

### CAPTAIN'S LOG

**SPRING 1981** 





#### THE CAPTAIN'S LOG

#### PUBLICATION OF THE WORLD AIRLINE HOBBY CLUB

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#### Publication Dates:

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#### Changes of Address:

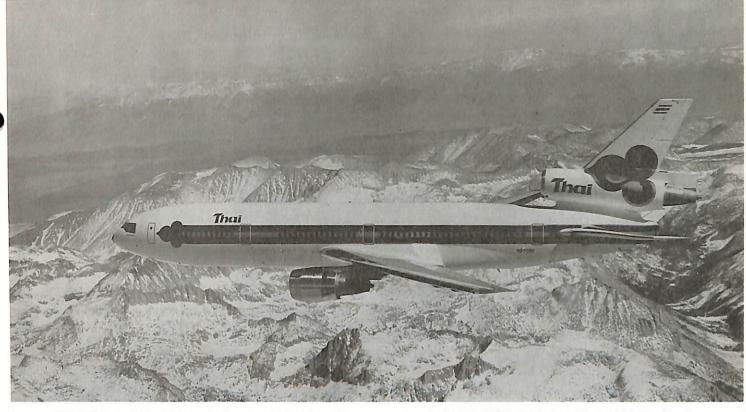
Please report any change of address promptly to the WAHC President. Improper address will result in member not receiving a copy of the CAPTAIN'S LOG since the third class postage rate does not allow forwarding. If it is necessary to send another copy of the LOG to members who have not reported a change of address, the member will have to pay postage costs.

#### Contributions Welcome:

Anyone wishing to contribute articles, photographs, or other items of interest to our membership is welcome to do so. The editor welcomes inquiries on ideas for articles.

#### Flight Exchange:

The CAPTAIN'S LOG will publish members' wants, trades, and offerings concerning the history of airlines and airliners. These will be published in "Flight Exchange." All material for "Flight Exchange" should be sent directly to the WAHC President. All inquiries for advertising should also be sent to the WAHC President.



Thai International DC-10-30. McDonnell Douglas photo. See page 5 for the DC-10 story.

#### SPRING 1981

#### FLIGHT MANIFEST

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Cover photo: Finnair DC-10-30 in a beautiful flight scene, courtesy of McDonnell Douglas. The Douglas sticker included with this issue of the LOG is being sent to you through the courtesy of the Travel Industry Affairs section of McDonnell Douglas.



Republic Airlines Boeing 727-2S7 N715RC "at the gate" at Milwaukee (MKE). Photo by Gary Dolzall.

AT THE GATE

Paul Collins began his editorial last issue by thanking the membership for its support. I'd like to begin as editor by thanking Paul, on behalf of the staff, the membership, and myself. Paul has devoted countless hours of his time to developing the World Airline Hobby Club and the CAPTAIN'S LOG. That he has been successful in the former is evident as our club's membership roster reaches toward 600. That he has been successful in the latter is shown in the extraordinary team he has developed to aid me in putting the LOG together. Take this issue for example-it comes to you from enthusiasts in Florida and Oregon, California, Texas, Australia, and a variety of other locations.

As I write this first editorial, the Spring 1981 issue of the LOG is but a large pile of "camera-ready" pages soon to go to the printer. I'm anxious to see the issue, and hope you enjoy its contents. If there are some unseen "glitches" in my preparation of this issue, please bear with me. Paul, the staff, and I are anxious to improve the LOG, and I'm certain we will with your help.

To lessen confusion in the future, let me go over a few of the new divisions of duties. Any major feature stories, or inquiries about doing articles or columns should be directed to me. As in the past, materials concerning specific columns, such as labels, post cards, timetables, etc., should be addressed to the appropriate staff member as listed on page 2. All "Flight Exchange" materials--your wants and trades--plus all advertising copy should still go directly to Paul Collins. Please direct all dues payments, changes of address, and other club business to Paul also. And finally, Paul will be taking care of reporting on club events, so send your reports of club meets to him. And please do send those reports!

We all like to hear what other members in other locations are accomplishing, and hopefully such club reports will spark more of us to get together in our regions.

Since the International Convention (Miami, June 19-21) is earlier this year, this issue of the LOG will be the last you receive before the convention. The Miami event promises to be an exceptional one -- be there if you can! Since the summer issue of the LOG is due to be mailed on June 15 -- only four days before the convention -- we'll be holding that issue back one or two weeks, and will plan to include reports on the convention in that issue. One final convention item: For the photographers and spotters among us, MIA and FLL offer an exciting opportunity. Bruce Drum, convention chairman and Managing Editor of the North American Aviation News, tells me that NAAN will be featuring a report on MIA and FLL this spring to aid convention-goers in finding the best photography and spotting locations, so watch NAAN for this useful information before you head for Miami.

Finally, I want to express my interest in hearing from the membership on what new features or columns would be welcome in the LOG. Take a few moments, and offer me your suggestions. One regular addition to the LOG being planned is to feature an interesting airport in each (or at least most) issues. If you're interested in writing an article detailing the history and current operations of a major airport in your area, I'd certainly like to hear from you.



McDonnell Douglas photo; courtesy of the author. .

### DC-10

GEOFF THOMAS

THE ORIGIN of the McDonnell Douglas DC-10 can be traced back to the summer of 1964, when the United States Air Force issued contracts to Douglas, Boeing, and Lockheed for the design of a new giant cargo plane. From these contracts, the world's largest aircraft, the Lockheed C5, was eventually born.

With the USAF contract going to their competitor, both Boeing and Douglas turned their new technology toward the civil market. At Douglas, this planning was to produce a design for a double-deck, four-engine aircraft which could carry up to 562 passengers. Douglas estimated its new design could be built and put into service by 1974-75. Also at this same time, Douglas was proposing new versions of the Super DC-8, the Series 80, which would have an increase in cross-section and would have a maximum seating capacity of 350.

Several factors soon changed Douglas' plans. Douglas was not in a good position to launch major new programs because (a) it had underestimated the market for the DC-9 and was working feverishly to keep up with orders, and (b) the escalation of the Viet Nam conflict was creating a se-

vere shortage of jet powerplants. This situation and a number of other considerations lead at this same period to Douglas' merger with McDonnell Aircraft.

Boeing, faced with the competition of the Super DC-8's already in service, launched its now famous 747 widebody, capturing the market for the truly huge, four-engine jumbo. Douglas began looking into other market segments to utilize the new technology at its disposal. The new market appeared with the noted American Airlines requirement for a twin-engine aircraft design that was circulated to the manufacturers in the spring of 1966. With Boeing preoccupied with the 747 project, both Douglas and Lockheed pursued the AA requirement with vigor. In consultation with Douglas, American's twin became a threeengine aircraft capable of transcontinental service, with the potential for transatlantic range. American re-issued its requirement, in trijet form, in July 1967.

From these events, the newly-formed McDonnell Douglas Corp. and Lockheed ended with nearly identical aircraft designs, with only the tail engine layout providwith only the tail engine layout providing a major visable difference. There were,

of course, many differences in aircraft systems and manufacturing.

THE FIRST ORDERS

American Airlines gave the new DC-10 a distinct edge over the budding Lockheed L-1011 Tristar in February 1968 when it ordered 25 DC-10's with an option on a further 25 aircraft. At this time, Aviation Week stated that Eastern would follow suit and order the DC-10. However, in strong pricing action, Lockheed reversed the trend and obtained orders from not only Eastern but also TWA. When a few days later both Delta and Northeast signed up for the L-1011 Tristar the outlook for the DC-10 began looking bleak.

A Business Week article about McDonnell Douglas in 1968 provided some interesting insight into the sales and pricing battle going on between Douglas and Lockheed. Reports were that several airlines lining up for the L-1011 actually preferred purchase of the DC-10, however, Mr. McDonnell would not drop the price of the trijet, leaving the L-1011 with a price advantage. Some executives at Long Beach felt that if McDonnell would accept a short term cash loss on early DC-10 sales the L-1011 could be forced out of the market. That would leave the entire market to the DC-10. However, it must be recalled that McDonnell-Douglas was involved in a number of projects at this time, and surely did not want to incure massive debts which would be difficult to overcome. Nonetheless, McDonnell Douglas did reduce the price of

the DC-10 to some degree and was able to secure the crucial United Airlines order for 30 aircraft in April, thus insuring production.

Apart from Air Canada's early purchase of the L-1011, the DC-10 began to roll up a commanding sales lead over its competitor. Several factors had an effect. First, Douglas quickly offered the DC-10 in a number of intercontinental models, in contrast to Lockheed. Douglas' ties with its traditional customers likely also had some effect, although not as much as one might expect (as is illustrated by big Douglas users Eastern and Delta going with Tristars).

It must be remembered that while Douglas was long established in the commercial field, the other half of the new firm--McDonnell-was basically an unknown commodity to the airlines. Finally, there was the much discussed financial plight of Lockheed and its engine supplier for the L-1011, Rolls-Royce. It has been argued that this situation caused many lost sales for Lockheed, but such is not true with the possible exception that it limited Lockheed's ability to compete with the DC-10's variety of model variations, as mentioned above. The DC-10 gained only one buyer directly from the Lockheed/Rolls-Royce situation--Delta for the short term. And Delta's aircraft were purchased with the full expectation of being sold to United, as they later were. Delta's DC-10's were built completely to United specifications. Nonetheless, by roll-out date in July 1970,



In the huge McDonnell Douglas facilities at Long Beach, Calif., a line of DC-10's take shape. The first DC-10 was rolled off the assembly line on July 23, 1970. McDonnell Douglas photo, courtesy of the author.

16 airlines had ordered 123 DC-10's with options on 122 aircraft, while the Tristar had but 99 firm orders and 39 options from six airlines and two leasing companies.

IRST FLIGHT

The first flight of the DC-10 took place on August 29, 1970: Five aircraft eventually took part in the certification process, and the only major problem encountered was the decompression explosion of a cargo door during ground tests. Certification of the DC-10 was accomplished in July 1971, and deliveries began to United and American. Both AA and UA received the DC-10 Series 10, the domestic version of the new trijet. Commercial operations began on August 5, 1971 with a flight on America's Chicago-Los Angeles route. United followed suit nine days later, using the DC-10 on its Washington, D.C.-San Francisco route.

#### OPERATION AND PASSENGER REACTION

The DC-10 became a popular, successful aircraft with passengers, crew, and maintenance staffs immediately. The DC-10's cabin was quiet and it featured 30 percent more window area, in proportion to total size, than any other jetliner. No passengers were seated more than one seat from the aisle. For the flight crew, the cockpit was spacious with superb visability, and the DC-10 boasted the most advanced technology available at the time. From a aintenance standpoint, the DC-10 demontrated excellent reliability. Infact, United stated that the new DC-10 was the. best aircraft it had ever placed in service.

#### NEW VERSIONS

The first flight of the DC-10 Series 20 and DC-10 Series 30 took place on February 29 and June 21, 1972 respectively. Certification followed on October 20 for the Series 20, and November 21, 1972 for the Series 30. At the request of Northwest Chairman Nyrop, the Series 20 was renamed the Series 40 in a public relations ploy

to imply that it was more advanced than the Series 30. The Series 30, of course is the intercontinental DC-10. The Series 40 is powered by Pratt & Whitney engines while all other DC-10's use General Electric powerplants. Northwest commenced operation of the DC-10-40 on its Minneapolis-Milwaukee-Tampa route on December 13, 1972, and Swissair started DC-10-30 service on the Zurich-Montreal-Chicago route on December 15, 1972. By the end of 1973, orders had climbed to 211 from 30 airlines while 125 Lockheed Tristars had been sold to 11 airlines.

#### THE PARIS TRAGEDY

The history of the DC-10 took a tragic turn in March 1974 with the loss of a THY Thurkish DC-10 after takeoff from Paris. The cause of the accident has been welldocumented as the loss of control due to a decompression explosion caused by the loss of a rear cargo door. The debate about responsibility for the crash will go on for years, however it is worth mentioning that in the official reports published two years after the accident several crucial points were to emerge. Adjustments had been made to the cargo door's locking mechanism. The warning light system in the cockpit had been adjusted to make it inoperable -- a warning light had been giving some trouble. Further, no visual inspection was made to insure lockpins were engauged after closing the door. Some interesting points were made by Captain Bryce McCormick, captain of the AA DC-10 that lost an aft cargo door in 1972, in a letter to Aviation Week. He suggested that perhaps the damage to the Turkish aircraft might not have been as great as to his aircraft. McCormick stated that the Turkish pilot had perhaps made an emergency descent without consideration of the integrity of his controls, and when he tried to pull out he did not have adequate control. The Turkish DC-10 (after loss of the door) went into a -20 degree descent for 7200 feet and then this decreased to -4 degrees before impact. In the AA occurance, Captain McCormick applied power to the number 1 and 3 engines and regained control.

American inaugurated DC-10 service on August 5, 1971 on its Chicago-Los Angeles route. Nine years later, American DC-10-10 N107AA was photographed lifting away from the runway at Chicago ORD. Photo: Gary Dolzall.





Above: French international carrier UTA operates six DC-10-30's throughout the world. Colors are blue and white, with green doors. McDonnell Douglas photo.



Left: Viasa DC-10-30 touches down at Miami after a flight from Caracas, Venezuela. Viasa, the South American country's flag carrier, employs DC-8 and DC-10 aircraft. Photo by Gary Dolzall

Below: Trans International (now TransAmerica) purchased three DC-10-30CF's. Airline has since purchased larger 747's. McDonnell Douglas photo.





Above: Charter and transcontinental carrier World Airways employs colorful red, white, gold, and silver DC-10's. McDonnell Douglas photo.

Thailand's Air Siam took delivery of a single DC-10 in 1974. Airline has since been dissolved, aircraft went to Korean Air Lines. McDonnell Douglas photo.

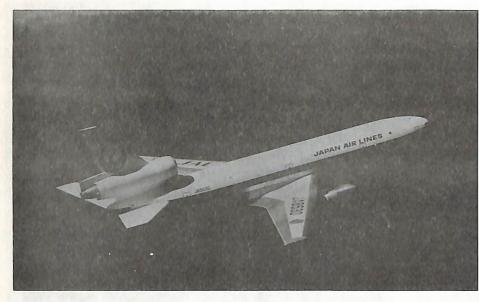


Below: In addition to VIASA, the DC-10 also found a home in South America with Brasil's international carrier, VARIG. McDonnell Douglas photo.





Above: Charter carrier Overseas National operated three DC-10-30's; two were written off in accidents. N1033F now flies for Spantax. M-D photo.



Left: In addition to Northwest Orient, Japan Air Lines operates the P&W powered DC-10-40. McDonnell Douglas photo.

Below: British Caledonian's elegant DC-10's, such as G-BEBM shown in this McDonnell Douglas aerial view, can be spotted in Atlanta, St. Louis, and Houston.



#### THE KC-10

By the end of 1976, 246 DC-10's had been sold. During 1977/78, 72 additional DC-10's were sold while customers increased to 44. A major boost for McDonnell Douglas came when the DC-10 was selected as the basis for the United States Air Force's new refueling tanker, which was designated the KC-10. The USAF cited the DC-10's ability to land at more airfields than the 747 as critical in the selection of the trijet. A total of 26 aircraft were planned for construction, however this number has since been increased.

#### STRETCHED DC-10's

With sales on solid footing, the time seemed right in the late 1970's for the next major stage--stretching the DC-10. Douglas had been marketing the concept of the stretched DC-10 for some time and Swissair, Alitalia, and Air New Zealand had expressed definite interest. By early 1979 it seemed certain that the larger models of the DC-10 would receive the go-ahead by summer. Apart from the stretch of the fuselage, other changes would be made. The wing would have new flaps, larger spoilers, new slats, and seven-foot wing extensions. The program was to follow the pattern set by the DC-8 Super series. The first new DC-10 would be the DC-10-61 with a 40-foot stretch and the DC-10-30 wing. It would be marketed for U.S. domestic operations and would carry up to 390 persons in a mixed class configuration. The DC-10-62 would offer a 26-foot stretch with a new wing and undercarriage. Range would be similar to the Series 30, with a capacity for 350 passengers. The final model, the DC-10-63, would combine the 40-foot stretch of the -61 with the new wing of the -62 and be capable of a range of approximately 4700 nautical miles. For the DC-10 program the future looked good. United and Alitalia had just placed orders including the first order for an all-freight DC-10 (Alitalia), however upheaval was just around the corner.

#### THE CHICAGO CRASH

On May 25, 1979 American Airlines DC-10 N110AA crashed on takeoff from Chicago O"Hare after the left engine and pylon seperated from the aircraft. There was a total loss of life. After exhaustive tests the DC-10 design was found to be technically sound, however the publicity and the FAA grounding of the DC-10 after the crash had served up a serious blow to the DC-10 program. And although the 1979 losses of an Air New Zealand and Western DC-10 had absolutely nothing to do with aircraft failure, both added somewhat to the public's lack of confidence in the DC-10. By the end of 1979, the reputation of the DC-10 was, in many quarters, in tatters.

What effect the Chicago crash and its shock waves had on airline boardrooms will probably be debated for years. The ripples of the AA accident and grounding of the DC-10 quickly became muddled in with a

generally sluggish market caused by a softening economy and escalating fuel prices.

#### RETRENCHMENT

Whatever the cause, the most profound event of late 1979 was the shelving, at least for the time, of the stretched DC-10 program. While one airline, United, was still showing some interest in the stretch program, McDonnell Douglas could not obtain commitments for an adequate number of aircraft to launch the program. And in the face of poor economic conditions even United's enthusiasm for the stretched DC-10 seemed questionable. Following the decision not to proceed with the Series 60 DC-10, several airlines -- Air New Zealand, Swissair, and Alitalia -- all ordered 747's. Alitalia stated recently that its order for six DC-10's had indeed been dropped because Douglas would not guarantee that the DC-10-62 would be built. A further problem arose when Singapore Airlines, Thai International, and Air New Zealand announced they would be phasing out all or most of their DC-10's. Various reasons caused these moves. Air New Zealand has frequency of service limits on its USA-New Zealand routes and thus needed larger aircraft (747's) to meet the market demands. Some Air New Zealand DC-10's will probably remain in service on other routes. Thai International had an option to drop the DC-10-30's if the stretched DC-10's were not constructed. Like Air New Zealand. Singapore Airlines is faced with the need for more capacity than the DC-10 can offer. Singapore Airlines also already operates the 747. The availability of these carriers' DC-10's (plus some from other companies, i. e., Continental) has certainly slowed McDonnell Douglas sales of new DC-10's.

#### NEW VERSIONS

While the DC-10 Series 60 has not been launched, two new DC-10 versions have emerged over the past year. The first of these is the DC-10-15 which combines the DC-10-10 airframe with the powerplants of the Series 30, giving excellent "hot and high" performance. Launch customer, and a new DC-10 operator, is Mexicana. The other new DC-10 variant is the DC-10-30ER launched recently by Swissair. Extra fuel capacity added in the rear cargo hold area provides an additional range of 800 miles.

#### CONCLUSIONS

The DC-10 is now operated by or on order with 52 airlines. Total firm sales are at about 355 aircraft with an additional 38 on option. The world's largest DC-10 operator is United with 47 aircraft in service or on order. Although several airlines have moved up to the Boeing 747 to meet capacity needs, McDonell Douglas holds a larger DC-10 customer base, including the USAF, from which to gain further DC-10 orders and perhaps still launch the Series 60's.



Today, the Boeing 727 serves as the heart of the Continental fleet. Photographed in Denver, CO 727-76 N18480 began its service career on TAA. Gary Dolzall photo.

#### **Continental Airlines**

GEORGE CEARLEY

CONTINENTAL, the airline known for its golden-tailed aircraft, outstanding in-flight service, and long standing capable leadership by Robert Six, now has an extensive route structure spanning North America, the Pacific, and extending to the Far East and Australia. The history of this major airline dates back to a small operation in Texas, New Mexico, and Colorado over 46 years ago.

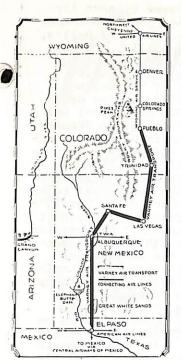
In 1934, Walter T. Varney founded the Southwest Division\* of Varney Speed Lines in cooperation with an associate, Louis H. Mueller. Varney was granted the air mail contract for the route between Pueblo and El Paso with stops at Santa Fe and Albuquerque. The first operation over the new route was July 15, 1934. Also, an initial passenger route was operated between Denver and El Paso via Pueblo, Santa Fe, and Albuquerque by Varney's Southwestern Division. No mail was carried between Pueblo and Denver, and this route was soon suspended but the company continued to carry passengers and mail between Pueblo and El Paso. Varney's headquarters were originally in Denver but were moved to El Paso following the suspension of Denver-Pueblo passenger services.

\*Other division of Varney in Calif.

On December 17, 1934, Varney Speed Lines was reorganized as Varney Air Transport, Inc., with Louis H. Mueller as its new head. Walter T. Varney withdrew his interests in the company to pursue other aviation interests in Mexico. The fleet of Varney Air Transport at this time consisted of four nine-passenger Lockheed Vegas with a cruising speed of 145 mph. Business was slow, with an average of only five passengers carried per week.

In 1935, Robert F. Six acquired substantial shareholdings in Varney Air Transport and the company entered a period of steady if unspectactular growth. The little airline's first modest expansion came on May 14, 1937, when Varney purchased the Pueblo-Denver air mail route from Wyoming Air Service. Three Lockheed L-12's were acquired and replaced the older Vegas.

on July 1, 1937, Varney Air Transport's name was changed to Continental Air Lines, Inc., the present day company, and headquarters were moved back to Denver from El Paso. Steady growth and expansion continued in the period preceding World War II. In 1939, Lockheed L-14 "Super Electras" were purchased. Each aircraft flew at a speed of





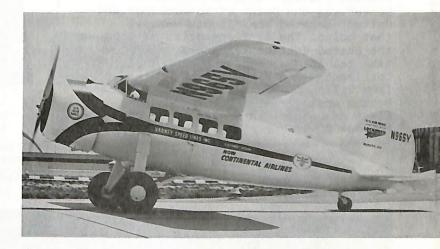


Left to right: Map showing Varney's original air mail route from El Paso, Texas to Pueblo, Colo.; Varney timetable dated December 1, 1935; 1937 Continental timetable cover. All from George Cearley collection.

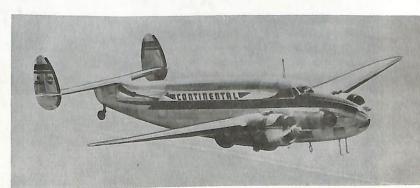
200 mph and carried 14 passengers. The same year, Continental's routes were extended from Denver to Wichita, giving a new system route mileage total of 1030 miles. In 1940, the route structure grew to 1261 miles with the inauguration of new service at Rosewell, Hobbs, and Carlsbad from El Paso and Albuquerque. Also in 1940, Lockheed L-18 "Lodestars" carrying 14 passengers at a speed of 205 mph were introduced. In 1941, three more Lodestars were delivered to replace the older L-14's and routes were extended southeastward from Wichita to Tulsa.

Continental, like other airlines, was involved in the U. S. defense effort during World War II. A \$5,000,000 modification center was established at Denver where more than 1000 B-17's underwent modifications and were made ready for the war effort. Other wartime operations included a transcontinental cargo route from San Francisco to Harrisburg.

During the latter period of the war in 1944 two major additions were made to Continental's route structure. Service was extended from (1) Denver to Kansas City and (2) El Paso to San Antonio. Also in 1944, the workhorse of the airways, the Douglas DC-3, joined Continental's fleet. The DC-3 carried 21 passengers at 180 mph. By year's end system



Above: Four Lockheed Vegas with a cruising speed of 145 mph served Varney's early routes. Below: Continental's 14-passenger, 205 mph Lockheed L-18 Lodestar. Photos courtesy Continental.



route miles totalled 2359. This figure grew to 2884 miles in 1945 as a result of a route extension from Hobbs to Oklahoma City and Tulsa with through service offered between Tulsa and El Paso. Continental's route structure remained fairly constant during the remainder of the decade. One major event occured in 1949, the inauguration of service with the twin engine Convair 240, which carried 40 passengers at a cruising speed of 285 mph.

In 1951, Continental extended service from San Antonio to Houston and began through one-plane interchange service with American Airlines between Houston, San Antonio, El Paso, and California, using a new DC-6B carrying 62 passengers at 300 mph. El Paso served as the interchange point with routes east of El Paso being operated by Continental crews and west of El Paso by those of American. The last operation of the Continental-American interchange was June 10, 1961. Additional interchange agreements were made in 1952. Through Denver-St. Louis plane service was begun with Mid-Continent with Kansas City as the interchange point. Mid-Continent crews flew the planes between St. Louis and Kansas City. The arrangement continued with Braniff Airways following Mid-Continent's merger into the Braniff system on August 16, 1952. Also in 1952, through service with United Air Lines between Tulsa and Wichita and Seattle/Portland was begun. Denver was the point of interchange and United operated the flights west of that point. The last operation of both the United-Continental and Braniff-Continental interchanges was June 1967. Continental's own routes were extended from Tulsa to Kansas City in 1952 and by the end of the year the company's fleet comprised ten DC-3's, five CV-240's, and one DC-6B.

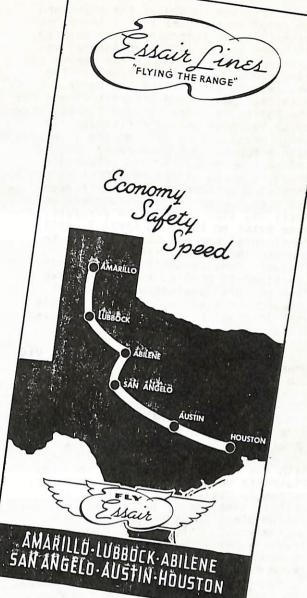
Continental purchased Pioneer Air Lines on April 1, 1955, adding numerous cities in Texas. These included Dallas, Fort Worth, Austin, Amarillo, Lubbock, Midland/Odessa, Waco, Temple, College Station/Bryan, Abilene, and Clovis. Pioneer was the first of the second level (regional) airlines--being organized in the late 1930's by General Smith as Essair, Inc., of Houston. In January 1939, Essair was authorized to begin experimental passenger and express service from Houston to Amarillo via Abilene. In July 1939, the plans for service were suspended as a result of an appeal to the CAB by Braniff which considered Essair's operations as an intrusion into Braniff's "Texas Sphere of Influence." However, on November 5, 1943, the CAB again selected Essair to operate the service and stated that the company was better suit ed to operate these routes than a large trunk carrier such as Braniff. Implementing this decision, the CAB established a new class of feeder airline on July 11, 1944. Essair finally began its service on August 1, 1945, over a route from Houston to Abilene using three 12passenger Lockheed L-10A "Electras." Essair's name was changed to Pioneer Air Lines on June 17, 1946. In 1952, Pioneer bought nine 36-passenger Martin 202's from Northwest Airlines. It had sold its fleet of 11 DC-3's to the United States Air Force at a profit of \$841,000. This amount was used by Pioneer to offset losses on mail subsidies, but the CAB felt Pioneer's actions were irregular and possibly inconsistent with the regulations governing public money. Pioneer was unable to demonstrate that the operation of Martin 202's would reduce subsidy. It reverted under CAB pressure to the use of DC-3's in March 1953.

Although the purchase of Pioneer marked a significant addition to Continental, an event occured later that

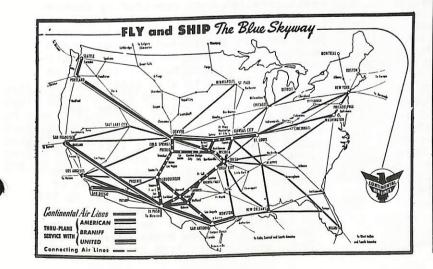
The work horse of the airways, the Douglas DC-3 joined Continental's fleet in 1944, a year Continental route miles totaled 2359. Photo: Continental.







Timetables from Continetal merger partners Fioneer and Essair, Continental's expanded route map, showing through plane services with American, Braniff, and United. All four illustrations: George Cearley collection.



## | Country | Coun

year that was to change the shape and scope of Continental from a large "regional" to an important trunk carrier. On November 14, 1955, Continental was granted a major award in the Denver service route case, from Chicago to Los Angeles via Kansas City and Denver. With this award came aircraft orders for the Boeing 707 pure jet and Vickers Vis-count 812 prop jet. The Viscount 812 was a stretched version of the Viscount, with a capacity of 15 more passengers and more powerful engines allowing a cruising speed of 350 mph. Continental's initial operation on the new Chicago-Kansas City-Denver-Los Angeles route was April 28, 1957 using DC-7B aircraft. A year prior to this, on April 1, 1956, Continental was the first airline to operate the Convair 440 (on other routes). Continental's fleet in 1957 comprised 15 DC-3's, six Convair 340's, five DC-6B's (including two leased), three Convair 440's, and five DC-7B's with 15 Viscount 800's and five Boeing 707's on order.

On February 14, 1958, the first Viscounts entered service on the Chicago-Los Angeles routes. Continental christened the new aircraft "Jet Power Viscount II." The first pure jet service with the "Golden Jet Boeing 707" (707-124) was June 8, 1959, between Chicago and Los Angeles. Five 707's entered service between June 8, 1959 and April 7, 1960. With the inauguration of 707 service, Viscounts were transfered to secondary routes in Texas and New Mexico, and Dallas, West Texas, and Albuquerque received their first Viscount service. On September 25, 1960, Houston was given its first jet service to the west coast when "Golden Jet" service was inaugurated between Houston, El Paso, and Los Angeles on the Continental-American interchange. The route was initially flown with a Continental 707 and beginning in spring 1961, with an American Airlines Boeing 720.

Another major route expansion was granted to Continental with the Southern Transcontinental Route Awards in 1961. The first service was June 11, 1961. Initial non-stop "Golden Jet 707" flights included Houston-Los Angeles, Houston-San Antonio, San Antonio-El Paso, El Paso-Phoenix, and Phoenix-Los Angeles. Tuscon was served with Viscounts initially.

In 1961, Continental's fleet consisted of five 707-124's, 13 Viscount 812's, five DC-7B's, one DC-6B, 10 leased DC-3's, with four Boeing 720-024B's on order. In 1962 the 720B's entered service and on July 16 the first pure jet service by Continental was provided in the following markets: Dallas-El Paso, Dallas-Midland/Odessa, Dallas-Albuquerque, and Albuquerque-Denver. These jet flights only lasted two months and were provided by both 707-124 and 720-024B aircraft. With the delivery of

the 720B's came an updated white, gold, and black paint scheme. 707's had been delivered in a red, white, blue and gold scheme that was updated to this scheme in 1962. Other aircraft repainted in the black, gold, and white livery included the Viscount and the DC-3. The DC-6B's and DC-7B's were not repainted in this design.

In 1963, Continental's head offices were moved from Denver's Stapleton Airport to Los Angeles International Airport. The headquarters had been in Denver for 26 years since 1937.

During the ten year period, 19641973, Continental flew 707-324C "Intercontinental Golden Jet" aircraft under
Military Airlift Command (MAC) charter
to the Orient and Southeast Asia as well
as points in Europe and North Africa.
Continental Air Services, a wholly-owned
subsidiary of Continental Air Lines,
operated charter flights in Southeast
Asia for the U. S. Agency for International Development, and for independent
contractors from 1965 to 1975.

Twin-engined short to medium range DC-9 jets were inaugurated in service on April 10, 1966, between Dallas-Lubbock-El Paso, and Dallas-Albuquerque. The following year on July 1, 1967, Continental began new service to the Pacific Northwest on the following routes: (1) New Orleans-Houston-Tulsa-Wichita-Portland-Seattle, (2) Houston-Oklahoma City-Tulsa-Wichita-Portland-Seattle, and (3) New Orleans-Houston-Wichita-Seattle. Service with the Boeing 727-224 was also inaugurated in 1967.

In 1967, Air Micronesia was founded jointly by Continental (31% interest), Aloha Airlines (20% interest), and United Micronesia Development Association-UMDA (49% interest). UMDA held an option to purchase a further 2% of stock from Continental in five years, thus jiving UMDA majority control. In addition, UMDA would then have another option to buy an additional 9% stockholding in Air Micronesia. Initial Air Micronesia services were provided by Continental entirely. Continental at this time was the only U. S. trunk carrier not to have officially granted foreign routes (excluding contract routes). Air Micronesia flights began May 16, 1968, with a 727 (DC-6B's were also used) linking major Micronesian islands with Okinawa on the west and Honolulu on the east. This put Micronesian islands on-line with transpacific airline schedules without obligation to make all flight connections through Guam. Air Micronesia's contract, in addition, called for the construction of six hotels in each of the six districts of Micronesia. In 1971 Air Micronesia gained routes to Nauru and American Samoa in the Pacific Islands Local Service Route Case. Also included were routes from Hawaii through

On April 1, 1956 Continental was the first firline to operate the Convair CV-440. All photos this page courtesy Continental Air Lines.



Continental used the DC-7B to introduce service on the Chicago-Kansas City-Denver-Los Angeles route in 1957.



"Jet power Viscount II" was Continental's name for its British-built Viscount 812's. Viscount service began on Continental on February 14, 1958.

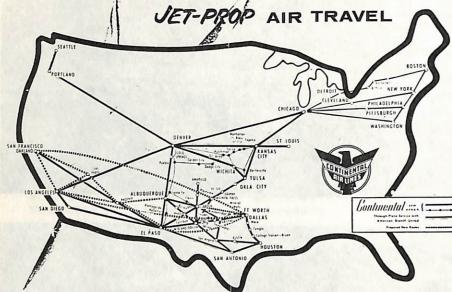


Following the Boeing 707's which introduced pure jet service to Continental in 1959 were the smaller Boeing 720's arriving in 1962.





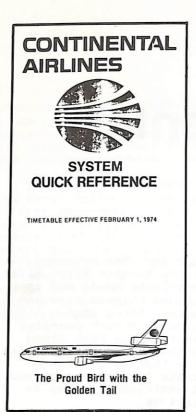
NEWEST OF ITS KIND. BRINGING
YOU VIBRATION-FREE VELVET-SMOOTH



CONTINENTAL AIRLINES

Continental proudly advertised the coming of "jet-prop" service--the Viscount 812. And below, on its April 26, 1959 timetable announced 707 service. Both illustrations from George Cearley collection.







Continental began DC-10 service in 1972, and today rosters both DC-10-10 and DC-10-30 aircraft. Continental featured the DC-10 on the cover of its February 1, 1974 timetable (George Cearley collection). Above right, Continental DC-10-10 N68050 touches down at Chicago (ORD). This aircraft has since been sold to Federal Express. Gary Dolzall photo.

Micronesia to Guam and Okinawa as well as from American Samoa and the Gilbert and Ellice Islands to Micronesia, Guam, and Okinawa. Continental continued to supply aircraft and technical support.

In 1968, the CAB recommended Eastern be granted extensive Pacific routes. However, President Lyndon Johnson substituted Continental on these routes in place of Eastern. Soon after Richard Nixon became President in 1969, Nixon reversed this to Eastern as the CAB had originally recommended, but the CAB gave the major South Pacific routes to American. Finally, on July 22, 1969, Continental was given modified approval for flights to Hawaii from the Continental United States. On September 9, 1969, Continental began service from Chicago to Los Angeles and Honolulu. Continental's first 747 service was over this route on June 26, 1970.

In 1969 Continental's fleet comprised 13 707-324C's, eight 720-024B's, 14 727's and 19 DC-9 Series 10's. The previous year a stylish new streamlined orange, red, and gold paint scheme was introduced. It was designed by Saul Bass, who became known originally for screen credit designs for "Around the World in 80 Days," "It's a Mad Mad Mad Mad World," "North by Northwest," "Westside Story," and others. His other aircraft designs have included those of Alleghany (now USAir), Eastern, and United.

In 1971, Continental inaugurated flights between San Diego-Denver, and Miami-Houston. DC-10 service was introduced in 1972, and the McDonnell-Douglas product is today the largest aircraft in Continental's fleet which consists of 727-100 and -200 planes from Boeing, and DC-10 aircraft from Douglas. The Boeing 707's, 720B's, Douglas DC-9's and Boeing 747's were all phased out of the Continental fleet in the 1970's.

In 1977, Continental began flying over new routes granted in both domestic and international markets. New daily round trips were introduced between Saipan, the Marianas, and Japan. Also as a result of awards in the Denver-Southeast route case, new service was begun from Denver to Tampa, Fort Lauderdale, and Miami. In 1978, DC-10 flights began on a route from Los Angeles to Taipei via Honolulu and Guam and on May 1, 1979 flights to New Zealand and Australia from the U. S. via Honolulu, American Samoa, and Fiji were inaugurated.

In 1980, Al Feldman, formerly president of Frontier, was named President of Continental. Robert Six remained in the role of Chairman of the Board,

#### **On Board Continental**

GEORGE CANTLEY

CONTINENTAL AIR LINES has, for many years, offered some of the finest and most elaborate in-flight services to be found anywhere, a fact which has certainly played a sizable part in the airline's popularity. An advertising campaign in 1957 enticed customers with Continental Club Coach flights between Chicago, Denver, and Los Angeles. This was the first Continental scheduled service between Chicago and Los Angeles using DC-7B's and combined low air-coach fares with such luxury features as reserved seats, hot "Country Club" meals offering a choice of four different entrees, two lounges aboard the aircraft, and convenient departure times. The popular DC-7B's held 85 passengers and cruised at 365 mph.

In 1958, Continental added Kansas City to the Chicago-Los Angeles route, and something else which no other airline in the U.S. could boast of--the Vickers Viscount II. Passengers eagerly took advantage of the aircraft's 52

First Class seats and two lounges. The cabin interior was so impressive that a foreign airline bought the interior plan from Continental and used it in its own aircraft. The colors throughout the cabin were soft desert shades. Their use was inspired by the western country that soon became familiar with the whine of the Rolls-Royce engines that powered the Viscount. Individual fold-down tables, 26" oval windows, and hostesses clad in elegant serving gowns added to the atmosphere of relaxation. The Viscount also offered the closest thing to "vibration-free" flight to be found at that time.

The year 1959 marked a mile-stone in air travel with the introduction of the Boeing 707-124 to Continental's route system. The "Golden Jet" featured an interior designed for Continental by Charles Butler of the New York firm bearing his name. Several innovations were incorporated in the custom designed interior such as the "Rendezvous Room"—the spacious first class lounge that featured eight armchair seats, cocktail tables, and a television set. Radio—

telephone service was also provided. Gold carpet service treated first class passengers to exquisite meals and appetizers that included Chicken Kiev and fresh Maine lobster. After dinner liqueurs were served with French pastries and fresh fruits from the Pink Cloud Buffet. Continental was so proud of its in-flight service that it published four-color booklets for passengers and offered to send additional copies to friends and relatives.

In 1962, Continental purchased Boeing 720-024B jets to increase the famous Golden Jet service to more cities. Continental continued to give passengers outstanding service, and in 1968 introduced a vivid new look to its aircraft. Along with this came movie screens and projectors in the Boeing jets to provide passengers with a new kind of entertainment on flights to and from Hawaii.

Continental began Boeing 747 service on June 26, 1970, on the Chicago-Los Angeles-Honolulu route. To insure the finest of service on the new aircraft, the designers at Continental divided the huge plane into five distinctive "rooms." First class passengers were accommodated in the Kamehameha Room, from which they could ascent to the upstairs Diamond Head Lounge. For coach passengers, the Bougainville Room, Micronesia Room, and Kubuki Room provided ample space in which to relax. Continental had still another innovative appointment--The Polynesian Pub--that served as a lounge for coach passengers. Each cabin was transformed into a dramatic room highlighting areas of the Pacific, a feature which made the Continental 747 unique. "Don the Beachcomber" food and drink service helped add a new dimension to in-flight dining. Exotic dishes from the Pacific were served by hostesses in Hawaiian cos-

The Douglas DC-10 began service over Continental's routes in 1972, and many of the same fabrics made popular on the 747 were used in its interiors with the addition of the California Room which was accented by contemporary styling. Passengers on the DC-10 enjoyed free

stereo, marvelous foods, and the only coach pub in the sky. In first class, entrees were served on China; California wines poured into crystal goblets, and complemented with linen.

Throughout its history, Continental has never failed to realize that flying is more than getting from point A to point B quickly, and most of this is a result of the innovative attitudes of Robert Six, Chairman of the Board of Continental Air Lines. Through his knack of knowing what people expect, he has guided Continetal from a tiny regional airline to a major carrier—The Proud Bird with the Golden Tail.

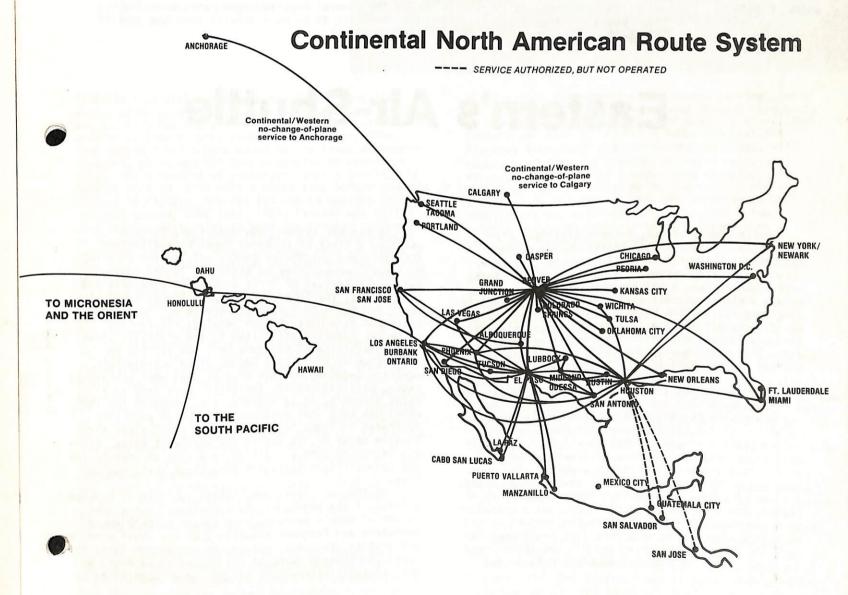
#### References for both Continental articles:

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Davies, R. E. G.; Airlines of the United States Since 1914. Putnam & Co. Ltd.

System timetables of Varney, Pioneer, Air Micronesia and Continental Air Lines.

Continental Air Lines General Schedules,





The first landing ever by a wide-body airliner at Washington National Airport when this Eastern Airlines A-300B4 visited the capital's airport at the invitation of the Federal Aviation Administration. The big jet performed a number of noise measurement flights which proved it to be much quieter than the smaller jets currently using the airport. Photo courtesy of Eastern Airlines.

#### Eastern's Air-Shuttle

Peter W. Black

Quite simply stated, Eastern Airlines' AirShuttle is that proverbial better mousetrap that
has brought the world to their door. In this case,
the world is air passengers in the Boston-New YorkWashington market, a market in which Eastern now
enjoys a ninety percent share, thanks to the shuttle.
Sometimes called "The biggest little airline in the
World", the Air Shuttle is a part of Eastern's system that in many ways is almost an independent airline. This article will deal with the history and
current operation of this unique system of air travel.

On April 30th, 1961 Eastern inaugurated its new Air-Shuttle service over its Boston-New York/La Guardia-Washington/National route on a six-month trial basis. The Civil Aeronautics Board had approved Eastern's experimental tariff over the vehiment objections of Allegheny Airlines, a carrier with little stake in the routes involved. The concept was simple: no reservations needed or accepted, frequent flights, no advance ticketing necessary as tickets could be purchased on board, and a guarantee to accomodate every passenger at the gate at posted departure time. Fares were very low: Washington-New York \$14.00 and Boston-New York \$14.00. (Coach rail fares at this time were \$11.50 and \$10.65 on the same routes.

To put the system into operation, Eastern assigned a fleet of Lockheed Super Constellations (L-1049's and L-1049C's) exclusively to the shuttle. No longer compettitive on Eastern's longer routes due to the arrival of first generation pure jets and the Electra, the Super Connies were almost ideal aircraft for the high frequency service on the approximate 200 mile hops. A high density, ninety-five passenger interior was fitted to the aircraft, close to the certificated maximum. Work was started on the conversion of an Eastern hangar at La Guardia into a separate terminal for the shuttle, but when operations began, existing Eastern facilities were used at all three airports. At La Guardia, the layout of the terminal was such that passengers flying on archrival Northeast Airlines had to walk past the Eastern Air-Shuttle gates on the way to the Northeast gates. Eastern wasted no time in calling in a sign painter to let the competition's customers know about their new ser-

On the very first day, thirty two flights carried a total of six hundred-forty passengers, for a load factor of twenty percent. Word spread quickly among commuters and frequent travellers on the shuttle route and traffic grew very rapidly. So rapidly in fact, the until the shuttle terminal was opened at La Guardia, most of Eastern's regular flights were transferred to

A Super G Constellation in its final Eastern color scheme arrives at LaGuardia Airport in New York City in 1967. Aviation World photo by the author.



The Lockheed Electra served Eastern longer than any other major U.S. carrier, its latter years exclusively on the Air Shuttle. This photo, taken at New York's Kennedy Airport, shows one of Eastern's nonshuttle Electras in 1968. Aviation World photo by the author.



Idlewild (now JFK) and Newark Airports. About five months after service started, the frequency of flights was doubled, but the airline still found itself flying several back-up flights each day. About this time, four Martin 4-0-4's were added to the fleet as back-up aircraft, as it was far less expensive to operate a Martin for a handful of passengers than a Connie. The Martins were to serve only a short time before being retired by Eastern. The day the new La Guardia Shuttle Terminal opened, June 12th, 1961, Eastern was called upon for the first time to keep its promise to operate an extra section (back-up flight) for a single extra passenger waiting at departure time. That day there were ninety-six passengers at the gate for one shuttle departure, so after the first ninety-five were boarded. a second Super Constellation was loaded with a single passenger, the first "Mr. Ninety-Six." Needless to say Eastern's PR people, already on hand at the the terminal for the opening ceremonies, had a field day, and a further inducement for more passengers to become Air-Shuttle travellers. A year later the shuttle carried its millionth passenger, and Alan S. Boyd, then the C.A.B. Chairman commented....the Air-Shuttle was the greatest thing that has happened in air transportation in years." The same year, 1962, also saw the opening of a route from Washington National to Boston through Newark Airport, supplementing the route via La Guardia. and also non-stop Washington-Boston services. Traffic continued to grow at a pace that far exceeded all expectations, and on one day, December 1st, 1963, a one day record of 20,589 passengers were carried on 277 flights. It was now obvious that Eastern was not only pulling passengers away from other airlines, but from surface transportation as well.

In 1964 the Washington-Boston non-stops were designated the "Executive Shuttle", and meal service and beverages were added to meet stiff competition, but the following Spring saw this sector revert to normal reservation services using Electras. Douglas

DC 7B's were introduced on the Newark services (only), all the Super Connies being routed through La Guardia. By mid-1965 enough new 727's had been delivered, that Eastern was able to release a number of Lockheed Electras from short and medium haul services, and reassign them to the shuttle. By early Fall, all first sections into La Guardia were Electras, with the Super Connies relegated to the role of back-up aircraft. By the end of 1965, the Air-Shuttle had carried its ten-millionth passenger, and a few L-1049G "Super G" Constellations replaced some of the older, high-time L-1049's.

Washington National Airport and La Guardia have always had a common limitation: short runways. Several thousand feet too short for the first generation jets, and politically too short for United's foreign built Caravelles. The arrival of growing numbers of 727's on the scene in 1966 (politically acceptable to the F.A.A.) caused the lifting of the jet ban at Washington National and runway improvements and a new terminal at La Guardia opened it to smaller jet equipment. Eastern was the first airline to receive the 727 off Boeing's production line, and placed a couple of them on the shuttle runs in 1966. In 1967 competition really intensified with American Airlines introduction of their "Jet Express" services, paralleling the Air-Shuttle routes. American used BAC-111 and 727 aircraft, but did not offer the no reservation-guaranteed seat system that had accounted for much of Eastern's success. Hapless Northeast, with very limited turbine equipment and a fleet of aged DC-6B's, was clearly out of the running. American made a dent in Eastern's traffic for a while. but the frequent traveller, the mainstay of the routes in question, soon realized that all American offered was a schedule of flights at regular intervals, but without any of the hassle-free convenience offered by Eastern. The "Jet Express" was allowed to quietly fade into the sunset, and Eastern's hold on the market became undisputed.

During 1967 the 727's were replaced by newly arrived DC-9-31's, which Eastern had dubbed the "Whisperliner II". Eastern had ordered 49 of the twin-jets, and played a large role in laying down the specifications that led to the stretched DC-9-30 series, and the requirements of the shuttle were taken into account in the design of the stretched version. A number of the new DC-9's were specially configured with 107 seats and minimal galleys, and assigned exclusively to the shuttle. It was Eastern's goal to eventually replace all the Electras, Super Connies and DC-7B's with the DC-9, but that would take several years.

An era came to an end on the evening of St. Valentine's Day 1968 at Washington National when Captain E.M. "Bud" Burke shut down the engines of N6232G after a trip from New York. The last Connie in service with a major U.S. carrier has flown its last passenger. The next few years brought continued traffic growth and brief experiments with on-ground ticketing, on board beverage service, and a route extention to Montreal. Despite steady traffic at Newark, economic factors forced the elimination of shuttle service there, and the Newark shuttle was replaced with regular geservation service. In 1975 a Lockheed TriStar was used on the La Guardia-Boston sector for a week to see if it was suitable to the route. It wasn't. On October 31st, 1977, the venerable Lockheed Electra closed out its career with Eastern. Full-page newspaper ads bade "Farewell Old Prop" as the airline became all jet, and the shuttle all DC-9. A little over a year later it was becoming obvious that traffic was outgrowing the DC-9. The cost of jet fuel was also increasing rapidly. Both Washington National and La Guardia were saturated at peak hours and "slots" were being assigned to the carriers serving these airports. Clearly only one course was available: more poeple had to be moved on fewer flights. On December 2nd, 1978, brand-new 727 225A's, specially configured for the shuttle took over the first sections on the Boston-New York sector, and a few months later, took over the Washington first sections as well.

By the end of 1979, the soaring cost of jet fuel, and other factors caused a major reshuffling of Eastern's fleet. The 727-25's (short fuselage 727's) were to be withdrawn as soon as possible. Where a larger aircraft could not be justified, the 727-25's would be replaced with DC-9's which could carry the same passenger load, but do not guzzle fuel like the heavier tri-jets. The DC-9's had become too valuable to sit on the ground as back-up aircraft, so those assigned to the shuttle were reconfigured for regular service, and the 727-25's became back-up aircraft. The logic behind this move was that the airline could afford a fuel guzzling back-up aircraft as it spends most of the time on the ground, and flies only when needed to cary extra traffic. The DC-9's could handle the 727-25's old routes, and on far less fuel, so the entire system became more economical to operate. The latest phase of the re-equipment of the shuttle came on January 31st, 1980 with the placing of two Airbus Industrie A-300B2K's on the Boston Sector. Initially seating 280 passengers, a few seats had to be removed from the A-300's to allow the installation of extra coat closets. It is only a matter of time before the ban on wide-body aircraft at Washington National is lifted, and it's a foregone conclusion that among the first wide-bodies to service that airport will be A-300's on Eastern's Air Shuttle.

#### HOW IT WORKS TODAY

To witness a shuttle departure for the first time may cause an observer to momentarily think he is in a commuter railway station or bus terminal. Passengers arriving at the terminal, either by cab or bus from the parking lot, are invariably in a great hurry, sometimes running, dash through the terminal lobby like commuters late for a train. Most are men, and few carry baggage. Most just have an attache case. Most will also return the same day. There are machines in the lobby that can issue up to eight one-way tickets by the simple insertion of a credit card and the pushing of a few buttons. Very few have tickets in advance. Boarding cards with name and address are filled out, and passengers stand in line. A few sit in the departure lounge, but most stand. At departure time, an agent begins counting. One of two possible things then happen: either the aircraft is filled, or departure time comes. If the aircraft is filled, it is dispatched and the boarding of a back-up aircraft commences. If necessary, the process is repeated until all passengers have been boarded. In the event a flight is not filled, it departs at the scheduled time, regardless of the number of passengers on board.

Besides passengers, the Air-Shuttle carries a good amount of mail and freight. The belly capacity of the Airbus Industrie A-300's is not going to waste on the shuttle. Rather, containers are often seen being unloaded for transfer to another widebody aircraft.

The hours of operation of the Air-Shuttle say a lot about the type of traveller who uses the service. Currently, it is hourly from 7:00 AM to 9:00 PM, with the expected slight reductions on week-ends. The heaviest traffic is in the early morning, and the lightest is around mid-day. A vast majority of shuttle passengers travel no further by air than their shuttle destination; as unlike travellers on conventional services, few connect to other flights.

What does the future hold for the shuttle? As mentioned before, we can expect A-300's to serve the entire shuttle system soon, with 727's remaining as the back-up equipment. A brand new terminal at New York's La Guardia Airport will soon replace the converted hangar that has been in use for nineteen years. Beyond these improvements, it is difficult to envision any further improvements. Eastern has developed a better mousetrap, and it is close to perfect!

In closing, it may be interesting to consider why the system in use by Eastern has not been tried by other airlines or on other routes. Obviously many factors that exist in the current shuttle markets do not exist elsewhere. The most important of these is a steady, balanced movement of passengers in both directions on the routes involved. A similar number of passengers travel in both directions at the same time, permitting the aircraft to make money in both directions and not have to fly in one direction almost empty. Few other markets could produce such balanced loads. Still, Eastern is continuously studying other routes for shuttle-like operations. At a press conference in January 1980. a Senior Eastern Vice-President carefully dodged a question about Eastern's interest in shuttle operations on the New-York-Chicago route. Time will tell.

#### Air Transport in Europe

JOOP GERRITSMA

THE SOVIET UNION, consisting of a European and an Asian (Siberia) part, is more than twice the size of the United States including Alaska and Hawaii. In such a vast area virtually every type of terrain and climate can be found. Vast open deserts, large lakes, high mountain ranges, all in climates ranging from tropical to arctic. Since under the Soviet system of government, all airline operations are run by one state-owned airline, it is obvious how enormous a task this airline faces.

But Aeroflot is much more than an airline. It also is responsible for all other civil flying activities in the country, including pilot training, forestry and ice patrols, geological survey, air ambulance services, agricultural aviation and air taxi work. Aeroflot also runs the country's civil airports and operates the navigational systems across the country, does a large amount of test flying civil aircraft before they enter service, and draws up specifications for new equipment for aircraft and airports. Aeroflot also runs passenger transit hotels, aircraft and hotel catering services, and supplies its own logistic support.

And if all this were not enough, the airline's fleet also serves as a back-up to the air transport fleet of the Soviet air force. To accomplish all this, Aeroflot operates a fleet of many thousands of aircraft, ranging from small helicopters to the 350-passenger IL-86 airbus.

#### THE BEGINNING

As early as 1921-22, the army carried out some experimental passenger and mail services between Moscow and Sebastopol, using converted Ilya Murometz bombers. But little is known about these services, other that that only government and military officials and mailed was carried.

November 24, 1921 saw the founding of Deruluft or Deutsche-Russische, Luftverkehr,

in Berlin. This was a 50-50 joint venture between the Soviet government and the German Aero Lloyd and the intention was that the new company would establish an air link between Berlin and Moscow. Operations started on April 30, 1922, when a Fokker F-III for five passengers opened a Konigsberg (now Kaliningrad)-Moscow service. A Konigsberg-Tilsit-Riga-Talinn-Leningrad service followed shortly after, but the Berlin-Konigsberg sector was not opened until May 2, 1927. During its first year of operations, Deruluft made 109 flights carrying 268 passengers and 20 tons of freight and mail.

Three all-Russian airlines started operations in 1923. Dobrolet, the largest, began domestic operations with aircraft on loan from the army on routes from Moscow to Novgorod (now Gorki), Kharkov, Kiev, and Odessa, and to Tiflis. In the Ukraine, Ukrvozdukhput started local services with German Dornier Komet III aircraft and Zakavia opened local services in the Caucasus, between the Black Sea and the Caspian Sea. Also, the German airline Junkers Luftverkehr started a Moscow-Tiflis service, using the well-known Junkers F-13.

Dobrolet was the most aggressive of the three, and by the mid-1920's was operating an extensive network in Central Siberia. Ukrvozdukhput had expanded by taking over Zakavia in 1925, and was by then also operating most of the early Dobrolet services in southern Russia. Also in 1925, Junkers started Moscow-Baku (Caspian Sea) services as part of its Berlin-Persia (now Iran) service. Dobrolet saw further expansion in 1927 when it started operating into Afghanistan and Mongolia.

During all these early years, Soviet airlines had almost entirely relied on German aircraft. Even the Dutch Fokker F-III's of Deruluft had been built in Germany. Some small Soviet-designed and built aircraft were also in service, but they formed a minority.

#### DOBROFLOT FORMED

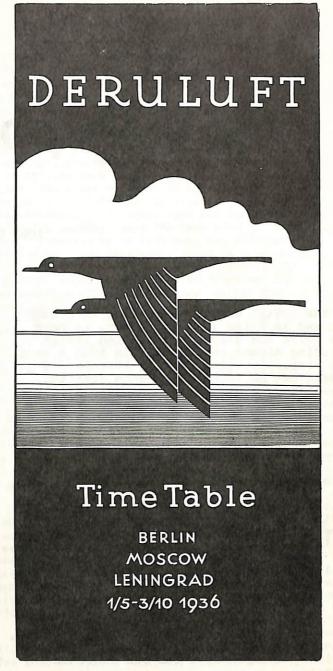
Under the Soviet five-year plan of 1928, the government created a state airline which, under the name Dobroflot, was eventually to take over all airline services in the country, with the exception of Deruluft, which was half-owned by German interests. Between August 1 and October 1, 1928, Dobrolet made a number of experimental mail flights from Moscow to the central-Siberian city of Novosibirsk and on to Irkutsk, on the Mongolian border. In May 1929 it opened a scheduled mail service between Moscow and the two cities, departures being every other day and flights taking 36 hours. Passenger service was planned to start in May 1931, but by then Dobrolet had been taken over by Dobroflot.

During its seven years of existence,
Dobrolet carried a total of 15,000 passengers and in 1929 had taken delivery of the
first of a fleet of three-engined, ninepassenger ANT-9 airliners designed by Andrei
N. Tupolev. This aircraft resembled the
contemporary Fokker and Ford Trimotors,
and was to become the most important Soviet
airliner before World War II. It also
appeared in a twin-engined version, and
this one was to predominate over the threeengined version.

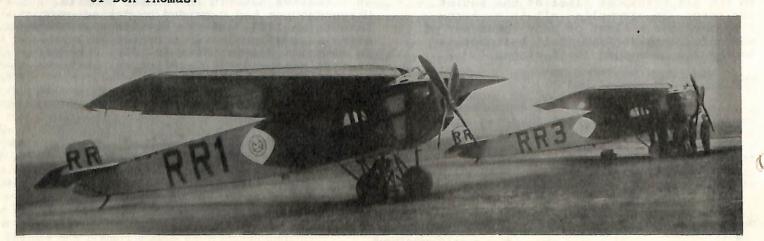
From 1932, the ANT-9 also went into service with Deruluft, replacing that carrier's obsolete fleet of three Junkers F-13 and seven Dornier Merkurs. In the summer they operated on wheels and in the winter on skis on the Moscow-Konigsberg-Berlin and Konigsberg-Tilsit-Riga-Leningrad services.

#### AEROFLOT FORMED

Another government reorganization in 1932 saw the formation of Aeroflot, or Grazdansij Wozdusnyj Flot. Upon its formation, Aeroflot was not only made responsible for all airline operations in the country, but for all other civil aviation aspects as well, flying and non-flying.



On April 30, 1922, a Fokker F-III marked RRl became the first "Deruluft" aircraft to land at Moscow. The second Fokker, marked RR3, arrived the following evening. Lufthansa photo. Above: Deruluft timetable, courtesy



During its first year of operation, the airline portion of Aeroflot carried 27,000 passengers and 900 tons of freight and mail in its fleet of ANT-9, Dornier Merkurs, some Junkers F-13's, some small Soviet types, and even a few Dornier Wal flying boats.

In 1933, Aeroflot opened its first domestic trunk route: Moscow-Irkutsk, already planned by Dobrolet in 1929. Considerable expansion followed and for 1935 Aeroflot could claim it carried 111,000 passengers and more than 11,000 tons of freight and mail. In that year it served more than 60 points in the country and was eyeing some foreign destinations as well. Organizationally, Aeroflot was then split into 11 regional managements, each with the responsibility for developing air traffic in its own area.

The ANm-9 fleet had fallen behind by the mid-1930's, and since nothing more modern was available at home, Aeroflot went shopping elsewhere. It obtained one DC-2 from abroad and tested it on its network for several months. After these trial flights, engineer Boris Lisunov was sent to the Douglas plant to study the DC-3 and to arrange for license production in Russia. Eventually more than 1,000 civil and military DC-3's were to be built in Russia.

However, ANT-9 designer Tupolev had not remained idle, and in 1935 he presented a prototype of the ANT-35. This twin-engined, low-wing, all-metal airliner for 10 passengers was every bit as modern as its west contemporaries. It went into Aeroflot service on the Moscow-Stockholm route on July 1, 1937, serving alongside the DC-3. Most local services in Asia, however, continued to be served by the ANT-9, and a few Junkers Ju-52/m's for many years to come.

During 1940, the last full year of operations before the Soviet Union became involved in the Second World War, Aeroflot carried 359,000 passengers and 45,000 tons of cargo and mail.

The start of the war also meant that Deruluft ceased operations. Its Russian services were taken over by Aeroflot, but when Germany invaded the country in June 1941, all services west of Moscow were haulted and for the next four years Aeroflot operated only its Siberian and some Arctic services. Aircraft not needed for these routes were made available to the air force and army for the war effort.

#### PEACE AGAIN

Peace came in 1945 and Aeroflot reequipped with a large number of Li-12 transports, the licence-built DC-3. But in 1948 the Ilyushin IL-12 entered Aeroflot service, reducing the Moscow-Vladivostok (far-eastern Siberia, on the Sea of Japan) route to a traveling time of

33 hours, including nine stops enroute. This IL-12 was an aircraft not unlike the Convair CV-240, but much smaller. Accomodation was for 27 passengers, against a Convair's 40.

Despite the vast distances in the country, Aeroflot never operated any large, four-engined long-range piston aircraft like airlines in the west did. Two types, the IL-18 and TU-70, were test-flown in 1947, but their development was abandoned shortly after. The IL-18 was basically a scaled-up IL-12 and is said to have undergone service trials on the Aeroflot network. The TU-70 was a transport version of the Boeing B-29 bomber, with an entirely new fuselage. Three B-29's had made emergency landings in Siberia following a raid on Japan during the war and the Soviets had put it into production as the TU-4 bomber.

So it was that by 1950 Aeroflot operated a 188,000-mile network, flying both short and long-range services with what in the west would be at best medium-range equipment: the IL-12 and LI-2 (licence-built DC-3). Yet, in that year Aeroflot carried 1.6 million passengers and 181,000 tons of freight and mail.

An improved version of the IL-12 began to appear in 1954. Called the IL-14, it had accommodation for only 18 passengers in its early versions because the modifications had added so much weight to the airframe. Later versions, however, carried 24 passengers, and later yet 32-36 in high-density layouts.

Soviet air transport was revolutionized in 1956 when the first TU-104 twin-jet air-liner entered Aeroflot service on September 17. The Transiberian Moscow-Itkutsk service, which took 20 hours with five stops in the IL-12/14, was cut to seven hours and only one stop (at Omsk), while the Moscow-Vladivostok service was cut to less than 10 hours with two stops, instead of 33 hours and nine stops (including an overnight stop). The distance from Moscow to Vladivostok is 14,600 miles, more than twice the distance from New York to San Francisco.

Although the first TU-104's in service carried only 50 passengers, later versions carried 70 (TU-104A) and 100 (TU-104B) and they made a so far unseen expansion of services possible. With the TU-104 in the fleet, followed by the IL-18 four-engine prop-jet entering service in 1959, Aeroflot was for the first time able to compete on equal footing with western airlines on services to western capitals. Such services were from then on greatly expanded and new destinations were included in the network. This, of course, coincided with the expansion of services by western carriers to Moscow under bi-lateral air agreements. Up until then it was often felt in the west that Aeroflot and the Soviet government did not want to fly to the west, because the resulting large-scale services by western



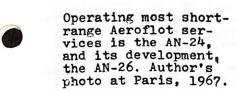
Aeroflot's early jet, the TU-104A, is seen here in a Joop Gerritsma photo taken in Amsterdam in 1958.

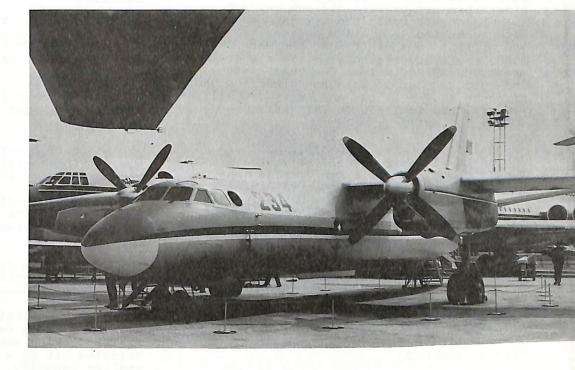






Cargo workhorse of Aeroflot is the de-militarized AN-12, a C-130-type aircraft. Photo at Amsterdam in 1972. Gerritsma files.



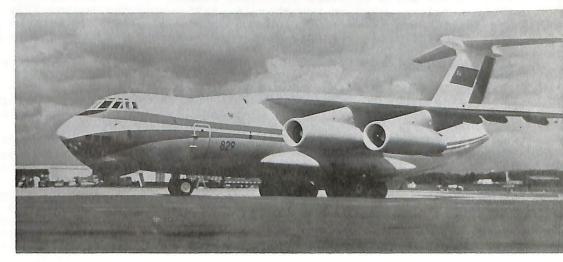




28

Aeroflot's rare giant, the turbo-prop TU-114 is illustrated by CCCP-76470, captured on film in Paris in 1967 by the author.

The IL-76 is a heavy transport now entering service with Aeroflot, especially in its Arc-tic operations. Photo at Paris in 1971. Gerritsma files.



carriers to Moscow would show the Soviet citizens clearly the difference in equipment.

In the early sixties, Aeroflot also greatly expanded its services to southeast Asia and Africa, and started serving Cuba non-stop from Moscow with giant TU-114 prop-jets, the largest aircraft in the world when introduced in 1961. Montreal in Canada was soon added. Carrying 170 passengers, the TU-114 was not surpassed in size until the Boeing 747 appeared.

The next major step in the modernization of the Aeroflot fleet took place in October 1962, when the twin prop-jet Antonov AN-24 and the TU-24 twin turbofan entered services on short and medium-haul domestic routes.

The new equipment of course had a tremendous impact on traffic. Had Aeroflot in 1947 still rejected large long-range airliners because traffic did not warrant such large aircraft, the new jets and propjets generated 42 million passengers and one million tons of freight and mail in 1965. That year the total route network measured 310,700 miles. Two years later, the total number of passengers carried had risen to 47.2 million, and nearly 54 million were carried in 1967. In 1979 this was nearly 100 million.

During the past 10 years, the fourengine IL-62 has replaced the TU-104 and TU-114 on all domestic and foreign longrange services, while the three-engined TU-154 is now flying medium range and highdensity services, both domestically and to foreign points.

Aeroflot now serves 3,600 domestic points and flies to nearly 90 other countries in the world, including the U.S., where it has New York rights, and Canada, where it flies to Montreal, both services with the IL-62, although the current political situation between the U.S. and Soviet Union has disrupted Aeroflot service to the U.S.

Aeroflot can claim to be the first airline in the world to start scheduled supersonic services, when on December 26, 1975 the TU-144 went into service on the Moscow-Alma Ata (Tashkent) service, a 2,190-mile route. But Aeroflot is also the first airline in the world to have been forced to hault supersonic services because of severe technicals problems with the aircraft. The TU-144 was grounded in 1978 and was withdrawn from service more than a year ago. Most-serious problems according to western observers were with high fuel consumption of the engines, and the high drag of the airframe, both of which in combination had a limiting effect on the range of the TU-144. There have also been reports of accidents.

No story about Aeroflot is complete without mentioning its polar services. In

1933 Glavsevmorput (Northern Sea Routes Administration) was formed to operate small flying boats (mainly Dornier Wals from Germany and some small Soviet types) along the major rivers in northern Russia and Siberia. A few years later, east-west routes were also started.

Another organization flying in the Soviet arctic was Aviaarktika, a development organization supplying research groups and northern weather stations with vital commodities. Both Glavsevmorput and Aviaarktika were eventually intergrated into Aeroflot services, within the Polar directorate of the airline in 1960.

In 1962, Aeroflot carried out a series of flights to Antarctica to supply a Soviet scientific expedition on the polar icecap. These flights, mainly with IL-18's, staged through Australia.

#### THE FLEET

There are no reliable figures available in the west about the number of aircraft in service with Aeroflot. But most observers agree on the following rounded figures:

About 150 IL-62 four-engined jets serving domestic and international long-haul services.

About 175 four-engined IL-18 prop-jets, now serving domestic passenger services, and freight services, only.

About 50 IL-76T heavy four-engined jet freighters in the class of the USAF C-141 Starlifter, flying on domestic freight services.

Less than a dozen IL-86 wide-body jets which are now entering services with Aeroflot on major domestic routes.

200 AN-12 freighters, a four-engined high-wing cargo development of the older AN-10. Looking somewhat like a Lockheed Hercules, it is a little smaller and has smaller capacity.

350 TU-154, a trijet in the class of the Boeing 727, flying most of Aeroflot's medium-distance services and those shorter services with a high traffic volume.

400 TU-134 short-range twinjets.

550 Wakolev YAK-40 short-range trijets, used mainly on feeder services and in areas with light traffic.

700 AN-24/26/30 twin prop-jets in the same category and looking alittle like the Fokker/Fairchild F-27.

Several thousand AN-2's, a single-engined biplane falling roughly between the Canadian Beaver and Otter. Most of these are in use for various agricultural purposes, but many also serve on short,

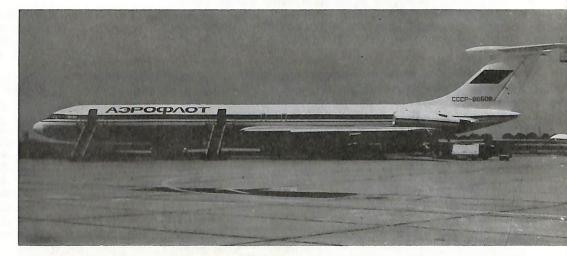
Aeroflot's new widebody, the IL-86 is now entering scheduled service in the USSR. Photo at Paris in 1977. Gerritsma files.



Looking similar to the Boeing 727, the TU-154 is Aeroflot's main medium-range jetliner. Lakmaker photo at Stockholm, 1976.



Aeroflot now operates all long-range services with the four-engine IL-62. Similar to the British VC-10, CCCP-86608 was photographed at Paris in 1976. Gerritsma files.





Now entering service with Aeroflot is the YAK-42 trijet, capable of operations from rough surfaces. Gerritsma files photo.

"outback" services.

Large numbers of medium and small helicopters including Mil and Kamov models. Again, most are in use for agricultural flights, but many are used in airline/air taxi traffic.

Unknown numbers of the YAK-42, a trijet and a larger development of the YAK-40. Deliveries were scheduled to begin in 1979 and the aircraft was designed to fly over relatively short stages using restricted airports with poor surfaces in remote areas of the country.

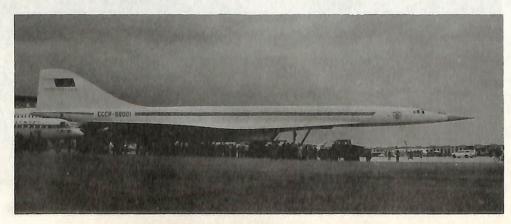
The Aeroflot fleet status of the AN-14 and AN-28 twin-engined feeder liners is unknown, these 15-20 passenger aircraft were developed to replace AN-2's in passenger service, and various examples have flown with Aeroflot since the early sixties.

Also worth mentioning is the AN-22, a very large cargo plane flying for the first time in 1965. Carrying 725 passengers, the AN-22 had four engines driving four pairs of counterrotating props. A few flew in Aeroflot colors, but this seems to have been for test flying only. Obviously, more a military cargo plane than a civil airliner, little has been heard of the AN-22 in later years.

Also in service with Aeroflot is an unknown number of Czech L-410 twin-engined feeder-liners. In mid-January 1981, the British magazine Flight International reported a Soviet Ministry of Aircraft Official had said that the TU-144 could be back in service "soon." Official press reports, Flight notes, however do not support that statement.

#### AUTHOR'S THANKS

Now that this series on the history of European Air Transport since 1919 has been completed, the author wishes to thank the many people who have helped him with information and photographs. Especially to the public relations representatives of various airlines wo have responded to my letters: Thank you! I also wish to thank R. E. G. Davies, whose book "A History of the World's Airlines" (Oxford University Press, London, 1964) cleared up several uncertainties in my files, particularly with regard to dates on which certain events took place.—Joop Gerritsma.



The lean TU-144 became the world's first operational supersonic jetliner in 1975, however it is now grounded. 1971 photo at Paris by the author.

#### THE BALKAN STATES

#### DANZIG

Danzig, on the eastern end of the Baltic Sea, was part of the pre-World War I German empire. After the war it became a free state but maintained close links with Germany. The first airline in the small nation was the Danziger Luft Reederei, formed in 1920. Flying Fokker F-III aircraft, it opened its first service from the capital city of Danzig to Konigsberg (now Kaliningrad in the Soviet Union) and to Memel in Lithuania (now Klaipeda in the Soviet Union) across the Gulf of Danzig. On August 21, 1921 this service was extended to Riga in Latvia.

The Danziger Luft Reederei was a partner in the German Aero Union together with the Deutsche Luft Reederei. Both ended services in 1924 when they were absorbed into the Deutscher Aero Lloyd.

1920 had also seen the formation of Danziger Lloyd Luftdienst, which operated a Berlin-Konigsberg service. This airline was controlled by the Albatross aircraft builders of Germany through the Lloyd Luftdienst, which also became part of the Deutscher Aero Lloyd in 1924.

Yet another airline was formed in the small nation in 1920. Danziger Luftpost was controlled by the Junkers company of Germany and opened Danzig-Berlin and Danzig-Konigsber services with Junkers F-13 aircraft. The airline became part of the Osteuropa Union in 1923 and ceased services that year. The Osteuropa Union in 1924 became part of the Europa Union, and this conglomerate, together with the Deutscher Aero Lloyd in 1926 combined to form Deutsche Luft Hansa.

From that year on, Danzig's air services were maintained by Deutsche Luft Hansa and by foreign (Polish, Scandinavian) airlines transitting through the country. Danzig itself became part of Poland after the second World War and is now the Polish province of Gdansk.

#### LITHUANIA

Moving up north along the eastern seaboard of the Baltic, Lithuania was also an independent state between the two world wars. It is now part of the Soviet Union.

There is no recorded evidence of any civil airlines existing in the country between the wars. The British aviation weekly Flight in 1939 reported two British Percival Q-6 twin-engined six-seaters were operating on a Kaunas-Palanga route and made weekend services to summer resorts on the Baltic. External services were under consideration, Flight reported. The two aircraft were operated by the Susisitkimo Ministerijos Orionio, presumably a government department. This is implied, the author thinks, by the word ministerijos, which in

one form or another exists in all German and slavic European languages and stands for ministry in the meaning of the government department.

Also, during April 1937 the (small) Lithuanian Air Force took delivery of two British DeHavilland DH-89 Rapides. There is some evidence to suggest that these were used occasionally on public transport work.

#### T.ATVT

North of Lithuania lies the formerly independent nation of Latvia, now also part of the Soviet Union since the end of World War II.

Latvijas Gaisa Satikmas Akciju (Latvian Aerial Transport Company) was formed in 1921 and started services from the capital of Riga to Memel and Konigsber that year. In 1922 services were started to Helsingfors (Finland) through Reval (now Talinn), the capital of Estonia. The company was controlled by the Junkers company of Germany. The fate of this company seems to be lost in history.

In April 1937, the Latvia Post and Telegraph department of the Department of Commerce took delivery of two DeHavilland DH-89 Rapides from Britain and started internal mail services on a Riga-Libau route.

#### ESTONIA

The northernmost of the four former Baltic states, Estonia, today is also part of the Soviet Union. In 1922, Aeronaut was formed and started services from the capital of Talinn to Riga in Latvia with 4-passenger German Sablatnig P-I single-engined converted World War I bombers. In 1923, the company was operating local services to Dorpat and Ternau from the capital of Revel (renamed from Talinn, but today again called Talinn).

In 1923, Aeronaut bought six Sablatnig P-III cabin aircraft, developed from the P=II. Six Junkers F-13's replaced the P-III's one to one in 1924, just before the airline joined the Osteuropa Union. In 1928, Aeronaut, no longer operating, went officially out of existence.

The only other airline activity the author has ever been able to find in Estonia is that in the mid-1930's of a company known as AGO operating domestic services with one Junkers JU-52/3m.

## Around the World of Airline Schedules

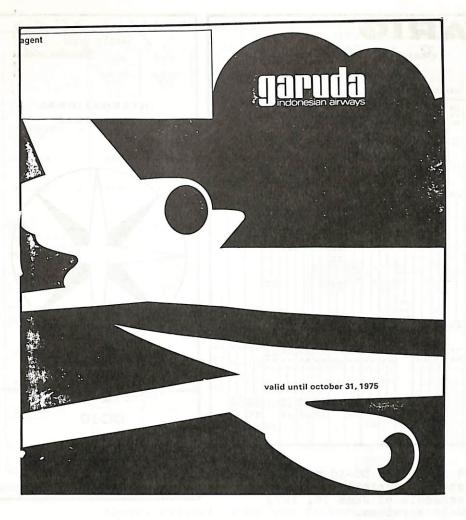
GEORGE CEARLEY

For this issue of the LOG, Schedules Editor George Cearley offers a selection of U. S. and international timetables re-

lating to the introduction of the DC-10 into commercial service. All material from the collection of George Cearley.

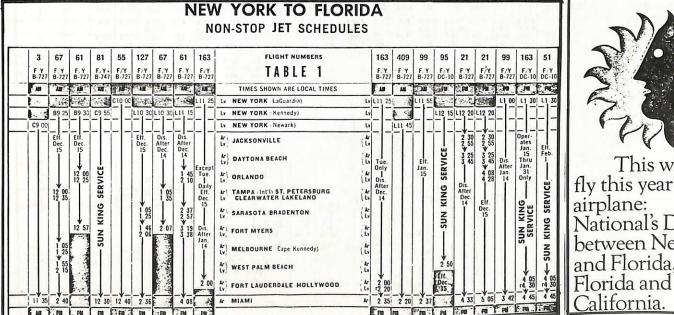


Three landmark schedules in the DC-10's history: Left to right, AA's September 13, 1971 schedule containing that carrier's first DC-10 services. United's schedule of the same date, also introducing DC-10 services, and AA's October 31, 1971 depicting the new DC-10.





Above: Garuda Indonesian Airways timetable cover depicting the familiar shape of the DC-10. Above right: French carrier UTA's schedule of August 15, 1978. Below: Table from National's December 15, 1971 schedule introducing DC-10 service, and below right, previous schedule introducing DC-10 services which would soon become effective.



National Airlines System Timetable
Effective October 31, 1971

National
Airlines

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fly this year's
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BROWLER AND AL
TIMETABLE

DC-10

EFFECTIVE: JULY 1, 1974

SCHEDULES SHOWN WITHIN ARE SUBJECT TO CHANGE WITHOUT NOTICE

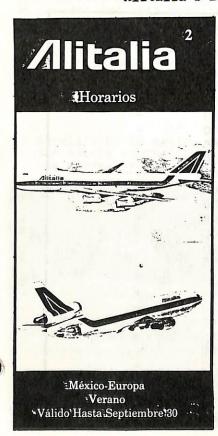
Above: Varig schedule of 1974 including DC-10 services.
Above right: Cover of same schedule depicting the DC-10.
Below: Table from Western's schedule of June 16, 1973 introducing that carrier's DC-10 services.

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Above: Swissair schedule featuring the DC-10-30. Below: Cover of Alitalia schedule featuring the DC-10 and 747. Below right: Alitalia's DC-10 on takeoff. Photo courtesy Geoff Thomas.

For North Atlantic cargo services, see table 23





#### **Model Shop**

DAVE MINTON

MODELING the DC-10 gives one a rather large selection of kits from which to choose, with various scales and many markings. Listed below, in the usual format, are most of the kits, with scale, decals, values, and availability, where known by me.

It is pretty firmly rumored that Airfix and USAirfix will release a 1/144 DC-10 in the very near future. The most often suggested markings are SAS, with British Caledonian coming in a close second. Some of the better rumors give both sets of markings in one box. In addition to the markings found in the kits, the following markings have also been issued by various decal manufacturers. From Micro-Scale, sheet 44-1 Continental, UTA, Air New Zealand, and Alitialia; sheet 44-15 Thai, ONA; 44-17 Laker Skytrain, Air Afrique, Finnair, Trans International oc; 44-33 British Caledonian. Sheet 44-1 is also available for 1/200. From Runway 30, CP Air, Iberia, and World Airways n/c. From Jet Set System, Air Siam and Martinair. Singapore and Malaysian are due in the reasonably near future from Mach 1 Line Decals. With all of these choices, one could make a large collection of DC-10's.

The Hasegawa/Minicraft DC-10 version comes with registration number N68041, which is the N-number for a Continental DC-10-10. The model provides a plug at the spot for the center landing gear, which is compatible with the Series 10, but the engines and wheel well farings are not for the Series 10, being more accurate for either the Series 30 or Series 40. The box art describes the model as a series 30. So you pay your money and take your choice. The entire upper tail assembly, including the engine, is a seperate part from the fuselage, so it is very possible that Hasegawa may later provide the enlarged intake for the Series 40, with either JAL or Northwest markings. I have not seen the new NW version, so perhaps this is the case.

The Hasegawa model is molded in two colors of plastic, light gray and white, with a single smoked clear part. There

Manfacturer	Scale	Kit #	Markings	Value	Availability.
Advent	1/144	3041	United n/c	5.00	+
Aurora	1/144	365	KIM	10.00	Managar da 🖶 da mendanda bada
	N N	366	SAS	10.00	
Aurora	11	366	Martinair	10.00	
Aurora		366	Swissair	10.00	SENTENCE SERVICE SERVICE
Aurora	tr.	366	American Airlines	10.00	
Aurora	1/144	385	UAL Friendship	10.00	A PART OF THE PART
Aurora	<b>II</b>	390	National	12.00	No. of the last of
Entex	1/100	8456	UAL Friendship	22.00	+
Hasegawa	1/200	1158	Continental	5.00	+
Hasegawa	1/200	?	Alitalia	8.00	+
Hasegawa	1/200	?	OW1	5.00	+
Heller	1/450	049	UTA	1.00	+
Heller	1/125	460	UTA	15.00	
Monogram	1/144	5413	American Airlines	3.50	+
Nitto	1/125	389	Douglas	22.00	+
Pevell Pevell	1/144	iI-106	KLM	10.00	+
Revel1	11	H-118	Delta	8.00	The state of the s
Revell	11	II-119	SAS	10.00	White the second second
Revell	n	H-120	Lufthansa	10.00	+
Revell	u	H-141	WAL Spaceship	10.00	-
Revell	n	H-156	UAL n/c	6.00	marks of the Section
Revell	11	H-271	Laker Skytrain	4.00	**************************************
Revell		H-118	Varig	8.00	+
Revell	.17	?	Aero Mexico	8.00	+

are no cabin windows, the clear part is for the front windscreen. There are approximately 40 parts in all. The only noticable problems encountered with fit were the vertical tail part and the wing root joints, which required much filling and sanding. The surface detail, mostly raised lines, is adequate. Scalemaster decals (Continental) are very good.

The Aurora/Monogram DC10 version represents a Series 10 only. There are about 40 white or gray parts, depending upon which kit you have. The model comes with a clear stand and a front windscreen, but no cabin windows. The shape of the nose of the DC-10 is not very well represented by the model, and flap tracks are not provided on the wings. Surface detail, what little exists, is deeply engraved. The fit is not particularly good anywhere, with much filling and sanding needed at each joint. In most of the kits, the decals range from completely useless to barely useable.

The Nitto/Entex kit comes with about 120 black and white parts, including a four-piece blue stand. There are 11 clear parts, providing both wing lights and all cabin windows. The model represents a Series 30. Surface detail is very light and the appearance is quite pleasing. Considering the expense of the model, the fit is particularly bad. Filling and sanding will be required for all of the fuselage seams, and along the leading edge of almost all of the mating surfaces. There is a gap in the engine nacelle parts which will have to be filled with scrap plastic. The tabs for nearly all of the wing and tail joints, and the engine pylons as well, do not fit and will have to be cut down. The overall outline of the model is very good, although the trailing edges of all flying surfaces are quite thick. The decals in both models are useable, however the blue on the Nitto sheet is much too

Revell's DC-10 again, this time in the colors of Thai International using Micro-Scale decals.





A Revell DC-10-30 with Jet Set System Martinair Holland decals. Photo and model courtesy of Jet Set System.

The Advent/Revell kit comes with about 58 parts, including clear parts for both the front windscreen and the cabin windows. In the U. S. versions (Delta, UAL, WAL, Laker) it represents a Series 10. I have not seen the foreign versions, but I have learned that some of them represent the Series 30 (at least they may have the center gear). Most of the surface detail is engraved, although some is raised, particularly the external stiffeners on the vertical tail. The fit is not easy, especially with the lower wing center section-fuselage part which is one piece. It is easy for this part to warp during assembly and much care must be exercised to achieve the best fit. The fit of the trailing edges of the wings is also difficult because of the thickness inside, so they should be scraped down. Overall, the model represents a very good-looking Series 10. The clear front windscreen also requires some effort for a good fit. The decals for most of the versions are useful, although the KLM decals suffer from bad screening and the early Delta decals (before the windows were punched) are prone to be brittle and hard to use.

To convert the Series 10 to a Series 30 you will have to complete some changes. There are four major external differences between the aircraft. The two most obvious and the easiest to change are (1) put in a center two-wheel gear between the wing gear and (2) remove the baffles from the engine exhausts and fill in the slots. Other less-obvious changes include that the wing span should be increased by five scale feet, or 5/12 inches (1.06 cm.) at the tips and the wheel wells keep the same general shape, but are extended further aft along the fuselage. To make a Series 40, complete all of the Series 30 changes and in addition enlarge the intake for the center engine.

In the new products section, there are a lot of interesting developments, besides the Hasegawa/Minicraft matter, which amount to reboxing and decaling the existing models (DC-10, DC-9, Boeing 737, and L-1011).

The new ones, the Boeing 727, DC-9, DC-9, and Boeing 747 are yet to be released. The Airfix people have re-released the DC-9 with the new Swissair colors and rumors indicate that they will also re-release this aircraft in USAirfix (for a couple less dollars). There is also a rumor that Airfix's Boeing 727 has been taken back to the shop and will be re-released later as a series 200.

From ATP comes word of some new decals. Clint sent me proofs for two sheets, one is EAL in the meatball colors for an Electra to 1/144 and the other is Ethiopian for the Boeing 707 and 727. In both cases the artwork looks really good, especially for the Ethiopian colors, which are quite complicated. Those of you who have by now used some of the more recent ATP decals know that Clint is using a new printer and that the decals are exceptionally strong and clear. More on that when the decals are released. These decals, along with a variety of others, are available directly from ATP.

From a new decal company comes word about a number of exciting releases. There are actually about four different names involved here, they are Jet Set System, Jet Set System Collector's Series, Mach-1 Line Decals, and Calcomanias Brabazon. The Jet Set Collector's Series, which was released some time last year, and is now out of production, featured about 12 different sheets. Some of these are still available from the manufacturer. The new ones, released under the name Jet Set System, are as follows: Aerocondor Columbia for the A-300, Cyprus Airways for the Trident, Air Nauru for the 727/737, British Caledonian for the 747, Panagra for the DC-8-30, Condor for the 737/727/707, Sabena for the 727/737/Caravelle, Martinair for the DC-8, DC-9, DC-10, Air France for the Concorde (pre-delivery colors), and Caribair for the DC-9-30 Fiestajet. Of these, the Aerocondor, Cyprus, Condor, Sabena, Martinair are currently available, with the others to be released in the near future. Some of the decals are complete, such as the Air Nauru, which has the fuselage cheat line and the tail markings; and some come, with only the titles and various markings on the aircraft, but not the cheat lines. Most of the artwork I have seen for the newer ones to be released provide for the door outlines, but the earlier ones, including the Condor, do not provide any doors. The decals are thin and easy to work with, following the contours of the models very easily. Some of the decals show a little problem with the registration, for example the flag of India on the Caravelle sheet for Indian Airlines was slightly off register, but it was simple to fix. The instructions provided give all information necessary to put the decals on the model, including a placement drawing; they are brief and to the point. More. about these decals as some of the newer ones become available. On the whole, they are exciting because they offer such a

wide variety of unusual schemes and make up some very nice looking models. To find out more about these decals you can write to Jet Set Systems, 549G La Rambla, Ponce, Puerto Rico, 00731, and ask Fernando about the new decals available. Also from the same address, you can ask about the new decals from Mach-1 Line, which includes Singapore markings for the 707/Concorde/737/ DC-10-30/A-300, Air Inter for the A-300, Air Polynesie for the Revell F-27 and Malaysian for the DC-10/A-300 and you can ask about the decals from Calcomanias Brabazon which include Avianca 747, Trans Brazil 727, TAI DC-8, and LAN-Chile 707 markings.

Gene Hooker announced in the last issue a new set of decals. These could be available in the near future. These decals, which will be sold only as a set, include markings for 32 different airlines and 54 different aircraft, such as Aeroflot, Air Florida, Capital, Capitol, Continental, CP, LOT, SATA, Trans Canada, and Transavia to name only a few. You can find out more about these by writing to Gene at 46 East 8th Ave., Columbus, OH 43201. Include a

From Drew Euebanks comes word of an interesting series of conversion parts for us modelers. These will be cast in an epoxy type of resin and will include the following: Non-fan engines for the Revell 707, the four JT3C engines and pylons and the inboard extension for the wing to do the 720 series. Later he expects to complete JT3D's, DC-8-50 engines and parts for the -62, -63 series. He is also planning the BAC-111 conversion parts, including wing fences, a new nose, and parts for the Series 500 fuselage. And later will come a complete DC-9-80 conversion kit. He is interested in any ideas you may have for conversion kits (for example, a DC-7C for the Revell kit), and you can find out the status of the current conversion kits when writing him at Euebanks Aerospace, 31 Chestnut St., Clarendon Hills, IL 60514.

The Revell DC-8-61 has been re-issued in Flying Tigers markings, and while the box art features a very nice rendition of the Series 63, inside the model is the same Series 61 we all know and love. It is molded in white plastic and the molds appear quite clean, so the model should make up very well. The decal sheet provides for both the Series 61 and the Series 63. You can obtain this model as well as most of the DC-10 models listed as available from Bob Keller at Starline Models, P. O. Box 38, Stanton, CA 90680, with his usual 10% discount.

Finally, for some new hot rumors, how about an Italiarie 1/72 DC-4, Heller with 1/72 Connie and a DC-6, and LS with a 1/144 C-130? You can also get the C-97 from Rareplanes at about \$23 by writing directly to Gordon Stevens. It is 1/72 and although I have not seen it yet, the pictures are fantastic.

#### Sticker Chatter

DON THOMAS

SINCE Continental Air Lines and the DC-10 are featured in the LOG this issue, we have plenty of label material to choose from for illustrations.

Varney Air Transport became Continental Air Lines in 1937, with headquarters in Denver. Illustrated are early and modern air baggage labels of Continental. Both of these will be sent to anyone who sends a self-addressed, stamped envelope. Address: Don Thomas, 1801 Oak Creek Dr., Dunedin, FL 33528.

Continental has favored various logos through the years. Its earliest design was a set of feathered wings, as seen on a round label in gold color, now quite scarce. The stylized eagle logo was used on half-a-dozen types of baggage and freight labels, including one small round one for Continental's 15th anniversary in 1949. The 15 years no doubt included Varney's three years of operation. Later labels featured American Indian chiefs in feathered warbonnets. The logo on the modern label is what Continental is now using. What it is supposed to be is for guessing; perhaps it is a stylized design of air currents in a wind tunnel. Like Eastern Airlines' abandonment of its beautiful Falcon logo for the plain one now used, I suppose they save on art work so any painter can reproduce the logo.

Continental, which over the years has publicized flights to Hawaii and Micronesia, issued a large colorful square label showing a 747 flying over mountains and a palm tree--"Continental to Hawaii." Their DC-9 "Golden Jet" was advertised on a round gold foil label. These foil labels are difficult to illustrate.

Air mail labels like the one shown were also used by Continental in the days when most airlines issued them.

DC-10 labels are proliferating, and McDonnell-Douglas puts out more than anyone else. There are presently 42 different airlines users of the DC-10 for which labels have been printed by Mc-Donnell-Douglas, plus similar ones for Equator crossings (two different) and International Dateline crossing. Available, \$3 per set ordered from the Douglas Company. Address: Ralph Underdahl,



Travel Affairs DAC, 3855 Lakewood Blvd... Long Beach, CA 90846. There is also a set of DC-9 labels, featuring the theme "When you have a choice." The set sells for \$1.50, same address.

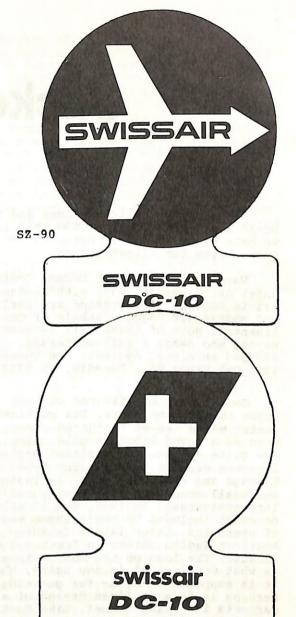
Individual labels, as previously pointed out in this column, change from time-to-time. Note the DC-10 and DC-9 labels of Swissair illustrated. The winged arrow logo has been replaced by the more simple white cross on red. More simplification, but no improvement, in my opinion.

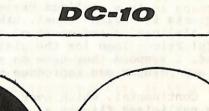
KLM has acouple new DC-10 labels. one in red and white showing a DC-10 flying left on a blue background, and one in the same colors flying right. "Amsterdam-Los Angeles." Condor, a subsidiary of the German carrier Lufthansa, has a beautiful big oval label, same shape as the Airbus labels. It shows a silver DC-10 on a bright vellow background. Condor also has a similar label in English in the regular diecut DC-10 series--"Fly Condor DC-10," colors are yellow, black, and blue, on white. Another label, same shape, for use in Germany, is black on yellow, and reads "Condor DC-10 / Schoner fliegen Richtung Urlaub."

Brazil's Viacao Aerea Rio Grandenses, more commonly known as Varig, was apparently happy about its purchase of the DC-10 in 1974. Both large and small round labels with "Varig '74 / Ano DC-10" (Year of the DC-10) were printed. Also the special "I flew Varig's DC-10" illustrated came in both English and Portuguese.



SZ-105







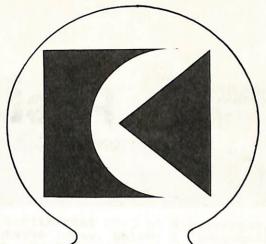
BR-570

BILs, (Baggage information labels) should be popular items for collectors of airline memorabilia. There are so many; most every airline has them, and they are so cheap--you just pick them up at the airline counters. Most airlines use colorful advertising labels or stickers now only for special campaigns or to advertise new services, but they use these BILs every day. The small commuter and feeder airlines should offer a good selection. A traveler to foreign airports or one who has access to foreign airline ticket counters should pick up a wide variety of the lesser-known airline BILs. If you take more than one or two samples, you will have duplicates to trade. However, at many airlines you must ask for them. Sometimes they grudgingly give you one or two, and sometimes they are more generous. Anything you think is new, I would like to see and list and photograph for the catalog. Returnable, of course, if you only have one. Data on the catalog will be sent to anyone who sends a SASE for reply.

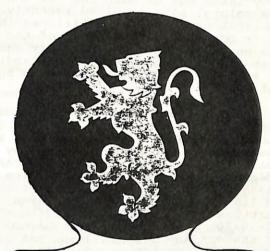
New BILs lately: Bar Harbor Airlines, available at Boston and in Maine airports; Swiftaire in a new printing; Golden West Airlines; Cascade Airways; Apollo Airways; and World Airways. There are many new foreign ones, such as Air Ecosse of Scotland, Aeropelican of Australia, Zambia Airways, Egyptair, and Kuwait Airways. Gulf Air, also flying in the Persian Gulf, has a round green "Advanced Boeing 737-200" label, as well as the previously cataloged red-colored and purple-colored examples. They are listed under Bahrain in the Asia/Africa volume of the Air Transport Label Catalog. Air India has a big blue and silver foil label "The Love Bird," showing the little Air India man with wings, also another round one, red and yellow on white, "Air India / Your friend in 133 cities." The "Love Bird" motif was first used by Air Jamica several years ago (JM-1).

	cascade	
NAME		
STREET		
CITY		
STATE		
TELEPHONE		

USC-400



Catch our Spirit on a CP Air DC-10



Happiness is a flight on a **BRITISH CALEDONIAN** DC-10



#### **Post Card Corner**

JON PROCTOR

I SHOULD begin by thanking Jack Splinter of ACP, who was the first to answer my call for DC-9-80 post cards. Jack sent along an example in Swissair's livery, a landing shot by Swiss publisher E. Baumann. It is understood that Swissair has a company issue out of both the -81 and -51 in new colors. Also received recently was a snazzy-looking Austrian Airlines issue of their DC-9-81. And speaking of the Swiss, the publisher Photolob recently came out with six excellent cards, all landing shots of various aircraft, including a spectacular Balair DC-10.

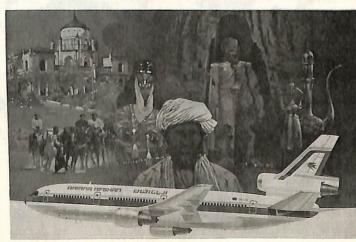
Numerous new cards have surfaced since our last article: almost too many to mention. Among the big surprises was a CAACissued 747SP card, much to the joy of card collectors world. It's probably CAAC's first offering. While riding the airline between Shanghai and Peking last year, I got only smiles when inquiring about cards. Another surprise was a Transamerica issue of their DC-10-30, which surely will become rare, as the company has announced the long-term lease of their entire DC-10 fleet. Other new arrivals include a Bahamasair 737 card, and a shot featuring two American Eagle 707's on the ground (both cards airline issue). The Aviation Hobby Shop in England has just released a beautiful card of BWIA's L-1011-500. And from Mary Jayne's Railroad Specialties comes their first effort in the aviation field: a ground shot of a Great Lakes CV-580 in current livery; photo by WAHC member Leonard Wallis. Nice one, Len!

Charles Skilton & Fry of the UK recently released a few updates, including a smart looking Dan-Air 727-200 in new colors. Several more Skilton issues are expected shortly, including a Monarch 737 and SAS A-300. Although not yet observed, Republic Airlines has stated that their 727-200 and DC-9-51 cards will be available very soon. Finally, Aviation World has just issued a new sales list (81-1), with no less than 40 new cards, including 12 new A.W. issues, such as an Air New England FH-227 and Delta C&S CV-340. Added to the offerings are 10 cards from Swiss printers; my favorite is a reprint of a BEA Trident One in original colors, showing a Swissair CV-440 and El Al 707-458 in the background. Coming up from Aviation World are 10 more issues, to be released at the convention in Miami.

In keeping with the DC-10 and Continental Air Lines themes in this issue, I've hung out a selection of favorites from both categories. In the CO category, no less than three Albuquerque airport cards have eluded me for years. Anybody seen any extras lying around of these? 1) A CO CV-240 on the ground-linen card, 2) CO CV-340 N90854-Petley card #33683, or 3) CO Viscount II, with a TWA Super G Connie-Petley card #72416. As for the DC-10 cards, there are so many fine ones out, and it was hard to cut down the selection to fit this issue. Hopefully we will see some new ones out one of these days, including Mexicana, Ghana, and others. How about a nice Continental DC-10-30?

Many thanks to all those who have added information and cards to our files; we appreciate your time and effort. Happy collecting! --Jon Proctor





Below: BEA Trident One at Zurich. Suter issue. Below center: DC-10 in Swiss Balair colors. Photoglob.







Previous page: CAAC issued 747SP card, and a Ariana Afghan issued DC-10 card. Above: Eastern European carrier JAT DC-10 depicted in an airline issue card.



Above: Continental DC-3 at Albuquerque, Mike Roberts issue. Below: A "home-made" card of a DC-6B in joint CO/UA colors.





Above: The Boeing 707-124 as illustrated in this airline issue introduced pure jet service to CO. Below: A airline issue of CO's now sold Boeing 747.



#### **Book Reviews**

JOHN IRBY

"PIONEER OF THE THIRD LEVEL, A History of Air Midwest." By I. E. Quastler. Published by Commuter Airlines Press, San Diego, California. A paper-bound, 174-page illustrated book. Price: \$7.50, plus shipping.

In the tradition of the great aviation promoters of the 1920's and 1930's, Gary Adamson brought a tiny charter airline to life in 1965, Aviation Services Incorporated. Today, Gary Adamson's airline is known as Air Midwest, an important Wichita, Kansas-based regional airline providing scheduled services to 25 cities in eight states. Thanks to the substantial efforts of fellow WAHC member Quastler we now have the second in his series on third-level airlines (the first was an excellent history of Swift Aire Lines. Quastler tells the remarkable story of Gary Adamson's airline with his 1980 book, "Pioneer of the Third Level, A History of Air Midwest, published by Commuter Airlines Press, P. O. Box 15064, San Diego, CA 92115.

This book takes you back to the humble beginnings of what was to be Air Midwest when Gary Adamson and Donald Beilman started Aviation Services, Inc. (ASI) in 1965. Then, their sole aircraft was a single engine Cessna 206, outfitted to haul caskets on a charter basis for the Wichita mortuary trade. Finding the casket-hauling business to be somewhat "dead" (please forgive the pun!), ASI branched out their services to include air ambulance and ad hoc people-hauling charters with the tiny Cessna. In 1967, ASI began their first scheduled services with the 206 between Wichita and Salina, Kansas, thus laying the cornerstone for today's vast scheduled operation. By late 1969, ASI found their commuter business rapidly growing, so with the delivery of their first 15-passenger Beech 99 jet-prop airliner that year, ASI management decided to change the airline's name and image to Air Midwest. From 1969 to 1977, Air Midwest struggled with the dual problems of financial weakness and the need to rapidly expand their services under the then-regulated airline market.

When discussing the early years as ASI/Air Midwest, author Quastler points to the general service-pattern changes by local-service airlines like Ozark and Frontier that caused a need for commuter airlines like Air Midwest. When Central Airlines (now Frontier) decided to phase-out their 25-passenger DC-3's and replace them with

50-passenger Convair 580 jet props, it became evident that some of the smaller communities in the area could no longer be economically served, even with federal subsidies. This trend accelerated when the local-service airlines began to add 100+ passenger DC-9 and 737 twin jets to their fleets during the early 1970's. All over America, the need for smaller third-level airlines became evident during the late 1960's and early 1970's, and it was during this commuter boom that ASI/Air Midwest was beginning to make their move into these abandoned markets. Ready, willing, and able, Air Midwest quickly and successfully replaced Central Airlines in the famous western Kansas city of Dodge City. By providing more frequent services between Dodge City and Wichita with their efficient 8-passenger Cessna 402 piston twins and 15-passenger Beech 99 jet props, Air Midwest made this route one of their most important routes, even today.

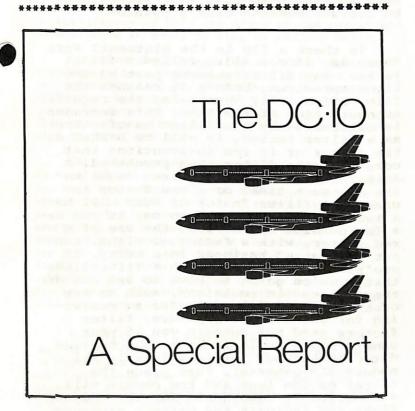
Quastler writes with such efficency that even the most difficult and technical subjects discussed in the pages of this book read easily. For example, the description of Air Midwest's struggle with the Civil Aeronautics Board (CAB) for route subsidies shows Quastler's lucid style at its best. All of the "legaleze" and courtroom dialogue of the CAB proceedings is written and paced in such a way that you will find this section not only understandable, but very entertaining as well. As for myself, I was "rooting" for Air Midwest's cause when I read this section.

No detail in the care and running of a commuter airline like Air Midwest misses the probing narrative of Quastler. Whether discussing AM's aircraft or AM's advertising campaigns, the book is never dull. For those who want their facts graphically displayed, they will find this book to be loaded with charts, graphs, maps, and dozens of excellent black and white photos. There is even an information-loaded appendix that lists all of Air Midwest's current (as of April 1980) employees and directors, and a roster of every AM aircraft ever ordered and/or operated from the ASI days to date. To make full-use of the book's compact (174 pages) size, even the cover and inside plates are covered with beautiful color reproductions of recent Air Midwest publicity releases.

Best of all, Quastler describes the

remarkable people that worked and sacrificed to make Air Midwest succeed. We get in-depth profiles of such key employees as Chief Pilot George Schreyer, Marketing Vice President James Pickett, and Operations Vice President Michael Freeman, et. al. The most in-depth profile, however, is reserved for Air Midwest's founder and President Gary Adamson. What we learn about Adamson is that he was just an average guy with a bad case of the "flying bug" when he started ASI in 1965 and it was his tenacity and hard work that caused his airline to grow into the regional carrier Air Midwest, one of the largest commuter airlines in terms of passenger mileage in existence.

Today, Air Midwest has a fleet of new jet prop Metroliners, operations bases in Wichita and Albuquerque, New Mexico, and a favorable balence sheet. To get where they are, Gary Adamson and his employees had to guide Air Midwest by the pitfalls of cashflow and credit problems, problems that almost proved insurmountable before CAB certification in 1976. Thankfully, Air Midwest thrives today and I. E. Quastler has chosen to tell us its inspiring success story in a small but very important book that could very well be my choice for "aviation book of the year."



"THE DC-10 REPORT," by McDonnell Douglas publicity department. Published by Mc-Donnell Douglas, St. Louis, Mo. 12 pages, available free on request.

'If there are in America or the world people who hesitate to fly the DC-10, those

people are, like our airplane and our company, victims of a great mass of misinformation and baseless speculation. They have been misled, as we have been maligned, by so much falsehood that the truth, when it finally emerged, was scarcely recognized." So stated McDonnell Douglas Board Chairman sanford N. McDonnell, at his company's annual meeting of April 1980 and reprinted on the first page of the McDonnell Douglas publicity pamphlet, "The DC-10 Report."

How may a company defend a product like the DC-10, an aircraft that had suffered three major accidents and a world-wide grounding in 1979? Should McDonnell Douglas retaliate against the attacks that were aimed at the company and its DC-10 by the media? What could be done to restore the good reputation for utility and service that the DC-10 enjoyed with the airlines before the 1979 difficulties?

At an April 1980 board meeting, the decision was made to launch an expensive multi-media advertising campaign promoting the troubled DC-10. The campaign was structured in three parts: (1) Television ads featuring a well-known and respected personality, (2) Print advertising that combined portions of the TV ads' format with a mail-in offer for information. (3) Mail-outs of the "DC-10 Report" pamphlet in conjunction with the print advertising, which offered more in-depth information about the DC-10.

It was planned to have the "agressively defensive" advertising and mail-out pamphlets appear in a first wave. In the fall of 1980, the tone of the advertising changed with the appearance of "positive" TV and print ads that featured both the DC-10 and the new DC-9 Super 80 together. Finally, during the December and early-January football "bowl" games, beautiful 30-second TV spots featured the newly-delivered DC-10 aircraft of CP Air, British Caledonian, Laker, Sabena, and Varig.

"The DC-10 Report" is a frank, 12-page publication. It takes on most of the aircraft's recent critisisms in the form of questions and provides concise but accurate answers in response to those questions. The only concerns dodged are ones dealing with the defective cargo doors that caused one major and two minor decompression accidents in the early 1970's. The pamphlet concludes by stating some interesting comparative facts between the DC-10 and the competitive wide-body airliners, the 747 and L-1011. These comparisons show that the DC-10 serves more cities, carries more passengers on more flights, with greater mechanical reliability than any other wide-body airliner in service today.

To obtain a copy of "The DC-10 Report," write: DC-10 Report, McDonnell Douglas Corp., St. Louis, Mo. 63178.

#### **Photo Tips**

BILL MANNING

FILTERS; those magical little pieces of glass or gelatin that everyone talks about, but almost nobody uses, under actual picture-taking conditions. Black and white photographers are more religious about the use of filters than those of us shooting color, but if everyone would pay more attention to the possibilities of filters, and how they could improve their pictures, we would have more good photos, and emptier trash cans.

Let's talk about color first, because outside of the darkroom, there are not many filters that you will normally use in aircraft photography. A skylight, or haze filter, will protect your expensive lenses, but normally the only filter a color photographer will use in the field will be a polarizing filter. A polarizing screen, or filter, will reduce surface reflections from any non-metalic surface. It also darkens a blue sky and will increase color saturation. It is the only filter that will do this with color film. and thus it is the only filter a color photographer will normally use in the field.

Now, before I get a whole lot of flak from you guys that are into all kinds of special effect filters, like cross star screens, or multiple pattern repeaters, etc., let me say that an article covering all of the special effect filters would take a book, and right now we are only concerned with filters that improve the aviation enthusiasts' photos, without alot of problems.

Let's get to the black and white filters and what they can do. First, we need to know alittle about the film we'll be using. Panchromatic film is sensitive to all colors in the visible spectrum, but in black and white the result is a variety of gray shades. The film is not equally sensitive to every color however. It is too sensitive to blue, and not sensitive enough to red and green. What to do? Use the correct filter, that's what to do.

As an example, let's say you're photographing your favorite airliner against a blue sky with some white clouds in the background. When the photo is finished, there may not be enough contrast between the sky and the clouds.

A yellow filter will darken the sky, by absorbing some of the blue and the clouds will then stand out a little more. Orange filters will darken the sky even more, and a red filter will provide really dramatic clouds against a dark sky. A red filter will also penetrate haze and smog to a certain extent. As you can see, it will not be necessary to carry a great many filters with you in the field. A yellow and a red should cover most needs of the aircraft photographer. The polarizing filter you use for color will also serve the black and white shooter. These few filters will give you some experience in the effect of filters on the film you use, and then if you feel the need for a more extensive selection of colored glass, you'll have something to base your selections on besides someone else's opinion.

Is there a fly in the ointment? Sure there is. It's a thing called a filter factor. Any filter absorbs part of the light sprectrum, before it reaches the film, effectively increasing the required exposure time of the film. This increase is calibrated by the filter manufacturer, as a filter factor. It will be marked on the filter or in the instructions that come with the filter when purchased. A filter factor of two requires doubling the exposure time, or a one f-stop increase. A filter factor of four will be a two-stop increase and so on. If you're a fan of slow speed film, the use of a red filter, with a factor of eight, can put you out of business in a hurry. If you're going to shoot with a filter like that, you're going to have to use one of the faster film emulsions, such as one of the ASA 400 films. As far as measuring for the correct exposure, filter factors need not concern you if your camera has a built-in meter which reads directly through the lens (nearly all modern SLR cameras). Just place the filter on the lens and the camera will automatically compensate for the reduced light and indicate the correct exposure setting.

Aside from the small setback of factors, filters have alot going for them Get acouple and experiment with them. I think you will like the resulting improvement in your photographs.

#### This, That, and Other Stuff

PAUL COLLINS

Several members have written in that they would like to see additional material in this column on the collecting of airline playing cards. Sometime in the near future we will again feature a page or two of cards, so if you have any good ones, and would like to see them in print, send in a Joker! Another member wrote in and volunteered to become the Playing Card Editor. I am sure the editor will be contacting him about that!

I would like to thank those of you that have been sending in material for the column. Several members from the West Coast and several from England have been very generous in sending in bag tags, labels, badges and other items. I would also like to thank those that have sent in GULF AIR material. So far I have post cards, menues, stationary, several labels, and the second issue of GOLDEN FALCON, the inflight magazine of Gulf Air. Does anyone have the first issue? Beautiful book! I am planning on having a nice display of Gulf Air items at the convention in Hollywood in June, so stop by and say hello.

My award for the most unusal item received from an airline--TAP has sent out a record, a full size 33 1/3rd LP, featuring songs about the different regions of Portugal. The record jacket is designed like a airmail envelope. This is a super idea, maybe some other carriers will be doing the same.

This time around I thought we would look at some cabin baggage tags that some of the various carriers are using. Also a number of airlines are now using peel off labels with instructions as to whether you want to sleep, eat or have cocktails, etc. Instructions are to place this label on your headrest where the attendant can see it. Another item we will look at is the little plastic (for the most part) pocket calendars that the airlines issue. Some are really nice. We will close with some new badges that have shown up recently at the old clubhouse.

The first cabin baggage tags that we will look at are those from Air-India. The art work on these tags is just beautiful. To bad you can't see these gems in color! The next two items are from Singapore Airlines. One is from their Concorde service, the other from their regular first class service. Both very nice. The following two items are from South African Airways. One has a blue background and the other brown. This may be a way to denote different class service.

The next two items show the front and back of a Laker Airways Skytrain tag. Following Laker we have the front and back of a Caribbean Airways tag. The Saudi tag is in bright red and really looks nice. The British Midland tag is nice as well as the American Airlines item, front and back. The China Airlines tag tells it all!

The two PIA items recently arrived at Club HQ. A nice baggage label and a DO NOT DISTURB sticker. The Varig label certainly leaves nothing to the imagination. British Airways gives you a list of things that you would like to have done--or undone, as the case may be. This sort of list could really grow so we will be watching for additional stickers of this type.

The plastic calendars featured are for the years 1979-JAT, 1966-coming to Ireland, 1970-Czechoslovak Airlines, 1978-Thai's remarkable A300, 1978-JAT DC-10, 1980-Air Nauru, and 1980-British Caledonian DC-10. If you have any extra pocket calendars, please send them in and we will have another feature in a future issue of the LOG.

Now that Tiger and Seaboard have gotten it together, a new badge has been issued telling everyone, "We've got the world together!" American is #1--again, according to this new badge. Hughes Airwest WAS Top Banana, but we all know they are now part of the Republic system of fine airlines. Republic, by the way, is Joining More of America, according to the recently issued badge. Air California has a couple of new badges, one featuring LA International and the other telling us to "escape to Las Vegas."

This will be the last column you will be seeing before the convention this coming June. I would really like to see a lot of you show up with bags of miscellaneous items for sale or trade. This will give me the opportunity to pick up material for future columns! The next issue we will be looking at boarding passes, ticket envelopes and other goodies. See you in Hollywood!





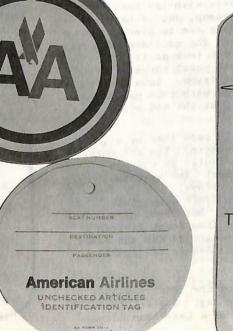




















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DO NOT DISTURB



#### Are you going to sleep?

Use these labels to let us know if you'd like to be wakened for cocktails or meals, or if you'd like to sleep until your arrival.

Peel off the label or labels of your choice and attach to a visible part of your headrest cover.

British airways

British airways

Please wake me for meals

British airways

Please wake me for cocktails

British airways

Please don't wake me until we arrive



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CHINA AIRLINES THIS IS BAGGAGE











#### FROM THE CAPTAIN

Welcome aboard! This is the first issue of the LOG to be edited by Gary Dolzall and I think that he has done a super job! Thank you Gary and please-continue the fine work.

While Gary has been working on this issue of the LOG, I have been working also, working on ways to attract new collectors to the Club. The Douglas Company and Delta Air Lines have agreed to send a note about the Club to all persons requesting material from them. This should get the Club name out to a lot of people that have not heard about us. I have also been corresponding with other groups and hobby organizations, trying to obtain new members for the Club. I will continue to do this from now on. I would, however, like each and every one of you to continue to promote the Club and sign up new members when and where ever you run across someone that has the same interest.

In addition to working on memberships, I have been working on a rough draft of a constitution for the Club. We are now reaching a point in time when we are going to need additional guidance and leadership. I hope to have some copies of this constitution out to a number of "key" Club members within several weeks. I will be asking them to study the paper and make suggestions on how it can be improved. We will then discuss the pros and cons of the constitution at the business meeting to be held on the Friday night of the convention in Miami, following the Convention business meeting. I sincerely hope that you make plans to attend both the convention meeting and the Club meeting. Important issues will be discussed at both sessions.

I would like to thank all those that requested back issues of the LOG for sending in the additional money to cover the cost of having the LOGS xeroxed. I appreciate it very much. The offer to xerox back issues of the LOG is temporarily withdrawn until a better method of reproducing them can be found.

Membership renewals came in a little better this year than last, but there are still about 70 members that have not sent in their checks. These members will be receiving a letter about this time indicating to them that they would now be receiving their LOGS, instead of a dues reminder. Hopefully all those contacted will send in their renewal checks.

You will be receiving the 1981 Membership Roster with this issue of the LOG. I am sending it separate from the LOG so you may place it in a folder where you can add to it during the course of the year with membership up-dates and changes of address. PLEASE REMEMBER TO SEND IN A CHANGE OF ADDRESS CARD WHEN YOU MOVE. THESE CARDS ARE FREE FROM THE POST OFFICE. One member recently wrote complaining that he had not received a LOG for almost a year. It turns out that he moved and did not inform me of his new address! The post office will not forward bulk mail to your new address. PLEASE, I BEG YOU -- WHEN YOU MOVE SEND IN A CHANGE OF ADDRESS CARD!

The next LOG will not be mailed out until AFTER the convention in June. Please keep this in mind.

You might also take note of the fact that the location for the 1982 convention will be decided by those attending the business meeting at the meeting in Miami. If you desire to host a convention in the future, it will be to your advantage to attend the business meeting at this years convention.

I will be looking forward to meeting many of you in Hollywood in June. Don't forget that the Club is sponsoring a free hospitality room on Thursday night, June 18th. This will give us all a chance to talk and really get into the spirit of the convention. Until I see you then,

Happy collecting

## CONTENT DELETED DUE TO PRIVACY CONCERNS

# CONTENT DELETED DUE TO PRIVACY CONCERNS

#### BRANIFF - WITH A DASH OF COLOR AND A TOUCH OF ELEGANCE

The long awaited history of BRANIFF AIRWAYS, by Club member GEORGE CEARLEY, JR., is NOW available. This is an illustrated and complete history of this famous domestic and international carrier from the very beginning in the late 1920's up to the present. The book contains many illustrations of timetables, route maps, logos and service marks and advertisements along with a great many photos, many of which are quite rare.

Also included in the book you will find a complete list of virtually all aircraft operated by Braniff, predecessor and acquired companies, telling where each aircraft was acquired an to whom it was sold. There is also an aircraft color chart of prop-jet and jet aircraft, listing all airplanes painted in the solid pastel, two-tone, and ultra-look color schemes.

The book has been printed in a limited edition, and a good per cent of these will be going to Braniff. To get your copy, send check or money order in the amount of \$15.00 (U.S.) which includes postage and handling, to:

George W. Cearley, Jr. 4449 Goodfellow Drive Dallas, Texas 75229 U.S.A.

Telephone: 214-353-0540 or 214-352-2212

#### "SPRING GATHERING" Sunday, April 26, 1981

The West Coast "Wild Bunch" is at it again! On Sunday, April 26, 1981, from 10 a.m. until 5 p.m., at Rochelle's Convention Center, 3333 Lakewood Blvd., Long Beach, California 90808, there will be trading, selling and who knows what, going on. The Convention Center is located adjacent to Long Beach Airport and contains a large display area as well as a restaurant and bar. There will be slide shows, trading tables, models, both displayed and for sale, postcards and many other items of memorabilia on display.

For additional information, please contact:

John Wegg 2011A Huntington Lane Redondo Beach, California 90278 Tele: 213-379-3965



#### AIRLINE & MODELLING REVIEW

#### AMR

FINALLY--the Spring 1981 issue of AMR has been mailed out. This is the NEW magazine that features stories on airline operations and on modelling. I must admit that I was pleasantly surprised at the quality of the magazine and its contents. From the "Caribbean News Summary" right on through to the final article "Rare Kit Gallery", I found all material interesting and informative. The only major flaw, if it can be called that, was in the quality of the photographs. I sure this will improve in future issues of the magazine.

If you are into modelling, I think that a subscription to "Airline & Modelling Review" would be to your advantage. The cost for one year is \$10.00. You may subscribe by writing to: AMR, Airline & Modelling Review, P.O. Box 69, Ponce, P.R. 00731. If you wish to receive a trail issue, send \$2.00 to the address given.

(Review by P. F. Collins)



#### SOUTH AMERICAN AVIATION NEWS

The sole Brazilian magazine made by enthusiasts for enthusiasts dedicated exclusively to the coverage of nistorical as well as current aspects of commercial and military aviation of this part of the world. PACKED with news, articles, photos, registers, inquires and answers sections, etc., it keeps you fully informed on what's going on in the aviation field in this corner of the globe! A must for ANY enthusiast worth its name and serious researches of South American Aviation! Subscribe to it right now! Sample copies \$2.00 U.S. obtainable directly from the editor. Annual subscription rate is only \$15.00 U.S., world-wide delivery included, payable to the editor. For sample copy or yearly subscription:

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#### COLUMBUS AREA HOLDS FIRST MEETING

On Saturday, February 21, 1981, the Columbus Ohio area of the World Airline Hobby Club held its first collectors meeting. The meeting was hosted by Jim Thompson, USAir, one of the Club's more active members. Jim was assisted by several other Club members from the Columbus area.

The meeting started around 9 a.m. and continued until around 6 p.m. During the course of the day those in attendance traded postcards, slides, schedules, labels and quite a bit more. Joe and Rick came down from Detroit on a "wing and a prayer", mostly on Joe's AirJet models. The boys from "Indy" came looking for all the rare postcards and the Club President showed his "famous" AA DC-3 movie. Jet also showed a film that was very interesting. It was about early Ford TriMotor service--a super movie. There were a lot of slides being shown and a lot of trading going on. Everyone that attended seem to leave with some new "goodies" for their collection.

Jim indicated that Columbus might hold a meeting at least once each year. Much thanks to Jime and his crew for a nice winter day in Columbus, OHIO.

#### IPMS CHICAGO

Region V, IPMS, will hold a modeling convention May 1 through May 3, 1981 at the Sheraton O'Hare Hote, 6810 Mannheim Road, Rosemont, Illinois, with the host Club being the Chicago Sprue Stretchers.

Jim Griffiths, 108 Lincoln Street, Glenview, Illinois 60025, the Convention Chairman, is happy to extend an invitation to members of the World Airline Hobby Club that wish to participate in this meeting. You do not have to be a member of IPMS to enter the modeling contests. The Convention Committee is planning quite a number of interesting activities for the week-end of the convention and if you are a modeler, you will be sure to have a good time.

The Chicago Sprue Stretchers are extending their hand of friendship and it is up to World Airline Hobby Club members to accept it. It is suggested that all those interested in the Convention, contact Mr. Griffithes at the address mentioned above and write for additional information on the IPMS convention.

I.P.M.S./Sprue Stretchers Chicago-Con '81 108 Lincoln Street Glenview, Illinois 60025

#### RECON 7

1981 Region 7 Model Convention
June 12, 13, 14 Seattle-North Holiday Inn
Interstate 5 at 128th St., Everett, Wa.
Presented by

IPMS Seattle

in association with

#### WORLD AIRLINE HOBBY CLUB

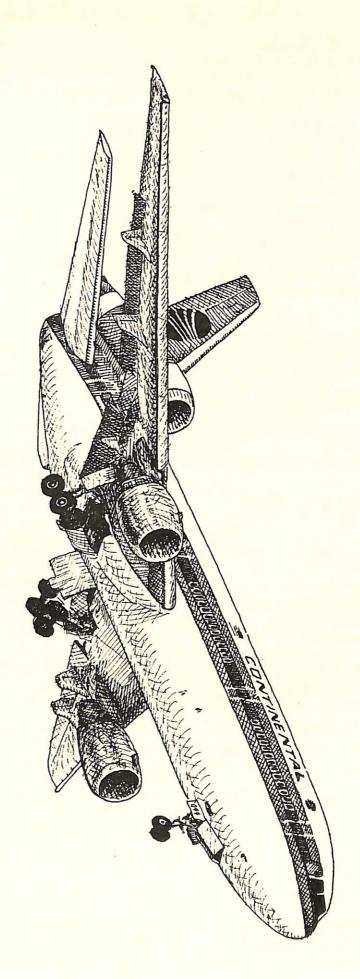
\*Tour of Boeing Everett, home of the 747 and 767.
\*IPMS Model Contest, Airliner catagories organized
by the local members of the WAHC.

\*Swap and vendor areas for trading and buying slides, postcards, timetables, baggage stickers, and other items of memorabilia.

\*Guest speakers, films, slides and tours for non-modelers as well as Sunday awards brunch.

#### REGISTRATION INFORMATION

Terry D. Moore 14515 6th Avenue NE Seattle, Washington 98155



Kalina

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KCC is a bi-monthly publication of ads and info on collectable plastic kits and related items. Pictures of rare kit box art and early news of new and re-issued kits are included. Send \$1.00 for current issue and subscription information.

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"LAAS INTERNATIONAL" was formed as the London Amateur Aviation Society in 1961 by a small group of enthusiasts and historian. The group has now grown into the largest society of its type in Europe with world-wide membership now touching 5,000 members.

The Society's main interest is the current events of today's aviation plus publishing aircraft monographs as well as Civil Aircraft Registers of various countries. Current membership fee is \$12.00 per year, includes 12 issues of the monthly magazine "Aviation News and Review." (Sample \$1.00) For additional information contact Mr. Gerry Lowther, 10 Devon Road Luton, Beds., LU2 ORH, England.

Air Pix, operated by USAir's best, Marion Pyles, offers some really great airliner and military slides for the collector. For a copy of the current slide catalog, send two bucks (\$2.00) to P.O. Box 75034, AMF, Cincinnati, Ohio 45275.

#### AVIATION POSTCARD COLLECTOR

Here is a NEW publication from Airline Publications in England for the serious postcard collector. This quarterly magazine will list postcard publishers, airline postcard lists, cards for sale and have available space where you can list cards you have for sale or trade.

This new quarterly publication represents the first serious attempt to record the aviation postcards published since 1909. It is intended that the editions of AVIATION POSTCARD COLLECTOR will build into a comprehensive catalogue of postcard Publishers list. In addition postcards representing aircraft of a particular Airline will also be listed.

The quarterly magazine sells for £1.00 (or roughly \$2.50 U.S.) and is available from: AIRLINE PUBLICATIONS, 41B Luke Drive, Harrisburg Int'l. Airport, Middletown, Pennsylvania 17057.

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AERO GRAPHICS, P.O. Box 28583, Atlanta, Ga. 30328 is operated by John Ficklen, III. John has a number of limited edition prints currently available for the collector. If you are interested in super-detailed aviation prints then Aero Graphics is what you have been looking for. Drop John a line and let him tell you about what he has in stock. You will find his material top quality.

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If you would like to advertise a product or service in the LOG, send information and copy to Advertising, CAPTAIN'S LOG, 3381 Apple Tree Lane, Erlanger, Kentucky 41018.

#### MIAMI 1981

DIPLOMAT RESORT & COUNTRY CLUB

3515 South Ocean Dr.

Hollywood, Florida

33022

The 1981 edition of "Airliner's Int'l." will be held JUNE 19, 20, and 21 at the Diplomat Resort & Country Club in Hollywood, Florida. You will be receiving additional information on registration, rates and fees as it becomes available.

Bruce Drum is the convention chairman and all correspondence to him with regards to the meeting should be addressed: Bruce Drum P.O. Box 523082, Miami, Florida 33152

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