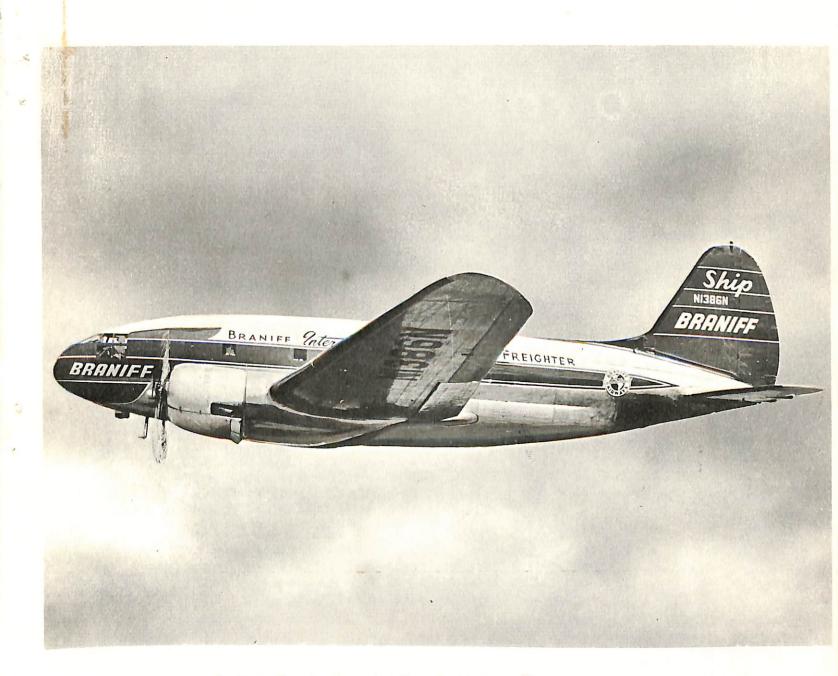


CAPTAIN'S LOG

VOL. IV NO.1

SUMMER 1978



CURTISS-WRIGHT C-46

CONTRIBUTIONS WANTED

Anyone who wishes to contribute articles, pictures, or other items of interest to the membership are invited to do so. The CAPTAIN' LOG will publish members wants, trades and material concerning the history of airlines and airliners. Interesting experiences related to airlines will also be accepted for publication. Photographs and drawings will be published if of good quality and if accompanied by a full description.

Any articles or material on timetables, post cards, modeling, insignia and the international scene should be sent directly to the appropriate editor listed below. All dues and other material for publication should be sent to the Publication Editor.

PUBLICATION DATES

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The CAPTAIN'S LOG is the official publication of the WORLD AIRLINE HOBBY CLUB. Current membership fee is \$10.00 per year for US and Canadian members and \$12.00 for all others. Please add \$5.00 additional if you wish air mail delivery(foreign members only). Make checks and money orders payable to "World Airline Hobby Club". Send dues to Publication Editor.

CHANGE OF ADDRESS

Please report any change of address promptly to the Publication Editor. Improper address will result in member not receiving his copy of the CAPTAIN'S LOG since the 2nd class postage rate does not allow for forwarding. If it is necessary to send another copy of the LOG to someone that has not reported a change of address, the member will have to pay the postage.

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Please send material that you wished published to any of the people listed above, paying attention to what department they handle. Any material you have doubts as to what category it belongs in, please forward to the editor.

Thank you



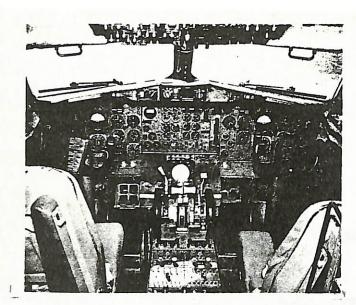
Delta Air Lines super Air Freighter C-46. Photo from files of Tom Kalina.

CAPTAIN'S LOG

FLIGHT MANIFEST

Cover photo courtesy of George Cearley and Tom Kalina, both sending in the same photo. World Airways post card, Alaska color sheet, Seaboard decal sheet courtesy Fowler Aviation. Braniff material from good old Joe Turner, Mr. Braniff out of New York. Thanks to all.

VOLUME IV, Number 1 Summer 1978



...from the left hand seat...

With this issue of the "Captain's Log" we begin our fourth year of operation. We have come a long way in the last three years. The first issue of the "Log" was mailed out to 18 members and contained 20 pages. The last issue of the "Log" went to over 240 active members plus a number of "associates" and contained 56 pages. The first issue had 11 photos and two drawing while the last issue (Spring 1978) had 25 photos and nine pages of drawings. Quite an increase. But I believe better things are still to come. Take this issue of the "Log" for instance. George Cearley has done an outstanding job on the Braniff article and our International Editor, Joop Gerritsma, is filling the void on foreign carriers with his interesting article in this issue on the carriers in Germany. Steve Kenyon's and Dave Minton's material speaks for itself. SUPER! If future issues are as good as this one, or better, the only way we can go is UP!

I would like to take this opportunity to thank one member of our "staff" that has been with us since the second issue of the "Log" back in July of 1975. Tom Kalina has been producing some super drawings for each issue of the "Log" and did a great article on the Douglas 6 and 7 back in December of 1975. His full cover drawing for the April-June, 1976 issue on Western Airlines was simply super, no other way to put it. I'm going to stick my neck out and state that the C-46 drawing for this issue of the "Log" is the best done so far by Tom. A BIG THANK YOU, TOM, from this end of the operations. Keep up the fantastic work!

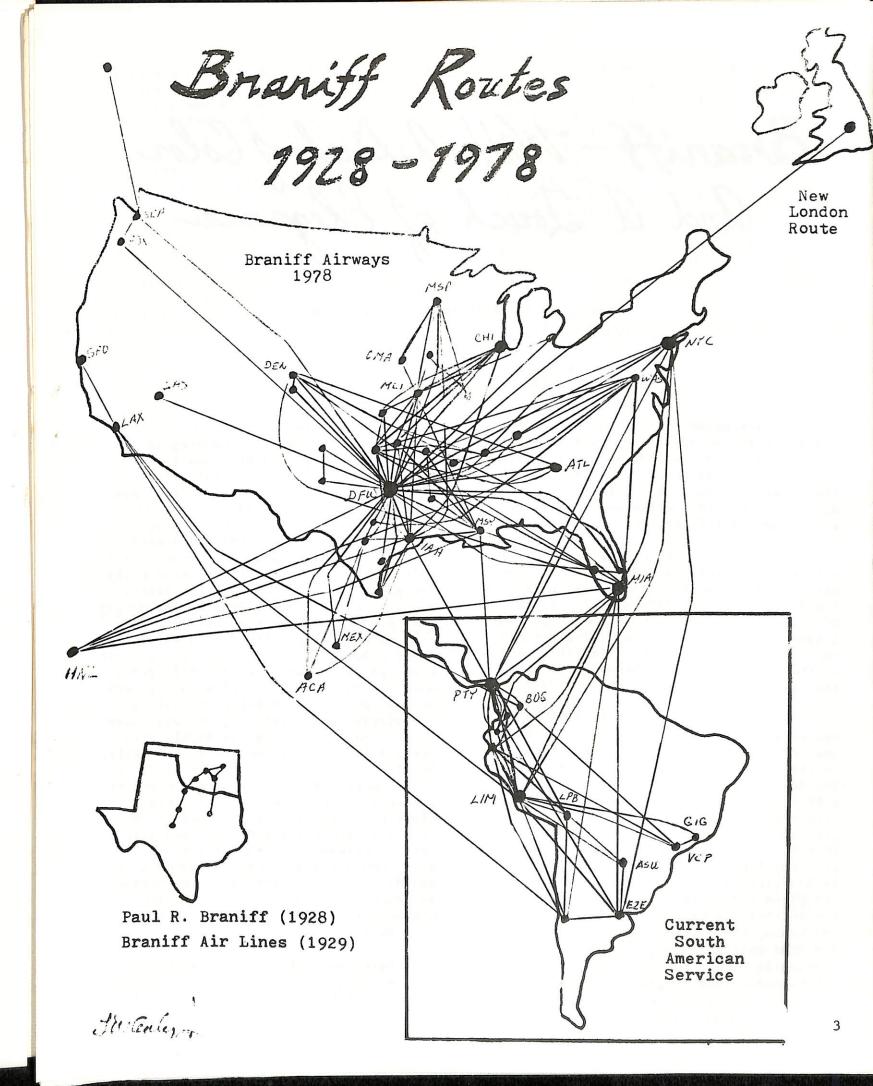
The convention, sponsored by the Club last July, was something that I had in the back of my mind when the Club was first founded. There is no fun in collecting if you can not share your feelings with others that have the same interest. This is the basic principle on which the Club was established, to give people of like interest a place to "meet" and share their ideas and experiences. I think we have accomplished this.

The second convention for collectors is being held in July of this year in Toronto. This meeting promises to be bigger and better than anything we hoped that Cincinnati was. The Canadian convention committee has put in many long hard hours in setting up the meeting. I hope it is as successful as they are planning it to be. Since I am writing this about three weeks before the convention in Toronto, I have no idea how it will turn out or where the meeting will go for 1979. My vote for the 1980 convention, however, is EUROPE. Fantastic idea--out of sight--you better believe it! To be BIG, you have to think BIG. Europe--why not? What a great chance to trade with our "foreign" friends and meet with folks we have been corresponding with for years. More on this in the future issues of the "Captain's Log," I would like to receive some feedback from the members on what you think of the idea.

One other area that I would like to cover before ending this editorial is that of obtaining new members. Steve Mason, through his GATE 66 magazine has obtained a number of new members for the Club. Member George Cearley has obtained 8-10 new members. To grow, we need new members and the only way to get new members is for each current member to go out and find other folks with the same interest. There are certainly more than 250 airline buffs in this country that would enjoy knowing about the WAHC. I would like to see the Club membership reach 325 "active" members by the end of the year. So--let's all start "beating the bushes" for those poor lost souls out there that NEED the WAHC!

Till next issue, Happy collecting!

Paul



Braniff-With a Dash of Color and a Touch of Elegance

A HISTORY OF BRANIFF INTERNATIONAL AIRWAYS - ON THE AIRLINE'S 50TH ANNIVERSARY, 1928-1978

Written by George Cearley With the Invaluable Assistance of Pat Zahrt

The extensive route structure of Braniff Airways that now spans from Honolulu to London and Seattle to Buenos Aires had its modest beginnings on June 20, 1928, when the first passengers were flown by Paul R. Braniff, Inc., from Oklahoma City to Tulsa, a distance of 116 miles.

Today Braniff has an extensive route structure serving the U.S. mainland, Hawaii, Mexico, South America, and Europe. Currently the fleet comprises 727-20's, 727-220's, DC-8-51's, DC-8-62's, one 747-127, and one leased 747-123. Additional 727-227's and one 747-227 are on order. Braniff is one of the few airlines in the world to bear the name of its founder.

In May, 1928, Paul R. Braniff, Inc., was organized in Oklahoma City with Paul R. Braniff, president; Walter A. Lybrand, secretary; and E. E. Westervelt, treasurer. Tom Braniff, the older brother of Paul and a prominent Oklahoma City insurance executive and much respected civic leader, had purchased a five passenger Stinson SM-1 Detroiter along with five business associates and friends. They had been inspired by Lindbergh's flight to Paris and bought the plane for their personal use. After the initial interest in their new aircraft had waned, the plane began to spend much of its time in the hangar, and Tom Braniff eventually bought out the interests of his associates. Paul suggested the plane could be used to carry oil men at a profit between Oklahoma City and Tulsa. Thus in May, 1928,

the little airline was created. The Braniff brothers had the backing of two Oklahoma oil companies and Paul was the airline's first pilot, flying the little Stinson Detroiter which made that first passenger flight between Oklahoma City and Tulsa on June 20, 1928. The Stinson's fuselage carried the titles "Daily Passenger Services --Tulsa-Oklahoma City Airline". Apparently the plane was black with white letters. R. E. G. Davies in Airlines of the United States Since 1914 states that Braniff started operations with four aircraft. Still others say Braniff had two aircraft when operations were begun. All agree, however, that the original aircraft were Stinson SM-1's. According to Davies. the airline had carried 3,000 passengers by the end of 1928 and was highly successful in its early months of operation. Davies further states that Braniff's routes were extended southward to Dallas and Fort Worth on February 11, 1929. However, an April 6, 1929, Paul R. Braniff timetable shows three daily round trips between Oklahoma City and Tulsa, and two daily round trips between Oklahoma City and Wichita Falls, Texas, via Chickasha and Duncan, Oklahoma, but no service whatsoever is listed for Dallas and Fort Worth.

Later in April, 1929, a merger of Paul R. Braniff, Inc., was effected with Universal Airlines System of St. Louis, Missouri. Braniff had begun to find the operation of passenger service economically unfeasible without an air mail contract. Universal was a conglomerate of several small airlines and hoped to put together a series of several small companies as Braniff to operate a transcontinental airrail network. As of July 15, 1929, Braniff Air Lines, Inc. (Division of Universal) was operating between Oklahoma City and San Angelo, Texas, via Wichita Falls, Breckenridge, and Abilene, Texas. A second route was operated between Oklahoma City-Tulsa and Fort Worth via Wewoka, Oklahoma, and Dallas. A third route was flown between Oklahoma City and Tulsa via Wewoka and Seminole. According to an early airline logo, Ford Trimotor aircraft were operated at this time.* Minor changes were made in the above route structure in the fall of 1929. Universal was soon absorbed by the rapidly growing Aviation Corporation and the Braniff division ceased operations.

The present day Braniff Airways, Inc., was founded November 3, 1930, in Oklahoma City with Thomas E. Braniff president, E.E. Westervelt, vice-president, and Paul R. Braniff, secretary-treasurer. The first scheduled flights of the newly formed airline were November 13 between Oklahoma City, Tulsa, and Wichita Falls, using two Lockheed L-5 "Vegas", each of which carried six passengers. The little company could now boast that it had six employees, 241 route miles, and dubbed itself the "world's fastest airline" with its Vegas capable of flying 150 mph. December 5, 1930, marked extension of Braniff service to Kansas City from Tulsa. St. Louis and Chicago were added to the system in 1931. In 1932 stops were added at Bartlesville, Oklahoma; Coffeyville and Chanute, Kansas; and additional Vegas were added to the Braniff fleet. Airline officials reported summer traffic was good. However, Braniff was beginning to encounter difficulties. The company needed air mail contracts which were vital to the airline's economic survival. However, the federal government contracts kept passing up Braniff. Things were really getting critical by early 1934. A determined group of 33 employees who comprised the entire company met with Tom Braniff in his Oklahoma City home and offered to work without pay until the company could recover.

*Other sources indicate Travelaire 4000 and 6000 aircraft were operated at this time.

Their support was soon shown to be not in vain. On may 7, 1934, Braniff Airways was granted an air mail contract on Air Mail Route 9 (AM-9) from Chicago to Dallas via Kansas City, Wichita, Ponca City, Oklahoma City, and Fort Worth. On May 17, the first air mail flights were flown over this route south-bound from Chicago to Dallas and on May 30 passenger and express service was inaugurated. November 27, 1934, marked the move of operation and maintenance facilities to Dallas. However, administrative offices remained in Oklahoma City.

In 1935 Braniff acquired Long and Harmon and Bowen Airlines and extended its routes southward to Waco, Austin, San Antonio, Houston, Galveston, Corpus Christi, and Brownsville, and northwestward from Dallas to Amarillo. The airline purchased a fleet of seven Lockheed 10A Electras which proudly bore the titles "Great Lakes to the Gulf" and carried their first passengers on April 17. Braniff inaugurated its first meal service on its new Electras on September 15, 1935 -- a box of cold sandwiches given out by the co-pilot!

As of January 1, 1936, Braniff's entire fleet included seven Lockheed Electras, four Lockheed Vegas, two Ford Trimotors, and one Stinson Reliant. DC-2's were added to the fleet in 1937, and with their "spacious" cabins came the need for the airline's first flight attendants. The airline selected 14 lucky girls for training from a list of 800 applicants and dubbed the first graduates "hostesses" because of the hospitality and warm and gracious service the term implied. The service was an immediate success and attracted additional passengers, both male and female. Women were still rare travellers on aircraft then. The new DC-2's were placed in service on June 12, 1937, between Dallas and Brownsville and later on the Dallas-Chicago run. July 1 marked the date of the last service with the Lockheed Vega with the final trip between Dallas and Amarillo.

On June 20, 1938, Braniff celebrated its 10th anniversary of scheduled passenger service, flying 8700 miles daily

with 20 scheduled flights to 15 cities, and by the end of the year had placed DC-2 equipment on all through "Great Lakes to the Gulf"--"B-Line"--routes.

The DC-3, dubbed the "giant ship with luxurious facilities for 21 passengers and a crew of three" was ordered on August 29, 1939, christened, and were delivered at Oklahoma City. The first scheduled DC-3 service was February 3, 1940, between Dallas and Amarillo although the aircraft had been used occasionally as needed since January 1. In July, 1940, the last L-10's were retired and Braniff's fleet then consisted solely of DC-2 and DC-3 equipment.

Braniff had maintained an operations base at Love Field, Dallas, since 1934, but the administrative offices had remained at the "Braniff Building" in Oklahoma City. Because of the numerous difficulties arising because of communication problems and wartime military contracts, Tom Braniff decided to move the headquarters to Dallas to a single central facility. The move was completed by June 30, 1942.

On November 1, 1940, Braniff inaugurated Amarillo-Oklahoma City service and the first Dallas-Kansas City non-stops were flown to Colorado Springs and Denver June 19, 1943, and service was begun over the new route on August 1. Service to Laredo was inaugurated September 1, and as of that date the Braniff system had 3,108 route miles and 1,300 employees.

During World War II, under contract to the Army, Braniff flew the so-called "Banana Run" from Brownsville to the Canal Zone across Mexico and Central America. In the very critical first six months of the war Braniff moved over six and a half million pounds of top priority cargo over this route. Similar services were operated between Dallas and Dayton, Ohio, and Dallas and the West Coast. The airline also trained Army pilots in instrument flying and held classes for Army mechanics and radio operators.

Braniff was an early pacesetter in women's rights, too. The airline was the first carrier to hire and train women for reservations in 1939. The first woman to

complete an apprentice mechanic training program in the U.S. was a Braniff employee during World War II. Another woman became the first in the history of commercial aviation to be named a district sales manager and another was appointed superintendent of passenger service.

Several additional routes were added to the Braniff system in the mid-1940's. On November 13, 1944, the CAB granted Braniff a 478 mile route extension linking Oklahoma City and Memphis via Tulsa, Muskogee, Fort Smith, and Little Rock, and service was begun on this new route September 20, 1945. Lubbock was added as a stop on the Dallas-Denver run on July 1, 1945.

Braniff began receiving more aircraft, too. DC-4's were turned over to the airline by the military for conversion from C-54 to 56-passenger type aircraft, and the first of these entered regularly scheduled service with daily round trips between San Antonio, Dallas, Kansas City, and Chicago on May 5, 1946.

The end of World War II brought a rise in passengers seeking the airways over land routes as a means of travel. New methods would be required to handle the boom and Braniff met these demands by introducing new techniques in handling of the passenger that would soon be followed by the entire airline industry. Among these were instant confirmation of airline reservations, hotel reservations for passengers, and in-flight reservations by hostesses. Braniff later became the first airline to link all of its cities with an electronic reservations system (February 10. 1958), and not long before its 35th anniversary it introduced advanced checkin procedures at airports.

Braniff can be credited with other firsts, too. The airline was the first to equip its entire fleet with automatic direction finders. In addition, Braniff was the first airline to be certificated for the use of ILS by the CAB (April, 1947). Two years before the general adoption of ILS Braniff trained its employees to use the system and the airline's planes were running on schedule in bad weather when other aircraft were grounded.

One of the most momentous days in Braniff's history came on May 22, 1946, when Braniff was granted a 7,719 mile route extension by the CAB to Central and South America. Before the service could be inaugurated, much had to be accomplished in terms of diplomacy, physical labor, and technical planning. On the morning of August 25, 1946, a survey team took off from Dallas Love Field in the company's executive DC-3 to determine what tasks would have to be accomplished before service could begin over the new routes. The trip took 18,000 miles and 46 days. Braniff, to fly across the varying terrain and environments of South America (including the Andes, tropical rain forests and ngles, grasslands, and deserts) with safety and reliability, would have to build top-flight navigational stations, erect terminal buildings in Ecuador and Bolivia, and clear land and extend an air strip in Bolivia. Radio beacon stations were built all over South America, but the parts had to come from the U.S. Braniff technicians successfully erected these against all sorts of odds -- numbing cold in the Andes, tropical disease in the jungles, not to mention hassles with competitors over the use of airport facilities.

Step by step the work was completed and Braniff began to inaugurate service along its new Latin American routes. On June 4, 1948, Braniff inaugurated service from Dallas and Houston to Havana, Panama, and Guayaquil, Ecuador. Flights were extended to Lima on June 18. DC-6 and DC-4 equipment was used with the latter offering the first air coach service anywhere in the world! DC-6's had been placed in regularly scheduled service November 5, 1947, on daily round trip schedules between Chicago, Kansas City, Dallas, and Houston. Service to LaPaz, Bolivia, was begun on February 8, 1949, with planes serving "El Alto" Airport which means "the high one" and well-named, too, since the altitude of this airport is 13,400 feet! Braniff used DC-4's initially on this route which were equipped with JATO (jet-assisted takeoff) required in the thin air at El Alto. This, incidentally, was the first government approved use of JATO. On March 9, 1949, service was inaugurated between Lima and Rio de Janeiro, a distance of 2,548 miles,

and at the time was the worlds longest non-stop flight. Famed "El Conquistador" and "El Intercontinental" flights were inaugurated to South America on September 18, 1949. Flights to Asuncion and Buenos Aires from Lima were begun in 1950, and on August 3, 1951, Miami became an international gateway city to South America.

Back on the domestic scene, Braniff inaugurated DC-6 sleeper service between Chicago and Texas in 1950. In 1951 Braniff ordered 20 Convair 340's from Consolidated Vultee Aircraft Corporation, and on November 1, 1952, became the first airline in the world to fly this aircraft in regularly scheduled service.

Braniff took another major step forward in 1952 when a merger with Mid-Continent Airlines was effected with Braniff as the survivor. An extensive route structure was added to the Braniff system north and south throughout the mid-section of the U.S. including Omaha, Minneapolis/St. Paul, Des Moines, Sioux Falls, Sioux City, Shreveport, and New Orleans.

However, a dark day was soon to follow. Thomas E. Braniff, founder of Braniff Airways, was killed in a private plane crash near Shreveport, on January 10, 1954. Braniff had achieved a brilliant career in insurance, aviation, world brotherhood, and philanthropy, and was respected and admired by his colleagues and employees. He was a co-chairman of the National Conference of Christians and Jews and one of the founders of the World Brotherhood Movement. He and his wife set up the Braniff Foundation to support worthy religious, educational, and scientific organizations. He was known for his warm, down-to-earth personality, his deep interest in the welfare of mankind, quiet determination and strength of character, and it seems only fitting that his name live on in the world of commerical aviation as he was truly a great man as well as an early aviation pioneer.

On Tom Braniff's death, Charles E. Beard became president of Braniff. He had joined the company as general traffic manager in 1935. He has been a member of the executive committee of the International Air Transport Association, director of the Air Transport Association,

president and vice-president of the Air Traffic Conference, member of the Air Transport Committee of the U.S. Council of the International Chamber of Commerce, member of the Foreign Policy and Transportation and Communications Committees of the U.S. Chamber of Commerce, director of several civic organizations including the Dallas Council on World Affairs, director of the Dallas Theatre Center, and a director of the Dallas Circle 10 Council of the Boy Scouts of America. Peru decorated Mr. Beard with the "Order of Merit" in 1957, and the Republic of Panama honored him with the "Order of Balboa" in 1960, the highest civilian awards bestowed by these countries. As Braniff's executive vicepresident prior to 1954, he had supervised the development of Latin American routes.

Braniff Airways entered a new era in 1954 of experienced and capable leadership. Braniff also scored another first in aviation that year, becoming the first airline to use airborne radar in South America. On April 5, 1954, the airline recorded its 3 billionth passenger mile on a Dallas-Chicago non-stop and the airline closed 1954 with the best trunkline record in the U.S. for completion of scheduled flights--98.96%.

Braniff entered into several interchange agreements in the 1950's. Braniff-Eastern interchange service between Denver and Miami via Memphis and Atlanta became effective December 1, 1951. Braniff-United Air Lines interchange service between Texas and the Pacific Northwest via Denver began September 27, 1953, and in January, 1955, Braniff and TWA inaugurated interchange service between Houston, Dallas, Amarillo, Las Vegas, and the West Coast. Braniff and Eastern Air Lines inaugurated new throuplane service between New York (Idlewild), Washington, D.C., and Latin American via Miami on August 18, 1955.

The Civil Aeronautics Board granted Braniff a major route extension in the Southwest-Northeast route case, awarding the airline new service between Texas, the Mid-South, Washington, D.C., and New York. Service was inaugurated on this route on February 15, 1956, using DC-6's. Braniff DC-7's, christened "El Dorados", were introduced on the Texas-New York route on October 20, 1956, and another first was scored -- first carrier to operate the DC-7C on scheduled flights in the U.S.

Convair 440's were introduced on December 10, 1956. Also, two L-049 "Constellations" were purchased in 1955 and used on flights between Chicago and Texas until 1959.

In 1955 Branift announced the purchase of Lockheed L-188A "Electras" and Boeing 707's. The first Lockheed Electras were introduced into regularly scheduled service June 15, 1959, between Houston-Dallas-Chicago and San Antonio-Dallas-New York. For the 707 Braniff purchased a special superpowered version--the series 220 -- and became the only airline in the world to order this version. The series 220 has the airframe of the 707-120 but the much larger and more powerful JT4A-9 engines of the 707-320 which didn't require water injection as did the standard turbojets on the 707-120's. The Braniff 707-227 was dubbed "El Dorado Super Jet". "The Different and Superior 707-227", "The Jet with the Big Engines", and "World's Fastest Jetliner". It carried 112 passenger and had a cruising speed of 635 miles per hour. The first 707-227 service was inaugurated December 19, 1959, with "El Dorado Super Jet" -- Flight 6 nonstop from Dallas Love Field to New York International Airport at Idlewild, Queens. Service from Dallas to Chicago O'Hare was begun the following day. Flight 6 established a speed record time of two hours, seven minutes, and an average ground speed of 685 mph on January 5, 1960. San Antonio got its very first jet service on March 1, 1960, and Houston its first Braniff jet service on March 10, both with 707-227 equipment. On April 1, 1960, "El Dorado Super Jets" were introduced on the South American run from New York to Miami, Panama, Lima, and Buenos Aires. Also on that day the author took his first jet trip -- a 707-227, of course, from Dallas to Houston operating as "El Dorado Super Jet", Flight 41. The 227 became familiar and well-known with its stylish paint scheme of red, white, and blue -- with the large red nose and the numerous geometric red stars on the tail.

On February 12, 1962, Braniff received its first 720-027 from Boeing. The previous November, new service had been inaugurated between Mexico City and Minneapolis/St. Paul via San Antonio, Dallas, and Kansas City, using Lockheed Electras. However,

they were replaced on this route by the new 720's in the Spring, 1961.

Recognizing that the 707's and 720's could profitably serve only larger cities, Braniff became the first airline to order the short haul British jet, the BAC-111, in 1961. The first of these new aircraft were placed in service on April 26, 1965.

Braniff and Pan American inaugurated interhenage flights from Houston and Dallas to London and Frankfurt via Chicago on July 1, 1962. Also in 1962 Braniff moved into new terminal facilities at O'Hare and Idlewild.

Braniff. On May 8 Braniff offered to purchase Panagra from Pan American and W. R. Grace and Company. Also, in the spring Braniff was presented the Presidential "E" award for excellence in exporting through its "Visit USA" program in Latin America. By October 27 all Latin American flights were pure-jet and on October 31 the airline established a record -- 99.4% of all domestic flights were operating within the accepted 15 minutes of scheduled departing time, and 95.3% of the flights departed precisely on time!

In spring 1965 Braniff entered another new era of growth and very capable and dynamic leadership when Harding Lawrence became the new head of the company upon the retirement of Charles E. Beard. Lawrence, a north Texas native, attended the U. of T. and majored in pre-law. He was associated with the RAF Flying School at Terrell, Texas during World War II. After the war he joined Essair (later Pioneer) and joined Continental in 1955 with the merger of Pioneer into the Continental system. After coming to Braniff he soon announced the purchase of five 707-327C and twelve 727-27C aircraft for 1966 delivery and began working on an entirely new image for the airline. Braniff introduced its "New Colorful Look in 56 Themes" in October, 1965, for aircraft exteriors and interiors, gate lounges, club rooms, ticket offices, etc. New uniforms were adopted for employees from ground personnel to flight attendants and pilots. Aircraft were initially painted with fuselages in eight solid pastel colors -- dark blue, periwinkle blue (lavender), beige, turquoise, lemon yellow, ochre, orange, and sky blue. One of the first aircraft to be

repainted was a Boeing 720-027, N7076, with a periwinkle blue fuselage.

Braniff completed a purchase agreement to buy Panagra in late 1966 and the merger became effective February 1, 1967, adding the cities of Cali, Colombia, Santiago and Antofagasta, Chile, to the Braniff system, and Los Angeles and San Francisco as interchange points. On June 13, 1967, non-stop service was inaugurated from Dallas to Portland and Seattle over a new route granted Braniff by the CAB.

February 1, 1969, marked the addition of New York, Washington, New Orleans, and Los Angeles as gateway cities to South America. On May 11, service to Hawaii from Dallas, Houston, Miami, New Orleans, Atlanta, and St. Louis* was introduced. However, St. Louis service was shortlived. On July 7, 1969, service was begun to Detroit from Dallas and Kansas City. New service from Dallas to New Orleans, Tampa, and Miami was inaugurated in October, 1969. Early 1971 marked the inauguration of 747 service on the Dallas-Honolulu run with "Fat Albert" -- the well-known orange giant of Braniff. ("Fat Albert" is now being used on the Dallas-London run with a leased American 747 flying to Hawaii.) Braniff was awarded new routes in the Denver-Oklahoma City-Southeast route case and service began on these routes in the summer of 1977.

Braniff began service on its new Dallas-London route on March 18, 1978. Currently applications for service from Dallas to Amsterdam, Frankfurt, Paris, and Madrid are pending. Also, new Latin American service is anticipated.

In 1958 Braniff moved into new headquarters at a business development near Love Field, Exchange Park. Braniff has now outgrown these facilities and a massive headquarters complex is now under construction at D/FW and is scheduled to open later this year. It will be known as "Braniff Place".

Braniff has just recently adopted a new look -- new uniforms and aircraft interiors -- a sleek stylish ultra look for the coming years. New fuselage colors and a new paint scheme have been unveiled. 727's are now being painted in several new colors -- chocolate brown, mercury blue,

Peresus green, sparkling burgundy, and terra cotta. Each aircraft will carry accent stripes along the fuselage and on the trailing and leading edge of the tail and the name Braniff will appear in script on the fuselage, forward of the wing root, at least on the 727. The "BI" titles will not be used in this scheme.

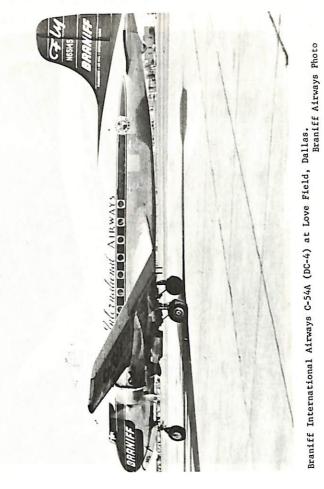
The autnor wishes to thank Mary Cearley, Marvin Kreiger, Charles E. Beard, and Pat Zahrt.

Pat Zahrt was editor of the Braniff B-Liner (the company paper) for over 30 years and is currently doing a wonderful job of putting together an excellent company reference library of Braniff historical documents. This article could not have been written without her help and generosity. Her efforts and help are greatly appreciated.

*The April 27, 1969, Braniff timetable lists non-stop St. Louis-Honolulu service, with Flight 503 originating in Atlanta, continuing to St. Louis and Honolulu daily except Thursday, and Thursday adding a stop at Hilo before arriving at Honolulu. Daily except Wednesday service via Flight 504 is shown from Honolulu to St. Louis and then to Atlanta, and on Wednesday the aircraft, a Boeing 707-327C, is shown making a stop at Hilo before arriving at St. Louis. This service is shown again via the same patterns in the June 2, 1969, timetable, as well as the July 7 schedule. Some persons have indicated that although this service is listed in these three schedules, it was never operated at all. However, I have been unable to verify this. Anyone having any information on this please advise.



Arrival of Braniff's press pre-inaugural D/FW-London flight at Gatwick Airport March 1, 1978. Braniff Airways Photo.





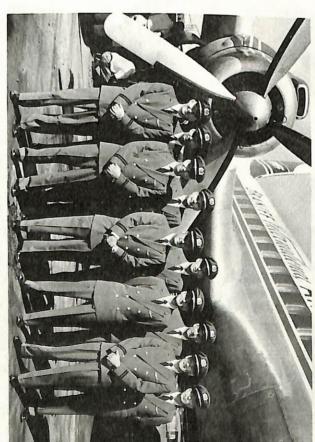


Braniff vice-president, R. V. Carleton (left) accepts delivery of Bran: L-188A "Electra", N9701C, at Lockheed, Burbank.



in markings. Braniff Airw





Braniff Airways' for this picture flight engineer training school dom by Braniff's "El Dorado" DC-7C. Braniff Airways Photo

Planes of Braniff and Companies Acquired--Fleet List Since 1928 (N--numbers and C/N shown where known) I. Braniff Aircraft Stinson SM-1 "Detroiter" C-53 (DC-3 A) 4822 7356 4976 N18661 N33346 N45340

NC 1929 Travelaire 4000 N49556 C-47 (DC-3C) Travelaire 6000 111877 N59748 N59749 ? 19224 19225 Lockheed L-5 "Vega" N65350 123 26 49 96 N65351 NC106W NC195E N65378 NC433E Douglas DC-3 (from M-CA) NC975H N15201 N17338 11666 191 NC980Y 16 23 154 156 161 50 1963 NC7428 11682 N17888 N18667 NC7953 NC8495 NC8497 11644 N19928 7400 4965 N21914 NC12288 2210 N25670 NC434E 2212 2216 7349 N25672 Lockheed L-10 "Electra" N25685 NC14905 NC14937 NC14938 1018 N28508 10035 1026 N28679 4842 N33312 N33326 N33327 1027 4127 1028 NC14939 1029 1030 1031 4128 NC14940 7399 4827 N34950 NC14941 N34951 NC14942 4944 42967 N34952 Douglas DC-2 N34971 3275 NC13713 NC13715 1239 N41831 4964 1241 N45335 4535 NC13716 1242 N61350 4390 NC13719 1245 N61351 4630 1250 1253 1254 NC13724 N61451 7351 NC13727 N95453 11631 N61450 NC13728 Douglas DC-3 C-54A (DC-4) 10424 10338 2178 N21773 N65141 N21774 2180 N65142 N21775 2181 10336 N65143 2182 N21776 10282 N65144

N25666

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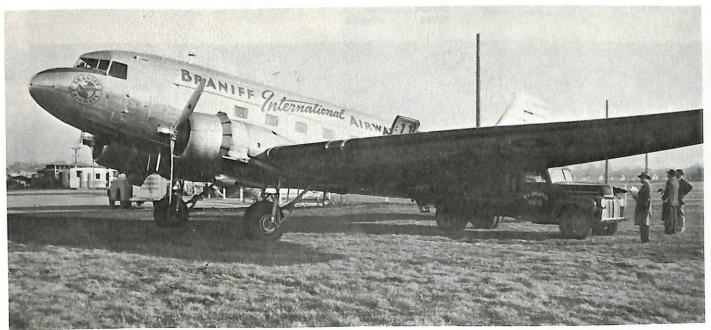
NT5903

Douglas DC-6

43105

N90881

N90882



10360

10528

18383

10539

18339

18353

N65145

N59952

N86573 N86575

N88709

N88818

C-54B^(DC-4)

Bragiff DC-3 Shaeffer Pen Charter Flight, December, 1946.

Braniff Airways Photo

Douglas DC-	-7C, con't.					
N5904	45072	BAC-111, 0	on't.	Boeing 707-	327C, con't.	
N5905	45073	N1544	018	N7096	19105	
N5906	45074	N1545	019	N7097	19105	
Convair 440)	N1546	020	N7098	19107	
		N1547	041	N7099	19108	
N3432	375	N1548	042	N7100	19440	
N3433	376	N1549	043	N7102	19529	
N3434	384	ท1550	044	N7102	19530	
N3435	385	N1551	045	N7103	19531	
N3436	386	N1552	046			
N3437	453	N1553	070	Boeing 707-	138B (ex. QF)	
DC-6A		N1554	071	N105BN	18068	
	12020	D 707	2.270	N106BN	18069	
N90776	43839	Boeing 727	-270	N107BN	18739	
DC-6B		N7270	19109	N108BN	18740	
	45063	N7271	19110			
N91311	45063	N7272	19111	DC-8-31 (ex	. Panagra)	
Tockheed.	L-188A, "Electra"	N7273	19112	N8274H	45274	
		N7274	19113	N8275H	45275	
N9701C	1040	N7275	19114	N8275H N8276H	45276	
N9702C	1052	N7276	19115			
N9703C	1067	N7277	19116	N8277H	45277	
N9704C	1086	N7277	19117	DC-8-55F (e	ex, Panagra)	
N9705C	1090	N7279	19118	********	45050 (3 - 3.55 - 3	
N9706C	1095	N7280	19119	N1509U	45858 (leased f/Dougl	as)
N9707C	1099	N7281	19120	DC-8-62 (PC	(BN order)	
N9708C	1106	N7287	19246			
N9709C	1114	N7288	19497	N1803	45895	
N16816	1004	N7295	19532	N1804	45896	
Tookheed T	-188C, "Electra"	N7296	19533	N1805	45899	
				N1806	45911	
N9710C	1134	Boeing 72	7–27	N1808E	46105	
Boeing 707	7-227	N7289	19499	N1809E	46107	
		N7290	19500	N810BN	45905 (ex. SAS)	
N7071	17691	N7292	19501	DC-8-62F		
N7072	17692	N7293	19534		45004	
N7073	17693	N7294	19535	N1807	45904	
N7074	17694	147254	19555	DC-8-51		
N7075	17695	Boeing 72	7-62C (ex. PNA)		45624 (
Poeing 720	0-022 (ex. UA)	N7284	19244	N811BN	45634 (ex. NA)	
		N7286	19245	N812BN	43033	
N7224U	18077	N/200	19245	N813BN	43042	
Boeing 72	0-027	Boeing 72	7-162 (ex. PNA)	N814BN	13011	
		N7282	19243	N820E	45815 (ex. DA)	
N7076	18064			N821E	45877 (ex. DA)	
N7077	18065	Boeing 72	7-172C (ex. Airlift)	747-127		
N7078	18154	N309BN	19808	NCO1701	20207	
N7079	18423	NOODEN	19808	N601BN	20207	
N7080	18581	Boeing 72	7-185C (ex. AFA)	747-227 (01	n order)	
	0-048 (ex. EI)	N308BN	19827	N602BN		
N7081	18042	Boeing 72	7-191 (ex. Frontier)	747 300 /3		
N7082	18043	N297BN	19391	747-123 (1	eased from AA)	
N7083	18041	N298BN	19392	N9666	20105	
BAC-111-2	03AE	N299BN	19393			
		N300BN	19394	727-2B7 (e	x. Allegheny)	
N1541	015	N301BN	19395	N404BN	20302	
N1542	016			N405BN	20303	
N1543	017	Boeing 70	1-32/C			
		N7095	19104			



Boeing 707-227, N7073, at Rio de Janeiro, Brazil, on South American pre-inaugural jet service flight, February, 1960.

Photo: Mozart, Rio de Janeiro

272-291 (ex. FL)	Boeing 727-227, con't.	L.18 Lodestar NC25601 2002
N407BN	19992	N457BN 21463	NC25602 2003
N408BN	19993	N458BN 21464	NC25603 2004
73235		N459BN 21465	NC34964 2111
727-214 ((ex. PSA & FL)	N460BN 21466	(also NC17385?)
N409BN	20162	N461BN 21488	III. LONG & HARMON:
727-227		N462BN 21489	
	00000	N463BN 21490	Mercury Mars
N401BN	20392	N464EN 21491 N465EN 21492	NC406V
N402BN	20392 20394	N465BN 21492 N466BN 21493	Travelair A6000A
N403BN N410BN	20608	N467EN 21529	
N41UBN	20609	N468BN 21530	NC9976
N412BN	20610	N469BN ?	Ford 5-AT-C
N413BN	20611	N470BN ?	The second secon
N414BN	20612	N471BN ?	NC411H 70 NC426H 86
N415BN	20613	N472BN ?	NC426H 66
N416BN	20729	II. Hanford/M-CA (pre 1945)	Stinson SR-5E Reliant
N417BN	20730	II. Hanford/M-CA (pre 1945)	NC14152
N418BN	20731	Stearman C-3-B/R	NC14153
N419BN	20732	NC8824	NC14154
N420BN	20733	NC8828	
N421BN	20734 20735	NC9065	L.9 Orion
N422BN N423BN	20736		NC231Y 202
N423BN	20737	Boeing 40-B-4	IV, BOWEN
N425BN	20738	NC10350	2
N426BN	20772	NC10352	Stinson SM-2A
N427BN	20773	Waco YCC	NC8482
N428BN	20774		L.5 Vega
N429BN	20775	NC15208	
N430BN	20837	Travelair S6000B	NC107W 124
N431BN	20838	NC483N	NC160W 126 NC161W 127
N432BN	20839		NC161W 127 NC176W 129
N433BN	20840 21041	Fokker AF-104	NC8495 156
N434BN N435BN	21041	NC535E	NC8496 157
N435BN	21042		
N437BN	21044	Ford 5-AT-C	L.9 Orion
N438BN	21045	NC418H -?	NC960Y 168
N439BN	21118	NC420H 80	NC964Y 169
N440BN	21119	NC422H 96	L.8 Sirius
N441BN	21242	L.5 Vega	
N442BN	21243		NC167W 167
N443BN	21244	NC49M 101 NC288W 137	Vultee V-lA
N444BN	21245	NC306H 76	Annual Company of the
N445BN N446BN	21246 21247	NC624E 53	NC14248 NC14253
N446BN N447BN	21247	NC905Y 133	NC14253
N448BN	21249	NC2875 60	
N449BN	21363	- 103 Floatra	
N450BN	21364	L.10A Electra	
N451BN	21365	NC233Y 1001	The author wishes
N452BN	21366	NC14260 1011	Martin, Pat Zahr
N453BN	21394	NC16050 1061	and Al Canales fo
N454BN	21395	NC17375 1096 (another Electra?) (tot. 5?)	paration of the
N455BN	21461	(another Electra?) (tot. 5?)	list. George als
N456BN	21462		Pete Krey for the did in typing the
			ald in typing the

The author wishes to thank Mike Martin, Pat Zahrt, Reagan Rogers, and Al Canales for help with preparation of the Braniff fleet list. George also wishes to thank Pete Krey for the excellent job hedid in typing the fleet list.

V. Pan American-Grace

Aircraft DC-6 N90876 N90877 N90878 DC-6B N6536C N6537C DC-7B

N51700 N51701 N51702 N51703 N51704



Factory roll-out of Braniff's first BAC-111-203AE.

PART 3

TRANSPORTIN

EUROPE

by

Joop Gerritsma

This is the third part of a continuing series in which our International Editor takes a look at the history and present status of the airline industry in Europe. The most difficult part in writing this series is not what to use, but what to leave out, since we can only offer limited space for this material. Therefore we will not publish long lists of fleet registrations. They are covered extensively elsewhere, in particular in the annual JP and AIR BRITAIN fleet list publications. Only the major airlines will be mentioned, mainly for space reasons. Within these limitations, North American readers will get an insight in the past activities in Europe otherwise not easily available on this side of the Atlantic and therefore less well known.

GERMANY

The history of German air transport, especially before the second World War, is essentially the history of Deutsche Lufthansa. Formed in 1925, the line dominated air transport in Europe, South America and China right up to 1939. Today, after rising from the ashes again in 1955, Lufthansa is one of the major airlines of the world, with a world-wide network flown by a modern fleet of Boeing, McDonnell-Douglas and Airbus jetliners.

THE BEGINNING

It began in 1909 when DELAG (Deutsche Luftschiffahrt A.G.) started scheduled operations with three airships, connecting Berlin and Hamburg with six other cities. Prior to 1914, DELAG carried more than 19,000 passengers on 881 flights. The outbreak of the first World War halted services.

On February 5, 1919, less than three months after the signing of the Armistice,

DLR (Deutsche Luft-Reederei) started scheduled services twice daily from Berlin to Weimar, then the seat of the government, via Leipzig. Converted warplanes for two to five passengers were used. Hamburg, Hanover, Frankfurt and other cities were added, but all services ended on August 1 due to a fuel shortage in the country. Nearly 1,600 passengers hand been carried.

DELAG had also restarted operations, connecting Friedrichshafen in the south with Berlin, from August 24 on. Two of these flights even continued to Stockholm, Sweden. Twenty-three passengers could be carried and each flight lasted, on average, six to seven hours. Operations ended on December 11, 1919 when France seized the airship "Bodensee" under authority of the Allied Control Commission.

30 AIRLINES OPERATIONAL

Backed by state subsidies, town councils and chambers of commerce encouraged the formation of local airlines and soon no fewer than 30 were operating, most of these on one or two local routes.

DLR restarted operations on August 3, 1920 when it opened an international service from Malmo (Sweden) and Copenhagen (Denmark) to Amsterdam (Holland) via Hamburg/Bremen in co-operation with the Dutch and Danish carriers KLM and DDL. Scheduled services to London started on May 3, 1922.

On November 24, 1921 DLR and the Soviet Government jointly formed Deruluft and the following May this company started a Koenigsberg (now Kalinigrad in the Soviet Union) to Moscow service.

LUFTHANSA GERMAN AIRLINES

Financial circumstances made mergers and take-overs unavoidable and by 1925 two powerful airlines had emerged: the Deutsche Aero-Lloyd, including DLR and backed by banking and shipping interests, and the Junkers Luftverkehr, the airline arm of the Junkers aircraft company, formed in 1922. Besides, Junkers had extensive interests in other European airlines, mainly to the east.

State subsidies, however, were still necessary and the German government, wanting to eliminate wasteful duplication and to cut subsidies, forced the two lines to merge. Thus, on January 6, 1926, the final merger took place and Deutsche Luft Hansa, the single German airline demanded by the government, was started. Passenger, mail and freight services began on April 6.

EXPANSION TAKES PLACE

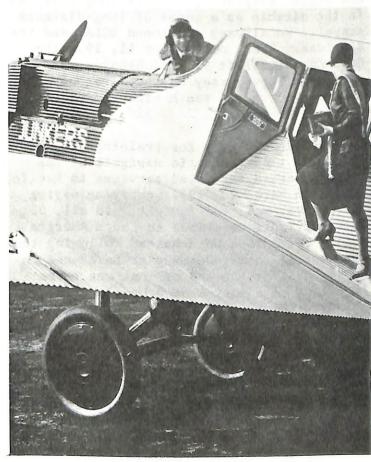
Luft Hansa (the name became Lufthansa only in 1934) immediately set out to expand its network. Initially seven routes were operated, mainly with single-engined Junkers F-13 and W-24 and Fokker F-3 landplanes and twin-engined Dornier Wal flying boats. Night flying operations began and Paris was added to the route system as were the countries of Norway and Sweden. The formidable Pyrenees, Alps and Balkans were conquered to bring scheduled services to the far corners of Europe, including Spain, Italy, Austria, the Balkan states and Turkey. In 1928 radio-communications allowed Luft Hansa to have airplanes waiting at Hamburg, ready to take passengers of the steamship "Columbus" out of New York on fast journeys to Berlin, Frankfulc and Munich.

A domestic night mail network was set up and proved so successful that a few years later the postal authorities and airlines of all the major European nations combined to set up a Europe-wide night mail network.

In 1931 Luft Hansa pioneered an "Aerobus" service between Cologne and Frankfurt with five trips per day in addition to the normally scheduled services, and the following year the Junkers G-38, the largest landplane in the world, was assigned to the Berlin-Amsterdam-London service. Athens was added that same summer, linking the Luft Hansa network to the Dutch and British services to African and Asia.

MANY INNOVATIONS

Many new innovations were started by Luft Hansa in the thirties. The Heinkel He-70, a fast mail plane, started express services on June 16, 1934 and



An advanced design for its time, the Junkers F 13 even provided enclosed accommodation for passengers. The plane was covered by a corrugated metal skin and became an important transport aircraft in the 1920s and 30s.

A prototype F 13 made its first flight in 1919.

one year later 11 of these "blitz" services were in operation. In 1933 the German railway company halted two daily train services between Berlin and Koenigsberg because of the stiff competition by the aircraft, leaving the route to Luft Hansa instead. In 1935 a trial flight was made to Cairo and in 1937 the line took over the Deruluft network. In the summer of 1938 the new four-engined Focke-Wulf FW 200 Condor made the first non-stop flight from Berlin to New York in preparation of anticipated trans-Atlantic service.

During its last year of operations before the second World War, Lufthansa carried 254,716 passengers, 388 tons of luggage, 1,321 tons of freight and 5,288 tons of mail. This does not include the figures of its South American and Chinese subsidiaries.

AIRSHIP SERVICES

Despite the emergence of safer, faster and bigger airplanes, Germans long believed in the airship as a means of long-distance travel. We already mentioned DELAG and its services. Then, on October 11, 1928 the Graf Zeppelin left Friedrichshafen for Lakehurst, New Jersey on the first of more than 100 north and south Atlantic crossings of its career.

Designed mainly for training and research of trans-Atlantic navigation, the "Graf" started scheduled services to Recife, Brazil on March 20, 1932, carrying paying passengers, mail and freight. In all, 55 return flights were made to South America before operations were halted following the accident of the Hindenburg at Lakehurst on May 6, 1937 at the end of what was to be the first of a series of scheduled North Atlantic flights.

The 50-passenger Hindenburg was to be the first of four Zeppelin airships for the Deutsche Zeppelin Reederei, a joint venture of Lufthansa and the Zeppelin Works. Before its demise, the Hindenburg made 10 return flights to North America and 36 to South America, carrying 2,057 people, of which 1,309 were across the North Atlantic.

TO OTHER CONTINENTS

Bridging the 9,000 mile gap between Germany and South America, where many Germans had settled, was one of the declered aims of Lufthansa and its predecessors. A study group had been formed as early as 1924 by Deutsche Aero-Lloyd.

Other steps toward the ultimate goal were the many airlines in Central and South America sponsored by German interests, but it was not until 1928 that a Dornier Wal flying boat made an exploratory flight to the Canary Islands off the west coast of Africa.

On March 22, 1929 a Syndicato Condor Wal flying boat transported mail from Recife, Brazil, to the ocean liner Cap Arcona off the Brazilean island of Fernado Noronha. In doing so, the Wal had to land on the high seas, but the mail takes only 19 days to reach Germany instead of 21. The first step is accomplished. Syndicato Condor was one of the several German airlines set up in South America and operated in Brazil.

When the Graf Zeppelin started its scheduled services, mail from Germany was flown by aircraft to Seville, Spain, transferred to the Graf and taken to Recife. There it was transferred to an aircraft and flown to Rio de Janeiro and Buenos Aires, taking only five days for the trip.

Later, Lufthansa chartered the steamship Westfalen from the Nord-deutscher Lloyd and stationed it half-way between the south Atlantic crossing as a refueling stop for the Wal flying boats. The aircraft land near the ship, taxi onto a drag sail and hoisted aboard for servicing and refueling. They are then catapulted away for the second half of the trip. Scheduled services began February 3, 1934 and take 10 days.

More destinations in South America were added to the Syndicato Condor network over the years and a second mothership, the Schwabenland, was positioned



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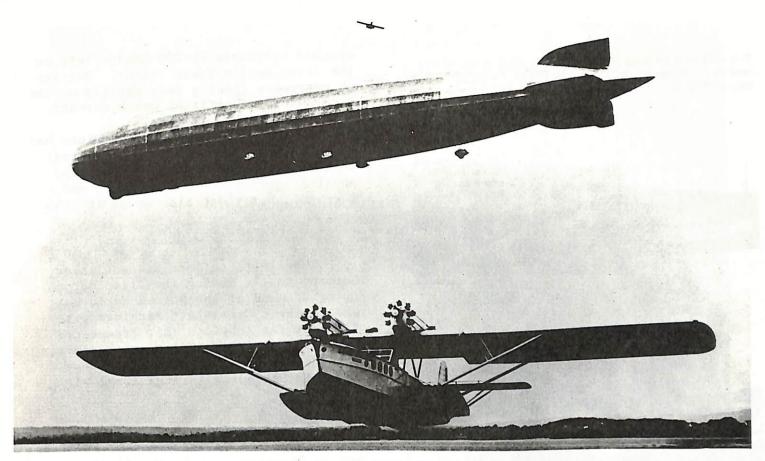
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This remarkable photograph shows a Dornier Super Wal (built in 1926) taking off and another high in the sky. In between is a huge Zeppelin. The Dornier Wal aircraft became renowned for opening up the South Atlantic routes.

off the west coast of Africa. Night service on the route began on March 30, 1935, shortening the flying time between Germany and Rio to three days with another half day added to reach Buenos Aires. All services to South America came to a halt in late 1939 when the war in Europe broke out, and services inside South America stopped completely by 1941.

Lufthansa also started preparations for regular service across the North Atlantic, and apart from the FW 200 Condor flight in 1938, a series of test flights were made.

atter the 1928 trans-Atlantic flight of the Junkers W-33 "Bremen", a Heinkel He-12 catapult aircraft was launched in July 1929 from the passenger liner "Bremen" in the Atlantic, 280 miles out of New York. After 2½ hours the aircraft, carrying mail, landed in New York harbor. On the return journey, the aircraft was catapulted five miles west of Cherbourg, France and flew to Bremerhafen where a special plane was met to fly the mail to Berlin, offering a considerable saving of time over the "Bremen's" journey time.

More catapult flights were made during the following years until 1936, when a series of Dornier Wal flying boat flights were made across the southern section of the north Atlantic via the Azores to New York. A mother ship, the "Schwabenland" refueled the Wal's halfway.

Another series of test flights were made in 1937 with four-engined Blohm und Voss Ha-139 floatplanes and two motherships. Again in 1938 a series of crossings were made on an experimental basis, but no new services were scheduled

TO THE EAST

The Middle and Far East were also early targets for German air transport expansion. In the summer of 1926 two Junkers G-24 three-engined aircraft flew a trial flight from Berlin to Peking. A Junkers W-33 flew to Siberia in 1928 and in 1930 Luft Hansa and the Chinese government concluded a 10-year agreement to form and operate an European-Asian

This Junkers-G 24 was a well-known plane of its time and was used by Lufthansa for its 12,500 mile Berlin—Peking and return trip in 1926.



The Focke-Wulf Fw 200 Condor was the first land plane used on Lufthansa's long distance services. It was used in 1938 on a non-stop Berlin—New York flight.

air mail company, the Eurasia Aviation Corporation. In November 1930 a Luft Hansa W-33 flew from Berlin to Baghdad to explore the possibilities of extending the Berlin-Istanbul service to Asia Minor.

Regular air service inside China started on the last day of May, 1931 and air mail took seven to eight days from Berlin to Shanghai, a gain of five to six days over train travel.

As more services were added by Eurasia, more aircraft were ferried from Germany, and each of these ferry flights were used as a trial flight for an eventual scheduled Berlin-Far East service by Lufthansa. Deliveries took place both over the northern route via Siberia and the southern route via Baghdad. Tehran was added to the network in 1938.

With the outbreak of the Sino-Japanese war in 1937, China service was drastically curtailed. But on November 28, 1938 a four-

engined Lufthansa FW-200 Condor left on the first Berlin-Tokyo flight. Despite an emergency landing near Manilla on the return trip, the flight was a success.

By 1940, all Lufthansa services had come to an end, except to some neutral countries, mainly Sweden, Switzerland and the Iberian Peninsula (Spain and Portugal) but these also ended in 1944.

A NEW BEGINNING

The Allied nations did not allow Germans to flv during the first decade after the end of the second World War and domestic German air services were flown by Pan American, Air France and British European Airlines, with other nations' airlines sharing with these three in Germany's international air links.

In 1953 a study group was set up to prepare for the resurrection of Lufthansa and in December of 1954 the first aircraft for the new Deutsche Lufthansa A.G. arrived at Hamburg. On March 1, 1955 domestic service started with four Convair 340s, flown by British pilots and German copilots. Most of the latter were recruited from the pre-war pilot corps. Four Super Constellations started North Atlantic services to New York that same year. In 1956 the traditional South American service was reopened. The Near East service followed in October of 1956.

Gradual expansion then took place. Vickers Viscount turbo-props and more Convairs were added for domestic and European services, four Lockheed Super Star Constellations (L-1649A) replaced the Super Connies on long-distance routes and the first jets arrived in 1960 when Lufthansa started operating the Boeing 707-420 on its intercontinental routes. The Boeing 720 served the Near and Middle East. The first of 12 Boeing 727 "Europa Jets" entered service in 1964 and at the end of June of that year, the one-millionth passenger of the new Lufthansa was carried. Delivery of 21 Boeing 737 "City Jets" started in 1968. These were entered on domestic and short international services.



ABOVE: A Convair 440 of Lufthansa taken at Hanover, Germany by Joop Gerritsma. This was one of the first aircraft flown by the "new" Lufthansa when flight restrictions were lifted after World War II.

BELOW: A Boeing 707-330B jetliner of Lufthansa photographed at Amsterdam Holland. Lufthansa entered the jetage with the Boeing 707, followed by the 727 and 737. Later 747 and DC-10 aircraft were purchased and recently, A-300 Airbus equipment was obtained. Gerritsma photo.



Back on September 1, 1961 Lufthansa had restarted its old night mail service network with four Convairs and one Viscount and had formed a subsidiary company, Condor Flugdienst, to operate international charter flights. In co-operation with Seaboard World a cargo network was started with the Canadair CL-44D on the North Atlantic. A shuttle or airbus service was started in 1963 and operated for three years.

LUFTHANSA TODAY

Today, Lufthansa operates a world-wide network of services with a fleet of Boeing 747s, 737s, 727s, DC-10s and A-300 Airbus aircraft. The fleet of aircraft will soon increase with the additional purchase of 747s, 727s and A-300 types. Lufthansa is a member of the Atlas group of airlines, which operate a common pool for maintenance purposes, a member of IATA, of which Deutsche Luft-Reederei was one of the founding members back in 1919. Polar services are operated to Japan and Africa was added to the other continents served to add to the tradition of pre-war intercontinental services.

THE OTHER SIDE

The end of the second World War in 1945 left Germany a divided country with the three Western Powers in the western three-fourths of the country and the Soviet Union in the eastern part. Therefore, no history of German air transport would be complete without the post-war exploits of the "other" Lufthansa, or Interflug as it is not called.

In May 1954 Deutsche Lufthansa was formed in East Germany and no effort was made to avoid confusion with the already-established airline with the same name in the western part. Both claimed to be rightful heirs to the Lufthansa name. This worked fine as long as the eastern Lufthansa confined its services to the countries of the communist bloc. The first scheduled service took place on February 4, 1956 with an Ilyushin Il-14, followed by more services the same year.

When the eastern Lufthansa spread its wings to western Europe in the late fifties, Western European nations refused to recognize the name Lufthansa, since they already had another Lufthansa serving their countries. So the name Interflug was adopted

for services to the west and the first flight took place on February 27, 1959 between Copenhagen and Leipzig. In September 1963 the airline was officially renamed Interflug and since then has built up an extensive East and West European network of scheduled services. It also flies to North Africa and the Middle East with a fleet of Lyushin I1-62, II-18 and Tupolec Tu-134 aircraft.

In addition and along the general pattern in communist countries, Interflug also operates an agricultural division with light aircraft for spraying, seeding and other purposes.

THE AIRCRAFT

It goes almost without reason that the tremendous development and achievements of post-first World War German air transport could not have taken place without good aircraft. And that the Germans had!

Unlike in other European countries, where most air transport in the early years relied almost entirely on converted warplanes, Luft Hansa and its predecessors had from the beginning fleets of Junkers F-13 and Fokker F-3 aircraft, especially designed for air travel. Few indeed were the converted warplanes used in those years, by others.

It was mainly Professor Hugo Junkers who was responsible for a series of modern airliners which were found on all five continents (yes, even in the U.S. and Canada). From the single-engined, four passenger, all-metal cantilever F-13 he developed a series of single-engined and trimotor airliners which were years ahead of what other nations had to offer. The G-34/24 and G-31 became the standard aircraft of Luft Hansa and other carriers in the late twenties and it was not until the Boeing 247 and Douglas DC-1 appeared that one could speak of an improvement in construction methods. By 1931, Luft Hansa had no fewer that 145 aircraft in its fleet, 43 of which were F-13s, 20 G-23/24 -31s and 24 Fokker F-3s.

In 1928, Junkers began work on the G-38, to become the largest landplane of its time, carrying 30 passengers seated in the thick wings of the aircraft. The

Junkers G 38

Year of construction 1931
Engine Junkers L 88
HP 4 x 650
Crew 7
Passenger seats 34
Tank content —
Freight *
Length 23,20 m
Wingspan 44,00 m
Height 7,20 m
All-up weight ca. 24,000 kg
Speed 185 km/h
Range 1.000—3.000 km
*dependen: on tank content and range

Focke-Wulf, already mentioned, of course was responsible for the Fw-200 Condor, a fourengined, 28 passenger aircraft for long distances, but about five went in service with Lufthansa and a few with Danish and Brazilian carriers. Apart from trial flights to New York, Tokyo and inside South America, the Condor never was used on through long-range service.

Finally there is Heinkel. After a series of low-wing and biplane mail planes, the He-70 appeared as a competitor to the Ju-60/160 and Lockheed Orion. By 1935 Lufthansa had 12 in service on express routes across the Alps. The twin-engined He-111 was a direct development, but became better known as a medium bomber for the Luftwaffe. Lufthansa had 12 of the 10 passenger aircraft.

Junkers Ju 52/3 m

Year of construction 1932 Engine BMW Hornet HP 3 x 525/600 Crew 2-3 Passenger seats 15-17 Tank content ca. 1.600 I Freight ca. 1.000 kg * Length 18,90 m Wingspan 29,30 m Height 6,10 m All-up weight 9.200 kg Speed 270 km/h Range ca. 950 km

G-38, with its massive wide and thick wing and small tail section came as close to a flying wing as any airliner has ever been.

The real success for Junkers came in 1932, when he first flew the JU-52/3m which was developed from the G-31. Deutsche Lufthansa was destined to operate at least 230 JU-52/3m aircraft between 1932 and the end of the second World War, and many hundreds flew with airlines in other countries in Europe, Latin America, Africa, Asia and

even Australia. After the end of the war, its production was continued in France, for both military and civil purposes, as well as in Spain for the military.

Other Junkers designs were the Ju-60 and 160 fast mail planes, comparable to the Lockheed Orion series.

the Ju-87 which was really a little disguised medium bomber, and the four-engined Ju-90, which would have replaced most of the Luft-hansa European fleet had it not been for the war. Accommodating 38-40 passengers, the Ju-90 was of the familar Junkers construction but now with smooth surface, Junkers having abandoned the corrugated surfaces with the Ju-60. Ten or eleven were delivered to Lufthansa, but they were later transferred to the Luftwaffe.

Other designers who had an impact on German aircraft building were Focke-Wulf, which built a series of single-engined high-wing monoplanes of mixed construction, much like the pre-war Fokkers. Dornier did the same, but he was also responsible for the design of the immensely successful Wal and Super Wal flying boats which made trans-ocean traffic possible. The biggest operator of the Wal, however, was Italy, where they were also built under license.

CHARTER AIRLINES

Before the second World War, Lufthansa was the only airline in Germany. From 1955 on, however, several independent airlines have come and gone in the country. At the moment, there are seven main carriers operational in West Germany.

Bavaria Germanair: Formed in 1977 by the merger of Bavaria and Germanair, undertakes passenger and cargo charter air services

Dornier Do X

Year of construction 1929
Engine Curtis Conquerer
HP 12 x 600
Crew 14*
Passenger seats 70
Tank content ca. 10.000 I
Freight —
Length 40,05 m
Wingspan 48,00 m
Height 10,10 m
All-up weight 48.000 kg
Speed ca. 200 km/h
Range ca. 2.800 km



*on the flight from South to North America

in Europe and to North Africa. Fleet is two Airbus A-300 and seven BAC One-elevens.

Condor Flugdienst: This is the international charter subsidiary of Lufthansa and was formed in 1961 by the merger of Deutsche Flugdienst and Condor Luftreederei. Condor concentrates on charters to Southern Europe, Africa, the United States, the Far East and the Balkan area. Fleet is two 747s, two 707s and 13 737s.

<u>DLT Luftverkehrsgesellschaft</u>: This carrier was founded in 1974 by reorganization of the old OLT. DLT undertakes scheduled third-level services throughout Western Germany with a fleet of Twin Otters and Shorts 330 aircraft.

German Cargo Services: This all-cargo subsidiary of Lufthansa was formed in 1976 to operate cargo charter services. Two Boeing 707 freighters transferred from Lufthansa are in use. Hapag-Lloyd: Rekindling its post-first World War interest in aviation, the Hapag-Lloyd shipping line founded the airline in 1972 for passenger charter operations. Fleet is seven Boeing 727 aircraft.

LTU (Lufttransport Unternehmen): This carrier was founded in 1955 and concentrates on world-wide charter operations with a fleet of four TriStar and three Caravelle jet liners.

OLT (Ostfriesische Lufttransport): This is a new company founded in 1974 to operate scheduled services between the German mainland and the islands off the north coast. Fleet is two B.N. Islanders and some Cessna single and twin engine aircraft.

Interflug: This is the only air carrier in the East German area. Interflug takes care of all aviation needs of the peoples of East Germany.



Bavaria (now Bavaria-Germanair) operates this BAC One-eleven-528SP, registration D-AMUC, c/n 227, seen here at Geneva in 1973. John Wegg photograph.

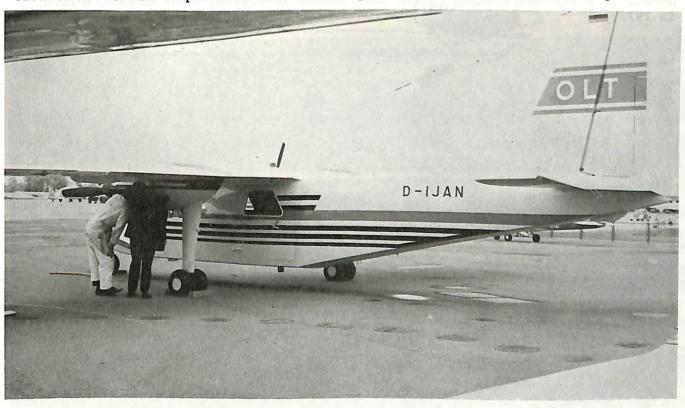


D-ABYF, c/n 20493 is a Boeing 747-230B of Condor Flugdienst, currently in service.

Condor Flugdienst photo.

THE LARGE AND SMALL OF THE CHARTER CARRIERS

OLT, forerunner of the present DLT, operated this B.N. 2 Islander, D-IJAN, c/n 22, back in 1968. It is pictured here on the ground at Hanover. Gerritsma photo.



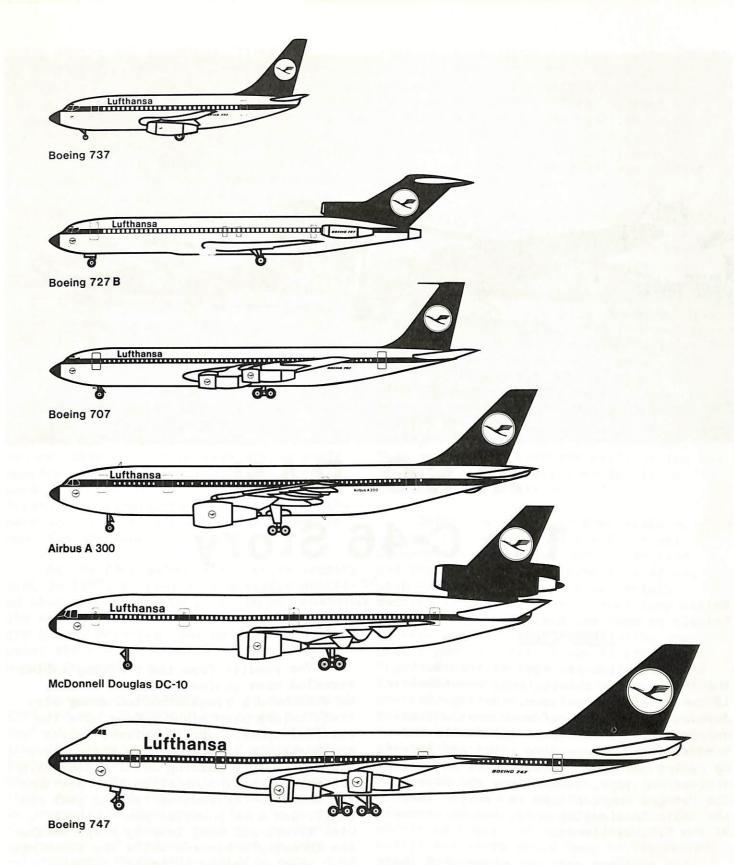


The East German Interflug operates this Ilyushin I1-18D DM-STO, c/n 10904 on medium-range services. Seen in 1978 at East Berlin. Gerritsma photo.

DM-SCT is a Tupolev Tu-134A of the East German Interflug, seen at East Berlin in 1978.

Gerritsma photo.





All of the above Lufthansa aircraft can be made using either Revell or Airfix plastic models. A Germanair A-300 can also be made using Micoscale decal sheet 44-24. A Condor Boeing 747 can be made using Micoscale sheet 44-5. Revell of Germany offers a LTU TriStar or you can use Microscale sheet 44-27. VEB also has produced Interflug models.



ALSO RAN The C-46 Story

Steve Kenyon

INTRODUCTION

The aviation era that existed during the 1930's was a chaotic one; nevertheless, it was an educational one. During the decade the airlines suffered many a trial and tribulation both philosophically and economically. There were gains and losses; up cycles and down cycles; tears and smiles; sorrows and joys. These were the days of the "winged charger" and it brought about the whole fascinating story and creations of the U.S. airlines

The airlines were not alone with their problems and joys. Amidst all the strife, rested the aircraft manufacturers who certainly were not too jubilant either. Their woes and joys paralleled those paramount to the entire flying world. Faced with competition from every corner and recovering from a depression, the manufacturers had no place to turn except to the drawing boards.

The results from the drafting tables revealed more genius than ever before. We witnessed a transformation among aircraft seldom seen since. Gone were the external braces, struts, wires, fabric and box-style fuselages. In their place stood gleaming, shining metal bodies with streamlined engine nacelles that proviced the homes for retracting landing gear and bigger and more powerful power plants. Oleo struts and wing landing flaps became the industry's bywords while the interiors were revolutionized by pastel colors, sound-proofing, exotic fabrics and warm surroundings. These improvements plus many more all contributed to materially increasing the passenger's comfort. This seemingly should signal the end. But, no, never! Commercial aviation's growing pains demanded more--more airplanes; more income; more passenger miles per the same dollar overhead. And so this became their song.

Being daring and ingenious, lives and fortunes were gambled to prove each new

Without a doubt, the most inspiring saga of the period involved the creation of the Douglas DC-3 which had its beginning during the middle thirties. Her remarkable role from every corner of the globe won her praise from every pilot who flew her and from every passenger who enjoyed her safety. But one begets another. because it revealed several areas of weak-From this time on every manufacturer would be forced to try to equal or better the "Grand Old Lady", as the DC-3 was affectionately known. And thus it was as Curtiss Wright sought to improve by building the CW-20--better known as the C-46 Commando.

HISTORY AND DEVELOPMENT

The beginning of project CW-20 occurred in 1936 as Curtiss-Wright held a series of interviews with airline officials across the country. These discussions, secret in nature, disclosed to Curtiss-Wright staff members exactly what the airlines needed most in a, yet unbuilt, commerical airliner. The popularity of the DC-3 set the pace and Curtiss-Wright was determined to meet the challenge!

At the conclusion of the cross-country trek in 1937, a beehive of activity startled observers at the CW plant in St. Louis. The entire project had been assigned to TOP SECRET priority, but nature being the beast she can oft time be, allowed the secret to creep out.

Interested bystanders soon discovered that the new CW project was to be a twin engined aircraft -- similar to but larger than the Douglas DC-3. The fuselage was styled in a "double bubble" section and would contain a very unique feature for those days. The passenger section would be pressurized thus permitting the user to travel aloft high enough to evade all storms and bad weather. It was to have conventional three point landing gear; twin vertical stablizers; and a seating capacity of forty passengers.

A time lapse of three years occurred between the first drawings and the prototype's first flight. The prototype, registered as NX19436, was started in 1937, and after considerable delays for various

reasons, it finally made its maiden flight on March 26, 1940. Power for this flight was provided by two Wright Double Row Cyclones generating 1700 horsepower and whirling a three-bladed Hamilton Standard Hydromatic propeller at the end of the crankshaft. Subsequently, the power plants were changed to Pratt and Whitney R-2800-34s with a four-bladed prop.

The first flight proved unsatisfactory ness in the twin tail design which resulted in poor flying characteristics. And overall, the highly desirable ease in manuverability was completely lacking. This meant that the engineers and design teams went back to the drawing boards and the wind tunnels to establish the reason or reasons for the failure. Basically, the cause of the erratic behavior rested with the twin tails. Finally, after spending hundreds of additional hours testing redesigns, CW chose the high-rise Boeing B-17 single tail for the model. This appeared to cure the difficulties encountered and the prototype fulfilled its designer's expectations.

Unfortunately, time once again run out and the World found itself at war. Germany invaded Poland forcing England and France to decalre themselves at war with Germany. Other nations rapidly made their declarations: either they allied themselves with England and France; elected to remain neutral; or, sided withe the Axis's powers. Across the Atlantic, the United States, being entirely unprepared for combat, elected to try and remain neutral while she supplied the Allies with raw material and equipment. This meant feverish activity among the aircraft manufacturers since foreign orders for military aircraft poured in faster than the manufacturers could accept them. The economy of the nation developed a new side but commercial aviation died. The shattered hopes and dreams of bigger and better airliners would have to lie dormant for a few years.

Following the U.S. entry into World War II, Curtiss-Wright sold the prototype CW-20 to British Overseas Airways Company where it was registered as G-AGDI and named Saint Louis. However, before delivery was made, BOAC granted the U.S. Army Air Force a short period of time to evaluate



Photograph of prototype CW-20 with twin-tails. Photo from the files of Fred Erdman.

the aircraft for military purposes. In 1942, the aircraft arrived in England where it was outfited for passenger travel and for the next two years it served BOAC as a 24 passenger transport. This prototype CW-20 was later reported lost, but when and where are unknown.

But not all was lost for the Curtiss-Wright Company. The U.S., being woefully unprepared for war, found herself almost completely void of military air transport. Needing long-range and speedy delivery capabilities, the USAAF placed orders for the CW-20--now redesignated the C-46 Commando. Following in the footsteps of the USAAF, the U.S. Navy designated it the R5C-1 and also placed orders. A grand total of 3144 were built at the cost of \$233,000 each.

The military version of the CW-20 now known as the C-46 was very similar to the airline version. As was stated earlier in a previous paragraph, the engines were changed to P & W R-2800's which boosted the take-off horsepower rating to 2000 hp. The cabin was not pressurized and a large freight loading door was added to the left side of the fuselage aft of the main entrance door. The addition of the cargo door provided the first model change sc

the C-46 now became the C-46A. Several other C-46 models were produced including the C-46D (double cargo doors) and the XC-46B which retired the all-too-familiar bullet nose and replaced it with a stepped windshield. Ultimately, the stepped windshield model became the C-46E. Blunt wing tips was the familiar characteristic fo the C-46F. Small numbers of C-46E's; C-46G's and XC-46L's finalized the production run of the C-46.

During WW II hostilities, the Commando served primarily in the Pacific Theater of the War. It gained considerable fame flying the "Hump" which lay between India and China. Flights across this area were necessary because the Japanese had closed the Burma Road and air transportation was the only course left. The Commando was a natural for this type of flying which required much higher altitudes than the C-47 was capable of achieving. In addition, the C-46 carried more cargo than the "47". Obviously, this characteristic alone made the aircraft very adaptable to that war zone. Unfortunately, flying conditions throughout China and India left much to be desired: the weather was completely unpredictable and navigation and communications were nil. And so the elements of nature took their toll. Extensive maintenance was constantly required on the R-2800's and since replacement parts were scarce, these factors kept many of the aircraft grounded when under normal conditions the down time would have been minimal. Once in the air, the "ole" bird faced other treacherous hazards: rock-lined clouds (mountain peaks in the clouds); no ground communications for controlled instrument flying; very few radio stations for pin-point identification of geographical location; and, undesirable landing strip conditions. Consequently, these difficult times produced a relatively high loss ratio for the C-46.

Use of the C-46 expanded considerably during the later years of WW II. This meant that the Commando was used in almost every theater of war. In Europe, C-46's were used to drop paratroopers during the crossing of the Rhine River in March, 1945; in Central and South America, they were used to stock and re-supply bases where our tactical aircraft landed and refueled before crossing the Atlantic; and in the U.S. they were used to tow glides on training missions. Overall, the Commando performed many a task under very extreme operating conditions and managed to hold her own.

Following the surrender of Japan in 1945 and thus signaling the end to WW 2, the Commando became a different style of bird. Suddenly, she was a surplus commodity to the military forces and was available to the civilian market. But this was shortlived. In June, 1950, North Korean troops crossed the 38th Parallel and the Korean Conflict started. General MacArthur, in an effort to stem the overrun, pressed into service every available aircraft for air transport to the Korean pennisula. The call went far and wide and once again the Commando was called upon to perform many a Heroic task. Fortunately, her enormous freight capacity and short field landing abilities made her an ideal companion to her sister, the C-47. She continued faithfully throughtout the years serving the many Korean battle fronts. When the armistice was signed, she was retired and sent to pasture again, never dreaming a third call of need would require her resurrection in future years. Anyway the Viet Nam affair came along and so once again she found herself right back where she had started some twenty-five years earlier, performing the same jobs with some additional ones added.

POST WW II DEVELOPMENTS

Prior to the completion of VE and VJ days, most of the aircraft manufacturers had already put their aeronautical engineers and draftsmen to work designing new transport aircraft as witnessed by the emergence of the four-engined C-54. Feeling the need to stay in the transport market, Curtiss-Wright made plans for the development of the CW-20E. a civil version of the C-46, for Eastern Airlines. It failed to materilize for a number of reasons but uppermost because of the large number of surplus military C-46's. There were available for a ridiculously low cost and several hundred wound up on various airline inventories. Even adding the cost of refurbishing them to the cost of their purchase price made them the best buy for the times.

The war had been beneficial in demonstrating the need for long-range air transportation as well as a need for rapid air schedules. Airline passenger travel was increasing at a far greater proportion than aircraft was available to move them. This impact left the airlines no where to go but the purchase of surplus military aircraft and demilitarize them for airline service. Unfortunately, the military C-46 did not rate equally with the many other types available.

Basically, the big problem of civilizing the C-46 was the difficulty encountered meeting the Civil Aernautics Authority's requirements regarding maximum operating weights. During these trying times of post-war development, the CAA was steadfast in applying their rigid demands for passenger safety and as a result, use of the C-46 suffered.

However, as 1960 arrived, over 90 commercial opperators serviced their routes with the C-46. And ten years later over 200 of the aircraft still plied airlines routes through-out North and South America. The most popular

models were the C-46A's and D's. The A model had a single loading door while the D model had duel cargo doors and a modified nose. The type of engines (R-2800-51Ml) installed on these models permitted almost nine tons of payload and 24 tons of gross weight. Higher service altitudes made her popular for ranging the North and South American mountains.

In 1956 a CW-20T was introduced to commercial aviation by two firms by the name of Air Carrier Engineering Services and L. B. Smith Aircraft Corp. The major modifications for the C-46T were several structual improvements which permitted greater gross weights and thus more revenue. These same two firms also produced a Super C-46C in 1958 and introduced a C-46R to Riddle Airlines in 1957. None of the advanced models changed much in their outward appearance; as stated before, most of the changes were internal and involved structural changes to permit greater gross weights.

All said and done, the C-46(CW-20) enjoyed moderate success although it did not begin to compare with that of the C-47. Having personally flown the bird a goodly number of hours, I also know why. She was extremely cantankerous in a cross wind and

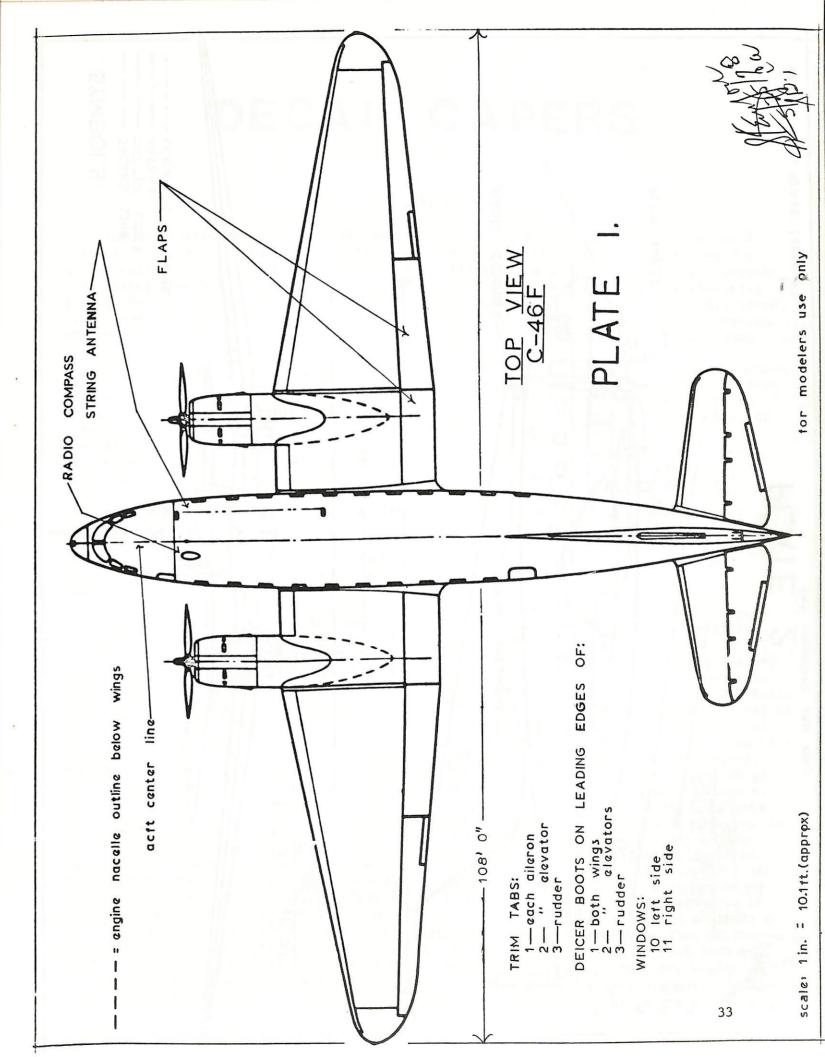
BELOW: Photograph of Ortner C-46D. Note that only one of the double freight doors are open. Photo from files of Fred Erdman very often required four hands on the controls to conquer her mean and treacherous tricks of weathervaning during landings. In the air, her single engine abilities left much to be desired while taxing her on the ground made it a most profound and trying chore for even the most experienced pilots. Her air stability found it difficult to remain on an even keel thus resulting in a "hunting" situation as the nose swung through its arc of travel. These factors presented a very unforgiving lady and she dearly loved letting you know it. Even one mistake was one too many.

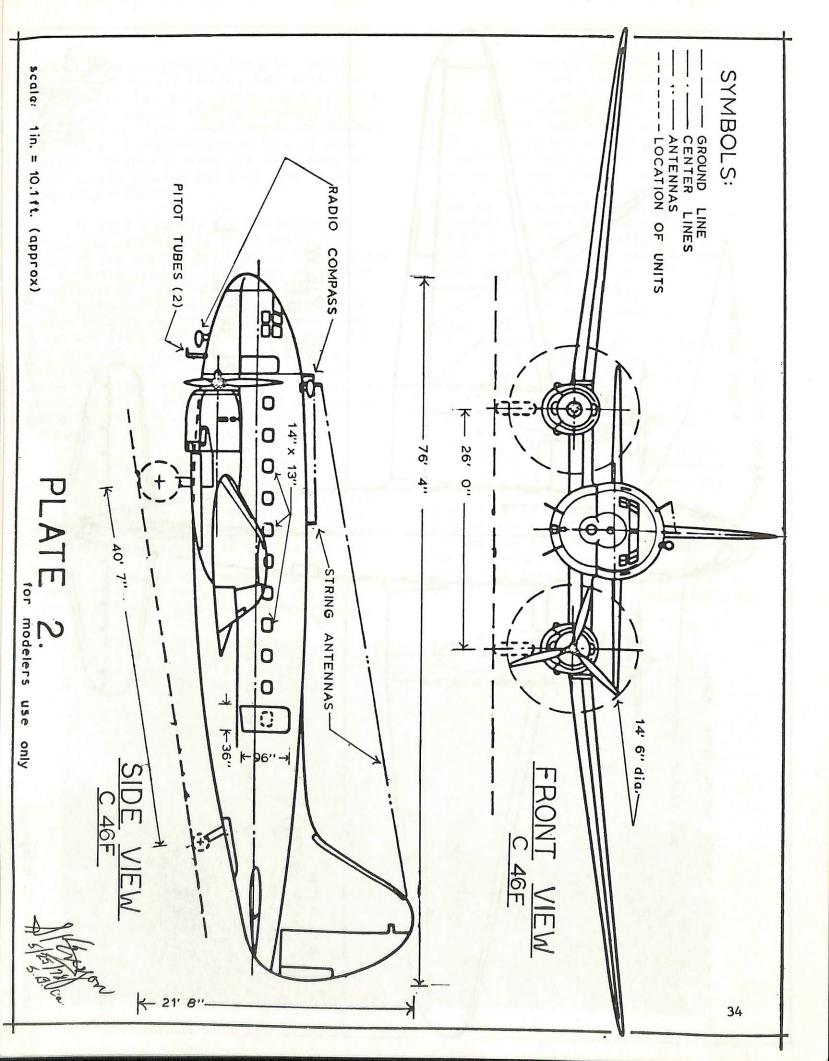
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Plate 1: This is a general arrangement view of the top of the C-46. It may be of some use for modelers in completing their external items such as antennas. Plate 2: A front view and side view of the C-46 Command. Please note dimensions.







DECAL CAPERS

by

Steve Kenyon

The fascinating subject for this issue will be the demoniac creation of Curtiss-Wright called the CW-20; perhaps many of us will better remember it as the C-46. It is a World War II carryover that still flies hither and yond among the world's vast newtwork of airways.

The CW-20 made its maiden flight in March, 1940 after a three year design program which resulted in several design changes. Only one was perfected which after an evaluation by the USAAF, was sold and delivered to the British Overseas Airways Company (BOAC). Here she remained in passenger service for approximately two years plying BOAC's air routes through out the Near East and Africa. Her fate following termination of service with BOAC has never been positively recorded (at least, my research could find nothing) although some rumors persist that she crashed and was destroyed.

A change in the course of events found the world plagued with WW II. Fortunately for our citizenry, the war fronts were conducted across two oceans. This meant delivery of supplies over long distances—most of it water. And the United States was woefully under staffed with air transports which was the greatest element to reduce the time factor. Needing equipment badly, orders were issued to Curtiss—Wright for a military version of the CW-20 which had been designed the C-46 Commando.

The C-46 was mass-produced with a total of 3144 being delivered to the military forces. The conclusion of the war found the aircraft a surplus commodity and enabled commercial airlines to purchase them for relatively low costs. Overall, some ninty companies pressed the Commando into passenger and freight service; some of these aircraft are still flying today and this brings us to our subjects for this issue of Decal Capers.

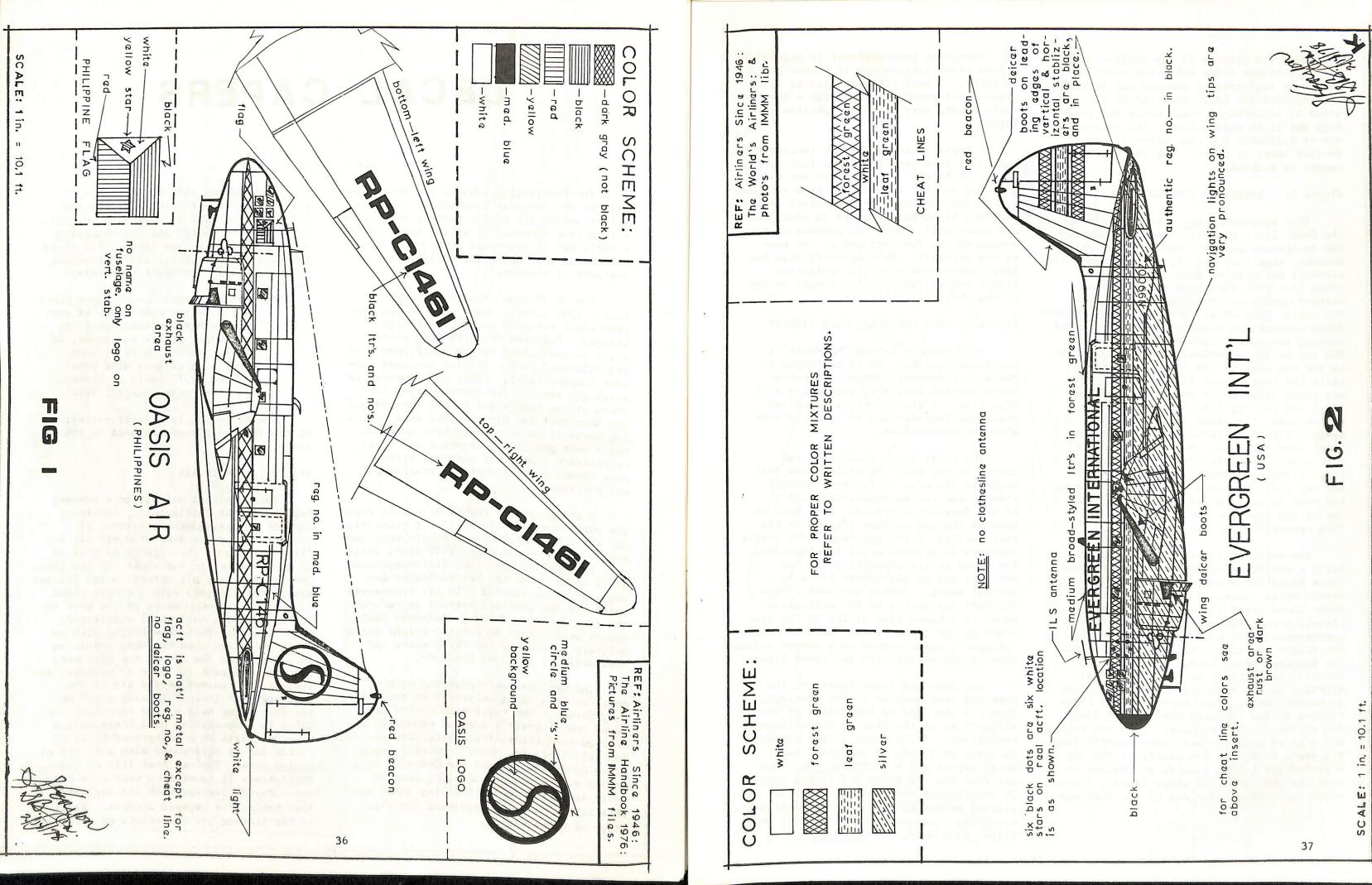
In dealing with our subjects, I selected three different airlines for illustration. Two of these are currently flying the "bird" and the remaining one consists of a "has-been". All three subjects are delightful and interesting covers and make excellent (also easy) decorating jobs.

NOTE: Other general arrangement plans and decaling side views of several other airlines operating the Commando are available. If more information is desired, drop me a note at Mini Model Museum, 2276 North D. Street, San Bernardino, Calif. 92405.

The following is a brief narrative of the three drawings included in this issue.

Figure 1: OASIS AIR

This aircraft belongs to a company located in the Philippines. Combining freight and passengers together, it operated under the name of Oasis Air and flies throughout the islands as well as to other cities in and about the Far East. The aircraft are all natural metal (silver may be substituted) with a single cheat line running from a point on the nose to the edge of the horizontal stabilizer. Note that the cheat line begins with an arrow point and then broadens enough so it passes over the top of the wing root but stays beneath the line of windows. The registration number begins aft of the passenger (or freight loading door) on the rear upper half of the fuselage. An Oasis logo consisting of a large medium blue "S" rests on a background field of yellow and is surrounded with a circle of medium blue. The national flag of the Philippines is mounted on each side of the forward fuselage with its beginning just behind the cockpit windows. Refer to the drawing for the colors of the flag.



Also note the absence of any airline name on the fuselage sides while the wings do carry the registration numbers and letters. The registration identification on the wings is lettered in black while the fuselage has it in medium blue. All antennas are as indicated and this aircraft has no de-icer boots in place. The registration number is authentic.

Figure 2: EVERGREEN INTERNATIONAL

This company is not currently flying the C-46, limiting their fleet to Convair 580 freighters and DC-8 and DC-9 aircraft. However, when they did fly the Commando, the aircraft was painted with the two tone green livery as indicated and performed charter work (mostly freight) throughout the world. The cheat lines are broad/narrow/ broad combination beginning at the nose and running the full length of the fuselage. The top of the uppermost line runs parallel to the top edge of the passenger windows while the bottom most line reaches about mid-point between the bottom edge of the wings and the top line of the wing root. At the nose, the cheat lines butt up against the black radar nose and the top cheat line serves as the anti-glare panel. I recommend using Pactra paints for your cheat lines with Forest Green (#M5) for the top and Leaf Green (#5) for the bottom. Use your favorite brand of white for the top of the fuselage and the white cheat line separating the two green ones.

The vertical stabilizer and rudder carry a variation of the cheat lines being three broad lines separated by the two narrow white lines. Further note that these three broad lines do not run completely across the upper tail surfaces -approximately 3/4's of the distance only. The colors are identical to those used on the fuselage cheat lines. All of these colorful cheat lines are easily painted directly to the fuselage and vertical tail surfaces. Note, also, there are six stars affixed to the fuselage cheat lines just aft of the cockpit windows. When you select the size of stars to use, make certain they are small enough so the points of the top star and the bottom star do not extend beyond the colors of the cheat lines. These stars appear on both sides of the fuselage.

Evergreen International is printed in medium sized letters and is forest green in color. I used press-on letters on clear decal paper and then with a 000 sable brush, very carefully painted each letter.

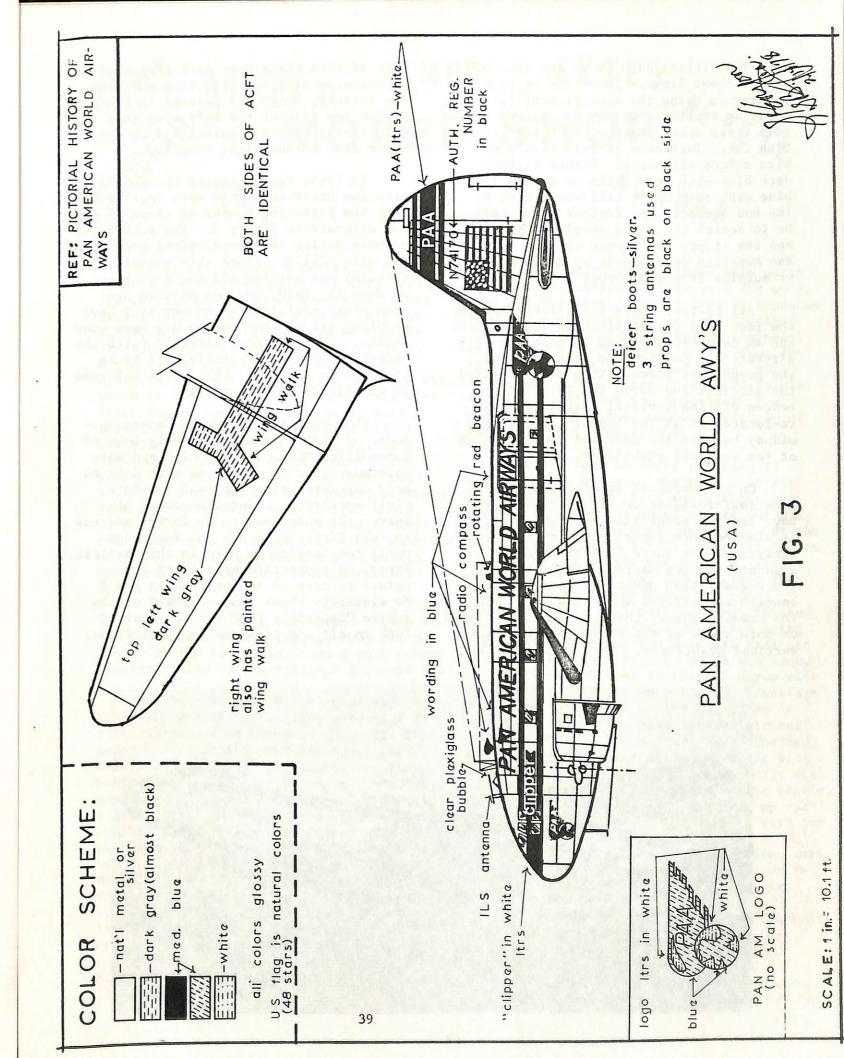
A registration number is located on the lower rear section of the fuselage and is in black. The aircraft has been modified so that current day type antennas are in use; however, this aircraft does have the black deicer boots in place and are functional. Note the antenna on the bottom of the fuselage and at the rear of the aircraft. This aircraft also has large pronounced wing tip navigation lights and a red rotating beacon on top of the vertical stabilizer.

Figure 3: PAN AMERICAN WORLD AIRWAYS

This example is the "has-been" I mentioned earlier. It is no longer on Pan Am's inventory although it served South America admirably during its service life. I don't feel Pan American needs any introduction so let's proceed with the decorations.

The cheat lines consist of two fairly narrow bands of medium blue that begin at the edge of the rear cockpit windows and run approximately 8/10's of the fuselage rearward. They butt up against the Pan Am logo affixed to the rear section of the fuselage. The entire aircraft is natural metal so, therefore, the broad stripe separating the two narrower medium blue cheat lines is natural metal. Across the nose of the aircraft and acting as the anti-glare panel is a broad blue stripe of the same color as the cheat lines. Note the word, "clipper", superimposed on a narrow medium blue banner between the two cheat lines.

Pan American logos appear on the nose and rear section of the fuselage. They are the same on both sides of the aircraft as is the flag on the vertical stabilizer. I could not locate any Pan Am logos so I made my own with clear decal papers and a 00 brush. The same was true for the globe and flying wing. To superimpose the letters, "PAA" in slanted printing, I used a Picket #16S lettering guide and a Staedtler ink pen filled with white ink.



The airline name is in the same blue as the cheat lines. These may be hand painted or using the same Pickett lettering guide as mentioned above they may be traced onto clear decal paper with an ink pen and blue ink. Just make certain that your blue colors all match. Either lighten dark blue with some white or darken light blue with some black till you arrive at the hue needed. One further idea would be to search the extra decal parts box and see if you can't come up with some Pan American decals made by Micro Scale or surplus from some other decal maker.

All de-icer boots are silver despite the fact they appear black in the drawing. Pan Am used three string antennas on this aircraft and painted the back sides of the propellers black. They also modified the aircraft and moved the rotating red beacon off the vertical stabilizer and re-located it at the top of the fuselage midway between the nose and the beginning of the vertical stabilizer.

On the vertical stabilizer appears a narrow/broad/narrow blue stripes which have the characteristic letters. "PAA" in slanted form superimposed on the broad stripe. These three blue stripes are separated by two narrow silver stripes. The registration number appears directly beneath the stripes and is in black. As the drawing shows, the U.S. flag is located on both sides of the bottom section of the vertical stabilizer. Note also that the

tops of both wings have dark gray wing walkways painted onto the wing surfaces. The letters, "PAA" are painted in blue on the top side of the left wing (not illustrated in the drawing) and on the under side of the right wing.

In 1948, Pan Am leased ten C-46's from the USAAF and these were registered with the beginning number as shown on the aircraft in figure 3. The subsequent numbers follow in chronological order and end with N74179. Since this example (N74170) was written off the inventory on June 15, 1950, you may want to use some other registration number so I have provided all of them so you may have your choice. The remaining aircraft (with the exception of N74179 -- written off by an accident on August 8, 1951) were returned to the Air Force during 1953.

Thus ends another Decal Capers eptsode. I wish to thank Mr. Terry Love of Burnsville, Minn. for his kind and very generous offer to supply me with data on many carriers using the C-46 in their civil operations. Unfortunately, his letter was addressed to my former address in Yuba City and it was not forwarded until too late to be used in this article. Terry, we appreciate efforts of your nature to keep us in the running and I do sincerely thank you on behalf of the entire "Captain's Log" staff. Best of luck to all and I'll see you next issue.

SK



HAWK AIRFIX MPC ENTEX HOWGRAM MODEL SHOP REVELL HOWGRAM FROG by DAVE MINTON

First off we have a revies of the kits of the featured model for this issue. the Curtiss C-46. To my knowledge, there exists only three model kits of this aircraft, all to 1/72 scale. These include the vacuum formed model from Sutcliff of England, the expanded foam model from E.D.H. Models and the Williams Brothers kit, which is injection molded. They only airliner decals that I know of which were issued specifically for the C-46 kit are the Flying Tiger decals in the Williams kit and the Seaboard decals herein from Fowler Aviation. I have also heard of, but never seen, an Air Hati sheet, probably from VHF in England, also in 1/72 scale. On the Flying Tiger markings -- while there does exist some evidence that these markings may be somewhat light -- there also exists some evidence that they are the correct shade.

I will provide a very brief review of the Sutcliff and EHD kits, as they are no longer easily available, then a more compre-

obviously one of the earlier offerings by this company, also known as Contrail. Surfaces were, for all practical purposes, devoid of any detail and the fit of the parts quite marginal. With some incredible amount of effort, the kit could be made into The model comes "as is" in the gear up cona presentable model. Accessories such as wheels, props, engines, gear and so forth were not provided and must be either scratch built or scrounged. In over all scale the model looked a lot like a C-46 once it was completed, although I feel the nose was somewhat squatty looking. It makes very little sense to talk of scale in terms of measurement because, as an early v-formed kit, it might take on any number of differentactual assembly. The model contains a outlines, depending on how one trimmed and fit the parts.

The EDH kit came in three main parts with a clear canopy. These were the wing, tail and fuselage. It was made of expanded foam and must therefore be held together with epoxy of the like. Again, the model was pretty well devoid of any surface detail and came with no extra parts, such as wheels, gear, engine, props and decals. In general outlines and appearance the model was quite nice; however, fitting of the parts took some effort.

The Williams Brothers offering is certainly far and away the best C-46 kit on the market, but it is not without problems. In scale the model checks out 0.K. with the span being quite accurate, but the length is perhaps a little short aft of the wing. The kit scales out to be a little closer to 74ft 8in than the required 76ft 4in. In overall appearance the model compares fairly well with drawings (Green/ Swanborough) with perhaps the wings being a bit too pointy and the vertical tail not quite pointed enough. The props are huge, hensive review of the Williams Brothers kit. as expected, and come in several parts with options for three or four blades. Fuselage The Sutcliff kit of the C-46 was pretty stiffeners are added to the model, to be removed in the event some version without these is built. Options are also provided in the directions for different style wing tips and tails. The model can be built with either regular plastic or rubber like wheels. figuration and in order to build it with the gear down, the doors must be cut out. On the version of the Seaboard C-46 I have seen the elevator trim tabs must be cut down to the even type as shown in the kit plans.

> For the actual construction of the model I very strongly recommend carefully test fitting everything to everything before considerable amount of flash, most of which will have to be removed before construction.

Besides the flash, particular problems were experienced in the fit of the trailing edges (quite fat), engine nacelles, wing panels behind these nacelles, wing to fuselage joint, clear (2 piece) canopy and the tail to fuselage joint. What is left? Well, some of the decals fit OK! A lot of sanding, filling, and buffing is needed to really finish the model. Certainly by todays standards it does not represent a good value for the money even if it is the only game in town.

Some particular problems: be very careful in the alignment of the fuselage halves as they do not easily fit all the way around. If there is any really serious problem, assembe the halves in parts, doing first the bottom half and then, through the wing opening, the top half. Also, go slow and careful with the assembly of the clear canopy, as the fit here is somewhat of a problem and it is a lot harder to sand out. Go carefully with the construction of the propellers, which are also a bit of a problem to fit and align. In

many ways the Williams kit reminds me of old balsa/plastic kits where the locating pins were quite general because the balsa was so forgiving--plastic, however, is not.

C-46 MODEL CONTEST

Starting with this issue of the LOG we will have a model contest of the featured aircraft. Since we are featuring the C-46 this issue, the contest will begin with this aircraft. Submit photos and full description of your model. Winners will be judged by a panel of modeling "experts" selected by the Editor. Prizes will be awarded to the three best entries.

To start this activity off the first prize for the C-46 contest will be a club jacket. Second and third prizes will consist of models and decals to be decided by the judges. Mail all entries to the Editor. All photos will be returned at the end of the contest.

BELOW: A Riddle C-46 being loaded with a pallet of small boxes. Note detail of the large freight door and door braces. This may be of help to those wishing to convert the Williams Bros. model. Photo by Tom Kalina.





In other news, the latest sheet from Fowler Aviation is for the Airfix DC-9 in 1/144 scale and allows the modeler to build either N978Z or N990Z in Ozark markings. While decals are provided for all cabin doors, none are provided for cabin windows (use Krystal Kleer) or front windscreen (use kit part) or wing escape route arrows (use Micro sheet 44-14A). I also experienced a very small difficulty in fitting the decal at the base of the tail section -- but by allowing the decal to lie flat against the model and cutting away the unnecessary part of the lower section to be replaced at the small space at the base of the tail, this problem was solved. Some of the next decal sheets we can expect from this company are as follows: 707-420 El Al, 737 UAL o/c all possible combinations, DC-8-61 Trans Carrib, 727 National and perhaps some more specials for the "Log".

A new decal manufacturer has appeared on the horizon--Rareliners--and their first sheet is for the Airfix Boeing 737 in the new Frontier markings. (See lower right column.) The decals are very flexible and crisp, but quite thin and transparent and so require some care to avoid overlapping. Again, all required markings are included on the sheet, including cockpit windows, to model N7391F. Markings are not included for wing walk escape route arrows so use the Micro sheet 44-14A and Krystal Kleer for the cabin windows.

From ATP comes a host of new decals including all of those mentioned in the earlier issue of the "LOG". Also, the new DC-3 EAL (meatball) kit is on the market in a very nice 4 color box. Included are photos of the Piedmont F-27 and Braniff International markings for the Hawk C-131,

which should be converted from the 440 to 340 version. While the Piedmont sheet appears ever so slightly light in shade of blue, once on the model the results are excellent, as the photo indicates. An extra bonus is that the sheet comes with an extra "Radar equipped" title. The register and crispness of all of the new sheets is excellent, but this is especially true of the Braniff and Eastern sheets. The BI sheet allows for two versions, as illustrated in the photo on the following page. While the Ozark DC-9 sheet appears just a little bit too light, the EAL n/c sheet has custom matched colors -- and they look it. The colors are just spactacular. They allow one to build any one of the EAL narrow body models in any of the hockey stick colors by using different parts of the sheet. The new UAL sheet also allows one to do any of the UAL narrow bodies, and again the colors are great. The Federal 727 sheet is crisp and simple. The Northeast sheet for the Viscount is very good and the company logo can easily be used on other models (i.e. it will fit the C-46). And the old style EAL colors for both the DC-3 and Connie are very nice, although the fit of the nose piece is somewhat difficult. The DC-3 sheet will also fit to the conversion of the Revell Connie featured in an earlier issue of the "LOG". The Mohawk sheet has very good colors and the fit for the Airfix kit is great. And an additional bonus, all of the jet decal sets (except the BAC 111) come with wing escape route and cargo door decals, which make a time consuming job very easy.





The new Airtec cast engines leave a little to be desired. The moldings, especially around the fan, are not at all crisp and the fit is not especially good either. They are quite heavy and will not, I think, be very easy to affix to the Airfix model. On the other hand, with all that extra weight, perhaps the model will sit easily and correctly on its gear. On the whole, I found them quite disappointing-especially considering the cost. I know the technology to do a better job exists, for I've seen it in other of their castings!

Their new Martin 404 kit isn't all

that great either. Made of expanded foam in three main parts, wings, horizontal tail. and fuselage, with cast extras. the model tends to scale a little small in the principle dimensions. Also the horizontal tail is just a bit out of shape at the tip. The cast parts lack the same crispness as the earlier: mentioned 707 engines; this is especially a problem around the engine and prop region. It will take a lot of work to really make it up into a display model.

The Excuform Lockheed L-10 is quite a disappointment because of the molding process used, which is male instead of female, so it is qute like the earlier Rareplanes kits. Because of this, the model will take some considerable time and effort in order to get reasonably good results and therefore does not represent a very good value for the money. I am not at all anxious about their announced DC-2.

The J&L DC-7C comes with a lot of parts, several of which are quite small. Thus, each of the propellars are made of at least 5 parts (depending on how you build them up), so all of this can add up to a lot of parts in very short order. The main aircraft itself is made up of two fuselage halves, upper and lower wing halves, and so forth. The wing arrangement is such that the wing extension is made up of a

little stub which goes between the wing and the fuselage. Presumably this would make it easier to make up earlier versions of the DC-7. The stub extension does, however, make it easier to correct one of the problems with the kit--namely that the span appears just a little short, scaling to 125.5 feet instead of 127.5 feet. With some care in construction this presents no real problem. The fit of the parts is really quite good. Because of the relatively large size of the kit, it will easily warp. Hence, great care is advised in the construction to minimize this problem by adding structural reinforcements,





Revell of Mexico issue the 990 with AA decals and the DC-9 in TWA markings. And Revell of Germany is planning the F-27 in NLM markings and also may do the 727 in Lufthansa.

If anyone is looking for a Revell DC-10, I have available a number of these kits in Delta markings, so let me know.

And in the "head". As you have probably already noted, the thrust reversers on the VC10 could be done not only in the versions suggested in my article, but in a number of other ways as well.

particularly around the wing joint and inside the fuselage. The ATL 98 (see page 44) mentioned in last issue and which is very similar, finished into a very nice model, as indicated by the photo.

Scratchbuilt has reissued the Boeing 307 Stratoliner, to be used in conjunction with the Crown B-17 kit. This model is about 1/144 scale. The model is pressed in very thin plastic and, considering the number of parts, the fit is pretty bad. With some effort, however, the model can be completed. The fit of the windscreen decal around the front is particularly difficult. Photo (see above) indicates that completed model looks fine.

Some new goodies to expect besides those already mentioned include a DC-10-30 in British Caledonian and an A-300 in EAL in 1/144 from Airfix. Check the Airfix Air France boxes, because someone said the EAL model is in the Air France box with a sticker saying the Eastern decals are enclosed. From Heller a 1/125 scale Boeing 727 in Lufthansa colors, no word on either 100 or 200 series. From Scalemaster, so they advertise, will come decals for the Braniff 727 in new colors. ATP may release a kit of the Viscount in Northeast (the old Kadar kit). Micro Scale is planning a series of decals for the prop jobs, including the Revell Connie and DC-7 and the Vega. Later in the year we may see

THE FINAL WORD

There will be several paragraphs in each issue devoted to new information pertaining to articles in previous issues of the LOG. If you note any errors or omissions that you would like to bring to the attention of the Editor, please address your comments to "The Final Word".

From Pete Black: The four Super VC10s of East African Airways were repossessed by BAE early in 1977. Gulf Air has retired their entire fleet of VC10s in favor of additional Lockheed TriStars. Ten regular VC10s of British Airways are going to the RAF to be converted to tankers.

C-46 References

"Airlines and Airlines" by Green/Swanborough. Several photos (B & W) and one set of drawings. Photos: pp 45 Lacsa; pp 204 Shamrock; pp 299 Ortner.

"Airlines of the U.S. Since 1914" by Davies. Some photos (B & W): pp 273 BI and PAA; pp 434 Flying Tiger; pp 438 Aaxico; ;; 440 ASA International Airlines.

"Civil Aircraft of the World" by Taylor/Swanborough. Photos: Shamrock in b&w.

"Airlines Since 1946" by Munson. Page 17 color drawing of Andes C-46.

"Pictorial History of PAA" by P. St. John Turner. Photos: pp 270, 271 in b&w.

"History of Aviation" by Crown Publishers. Color photo of Seaboard C-46 pp 370.

"World Airline Fleets 77" and "Fleets Monthly" contain many C-46 photos. Mostly of foreign carriers.

Two magazines contain useful information also:

"Airpower" Vol 3 #3 has good picture article on military C-46 showing many details.

"Scale Modeler" Vol 12 #3 contains two reviews of the Williams
Brothers kit by two excellent modelers: Bob Moore and Jordan Ross.

NOTICE NOTICE NOTICE NOTICE NOTICE

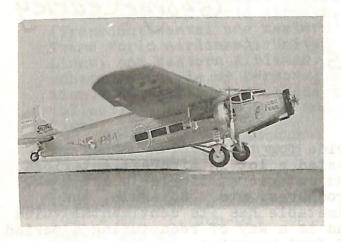
The reprinting of the Douglas post card catalog is being suspended indefinitely. The case for this reprinting will be taken up at the convention in Toronto. There seems to be something lacking in our post card reporting. Hopefully we can work this out at the meeting of the editorial staff to be held at the convention.

Part IV of the "Airway to Everywhere" will appear in the next issue (Fall) of the <u>Captain's Log</u>. The editor of this very fine series has been on the "Soap Box Derby" trail this summer and has not had time to work on the series. The new AIR PIX catalog is now available from Mr. Pyles and can be obtained by sending a buck (\$1.00) to Air Pix Aviation Photography, P.O. Box 75034, Cincinnati, Ohio 45275.

Milan Roupa, Jivavska 6a, 785 Ol Sternberk Czechoslovakia would like to trade models. He has available VEB models of most Soviet airliners. In trade he would like to receive WW II Luftwafee models. Write Milan and see if you can make some trades.

Doru Virlan, P.O. Box 7487, Dr. Taberei 22, R77450, Bucurest 74, Romania, is seeking information on operations of the Junker 13 in this country, Canada, and the rest of the world. Mr. Virlan is planning a complete work on the JU-13 and would appreciate any stories or photos on this early era passenger aircraft.

MODEL SHOWCASE



LEFT: A 1/72 Airfix Ford Trimotor wearing Mico Scale Pan American Grace decals.

of Steve Robinson of Carmel, Indiana.

This issue in the MODEL SHOWCASE we are featuring the models

RIGHT: Entex 1/100 scale DC-3 with the new Micc Scale Western decals.



In future issues of the CAPTAIN'S LOG we will be featuring various aircraft and would like to have photographs of models that you, the Club members have constructed. If you have any photos of your models that you would like to see printed, please send them to the Editor. All photos will be returned to their owners after publication.



LEFT: Kadar 1/120 scale Vickers Viscount with ATP's Northeast decals and landing gear borrowed from a Airfix DC-9 kit. An electric fan was used to turn the props.

BELOW: Revell of Brazil 1/144 scale DC-8-20 wearing the Mico Scale Eastern "Golden Falcon" decals.





By: George Cearley

FOF AIRLINE SCHEDULES

Bruce Drum and I talked several weeks ago and we agreed it would be interesting to include a segment on what we feel is the type of person who saves schedules. Here are some characteristics we thought might apply to schedule collectors as a whole and not necessarily to any one person in particular -- interested in geography, travel, current events. airline and related governmental politics, interested in internal workings of airline (system of organization - management marketing - operations - aircraft utilization - advertising and promotion). Also he or she may be more of a historian. The schedule (older columnar timetables primarily) is literally a piece of that carrier's history for the time the schedule is in effect -equipment, routes, tariffs, marketing trends, ad campaigns, etc. Finally there's the sentimental value of the schedule. My early 1960's schedules are most interesting to me and a way of recapturing days of early plane watching and memorable airport visits. My personal favorite period in airline history is the late piston-early jet era, particularly four-engine equipment. That was a period when we still had the old 50's paint schemes -- mixed with the then new, elaborate, meticulous and varied early DC-8, 707, 720, 880, and 990 schemes. That early jet era was really a period of special

pride for the airline. They invested a lot in aircraft interiors and exteriors, timetable art work, brochures, etc. So again, the timetable has its sentimental value and is a way of recapturing a period of fond memories.

Timetables can be used to trace a single aircraft throughout an airline's routes over a single day of operation. Also they can be used to trace seasonal changes in aircraft utilization. By taking schedules over a year period (particularly older timetables) one can see how an airline shifts its equipment from one route segment to another. A good example is Delta's shift in type of equipment used on the California and Florida route segments between winter and summer. Also, by studying various schedules one can see how flights are clumped to arrive and depart in a city at certain times of day to make connections with other flights. A good example is Delta's and Eastern's centering flights around Atlanta Airport to arrive and depart at key times of the day, as late morning and early evening.

NATIONAL Arelens of the Stars

AIRLINE OF THE STARS

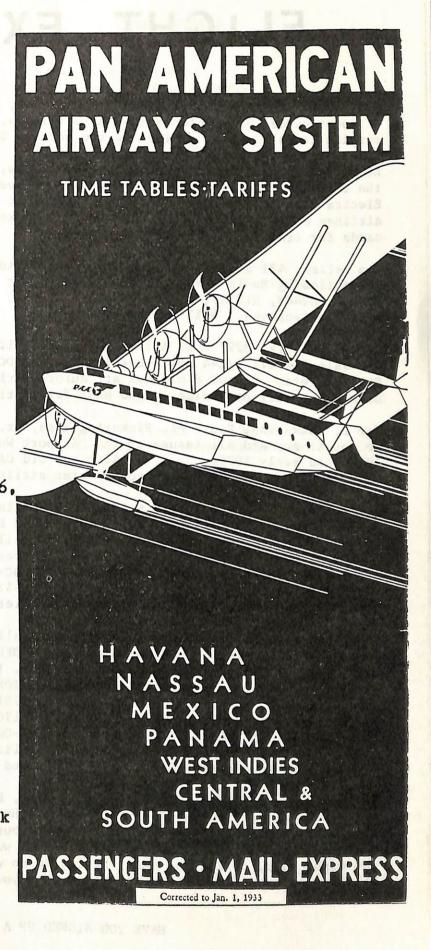
1969 - Feb 1, Mar 1, Apr 1, In this issue of the Captain's Log I'll be concluding the survey of Apr 27, Jun 1, Sep 1, Oct 1, Oct 26, Dec 1 trunk airline schedules covering those 1970 - Jan 1, Feb 1, Mar 1, of Pan American World Airways, TWA Apr 1, May 1, Jun 1, (Transcontinental and Western Air, Jul 1, Aug 1, Sep Trans World Airlines), United Air Lines, and Western Airlines. Not all Oct 1, Oct 25, Dec schedules are in my personal collec-1971 - Jan 1, Feb 1, Mar tion, but also include those in the Apr 1, Apr 25, Jun 1, collections of Bruce Drum and Perry Jul 1, Aug 1, Sep Oct 1, Oct 31, Dec Sloan. 1972 - Feb 1, Apr 30, Jul 1, Pan American World Airways Oct 29 1973 - Feb 1, Apr 29, Aug 1, 1933 - Jan 1 Oct 28 1936 - Dec 1 1974 - Feb 1, Jun 1, Aug 1, 1938 - Jan 15, Jul 1 Nov. 1 1941 - Mar 1, Jun-Oct 1975 - Feb 23, Jun 15, Sep 16, 1944 - Aug 15 1945 - Aug 1 Dec 20 1948 - Sep 1976 - Apr 25, Sep 14, Oct 31 1977 - Apr 24, Sep 12, Oct 30 1952 - Sep 10 1953 - Jan 1 1955 - Jan 1, Apr 24, Aug 1, Sep 1, Sep 25, Oct 30 1931 - Feb 1956 - Jan 1, Feb 1, Jun 1, 1933 - Jan 1 Jul 1 1957 - Jun 1 1936 - May 1. Sep 15 1939 - Dec 1958 - Jan 1, Apr 27, Aug 1, 2 1940 - Apr 28 Sep 1, Dec 1 1959 - Feb 1, Dec 1 1943 - Jan 1 1944 - Sep 15 1960 - Mar 1, Sep 25 1946 - May 15 1961 - Jul 1, Aug 1, Sep 24 1962 - Mar 1, Jul 1, Sep 1, 1947 - Nov 1 Oct 1, Oct 28 1948 - Aug 15 1952 - Aug 1 1963 - Jan 1, Mar 1, Apr 1, Apr 28, Jun 1, Jul 1, 1953 - Jan 1, Mar 1 1954 - Mar 11, Nov 1 Aug 1, Sep 1, Sep 29, 1955 - Aug 1, Oct 30 Oct 27. Dec 1 1956 - Mar 15, Apr 29, Sep 1 1964 - Jan 1, Feb 1, Mar 1, Apr 26, Jun 1, Jul 1, 1957 - Dec 1 1958 - Feb 1, Apr 27, Oct 26 Aug 1, Sep 1, Oct 25 1965 - Jan 1, Apr 1, Apr 25, 1959 - Jun 1 Jul 1, Aug 1, Sep 1, 1960 - Mar 1, Jul 15, Oct 30 1961 - Mar 1, Apr 30, Jul 2, Oct 1, Oct 31, Dec 1 1966 - Jan 1, Feb 1, Mar 1, Aug 1 Apr 1, Apr 24, Jun 1, 1962 - Feb 1, Apr 1, Apr 29, Sep 1, Oct 1, Oct 30, Jul 1, Aug 2, Aug 29, Dec 1 Oct 28. Dec 1 1967 - Feb 1, Mar 1, Apr 1, 1963 - Jan 8, Mar 1, Apr 28, Apr 30, Jun 1, Jul 1, Jul 1, Oct 1, Oct 27 Aug 1, Sep 1, Oct 1, 1964 - Jan 15, Mar 1, Jun 5, Oct 29, Dec 1 Jul 1(R), Aug 16, Oct 25, 1968 - Jan 1, Feb 1, Apr 1, Dec 3 Jun 1, Jul 1, Sep 1, 1965 - Jan 11, Mar 1, Apr 25, Oct 1, Oct 27 Jun 14, Jul 11, Sep 8, Oct 31, Dec 10

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TWA (Cont'd)
1966 - Jan 14, Apr 1, Apr 24,
       May 23, Jul 5, Aug 1,
       Sep 1, Oct 30, Dec 1
1967 - Jan 1, Feb 3, Mar 1,
       Apr 30, Jun 1, Jul 16,
       Aug 7, Oct 1, Oct 29
1968 - Jan 4, Feb 1, Mar 18,
       Apr 28, Jun 1, Jul 1,
       Aug 1, Sep 1, Oct 1,
       Oct 27, Dec 11
1969 - Jan 15, Feb 9, Mar 2,
       Apr 27. Jun 1. Jul 1.
       Oct 26, Dec 13
1970 - Feb 1, Mar 18, Apr 26,
       Jun 1, Jul 3, Sep 1,
       Oct 25
1971 - Jan 6, Apr 25, Jul 1,
       Sep 15, Oct 31, Dec 1
1972 - Jan 5, Jun 1, Jul 1,
       Sep 15, Oct 29, Dec 15
1973 - Feb 1, Mar 18, Apr 29,
       Jun 1, Jul 1, Sep 15,
       Oct 28
1974 - Jan 7, Mar 1, May 1,
       Jun 15, Aug 1, Sep 15.
       Oct 27, Dec 1
1975 - Jan 6, Feb 23, May 1,
       Jun 15, Aug 1, Sep 8,
       Oct 26. Dec
1976 - Jan 5, Mar 1, Apr 25,
       Jun 10, Jul 1, Aug 1,
       Sep 9, Oct 1, Oct 31,
       Dec 15
1977 - Mar 1, Apr 24, Jun 9,
      Sep
          8, Oct 30
1978 - Jan
United Air Lines
1933 - Jan 15, Jul 1, Sep 1
1937 - Feb 1
1938 - Jul 1
1945 - Feb 1, Apr 1
1950 - Aug 16, Nov-Dec
1952 - May
1955 - Mar 1, Aug 1
1956 - Apr 29
1957 - Aug 1, Oct 27
    - Jan 12, Mar 1, Apr 1,
       Apr 27, Jun 6, Dec 1
1960 - Jul 5, Aug 2, Sep 25,
       Oct 30
1961 - Jan 8, Apr 30, Jun 1,
      Jul 1, Aug 1
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1962 - Mar 8, Apr 29, Jun 1,
       Jul 10, Aug 1, Sep 10
1963 - Feb 1, Mar 10, Apr 28,
       Jul 8, Aug 5, Sep 8.
       Oct 27, Dec 1
1964 - Feb 1, Mar 1, Jun 1,
       Aug 9, Sep 27, Oct 25
1965 - Mar 2, Apr 25, Sep 1,
       Oct 31
1966 - Jan 9, Mar 1, Apr 24,
       Jun 1, Aug 1, Sep 1,
       Oct 30
1967 - Jan 15, Mar 7, Apr 1,
       Apr 30, Jul 9, Sep 10,
       Oct 29, Dec
1968 - Jan 15, Mar 1, Apr 28,
       Jun 1, Aug 1, Oct 1,
       Oct 27, Dec 1
1969 - Jan 15, Mar 15, Apr 27m
       Jun 1, Aug 1, Oct 26
1970 - Jan 15, Apr 26, Jul 1,
       Sep 14, Oct 25, Dec 17
1971 - Feb 1, Apr 25, Jun 11,
       Sep 13, Oct 31, Dec 16
1972 - Feb 1, Apr 30, Jun 1,
      Jul 1, Sep 11, Oct 29,
       Dec 14
1973 - Jan 31, Mar 2, Apr 1,
       Apr 29, Jun 1, Jul 1,
       Sep 10, Oct 28
1974 - Mar 1, May 1, Jul 1,
       Sep 9, Oct 27
           7, Jan 31, Mar 2,
1975 - Jan
      May 1, Jun 13, Sep 3,
       Oct 26
1976 - Mar 2, May 3, Jun 11,
      Sep 8, Oct 31, Dec 16
1977 - Jan 5, Apr 24, Jun 10,
      Sep 7, Oct 30, Dec 15
1978 - Jan 4, Jan 31
  STOUT - 1929 - Jul 15
Western Airlines
  Inland Air Lines - 1938 - Oct 15
  Western Air Express - 1931 -
                        Apr 20
  Wyoming Air Service - 1932 -
        1932 - Oct 1, 1945 Feb 1
1951 - Sep 30
1952 - Aug
1953 - Jan, Mar
1954 - Nov 1
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- Mar 1, Jul 16, Nov 1

Western Airlines (Cont'd) 1956 - Jan 5, Apr 29 1957 - Jul 1, Dec 1 1958 - Jan 10, Jun 10, Sep 1, Sep 28. Dec 1 - Sep 27 1960 - Sep 25 1961 - Apr 1, Jun 1, Sep 24 1962 - Aug 1, Sep 4, Sep 30, Oct 28, Dec 1 1963 - Jan 10, Mar 1, Jun 1, Jul 1, Sep 3, Oct 27, Dec 1 1964 - Mar 1, Jun 10, Sep 8, Oct 25 - Apr 1, Jun 1, Jul 1, Aug 1, Sep 7, Oct 31 1966 - Jan 6, Mar 1, Apr 24, Jun 1, Aug 1, Sep 6, Oct 1, Oct 30 1967 - Jan 7, Mar 1, Apr 30, Jun 1, Aug 1, Sep 6, Oct 29 1968 - Jan 6, Mar 1, Apr 28, Jun 1, Jul 1, Aug Sep 7, Oct 27, Dec 1969 - Apr 1, Apr 27, Jun 1, Jul 1 to Oct 25, Oct 26, Dec 1970 - Jan 6, Mar 1, Jun 1, Aug 1, Oct 1, Oct 25 1971 - Jan 5, Mar 1, Jul 1, Sep 8, Oct 31 1972 - Mar 1, Apr 30, Jul 1, Sep 6, Oct 29 1973 - Jan 5, Mar 1, Apr 29, Jul 1, Sep 6, Oct 28 1974 - Jan 6, Mar 1, Apr 28, Jul 1, Sep 10, Oct 27 1975 - Jan 8, Feb 23, Apr 27, Jul 1, Sep 10, Oct 26 1976 - Jan 15, Mar 1, Apr 25, Jul 1, Sep 8, Oct 31 1977 - Jan 15, Mar 1, Apr 24, Jul 1, Sep 7, Oct 30 1978 - Jan 15, Mar The author wishes to thank Mary Cearley, Bruce Drum, Pete Krey, and Perry Sloan.



FLIGHT EXCHANGE

Phillip Glatt, M-34 Millpond Road, Broadbrook, Conn. 06016 is looking to buy or trade post cards, 35mm color slides of airliners. He is also looking for any dining service items from any airline in the world. Send Phil a list of what you have.

Landall R. Ropke, 201 Birchwood, Williamsville, N.Y. 14221 is looking for copies of the following books: "Ceiling Unlimited", "Maverick", "The Probable Cause", "The Electra Story", "The Left Seat", all by Robert Serling. Also looking for "American Airlines Since 1926" by C. R. Smith. Mr. Ropke has PSA L-1011 (3 different) post cards for trade.

Tom Kalina, 431 Seneca Lane, Bolingbrook, Illinois 60439 is looking for slides of the following Be-18's belonging to Buckeye Air Service from 1971 to 1974: N4277B, N9909Z, N244V, N125TF, N1019B, N202LA, N3785A, N469DM, N601K, and N8794 (turbo-beech w/nose extension). Will buy or trade.

George Minarik, 3227 N.E. Arthur St. Minneapolis, Minn. 55418 has the following models for sale: Revell 1/144 Delta L-1011, Western DC-10; 1/150 Paremount YS-11; Lindberg PAA 707, etc. Set of 8 old box art Aurora airlines including 880, DC-9, DC-8, etc. Decals for airliners also. Send SASE for listing.

Jay L. Pickering, Route #1, Pickering Road, St. Clairsville, Ohio 43950 would like to obtain any and all issues of the "Airport World" which was published in the late 1960s and early 1970s.

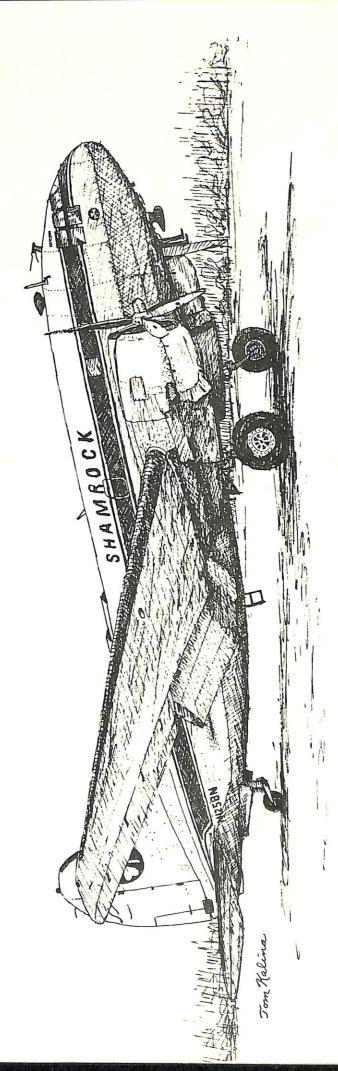
Also any old OAGs(1966-1970-1971) and most recent post cards of U.S. airports and commuter airliners.

Tom Kalina, 431 Seneca Lane, Bolingbrook, Illinois 60439 is looking for the following post cards: Northeast DC-6B (D-1039); United DC-6B old colors on ground, nose views (D-1094); United DC-7 old colors w/DC-7 on tail (D-1095); United DC-7 old colors (D-1097); National DC-7B w/stars (D-1117); Braniff DC-6 "El Conquistador" (D-1121). Tom has for trade: Delta DC-7 (D-1016); PAA DC-7C (D-1049); American DC-7 (D-1130, D-1131, D-1132 and D-1134); American DC-6 (D-1128); United DC-7 (D-1100); and United DC-6B (D-1137). For particulars and/or complete trade/want list send large SASE.

George Cearley, Jr. 4449 Goodfellow Drive, Dallas, Texas 75229 is interested in obtaining copies of the following system timetables: DELTA 1960-Feb. 1, March, July 1, Sept. 1, October 30, and December 1; 1961-Jan. 1, Feb. 1, June 11, Aug. 1, Oct. 1, Oct. 29, Dec. 15; 1962-March 1, April 1, June 1. NATIONAL 1959-Oct 25; 1960-Jan. 11, March 15, July 1, Aug. 1, Sept. 25, Oct. 30, Dec. 1; 1961-March 1, April 1, June 11, July 1, Aug. 1, Sept. 24, Oct. 29, Dec. 1; 1962-Jan. 8, Feb. 1, March 2. EASTERN 1960-Jan. 1, Jan. 24, Feb. 15, March 1; 1961-Oct. 29, Dec. 1; 1962-April 29. George is willing to buy schedules. Also he is willing to trade away many old and quite rare foreign schedules from the 30's, 40's and 50's. Write him for details.

Paul Collins, 3381 apple Tree Lane, Erlanger, Kentucky 41018 is looking for any material dealing with the Gulf Air L-1011. He would like to thank those of you that have sent in material in answer to his previous requests, however, he feels there must be additional material available. Paul would also like to receive anything extra you might have, collecting dust, having to do with the DC-3, likewise the Boeing 727. Will buy or trade. Send him a list of what you have and what you want for it.

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NAME OF PARENT OR GUAR	DI AN (Parent or Guardian'	s Name is ESSENTIAL to insure a	la livativa (William	

GATE 66, P.O. Box 83, Santee, California 92071, has a lot to offer the airline modeler. A great monthly newsletter full of modeling tips and ideas, great offers on models, decals, books and other goodies. Steve Mason works GATE 66 so drop him a line to find out what is happening. Tell him the World Airline Hobby Club sent you.

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R.V.F. IMPORTS, P.O. Box 528, Van Nuys, California 91408, is importing airliner kits from Czechoslovakia, Mexico and Brazil. They also have profile publications, airline decals, and South American post cards. Send now for free list of items to Ron V. Ferreyra, who is head guy at R.V.F. IMPORTS.

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RARELINERS P.O. Box 6283, Crossroads Stations, Bellevue, Washington 98007, is offering a nice decal sheet for the Airfix Boeing 737 featuring the new color scheme for Frontier Airlines. The company is a new one and promises to have some good material in the future. The Frontier sheet is \$1.50--and worth it.