EDITORIALS

ARMY AIR CORPS CARGO ACTIVITIES

The extent of air cargo carriage by the Army Air Corps has but recently been brought to public attention although the Army has been flying its own freight to a greater or less degree for over six years. This has been necessary in order to get parts and supplies to air depots and plane factories as rapidly as possible as well as to make it unnecessary to carry such large stocks of spare parts at the various air depots.

The carriage of cargo by air is the responsibility of the Fiftieth Transport Wing Headquarters which operates under the direction of the Chief, Maintenance Command, Air Corps, with headquarters at Wright Field, Dayton, Ohio. According to latest available information, this organization uses fifty-one planes, chiefly C-33 (DC-2), C-39 and C-50 (DC-3), similar to the Douglas commercial types, except that they are specially designed with reinforced flooring and wide hatches on the sides. There are also a few of the Curtiss-Wright CW-20 (C-55) type planes in use. An ordinary troop transport plane is reputedly not suitable for cargo because of the need for hatches and because the floor structure is not capable of having the heavy loads, which the Army has to handle, bolted to it.

The present distribution of the Fiftieth Transport Wing is as follows:

<table>
<thead>
<tr>
<th>Squadrons</th>
<th>Number of Transports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfield Air Depot .......... 1st &amp; 5th.......... 15</td>
<td></td>
</tr>
<tr>
<td>Middletown Air Depot .......... 2nd &amp; 6th.......... 16</td>
<td></td>
</tr>
<tr>
<td>Sacramento Air Depot .......... 4th &amp; 7th.......... 10</td>
<td></td>
</tr>
<tr>
<td>San Antonio Air Depot .......... 3rd .......... 7</td>
<td></td>
</tr>
<tr>
<td>Ogden Air Depot .......... 8th .......... 2</td>
<td></td>
</tr>
<tr>
<td>Mobile Air Depot .......... none .......... 1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong> .......... <strong>51</strong> ..........</td>
<td></td>
</tr>
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The ultimate strength of this organization cannot be predicted at this time as its size will be dependent upon the further growth of the Army Air force. Sites for three of five additional depots, under the present Air Corps expansion plans, have recently been selected at

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Oklahoma City, Oklahoma, Wellston, Georgia, near Macon, and at Rome, New York. When these depots are in full operation and the Air Corps fleet is enlarged to meet new air cargo needs, the volume of air shipments will increase greatly.

The basic function of the Fiftieth Transport Wing is to service the Air Corps Maintenance Command and transport supplies and equipment for Air Corps activities, as well as to maintain an even flow of government furnished equipment from plants in the East and Middle West to aircraft assembly lines on the West Coast. Regular schedules are maintained to connect the main air depots now functioning.

Regular scheduled trips are operated weekly as follows: (a) Fairfield to San Antonio to Sacramento to Los Angeles and return. (b) Middletown to Fairfield to San Antonio and back. (c) San Antonio to Fairfield to Middletown and return. (d) Sacramento to Los Angeles, to San Antonio to Fairfield and return. Local trips are also frequently made to various depots and between airplane factories. Weekly trips are made between San Antonio and the Panama Air Depots in the Canal Zone.

The operations office at Wright Field is responsible for scheduling and operation of all inter-depot cargo movements. This office classifies cargo according to importance into the following groups: (a) extra priority, (b) priority, and (c) normal shipments. On the basis of freight balances reported at the various depots, schedules are made in advance for the transport movements for a week. A portion of the cargo capacity is always unassigned, however, to allow for emergency and change orders which constantly come up. For example, a plane may start out with one load and drop it to pick up another on the way, depending on the priority rating of the various shipments concerned. A normal load is 3200 pounds.

Latest operation figures available are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Calendar Year 1939</th>
<th>Calendar Year 1940</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pounds of cargo moved</td>
<td>4,034,000</td>
<td>13,311,095</td>
<td>9,277,095</td>
</tr>
<tr>
<td>Passengers carried</td>
<td>2,170</td>
<td>5,809</td>
<td>3,639</td>
</tr>
<tr>
<td>Miles flown</td>
<td>2,517,000</td>
<td>5,132,573</td>
<td>2,615,573</td>
</tr>
<tr>
<td>Hours flown</td>
<td>16,790</td>
<td>33,823</td>
<td>17,033</td>
</tr>
<tr>
<td>Ton-miles flown</td>
<td>697</td>
<td>5,019,691</td>
<td>.........</td>
</tr>
<tr>
<td>Passenger-miles flown</td>
<td>2,377,933</td>
<td>.........</td>
<td>.........</td>
</tr>
</tbody>
</table>

It is estimated that the Air Corps poundage for the first six months of 1941 must have been at least 6,790,000 which can be
compared to the Railway Express Agency report for this period for domestic airline express poundage amounting to $4,620,077.2^2$

The main item of air cargo carried by the Air Corps is aircraft engines, new and overhauled. Another item is assembled propellers which are slung on the bottom of the fuselage so that two propellers can be carried at one time. Although they are right out in the air stream, it is reported that the drag on the transporting plane is not great, speed being reduced only about ten miles per hour when propellers are carried in this manner. Special parts and materials are carried also, sometimes to manufacturers who would otherwise have to shut down one of their production departments. However, only government material is carried in Army planes and the Air Corps has no intention of competing with commercial airlines in hauling cargo, especially cargo pertaining to national defense. Manufacturers who have to ship parts and equipment by the fastest means of transportation must make use of the regular air express service even though they may be engaged with national defense contracts.

The passenger traffic carried by the Fiftieth Transport Wing consists of ferry pilots, inspection personnel traveling between district offices and congressional parties. Other activities include the furnishing of transport planes and transport pilots to function with the training and activity of parachute troops.

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^The Railway Express Agency figure for air express is audited to eliminate duplications where more than one carrier services the same package. There is no way to indicate whether Army figures are audited in the same manner to avoid duplication where more than one flight services the same shipment.

A COORDINATOR OF AIR TRAFFIC

According to apparently reliable reports the President is still wrestling with the problem of the appointment of a coordinator of air traffic to deal with the increasing congestion, military and civilian, of the navigable air. The proposal was first urged upon President Roosevelt on June 12, 1941, by Congressman Jack Nichols of Oklahoma and Colonel Robert Olds of the Army Air Corps. The intelligent and capable aviation interest of each of these gentlemen
commands the utmost respect. The Nichols-Olds recommendation is not available, so far as we have been able to find, nor is the draft executive order carrying out the same. Therefore, we quote from our best source, a July 19, 1941, special dispatch to The New York Times:

"An executive order creating the office (coordinator of air traffic) is understood to have been ordered prepared by the President, and its announcement, under present plans, is to be accompanied by a Presidential proclamation assuming jurisdiction over all space above the Continental United States, its possessions and Territories and, possibly, that above a certain radius around the off-shore naval and air bases leased by this government.

"A tentative plan for the new office and its duties was worked out by an inter-departmental committee representing the Army, Navy, Civil Aeronautics Administration, Civil Aeronautics Board and the Select Committee of the House to Investigate Air Accidents.

"Colonel Robert Olds, of the Army Air Corps, and Representative Nichols, Democrat of Oklahoma, chairman of the House committee, laid the proposal before the President at a White House conference several days ago.

"The Nichols committee compiled a report on air traffic, and it was as a result of its recommendations, and their approval by the War, Navy and Commerce Departments, that the plan was devised.

"Representative Nichols said today that the need for a national 'air traffic cop' was well established.

"'The problem of air traffic is really becoming serious,' he said, 'especially in the bottlenecks around airports.'

"The Navy, he remarked, flew on one set of rules, the Army on another, the commercial airlines on another and sportsman pilots on very few rules at all, so far as they related to traffic. Moreover aviation schools are springing up everywhere, and anti-aircraft artillery training is coming in for its share of attention.

"'Some of the anti-aircraft units operate directly under commercial airways,' Mr. Nichols said.

"Passengers on a New York-to-Washington commercial aircraft landed here the other day to tell the story of an experience just this side of Baltimore when their plane side-slipped and fell
several hundred feet. Passengers were catapulted from one side of the ship to the other, women screamed and there was much excitement until the craft was righted.

"The co-pilot, according to some of the passengers, told them that an Army plane had come tail-spinning down out of the blue directly across the path of the transport. The commercial pilot 'side-slipped' his ship in his desperate but successful effort to avoid a crash."

Other accounts credit Congressman Nichols with the assertion that permanent federal jurisdiction over all navigable air space will have to be accomplished by legislation, but meanwhile the safety proposal should be put into effect immediately through the use of the President's emergency authority.

The proposal is of such tremendous significance that its adoption should only follow careful study of the needs of all types of aviation, the existing legislation, and the special circumstances of the present emergency. The Civil Aeronautics Act of 1938 is the product of months of work by the President and the Congress and practically every interest of aeronautics in the United States. In spite of certain imperfections, the 1938 Act has been hailed consistently as one of the great forward steps of the United States' art of flying. The consequences of the present proposal to the 1938 Act and those regulated by it should be fully explored.

The four corners of any problem of this kind are first determined by its causes. The Nichols-Olds recommendation, as reported, states these to be the great congestion of civil and military air traffic, especially around airports, the difficulties of civil and military flying according to the same traffic rules, and the fact that some near-accidents have occurred between air transport and military aircraft suddenly appearing in proximity to each other.

The progressive multiplication of aircraft, pilots, and flying hours, both civil and military, during the past two years has produced air congestion and will continue to produce more. That there have been near-collisions is understandable and their avoidance is eloquent tribute to the skill of the pilots involved and the air traffic rules under which they are presently operating. The problem of prospective collision is the product of air traffic congestion, and of course each must be dealt with appropriately. Of civil and military aircraft different types of flying are demanded, but the problem should not embrace nor tolerate (unless in an extreme emergency) the use of
any fundamentally different types of air traffic rules. The Army Air Corps, the Navy Bureau of Aeronautics, the Coast Guard and the representatives of civil aviation were the architects of the Civil Air Regulations of November 1, 1939, and their revision of May 31, 1938, which have served so well. That regulations frame-work is still sound, although it very likely needs a major overhaul. The same good joint architectural job can be done again.

The next dimension of the problem concerns the legislative vehicle available and what, if anything, needs to be done with it to solve the problem.

The definitions of "aeronautics," "air commerce," "aircraft," and "airman" in the Civil Aeronautics Act of 1938 clearly indicate the intention of Congress to extend to the limit the jurisdiction of the United States over the science and art of flight, any contrivance navigated in the air, and any individual who engages in such navigation in any respect. Special definitions for "civil aircraft" and "public aircraft" emphasize the military and civil coverage of the 1938 Act. Definitions of "United States" and "possessions of the United States" point out the full territorial coverage of the Act. Section 1107 (i) (3) emphasizes this territorial coverage by amending Section 6 of the Air Commerce Act of 1926 to read:

"The United States of America is hereby declared to possess and exercise complete and exclusive national sovereignty in the air space above the United States, including the air space above all inland waters and the air space above those portions of the adjacent marginal high seas, bays, and lakes, over which by international law or treaty or convention the United States exercises national jurisdiction."

Section 1107 of the 1938 Act also shows the preservation of Section 4 and Section 5 (f) of the Air Commerce Act of 1926 in the following form:

"Sec 4. Airspace Reservations.—The President is authorized to provide by Executive order for the setting apart and the protection of airspace reservations in the United States for national defense or other governmental purposes and, in addition, in the District of Columbia for public safety purposes. The several States may set apart and provide for the protection of necessary airspace reservations in addition to and not in conflict either with airspace reservations established by the President under this sec-
tion or with any civil or military airway designated under the provisions of this Act.

"Sec. 5. Aids to Air Navigation.—  * * * *

(f) Nothing in this Act or the Civil Aeronautics Act of 1938 shall be construed to prevent the Secretary of War from designating routes in the navigable air space as military airways and prescribing rules and regulations for the use thereof on routes which do not conform to civil airways established hereunder, or to prevent the Administrator in the Civil Aeronautics Authority from designating any military airway as a civil airway, and when so designated it shall thereupon become a civil airway within the meaning of this Act, and the Secretary of War is hereby authorized to continue the operation of air navigation facilities for any military airway so designated as a civil airway until such time as the Administrator in the Civil Aeronautics Authority can provide for the operation of such facilities."

It should also be noted that Section 501 (a) of the 1938 Act makes it unlawful for "any person to operate or navigate any aircraft" unless registered with the Civil Aeronautics Authority; and subsection (b) ((2) fastens compulsory eligibility for registration on "aircraft of the Federal Government."

Finally, we should note the air traffic rules power given to the Civil Aeronautics Authority in Section 601 of the 1938 Act:

"Sec. 601. (a) The Authority is empowered, and it shall be its duty to promote safety of flight in air commerce by prescribing and revising from time to time—  * * * *

(7) Air traffic rules governing the flight of, and for the navigation, protection, and identification of, aircraft, including rules as to safe altitudes of flight and rules for the prevention of collisions between aircraft, and between aircraft and land or water vehicles."

The Civil Aeronautics Act of 1938 centers in the Civil Aeronautics Authority (now Civil Aeronautics Administration and Civil Aeronautics Board) not only the power but the duty to make air traffic rules for all aircraft and all airmen, whether military or civil, except with respect to air movements within air space reservations established by executive orders of the President for defense purposes and perhaps on military airways designated by the Secretary of War. If the problem is merely one of congestion and its accom-
panying dangers, the Authority has the power to set up under its own roof a system of coordination, and no fundamental legislative changes are needed. If the problem is the continued and increasing dangerous proximity of civil aircraft and military aircraft, and the use of surface military weapons, on civil airways or over military reservations, then the solution lies in keeping one out of the way of the other either by enforcement of the present Civil Air Regulations, or their amendment, or the relocation of certain military activities. If the problem involves control of our far-flung military operations, Congress has already fixed the pattern by the broad coverage of the 1938 Act and the power in the President to designate air space reservations. If the demands of the emergency are such as to require a specialized operation of the military wholly incompatible with that of civil aircraft operations, then the designation of air space reservations can be broadened by the President and the Secretary of War can make a more effective use of his power to designate military airways.

The conclusion would seem to be that we have ample legislative power to establish a coordinator of air traffic, if that is deemed necessary, and to take care of emergency needs. However, every instinct dictates that we must only act through established agencies and with the benefit of past experience so that all of our types of aviation will be properly and adequately promoted. Otherwise that which is done in the name of the emergency may rise to plague peace time aviation.

Howard C. Knotts