recognize the supervisor of "blue collar" workers as a personnel manager and pay him accordingly, is expected to become effective the first pay day after April 1.

NSLI DIVIDEND — Vets holding both term and permanent National Service Life Insurance policies will be paid another dividend during 1953. Approximately 5,000,000, including personnel now on active duty, are eligible to share in the $18 million dividend.

POW CLAIMS — April 9, 1953 is the deadline for filing Prisoner of War claims under Public Law 303, 82d Congress. As of first of the year, the War Claims Commission had received some 98,000 American POW applications under this law.



Flexible metal arteries

solve Turbojet problems on the J-35

One of the primary problems in developing the J-35 for production was the development of fuel, oil and air lines to meet today's jet engine requirements. The metal hose had to meet complex configurations of a critical nature and still withstand excessive changes of temperature, high pressures, and unusual vibrations. Other important considerations were close tolerances, ease and speed of installation.

Rigid tubing was unwieldy; configuration couldn't be predicted on the drawing board; mass production was difficult; maintenance costly and complicated.

Because of the intricate nature of the problem, the metal hose lines had to be assembled on mock-up forms. This required flexible-hose engineers, a competent experimental shop, and advanced knowledge of aviation metal hose requirements.

Turbojet designers found the help and the metal hose they needed at Titeflex.

Our long experience with ignition shielding, fuel and oil lines and other aircraft applications enables us to design and construct flexible metal hose and fittings that meet the toughest jet requirements. (In fact, Titeflex was one of the first to qualify in this field!)

Today, Titeflex furnishes a majority of flexible metal hose assemblies for jets. Titeflex research continues to develop new designs of metal hose to take care of the higher temperatures, pressures, and new applications in the jet planes of tomorrow. Our experience and many of our techniques also apply to non-aviation problems. Perhaps yours is one of them. Write us about it today.

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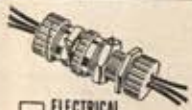

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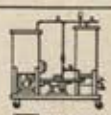

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designed machinery has its training built in and can be turned off or on at will.

Secondly, the load variation can be reduced by giving Air Defense Command a meaningful peacetime job which is similar to its wartime job. For example, it could act as an air police and watch the traffic on our aerial highways in good weather and in bad.

Finally, by intelligence and by other means, we can endeavor to remove the surprise factor from an air raid. If we know that it is coming at night we can start to prepare in the morning. This is probably the most important. The value of our airpower offensive as well as defensive, could be multiplied a hundred-fold with attack intelligence.

Flawless information on the US economic structure can readily be obtained and from this can be erected an accurate picture of our vulnerability. Our industrial complex with but a few exceptions is an open book. It is described in minute detail in trade journals available everywhere. Our country as a whole is open to foreign tourists. Our military intentions are also well known at least in principle. It can be taken for granted that we will never engage in premeditated and unprovoked aggression. By contrast the intentions of our potential enemy are most difficult for us to determine accurately. His military and economic capabilities are far less well known than our own. In truth we are fighting a ghost – an intangible evanescent creature hard to visualize and impossible to come to grips with. Better intelligence would enable our air defenses to operate with far fewer people and the savings in these alone might well be applied to great increases in our endeavors to collect more comprehensive intelligence.

The cost of our present air defense is measured by billions of dollars and tens of thousands of men. And it is not very effective. With new weapons, guided missiles, faster aircraft, and the like, and more importantly, if new devices for the organization and dispatching of these weapons can be brought into use, the cost can still be comparable to that of the present system if that is what is wanted.

What will be wanted will depend on the size of the enemy's forces and upon the amount of insurance we wish to invest in. Tremendous expansion of our *present* system would not necessarily yield a proportionate return in safety. On the other hand, a few years from now a ten-fold expansion might bring a very high degree of improvement.

But, the cost of air defense will be measured in more than dollars and military manpower.

If we set up a truly effective air defense system, we must face up to its consequences. When you sleep with a loaded pistol under your pillow, you gain protection – but the pillow isn't as soft as it used to be.

In particular, effective air defense means that there will be further restrictions on freedom of civilian flying. When a city may be at stake, it may be necessary to shoot down all unidentified aircraft on sight. The aircraft may be friendly – you or I may be in it; and the effectiveness of the air defense system may ultimately depend upon whether you and I are willing to tolerate the small possibility of being shot down. For we cannot expect anything made by man to be infallible, and so the air defense must be organized to "fail-safe"; and "safe" in this case refers to the country and its cities and only secondarily to airplanes and their cargoes.

–END

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New York: Robert Taylor and Col. Paul W. Tibbets admire citation AFA awarded M-G-M for "Above and Beyond" film.

New York: Gen. Leon Johnson watches as AFA Auxiliary President Marietta Miller, left, honors actress Eleanor Parker.

OPENING NIGHT WITH AFA

AFA previews 'Above and Beyond'

FIRMLY believing that the airpower story can be told through many media, AFA turned to motion pictures during January and staged previews of M-G-M's film "Above and Beyond," which stars Robert Taylor as Col. Paul W. Tibbets, pilot of the B-29 "Enola Gay" which dropped the atom bomb on Hiroshima.

Top civic, military, and political leaders were asked to join members of the press, radio, and television in viewing this historical film. Bob Taylor was given a week off from "shooting" a new picture to appear personally at the AFA screenings in Chicago, Omaha, Cleveland, Dayton, and New York City. He could not attend the Washington showing, but Colonel Tibbets, whom Taylor portrays in the film, was on hand.

"Above and Beyond" received double-barrelled honors from AFA. The Association awarded M-G-M a Citation of Honor, which was presented on Ed Sullivan's "Toast of the Town" network TV show. The AFA Ladies Auxiliary gave Miss Eleanor Parker who portrayed Mrs. Tibbets, a citation at the New York City premiere.—END

Washington: Above, Col. Paul Tibbets, hero of "Above and Beyond," joins General and Mrs. Carl A. Spaatz in viewing the film at AFA's private preview. Below, in Chicago, George Anderl, center, Illinois AFA Wing Commander, presents Bob Taylor the Wing's Silver Plaque for his fine acting. AFA Regional Vice President Morry Worshill looks on.

Omaha: Host Arthur C. Storz, Chairman of Omaha's Armed Forces Committee, poses with Bob Taylor and Gen. Curtis LeMay, SAC, during the Nebraska preview. Dayton: Gen. Pratt Brown, Wright AFB CO; Norman Miller, Wilbur & Orville Wright Mem. AFA Sq. CO; and Robert Frame, C of C, join Taylor, below, placing wreath at Wright Memorial.

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Congressman T. Ashton Thompson

AF VETERAN IN CONGRESS

THE January 1953 issue of AIR FORCE pictured twenty-six members of the 83d Congress who are Air Force veterans. One man, the new congressman from Ville Platte, La., was inadvertantly left off the list. He is shown here at his desk. Representative T. Ashton Thompson, a Democrat from Louisiana's seventh district, enlisted in the Air Force in November 1942 and served until February 1946 when he was discharged as a technical sergeant. He was assigned duty as a property auditor. At the end of the war he helped run the final audit on camps and air bases that were being closed. Mr Thompson's extensive government service in the accounting and budget fields dates back to 1934 when he joined his state government service as an auditor. He will be 37 the end of this month.—END

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Here's a ship you'll be hearing plenty more about when she begins to go into service on U.S. airlines later this year.

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WELCOME HOME FOR A JET ACE

AFA's San Francisco Squadron turns out the town in honor of Lt. James Low as the 17th jet ace returns from Korea

San Francisco rolled out its revered 1932 Lincoln last month in honor of Lt. James F. Low, seventeenth Korean jet ace, who has returned to the US with nine MIGs to his credit. The San Francisco AFA Squadron and the cities of San Francisco and Sausalito (Low's hometown) went all-out to welcome the young pilot.

Charles Morgan, Squadron Commander, and Thomas Stack, past National Officer, headed the committee which, with a minimum of advance notice, staged the civic celebration in Lieutenant Low's honor.

Officials estimated that a crowd of more than 100,000 watched as a parade, featuring Air Force bands from Parks and Hamilton AFBs, wound through the financial district of San Francisco, then headed over the Golden Gate Bridge to Sausalito, where another civic observance was held in the town square. In San Francisco, City Supervisor Francis McCarty presented Lieutenant Low with the key to the city and a scroll welcoming him.

Arrangements were made to have Lieutenant Low appear at all of the schools in Marin County, highlighted by his appearance at his former high school, where he arrived by helicopter to address the students. A committee headed by Mike Pisani, former Squadron Commander, arranged television and radio appearances. Many were responsible for the success of this function, among them Bill Berman, who handled transportation, and Ed Olsson, who assembled the parade. The main committee included Frank Chun, Ray Smolenski, Ed McLaughlin, Howard Halla, Mike Kavanaugh, Charles Kring, Cliff Griffin, Jack Krentz, and Alex Juhl.

Seattle Squadron News

The Greater Seattle Squadron, newest unit in the Washington Wing, has undertaken two programs of civic interest, and through these programs has managed to enlarge the membership of the Squadron.

Along with many other Squadrons, this one is endeavoring to cooperate with local Civil Defense officials in the opera-

(Continued on page 68)

SQUADRON OF THE MONTH

Chicago Squadron 41

CITED FOR

the continued development of airpower education in the Chicago area through bi-monthly Airpower Forums, representing civic, business, and aviation interests. For inaugurating this program AFA salutes Squadron 41.

San Francisco's famed Lincoln touring car leads the parade down Montgomery Street as jet ace Jim Low returns home. Accompanying him are civic and military officials and Charles Morgan, San Francisco AFA Squadron Commander.

Kenneth Rankin (right), cadet colonel of the AF-ROTC detachment at Akron University and NAA scholarship winner, looks over one of the planes he may fly after graduation. At left, Dr. Norman Auburn, Akron University president, and Brig. Gen. M. K. Deichelmann, Commandant of AF-ROTC.

Brooklyn Squadron members get late word on Reserve problems from Col. Paul Zuckerman, CO, 8709th Pilot Training Wing, and his staff. From left, Lt. John Stevens, Capt. Milton Mitler, Zuckerman, Erwin Kranz, Stanley Denzer, Squadron Commander, Arthur Wegman, and Herbert Heimberg.

Top officers of the Region, Wing, and Squadrons gathered at the Airpower Symposium sponsored by Chicago's Squadron 41. From left are George A. Anderl, Illinois Wing Commander, Morry Worshill, Great Lakes Regional VP, Norman N. Lauer, Squadron Commander, and George Wilson, Wing Vice Commander.

tion of a GOC Observation Post. Two meetings have been held at which these plans were the main topic.

Plans for cooperation with the Civil Air Patrol have been under discussion. Norman Goldberg, who belongs to both CAP and the Squadron, heads a group appointed to investigate ways the Squadron can assist the CAP unit.

Carl Peterson, 602 E. 201st St., Seattle 55, is Commander of this Squadron. He moved up to this position when the former Commander, Winfield G. Young, 2039 E. 193d St., was appointed Washington Wing Commander.

Peterson, Young, and Regional Vice President Hillford R. Wallace are coordinating a membership drive in the Wing.

Food for the Needy

Carrying a program into its fifth year, members of the San Francisco Squadron this year distributed more than a ton of food to needy families in the Bay area, in the name of the Squadron's Lt. Joe Johnson Fund, named in honor of the first member of the San Francisco Squadron to lose his life in Korea.

Part of all receipts from functions goes into this fund. In addition, a Christmas party was held this year, with all proceeds going to the fund. At the same time, Squadron members collected toys and clothing, and distributed these after making any necessary repairs.

California Wing Convention Planned

James H. McDivitt, California Wing Commander, advises that "the biggest Wing Convention in California's history" will open in San Diego April 18 and 19. Edward Kranch, 8447 La Mesa Blvd., La Mesa, is Convention Chairman. He is also Commander of the San Diego Squadron, host to the Convention. Headquarters will be the Hotel Manor.

Top event of the Convention will be the official recognition of the "outstanding Airman" of the Korean war, who will be flown back in time to arrive for this affair and will be an honored guest at all functions. The "outstanding Airman" will be named by the Air Force.

During the Convention, a wreath will be placed on the Montgomery Monument, signifying the growth of aviation in its fifty years of progress.

AFA President Arthur F. Kelly will be a principal speaker. Other AFA dignitaries will include Tom Lanphier, past President and Chairman of the Board, Tom Stack, former National officer, and Mike Kavanaugh, Far West Regional Vice President.

AFA Dance in Detroit

The Detroit Squadron has played host to a number of Motor City-ites at the beautiful Veterans' Memorial Building. Twelve hundred people, the largest gathering ever to partake of the Squadron's hospitality, enjoyed a full evening of dancing and refreshments, complete with a buffet supper.

Detroit's Commander, Jerome Green, 2930 Richton, Detroit, invites all area members to participate in the coming projects of the unit.

Pittsburgh Auxiliary

Recently, AFA received a nod of encouragement in the Smoky City, through the considerable accomplishments of the Pittsburgh Auxiliary unit President, Mrs. Kathleen Murray, 335 Klein Rd., Pittsburgh. After contacting Civil Defense leaders and learning of the problems connected with recruiting Skywatchers for the Ground Observer Corps, she set out on a lecture tour of the various Women's Clubs in the area.

Through Mrs. Murray's efforts, the AF Filter Center in Pittsburgh has received a good increase in the number of volunteer workers.

Peoria Organizing

George Anderl, 412 N. Humphrey, Oak Park, Ill., Illinois Wing Commander,

(Continued on page 71)

Rep. Carl Hinshaw (left), Republican from California's 20th District and a vigorous exponent of airpower in the US Congress, accepts honorary membership in the Pasadena Area Squadron from Cecil Howard, Commander of the Squadron.

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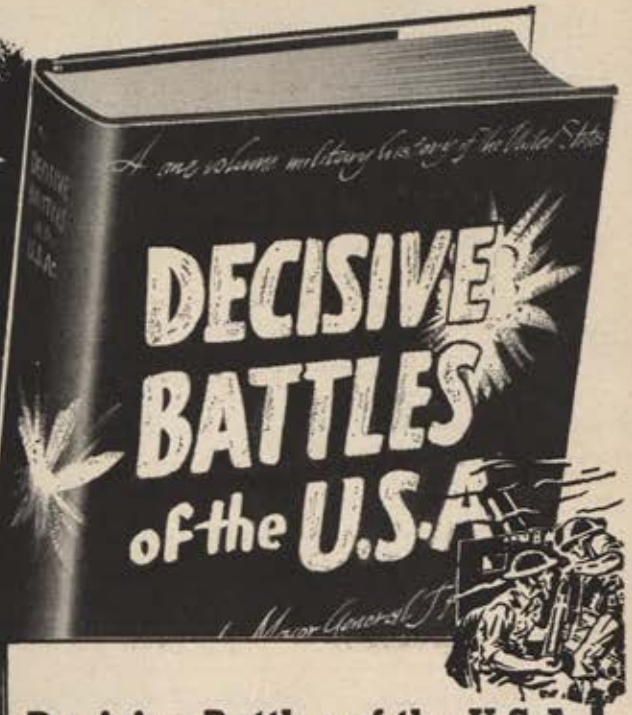

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has announced the first organizational meeting of the latest effort of his Wing. On January 13, Anderl conducted the meeting, which had as its objective the addition of Peoria to the list of Illinois Squadrons. In addition to area AFAers, officers of the ANG, the AF-ROTC Unit at Bradley University, CAP, GOC, and civic dignitaries attended this first get-together. A tape recording of Anderl's address was made, and rebroadcast over Chicago television station WNBQ.

Richmond Squadron

There has long been a vacancy in Richmond, Va., on AFA's organizational map, but this now seems to be corrected.

When Vice President George Hardy recently called a meeting in Richmond, members turned out in gratifying strength. Charles B. Reynolds, 3015 Montrose Ave., a Life Member of the Association, is the original organizer. Many others in the area are cooperating with him in this program.

Hardy reports that the second meeting will be held March 10. All Richmond members are urged to contact Reynolds for details.

March AFB Tour

Members of the San Diego Squadron and the Auxiliary unit were recently treated to a day of "active duty," when they became the guests of Maj. Gen. Emmett (Rosy) O'Donnell and the personnel of March AFB.

General O'Donnell, who is the commanding general of the Fifteenth Air Force, greeted the AFAers on their arrival and turned the base over to them. The highlight of the day-long visit was a practice jump by members of the 42d Air Rescue Squadron, whose proficiency was demonstrated by their accuracy at landing "on target."

A private airplane took the members back to the city, treating them to a three-hour tour of Southern California en route. Edward C. Kranch, 8447 La Mesa, La Mesa, Calif., is the Commander of the Squadron and was Chairman of the committee arranging this trip.

In the near future, members of The Greater Los Angeles AFA Squadron plan to take a similar tour of March AFB. AFA is indebted to General O'Donnell and the 15th AF for the courtesies extended.—END

CREDITS:

Front cover, pages 25, 26, and 27—Charles deM. Barnes; pages 17, 47, and 49—Arlo Greer; page 64—photo of Rep. T. A. Thompson by Chase-Statler; page 68—photo of Rep. Carl Hinshaw by Bob Brooks.

JET BLASTS

WHAT'S WRONG WITH THE USAF?

Failure of the military to realize that civilians fight the wars is one problem. And is there too much rank in the Air Force?

I believe the lack of West Point applicants for USAF duty points out the specific problem of leadership in that branch of service which isn't found in other branches. The Academy men felt if they washed out of pilot training they would never make general, the logical aim of every career soldier.

Unfortunately, the problem reverts back to the old Air Force problem of having too much rank in the first place. There are many valid arguments backing the idea of commissioning pilots and certain crew members. Incentive of a commission probably helps recruit most to a highly dangerous occupation. However, tanks are expensive too, yet plenty of sergeants command tanks. And it's not always easy to prove whether an airplane commander or a squad leader does the most important job at any specific time. It's too late now to change the rules, of course, but it should be recognized that boy-type colonels and flying pay for people who shouldn't be flying in the first place are two big sore thumbs which do nothing to help advance the cause of a strong USAF. Sales managers don't often hit the street: neither should field graders take to the air once they've accepted high command responsibility — or should they get flying pay if they do.

The main problem with anything in the military field is the total lack of understanding on the part of commanders that they fight wars with civilians in the main and not professionals. Amateur military management in the form of reserve officers and NCOs were the operating level of the Air Force and every other branch. Yet regulations still are written on the premise that the professionals alone do the job: why anyone retains reserve rank is a mystery to me considering the short shrift they receive at the hands of the regular establishment. We trust local police forces and expect they'll do the job at hand and we never try to tell them how to do it. But neither are we impressed into traffic control or criminal apprehension every time there's a crime wave. This thought should underlie military thought on every facet of administration if we are to have the best force possible with our vast pool of resources and talent.

One study should be made in the Air Force and that is the thorough investigation of the type of leadership required and whether pilot or administrative types can best do what. Different psychological strains accompany every type of human endeavor and different leaders are required to get the best results. Would it be better to have administrative and operational heads of a squadron? Do we cling to sacred cow ideas like outmoded weapons?

Should rated officers ever draw supply jobs or should they merely advise on such problems? These and similar questions should be studied considering the great number of specialties required to run a modern air force. We must find some way to suitably employ grounded flyers, of course, but highly trained — at public expense — flying personnel should not be wasted in ground jobs better done by non-rated officers. The alternative would be a concentration on training of pilots, etc., and a reliance on civilian procurement for the non-rated jobs. With only so many planes to go around at any one time, it's a bit silly to over-produce the operators! This second idea would also save the expense of training AFROTC specialists who, logically, would serve only a short time due to lack of opportunity for advancement under the present system of pilots first and swivel chair men a far-away second.

At one time sales people became company presidents at a rate of ten to one over any other member of the firm. Now it's not unusual to find comptrollers running things or production men. Since there are far more jobs of a different nature in the Air Force than in most civilian industries, perhaps it is an error to push only one kind of officer. Undoubtedly, much must be done with care if we are to have the kind of Air Force which can effectively meet the demands of our hazardous future.

Edward J. Carlin, Jr.
Philadelphia, Pa.

Mass Malassignment?

Please be assured of my extreme pleasure in reading the article, "A Reservist Sounds Off," November 1952 issue of AIR FORCE. I am glad that the author has presented his views and that I am not the only person who, from both observation and experience, is very disgusted with Air Force gross prejudice and inefficiency. A few more stories of fact might awaken the taxpayers and the officials to demand constructive changes in the Air Force.

(Continued on page 75)

LET'S HAVE YOUR JET BLAST

In "Jet Blasts" you can sound off on any subject you want. Each month we'll pick the letter or letters we feel will interest our readers most and pay $10 for each one printed. Please keep letters under 500 words.—The Editors

What JACK & HEINTZ *is doing about...*

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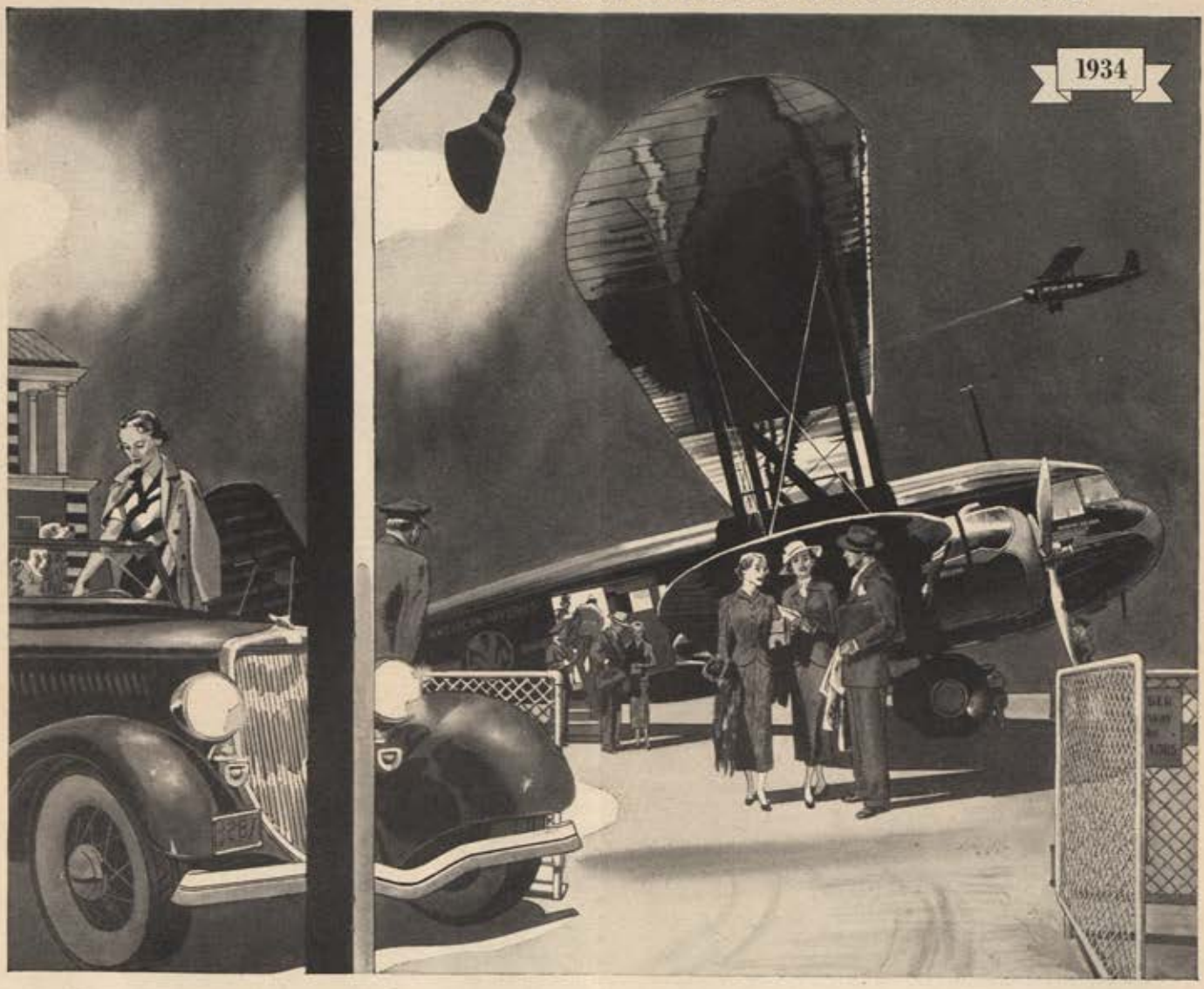

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Sleeper service proved to be particularly important to the growing airline industry at that time. For it literally "woke" the public to the fact that air travel, with its tremendous time-saving advantage, could also match every standard of comfort and luxury offered by surface transportation.

Many transportation officials were frankly dubious about the potentialities of sleeper planes, but mounting popularity and public demand soon wiped away all doubts. Other airlines, taking their cue from American's success, began to install berths in some of their own long-haul aircraft.

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Please permit me to make some suggestions:

1. Before we buy expensive, plush chairs, let us first buy decent typewriters. Most typewriters in the orderly rooms where I have worked are terrible. The one that I am using now is a good example.

2. Let the Air Force recognize teaching as a profession. It is a very honorable profession, and when its members enter the Air Force with letters of commendation, they should be considered professional persons. Above all, teaching should be listed in Air Force regulations along with the other professions. And prejudice against former teachers should be eliminated as much as possible!

3. The current AFSC program should be carried out, not exist as printed matter on a piece of paper. Let's assign qualified people to the positions that can carry out the program.

4. Let the airmen who do the work get the pay. Too often a person is advanced in rank simply because he has time-in-grade or because he has his nose too close to a certain sergeant or commissioned officer.

5. For the sake of the individuals, the Air Force, the taxpayers, and America as a whole, let us do something to correct the mass malassignment.

6. Air Force doctors should care for the ill of the Air Force and not practice in towns near bases "on the side."

7. Let's stop the recruiting sergeants from making so many false promises and painting the Air Force picture overrosy. In the long run, the Air Force loses. Disappointed and disgusted airmen who can point directly to the professional liars of the recruiting department are indeed poor advertising for future recruiting. How well I know. I am an airman who was promised a commission in the field of education if I would enlist. So far, my application for a commission has been disapproved without my even having been given the courtesy of meeting any official board; and, I possess the outlined qualifications.

I've been unable to receive assignment to my professional field—the education field. I was originally scheduled to become an A&E mechanic. I was sent to a clerk-typist school, though I have already taught both typing and English in Illinois high schools. I became a corporal when I graduated from the tech school as top academic student in my class. I've been promised sergeant's stripes three different times by my Adjutant, yet I cannot receive promotion.

8. Let's have some consistency in the Air Force. A person stationed on one base may have an environment, including regulations and policies, that differs so much from that of an airman of another base that you would never realize that the two men are in the same Air Force.

9. Let's give commissions to men who are sincere. And, let us realize, as far as ROTC commissions are concerned, that northern schools are definitely more than equal to those of the South.

10. If we are in such desperate need of qualified pilots, then why are so many qualified pilots serving as administrative and personnel officers in Air Force offices, while college graduates of these fields who have practical experience assigned as Air Force clerk-typists, cooks, and mechanics?

Here's for initiated improvement for a better, greater Air Force and a safe, sane, economical America!

An American Airman

Combat Cargo

In your magazine AIR FORCE for June 1952 you printed an article by Mr. Robert Hotz entitled "New Jobs for Combat Cargo." I read the article a couple of times and consider it one of the most accurate, with a few exceptions, and one of the most informative articles that have been written about the Korean operation. I do not know Mr. Hotz personally; however, there is no doubt but what he had first-hand information from the approximate date of General Tunner's arrival until the end of the period which he covered. His material is well organized and presents a very excellent overall picture of combat cargo operations.

The exceptions to accuracy mentioned above did not strike me at first as being particularly important as they apparently had no bearing on the objectives of the article; however, one paragraph has been repeatedly brought to my attention by officers and airmen who were serving with the Troop Carrier units in the Far East at the outbreak of the Korean war. This paragraph states:

"When General Tunner and a small group of veterans of the Hump and Berlin airlifts, all borrowed from MATS, arrived in Korea in the fall of 1950, air transport was a chaotic affair. Aircraft were often 'lost' for days in the scramble of the retreat at the Pusan perimeter. All of the air transport equipment then in the Far East was quickly merged into a single organization under General Tunner. The C-54s and C-47s of the Troop Carrier and MATS units already in action were reinforced by C-46s hastily taken out of mothballs and a group of C-119s flown to Japan . . ."

This paragraph seems to be particularly irritating to those engaged in the Korean airlift prior to September 10, 1950, when General Tunner's headquarters took over operational control of all FEAF Air Transport. They seem to feel that one complete and very important phase of the Korean operation of combat cargo has been summarily dismissed as far as the American public is concerned by a totally inaccurate and misleading statement. Of course, the early operations of the FEAF airlift is history and probably not very interesting history except to those who were vitally involved at the time. However it is a shame to arbitrarily dismiss the best and hardest work that an organization of over 2,500

(Continued on page 76)

JET BLASTS——CONTINUED

performed through the most critical period of the entire affair in such a manner or to accuse them of building, organizing, and operating an airlift of chaos, with aircraft "lost" for days at a time. As this accusation does not come from this source, it is merely a small irritation as it indicates a lack of knowledge on the part of the author as to what had happened in the theater prior to his arrival. In all justice to military and civilian personnel who successfully met all commitments for both the Air Force and the Army during the entire retreat and defense of the Pusan perimeter, it is believed that an article should be obtained which would justify to some extent three months of the hardest and finest work these people ever did.

Those who have spoken to me believe that their fellow servicemen, with whom they must now live and work, and the public in general have a totally distorted picture of the part played by Troop Carrier before the organization of Combat Cargo.

My reason for writing to you on this matter is to enlist your aid in clarifying the work performed during this time. I have a tremendous pride in the entire organization and the personnel who carried this enormous load until the experts could arrive on the scene, and I feel that to keep still and not speak up in their behalf would be a failure to keep faith.

On the 19th of June 1950, I took over command of the 374th Troop Carrier Wing stationed in Japan, and was in command at the time the Korean war started. This unit at the time consisted of one heavy wing of C-54s operating the FEAF airlift on regular flight schedules – Japan to Guam, the Philippines, Okinawa, Iwo Jima, Korea, and air bases in northern and southern Japan. The 21st Squadron, then in the Philippines, was a technical part of the 374th but was not under my command or operational control at the time. This one tactical wing plus its detached squadron was the total Troop Carrier operation of the Far East and constituted the FEAF scheduled airlifts.

MATS had one base at Tokyo which flew into but not over Japan and had a scheduled flight into Okinawa and the Philippines, which was independently operated from the States through Hawaii. On the 26th of June we were ordered to evacuate all foreign civilians out of Seoul and the adjacent areas into Japan. We were immediately released from all scheduled flights which were turned over to MATS temporarily. The aircraft were flown in and placed under the operational control of the 374th, while at the same time some 800 civilians were evacuated from Kimpo and adjacent airfields, resulting in official commendation from FEAF.

During this operation one C-54 was shot up and burned, and one shot up but brought back under extremely hazardous conditions to Southern Japan. This may have accounted for one of the

(Continued on page 78)

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WHERE TO GET MORE DETAILS: Visit your nearest Air Force Base or Air Force Recruiting Officer. Or write to: Aviation Cadet, Headquarters, U. S. Air Force, Washington 25, D.C.

U.S. AIR FORCE

JET BLASTS—CONTINUED

"lost" aircraft mentioned, as it was the first American aircraft destroyed during this war. As soon as the evacuation was completed, the fields available to C-54s and C-46s were reduced to one at Pusan and so we borrowed C-47s from all of the Wings in the Fifth Air Force, FEAF headquarters, and FEACom, and a few C-46s were pulled out of the boondocks and put in a cargo airlift from Southern Japan to all airfields adjacent to General Dean's retreating front line. As the source of supply for the forces fighting in Korea was mainly in Japan, the C-54s were set up into a cargo airlift. The supplies were all loaded from aircraft or from trains, where the priority was not so high, then airlifted by C-47s into the immediate area near the front.

During the first week of the C-47 operation from Japan into Korea, both the airplanes and crews were borrowed from other units, and I ran the entire thing personally without any organization. This might have been the period of chaos inasmuch as it is somewhat of a problem to handle all crews and airplanes with the aid of just one corporal. However, one of the squadrons moved down there after the first week and took over all C-47 operations and is still in business, having earned at least one Presidential citation and probably more decorations than any other Troop Carrier unit in history.

The C-54s and C-46s broke up the Pusan airfield after three days' operation and were thereafter excluded from Korea until the Corps of Engineers could prepare a suitable landing field at Taegu. However, the 374th Troop Carrier Wing, operating C-54s, C-47s, and five or six C-46s, hauled many millions of pounds into the forces defending the Pusan perimeter. The airplanes and crews were under complete control, and troops and supplies were hauled into Korea and the wounded, VIPs, visitors and writers were evacuated back to Japan — all done in a thoroughly organized manner.

Actually, General Tunner and his staff were called into the operation not as a result of failure of the existing organization or system but in order to enlarge the capacity sufficiently to provide adequate support for the Inchon landing and later, the drive toward the north. Incidentally, he brought with him ninety-eight C-119s, thirteen C-54s and forty-eight C-46s, as indicated in Mr. Hotz's article. After he got them properly based, organized, and systematized he had an extremely fine Combat Cargo Command and I do not want to detract in any manner from the excellence of this operation.

I personally retained command of the 374th Troop Carrier Wing and the Tachikawa Air Force Base until September 1951. This very fine unit worked on a 70-hour week basis for all personnel from the time the war started until my departure, and during one three-month period exceeded more hours flown per aircraft in possession than any military unit before or since.

Col. Troy W. Crawford, USAF
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Picture of the Month

Bogart and Allyson!!!

The years to come will have to go some to top this twosome! Here's TNT teaming of the kind that is reminiscent of those Gable-Gardner and Taylor-Turner combos. And if memory knows a bigger or better showcase for their torrid talents than M-G-M's bold and beautiful "Battle Circus"—memory just isn't telling this excited previewer.

Excited? "Scorched" is closer! Without a doubt, "Battle Circus" is the warmest, most wonderful story of desire-under-fire to come out of the war and into the heart. In it Humphrey Bogart really meets his match ... and she's terrific! A new June Allyson—still winsome (and then some!) but with a smoldering hint of volcanoes to come. And June *does* bust out all over, while all Bogart's breaking loose in this story of a half-naive, half-knowing nurse who comes to Korea to help win the war and can't help winning a one-man war called Bogart.

Last year's Academy-Award winner is in there power-pitching again as an Army major, a surgeon with a first-class touch, a scalpel-sharp temper, and the bedside manners of a marine on leave. Out of gentlemanly respect for June's tender years and inexperienced ears, Bogart waits a full thirty seconds or so after meeting her before inviting her to see the sights, starting with the inside of a tent.

To sample you a sample of the crackling love-talk writer-director Richard Brooks has them tossing at one another: "Please, major, stop creeping up on me," says June. "Stop talking like a vice squad," says Bogart. "Aren't you too old for this kind of thing?" says she, retreating. "When I'm too old for it I'll be dead," says he, advancing.

But all the time he's declaring war on her defenses, she's invading his heart. Then D-Day for the real thing can't come too soon for him.

The screen's top topkick, Keenan Wynn, is just about perfect as an ex-circus roustabout bringing Barnum & Bailey techniques to these Army tactics. In tempo, temperature, and between-the-bombs tenderness, "Battle Circus", is surefire, sheer flame and sure fun!

★ ★ ★

M-G-M presents HUMPHREY BOGART, JUNE ALLYSON in "BATTLE CIRCUS" with Keenan Wynn and Robert Keith. Screen play by Richard Brooks. Based on a story by Allen Rivkin and Laura Kerr. Directed by Richard Brooks. Produced by Pandro S. Berman.

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• To assist in obtaining and maintaining adequate airpower for national security and world peace. • To keep AFA members and the public abreast of developments in the field of aviation. • To preserve and foster the spirit of fellowship among former and present members of the United States Air Force.

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