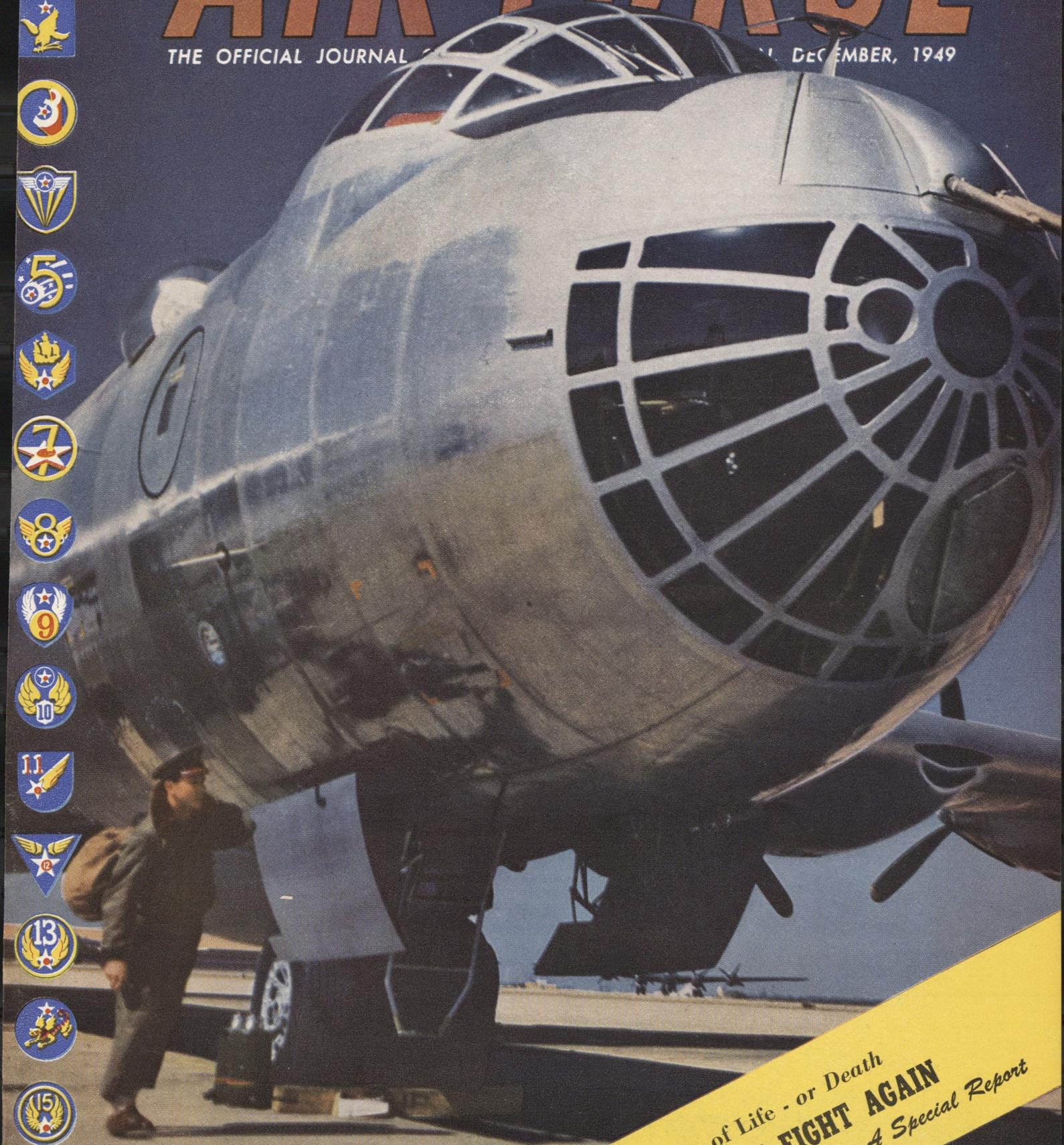


# AIR FORCE

THE OFFICIAL JOURNAL

DECEMBER, 1949



Intercontinental Bomber

The Facts of Life - or Death  
**IF WE FIGHT AGAIN**  
*A Special Report*

# THE MOST SIGNIFICANT STEP FORWARD

## In the History of Aircraft Ignition

BENDIX  
SCINTILLA

# LOW TENSION IGNITION SYSTEMS

The name Bendix-Scintilla has long been synonymous with the finest in aircraft ignition equipment. The highly specialized knowledge of design, development and production techniques which earned this reputation has been compiled through more than 25 years of experience. With such a background it was only natural that Bendix-Scintilla should introduce a revolutionary improvement in this field. Scintilla engineers turned to an entirely new concept, the Low Tension System. In this way they eliminated many of the difficulties encountered with conventional installations right at the start, confining high voltage circuits to very short leads between the transformer coils and spark plugs.

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- Product of the most trusted name in aircraft ignition.
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- Superior ability to fire spark plugs with low leakage resistance caused by conductive surface deposits.
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- Reduction of as much as 65% in spark plug erosion.
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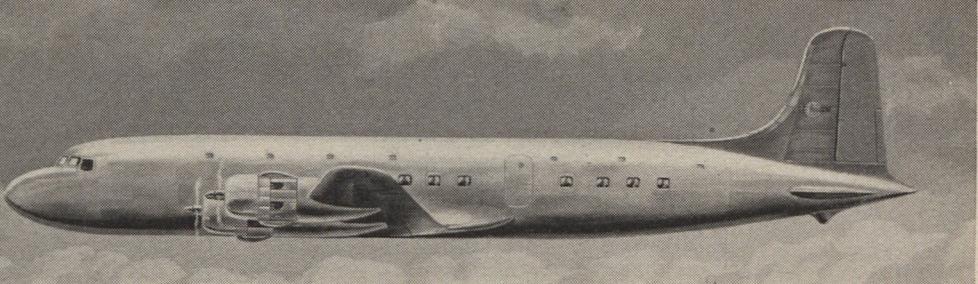
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Douglas *Giant Transport* Family

# GREATER LUXURY

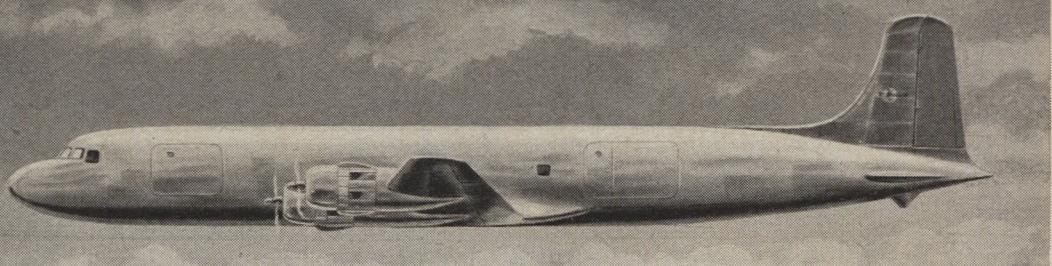


**DC-6**

*MOST POPULAR LUXURY AIR TRANSPORT*  
in service today is the great Douglas DC-6. Ninety-five of these swift, dependable airplanes are now in service on leading domestic airlines. The DC-6 carries more passengers in the U. S. than any other type of aircraft.

Douglas has established an unusual record for fast, reliable service on spare parts and maintenance. Swift, dependable, easy to fly and less costly to maintain—it is no wonder the Douglas DC-6 has achieved prime popularity with both flying public and airlines.

# GREATER PROFIT

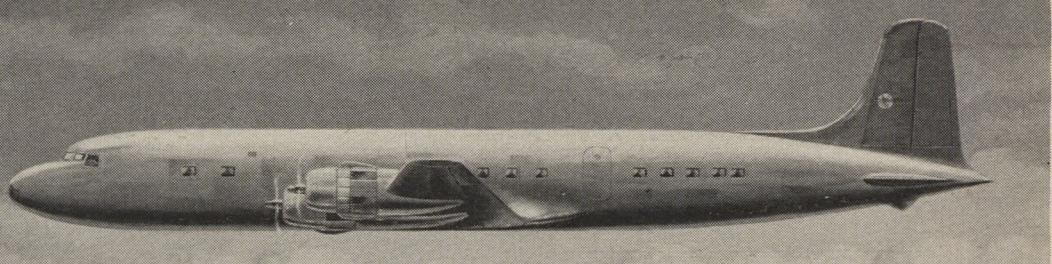


**DC-6A**

**A** NEW "LIFTMASTER" CARGO TRANSPORT opens new era in the rapidly expanding air cargo field. Currently being exhibited to airline officials, the "Liftmaster" is the first four-engine cargo airplane specifically designed to fill the need for a modern, medium-

size cargo airplane for military and civilian use. In contrast to the Douglas DC-4/C-54, the new DC-6A carries  $\frac{1}{3}$  more cargo at  $\frac{1}{3}$  less cost. The DC-6A flies 100 mph faster than the DC-4/C-54—thus making possible overnight transcontinental cargo service.

# GREATER SPEED

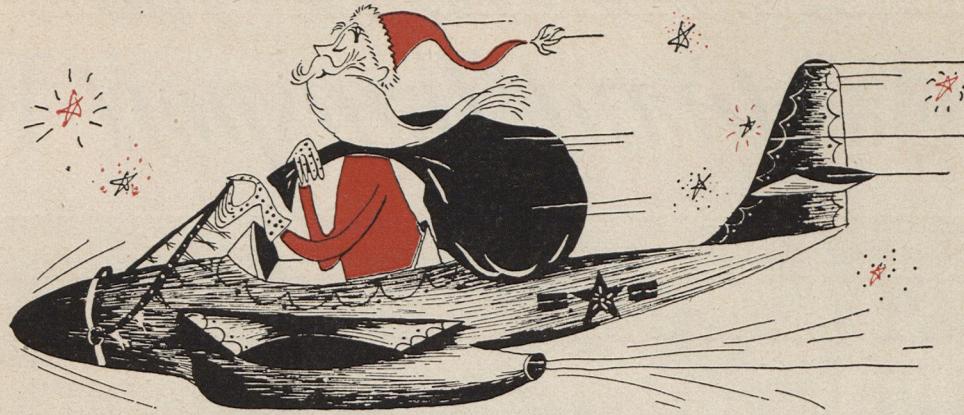


**DC-6B**

**B** *THE NEW DC-6B* will be the most versatile air transport ever designed. Like the "Lift-master," it will be 5 feet longer forward of the wing than the DC-6 and will thus accommodate 8 additional passengers in DC-6 luxury. High density models will carry up

to 92 passengers. The over-ocean DC-6B with large galley, coatrooms and lounge will carry 54 passengers in air-conditioned comfort. The 9600 hp developed by the Douglas DC-6B engines will make this the *fastest* non-jet luxury air transport in service.





## **EVERYONE'S AIR-MINDED THIS CHRISTMAS!**

Today, more than ever before, airpower and national defense are being discussed on front pages and front porches all over America.

Thanks to AIR FORCE Magazine, you have been kept informed on every new development in military aviation. You've had inside information on Air Force activities months before press and radio tell the story.

By sending AIR FORCE subscriptions to your friends this Christmas—or AFA Memberships to those who qualify—you not only give a unique gift you *know* will be welcome, but you make a valuable contribution to the cause of airpower. For, if we are to have the kind of Air Force AFA is fighting for, it is vital for *every* thinking American to know what's going on in the field of military aviation.

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# AIR FORCE

THE OFFICIAL JOURNAL OF THE AIR FORCE ASSOCIATION

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## CHRISTMAS IN JAPAN.....

Like cokes and chewing gum, Christmas is something the GI's brought with them

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Now that the Airlift is over, there's time to make a movie about it.....

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**AIR FORCE MAGAZINE** is published monthly by the Air Force Association at McCall Street, Dayton 1, Ohio. **EDITORIAL OFFICE:** 901 Sixteenth St., N.W., Washington 6, D.C., Sterling 2305. Publisher assumes no responsibility for unsolicited material. **ADVERTISING OFFICE:** 369 Lexington Avenue, New York 17, N.Y., Murray Hill 9-3817. Sanford A. Wolf, Advertising Manager. **MAILING:** Reentered as second class matter, December 11, 1947, at the post office at Dayton, Ohio, under the Act of March 3, 1879. **SUBSCRIPTIONS:** Membership in the Air Force Association, \$4.00 per year, \$2.50 of which is for 1 year subscription to **AIR FORCE**. Subscription rate to non-members, \$4.00. Single copy, 35 cents. **REGISTRATION:** Trade-mark registered by the Air Force Association, Copyright, 1949, by the Air Force Association. All rights reserved under Pan-American Copyright Convention. Printed in U.S.A. **CORRESPONDENCE:** All correspondence pertaining to editorial matters and change of address should be sent to Air Force Association, 901 Sixteenth St., N.W., Washington 6, D.C.

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## THIS IS AFA

● The Air Force Association is an independent, non-military, airpower organization with no personal, political or commercial axes to grind; established and incorporated as a non-profit corporation February 4, 1946.

● **Active Members** are men and women honorably discharged from military service who have been assigned or attached to the US Air Force or its predecessor services, or who are currently enrolled in the Air Force Reserve or Air National Guard. **Service Members** (non-voting, non-office holding) are men and women currently assigned or attached to the US Air Force. **Associates** (non-voting, non-office holding) are men and women not eligible for Active or Service Membership who have demonstrated an interest in furthering AFA's aims and purposes, or in proper development and maintenance of US airpower.

## ITS OBJECTIVES

● To preserve and foster the spirit of fellowship among former and present members of the Air Force, and to perpetuate the identity and group solidarity of wartime Air Force units large and small.

● To assist in obtaining and maintaining adequate airpower for national security and world peace.

● To keep AFA members and the public at large abreast of developments in the field of aviation, and to stimulate community interest in Air Force activities and installations.

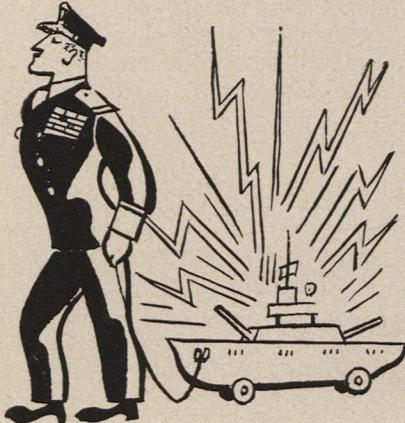
"A NATION'S AIRPOWER IS ITS TOTAL AVIATION ACTIVITY, CIVILIAN, MILITARY, COMMERCIAL AND PRIVATE, POTENTIAL AS WELL AS EXISTING."

H. H. Arnold

# AIR MAIL

## Hot and Heavy

**Gentlemen:** Undoubtedly the ill-tempered effort of Naval authorities to discredit airpower has given all air veterans their best rallying point since the war began with a devastating bombardment of naval units at Pearl Harbor. And we rather imagine that had B-36's or comparable craft swooped in without warning from any of a thousand possible island bases, and not the carrier-type craft that still wrought great havoc, we might well have had no Navy at all in a matter of days. Certainly the admiral's arguments are



transparent—they seriously dislike relegation to a slightly less glamorous co-operative, not necessarily dominant, role. Their little toy boats are covered with (radioactive) dust, but sturdy and staunch they stand . . . Somehow we must achieve common-sense unification of armed forces that will give us a highly efficient protective agency and simultaneously guarantee us against possible military government.

Thomas V. Waber  
Las Vegas, Nevada

**Gentlemen:** I don't know how this Navy business is smelling in Washington these days, but it certainly stinks out here. With absurdity daily following absurdity, one is finally led to the "hopeful" conclusion that perhaps some good may come from the sorry business in the end. It seems quite likely that the Admirals—the windy ones, that is—will eventually so discredit themselves and their stated "point of view" that their yammerings may well bog down in the general lethargy: no one listening. Nevertheless, their present unscrupulousness is a high price to pay for even so desirable an end. . . . These stubborn, willful, selfish men, who refuse to obey the orders and directives

of their superiors, who steal official documents and who talk and write nonsense, unable to adapt themselves to new ideas and to new facts, flaunting their traitorous defiance openly, to be observed and noted by our friends and by our enemies, are retrogrades, unable to emerge from the past. "Where would we have been without the Navy in the last war?" they whimper. The proper answer is, up the creek. Where would we have been without the Cavalry in the Indian Wars? Also up the creek. The Cavalry was a very good primary weapon. So was the Navy. The Navy is still a very good secondary weapon. I say, let them study and develop their own tasks. And let them let us study and develop ours—both those of us working on problems of tactical operations, and those of us working on strategic operations. And for God's sake, get them away from their press conferences and communiques, and back to work, or they won't even be a very good secondary weapon pretty soon.

Lee S. Thomas  
New Orleans, La.

**Gentlemen:** What has gotten the Navy so steamed up about this B-36? Does it actually believe that the plane is a "dud", or is it whining because of its loss of position as the fair-haired darling which heretofore was always the chief recipient of appropriations for the defense units? For the first time in many years the Navy lacks the major support of a President who is at heart a Navy man. So one must wonder if the Navy isn't just squalling like a spoiled child who for the first time is being made to share with others on a strictly merit basis.

John Tilton  
Ashland, Ohio



**Gentlemen:** The current attack in the House Armed Services Committee by

Naval officers is detrimental to national defense in the extreme. Far greater harm however, is done to overall defense by high Air Force officers who do not counter the current propaganda barrage and who, through silence, let



the entire system of National Defense be scuttled by a few Naval extremists. I am seriously considering resigning my reserve commission as a protest to the "silence" policy of high Air Force officers.

Gerald N. Leavitt  
Las Vegas, Nevada

**Gentlemen:** I must take this opportunity to add my expressions of gratitude and praise to Generals Vandenberg and Norstad and to all others who so commendably represented all of us before the Congressional Committee and the world. Regardless of whatever personal bones we may have to pick with Air Force administration during the war years, the news reporting of the investigation indicates that we can be rightfully proud of the Service of which we were members. Growing pains are difficult to all but the sound, sturdy maturity of the Air Force has been publicly recognized and appreciated by the general public. All of us of the Air Force, past or present, were on trial; certainly we know that our service, however insignificant it may have seemed, contributed to the desired goal, yet we were to be denied, if possible, the simple reward of a clear conscience in having done well the task permitted us. That a proud Service should have lowered itself to the common level of mere disgruntled human beings reflects no honor on any branch. Ours is the present task of rebuilding the faith that our country and our families are universally represented as well as protected by the uniformed services which are in the final analysis supported by those of

us not now in uniform. Let all those in authority constantly be reminded that theirs is not to command power but to command respect, to serve and not to be served. To AIR FORCE Magazine, my gratitude for a most commendable job of representation and reporting.

Harold C. Hoffman  
Mandan, North Dakota

*Gentlemen:* . . . I have been thinking about this business of Captain Crommelin's attempt to emulate Billy Mitchell. The public loves a martyr, but I think the public can be helped to think straight on this one if Air Force people state the situation as simply as possible. Here, for what it is worth, is how I have been answering questions about Captain Crommelin. There is a fundamental difference between Billy Mitchell and Crommelin. Whereas Mitchell was fighting an entrenched bureaucracy in a *new* cause, Crommelin speaks for those who are fighting, not the Air Force or any entrenched bureaucracy, but the evolution of warfare, in a *lost* cause.

Beirne Lay Jr.  
Los Angeles, Calif.

*Gentlemen:* . . . I am whole heartedly for a large Air Force and Unification, but I believe the Air Force might try leading the way in this Unification program instead of following the lead of both the Army and the Navy trying to build a complete defense organization within itself. For instance, the Corps of Engineers have for many years been doing a fairly fine job of building air fields etc., but now the Air Force is setting up its own engineering organization. This definitely is not Unification. . . .

San Francisco, Calif.  
James J. Newman

*Gentlemen:* . . . I personally view the attempts to restrict the preparedness of our air arm by our politicians with much apprehension . . .

Joseph P. Kelley  
Philadelphia, Pa.

*Gentlemen:* . . . It is a disgrace that we are not asking for a 100 groups instead of 70 . . .

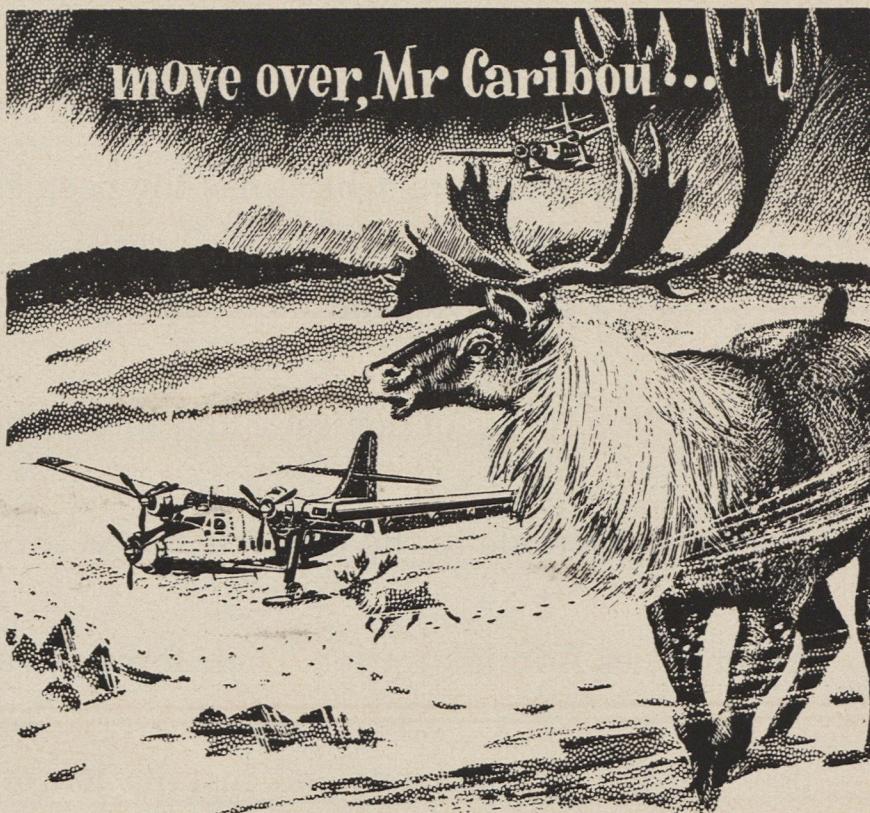
J. Eduardo Hernandez  
Lexington, Kentucky

*Gentlemen:* . . . After seeing what the last war has cost us in dead, disabled, money, time, materials and grief it doesn't seem possible that our government can be so short-sighted and bull headed about our national defense. It looks like they were inviting somebody to take another crack at us. . . .

Homer C. Spivey  
Shandon, Calif.

*Gentlemen:* As a member of a B-29 outfit during the past war, I am in full realization of not only the practicability of long range superbombers, but also of the necessity of holding a mighty big club until the world situation straightens out. . . .

Charles I. Phipps, Jr.  
Bloomington, Ind.



## your dining room is big enough for a landing field!

Rugged, three-engined dependability and the agility  
needed for operations in short, unimproved areas are  
features of the Air Force's new "four-in-one" transport

— the Northrop Raider C-125.

Designed for assault, arctic rescue, escape and  
evacuation and general cargo use, the Raider can carry

heavy loads of equipment and men into and out of  
forbidding country where other planes cannot go. This

simple, sturdy and versatile transport is one of the  
world's most useful airplanes, a credit to the famed

Northrop Aircraft design and production team which is  
producing it in quantity for the U. S. Military.



**NORTHROP AIRCRAFT, INC., Hawthorne, Calif.**

Builders of the SCORPION F-89 all-weather interceptor





HIS Christmas the peoples of all nations, who depend increasingly on aviation as an artery of domestic and international commerce, owe a debt of gratitude to the U.S. Air Force, U.S. Navy and the Civil Aeronautics Administration. Their foresight and confidence made possible the development and installation of GCA at nearly 200 military and civil airports around the world.

As the pioneer developer and manufacturer of GCA, Gilfillan is proud of its part in this vital contribution to aviation progress.

Pioneer Developer and Manufacturer  
of GCA for the USAF and the CAA



*Gilfillan*  
LOS ANGELES

GCA IS THE OFFICIAL AND PRIMARY NAVIGATIONAL LANDING AID OF THE USAF, USN, USMC, RCAF, & RAF

# Airpower in the News

25 OFFICERS FROM USAF AND NAVY WERE EXCHANGED on October 1 for one-year tours of duty in program designed to promote better understanding by AF and Navy officers of the administrative and operational problems of both services. Ranks of those exchanged ranged from 1st Lt. and Lt. (JG) through Maj. and Lt. Cmdr. . . . Meanwhile, the three services have agreed that one-fourth of graduates from West Point and Annapolis in 1950 will be allocated to AF. . . . Sec. Johnson's "economy program" is now being felt by AF as major AF commands have been directed to begin separating 2,454 non-regular rated officers from active duty and to offer an additional 1,401 the option of being converted to permanent non-flying status or being separated from active duty. . . . AF strength dropped from 419,900 on August 31 to 418,000 on September 30.

A NEW "FLYING BOOM" IN-FLIGHT REFUELING SYSTEM--in which a B-29 tanker plane refuels USAF Boeing B-50 and B-29 bombers by means of a telescoping pipe--was announced recently by AF. . . . Construction has been completed on the prototype of AF's largest production transport aircraft, Douglas C-124 "Globemaster II", and the new troop and cargo plane rolled out of its production hangar on November 11. . . . AF's new twin engine assault transport, Chase XC-123, (see Page 44) completed its first flight successfully last month at Mercer Airport, West Trenton, N. J., remaining aloft for 20 minutes.

AF's NEW XB-51 JET BOMBER successfully completed its first flight test in Patuxent, Md., recently. . . . Air Engineering Development Center, research installation to be built by USAF for development and evaluation of air weapons, will be located at Camp Forrest, Tenn. . . . A specially-equipped B-50 Superfort has completed, successfully special series of cold weather tests in Arctic region, Boeing has disclosed.

24 FAIRCHILD C-82 PACKETS WERE FLOWN TO WIESBADEN, GERMANY, recently for assignment to 60th Troop Carrier Group at Rhein Main AFB. . . . Two F-84's made first Thunderjet transoceanic flight on hop to England in late October. . . . Organization of six new squadrons to operate aircraft returning from Berlin Airlift to Pacific Division of MATS has been completed. . . . Reorganization of Air Transport Group of MATS stationed at Brookley AFB, to bring all functions of the group under command of MATS Continental Division, has been announced by Gen. Kuter.

ACCRUAL OF CONTINUOUS COMMISSIONED SERVICE FOR PURPOSE OF ENLISTMENT IN GRADE OF MASTER SERGEANT HAS BEEN DISCONTINUED, Gen. Vandenberg announced. Regulation changes are designed to aid the airmen career program. . . . A decision to continue advertising in support of personnel recruiting for AF and Army for balance of 1950 fiscal year was announced last month as result of study made by Personnel Policy Board.

HEADQUARTERS OF 1ST AF HAS BEEN MOVED from Slocum AFB, N. Y., to Mitchel AFB, N. Y.; Robins AFB in Georgia is new headquarters of 14th AF, formerly at Orlando. . . . 10th AF Headquarters will be moved from Benjamin Harrison AFB, Indianapolis, to Selfridge AFB, Michigan. . . 311th Air Division, strategic reconnaissance organization of USAF, which recently moved its headquarters to Barksdale AFB, has been redesignated as Second Air Force. . . USAF's Aircraft Assembly Plant No. 7, Cleveland, was renamed Schlegel AF Plant on Armistice Day in honor of Capt. Albert L. Schlegel, an AF pilot killed in action during World War II.

NAMES OF 275 OFFICERS NOMINATED BY THE PRESIDENT FOR PROMOTION TO PERMANENT GRADE  
(Continued on page 8)

# Airpower in the News CONTINUED

~~Three red airplane icons are positioned above the text.~~  
OF COLONEL IN USAF have been announced by Secy. Symington. . . USAF has convened a board of senior officers to make selections from approximately 1,880 officers for promotion to permanent grades of lieut. colonel, major and captain.

A CONFERENCE OF 24 USAF STAFF CHAPLAINS, representing all of the overseas and continental U. S. commands, was held November 15 through 17 at Wright-Patterson AFB. . . Contractors to Army, Navy and AF have been asked by Secy. Johnson to place sub-contracts on military orders with firms in distressed areas, wherever feasible.

FORMER MEMBERS OF AF, RETIRED OR RECEIVING RETIREMENT BENEFITS FOR PHYSICAL DISABILITY, who believe themselves eligible for increased retirement pay under provisions of Career Compensation Act of 1949, should address inquiries to Deputy Chief of Staff, Personnel, Attention Director of Military Personnel, Washington 25, D. C.

2,000 TRAINING OPPORTUNITIES ARE AVAILABLE TO RESERVE AIRMEN IN FIELD OF METEOROLOGY. These vacancies exist in the Corollary Unit Program of Air Weather Service. . . Opportunities exist for 2,227 Reserve officers and 1,692 Reserve airmen to attend service schools during remainder of current fiscal year. . . Uniforms must be worn by reservists--both officer and airman--during inactive-duty training for pay purposes, regardless of whether such training is performed at military installation or elsewhere, according to recent amendment to AF Letter 35-46. . . Air National Guard strength now totals 43,135. . . Elements of the RCAF Reserve joined units of USAF, Air National Guard and Naval Reserve in air training exercise held in northwestern U. S., November 4 through 14. . . As for Naval Air Reserve, squadrons located at 27 Air Stations throughout the country piled up a record-breaking total of 394,000 pilot flying hours during 1949 training cruise program which was completed in late October.

VA HAS DENIED RUMORS THAT NSLI REFUND CHECKS WILL START FLOWING BEFORE CHRISTMAS. . . Findings of War Claims Commission are expected to be announced at first of year, and forms will be distributed at that time to ex-POWs who will apply for this compensation.

47TH ANNIVERSARY OF FIRST FLIGHT OF WRIGHT BROTHERS will be marked by special celebration to be staged at Kittyhawk, N. C., on December 17. Observance will be under auspices of Kill Devil Hills Memorial Association, with the Air Force Association and North Carolina Division of American Philatelic Society as co-sponsors of the program.

THE "WAIKIKI BEECH" BONANZA, in which Captain Bill Odom flew non-stop from Honolulu to Teterboro, was accepted on November 3 by the Smithsonian Institution at National Air Museum's storage facility near Chicago.

INDUSTRY: Pratt & Whitney Aircraft had fewer lost-time accidents during first three quarters of 1949 than other aircraft engine manufacturers in country, according to figures released by National Safety Council. . . A larger, faster and more powerful DC-6, DC-6B, was announced last month by Douglas Aircraft. . . Convair has received contract from USAF for 12 additional T-29 navigational trainers. . . Inauguration of transatlantic service with Boeing Stratocruisers between England and U.S. on December 6, was announced recently by BOAC. . . A new \$12 million laboratory, designed and built expressly for test of experimental jet engines, will be named Andrew Willgoos Turbine Laboratory, United Aircraft Corp., has announced.

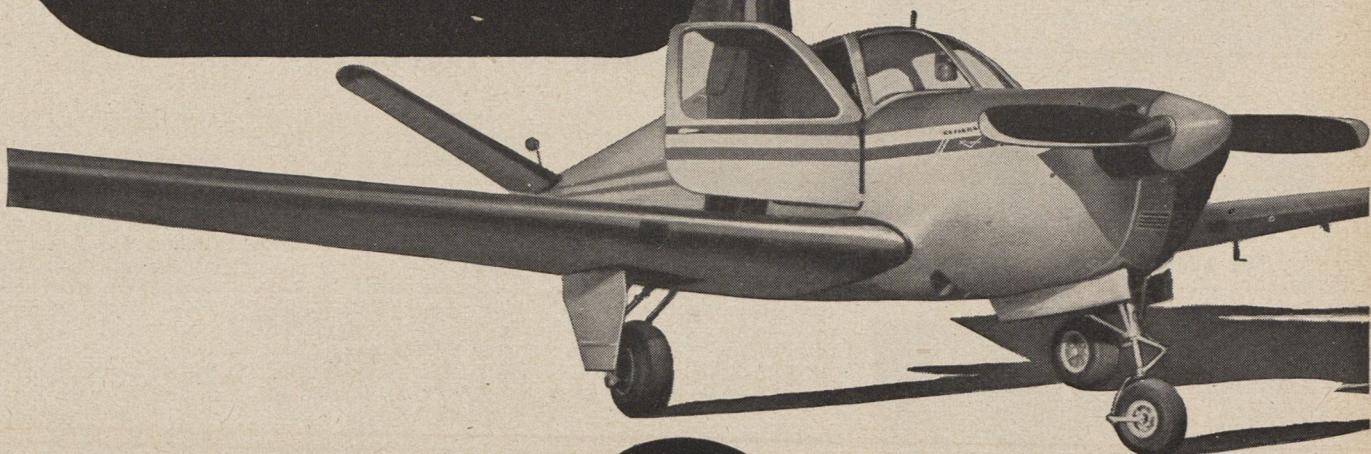
# Beechcraft **BONANZA**

Let's look at

Beechcraft advantages

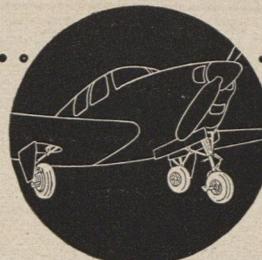
from the owner's

viewpoint



### You want speed . . .

The Beechcraft Bonanza cruises at 170 miles per hour at 8,000 feet, using only 56% of engine's maximum rated take-off power. *No engine overload.* Top speed of 184 miles per hour at sea level. (Bonanza performance figures guaranteed.)



... but you want strength and ruggedness, too. See how well the ship handles on short, rough fields. See that low, sturdy landing gear with wide tread and struts exclusively cross-braced. No pitching — because of nose gear position and long wheel base. Allows greater braking.

### You want high performance

Your Beechcraft Bonanza has a range of 750 miles, a service ceiling of 17,100 feet. You get the extra speed with an extra margin of safety. Carries four people and more than 135 pounds of baggage.



### ... but you want economy, too.

Beechcraft Bonanza fuel consumption amounts to only 9½ gallons per hour at cruising speed. Because of lack of engine overload, there's less engine wear. Seat-mile cost reaches as low as 1¼ cents. Real savings!

### You want safety . . .

Tough, sturdy framework gives you safety "plusses." Rated in *utility* category at *full gross weight*, with a limit flight load factor of 4.4 G's, the Beechcraft A35 Bonanza underwent radio controlled dive tests at 275 miles per hour, pulling out safely at 3 G's.



... but you want beauty and comfort, too. Exclusive retractable step and limousine door let you enter and leave with ease; preserve feminine dignity! Room to spare for four in the handsome, *sound-proofed* cabin. Maximum 5-way visibility.

Add up all these features—and you have the reasons why the revolutionary Beechcraft Bonanza is a better buy. See it today! A note on your company letterhead will bring illustrated brochures describing the Beechcraft Bonanza's many *extra* advantages. Write to Beech Aircraft Corporation, Wichita, Kansas.

#### Compare these performance features

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

#### Compare these comfort features

- Exclusive retractable step
- Limousine entrance
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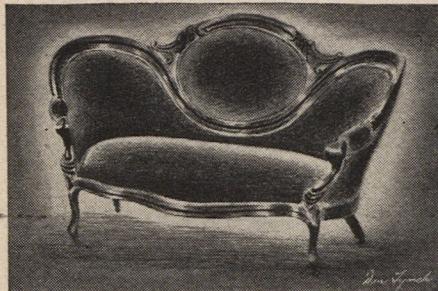
# What other Christmas present can you name that



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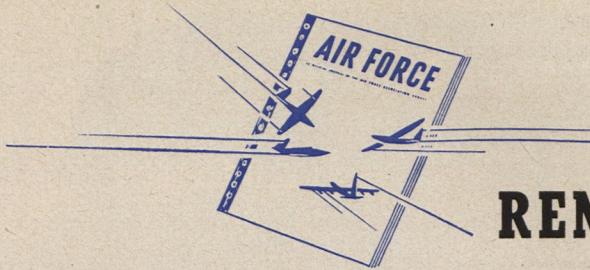


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## RENDEZVOUS

### Where the Gang gets together

**MIA:** My nephew, William R. Duke was reported missing in action when his destroyer, USS De Haven was torpedoed by the Japs in 1942. If anyone knows anything of this incident or has a Navy friend who might shed some light on this final action, please contact Robert E. Melvin, 111-42 126th St., South Ozone Park 20, L.I., N.Y.

**SWEET VIOLETTE:** Would like to hear from S-Sgt. William La Violette, 484th Bomb Sq., 505th Bomb Gp. Last I heard he was somewhere in the Mariannas. Joanne Adducci, 925 Montrose Ave., Chicago 13, Ill.

**BEST WHAT WAS:** Please try to locate for me one, each, GI, best P-38 Crew Chief which ever was. Same being Sgt. Brandon of the 394th Fighter Sq. He was my combat crew chief and I would like to hear from him very much, Toot-Sweet. J. E. De France, Box 396, Columbus, Mont.

**URGENT:** For personal reasons I am very anxious to locate Daniel T. Hagan. He was last based at Big Springs, Texas, and his home address was Santa Fe, N. M. He was a first lieutenant bombardier late in 1945. Robert A. Burdick, 67-27 3rd Terrace Middle Village, L.I., N.Y.

**REUNION:** 341st Fighter Sq., 348th Fighter Gp. Plans are being formulated for squadron reunion possibly in New York City, sometime in January or February, 1950. For particulars write Albert V. Arnold, 183 Rogers Avenue, Milford, Conn.

**KATIE, BOB & SUE:** Would like very much to hear from Katherine Birnie, AF WAC stationed at 8th AF Hq., High Wycombe, Bucks, England 1943-45. Also Robert C.

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

Philadelphia 6, Penna.

**WRECKONEERS:** Anyone knowing the present location of Flight Officer Myrl E. Fitzgerald please contact me. "Fitz" was last seen at Yokata, Japan. Allen W. Hoag, 6209 South Major Ave., Chicago 38, Ill.

**OUTFIT ROUNDUP:** Want to hear from anyone who was in any of the following outfits at the following times: 76th Bomb Sq. 42nd Bomb Gp. from July 1941 to July 1942; 330th Fighter Sq., 329th Fighter Gp. Naval Air Station, North Island, San Diego, Calif., from November 1942 to August 1943; Flt. 9, 302 CTD, Knox College, Galesburg, Ill., from September 1943 to February 1944; 420th Air Service Sq. from September 1944 to November 1945. T-Sgt. Victor N. Hill, NCOIC Recruiting Office, Spokane AFB, Bong, Wash.

**RESERVES WANTED:** The 448th Bomb Wing, Medium USAFR, is in need of personnel to fill T/O vacancies in all phases. Interested men living in southern California contact S-Sgt. D. Dea, Reserve Personnel, Long Beach Airport, Long Beach, Calif.

**EAGLE PASS:** 44-I of Eagle Pass who went to Boca Raton and who would like to keep in touch with each other, please send your address to the undersigned. And that goes for old Stubby Stubbs of Barnesville, Ohio. Porky and Bud are waitin' to hear from you. R. L. Stinson, Jr., 680 West South St., Galesburg, Ill.

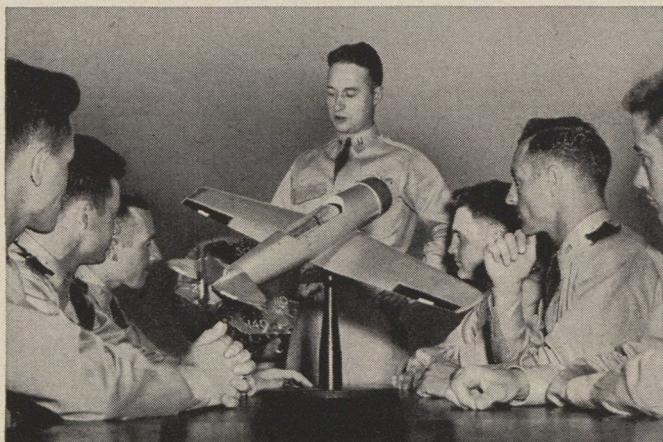
**CAPT. PETE:** Would like to hear from Capt. Pete and his crew who flew in "Satan's Lady", "143" of the 369th Bomb Sq., 306th Bomb Gp. in England. Lost your addresses, so please write. Harry Tzipowitz, 711 Pine St., St. Nanticoke Pa.

**BAILED OUT:** I'd like to contact any of the five men who bailed out of a B-24 which collided with another over the Baltic Sea on a mission to the synthetic oil refinery at Politz, Germany, on June 20, 1944. The ship that went down had the whole tail assembly torn off and, after dropping straight down several thousand feet I saw five parachutes open. I suppose the other five went under with it, because it sank immediately. I'd be pleased to hear from any survivors. Carl McClung, 290 Washington St., Keypor. N. J.

**GRIM REAPERS:** Would like to have reprints made of the two group pictures taken at the 3rd Bomb Gp. 1945 Christmas party in the Reaper's Rest Officer's Club, Atsugi, Japan. I will return the prints plus an extra set as soon as possible. Stanley Swick, 40 West Grand St., Nanticoke Pa.



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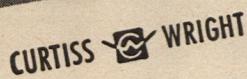


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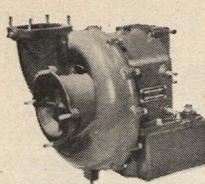
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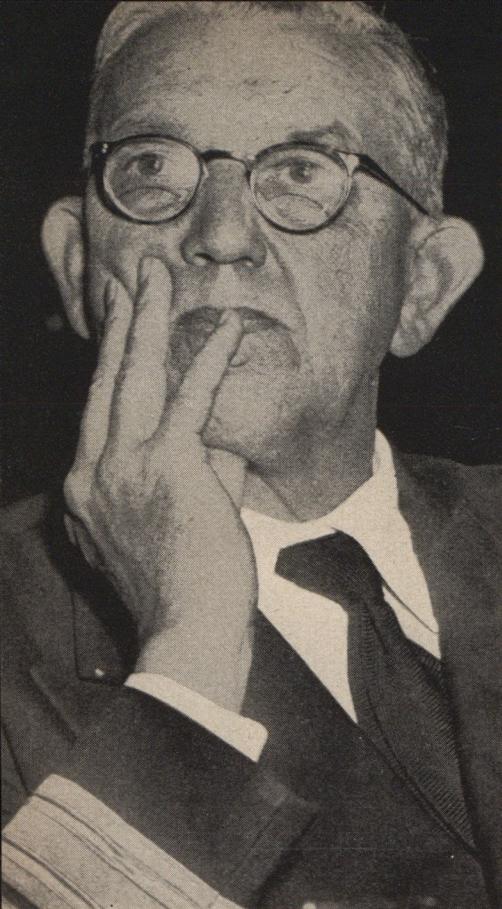


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# IF WE FIGHT AGAIN

On the eighth anniversary of Pearl Harbor the age-old question of making war is still very much with us, as are age-old methods for making it. And for the first time there is a weapon so powerful it gives hope of preventing warfare itself. This hope alone justifies our careful scrutiny of Old and New in the defense controversy. To that end this Special Report is dedicated.



**ADMIRAL LOUIS E. DENFELD**

"The Navy is not accepted in full partnership . . ."

**COMMANDER EUGENE TATOM**

"You could stand at one end of the runway at Washington National Airport, and have an atom bomb explode at the other end of the runway without serious injury."

**ADMIRAL ARTHUR W. RADFORD**

"The B-36 is a billion dollar blunder."

# LET'S BEGIN

The Congressional investigation of the "B-36 and Related Matters" (as the program announced it) is now two months behind us. There has been ample time for a cooling of tempers and for sober reflection on what has been accomplished. Usually time and thought are excellent distillates in separating that which is germane from the irrelevant. But here, for once, the distilling process is singularly unfruitful. Reflection seems to get one nowhere, and the inescapable conclusion is that it's because "nowhere" is precisely where the investigation itself got. To be sure, the Admirals found, as a by-product of the hearing that civilians still run the defense establishment as the provisions of the constitution intended, and their re-education in this particular was most timely, but the arguments they presented were, for the most part, left dangling.

There are many reasons why the investigation was inconclusive. Among them:

*The question up for debate was never clearly stated.* The inquiry began as a probe of anonymous charges of malfeasance in the procurement of the Air Force's mighty B-36 airplane. Three months and tens of thousands of pages of testimony later it wound up in the "related matters" department—a department related in truth to nothing so much as to the personal resolve of a "group" of Naval officers to stop at all costs the "nibbling away" of their particular branch of the service.

Once the charge of shenanigans in the B-36 procurement was dealt with it would have been

best for all concerned had the hearing been adjourned. But since the committee deemed it necessary (because of the Navy's well-publicized indignation) to go on from there, it should have started where it is likely the Joint Chiefs of Staff began their study—at an evaluation of the warring capabilities of "the only possible enemy."

Having arrived at a logical conclusion on this point, the next step should have been to consider the means (weapons) we have of defending ourselves against that enemy, and of carrying the battle back to him. Then and *only* then would it have been logical to discuss roles and missions. But that is where the committee chose to *begin* its post B-36 hearings, and that is one of the big reasons the thing fell apart.

To talk about roles and missions without prior consideration of a war plan is like playing a football game without a goal line.

Unless the objective is clear and understood by all, it makes no difference who carries the ball nor how far nor well he runs.

Of course the answer to this is that a war plan isn't something you discuss in open hearing. Quite true, but then why waste time and money and give away many of your military secrets on a debate that at the very best, can get at the point only on a most oblique angle?

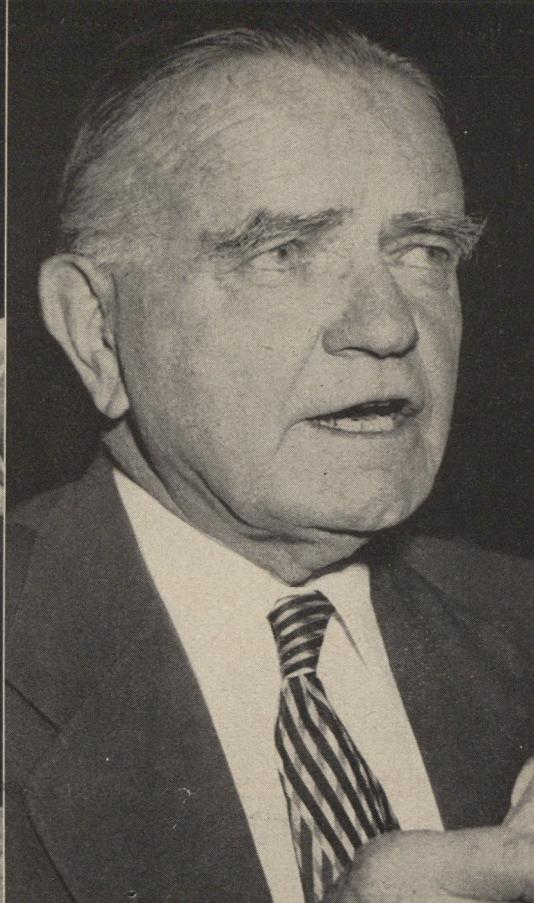
Another reason the hearing didn't get further was the fact that *the testimony that was germane was incomplete.* In bemoaning its "reduced" role, the Navy made many charges against the policies of the Joint Chiefs of Staff





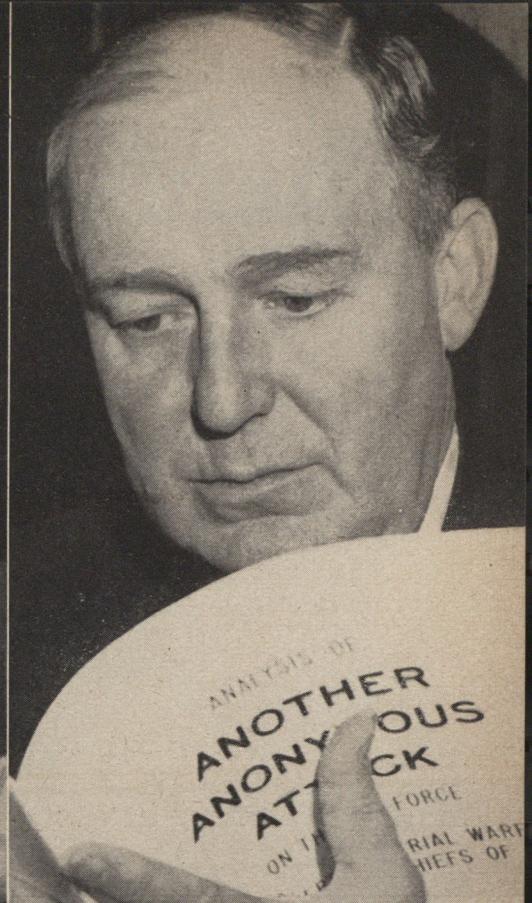
**ADMIRAL H. P. BLANDY**

"The aircraft the UNITED STATES (super-carrier) was intended to operate could have conducted strategic bombing if the occasion required."



**ADMIRAL WILLIAM F. HALSEY**

"Our priceless asset is our mobility. It commences with our command of the seas."



**COMMITTEEMAN DEWEY SHORT**

"There's glory enough for all."

# FROM SCRATCH

that could be repudiated before the committee and the public only by reference to highly secret *war plans*. There were two choices; (a.) give half answers which were likely to distort the picture more than no answer at all, or (b.) give full answers which would involve serious breaches of security. There were few full answers, but even so there was, as General Bradley said, "too much spread on the record."

The House Armed Services Committee made a poor "jury." The early part of the hearing, which had mostly to do with Cedric Worth and his "scandalous" charges regarding the B-36, was handled with commendable dispatch. It was a black or white question, and the committee had little difficulty in arriving at the conclusion that there was "not one iota" of truth to the allegations.

But when the subject got around to roles and missions it was apparent that the "jury" was in over its head. To their credit, they were the first to confess their inability to pass on matters of such technical and professional nature. The questions they asked of witnesses (as well as some they didn't) gave ample validation of their admission.

Furthermore, several members of the jury were either "for" the Navy and "against" the Air Force or vice versa, before the hearing began, and it is doubtful that any amount of testimony, no matter how convincing, could have turned them from their pre-established convictions.

There was one other factor—perhaps more important than



all the rest—that made a studied analysis of the problem impossible. That factor was the entirely unbecoming emotionalism resorted to by the Navy in getting its "case" before the public. Dignity and discipline are the essence of any military establishment. Had the Navy exercised either quality in its presentation, the job of evaluating what it had to say would have been far easier. But it chose to abandon the "posture" normally expected of soldiers, and in so doing only added to an already impossible situation. If confusion was the Admiral's end, then they were quite successful. If national security was the motive, then quite the opposite is true.

And so it may be best at this time to cross the investigation off and forget it. The committee's report is yet to come, but it is hard to see how it will clarify the issue other than to give a vote of confidence to the Joint Chiefs of Staff which it must certainly do. It may also make certain recommendations for modification of the National Security Act, but these will be in regard to administration rather than policy. In addition it probably will have quite a little to say about the removal of Admiral Denfeld.

But the basic problem—the problem which was alluded to, skirted, hinted at and avoided in the hearing—cannot be forgotten. *"How do you fight the 'only possible enemy'?"* This is a question that would best have been left up to the Joint Chiefs of Staff to determine. But the public and Congress now have their fingers in it, and it is important therefore that they have a nodding acquaintance with the basic issue—let's begin from scratch....

# There are **TWO** Reasons for



1.

## To KEEP the PEACE . . .

. . . or Failing That . . .

**I**t has been said many times by many people who should know: "the only way to *win* another war is to *prevent* it." Too many people have come to regard the statement as a platitude—homage the generals and admirals give to peace as a preface to their orations on how to fight a war.

The truth is that a military establishment designed to keep the peace must be built as carefully as one fashioned to win a war. Its weapons must be just as carefully selected, and peculiarly enough they might differ somewhat from the weapons upon which greatest emphasis would be placed in the event war came after all. Or to put it another way, the weapons that might be "*decisive*" in keeping the peace might or might not be decisive in winning a war.

When a war has begun and is well into, the combatants learn to take the measure of one another's fighting strength, to give and take, and to roll with the punch. Positions, although they are likely to be fluid, become fairly well known. Surprise is reduced to a minimum. For the most part one antagonist knows where the other is, what he's got to hit with, and how he's coming. A war that lasts any period of time becomes a war of attrition, and the weapon of decision (if there proved to be any such bird) might be, for sake of argument, a fast tank, a medium range bomber, or any combination of a dozen different instruments.

But tanks and medium range bombers are useless as weapons of *peace* because they *can not* be brought into play until the war of attrition has begun, and until the enemy is ready and waiting.

What then *is* an instrument of war that can be used to

prevent it? What do we have in our arsenal that is most likely to stop the enemy before he begins? What would he fear most? It would likely be an instrument with—among others—these capabilities:

- A weapon that we could use to strike back the *instant* we were struck.
- A weapon for which there was no tried and proven defense and one that could be sent against the enemy from unknown sources and over unknown routes.
- A weapon of such violence as to raise the question in the enemy's mind of his own ability to absorb it. One that would require him to put a major portion of his effort into his initial strike, or be so weakened by our counteroffensive as to be unable to carry on from there.

Go over the list of weapons in our arsenal today. Which of them fills the bill? Which would be applicable to "the only possible enemy"? At the moment there is one: the B-36 and the A-bomb. That is why the Joint Chiefs of Staff have called it the greatest single *deterrent* to war today. And that is what prompted Winston Churchill to remark that except for America's ability to strike back instantly with the atomic bomb, Europe *already* would have been overrun by Russia.



# Being MILITARILY STRONG



2.

## To WIN the WAR

ANY discussion of armed defense must be predicated on an understanding of what and when we are preparing to defend ourselves against. Security is not in these days a moat that can be built against all comers. We can no longer afford a defense against the world. Today's war is an expensive war. Consequently we must choose carefully the weapons best calculated to destroy the nation or nations *most likely* to attack us.

A parenthetic note about those weapons: The intrinsic efficiency of any given instrument of war is a thing quite apart from its effectiveness against the enemy. A carrier at sea is one of the most complex instruments of modern battle. Its workings are a marvel to behold. Likewise, man's achievement in building a 500,000 pound airplane

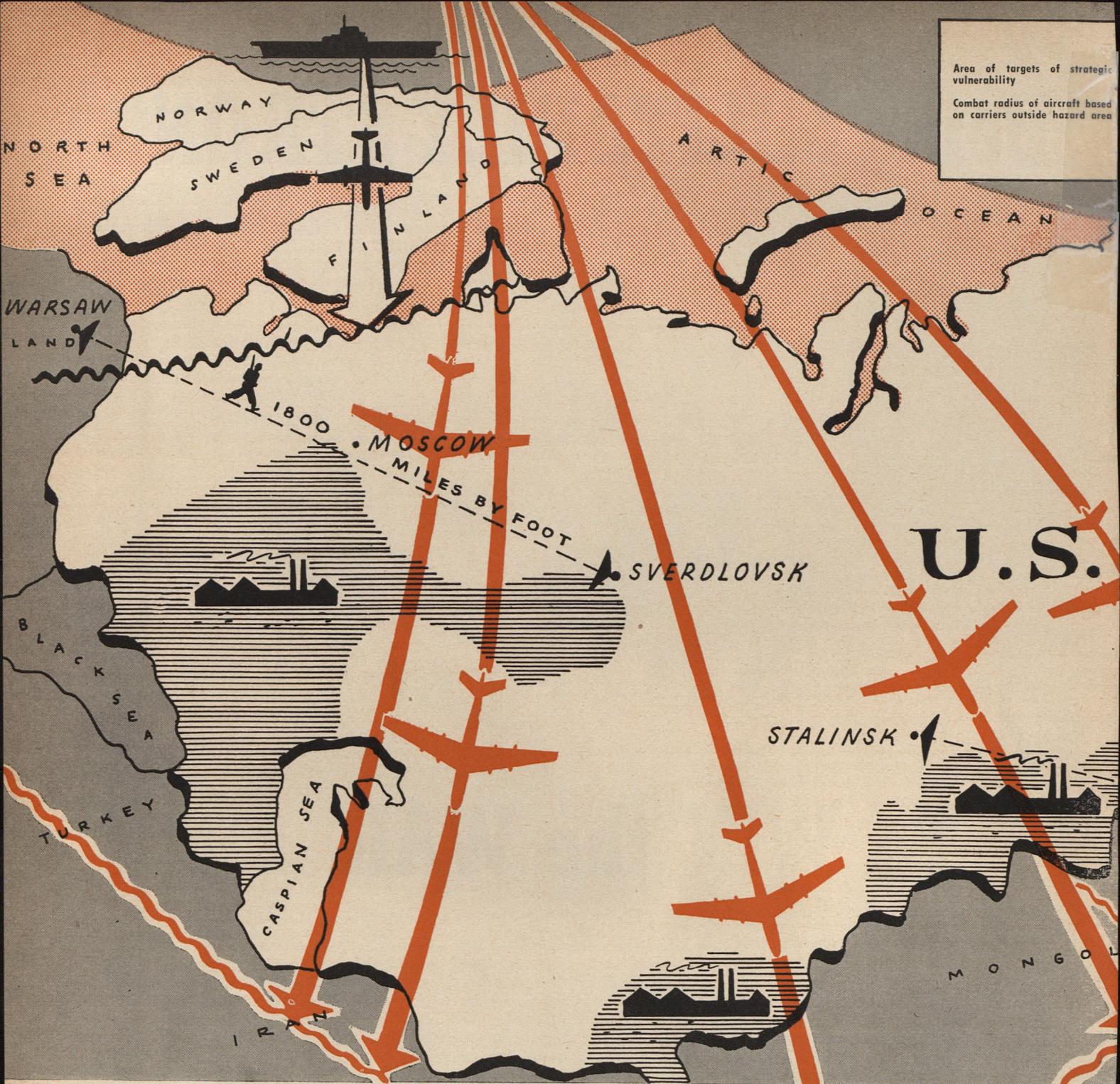
that will lift itself gently and smoothly off the ground and fly 10,000 miles before returning is an awesome thing. But the *mechanical efficiency* of neither the plane nor the ship can be used as a *gauge* of their *effectiveness* against the *enemy* IF there are other instruments—a rocket perhaps—that can deliver greater destruction as cheaply in equal or less time. The re-



finement of a weapon, in other words, doesn't materially increase its worth if the instrument itself has become obsolete, or if it can't be used to advantage against the particular antagonist with whom you are faced. There is no place in our military setup for the admirals and generals who are incapable of making this distinction. There are a lot of them who can't.

Nor is there room in our armed services today for admirals or generals who can only point to the effectiveness of a given weapon in the last war as a reason for its retention in the arsenal of today. Our defense must be built with the *one* criterion: What weapons are *best calculated* to defeat the country *most likely* to attack.

The selection is difficult. Basically a weapon to keep the *peace* is one that will scare the "enemy" off. But if he isn't scared—if he attacks anyway—the requirement is for something more than an instrument of threat. How do you find that requirement? You begin by making a thorough examination of what the enemy is, where he lives, and what he's got to fight you with. Let's speak bluntly. To determine the value of a B-36, a supercarrier or a General Patton tank, we must begin with a study of Russia. It is not a pleasant task to undertake. Inescapably it smacks of war-mongering. Yet it must be realized that the peace we prize so highly can be retained only if we clear our minds of the confusion that exists in building our defenses against the only possible country that could bring war.



## Russia is a Land Mass

The length of any shooting war between the United States and Russia would depend on many things. It would depend on how far Stalin's forces were able to move into Western Europe, and how long it would take to dislodge them. It would depend on the ability of the US to seize advance bases and to hold them. It would depend on Russia's success in cutting out trans-oceanic supply lines with her snorkels, and on our success in sinking the snorkels first. It would depend on the outcome of a great many strategic and tactical contests.

But as much as anything, it would depend on the productive life span, after war began, of the targets in the shaded areas of this map. For here are Russia's coal mines, oil refineries, steel mills, hydro-electric plants and factories. These are the regions from which she draws her strength to fight; her *targets of strategic vulnerability*. As long as they pour out the materials of war it is difficult to imagine how any combination of allied field forces could bring Russia to her knees. Conversely it is just as

logical to assume that Russia's fighting days could be numbered from the moment the flow of equipment from this area was halted.

It is obvious therefore, that getting at the shaded areas in this map would be of the first order of business the moment any war began. The trouble is they are highly inaccessible. It is dreadful to contemplate the cost of getting at them in the early stages of war with a land army. For sustained operations they are entirely out of reach of any weapon in the Navy's arsenal.

Until the perfection of long range guided missiles, therefore, the choice of logical weapons to get at Russia quickly where it hurts most is reduced—by process of elimination if nothing more—to one; land based strategic bombers. This is the choice the Joint Chiefs of Staff have made, and it is not only sound, it is inescapable.

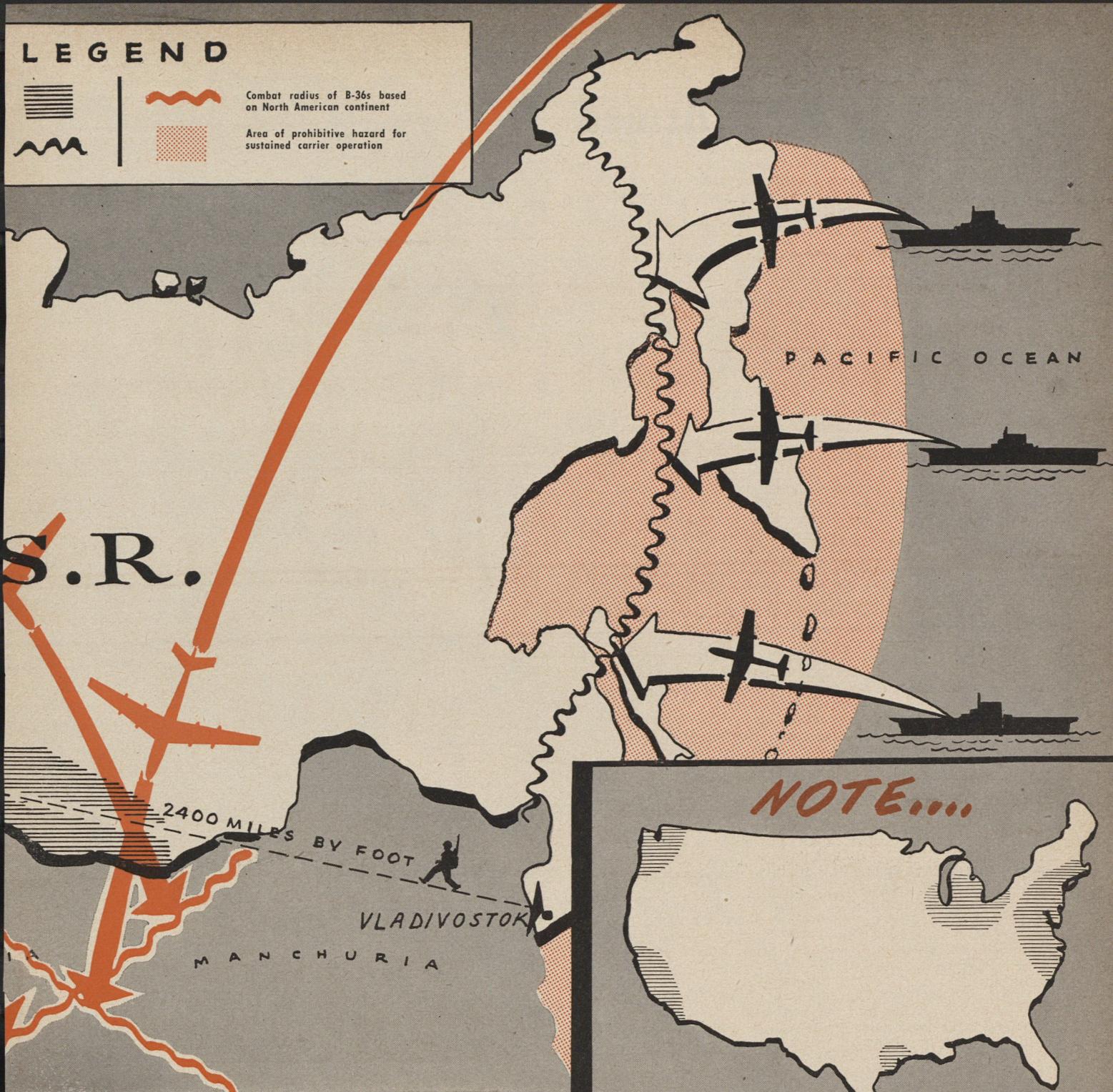
Right here it might be well to correct a lot of trackless thinking about strategic bombing. In recent months a lot of people have come to regard *intercontinental atomic* bombing as the sum of strategic bombing. The truth is that a great portion of the strategic bombing effort in any future war may be *neither intercontinental nor atomic*. The essence of strategic bombing always has been and will be for some time to come *sustained operations*

## LEGEND



Combat radius of B-36s based on North American continent

Area of prohibitive hazard for sustained carrier operation



day after day and night after night. Obviously neither the stockpile of A-bombs nor the cost of running mass intercontinental attacks over a long period of time would permit of our conducting the air effort exclusively in such a manner.

Perhaps A-bombing would never be done except from bases within the United States. But the targets leveled with A-bombs must be *kept* level. Targets which are not "worth" an A-bomb also must be struck out. This will be the job of smaller bombers with lesser explosives. They will work from bases closer in after our forces are deployed, and they will work day after day.

This is where the Navy's argument falls apart. In the back of its head and in some of its public statements the Navy has had the idea that it could conduct strategic bombing as well or better than the Air Force. They argue that they could send a carrier in close to Russia's coast line, launch an atomic bomber and then get the hell out as fast as possible, leaving the plane and its crew to scramble for themselves after delivery of the bomb. There is some glamour to such a proposal if the US is willing to risk its A-bombs in the hold of a carrier to begin with. But there is little real military attraction to the plan since it does not provide for sustained follow-up operations. Lacking this, it is only half a program. It is NOT strategic bombing.

Speaking of strategic vulnerability, it might be well to take a look at our own touchy spots. Unlike Russia, the US solar plexus is situated for the most part along our coast lines. Russia's problem in getting at us is therefore greatly simplified. She needs no super long range bombers to take her far inland. She needs no army to march across the Rockies or the Alleghenies. By reducing our coastal cities and those a few hundred miles inland she would lay us prostrate. This she *might* do with a fleet of submarines which could fire either A-bombs or TNT missiles. The Russian sub fleet might easily prove to be the counter part of the US strategic bombing effort. Since the Navy has complete control of antisubmarine warfare (according to the assignment of roles and missions at Key West) it seems imperative that the Admirals get off their sea-horses and provide a more adequate defense against snorkels. It would become them more than trying to grab off a chunk of the strategic bombing mission just for the sake of the prestige it would afford.

# Russia is Well Armed

With the passing of the initial stages of war, the choice of weapons with which it is fought thereafter—or at least the emphasis on those weapons—could be expected to undergo considerable change. As General Bradley states, "Ultimately a war between nations is reduced to one man defending his land while another tries to invade it. Whatever the devastation in his cities and the disorder in his existence, man will not be conquered until you fight him for his life."

So it is that as war got on the job of traversing Russia's great geographical barriers to blast her strategic targets might be given no greater priority than the job of meeting and containing the ground forces she would throw up to intercept the "ultimate" march into her homeland. Especially is this true since those forces might quickly be spread over the whole of Europe, leaving us without so much as a foothold from which to begin our ground operations.

This is not to say that Allied ground forces would necessarily be faced with the dismal prospect of beating the Russian army over every inch of its native soil. If the bombing of strategic targets were fully successful, and if supply lines were effectively cut, and if our own ground forces were of adequate strength, then Russia's armies might be conquered well outside their own borders in lands they had overrun during the first sweep of battle. The "invasion" of Russia proper would then be far less difficult than either Napoleon or Hitler found it. It would be unthinkable to attempt it otherwise. The great hope of course would be to have the battle reduced to mopping up operations before the Allied attack had to go many miles inside Russia's formidable borders.

But of more immediate concern than dropping the Russian army in its tracks west of the Dnepr, would be the job of at least containing it somewhere east of the English channel. For if we failed in this regard, we would be forced into another "Normandy"—an eventuality that sends shivers down the back of every general on the US staff in view of the awesome vulnerability of such an operation to A-bomb attack.

What weapons then, would best be used to keep the foothold? Here again the selection must depend on Russian capability—not on the intrinsic beauty of a ship at sea, nor on the yammering of an admiral for a "balanced" force. Obviously the weapons we choose would have to be the ones best calculated to neutralize those Russia had selected to boot us into the sea.

The first step, therefore, is to take a careful look at the Russian arsenal—or at least as good a look as the iron curtain will afford. The map on these pages gives some idea of what we'd be up against:

**THE RUSSIAN ARMY:** It is 4 million men strong and, counting satellite and reserve forces, could be hiked quickly to 10 million. It is well equipped. As recently as last month Army Chief of Staff General Lawton Collins admitted publicly that the Joseph Stalin tank was superior to anything we now have in the field. The obvious mission of the Red army in the event of war would be to move as far west in Europe as quickly as possible.

**THE RUSSIAN NAVY:** In terms of "capital ships" Russia has no Navy. It has four old battleships, 10 cruisers and no carriers. What Russia *has* got though, is a fleet of at least 250 submarines, a large part of which are snorkel equipped. In a war with the West the snorkes would serve two purposes: (a) to cut the all-important marine supply lines between the US and Europe, and (b) conduct probable A-bombardment of our coastal cities.

**THE RUSSIAN AIR FORCE:** There are some 18,000 planes in the Russian Air Force, most of them post-war models. There are 10,000 more in reserve. Two thirds of the total are fighters; one third bombers, transports and miscellaneous types.

The consensus is that Russia's jet fighters and interceptors are just as good as ours. In the bomber field though, Russia undoubtedly is far behind. She has no B-36. Her "B-29", the TU-70 may be as good as our old Superfort, or a little better, but it is probably less capable than even our B-50. Little is known of the performance characteristics of another bomber, the new four-jet Illushin, except that it is apparently the Soviet counterpart of the American B-47.

In time of war the Russian Air Force would be committed to many tasks. Among them:

► **Support of the Red march west.** This would be by far the biggest assignment on the Air Force work-sheet. Most of Russia's fighter planes (which means most of her Air Force) would likely be employed in this capacity.

► **Interception of Allied bombers.** Fighters that could be spared from ground support would fall heir to this unsavory undertaking.

► **Interdiction of Allied shipping.** A certain number of Red bombers, fighter-bombers and fighters would likely assist the



snorkes in cutting US shipping convoys within their range. ► **Strategic bombing of European and US targets.** Although Russia has no planes capable of round trip missions to the US, it must be expected that she would not overlook the possibility of one-way A-bomb flights. In addition, her strategic bombers unquestionably would give Western European targets a thorough working over.

## AGAINST THESE "DEFENSES" THE US CAN NOW SEND:

► An army of 650,000 men. With the help of Atlantic Pact nations the number of Allied foot soldiers would be upped to 2 million.

► A Navy ridiculously superior to the task of protecting convoys from air attack but dangerously inadequate in techniques and instruments to intercept Russian subs, bound either for the US or for Allied shipping.

► An Air Force of 10,000 planes that must serve triple duty in



LEGEND

— = 10 SUBMARINES

— = 100,000 TROOPS

— = 1000 AIRPLANES

(a) the defense of our own shores (b) support of Allied ground forces in Europe and (c) in concurrent (and uninterrupted) bombing of Russia's strategic targets.

An objective study of weapons we *have* and those we *need* during this phase of the war would indicate that:

► Either our ground forces or those of our European partners should be built to a strength a little nearer parity with the Russians. Since the Stalin thrust might be so fast as to preclude getting our troops on the scene in time, it would seem logical to strengthen the European armies rather than our own. This is *exactly* what the Joint Chiefs of Staff and the Congress have determined to do and *are* doing under the military aid program.

► The Navy should re-channel its effort to provide for greater safety from Russian submarines instead of trying to prove that it can accomplish a strategic bombing assignment better than the Air Force. This is *exactly* what the Navy is *NOT* doing.

► The Air Force should be strengthened in all departments. The question is where to begin. Recently the emphasis has been on building up our strategic air fleet. This is natural since, it is the *first* instrument we would employ in battle. But careful attention should be given our interception and support forces.

This progressive build up of the Air Force is *exactly* what the President's Air Policy Commission and the Congressional Aviation Policy Board recommended in their reports, and *exactly* what the 81st Congress provided for in appropriating funds for an increase from 48 to 58 groups in the next fiscal year.

When the decisions and plans of the Joint Chiefs of Staff are analyzed in the simple light of all the foregoing—when the weapons they have chosen are considered in relation to the job to be done—there can be little argument with what they have done to date. Yet there has been a "rhapsody" of dissention. The motives of the dissenters should be understood . . . .

# Revolt of the Admirals

What prompts a trusted civil servant in high office of the Navy, a Cedric Worth, to anonymously circulate gross and vicious lies against men of high repute? What brings a naval reservist in Congress, a Van Zandt, to give voice to those lies? What leads an able and seasoned Navy captain, a Crommelin, to prowl the back streets sneaking classified military documents to the press? What stirs a four-star admiral, a Denfeld, leader of the Navy and its representative on the nation's highest military council, to rebuff higher authority and by his actions encourage insubordination within his command? What drives a distinguished group of admirals, a Radford and a Bogan on the active rolls and a Nimitz and a Halsey on the inactive list, to denounce strategic bombing while pleading for the means with which to conduct it, to find the A-bomb immoral in the hands of the Air Force but quite moral in the hands of the Navy?

Only the most powerful of motivations could stimulate such acts on the part of men who have been schooled in military discipline and who have guided their lives by its rigid rules of conduct. This "revolt of the admirals" defies the capabilities of any weapons evaluation board, military or civilian, and reaches deep into the field of the military psychiatrist.

And yet, as the *Detroit Free Press* has pointed out, "If the Navy's unorthodox approach to a revelation of all its beliefs does indeed reveal also an exact state of affairs, then the taxpayer will get what he wants—and he won't quibble over the propriety of the methods which attained it". Thus the observer is wisely cautioned to think beyond the means which have been employed to achieve an end, and to concentrate on the end itself.

This same newspaper brings another factor into proper perspective with its plea to "give the Navy as an institution credit for a deeply patriotic motivation, no matter how inept its tactics". Failure to do so would only prejudice the appraisal out of all proportion to the facts. Besides, patriotism obviously is not the matter at hand. It can be all things to all men of all countries. The Japanese and the Germans were fanatically patriotic in the last war, and there is every reason to believe the Russians would be equally patriotic in another.

Nor can the sincerity of the revolting admirals logically be questioned. Jimmy Doolittle made the point a few years ago in commenting on the Navy's violent opposition to unifying the armed forces. "It is not whether the Navy and Navy advocates are sincere in their expressed beliefs," he said. "It is that they are wrong."

Secretary of Defense Johnson has helped clarify this "sink or swim" campaign of the admirals with reference to another military revolt—the reluctance of "a few die-hard cavalrymen" to accept the modern trend toward mechanization. Describing the situation within our War Department as late as 1937, Secretary Johnson explained in a recent address: "In true cavalier fashion the horsemen were still gallantly defending the steed against the inroads of the motor, and slowing up both motorization and mechanization at a time when political events abroad were making it mandatory for us to streamline our defense to keep abreast of modern military trends." The full meaning of that statement—substituting admirals for "horsemen", aircraft carrier for "steed", and intercontinental bomber for "motor"—is quite obvious.

Our cavalrymen of the sea and the sea power they so brilliantly employed, constituted our only instrument of national policy as long as the sea was our only avenue of international transportation. The sea approach prevailed as the basic element of this country's strategic vulnerability, the island concept of warfare dominated our military planning, and sea power logically held sway as our first line of defense.

The flying machine entered the realm of the warship as the motor vehicle moved into the stable of the cavalry horse. The cavalrymen made some concessions to the motor age: Instead of proceeding the full distance by horse-power, they carried their horses to rendezvous points in trucks, there took them off the vehicles and mounted for deployment as cavalry. And the seamen went further. They created the aircraft-carrying warship and, within its limited capabilities, made it an effective weapon.

A military revolt arises when a motor-carried horse or a warship-carried airplane are projected into military planning and operations beyond their ability to produce efficient and economic results. It is then that the new must take over—or the nation take the consequences.

The human revolt that follows centers in those who are compelled to give up the old and accept the new. "The tradition of the status quo", as Secretary Johnson has put it, "always dies hard in the face of new and compelling factors." Even more pertinent to the present situation is his analysis of what made the die-hard cavalrymen of another era hold out against the new. "Their views were so colored by a mixture of sentiment and nostalgic affection for tradition", he said, "as to warp their judgements in considering the realistic situation with which we were confronted".

These "warped judgements" of the present day had their genesis in the element of nature commonly responsible for twisting and turning objects into a warped state—meaning water, in this instance salt water and lots of it. The spectacle of a universe in which, as Navy leaders remind us again and again year after year, "two-thirds of the earth is covered by water," obviously has proven too much. The seafaring brain has been split wide open by the hammering blows of the seven seas, and in the process has become quite thoroughly waterlogged with delusions of grandeur—indeed, as the thinking mechanism of the airfarer can on occasion become lighter than air in contemplation of the wild blue yonder. Our seafarers have been subjected to the tidal blows of their chosen element for the longer period—155 glorious Navy years in all—and time has taken its toll.

Thus, while the earth remains two-thirds covered by water, it is also three-thirds covered by air, and the hard facts of airpower have long since rendered the traditional sea power philosophy obsolete. But deep in their hearts the admirals have never conceded that Neptune has been voted

out of office by science (as our air generals some day may fail to recognize that science has outvoted the airplane). The recent Navy testimony in Congress, despite ingenious and dramatic lip service to airpower, is heavy with the old salt sea spray, and Admiral Denfeld, in his historic statement before the House committee, quite significantly referred to the US as a "maritime nation". The air admirals on hand, who stirred up this revolt, and who themselves have fought the warship philosophy over the years, would never own up to the fact that they are tied to the sea with



the ships from which they operate, and therefore are subject to the limitations of the sea; though their heads are in the clouds, they are waterlogged themselves at the base.

The snarling complexity of preparedness planning during this transitory period, when neither the old can be crossed off completely nor the new accepted at full face value, justify some measure of forbearance in evaluating the revolt of seafaring men struggling upstream in the air age. At the same time, it must be acknowledged that our cavalier horsemen of another generation felt the sting of new methods challenging the horse-drawn world—perhaps with equal impact—and that their revolt paled in comparison with this modern Navy rebellion. So it is that for the whys and wherefores of this revolt we must peer into what former Secretary of War Stimson called that “dim religious world in which Neptune is God, Mahan his prophet, and the United States Navy the only true Church”. The predominate characteristic of this mysterious Navy world is a self-imposed concept of magnificent independence. It has reached its highest form of expression in a statement fathomed back in 1945 by Fleet Admiral Ernest J. King and reiterated just recently at the height of the Congressional hearings by Admiral Louis Denfeld as the summation of his convictions regarding the Navy’s position in our national life. For more than half a century it has been in the hearts, if not on the lips, of the Navy’s uniformed ruling class, until it has become a guiding credo, ingrained at Annapolis, sharpened on the high seas, and applied with resounding success at the White House and in the halls of Congress. The credo is this:

*Any step that is not good for the Navy  
is not good for the nation.*

By rigid adherence to this credo the Navy has, over the years, inflicted upon the nation a self-conceived immunity to the normal controls placed upon public agencies, and has developed a protective instinct warped beyond belief in relation to the national good.

It was this instinct which placed a protective smoke-screen over the results of Billy Mitchell’s bombing tests against battleships in the early 1920’s, and which prompted Admiral William B. Shoemaker, after reviewing the report of those tests in 1923 to remark, “It’s true, every bit of it—but, my God, we can’t let this get out or it would ruin the Navy”. Twenty-three years later, when it came time to stage further tests against warships, and with atomic bombs, it was this same instinct which all but dominated deployment of the test vessels in Bikini lagoon to insure minimum damage, and which prompted Admiral W. H. P. Blandy, commander of the operation, to comment that in the atomic tests consideration must be given to the “after-effect on the Navy as a whole”.

That the after-effect on the Navy as a whole does not always jibe with the after-effect on the nation as a whole is quite obvious, and is nowhere better illustrated than within the Navy Department itself. This was brought out in an examination of the department made in 1945 by Ferdinand Eberstadt at the request of then Secretary of the Navy James Forrestal as part of an over-all study on Unification. It contributes, from a source one must consider to be at the very least sympathetic to the Navy, a valuable insight into this country’s growing “Navy problem”.

Summing up his findings, Mr. Eberstadt reports: “In conclusion it may be pointed out that administrative incoherence continues because the structure of our naval administration is founded upon an unstable base of divided authority, divided responsibility, divided control over information and the purse. Nowhere in the whole machinery is there to be found a source of superior directive energy equipped with knowledge and power. Where there is no

firm base from which an executive agency can operate, there can be no firm direction and control. Until such a base is supplied, there will always be overlap, waste and duplication, and there will be fundamental uncertainty in the administration of our naval affairs”.

And though civilian control of the armed forces is a constitutional prerequisite and the civilian Secretary is the Navy’s “source of supreme authority”, the Eberstadt study relates:

“As a decisive influence in the affairs of the Navy Department the Secretary has not, as a general rule counted”.

The problem, it is made clear, is that the admirals have never, over a long period, kept the civilian Secretary informed of what is going on in the Navy Department, and the Secretary, limited in staff by law, is too busy attending to detail to find out for himself. As Mr. Eberstadt discovered, “Secretarial authority was emasculated through a want of knowledge”.

“The nominal military authority in the Navy (the Chief of Naval Operations) has, traditionally,” as Mr. Eberstadt points out, “exerted greater influence than the Secretary”, but even the CNO does not run the Navy establishment. As the study explains, “The Chief of Naval Operations could

prepare plans, but he possessed no authority over the activity of any of the subordinate agencies which fulfilled the requirements of the plans”.

Who, then, runs the Navy? “Administration of the Navy”, the Eberstadt report states, “has been entrusted primarily to the individual bureaus” (there are five Navy bureaus) each enjoying “a mutual independence”. And the report adds, “Those men associated with the bureaus have traditionally and naturally found it desirable to preserve the integrity of their vested interests”.

So it is that the Navy’s spirit of magnificent independence springs from within, from the core of the Navy department. The Navy world is actually composed of several smaller worlds, each as magnificently independent as the other, each revolving in its own orbit—and each as wonderfully efficient and as hopelessly wasteful as uncoordinated little worlds can be.

“The laws governing the Navy”, concludes the Eberstadt report, “have been transmuted, by the passage of time, into a set of natural laws controlling and conditioning the whole structure of the society. These laws have been clearly defined for every naval officer. He knows, almost by instinct, where sources of authority can be found; where roads to promotion lie; where he fits in the scheme of things. Within this rigid framework, all officers know how to deal with each other, with Secretaries, with Congressmen, and with the public”.

These undefinable “natural laws” bring the warring, incoherent, uncoordinated Navy bureaus together as one man in the face of an external force. To buck these laws and face the scorn of the Navy’s ruling hierarchy is quite inconceivable, as Admiral Denfeld determined for himself.

On the operations side, the Navy world revolves methodically around its fetish for self-sufficiency, meaning its operation of land, sea and air forces. For while the admirals have kept their heads in the waves, they have protected their rear by building up strong land (Marines) and air (Naval Aviation) strength.

“Preserving the self-sufficiency of one service”, Jimmy Doolittle has commented, “reduces the overall effectiveness of the three taken together, and substantially increases the overall cost in natural resources, equipment, facilities and personnel”. It is clear that while self sufficiency may be good for the Navy, it is *not* good for the nation.

*(Continued on page 24)*



## REVOLT OF THE ADMIRALS

The admirals, however, have never let this fact bother them. In the post-war struggle they have grabbed at air as their only hope to maintain a large Navy in the face of sea power's inevitably dwindling fortunes. And they have determined that it is not enough to maintain carrier aviation in its proper role, which no one disputes, as a prime tactical force to support the fleet. To maintain a self-sufficient empire, naval aviation must be maintained out of all proportion to its logical roles and missions. In this atmosphere the unruly, outsize child of our peacetime defense establishment—christened "sea-airpower"—was born, out of wedlock and out of tune with the times. And so it was that the taxpayer unwittingly took on support of two full-scale air forces, as against one army and one navy.

The air admirals who would run this out-sized air force had seen, for the most part, only the Pacific battleground, which was made to order for carrier operations, and they had come home from the wars inebriated with dreams of fast carrier task forces (and new supercarriers, of course) roving the seas and policing the "islands" of the world. These dreams were spiced with the deep conviction that land based airpower, lacking in range and quite likely to lack it for some time to come, could not carry out the nation's strategic requirements without overseas bases. At the very worst, as they saw it, this meant a need for extensive carrier operations to secure and hold such bases; at best, it might mean a bright new future for one and all. And the more imaginative of them were asking: Why confine carrier aviation to a holding force?

Their answer came from Admiral Dan Gallery, whose now famous memorandum of August 11, 1947, to the Chief of Naval Operations, gave the slumbering Air Force the first hint that the Navy was on the war-path, and set the stage for much of the controversy that has since issued. Admiral Gallery presented a "platform" for the Navy to become "the branch of the national defense destined to deliver the Atom bomb". Arguing for strategic-atomic bombing as the "Sunday Punch" of any future war, and relegating the role of the Air Force to "defense of the United States against air attack", he urged that control of the seas become merely the Navy's secondary mission and advised, "the time is right now for the Navy to start an aggressive campaign aimed at proving that the Navy can deliver the atom bomb more effectively than the Air Force can". To this end he proposed that the Navy adopt "revolutionary changes in our concept of carrier tactics" and begin immediately to develop the proper ships, planes and tactics to

### CONTINUED

make the Navy "the branch which actually delivers the knockout blow".

When the Gallery memo was exposed in the press (by Drew Pearson) the Navy quite appropriately denied that it constituted official policy, but it is now quite clear that the Gallery proposal fired the air admirals and many of the sea admirals to new heights, and the well-knit plans for the super-carrier tend to confirm its significance.

The postwar Navy bubble began to burst with Unification, which seriously threatened the Navy Empire. By giving autonomy to the Air Force, it disturbed

the dream of "sea-air-power", and in providing for stronger civilian control of the military, it threatened the independent hierarchy of the Navy's bureau system.

Any sort of unification would be bad enough to the admirals, but one military service for the nation, originally considered, was unthinkable, and so the admirals blasted it out of sight. One air force

for the nation was almost as bad; and compromise-bombing eliminated it. Loss of the Marines to the Army, also proposed, would disturb naval self-sufficiency, and it went down by the same weapon. Then began the long and successful campaign to water down the Act and insure minimum civilian control. Finally a form of Unification was compromised into law.

Then came a blockbuster—the revelation that the Air Force, with its B-36, had an intercontinental bomber. If true, this threatened the entire future of the Navy. True or not, it called for an extensive smear campaign. And the campaign that followed was, by Secretary Symington's appraisal, the "neatest hatchet job" he had ever witnessed in Washington. Meanwhile, the trend in appropriations was going bad for the Navy. The Air Force, for the first time in history, exceeded the Navy in the annual cutting up of the defense pie.

Louis Johnson came on the scene, clearly backed by the President, with a mandate to "knock some heads together" and to economize. The super-carrier fell, Navy Secretary Sullivan resigned in disgust, and the Navy rebels sensed the beginning of the end of their dreams. Secretary Johnson became a prime target. Employing the Navy League to full strength, the rebel Admirals hit him with sustained bombing at below-deck level.

The Unification Act of 1949, though watered down through extensive Navy pressure, strengthened civilian control

of the military, and strengthened Secretary Johnson's hand. This was the last straw. The Navy's Operation 23, a staff agency set up to sabotage Unification behind the scenes, decided it was time to come out in the open. The Worth-Van Zandt-Crommelin-Bogan-Radford rebellion resulted.

Neglected and unheard of through it all were the Navy officers and men who disagreed with the rebellion on general principles, if only on the basis that a law of the land must be defended by military men. Mute also are the old black shoe admirals who see the Navy's job as control of the seas. They are champing at the bit today because the Navy cause in general has been hurt by the revolt. And there are silent Navy airmen who appreciate carrier aviation's weaknesses as well as its strength and aren't fooling themselves or anyone else about it. Some of them believe strongly in a single air force but dare not open their mouths about it even to fellow Navy men. Some would like to transfer to the USAF if given a fair chance. Others have tried to transfer, during the short time the doors were open, and have seen their careers blasted by their actions. And always present are Navy airmen who hold no brief at all for land based airpower or the Air Force but who think carrier aviation has a big job to do and dislike seeing it hurt in any way.

In Admiral Forrest Sherman the Navy has its first airman as Chief of Naval Operations, the man who helped bring Unification into being, and perhaps the most progressive of the air admirals. And in Secretary Matthews the Navy has a stubborn fighter who

may become its first controlling civilian leader. Both men are naturally disliked and distrusted by the still-determined group of rebels in the Navy. Both men deserve the fullest measure of support from all quarters.

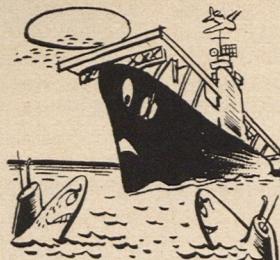
Looking back over military history, it is encouraging to note that those rebellious cavalier cavalrymen of another era, though they kicked

up their spurs for a period, eventually, with few exceptions, accepted the inevitable trend toward mechanization—and that they included among their ranks none other than General George Patton, a former horsemen of the old school who became one of the great leaders of tank warfare and mechanization. The nation needs and will welcome progressive conversions of the Patton type from within the Navy.

Meanwhile, the "warped judgements" of the rebellious admirals have raised questions which can and must be answered by the facts whenever those questions are raised.

That is exactly what we have tried to do on the following pages.

**FOR TIPS ON HOW TO ANSWER AN ADMIRAL, TURN THE PAGE**



# THE NAVY'S BASIC CHARGES and the ANSWERS

## Charge I

### STRATEGIC BOMBING SERVES NO PURPOSE:

"It (the strategic bombing force) serves none of the primary demands for our vital minimum security—the defense of western Europe, the protection of forward bases, the early reduction of enemy military potential, and command of the sea. It cannot be a useful part of the fighting team of all services which must stand ready to meet the potentially disastrous shock of an enemy's initial attack." ADMIRAL RALPH OFSTIE.

#### The Reply:

"If war is forced upon us, this proposal (that strategic bombardment is of no value) deprives us of the opportunity of choking off enemy warmaking power at its source. It brings it about that the enemy's weapons have to be met and destroyed by our soldiers and tactical airmen while these weapons are shooting at them. It eliminates the possibility of destroying these weapons in the production stage before they can shoot." GENERAL HOYT VANDENBERG.

"If war comes, we believe that the atomic bomb, plus the air power to deliver it, represent the one means of unloosing prompt crippling destruction upon the enemy, with absolute minimum combat exposure of American lives. If it is preferable to engage in a war of attrition, one American life for one enemy life, then we are wrong. That is not our way. That is not the way in which the mass slaughter of American youth in an invasion of Japan was avoided. To whatever extent we can bring it about that weapons fashioned at Los Alamos, and carried in aircraft fashioned at Fort Worth, can destroy or diminish the power of an enemy to kill American soldiers, sailors and airmen, we are for pursuing that method." AIR FORCE SECRETARY W. STUART SYMINGTON.



## Charge II

### STRATEGIC BOMBING IS MORALLY WRONG:

"A war of annihilation might possibly bring a pyrrhic military victory, but it would be politically and economically senseless. In my opinion, the American people, if they were well informed on all factors involved, would consider such a war morally reprehensible." ADMIRAL WILLIAM RADFORD.

#### The Reply:

"As far as I am concerned, war itself is immoral. And in carrying out any of our missions from the squad on the battlefield to the bomber deep into enemy territory, we Americans will seek to achieve maximum effectiveness against the enemy's armed forces, with minimum harm to

the non-participating civilian populace. "I am reminded, however, that I don't believe a communist ideology and the dictatorship it fosters, has any such humanitarian outlook about war. They will sacrifice human life at the slightest provocation, and would be inclined to sacrifice our lives even more quickly. "I might suggest that if our attacks are only in retaliation for an attack made upon us, the American people may feel that strategic bombing is both militarily and morally justified." GENERAL OMAR BRADLEY.



## Charge III

### THE A-BOMB ISN'T A VERY GOOD WEAPON ANYWAY:

"You could stand in the open at one end of the North-South runway at the Washington National Airport, with no more protection than the clothes you have on, and have an atom bomb explode at the other end of the runway without serious injury to you." COMMANDER EUGENE TATOM.

#### The Reply:

"I believe that the insinuation that the atomic bomb is ineffective as a weapon of war is refuted by every test that has been made. Contrary to the statements made before your committee, the Navy case in these matters has been presented to the Joint Chiefs of Staff, and among other things, it has been the Navy's continuous argument that they should be permitted to use the atomic bomb, both strategically and tactically. If it is really so ineffective as some would have you believe, I wonder why the Navy is so anxious to use it?" GENERAL OMAR BRADLEY.

## Charge IV

### THE B-36 IS A BAD PLANE TO BEGIN WITH:

"The B-36 can be intercepted in unacceptable numbers if it is unescorted. Today, in terms of the Air Force Chart which was presented to this Committee at an earlier session, American planes by day or night and at all speeds and altitudes which the B-36 can operate on military missions, can locate the bomber, intercept the bomber, close on the bomber, and destroy the bomber." Our present ability to do this will increase greatly during the service life of the B-36. It is folly to assume that a potential enemy cannot do as well.

"I can sincerely say to you that I hope that enemy bombers which may attack our country in any future conflict will be no better than the B-36." ADMIRAL WILLIAM RADFORD.

#### The Reply:

".... our Air Force bombardiers have assured us that this aircraft can perform effectively under all conditions of weather, by day or night, and can deliver striking blows

## THE NAVY'S CHARGES CONTINUED

against their targets. These Air Force men, who will have to face the risk of the great losses that the Navy predicts, are perfectly willing to stake their reputations and their lives on their performance." GENERAL OMAR BRADLEY.

### Charge V

#### THE B-36 CAN BE SHOT DOWN:

"If you were to ride as an observer in a B-36 at 40,000 feet during joint exercises you would see Banshees diving and zooming all around you and apparently making repeated gunnery attacks with a speed advantage of over 100 miles per hour. They have, in effect, the same superiority over the B-36 that the fighters had over the bombers of World War II. When these bombers were unescorted, this superiority was decisive. In regard to the doctrine that the B-36 can defend itself successfully against interceptor attack: Three Banshees would positively insure the destruction of the B-36." CAPTAIN FRED TRAPNELL.

#### The Reply:

"The unsupported assertions that the task of the B-36 is impossible will not force me into the position of stating that it is easy. It is, in fact, difficult in the same sense that all military tasks in the face of the enemy are difficult. I have considered the capabilities of our strategic bombers and I have arrived at the clear conclusion that they can do their job. As the professional military head of the United States Air Force, I so assure the country and so declare to the world, especially our friends." GENERAL HOYT VANDENBERG.



### Charge VI

#### THE B-36 CAN'T BOMB FROM ALTITUDE:

"Bombing at very high altitude can be effective only on targets of great area. Such targets, unless we are committed to the concept of mass area bombing of urban areas, rather than precise bombing of specific military targets, are very limited in number. I believe the over-all strategic bombing effort of a future war, to be successful, must be precise. I, therefore, maintain that the B-36 cannot bomb successfully from the high altitudes which are said to constitute a major factor in its alleged invulnerability, unless it is intended to be used for mass area bombing." ADMIRAL WILLIAM RADFORD.

#### The Reply:

"It is no news that it is difficult to bomb from high altitudes; but we are engaged in constant improvement of visual and radar bombing methods, and recent tests have established to my satisfaction that necessary accuracy can be consistently attained." GENERAL HOYT VANDENBERG.



### Charge VII

#### THE AIR FORCE IS PUTTING ALL ITS EGGS IN ONE BASKET:

"Both from the operational and logistical viewpoint, it would appear to be incredibly foolhardy to exclusively commit the safety of the entire United States—and possibly the democratic world—to one prohibitive costly weapon,

while at the same time dollar-starving those other forces which can and must be used from the first attack until victory is achieved. From a budgetary and logistical analysis, it must be concluded that a battleship air force will dangerously absorb military peacetime dollars without guaranteeing sure return in compensation for the other elements of the American military team which will be starved into impotency." VICE ADMIRAL ROBERT B. CARNEY.

### The Reply:

"Only four out of 48 groups are to be equipped with B-36 bombers. In any 58 or 70 group structure, the Air Force still plans to have four B-36 bomber groups totalling 120 planes, plus 39 reserve planes to preserve unit equipment strength; or a grand total of 159 bombers. On the basis of any contemplated group structure, therefore, a maximum of 8 percent of all groups would be equipped with B-36 bombers." AIR FORCE SECRETARY W. STUART SYMINGTON.

### Charge VIII

#### THE AIR FORCE PROMISES A "CHEAP" WAR:

"The B-36 has become, in the minds of the American people, a symbol of a theory of warfare—an atomic blitz—which promises them a cheap and easy victory if war should come." ADMIRAL WILLIAM RADFORD.

#### The Reply:

"Some of the testimony you heard earlier on this point might have been amusing, if it were not so tragic. A straw man was built for you, by those who would have you believe that we expect to win a war by push-button tactics and atomic blitz. To the extent that an attempt was made by some witnesses to have your committee believe that our war plans contemplate such a sudden victory, I submit that your committee was misinformed by those witnesses. I do not know of any competent military man who thinks that we could win a quick and easy victory." SECRETARY OF DEFENSE LOUIS JOHNSON.



### Charge IX

#### THE AIR FORCE HAS NEGLECTED GROUND SUPPORT PLANES:

"The Air Force procurement and development programs have placed major emphasis on heavy bomber types. This had the inevitable effect of reducing emphasis on planes suitable for ground support missions and the fighters required on all phases of tactical warfare." ADMIRAL WILLIAM RADFORD.

#### The Reply:

"I am glad to answer that. I went to General Bradley and General Collins (after the report was made public) and both assured me that it was entirely unfounded, that they were very happy with the situation as it existed." GENERAL HOYT VANDENBERG.

### Charge X

#### THE SUPERCARRIER WOULD HAVE BEEN A GREAT WEAPON:

"... The carrier UNITED STATES, as a prototype, was a logical step in further development of an essential naval weapon system." ADMIRAL WILLIAM RADFORD.

#### The Reply:

"In listening to the presentation before the Joint Chiefs of Staff—and these presentations were given adequate hearings many hours' long—the arguments for increased large carriers have not been based for need on action against a

Russian fleet, nor even on Naval aviation against the menace of the submarine. Their presentations have demanded increased carrier strength to attack land targets and to oppose hostile air in limited areas for a limited time. This is not the Navy's primary mission.

"Such power would be nice to have, but does it contribute as much to the requirements to meet the initial stages of a war, as the same amount spent for other more vital needs? It cannot be furnished without reducing the strength of either the Army, the Air Force, or the Navy's ability to keep the sea lanes open.

"It is easy for men to lose the perspective of long-range plans, and understandably difficult to keep a steady hand on the tiller of the primary mission. But if they can't do it themselves, then the American people must do it for them." GENERAL OMAR BRADLEY.



### Charge XI

#### IF THE CARRIER WORKED ONCE IT WILL WORK AGAIN:

"The development between World Wars I and II of naval aviation and the aircraft carrier provided our armed forces with a weapon system of greatly increased flexibility, range, and power. The development of the fast carrier task force enabled us to use this weapon against both sea and land objectives. This was the powerpunch of our invasion of Africa. It was a decisive factor throughout the war with Japan." ADMIRAL LOUIS DENFELD.

#### The Reply:

"Any war we may have to fight in the future will obviously be unlike the Pacific war against Japan. It will tend to resemble the war against Germany, though with certain differences. There will be the same problem of killing submarines. And the enemy submarines seem likely to be greater in number and more capable of performance than were those in World War II. There will be the same problem of protecting Atlantic Ocean supply lines, although the threat to our shipping will come almost wholly from the submarine since the potential enemy has no surface units of the character of the Bismarck and the Tirpitz. There may or may not be amphibious landings, but if there are they will be like the landing in North Africa and Normandy and not like the landing in the Pacific Islands.

"Finally, the industrial heart of the potential enemy lies not on any seashore, not on any island, but deep inside the Eurasian land mass. It is to that type of war that we must adapt of all our forces, including carrier aviation." GENERAL HOYT VANDENBERG.



### Charge XII

#### THE NAVY IS OUT-VOTED IN THE PENTAGON:

"Unification should not mean that two services can control a third. Up to now, there have been many instances in which that has happened." ADMIRAL LOUIS DENFELD.

#### The Reply:

"Very few Navy men, on the staff of the Chief of Naval Operations, have had any experience in large-scale land operations. Uppermost in their minds are island-hopping

campaigns of the Pacific, and the battles at sea. While listening to presentations by some Navy Officers before the Joint Chiefs of Staff, I have heard high-ranking Navy men arrive at conclusions that showed they had no concept whatsoever of land operations. This may account for the fact that in joint planning, where knowledge of the larger continental operations which we must ultimately face if we ever go to war with a landpower is a 'must', Navy men frequently find their suggestions 'outvoted' two to one." GENERAL OMAR BRADLEY.

### Charge XIII

#### THE NAVY IS NOT A FULL PARTNER:

"The Navy is not accepted in full partnership in the National Defense structure." ADMIRAL LOUIS DENFELD.

#### The Reply:

"The machinery set up to determine strategic plans, problems of command, and technical questions would seem to provide ample representation and every protection to the views of each of the services. Its machinery provides, I hardly need repeat, for a National Security Council, a National Security Resources Board, a Munitions Board, a Research and Development Board, a War Council, Secretaries for each arm of the service, a separate military staff for each service, and a Joint Chief of Staff to prepare strategic questions for them, the Joint Staff, and the Weapons System Evaluation Group to prepare strategic plans. In all these agencies each of the three services is represented. The difficulty is that they need to get used to each other. I see no basis for complaint that adequate representation and adequate machinery to develop facts and conclusions have not been provided. HERBERT HOOVER.



### Charge XIV

#### THE NAVY HAS BEEN OFFICIALLY GAGGED:

"My feeling, and I think it is shared by a great many Navy officers, is that we have been at a disadvantage in the past two and a half years. We have been unable to discuss a great many of our feelings because we were told to stop talking about controversial matters." ADMIRAL WILLIAM RADFORD.

#### The Reply:

"I believe that the basic strategic concept, and the careful consideration given to the offensive power of the Navy, and the outstanding qualifications of the members of the Joint Chiefs of Staff, all combine to present the fact that there has been a complete understanding of the Navy capabilities. There has been careful consideration of the matters brought before the Joint Chiefs of Staff, and the Navy views like those of the Army and the Air Force have always been given the most careful consideration, before our recommendations were made to the Secretary of Defense." GENERAL OMAR BRADLEY.

### Charge XV

#### NAVY BUDGET REDUCTIONS ARE UNFAIR:

"Our concern is with arbitrary Navy reductions that impair or eliminate essential Navy functions." ADMIRAL DENFELD.

#### The Reply:

"We realize that the defense dollar has necessarily reduced the offensive capabilities of all three services. The Air Force and the Army can make the same complaint with equal or greater validity." GENERAL OMAR BRADLEY.

# Where Do We Go From Here?

It was not without misgivings that AIR FORCE attempted the article on the preceding pages. It is dangerous to talk about *how* to fight a war. In the first place, that's a job for the Joint Chiefs of Staff—not amateurs. In the second place, a serious risk is run of tipping our mitt to the potential enemy. And, most important, talk of *how* to fight is closely akin to war-mongering, no matter how objective the approach is kept.

In the past AIR FORCE has maintained a careful and rigid distinction between urging the American people to *build* a strong Air Force and telling them how it should be *used*. For just this once (we hope) we have departed from the rule, but we want it understood that we didn't start it.

In a desperate effort to justify an empire beyond all sanity (and beyond the taxpayers' pocketbook) the Navy saw fit to contrive all manner of missions for its weapons, and to lay those missions before the public for approval after that approval had been denied by the Joint Chiefs of Staff. Concurrently, they felt technically qualified and morally obligated to reject one of the primary weapons of the US Air Force—a weapon adopted and controlled by the JCS.

In the face of the inevitable confusion this tactic created, AIR FORCE felt there was nothing to do but to have a look at all the weapons on our list and to explore their possible use against the only possible enemy. That this involved the business of how to eliminate Moscow and Sverdlosk is regrettable, for we are of the firm conviction that the "only war we'll ever win is one that never started", and it doesn't add much to a peaceful world to talk about plans for destroying your neighbor. Nevertheless, this special report has, we hope, given our readers a "position" from which they can better judge for themselves the stories they read in their daily papers. This was our purpose. **BUT THIS IS NOT THE END.**

The end is to put the knowledge gained through a dispassionate perspective to work building the kind of national defense system the nation needs. There is much to be done.

There is no assurance at this moment, for example, that the Navy won't yet "sell" its falacious concept of strategic bombing from the decks of super carries—that Congress won't yet "demand" the construction of the carrier UNITED STATES in spite of JCS disapproval.

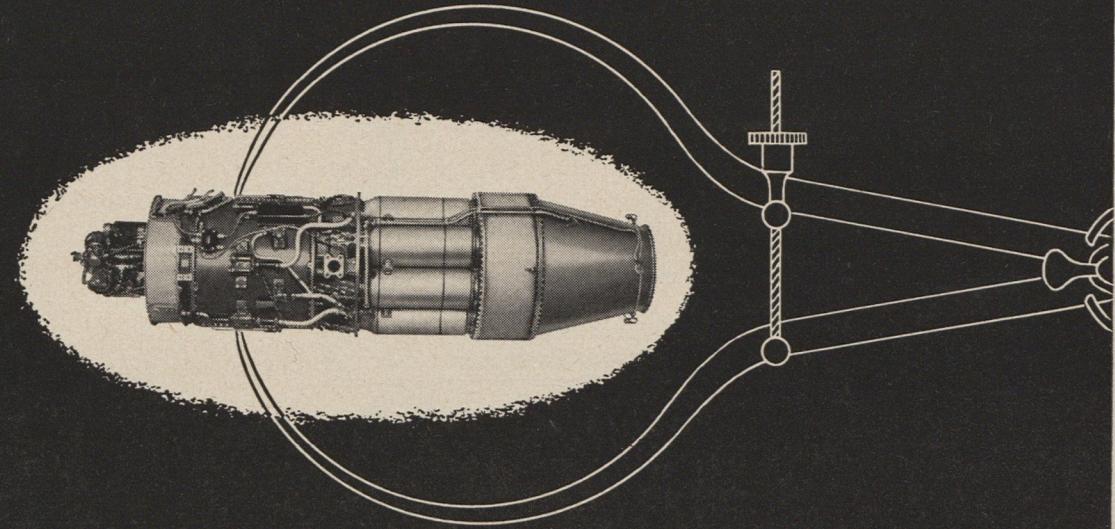
Neither is there any sign that the Navy intends to do anything more than it is doing about our extreme vulnerability to submarine attack—in spite of the fact that the admirals have *exclusive* responsibility for anti-submarine warfare, and in spite of their own admission of inadequacy in this field.

There is still no assurance that there will be any re-alignment of the traditional sixty-forty split in appropriations for AF and Navy air in spite of the fact that a realistic division of funds would be closer to 80 percent for the Air Force and 20 percent for Naval air.

There is still no assurance that the Air Force will get anything like the 70 groups it needs.

There is still no assurance that industry will be given sufficient orders to keep its production lines open.

There is still no assurance that the weapons we choose will be geared to the enemy we may have to fight. This is just the beginning.



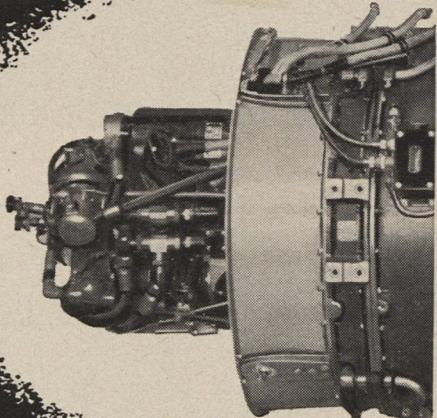
### SAVES SPACE

*Allison provides 5,000 pounds' thrust in a smaller diameter than any other engine.*

#### **Allison jet-powered airplanes:**

*Lockheed F-80 and TF-80 Shooting Star  
Republic F-84 Thunderjet  
Grumman F9F-3 Panther  
Northrop F-89A Scorpion  
North American FJ-1 Fury  
Lockheed F-94  
Consolidated XP5Y  
Northrop RB-35B Flying Wing  
Martin P4M-1 Mercator  
North American AJ-1*

*J35 Axial-flow Turbo-Jet*



# Allison

*Builder of axial and centrifugal flow turbine engines*

**DIVISION OF**



*Indianapolis,  
Indiana*



# Christmas in Japan

**Santa Claus and Glistening Baubles**

**Open the Eyes of Nipponeese Kids**

Like Coca Cola and chewing gum, Christmas in Japan is strictly an American importation. Homesick GIs, far from their own families, have turned to the children of Japan, and as they used to do at home, they are wrapping gifts, playing Santa Claus, and making sure there is enough candy for all.

No one has done more to foster the Christmas spirit among the Japanese than GIs of the Showa Sub Base of Japan Air Materiel Area located on the outskirts of Tokyo. They started things off in a small way four years ago. The Japanese were a little skeptical at first but this year's celebration promises to be an all-out affair.

Everyone at the base contributes in some way to the Christmas party. One of them plays Santa Claus and Japanese children still don't know exactly what to make of this strange old man with the long white beard. They bow to him and thank him for his gifts, but mostly they stare with enormous black eyes full of wonder as millions of children the world over have stared at the wonder of Santa Claus for centuries.

A new truck is a major event in the life of any boy. The lad, lower left, is obviously fascinated with his. That's kid brother in the cat bird seat. The young ladies, lower right, are wearing their finest kimonos. Who said they don't like ice cream?



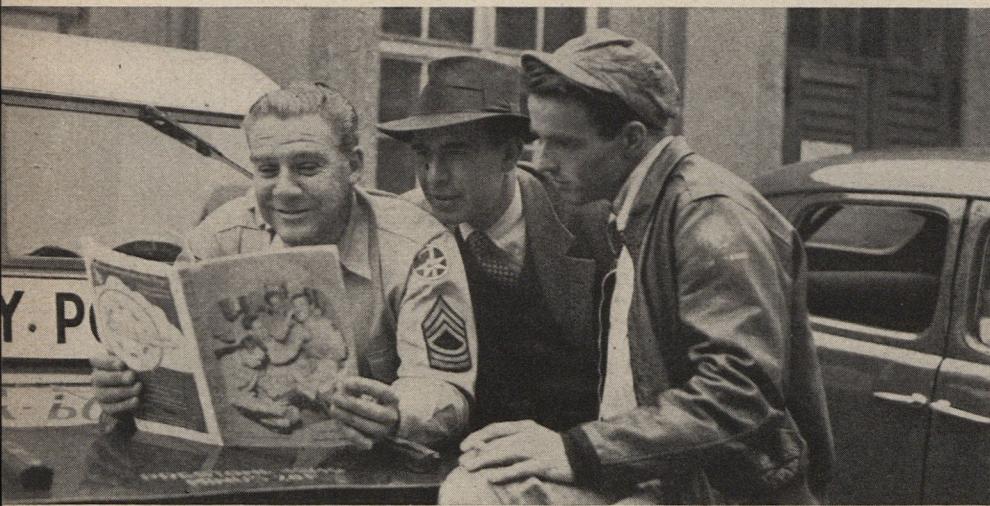


Above, even her new doll is forgotten as Yoko polishes off the piece de resistance with an able assist from a Showa Air Base GI. Below, children from a Tokyo orphanage entertain the guests with Christmas carols learned for the occasion.





Cornell Borchers, new German star, and Montgomery Clift are shown here in a night club scene shot on location in Berlin.



Paul Douglas left, and Montgomery Clift right, peruse AIR FORCE between scenes.



At the dividing line between the East and West Sectors of Berlin, the two main characters are stopped by Russian police. A tug of war between British and Reds ensues. Berliners showed great interest in the filming of the airlift movie. Most of the action centers about Potsdamer Platz, the dividing line between the East and West Sectors. Here, the people watch.

# Two Corridors East

## GI's Join Hollywood Stars in Movie about Berlin Airlift

GI's in the Berlin area are exchanging engine grease for make-up grease these days because they're actors now in the Twentieth-Century Fox motion picture based on the airlift, and currently being filmed under the title, "Two Corridors East."

Those in the know say that the movie will be the real thing. With the exception of the two leading men, Paul Douglas and Montgomery Clift, the entire cast was assembled in Germany. Of the two leading women, one, Cornell Borchers, is a new German "find" and the other, Bruni Loebel is a well known actress.

The GI's play themselves. Twentieth Century Fox went to every Air Base in Germany and made screen tests of all men who wanted to try out for the film. It is a tribute to the airmen in the film that you can't tell the difference between them and the few professional actors. And it is a tribute to the realism achieved by Douglas and Clift that they have been chewed out on several occasions by officers for not saluting and by MPs for having sloppy uniforms and no passes.

George Seaton, who wrote the film, spent many weeks in and around Berlin getting the true story and authentic local color. He spent most of his time in Berlin, the focal point of the airlift, asking innumerable questions: How did the Germans react to the airlift? What was their attitude in general? What was the attitude of the airmen toward the Berliners? Was the airlift worth the effort? In the answer to these questions and to others equally pertinent, Seaton found the theme, plot characterizations and incidents for his movie.

"Two Corridors East" should be a fitting tribute to all the guys who made the airlift work and a permanent record of what they accomplished.

George Seaton, film's writer-director.



The crew of the airlift's last plane gather with military officials and the mayor of Berlin. Tried to sell the airline—so far no takers.



Ever see two chicken colonels pitching coal sacks? Well they're doing it here. Those are the last two sacks on the last airlift plane.

## Troops for Coal Sacks

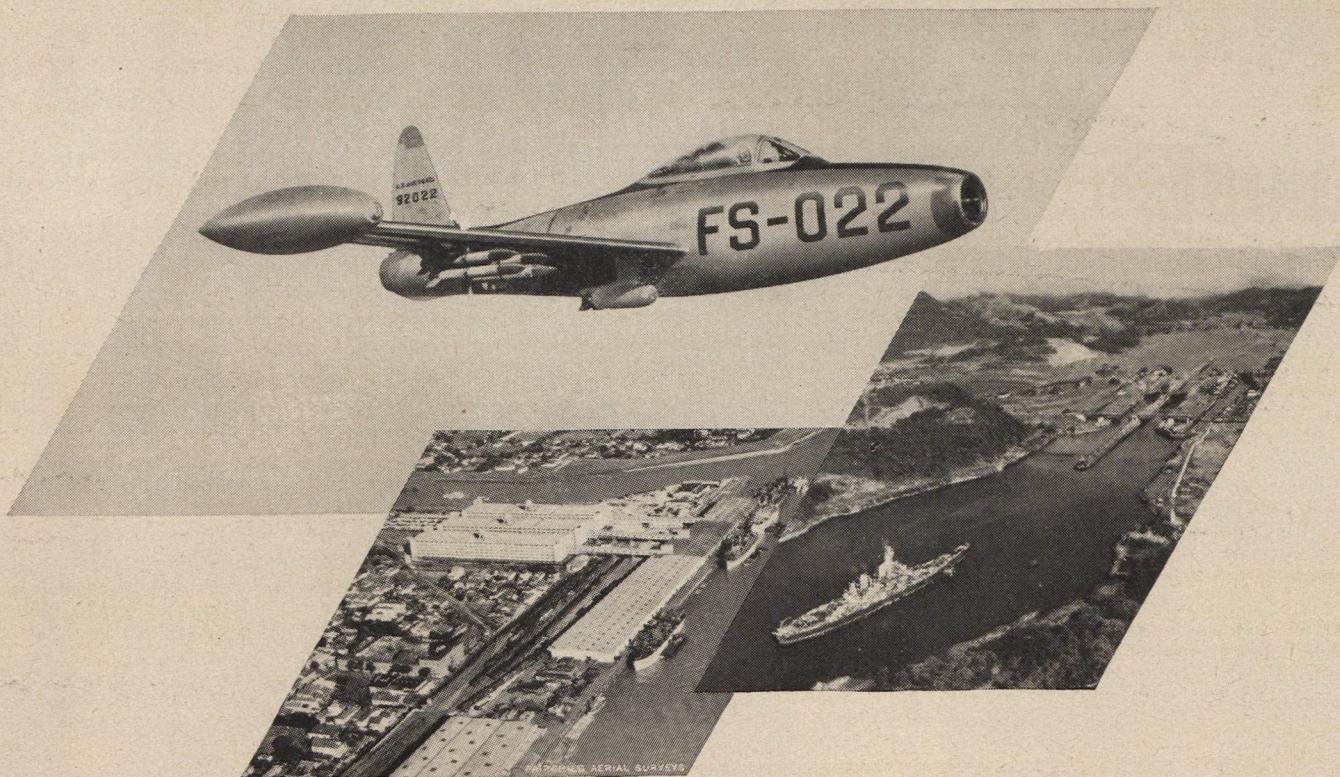
After 15 months of steady airlift duty, members of the 61st Troop Carrier Group recently traded coal sacks and flour bags for plane loads of combat infantrymen. For many pilots and crews this was the first time they had ever taken part in airborne troop movements—the role for which their unit was originally activated. But no flying experience is ever wasted. When Zero hour arrived, their planes rose from the ground with the same clockwork precision and split second timing so characteristic of the whole airlift operation. For all the Berlin gang, back to normal means ready for any emergency.



Former airlift crew member checks safety belts before first takeoff.

Combat infantrymen stow gear before boarding old lift plane.





## THUNDERJETS OVER AMERICA

Way down yonder...high above cotton fields and tobacco lands...more F-84's are going into active service daily...broadening the protective scope of our U.S. Air Force patrols. ¶ Two new models of the ...and the F-84-E...have been added to



Thunderjet...the F-84-D  
the Air Force's fighter

arm...bringing even greater performance in speed, range and altitude for air defense...and for quick retaliation in case of need. ¶ Not just an interceptor nor an escort fighter...but also a deadly fighter-bomber, carrying two thousand pounds



of bombs, high velocity rockets, depth charges or incendiaries...



in addition to a FULL load of fuel for any required mission...this

is the THUNDERJET. ¶ Today, F-84's protect the vast Southern

waterfront with its inland cities and farmlands...just as they are assigned to help guard our East and West Coasts and Northern boundaries. Proficiency of pilots and planes

alike is kept razor sharp by lighting the tactical requirements of



frequent maneuvers...high-independent air operations,

as well as performing vitally important close support assistance to Army Ground Force troops.....

Republic Aviation Corporation, Farmingdale, L. I., New York

*"This is the year of the Thunderjet"*

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*Makers of the Mighty Thunderbolt · Thunderjet · XR-12 · XF-91*



## CALIFORNIA WING HOLDS CONVENTION

### Three Day Conclave at Oakland is Highlighted by an Aerial Review and Presentation of State's Annual Airpower Awards

California Wing of the Air Force Association opened a three-day convention on October 8 in Oakland, bringing together both former and active airmen and high-ranking military leaders for reunions and celebrations with the security of the nation of primary concern.

Bombers and jet fighters sweeping over Oakland and neighboring communities heralded the opening of the convention.

The main event was the "Airpower Banquet and Dance" on October 8 at the Hotel Leamington, convention headquarters.

Lieut. Gen. Ira C. Eaker, former deputy commanding general of AAF and commander of the Eighth Air Force in England during the war, was the principal speaker at the banquet.

Besides the address by Eaker, a highlight of the event was the presentation of awards for outstanding contributions to aviation.

One of the recipients was Joe DeBona, winner of the 1949 Bendix Air Race. He was chosen for "skill and courage and superior pilot performance" in the race.

The public service award went to Senator William F. Knowland "for his sincere and courageous endeavors on behalf of a strong Air Force as the prime implement of peace and for his

outstanding and devoted contributions to the national security of this country." Senator Knowland's award was accepted by his wife since he could not be present.

The air science award was presented to Smith J. DeFrance, director of the Ames Aeronautical Laboratory, Moffett Field, "for developing and directing one of the world's greatest air research centers and his devotion to aeronautical scientific research for the past generation."

Four newspaper aviation writers were given arts and letters awards. They were George Rhodes, San Francisco; Marvin Miles, Los Angeles; Glen Noyes, Redondo Beach; and Richard Leonard, Culver City.

The public relations award went to Miss Mary Warren, of the Air Materiel Command, Los Angeles.

Among Air Force guests present were Maj. Gen. John Upston, commanding general of the Fourth Air Force at Hamilton AF Base, Maj. Gen. Junius W. Jones, and Brig. Gen. L. W. Sweetser.

AFA President Bob Johnson spoke at the first business meeting of the convention. Gen. H. H. (Hap) Arnold scheduled for an address was unable to attend because of illness.

June Lockhart, stage and screen actress, who is "Queen of the California



AFA's President Bob Johnson has radio chat with Betty Prator, head of California auxiliary, at convention.

Wing" reigned as queen.

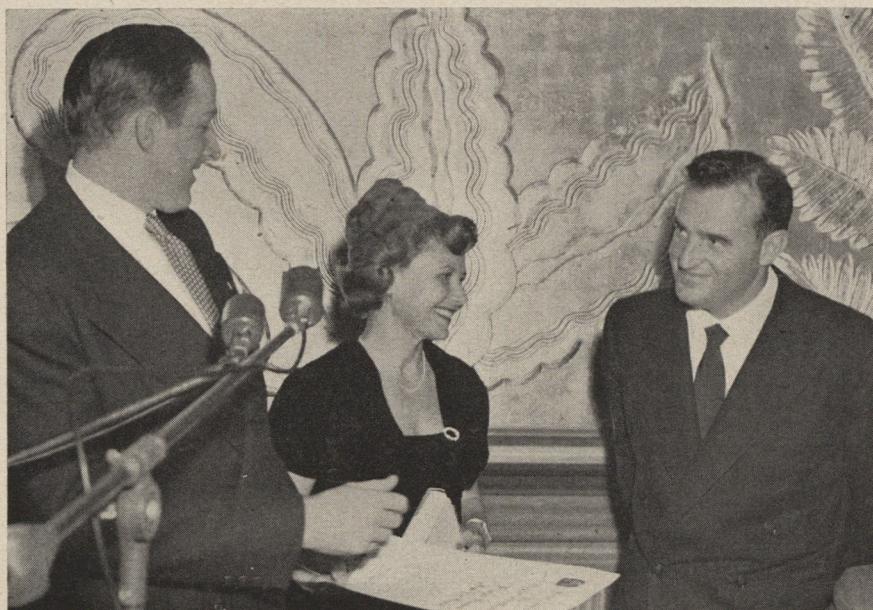
East Bay Squadron of the AFA was host for the conclave and Thomas F. Stack, California Wing Commander, presided.

Other events on the convention schedule included an informal AF reunion, "Air Parade" fly-by of USAF operational aircraft, rendezvous cocktail party and airpower ball.

New Wing officers elected for the year 1949-50 are: Joseph J. Nadel, 1941 Euclid St., Santa Monica, Wing Commander; Bert D. Lynn, Metropolitan Los Angeles Group Commander; Joseph Schlegel, Valley Group Commander; George Mantell, North Coast Group Commander; Mike Kavanaugh, Metropolitan San Francisco Group Commander; David Barrows, South Coast Group Commander; Bernard Barrett, Secretary; John Manning, Treasurer; and William Tobias, Sgt-at-Arms.

Resolutions adopted at the Wing convention include: 1. That Airpower matters rest with the Air Force, and that the Navy concentrate all of its time and effort on its assigned mission of sea-going problems, and further, that representatives who voted against adequate appropriations for airpower be singled out and called upon to defend their stand with the public. 2. That it is in the interests of the public that as much information as possible be disseminated on uses and effect of atomic energy within the bounds of security, and it behoves the Government to take necessary steps to publicize this information. 3. That the Education Department of State of California take immediate steps to re-equip all public schools with every possible means to educate our youth on a global concept of our new international world. 4. That the State Highway Commission, in conjunction with Airport Planning Board, the CAA and local municipalities, make a thorough and complete study of the lack of accessibility to the major civilian and military airports with the use of present highways leading to and from these locations to major centers of population. 5. That Article IX, Sect. 1 of National Constitution be amended to allow canvassing wings and

(Continued on page 37)



Tom Stack, left, presents California Wing's Airpower Award to Joe DeBona for "skill and courage and superior pilot performance" in winning the 1949 Bendix race. Assisting is Mrs. Art Kelly, wife of AFA's Far Western Vice President.

# SIKORSKY Helicopter NEWS

SIKORSKY AIRCRAFT

ONE OF THE FOUR DIVISIONS OF UNITED AIRCRAFT CORPORATION



Today air mail delivery by helicopter is "old stuff" to private citizens and businesses located in and around the Los Angeles area.

On October 1, 1949, Los Angeles Airways, Inc. celebrated its second anniversary of carrying air mail via helicopter in southern California. For two years now, LAA has been proving the advantages of this new phase of air mail operations. Through the use of versatile Sikorsky S-51s, slowdowns caused by surface deliveries have been practically eliminated. Business firms, especially, appreciate the saving of as much as twenty-four hours on air mail delivery.

From the airport to the Los Angeles Post Office roof top and on to the outlying districts, these Sikorsky helicopters lift the mail over surface congestion on a schedule that has established many records.

During the past two years, more than 6,000,000 pounds of mail have been carried; more than 600,000 revenue miles were flown; and - 96% of all scheduled flights were completed.

Rugged Sikorsky helicopters, the only ones used, have averaged a landing or take-off every  $5\frac{1}{4}$  minutes each twenty-four hours proving their worth to the Post Office, to Los Angeles Airways and to the people being served.

SIKORSKY AIRCRAFT

Bridgeport, Connecticut

squadrons as to their choice of convention site and/or their bid for same. 6. That Miss June Lockhart be named "Queen of the California Wing, AFA." 7. That a committee be appointed by

Wing Commander to determine the feasibility of establishing a commercially printed paper supported by proper and acceptable advertising, and made available to all squadrons.

## BATTLE CREEK SQUADRON HOLDS AIR SHOW

### Largest Crowd in Airport's History Turns Out for Air Show Marking 25th Birthday of Michigan's Famous Kellogg Field

An estimated 40,000 persons witnessed a three and one-half hour demonstration of air power at Kellogg Field on September 25. It was the biggest crowd ever assembled at the airport.

Climaxing the celebration of the 25th anniversary of the founding of Kellogg Field, the demonstration, arranged by the Battle Creek Squadron, AFA, attracted hundreds of spectators from Kalamazoo, Lansing, Grand Rapids, Jackson and other communities as well as Indiana and Ohio.

Between 10,000 and 15,000 remained after the air show to hear the one-hour program by Sammy Kaye and his famous "swing and sway" band. The concert was played from a platform arranged along the west side of No. 5 hangar where the 10-day civic fair was in its final day.

One-half hour of the program, including remarks by Mayor Bailey and Dr. Emory W. Morris, head of the W. K. Kellogg Foundation, and an interview with Col. Alfred F. Kalberer, who piloted the record-holding Pacusan Dream Boat, AF experimental B-29, flown from Offutt Field, Neb., for the show, was transcribed by radio engineers from Detroit and was broadcast over the CBS network.

Speeds in excess of 500 miles per hour were recorded as the various military aircraft flashed across the airport in spectacular maneuvers.

Although the demonstrations by the AF, Navy air arm and Coast Guard were particularly thrilling, the spectators gave the greatest acclaim to two Battle Creek volunteer organizations, the 172nd Fighter Squadron of the Air National Guard and the Navy Air Reserve squadron.

One of the finest exhibitions of formation aerobatics witnessed at any show was put on by 172nd's Acrogards, a four man team composed of Lieuts. Flagg, Joe Palmer, Jr., Howard Seeley and R. S. Richardson.

Twelve F-51 planes piloted by air guardsmen made a series of formation flights across the field before engaging in a thrilling "follow the leader" which literally filled the sky over the airport with planes in a number of various intricate maneuvers.

The Battle Creek Naval reservists, flying SNJs from the Grosse Ile Naval air base, made a carrier break-up over the field and landed after their demonstration, then later returned to Grosse Ile.

Shortly after noon Colonel Kalberer

AFA NEWS



took off with the Dream Boat to make several flights over the city and surrounding area. He was accompanied by George C. Price, an airport board member and reserve AF colonel, and Capt. Charles Jack, who headed the Battle Creek air reserve squadron until it was inactivated recently.

The most spectacular exhibition was the solo flight presented by Lieut-Comdr. Charles (Red) Schild of the Grosse Ile Naval air base in a Corsair fighter. Taking off after the 17 carrier planes had presented their demonstration, Commander Schild put his swift fighter through a series of maneuvers.

Three B-29s on a non-stop flight from El Paso, Tex., and return, made several low sweeps across the airport, pulling up in banks at the end of their runs.

Fastest speeds of the day were registered by the three AF F-80 jets from Selfridge Field.

As thrilling as the military exhibitions was the flight of Benny Carr of Augusta in the Battle Creek Area Soaring Club's sailplane. Towed to an altitude of 3,000 feet, Carr cut the sailplane loose and soared and looped, spun and rolled and spiraled before finally bringing the powerless craft in.

A B-26 bomber flew across towing an aerial gunnery target, and it dropped the target used by the Air National Guard fighters at the west edge of the field before coming in for a landing.

Frederick A. Chantrey, commander of the Battle Creek Squadron, AFA, directed the planning for the air show. Frank W. Ward was in charge of the static exhibits, Glenn Sanderson handled the publicity and Willard B. Baker arranged for the traffic and parking.



Six visitors at Kellogg show: In rear, the Pacusan Dreamboat. In front, Col. A. F. Kalberer, G. C. Price, Maj. R. J. Dixon, F. A. Chantrey, and F. W. Ward, AFA chief in Michigan.



Part of the 40,000 people who gathered at Kellogg Field in Battle Creek to observe the 25th anniversary of the dedication of the field. Air units of five services took part.



THE AIRLINES of the United States are recognized as the most efficient in the world. Their standards of safety and service are high; their charges for that service are low.

The airlines of the United States have been developed under the system of private enterprise, with adequate competition regulated in the public interest.

We believe that the system of private enterprise is best designed to keep the United States ahead in air transportation.

The record of performance, in our opinion, sustains that belief.

AMERICA'S LEADING AIRLINE **AMERICAN AIRLINES INC.**

## AFA STATE ROUNDUP



### ILLINOIS

**Chicago:** Mike Deidling was recently appointed chairman of the membership committee, Squadron 101, which is now conducting a membership campaign. Each member has pledged himself to sign up at least one new member. The campaign was opened on October 21 with a party which netted six new members.

George A. Anderl, 412 N. Humphrey avenue, Oak Park, Ill., was recently elected commander of Squadron 101. Other officers selected include: Walter E. Nelson, vice-commander; Walter A. Hinz, secretary; and M. Paul, treasurer. Councilmen are W. P. Bunnell, 1948-49 commander of the squadron, and H. D. Amey.

Squadron 101 meets the third Friday each month in National Tap & Restaurant, 5213 N. Pulaski, Chicago.

### MINNESOTA

**St. Paul and Minneapolis:** The St. Paul and Minneapolis Squadrons, AFA, showed "Operation Wing Ding" to a packed house on September 27 in St. Paul. Approximately 350 AF men, women and their friends attended the performance. Refreshments were served—on the house—after the show.

The St. Paul Squadron meets on the last Tuesday of every month at Heinie's Bar. The Minneapolis Squadron meets on the last Wednesday of every month at the Anglesie Hotel.

### NEW JERSEY

**Newark:** The Newark Squadron, AFA, meets at 8:15 on second Thursday of each month at a temporary meeting place located at YMCA, 107 Halsey Street. Tours through many aviation plants and installations are planned by the Squadron during the coming year. Commander Morris Blum has announced.

Anyone desiring information concerning squadron activities and applications for squadron membership should write to Morris Blum, 202 Chancellor Avenue, Newark 8, N. J. Phone WAverly 3-3391, Home, ESsex 3-4303.)

### NEW YORK

**Mitchel:** George D. Griffin, Jr., 238 N. J. avenue, East Hempstead, L. I., was named commander of the recently chartered Mitchel Squadron, AFA, at a meeting held last month. The squadron has 29 charter members.

Other officers include: John W. Hagan, Jr., vice-commander, Robert W. Fertsch, secretary, and Adolph Mills, treasurer.

Council members are: Woodrow A. Chisena, Harry C. Humes and Steven Owczarek.

**First Air Division:** David S. Levison, 10th Group commander, N. Y. State Wing, was elected commander of the First Air Division at the September meeting.

Other officers are: Morris Blum, commander of the Newark Squadron, vice-commander; Ruth Stern of WAC

Squadron No. 1, N. Y. Wing, secretary; and George Endres of Newark Squadron, treasurer.

First Air Division is comprised of commanders and vice-commanders of New York and New Jersey state wings. Meetings are held on first Monday of each month at the Park Avenue Restaurant, East 52nd Street, New York City. AFA members are welcome at these meetings.

### PENNSYLVANIA

**Philadelphia:** W. Hamilton Wilcox, 704 Wildell Road, Drexel Hill, Pa., was elected commander of the Metropolitan Philadelphia Squadron, AFA, at a recent meeting. Other officers elected were: Joseph J. Dougherty, Jr., 1st vice-commander; I. E. Brodsky, 2nd vice-commander; Elizabeth W. MacKenzie, secretary; Owen M. Ferry, treasurer; and Nan Serpico, historian.

Councilmen are: E. Perry Campbell, Richard P. Hart, Charles A. Vogel, Loyd W. Barbour and Frank J. Stieber.

These officers were elected to serve until the end of February 1951, so the squadron may be uniform with other squadrons under the new fiscal set-up.

Perry Campbell, retiring commander

of the squadron, is now heading a committee for the development of a National Air Memorial.

**Altoona:** Blair county's celebration of Pennsylvania week concluded on October 23 as 250 persons, including 66 from the Methodist Home for the Aged at Tyrone, went on a Good Will automobile tour of the county sponsored by the Blair County Squadron, AFA, and other veterans' organizations.

**State College:** The formation of the Pennsylvania State College Squadron, AFA, was announced recently by Randall Leopold, Pennsylvania Wing Commander.

After two preliminary meetings, Mr. Leopold arranged for a showing of "Wing Ding" in the State College National Guard Armory.

Mr. Leonard Work, 439 West College Avenue, State College, Pa., was elected commander. Other officers are: John F. Warnock, vice-commander; Miss Josephine Goesbeck, who is also secretary to the President of the College, secretary; and John J. Schanz, Jr., treasurer.

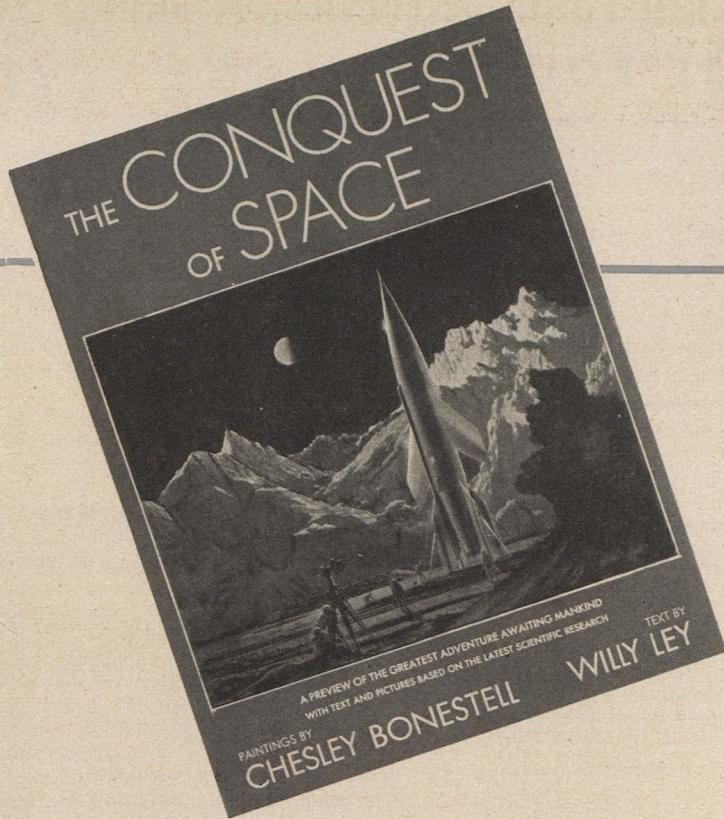
Council members include: Ferdinand J. Buechele, William H. Gross, John W. Graves and George L. Heller.



Barbara Johnson, wife of AFA President, meets with AFA Commanders in exhibit booth at Industrial Exposition at Roosevelt Field, N. Y. From left, Wm. Dwyer, Queens; G. D. Griffin, Mitchel; Mrs. Johnson, D. S. Levison, N. Y. 10th Group.



Booth above was installed and "manned" at the Nassau County Industrial Exposition, Roosevelt Field, by Queens and Mitchel squadrons of AFA. Purpose of booth was to demonstrate activities of Association and recruit new members.



# THE CONQUEST OF SPACE

*Paintings by CHESLEY BONESTELL*

*Text by WILLY LEY*

Want to take a trip to the moon by rocket? Well, maybe not tomorrow, but in *THE CONQUEST OF SPACE* the authors portray in text and pictures the universe our children may someday visit. We visit the mountains of the moon and Venus. We see Jupiter, the landscapes of Mars. And we view the devastating results should Manhattan be hit by a large meteorite—destruction worse than any atom bomb could produce. Each section of the text is followed by pages of parallel illustrations, together with full explanatory captions by the collaborators. There are 48 pages of illustrations, 16 of them, (plus the jacket) in full color. Just published, this is a beautiful and fascinating book.

The Viking Press

\$3.95

## For Ideal Christmas Presents Order Books from "Air Force"

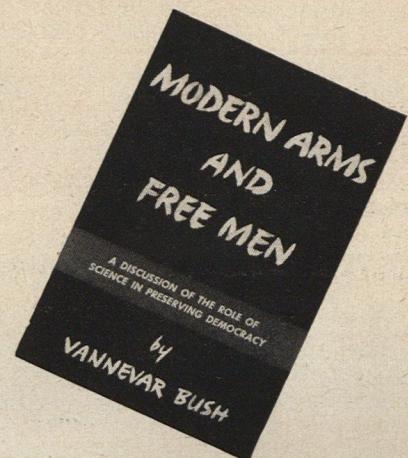
Here are the outstanding books published during the past few weeks. We have chosen them because of their unusual interest and great popular appeal. They're ideal Christmas presents.

● **ROOSEVELT AND THE RUSSIANS.** By Edward R. Stettinius, Jr. Here is the entire story of what happened at Yalta during those seven fateful days when Roosevelt, Churchill and Stalin made decisions that shook the world. Were we sold out? The author says, "no". Doubleday. \$4.00

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● **MODERN ARMS AND FREE MEN.** By Vannevar Bush. One of America's top scientists analyzes the various machines of war which might be used in a future conflict. He has his own opinions on the future effectiveness of the guided missile, the bomber and the submarine. And he has unbounded confidence in the Democratic ideal. Here is a book of vital interest to all Americans. Simon & Schuster. \$3.50

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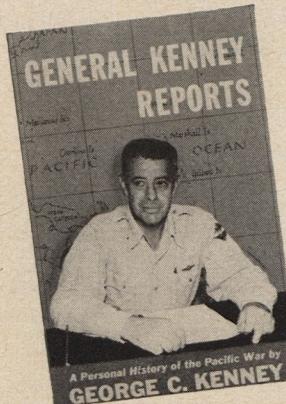
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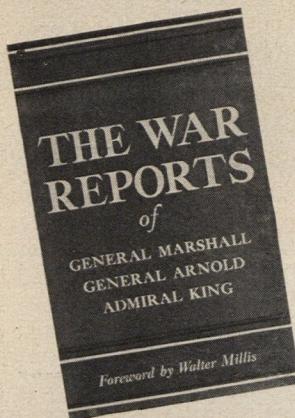
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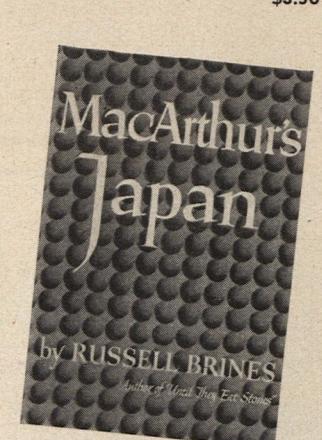
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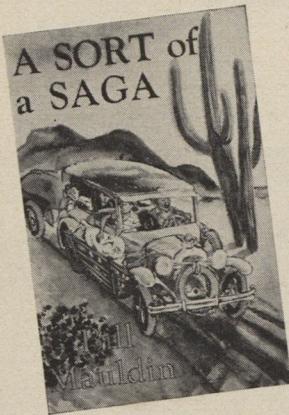
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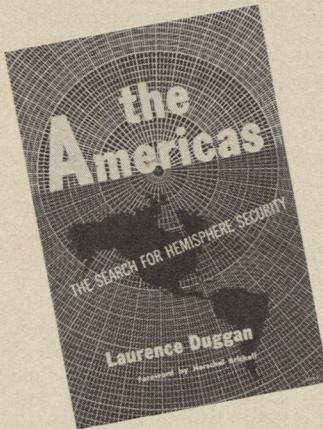
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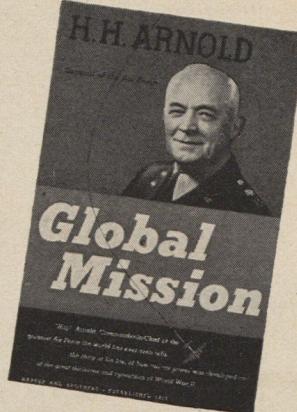
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46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94											

The Conquest of Space  Roosevelt and the Russians   
Modern Arms and Free Men  Woman of Rome   
This I Remember  Autobiography of Will Rogers

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# CARGO COMMANDO

Looks Like a "Sitting Duck", but this New Chase workhorse can bring the

**Big Stuff into Combat Areas and Doesn't Need a Fancy Field to Work In.**

One day some weeks ago, a newly-designed twin engined cargo plane touched its wheels down at a Trenton, N. J., airport. The pilot reversed his props and hit the brakes. Six seconds and 300 feet later it spun around in a 90 degree turn and shivered to a stop.

The plane was undamaged and the crew was not even shaken up. This was a simulated combat landing and Chase's XC-123 had passed its first flight test successfully.

The Avitrus, the name by which this Chase series is known, is probably the first plane developed from a glider design, and is certainly the first which can be modified in the field for use as a powered transport, tow plane or glider.

Its unique history dates back to 1943 when Michael Stroukoff, who was best known at that time as an architect and a builder of bridges, designed a new type of wing and tried to sell it to the Air Force. He was awarded a development contract for a 14-place combat glider with a towing speed much faster than that of the CG-4A's which were then being

used. His first glider was an all-wood structure completed in January 1945, and its success prompted the Air Force to give Stroukoff the green light on further designs. Chase's next effort was the 23-place CG-14A and this was followed by the first all metal, non-expended combat glider, the CG-18A. All these gliders embodied the drop-type fuselage ramp, a feature which has become characteristic of the Chase design.

The performance of the CG-18A was so outstanding that it was decided to equip the machine with detachable

power plants. The resulting model was the C-122, carrying 30 fully-armed troops.

The XC-123 is a direct outgrowth of this plane and is the largest in the twin-engined cargo program. It can lift double its own weight. The space available for cargo is 36' 8" in length, 9' 2" wide and 8' 2" high. It can accommodate a 155 mm howitzer on its carriage; a 105 mm howitzer with its own three-quarter ton truck; 60 fully armed troops or 50 litter patients, plus six attendants and six ambulatory cases in addition to its full crew. And what

is most important of all, carrying its full design gross load, it can clear a 50 foot hurdle on take off inside of 1,000 feet and can land over the same obstacle in 750 feet.

This, then, is an air-head vehicle. When speed is essential, it can take big loads into forward combat areas where landing fields are likely to be crude and short.

Key design feature in support of this role is the landing gear. Unlike most large aircraft, all three legs of the tricycle gear retract into the fuse-

## CHASE'S C-123 AVITRUC

**POWER PLANT** Two PW R-2800s, 2,000 HP each  
**DIMENSIONS** Span 110'; Length 77'; Height 32'8"  
**WEIGHT EMPTY** 25,000 Pounds  
**CARGO CAPACITY** 25,000 Pounds or 60 Troops  
**SPEED** 250 MPH  
**RANGE** 550 Miles  
**SERVICE CEILING** 23,000 Feet

lage. When down and locked, the wheels extend only 30 inches below the broad fuselage and give the plane a "sitting duck" appearance. In this way the possibility of its nosing over on a short, fast landing are greatly lessened. Then, too, the angle of the loading ramp is made less acute which eases the loading problem.

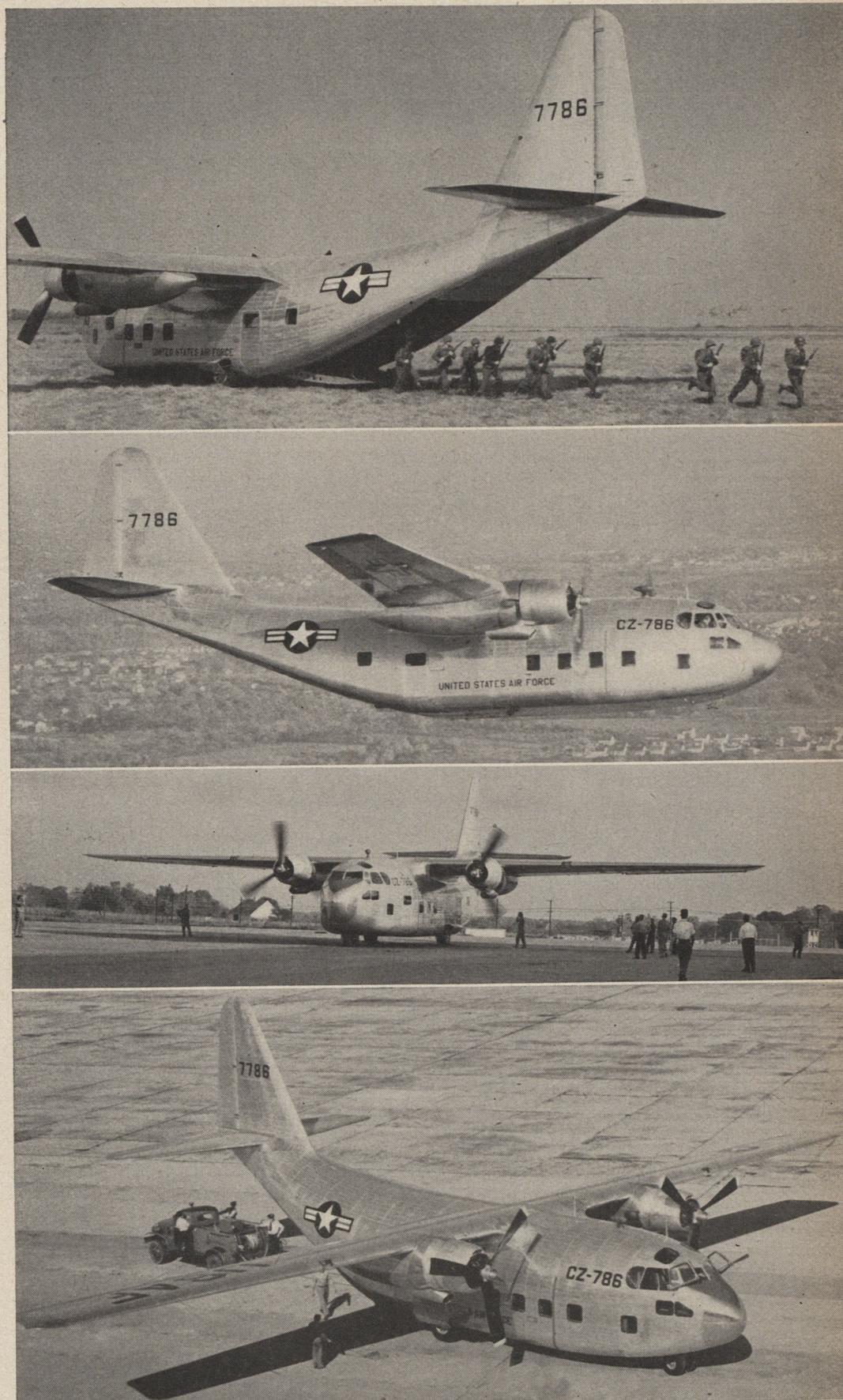
While the Avitru is fairly conventional in its construction, it has a number of safety devices peculiar to the Chase design. The cockpit floor, for example, is raised some 30 inches above the level of the cargo floor, protecting the crew against shifting loads. Another safety feature is the flight bridge which is caged in welded steel tubing running from the nose to the bulkhead separating the cockpit from the cargo compartment and encasing the pilots on all sides. In the event of a nose-in crash, the steel tubing should afford some measure of protection for the crew, not present in other planes. Windows in the cockpit and cargo compartment can be removed in a single motion for emergency exit. The ship's self-sealing gasoline tanks are jettisonable.

Like its predecessor, the XC-123 has "button on" power plants. The entire unit, engine, prop and all, can be quickly removed and the engine changed in 45 minutes. With the engines out, and the resulting cavity covered with a cowling, the Avitru is ready for use as a glider. Release mechanisms are built into both the nose and tail.

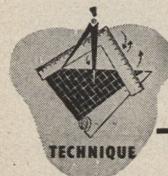
Since the ship will be used essentially for cargo transportation, Chase has built into it several unique loading features. The loading ramp, for example, can be swung down to any intermediate tail board level. Thus, the transfer of cargo from truck to plane is made as simple as loading trucks from a warehouse platform. For loading heavy equipment, a winch cable can be passed from the load at the rear of the plane through the cargo compartment and out a nosewheel well for attachment to a source of power. Once aboard, the cargo can be lashed in place to tie-down fittings spaced over the total floor area on a 20" grid pattern.

Side doors have been installed for the use of personnel and are also suitable for parachute jumpers. The plane's tail surfaces are mounted high to provide adequate loading clearance for trucks and to do away with any possible hazard in parachute trooper jumps.

Chase engineers feel that in the C-123, they have produced an ideal ship for Army and Air Force use when big loads must be transported hurriedly to forward combat areas, and looking beyond military utilization, they envisage this latest Avitru as a commercial cargo carrier with a really promising future.



This series of photos shows the new Avitru before and during its first test flight successfully completed not long ago. Designed for carrying heavy loads into forward combat areas, the C-123 can drop into a rough field over a 50 foot barrier and grind to a stop in 750 feet. It can take off over the same barrier in 1,000 feet, carrying 50 litter patients plus six attendants and six ambulatory cases. Air Force officials were reportedly impressed with the performance of this new cargo carrier.



TECHNIQUE

# AVITRUC

1945-1949



G-14 1945



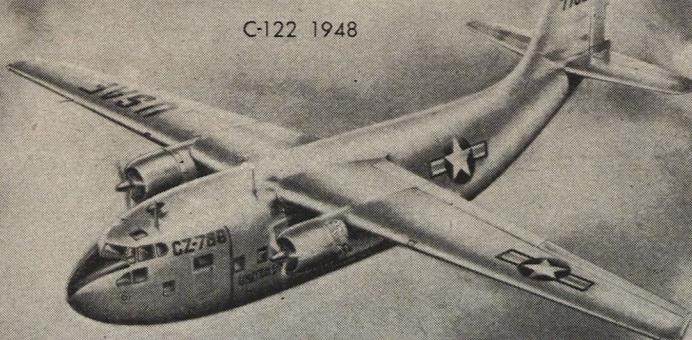
G-14A 1945



G-18A 1947



C-122 1948



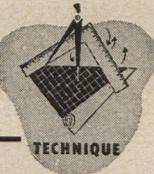
C-123 1949



CHASE AIRCRAFT CO., INC.  
WEST TRENTON, NEW JERSEY



TECHNIQUE



## Air Force Reveals New Guided Missile Built by Ryan Aircraft

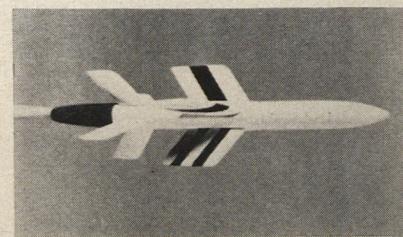
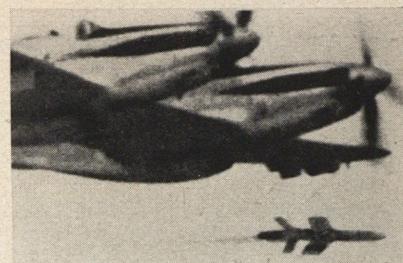
After a self-enforced silence of nearly a year on the work it was doing with guided missiles, the Air Force finally broke loose last month with an announcement of its new "Firebird" missile, developed by Ryan Aeronautical Company of San Diego, California.

The Firebird, virtually a fragmentation shell with human intelligence, is extremely small, fast and difficult to track—even on radar scopes.

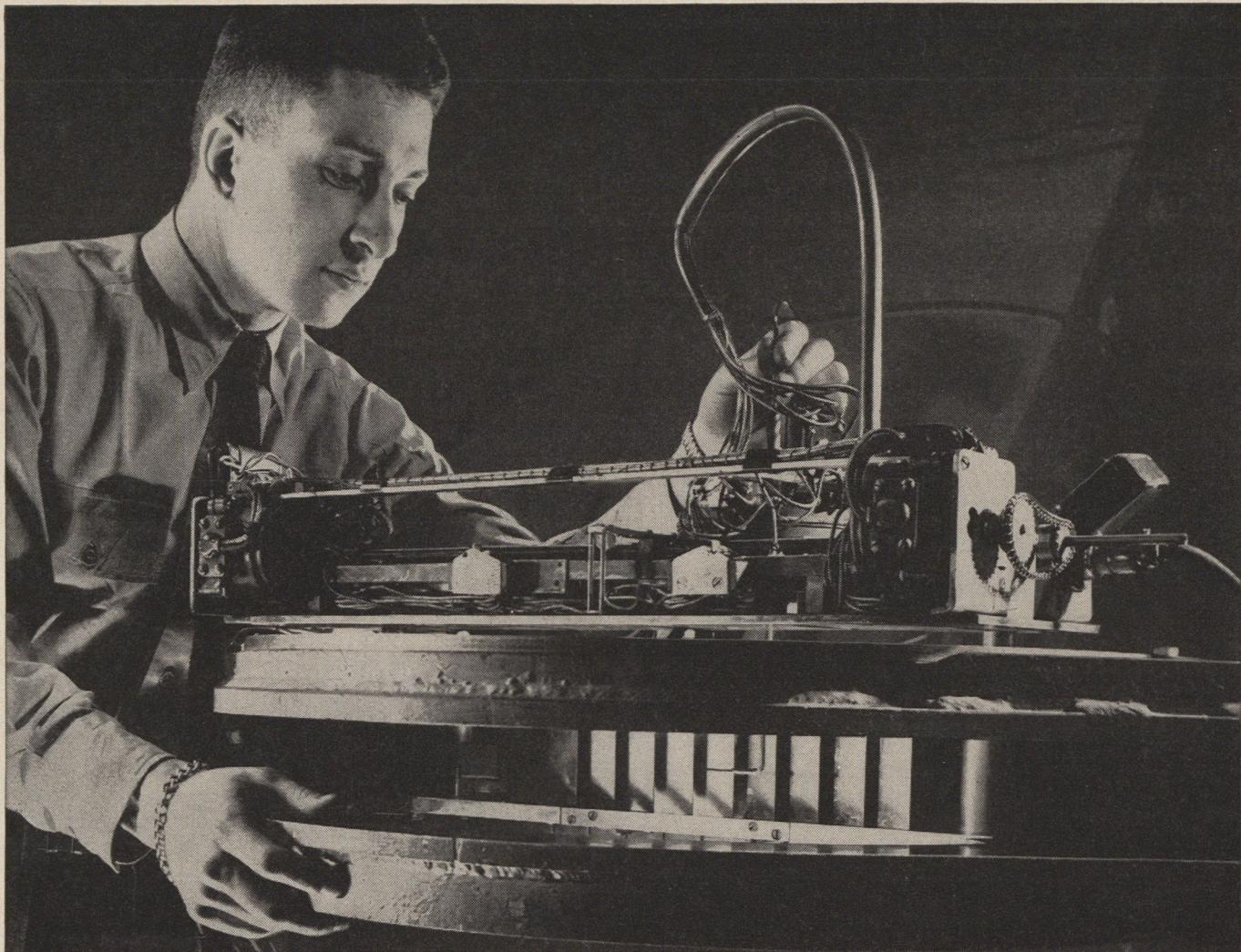
Little more than half a foot in diameter, it is about 10 feet in length and 7½ feet long after dropping its booster rocket.

After the missile is launched from the parent plane, a booster rocket takes over. Then, when the "Firebird" reaches maximum speed, the spent booster is jettisoned by an explosive charge. Thereafter, during the latter phase of interception, power is supplied by flight rockets. The warhead is designed to explode when it is close enough to an enemy aircraft to insure destruction. Should the missile miss its target, the warhead is automatically detonated in the air.

Development of the missile has been under way for more than two years by the Ryan Aeronautical Company. The "birds" have been manufactured by the company's San Diego plant, and under joint Air Force-Ryan technical supervision actual firings have been made at Holloman Air Force Base, Alamogordo, New Mexico.



A twin Mustang fighter launches one of the new Ryan Firebird air-to-air missiles developed for the Air Force. Below, a static drawing of missile.



## A QUEST FOR THE PERFECT "SHAPE"

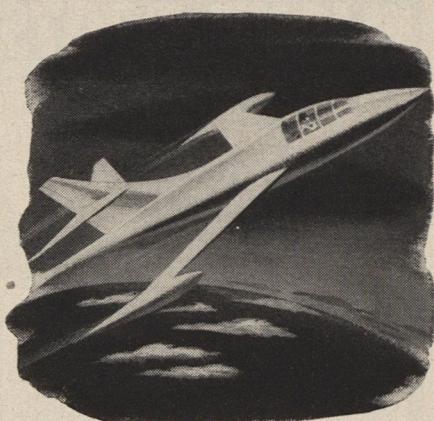
► This research engineer is seeking the best airfoil shape for the small but vitally-important blades of a jet engine turbine or compressor.

► This "wind tunnel" in the Wright laboratories can push air past the test blades at the speed of sound—an unusually high velocity for this type of equipment. The blades may be rotated in the airstream to change the angle of attack or may be assembled at various spacings to find the most efficient relationship between air and blade. Pressure readings behind the blades are picked up by a traveling probe and automatically recorded.

► There's a sound reason for this

large attention to small detail. For instance, a drop of one percent in the efficiency of the turbine section of a turbo-prop engine means a drop of three percent or more in shaft horsepower. The high speed of airflow is dictated by the fact that light weight gas turbines need the fewest possible compressor and turbine stages, which leads in turn to relatively higher speed of flow past the blades.

► This "cascade" test is one of many ways in which Wright Aeronautical Laboratories help along the "Jet Age" . . . through never-ending probing, proving and improving of all parts and materials essential to efficient jet-engine operation.



POWER FOR AIR PROGRESS

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# The Airman's Bookshelf

## The Conquest of Space

By Chesley Bonestell and Willy Ley  
The Viking Press. 160 pp. Illus. \$3.95

Ever since man began to dream, one of his favorites has been about taking a trip to the moon. That is still a dream but it is beginning to take on more practical overtones. Someday we'll land a rocket on the moon. It is only a question of "when". Willy Ley who wrote the text of this fascinating book believes it may happen within our childrens' lifetime and with the able assistance of Chesley Bonestell's pictures, he undertakes to tell us what the trip will be like and what we will find when we arrive at the moon and at the other planets which make up the universe.

There will be problems involved, of course. The first rocket ships will be rather "slow" and there will be four difficult days when the ship is not being acted upon by gravity. Passengers will float around the cabin, which might be fun for a while but everything else that's not tied down will float, too. That goes for food, pencils and other essential items. And landing on the moon will require an action very much like a take off. The force of the moon's gravity must be overcome and that can be done only by rocket action.

Bonestell's illustrations are fascinating in the extreme. These are no mere "artist's conceptions", for he has studied astronomy for most of his life and many of his paintings have been checked by scientists at the Mount Wilson and Palomar Observatories. There are 48 pages of illustrations—16 of them, plus the jacket, in full color. Those in color are amazingly beautiful. The Martian

landscapes; Venus' dustbowl; Jupiter, where hydrogen flame, liquid ammonia, lava and ice give an appearance of Dante's Inferno; Mercury where the temperature is like that of molten lead; and Pluto where the atmosphere is frozen solid, all come to life under the artist's brush. This is the sort of book which won't let a man grow old.

## Modern Arms and Free Men

By Vannevar Bush  
Simon and Schuster. 273 pp. \$3.50

The intricacies of modern warfare and the new and terrifying weapons which would be brought to any new conflict have led many men to the conclusion that the next war may be the last insofar as life as we know it in America is concerned. "Nobody will win the next war," they say, conjuring up images of atomic destruction, biological desolation, and the havoc wrought by guided missiles.

More faith in mankind and in the democratic ideal has Vannevar Bush, who, in his new book, holds that "the principles that underlie our democratic system will remain the same in spite of the evolution of weapons and that the aspirations of men of good will may become realities if we keep our strength."

This is essentially an optimistic book. As a scientist, Dr. Bush approaches the problem from a technological viewpoint. He believes that "the hopeful aspects of modern applied science outweigh by a heavy margin its threat to our civilization."

He believes that the day of the conventional bomber with its conventional bomb, as we knew it in the last war, is just about over. Radar, rockets and air-to-air missiles with proximity fuses spell the end of the great bomber fleet. He points to the Schweinfurt raid when the Germans spread great havoc with a frontal rocket attack by massed fighters. Examination of fragments of these rockets showed that they were equipped with recesses for proximity fuses. Those recesses were never filled. If they had been, says Dr. Bush, and if the same development had been successful in shells, we would have been stopped cold on that type of bombing.

What he is more concerned about from the standpoint of national security is the development of the submarine. In both the first and second world wars we underestimated the effectiveness of this weapon and found ourselves on the brink of disaster because of it. The snorkel and the long range torpedo have given the submarine another head start and we must make sure that we have the means to battle them if the need arises. To do this, Dr. Bush believes, "We need a Navy intent on the full accomplishment of its main mission and not diverted by the sirens of more spectacular fields, or arguing on the defensive in regard to its importance as compared with any other service."

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District of Columbia, ss.

Before me, a Notary Public, in and for the District of Columbia, personally appeared James H. Straubel, who, having been duly sworn according to law, deposes and says that he is the editor of Air Force and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (section 537, Postal Laws and Regulations), to wit:

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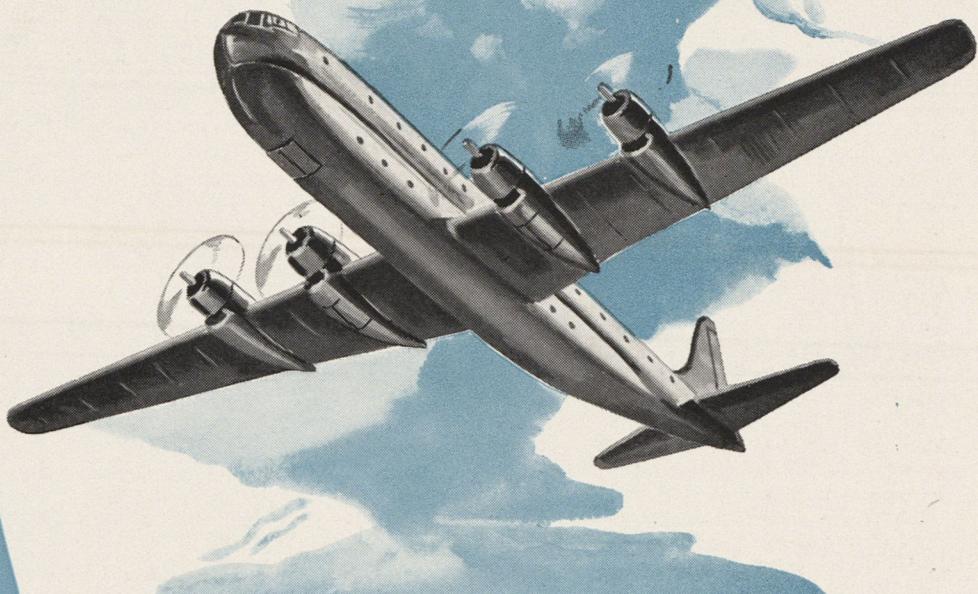
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