



AirFREIGHT

COMES OF AGE

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With the recent delivery of five new super "D" C-46 cargo ships, Delta now stands on the threshold of a new era of achievement in cargo service. Before we talk about the new service, however, let us look back and consider the amazing growth that has taken place in this field in just a few short years.

Delta entered the air freight business on August 15, 1946. In that year a total of 682,937 pounds of freight, 2,359,007 pounds of air express and 3,539,389 pounds of mail were hauled. Due to equipment limitations, traffic carried at that time was restricted to small packages. The cargo department, in its entirety, consisted of one man who was charged with the responsibility of production of cargo revenues throughout the system. It is significant that the department itself was founded in January of 1945 when Delta created the office of Supervisor of Air Cargo. Shortly after Delta's entry into the air freight field, John Pogue, now manager of cargo, was added to the cargo staff as cargo sales representative in Cincinnati.

Checking the airFREIGHT rates of that day, we find that the general commodity rate from Atlanta to Chicago was \$8.49 per hundredweight, advertised flying time—three hours. Today, despite a steady increase in freight rates of surface carriers, our freight rate over the same route has been reduced to \$7.20 per hundredweight and flying time is two hours and 15 minutes. Apparently, the higher rate was quite acceptable to the shipping public, for in July, 1947, airFREIGHT tonnage surpassed air express tonnage despite the fact that Delta had been in the air express business for over ten years prior to the entry into the freight field.

It was in 1947 that the company decided to operate scheduled all-cargo service over its routes. This does not mean that 1947 was the first time Delta

used cargo ships. Quite the contrary, for as early as 1945, a cargo airplane was used on an experimental basis. On May 9 of that year an "unconverted Army cargo ship"—to quote the publicity release—was flown from Tifton, Georgia, to Bowling Green, Ohio, under the command of Captain Floyd Addison. The aircraft, in addition to observers from the Department of Agriculture, contained 160,000 tomato plants for transplanting. At the conclusion of the trip, the report to the War Food Administration stated that every factor—temperature, humidity, and shortness of time in transit—is favorable for moving live plants by air. No more prophetic words were ever spoken, for this trip marked the inception of movement of a commodity which soon began to play a vital role in airFREIGHT.

The October 1947 issue of the American Aviation Air Traffic Guide (later known as the Official Airline Guide) shows that Delta operated Flight 67X, C-47 all cargo equipment, on a scheduled basis between Atlanta and Chicago. Further study of the Guide indicates that this was a truly pioneer schedule. Other airlines in the Guide published cargo schedules, but none were in a north-south direction. The Delta freighter was not only the first all cargo service between the north and Atlanta, but it also proved to be the longest continuous all-cargo operation on that route.

The original cargo aircraft had the following specifications: Maximum allowable gross take-off weight 25,200; empty weight, 17,320; cruising speed, 173 miles an hour; cubic capacity, 1,272; maximum payload, 6,000 pounds; door size, 85 x 71 x 55; maximum weight per single piece, 3,000 pounds.

Delta airFREIGHT tonnage, despite keen competition, doubled from 1947 to 1948 and doubled again between the years 1948 and 1950. In 1952 tonnage was well over 15 million pounds a year.

The merger of Delta and Chicago and Southern in 1953 combined the air freight experience of two pioneer air carriers, and it put the company in the international freight carrying picture as well. Three speedpaks were added to the cargo carrying capacity. These speedpaks, capable of hauling 8,000 pounds per trip, were operated between Chicago and Caracas via St. Louis, Memphis, New Orleans, Havana and Kingston; airFREIGHT volume that year jumped to 22,523,922 pounds.

In May of 1955 a survey was made by the cargo department to determine the need for new and larger cargo ships. That month alone, Delta carried three times as much airFREIGHT as during the entire year 1946. With the acquisition of the New York route late that year, the need for additional cargo ships became more pressing, and

the search for a suitable cargo airplane began. The DC-6A, cargo versions of the Convair, and numerous others were considered and found unsuitable for Delta's operation. The final choice narrowed down to the C-46. This airplane was found generally to fit the needs, but it was not completely satisfactory in its original form. Five such aircraft were purchased from the Civil Air Transport Company, a scheduled air carrier in Formosa, and Delta's engineering group assigned to the project were permitted by Civil Air Transport to pick the best five aircraft out of their fleet of 25. Under the guidance of these engineers, highly skilled Formosan mechanics set to work to transform the aircraft into cargo ships equal in safety and reliability to any passenger transport used on the company's route. Preliminary modifications were completed in the spring of 1957 and the planes were flown from Formosa to Miami for final modification. With these modifications completed, Delta's C-46's became an airplane vastly superior to any plane in its class in regular service on any other air carrier today.

Over 150 supplementary type CAA certificates are issued to Delta on improvements specifically approved as engineered by the carrier. Some of the outstanding characteristics of the new cargo airplane include: gross takeoff weight, 49,990 pounds; cruising speed



Delta mechanics at Miami are shown at work on the new C-46's. After preliminary modifications were completed at Civil Air Transport headquarters in Formosa, the freighters were flown to Miami for additional improvements.

192 miles per hour (the lower of the two permissible cruising speeds has been selected to give maximum schedule reliability); cubic capacity, 2,732 cubic feet; length of main cabin, 48 feet—eight feet longer than the stand-

ard railroad boxcar; extra large doors (in fact the doors are large enough to load a Cadillac automobile without scratching the paint job); maximum pay load of the airplane is 15,300 pounds and it is believed that it will be able to operate between most stations at maximum load.

On November 1, the following points will also be served by two or more of the new aircraft: Jacksonville, Miami, Memphis and St. Louis, bringing the total number of cities to twelve. Numerous other points will be served on a demand basis.

With the new fleet in operation, Delta will have increased its all cargo lift by 600%. Meanwhile, other departments are busily preparing for the operation of the aircraft, too. Both the Stations and Property departments are working on providing adequate terminals, loading facilities and personnel to give the needed ground support. The cargo sales staff has recently been increased by the addition of cargo specialists at key cities. Advertising is working on a nationwide cargo advertising campaign. The objective of it all is to produce an unprecedented 21,000,000 ton miles of airFREIGHT within the first year of operation. Considering that airFREIGHT increased by 724% between 1947 and 1956, this goal seems to be quite reasonable.



The speedpak, a prominent feature on the Constellation, were capable of hauling 8,000 pounds per trip. They were operated between Chicago and Caracas via St. Louis, Memphis, New Orleans, Havana and Kingston.