NEXT CONGRESS MUST DECIDE 70-GROUP USAF

“Operation Vittles” Held Invaluable Lesson in Air Transport Logistics

“Bigger planes pay off”

Written especially for Planes
By
Major General William H. Turner
Deputy Commander, Air Transport, Military Air Transport Service, Now Commanding Air Lift Task Force

If there is an elemental lesson to be learned from the Berlin Air Lift, it is that in today's chapter of air transport anything, in any quantity, can be carried swiftly anywhere in the world at any time.

This is no new concept, but the intense activity demanded by “Operation Vittles” has provided an unequalled laboratory for confirming views long held by air transport people.

The operation in Germany has provided the finest possible concentrated training for our airmen. It has demonstrated that an air transport force-in-being is vital to the national Military Establishment. The techniques used in supplying the western sector of Berlin, a section as large as Brooklyn, by air could be applied just as well, in an emergency, to St. Louis, Missouri, a location on the Polar ice cap, or Tokyo.

The pace of the operation in Germany is fast. For example, on last Air Force Day, 805 Allied flights to Berlin’s Tempelhöf and Gatow airports carried 6,897 tons of coal, in addition to passengers. Cargo aircraft took off or landed at the rate of one every 48 seconds—despite the fact that the pilots had to fly 18 out of the 24 hours on instruments.

Out of this intensive action, we have learned much about importance about aircraft, personnel and methods. I will discuss them in order.

—See “Berlin” page 4—

Urges 70-Groups

Navy Will Need 17,549 Planes

The Navy’s role in America’s air supremacy, a modern 14,500-plane air arm required to police the oceans of the world, will require delivery of 17,549 new planes in the next six years, according to U. S. Rep. Chester E. Merrow (R., N. H.).

This plane program for the Navy and the 70-group Air Force program constitute “only the minimum air protection for the United States.”

“It is not air supremacy. Should we be attacked, vast and immediate expansion would be necessary,” Mr. Merrow recently told the House of Representatives.

Using Storage Planes

Taking 3,000 obsolescent war planes out of storage, the Navy plans to reach 14,500-plane strength next July 1. However, to build up a modernized fleet air arm will require delivery of the 17,549 modern aircraft over the period of the next six years.

Once a state of combat readiness is reached, the Naval air arm will require 3,300 new planes a year, or approximately $1,970,000,000 annually, to keep the Navy up to the minute.

Delivery Requirements

Mr. Merrow said that deliveries of aircraft to the Navy for the next six fiscal years should be as follows:

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<thead>
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<th>Year</th>
<th>Planes</th>
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<tr>
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<tr>
<td>1950</td>
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<td>1954</td>
<td>3,760</td>
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<td>1955</td>
<td>17,549</td>
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Basic Pattern Needed

By the National Security Act of 1947 the Air Force came into being as a separate, autonomous arm of our defense. However, we have not yet defined in law just what the basic structure of this force will be. Nor have we given it a guiding framework of law under which to operate.

For decades we have been rebuilding and strengthening our sea forces. Sea power for ages has been a vital factor in mainte-
The Aircraft Industry’s Responsibilities

While the new national defense program has brought a welcome break in the 1946-7 decline, the aircraft manufacturers realize that the program imposes serious and impressive responsibilities.

These responsibilities are three-fold in nature:

First, the industry must produce new aircraft with increased performance superior to that of the aircraft of any other nation, particularly those of a potential enemy. The performance now being demanded of military aircraft is revolutionary in nature. Some measure of the task ahead of the industry is afforded by reference to the speeds. In the last two years alone, the British have twice raised the world speed record, and three American manufacturers of military, transport, and personal aircraft, helicopters, flying missiles and their accessories, instruments and components, have moved the record still higher.

But speed is only one of the performance characteristics of aircraft for which sharp improvement is being demanded. Aircraft must fly at all altitudes from zero to 40,000 feet and better. They must be equipped with instruments enabling them to operate under all types of weather and climate. Strategic bombers now must offer a range double that possessed by the best bombers in World War II. In this search for more and more performance, new planes utilize materials unknown in World War II, radical configurations, and are employing both jet and rocket propulsion simultaneously.

The second responsibility assumed by the industry is to provide these new aircraft at the lowest possible cost in order to hold the taxpayers’ burden to a minimum. In tackling this responsibility the industry faces perhaps even more serious obstacles than those that must be overcome in order to better performance. Indeed, every measure taken to improve performance inevitably raises cost. The new powerplants, the new materials, the new instrumentations and designs, all are far more costly. They require many thousands more hours of testing than were expended to produce the aircraft of World War II. Obviously the inflationary forces affect aircraft wage and material costs just as they do any other industry. With inflationary forces, new and revolutionary developments, and greater performance making for higher costs, the industry’s only resources to keep down the burden are careful planning, possible only with a long-term program; and economies possible because production volumes have been increased; and rigid adherence to sound management principles.

The final responsibility is to deliver these aircraft on time. No aggressor respects the air force or the military power of any nation equipped with obsolete weapons. Under current international conditions, the modernization of our air striking arms should go forward as rapidly as possible. Here, too, many handicaps stand in the way of the industry’s achieving a criticism-proof record in deliveries. We are trying to increase production during a period of all-time record peacetime boom conditions. Every material needed is scarce. A few subcontractors are reluctant to engage in production of parts and components for aircraft when this involves some sacrifice of a more lucrative line of work. It is precisely these men who, too, are often attracted to the civilian trades. Only by calling upon every resource available to management and with the closest cooperation of the armed services, the government agencies, and our suppliers will we be able to meet our schedules under the conditions now before us.

The industry welcomes the challenge inherent in these responsibilities. It is fully aware of the many factors beyond its control which may hamper the prompt fulfillment of its assignments. The industry will continue to do its best to overcome them.

Olive P. Eckels
President, Aircraft Industries Association of America, Inc.
A growing number of the leaders in American industry are adding their names to the rolls of the Corporate Aircraft Owners Association, established last year by a group of industrial companies operating airplanes in their business.

While a few industrial concerns operated company-owned aircraft prior to World War II, hundreds are now finding new uses for aircraft ranging in size from two-place light planes to four-engine flying sales rooms. Surveys have shown that more than 1,000 multi-engined aircraft are now used by private industry, approximating the total operated by all domestic airlines. Light single-engine planes and helicopters also are in use in private industry.

**Users Organized**

The Corporate Aircraft Owners Association is incorporated on a non-profit basis in New York. Founding members were The American Rolling Mill Company, Middletown, Ohio; Bristol-Wright Corporation, Hillside, New Jersey; Champion Paper & Fibre Company, Hamilton, Ohio; B. F. Goodrich Company, Akron, Ohio; Howes Brothers Company, Boston, Massachusetts; Republic Steel Corporation, Cleveland, Ohio; and Sinclair Refining Company, New York City.

The main objectives of the Association as explained by William B. Belden of Republic Steel Corporation, who serves as CAOA's Chairman of the Board, are:

**Names Their Aims**

1. To guard against discriminatory legislation, regulations and decisions emanating from Federal, State or Municipal agencies, so that our interests will not be adversely affected;
2. To promote a medium of exchange of information through a monthly bulletin, meetings and other activities that will bring our members into closer contact on friendly relations to the benefit of all concerned;
3. To establish a corporation aircraft owners to be represented as a united front in all matters where organized aviation is desirable and necessary to protect or foster our interests, and through this, also to establish liaison with other organizations whose activities are likewise concerned with the aviation industry;
4. To bring about improvements in all phases of the industry's service, cooperation among owners, which will result in constructive suggestions to manufacturers, distributors and service agencies;
5. To further the cause of safety and economy in the operation of our aircraft by the accumulation and distribution of data vital to our interests.

**More Firms Joining**

Since the formation of this Association, in the annals of transportation, additional members who have demonstrated their interest in securing full utilization of industrial aircraft include: National Dairy Products Company, New York City; United Cigar-Wholesale Stores, New York City; Reynolds Metals Company, Richmond, Virginia; Corning Glass Works, New York; General Electric Company, New York City; Goodyear Tire and Rubber Company, Akron; Buffalo-Mills Corporation, Greensboro, North Carolina; and Hanes Hosiery Mills Company, Winston-Salem, North Carolina.

Significantly, Chairman Belden and other officials of the Association have hereofore had little or no contact with aviation in any form.

**Uptrend is Noted in Utility Planes**

An accentuated trend toward executive type personal planes used in business and farming highlights the directory of new American civil aircraft just released by the Aircraft Industries Association.

The new directory reports 24 U.S. aircraft producers now offering 55 models on the civil market. A similar directory issued about the same time last year showed 25 producers with 50 models.

The publication lists 17 different executive or family type aircraft built by 12 firms. In the preceding directory a year ago only 10 models offering accommodations for four and five passengers were listed.

**Executive Types in Demand**

The sharp increase in number of models offered confirms the trend toward this type of plane already evidenced by the current sales figures reported by the Personal Aircraft Council of the AIA. The latest month for which figures are available, August, shows sales of executive type aircraft actually exceeding sales of cargo or trainer, by a substantial margin. August sales of executive types include planes accounted for 64% of total sales as compared to 47% for the first eight months combined, and only 37% for the first eight months in 1944.

The new directory lists only ten passenger or cargo type transport plane models compared to 18 listed in the previous directory. The reduction obviously reflects the continued trend toward smaller operators. The reign of the large passenger plane has been temporarily withdrawn from the market for new equipment.

**Types of Planes**

The breakdown by types is as follows:

- **Airline Passenger or Cargo Type:** Five companies with 10 models, three of them cargo planes. Capacity of the passenger planes ranges from 26 to 69 people. Useful load of the cargo types runs from 21,500 to 68,500 lbs. One new cargo plane, with 47, 600 lb. useful load is under way, its debut scheduled for next summer.

- **Executive or Family Type:** Twelve companies with 15 models. These in capacity of three to twelve persons.

- **Five-place Trainer Type:** Ten companies manufacturing 24 models.
New Device Spies On Plane Engines

An "engine analyzer," a new device that detects power plant troubles in flight, is expected to cut delays and minimize maintenance of airline and other large planes. This instrument will enable flight engineers to give ground crews at any stop a complete list of things to be checked, making it unnecessary to dismount each engine looking for trouble.

Sonic Moppets

Memo to kindergarten, elementary and junior high school teachers:

You can expect U. S. school children to ask more questions about aircraft construction than any other phase of aviation. And next to the structure of a plane, pupils are likely to be most interested in what makes them fly (aerodynamics), and how to go about making a career in aviation.

From the early school years to junior high, pupils' interest also switches from recognition of plane types to questions about technological advances, such as atomic and rocket propulsion, supersonic and pilotless flight.

These findings are the result of a survey conducted recently by CAA and Stanford University educational researchers. The study was conducted to determine what phases of aviation are of most interest to various grade levels, the task being covered 4,250 pupils from four years old through junior high school in the city school systems of the nation.

"BERLIN" (Continued from page one)

The Berlin Air Lift has demonstrated emphatically that bigger planes pay off. In July, General Clay set the record for the Zone of Berlin at 4,500 tons daily, equal to 135,000 tons monthly, and this goal has been reached.

If we attempted to handle the assignment entirely with two-engined transports, as was the case in the early days of the Air Lift, it would call for 39,706 flights a month for 899 aircraft. Considering the limitations of air space alone, this would be impossible.

Using four-engined C-54 Skymasters, which have now replaced the C-47's in Operation Vittles, the flights can be accomplished by 178 aircraft flying 13,800 trips a month.

Recently, we put one Douglas C-74 Globemaster in service on the Berlin shuttle. This plane carried bulldozers, the heaviest equipment ever flown to Berlin.

Facts and Figures

Air Force weathermen at White Sands, N. M., have sent a meteorology balloon 10,217 feet to test conditions for such devices—120,000 ft.

A World War II fast carrier task force could throw up a concentrated anti-aircraft fire of 6,000 shells a second. That's 200 tons of hot metal a minute.

In the summer of 1910 Army aviation included two officers, nine enlisted men, one airplane, one airship and three balloons.

November 19, ten years ago, construction was started on National Airport in the Nation's Capital.

The Air Force plans to recall 10,000 reserve and air guard officers for specialist jobs in the next few months.

At the start of this year there were 45 government-sponsored flying clubs in Canada.

Sixty-one per cent of all non-airline pilots in the United States have been licensed in two-place planes of 65 h.p. or less.

Already famous as the nation's rival center, Chicago has nine airways converging upon it.

The United States has approximately $6 billion worth of civilian airports, closed 15 per cent of the time because of bad weather.

First airways beacons in the United States were made from automobile headlights mounted in sets of four on wooden poles.

Answers to Planes Quiz

1. Wing.
2. False. Only the President is authorized a plane for his exclusive use.
3. False. What Congress has done is appropriate enough funds for the existing Air Force to start replacing obsolete equipment with new types.
4. (c).
5. (b). 1947 showed a gain over the previous year of about a thousand airports.
6. (e).
7. True.
8. (c).
9. (a) And it is a 5-year job bringing a new model from original design to production.
10. (b).