



CAPTAIN'S LOG



Airlines Int'l. "79" Dallas, Texas

CONTRIBUTIONS WANTED

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

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

PUBLICATION DATES

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CHANGE OF ADDRESS

Please report any change of address promptly to the Publication Editor. Improper address will result in member not receiving his copy of the CAPTAIN'S LOG since the 3rd class postage rate does not allow for forwarding. If it is necessary to send another copy of the LOG to someone that has not reported a change of address, the member will have to pay the postage.

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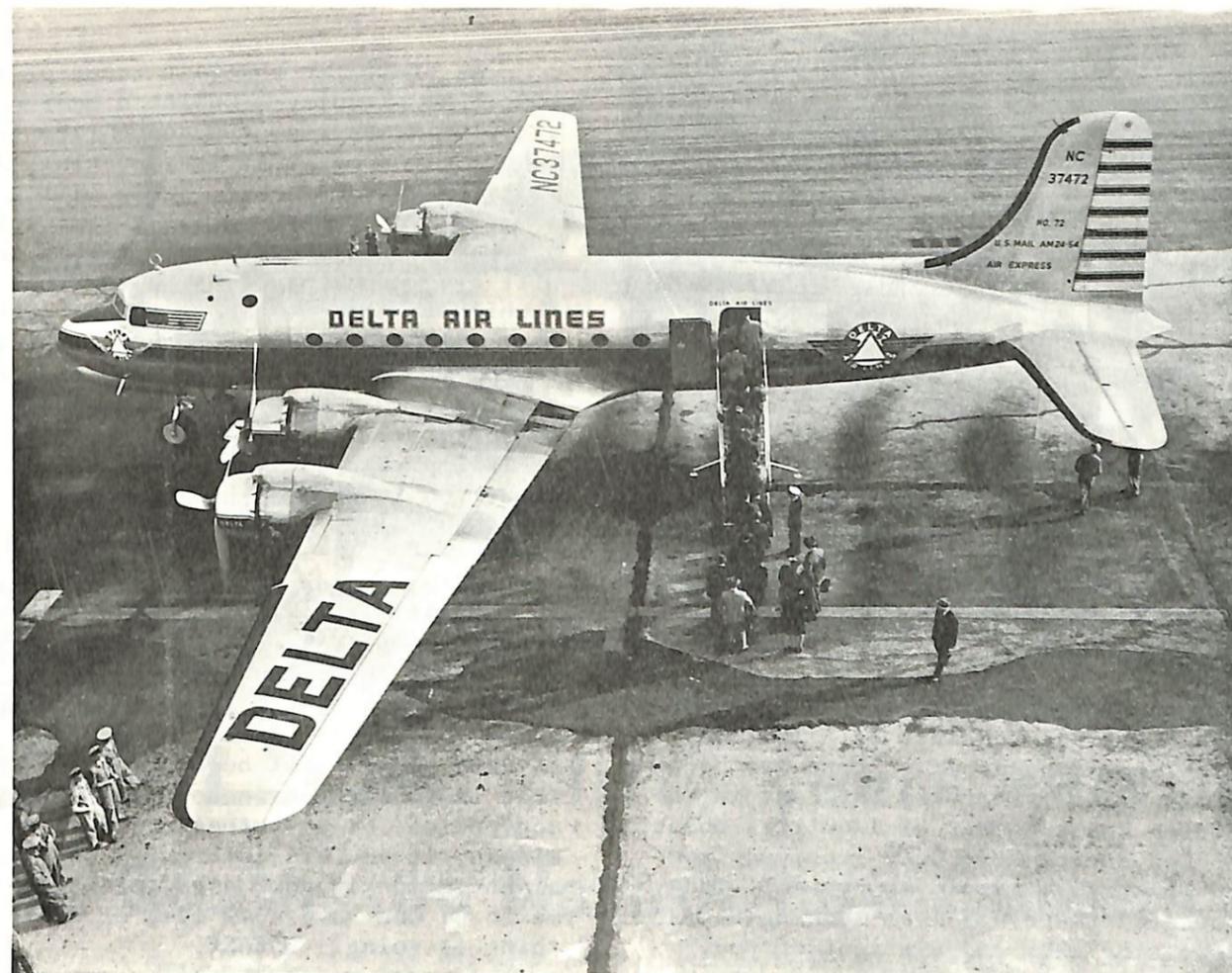
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Thank you



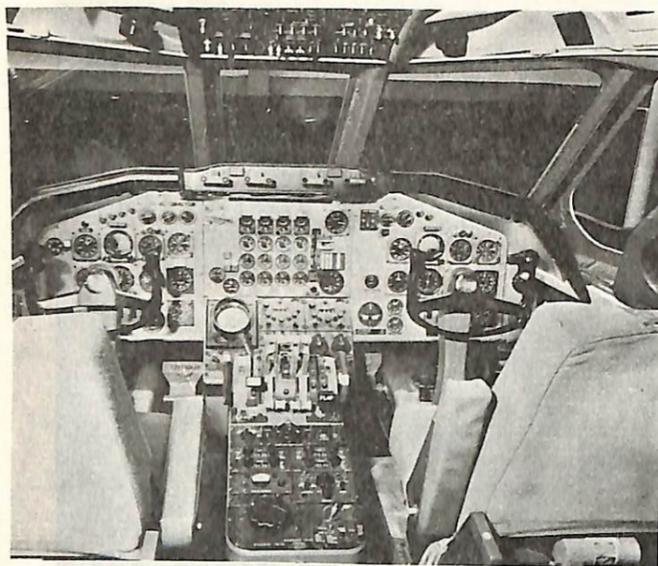
CAPTAIN'S LOG

VOLUME IV, Number 4
Spring 1979

FLIGHT MANIFEST

....from the left hand seat.....	2
Delta Air Lines-50 Years of Service.....	3
Convair 880/990.....	15
Decal Capers.....	20
Model Shop.....	30
Sticker Chatter.....	34
Around the World of Airline Schedules.....	36
Junior Crew Member Insignia.....	44
Airlines International 79.....	46
Post Cards.....	48
Airline Photography.....	52
Flight Exchange.....	54
Membership News.....	55

I would like to express my thanks to Ms. Harriette Parker, Supervisor, Public Relations for Delta Air Lines for the material pertaining to the history of that carrier appearing in this issue of the LOG. Also I would like to thank those members that have sent in pictures and other material that was requested in the last issue. I am just sorry that all material sent in could not be used. I had a very hard time selecting the photos to be used with this issue. Again, thanks to all, your material will be returned shortly.



...from the left hand seat...

It's time for the third annual airline memorabilia collectors convention! This years get-together in Arlington, Texas should be super. There has been considerable membership interest in the meeting and a number of inquiries about the convention have been received from non-members. I hope you have all made plans to attend and I am looking forward to meeting each and everyone of you!

This issue of the LOG is reaching you a little later than usual, but not for the usual reasons. All editors had their material in on time, so I can't place the blame on them. By the end of March, some 100 members had not paid their dues for 1979. Before I could publish another issue of the LOG I had to have some idea of how much money I would have on hand to print four magazines this year. A special mailing went to those that had not paid their dues inquiring if they desired to continue their membership in the World Airline Hobby Club. By the end of April, most had sent in their renewal checks. This delay has set the schedule of printing the LOG back about a complete issue. This issue should be the Summer 1979 issue. How this will be made up, remains to be determined. If time permits, we will try to get out three more issues before the end of the year. Please bear with the editor and the staff. I would rather be behind in the schedule and take time to put out a good issue of the LOG, then rush and produce a sloppy issue.

As stated in the last issue of the LOG, I am planning a business meeting for all Club members at the convention to take place sometime Friday evening, July 13, after dinner hours. This will give some members a chance to get some things off their chest that have problems and will give us a chance to be together for a while to talk over some of the problems that will be facing the Club in the time to come. If your able, please plan on attending this meeting. It may take you away from the trade area for a while, but it is important that we sit down and talk about the future of the Club and annual meetings.

With regards to the annual meeting, in the last issue I requested those that were interested in hosting a convention to contact me so their names could be placed on a ballot of some type to be voted on at this years banquet. Well, to date, I have not heard from anyone that is interested in hosting the 1980 convention, or any other convention. Please, if you are interested in holding a convention in your area, please write me so we can have some idea of where this thing is going. PLEASE!

We have picked up about 15 new members since the last issue of the LOG went out. I can not stress enough the need to obtain new members. I am sure there is at least one other person we all know that is interested in the collecting of airline memorabilia that we could get to join the Club. Sign him up! The more members we have, the more money we can put into the publishing of the LOG. This could be in the form of more pictures or more pages. Make it a point to sign up ONE new member this year.

One other item that I can not stress enough is that you inform me when you have a change of address. Please make it a note to change your address with the Club. When you fail to inform the Club your LOG goes in the dead letter mail and is lost, no good to you or the Club.

So much for all that. I will be looking forward to see all of you in Texas come July. Don't let the gasoline shortage scare you from making the trip. Leave home early and plan on staying late in Big "D"!



DELTA fifty years serving the South, the Nation, now Europe

A distinguished record of "firsts" has marked the colorful development of Delta Air Lines from its pioneer beginning as the world's first crop dusting company to a firm place of jet leadership in the nation's air transportation industry.

Back of Delta is a colorful story of aerial crop-protection--the pioneering efforts of men of vision who saw in the fledgling airplane a way to halt the cotton boll weevil's disastrous march across the South's main cash crop.

In fact, if the boll weevil had not marched out of Mexico in the early 1900's to devastate cotton fields from one end of Dixie to the other, there might never have been a Delta Air Lines. And C. E. Woolman, the company's principal founder, might have continued a career as district agricultural agent instead of becoming president and chairman of the board of the Free World's fifth largest airline, which he guided for over 40 years until his death in September 1966.

The boll weevil had long been a concern of the U.S. Bureau of Entomology, which operated a Southern Field Crop Insect Investigation studying sugar cane and tobacco as well as cotton. When the weevil's relentless march from Mexico reached the Mississippi Valley, such a serious economic threat faced the South that the government in 1914 relocated its laboratory in Tallulah, Louisiana, and made it the base for an intensified cotton insect investigation.

Directing the activities at the laboratory was Dr. B. R. Coad. He was assisted in experimental work by a young farm agent named C. E. Woolman, who had received a degree in agricultural engineering

from the University of Illinois and was then associated with the Extension Department of Louisiana State University.

Although a native of Bloomington, Indiana (October 8, 1889), Woolman's heritage was Southern. His father's family, Scotch Loyalists from the clan of McFarland, settled in South Carolina early in American history, and his mother's family were early Kentuckians who farmed on land that is now part of the city of Frankfort. His parents were living in Bloomington when Woolman was born and later moved to Urbana, Illinois, where he attended high school.

Woolman went to the University of Illinois on a scholarship, belonged to the Agriculture Glee Club and was a member of the senior football team. But his main interest was aviation.

One day when a crude airplane crashed on the campus, Woolman worked eagerly with the pilot to repair the damage. And in 1910--only seven years after the Wright Brothers' first successful flight, he took advantage of his summer vacation to attend the world's first aviation meet in Rheims, France. Coming back across the Atlantic, he worked with Grahame-White and his mechanic in the hold of the ship as they overhauled a rotary engine to prepare for America's first big meet in Boston. Woolman didn't attend that meet, however; he was back in school.

After graduating in 1912 from the college of agriculture he went south to farm in Mississippi, later moving to Louisiana where he supervised 7,000 acres in the Red River Valley.

Although aviation was still his first love, it was too uncertain a field to enter in those days, so Woolman accepted a position with the extension department of Louisiana State University. He was appointed county agent first in Caddo Parish (Shreveport) then in Ouachita Parish (1913), and in 1916 was promoted to a district agent in North Louisiana. Unknown to him at the time, his contacts while with the agricultural service were to bring him right back into aviation.

Only a few ineffective wet sprays had been developed to combat the boll weevil during the first decade of the century, but in 1916 Dr. Coad and Woolman had their first indications of success. Lead arsenate, a dry insecticide applied as a dust, had promising effects on the weevil, and an even more effective powder was the potent calcium arsenate mixture. What was needed was a method of application that would be faster and more effective than hand sprinkling.

Remembering an attempt that a city forester in Cleveland, Ohio had made to use the airplane to combat worms in his city's catalpa trees, the experimenters in the cotton fields decided to adapt the process to the fight against the boll weevil.

Dr. Coad went to Washington to seek necessary appropriations and appeared before several Congressional committees pleading his cause, but most congressmen scoffed at the idea. However, the director of the budget listened to the scientist from the cotton fields, and Dr. Coad went back to Louisiana with enough appropriations to earn the cooperation of the Army. For two or three years this entomologist and Woolman worked with two Army-furnished Jennys, designing effective dusting equipment and experimenting on a regular rate of dust flow regardless of how fast the plane flew.

Fate brought to Louisiana the person who furnished the first step in the creation of the world's first commercial crop dusting company. George Post, vice-president of an Ogdensburg, New York, airplane manufacturer, the Huff Daland Company, was forced down in Tallulah in 1923 en route to a demonstration in San Antonio. "Stuttering Sam," as his plane was called, was flying the first air cooled engine aircraft, the J-4, and Post was looking for an outlet other than the Army, which was at that time about the only purchaser of airplanes.

Post was so excited about the cotton dusting activities he observed in Tallulah that he spent several days watching Dr. Coad's experiments. Back in Ogdensburg he interested his company enough in the venture to form a separate division--the Huff Daland Dusters--with Post as president and Harold Harris, a test pilot from Wright Field, as vice-president and operations manager.

C. E. Woolman left the agricultural extension service on May 30, 1924, to take charge of the new company's entomological work and was made vice-president and field manager. He brought with him a genial personality, integrity, and a stubborn resistance to failure which have all characterized Delta ever since.

When Post left the company a short time later, Tom Huff succeeded him as president and Woolman

became vice-president and general manager. Huff remained only a short time and was succeeded by Edgar Gott.

Huff Daland Dusters started operations in 1924 at Macon, Georgia, but lack of experience and the smallness of the cotton fields led to an unsuccessful first season. Dr. Coad, an interested observer from the government's delta laboratory, suggested the dusters move to Louisiana, and in 1925 headquarters were established in Monroe, Louisiana.

The Huff Daland Manufacturing Company in New York built the first planes ever specifically designed for dusting, and Huff Daland Dusters' fleet became the largest privately-owned aircraft fleet in the world, with 18 planes incorporating tubular steel fuselage and the split axle type of landing gear. The company's order of Wright "Whirlwind" engines was the first large commercial order of Wright engines ever sold by the Wright Aeronautical Corporation.

Starting with 18 planes, Huff Daland Dusters soon owned 25 small planes and some larger aircraft (built around the Liberty motor) called "Ton of Dust." (Forty-three years later, following Mr. Woolman's death, Delta employees completely restored an original Huff Daland Duster in his memory and presented it to the Smithsonian Institution.)

Since the company had an income only during summer months, Woolman conceived the idea of shifting operations during non-productive months to Peru where seasons are reversed. He went to Peru in 1926 with no knowledge of the language, but he took along convincing movie films of the dusting work. Huff Daland Dusters, having shipped its aircraft to Peru by steamship, started out operating in two valleys; ended up expanding the work to seven valleys within a year.

It was in Peru where Woolman first visualized the future of passenger service by air, and he was successful in securing airmail rights over stiff competition from wealthy German interests to become the first American airline operator south of the equator in the western hemisphere, inaugurating service from Peru to Ecuador, a 1,500 mile route, in 1927.

In 1928 Woolman returned to Monroe where he found a representative from the New York company attempting to sell the dusting division out from under him because of financial upsets being experienced by the parent Huff Daland Manufacturing Company. Woolman quickly aroused the interest of Monroe businessmen, who had money, faith in aviation, and the vision to see that the dusting project would contribute materially to the economic welfare of northeast Louisiana. They bought Huff Daland's equipment on November 15, 1928. Now financed by Southern capital, Huff Daland Dusters became Delta Air Service (from the Mississippi delta), D. Y. Smith assumed the office of the company's first president, and Mr. Woolman continued as active manager under the title of Vice-President and General Manager.

Back in Peru an internal revolution was erupting. Woolman had left a few planes and ground equipment in Peru, and when revolutionaries began eyeing the fleet for military

struggles, Woolman sold his South American dusters in 1928 to a Peruvian firm and sold his airmail route to Pan American Grace, forming the nucleus of Panagra.

The company's dusting operations never stopped in the South--they continued until 1966--but bigger undertakings were afoot.

Woolman's dream of expansion led to the purchase of three six-passenger, 90 mile-per-hour Travelaire monoplanes, powered by 300 hhp Wright "Whirlwind" engines. The first passenger flight on June 17, 1929, over an original route that stretched from Dallas, Texas, to Jackson, Mississippi, with stops in Shreveport and Monroe, Louisiana, represented a bold financial step, for the route was operated without benefit of a mail contract. As additional planes were delivered from the factory, service was extended eastward to Birmingham, Alabama and westward to Fort Worth, Texas.

The year 1930 brought a name change (Delta Air Corporation) and the news that the Post Office Department had awarded the airmail contract for the southern route to a rival airline. But Delta's Woolman retained faith. After an interim period of expanded dusting operations, during which time Dr. Coad joined the airline as chief entomologist, Delta's opportunity came in 1934 when the P.O. Department cancelled all airmail contracts and submitted all routes for rebid. Delta won back the route it had originally pioneered from Dallas/Fort Worth to Birmingham and beyond Birmingham to Atlanta and Charleston, South Carolina.

The first airmail flight was on July 4, 1934, with tri-motored Stinson equipment (see below) which carried seven passengers and flew 10 miles an hour faster than the Travelaire. One of the seven pilots at the time was Charles H. Dolson, who was to rise through management's ranks to become president of Delta in 1965 and chairman of the board in 1966, following Mr. Woolman's death.



To finance the new route and equipment, Delta decided to sell \$25,000 in stock. The late C. E. Faulk made the investment at \$5 a share and went to the president's chair in 1934 as finance overseer. He served until 1945 when Woolman became president and general manager and the company's name was changed to Delta Air Lines, Inc. Faulk served as chairman of the board until his death on August 31, 1951.

Two other airlines, over the past years, have joined with Delta to give the company the route system that it enjoys today. We will take a brief look at the two systems involved; Chicago & Southern Air Lines which merged in 1953 and Northeast in 1972. A detailed look at these two carriers will be carried in future issues of the "Log".

CHICAGO & SOUTHERN

Also developing in the 1930's was another pioneer airline which became part of Delta through a merger in 1953--Chicago & Southern Air Lines.

Carleton Putnam, founder of C&S, majored in history and politics at Princeton. After graduation he journeyed abroad, worked in a New York law office, studied a year at Harvard Law School, and spent a few years working in New York politics before completing his degree work at Columbia.

It was this young law student who was walking down a street in New York one day, saw an airplane in a show window, went in and bought it and arranged for flying lessons. The lessons were in the form of a cross-country flight, and by the time he had reached California, Putnam had decided to try his hand in the field of air transportation.

One warm May morning in 1933, Putnam was seated in the offices of the Lockheed Aircraft Corporation in Burbank, seeking the advice of Lockheed's president, Robert Gross, on a career in aviation. As they talked, the company's secretary, Cyril Chappellet, walked in, and an idea occurred to Gross.



DELTA AIR LINES

THE TRANS-SOUTHERN ROUTE



Turning to the secretary he said, "By the way, Cyril, what about that milk run up the coast from Los Angeles to San Francisco through Santa Barbara and Monterey? You once thought of starting a line through that country. What do you think about Putnam's having a try at it?"

Chappellet glanced out the window at Putnam's old Bellanca plane, then his eyes twinkled humorously as they looked beyond over the mountains to the northwest.

"Well," he said, "why not? You can use my airline ticket agency downtown for an office if you want. I've a man down there who might be willing to help develop traffic."

Putnam didn't take long to reach a decision. Airlines were already operating over most of the country's desirable routes. Here, at least, was a possible last chance, albeit one which necessitated an independent operation without government subsidy support. Within a day or two he had made arrangements with Chappellet's ticket office to establish local ticket agents along the seaboard route to San Francisco, and was off to Chicago in search of another six-passenger Bellanca and a spare engine to begin one of the most adventurous stories in aviation.

Putnam found his second Bellanca in Chicago, bought it second-hand from Wayne King, the orchestra leader, and flew it back over the Rockies to Los Angeles. On June 25, 1933, the new line made its first flight from Los Angeles to San Francisco by way of Santa Barbara, Santa Maria, Paso Robles, Salinas, and Monterey.

The same spirit which led the pioneers across the plains westward in the years of American progress led Carleton Putnam through the first struggling years of building an airline. The company was known as Pacific Seaboard Air Lines in those days, and attracted no national attention. But it was during this period of obscure effort and seemingly hopeless struggle that the foundations of the later organization were laid.

In February 1934, opportunity came. Putnam was on his way to Washington via United Air Lines to attempt to persuade the P.O. Department to establish a mail service along Pacific Seaboard's route when he read a newspaper headline announcing the cancellation of all the country's airmail contracts the day before. He knew that the government would have to re-advertise every mail route previously in existence and to call for new bids and that this meant a new chance for small operators like himself who had been working without any mail revenues.

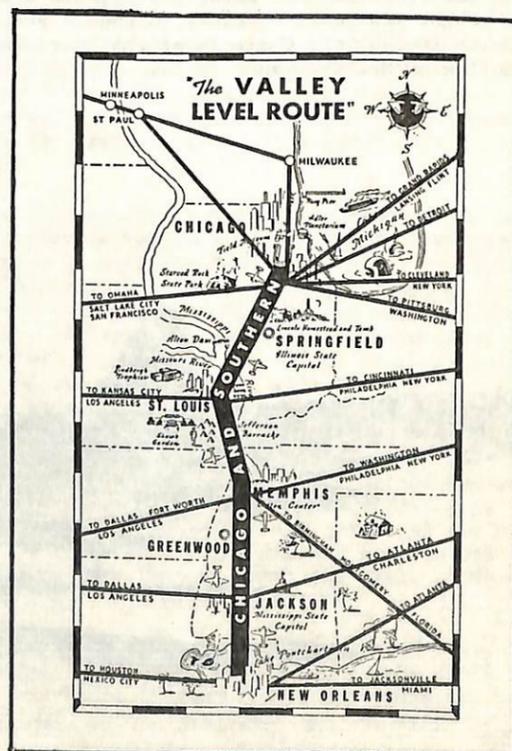
The result was that Pacific Seaboard Air Lines submitted a bid of 17½ cents for the Chicago-New Orleans route (the lowest bid ever received by the P.O. up to that time), and it was accepted in the spring of 1934. The company then shifted operations to the Mississippi Valley, with headquarters first in Memphis (May, 1934), later in St. Louis (Sept. 1935), and back to Memphis (August, 1941).

Mail service started between Chicago and New Orleans via Memphis on June 3, 1934, with four six-passenger Bellancas; passengers were first flown on July 13, 1934.

On December 3, 1935, the corporate name of the company was changed to Chicago and Southern Air Lines, a Delaware corporation.

Mr. Putnam, who had been serving as president and chairman of the board, resigned the presidency in August, 1948, and announced the election of Sidney A. Stewart as president. Mr. Putnam continued as chairman of the board.

On May 1, 1953, the Civil Aeronautics Board formally transferred the routes of Chicago & Southern to Delta Air Lines, Inc. and authorized the combined company to operate as Delta-C&S Air Lines, which it did for two years. Delta-C & S at the time of the merger served 59 cities in the United States and Caribbean, with a route system of 9,508 miles.



C. E. Woolman was president and general manager. Carleton Putnam was chairman of the board until October 19, 1954, when he resigned the chairmanship but retained membership on the board. Sidney Stewart served as executive vice-president of the merged company until his resignation on March 15, 1954.

NORTHEAST BEGINS IN NEW ENGLAND

The first flight of Northeast Airlines was on August 11, 1933, from Boston to Portland and Bangor, Maine, with 8-passenger Stinson equipment. The new carrier was known as Boston and Maine Airways, a subsidiary of the Boston and Maine Railroad Company, and the flights were operated, under contract, by National Airways, whose founders included PAUL COLLINS, one of the country's first air mail pilots; Samuel J. Solomon, a pioneer airport operator, Eugene Vidal, a West Point graduate; and Amelia Earhart, the famed aviatrix.

Company headquarters were located in a hangar on a hay field at Scarborough, Maine, just south of the Portland Airport. At the end of the winter, a heated hangar became available in Boston, and headquarters were transferred to the new facility. Boston and Main Airways purchased National Airways' assets in 1937, including its air mail contract, and in November 1940, the airline was renamed Northeast Airlines.

Storer Broadcasting Company purchased Northeast in 1965, and the next year the carrier took on a new image, with its aircraft painted yellow and nicknamed Yellowbirds.

Despite the fact that new routes came rapidly during the next few years, Northeast was suffering from severe financial problems. After a period of substantial financial losses, in April 1971, Northeast and Delta announced their agreement to merge. Fourteen months later on May 19, 1972, President Richard M. Nixon, on the recommendation of the CAB, authorized a merger between Delta and Northeast.

DELTA-NORTHEAST MERGER

The merger of Delta Air Lines and Northeast Airlines became effective August 1, 1972.

Northeast, at the time of the merger, serve 37 cities, of which 13 were also served by Delta. The merger brought the total to 98, including six cities in five foreign countries and San Juan, Puerto Rico. A second Venezuelan city was added in 1972, making a total of 99.

George B. Storer, Northeast's Board Chairman, and Bill Michaels, Northeast's President, became Delat Directors. However, Mr. Storer retired before the end of the year, and Stuart W. Patton, of Miami,

replaced him on the airline's Board of Directors. Mr. Patton, a practicing attorney, had also served as Vice-President-Law of Northeast prior to merger.

Now that we have briefly taken a look at the the airlines that make up Delta, lets turn back to the history of Delta and take a look at the aircraft that the company has flown over the years.

Delta's equipment has kept pace with the airline's steady growth, proccessing through the years from the six-passenger Travelaire to the 370-passenger Boeing 747.

With the securing of its airmail contract in July, 1934, Delta utilized the seven-passenger tri-motored Stinson T, which flew 10 miles an hour faster than the Travelaire. For C&S, Stinson T's replaced the Bellancas in 1935. The Stinson A, carrying eight passengers and flying at 120 mph, went into service over Delta's routes in 1935.

The Stinsons were fabric-covered aircraft, fast becoming obsolete for ailine use, so in 1936, Delta, C&S, and Northeast all added all-metal Lockheed Electras to their fleets (see next page). The 10-passenger Electras had a cruising speed of 160 mph and were powered by two 450-hp "Whirlwind" engines.

The Electras, equipped with two-way radio, modern flight instruments, and manned by a captain and first officer, were the finest and most efficient development of air transport at that time. Ground time was reduced by having the co-pilots serve complimentary box lunches aloft.

In 1940 the growth of air travel across the South necessitated the purchase by Delta of 14-passenger, 165-mph DC-2 transports. These planes went into service on March 15 and made an immediate hit with the passengers, for something else had been added--registered nurses to serve as stewardesses. These attractive and attentive girls, trained by Miss Laura Wizark, enchanced Delta's





DELTA
now serves New York's
IDLEWILD
AIRPORT

(In addition to Newark Airport)



New York and the South now linked with new
NON-STOP "FLYING SCOTS"
between
NEW YORK and ATLANTA

FLT. 123	FARES TO AND FROM NEW YORK	FLT. 122
8:40 amLV. NEW YORK (Idlewild).....AR.		10:32 pm
11:11 amAR. ATLANTA	\$35.00LV.	6:15 pm

Additional "Flying Scot" Services

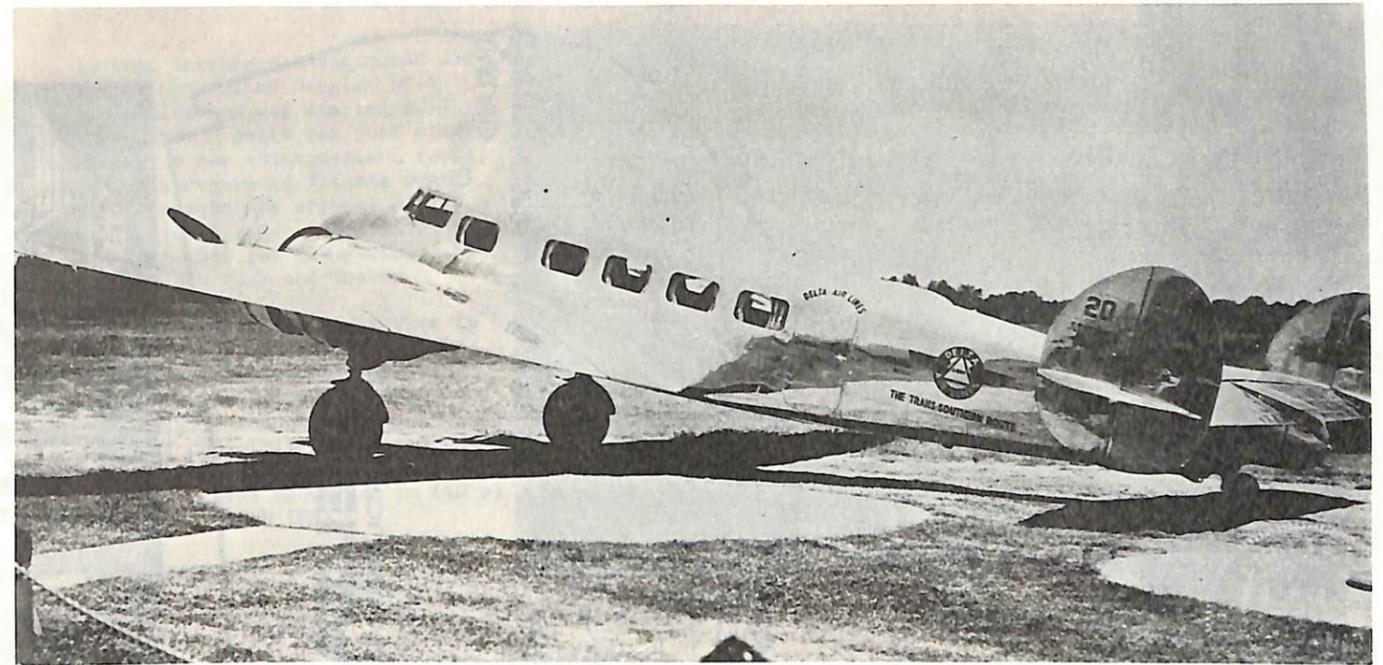
FLT. 121		FLT. 120
3:50 pmLV. NEW YORK (Idlewild).....AR.		5:29 pm
5:04 pmAR. WASHINGTON	\$11.10LV.	4:21 pm
7:00 pmAR. ATLANTA	35.00LV.	12:30 pm
8:19 pmAR. JACKSON	53.50LV.	9:05 am
9:46 pmAR. SHREVEPORT	62.80LV.	7:45 am
11:03 pmAR. DALLAS	63.00LV.	6:30 am

all fares plus tax

- Delta's new Idlewild arrivals provide more convenient connections to the Northeast and Europe.
- Delta continues to serve New York through Newark Airport with Golden Crown DC-7's and Super Convairs to WASHINGTON, ATLANTA, NEW ORLEANS and HOUSTON.

- Atlanta arrivals provide convenient connections to all the South and Southwest, including BIRMINGHAM, AUGUSTA, COLUMBIA, MACON AND SAVANNAH.

GENERAL OFFICES:
 Atlanta Airport, Atlanta, Georgia



The all-metal Lockheed Electras were added to the fleets of Delta, C&S and Northeast in 1936. reputation for fine passenger service.

In May 1940, C&S, striving to provide more and better service along the fast-growing Mississippi Valley route, changed equipment to the Douglas DC-3. Delta replaced its DC-2's with DC-3's in December 1940, and the venerable aircraft flew the Delta colors until October 1960. Northeast added DC-3's in 1941.

America's entry into World War II on December 7, 1941, affected Delta, C&S, and Northeast as it did everybody, and the airlines quickly joined the war effort by supplying pilots and equipment. Delta relinquished four Lockheed Electras and a DC-3 to the Army Air Force leaving four DC-3's to operate

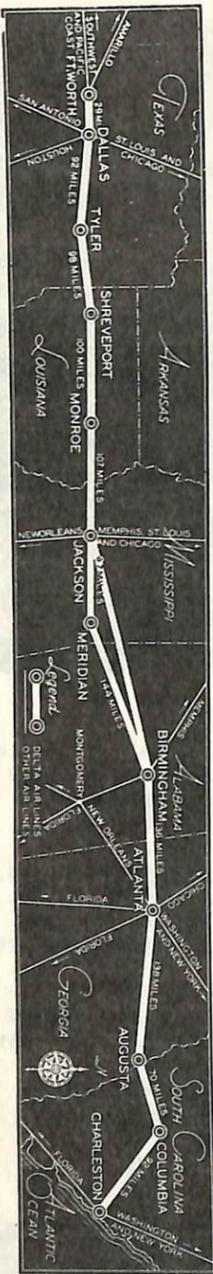
the schedule, and C&S gave up six DC-3's. Schedules were only slightly altered, but there were longer flying days and double duty for many old-time employees.

The airlines accepted various Army contracts, flying military cargo, modifying more than 1,000 aircraft for special military purposes, training Army pilots and mechanics, and overhauling engines and instruments.

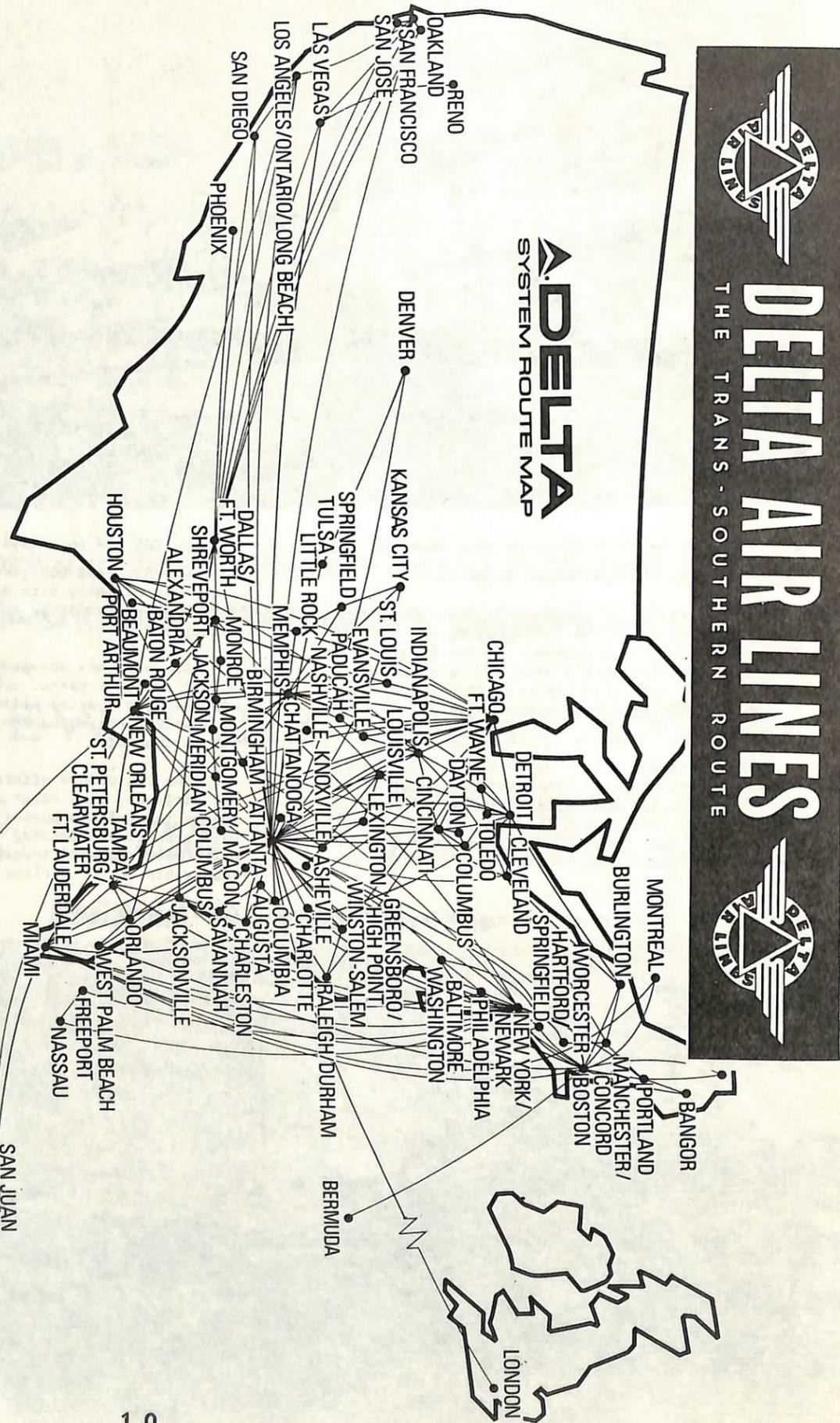
The victorious efforts of the Allies enabled the airlines, like other industries, to eventually return to civilian pursuits. Additional planes were gradually obtained, routes expanded, and Delta moved forward toward its firm place of leadership in the airline industry.

A Chicago and Southern DC-3 being serviced and loaded at Chicago Muni Airport.





T H E T R A N S - S O U T H E R N R O U T E



MARACAIBO
CARACAS
SAN JUAN
BERMUDA
LONDON

In 1945 Northeast inaugurated service with four-engined Douglas DC-4 aircraft; Delta and C&S started DC-4 service in 1946. Delta had just started service over a new Chicago-Miami route, and C&S had inaugurated flights over the New Orleans-Havana segment of its new international route. Northeast used the DC-4's in 1946 for new shuttle service between New York and Boston.



NORTHEAST "SUNLINERS" gives you that "first class feeling at low coach fares" so this post card tells you.

Delta inaugurated DC-6 service in December 1948, and N.E. added Convair 240's in 1949. C&S launched new Constellation flights in October 1950, and in November 1951, announced the purchase of a fleet of Convair 340's, first delivery to be in June 1953. Delta added Convair 340's (later converted to 440's) to its fleet in March 1953.

It was after the Delta/C&S merger that the company in April 1954, placed DC-7 aircraft in service. Finest of the piston fleets, the DC-7 carried 77 passengers and cruised at 365 miles per hour. It was retired from service in February 1968.

Northeast placed DC-6Bs in service in 1956, Viscounts in 1958, Boeing 707s in 1959, Convair 880s in 1960, B-727-100s in 1965, FH-227s in 1966, and DC-9s in 1967. It was the first airline to fly the B-727-200s in 1968.

Delta was one of three domestic trunk carriers to pass up turbo-prop jet aircraft and wait for the pure jets. Delta's management looked upon the prop-jet as an interim transport and preferred to wait a few months for pure jets which would fly 180 miles per hour faster. The decision paid off handsomely upon the arrival of the pure jets. Delta, after the inauguration of DC-8 service, immediately moved forward as one of the leaders with the new aircraft.

Delta is the only airline in the world to have introduced three different commercial jetliners.

The airline inaugurated DC-8 service on September 18, 1959; led again with the inauguration of Convair 880 jet service on May 15, 1960; and presented the world premiere of Douglas DC-9 service on November 29, 1965, an Atlanta-Memphis-Kansas City roundtrip. Daily DC-9 service began on December 8, 1965.

Because of its excellent short-to-medium range capabilities, the DC-9 has replaced the airline's piston fleet and added many new jet cities to the nation's air traveling map. Since the retirement of its Convair 440's on April 25, 1970, Delta's passenger fleet has been all-jet. With the merger of Northeast Airlines in 1972, however, the company acquired Fairchild FH-227 prop-jets, which operated in the New England area until January 1, 1975. Convair 880's were retired on January 1, 1974.

In 1966, the Lockheed L-100 airfreighter, built only 30 miles north of Delta's General Offices, succeeded the C-46, which had been Delta's cargo aircraft since 1957. With the L-100, Delta on September 15, 1966, became the first airline to employ the commercial version of the famed Hercules in all-cargo scheduled service. In 1968, Delta was

first to modify its L-100's to the larger L-100-20 specifications. The L-100's were retired from Delta service effective September 1, 1973.

Service with the Super DC-8 was inaugurated on April 18, 1967.

The largest jetliner ever designed for commercial use, the Boeing 747, joined Delta's fleet in 1970 and went into scheduled service on October 25. It was removed from service on April 24, 1977.

The L-1011 TriStar and DC-10 are three-engine, multi-range jetliners embodying advanced technological concepts to fulfill the expanding needs of air transportation during the 1970's. DC-10's leased from United Air Lines went into service in November 1972 and continued in operation until May 1, 1975.

TriStar service was inaugurated on December 15, 1973. With this airplane Delta became the first airline to operate all three of the third generation wide-body jets.

In 1972, Delta signed a purchase agreement to buy Boeing 727-232 wide-body aircraft. The agreement also arranged for Delta to sell to Boeing its Convair 880 and DC-8-33 aircraft. These aircraft were retired from service in January 1974.

From the Northeast merger in 1972, Delta acquired a fleet of DC-9-31's, 727-95's and -295's along with FH-227's. All of the 727's were converted to the new wide-body configuration. The DC-9-31's and FH-227's were sold in 1974 and 1975.

In January 1978, Delta announced the order of five long-range L-1011-500 TriStar jetliners for use on its Atlanta-London operations. Two are to be delivered in May and June of 1979; the other three are scheduled for delivery in 1981 and are convertible, at Delta's option, to the L-1011-1 configuration, which is the configuration of Delta's present TriStar fleet. Until these planes are received, Delta will lease two L-1011-100's from another carrier.

DELTA SERVICE INAUGURATED

DUSTER 1925	DOUGLAS DC-8 (Standard) 143 Passengers, 547 MPH September 18, 1959
TRAVEL AIR 5 Passengers, 90 MPH June 17, 1929 -- 1930	CONVAIR CV-880 96 Passengers, 547 MPH May 15, 1960 -- January 1, 1974
STINSON T (High Wing) 7 Passengers, 100 MPH July 1934 -- December 1935	DOUGLAS DC-9 (Standard) 68 Passengers, 540 MPH December 1965 -- October 1973
STINSON A (Low Wing) 8 Passengers, 120 MPH July 1935 -- March 1937	BOEING B-727 (Standard) 97 Passengers, 561 MPH December 1965 -- October 1977
LOCKHEED ELECTRA 10 Passengers, 160 MPH January 1936 -- June 1942	FAIRCHILD HILLER FH-227 43 Passengers, 264 MPH September 1966 -- December 1974
DOUGLAS DC-2 14 Passengers, 165 MPH March 1940 -- 1941	LOCKHEED L-100-20 (Air Freighter) Limit Payload 38,000 Lbs., 359 MPH September 1966 -- September 1973
DOUGLAS DC-3 21 Passengers, 170 MPH December 1940 -- October 29, 1960	DOUGLAS DC-9 (Super) 88 Passengers, 527 MPH April 1967
DOUGLAS DC-4 48 Passengers, 220 MPH March 1946 -- 1953	DOUGLAS DC-8 (Super) 199 Passengers, 547 MPH April 1967
DOUGLAS DC-6 67 Passengers, 312 MPH December 1, 1948 -- September 10, 1968	BOEING B-727 (Super) 137 Passengers, 557 MPH January 1968
CONSTELLATION 57 Passengers, 300 MPH October 1950 -- 1958	BOEING B-747 370 Passengers, 564 MPH October 1970 -- May 1977
CONVAIR CV-340/440 44 Passengers, 270 MPH March 1, 1953 -- April 25, 1970	DOUGLAS DC-10 250 Passengers, 564 MPH November 1972 -- May 1, 1975
DOUGLAS DC-7 77 Passengers, 365 MPH April 1, 1954 -- February 5, 1968	LOCKHEED L-1011 293 Passengers, 561 MPH December 1973
C-46 (Air Freighter) Payload/12-13,000 Lbs., 192 MPH October 1957 -- 1966	



USB-22



USN-180



USC-178



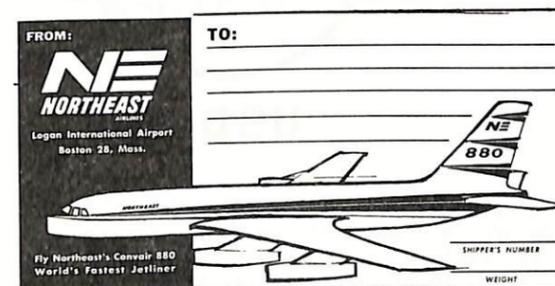
USN-188



USN-190



USC-181



USN-226



USN-200



USC-189



USN-197



USD-100





USD-79



USD-80



USD-81



USD-90



USD-84



USD-126



USD-91



USD-210

Now!
Golden Crown
DC-7
The Royal Caribe
NON-STOP
between
CARACAS
and HAVANA
ONE-STOP between
CARACAS and
NEW ORLEANS



Delta flies both the Douglas DC-8 and Convair 880 long-range Jetliners



THE CLASSIC LINES OF THE 880 ARE CAUGHT IN THIS SHOT OF 880M JA8021 (C/N 57) OF JAL. CONVAIR PHOTO.

CONVAIR 880*990

early jet-age glamour girls

by
JON PROCTOR

"As airliners, the 880 and 990 rank among the best of all time. As commercial products, they rank among the all-time corporate disasters." So admits, of all sources, the builders of these two jet transports, which have nearly disappeared from the airports of the world. The Convair division of General Dynamics eventually lost a staggering \$450 million producing only 102 examples, an average loss of nearly \$4.5 million on each airplane, an amount greater in some cases than their selling price, brand new.

The cause of this tremendous financial catastrophe can be traced to several factors, many of which will come out quite readily in the history of the aircraft. But the reader is encouraged to not let this overshadow the fact that a couple of first-class jetliners emerged and served the public faithfully for over fifteen years. Just ask the pilots who flew them, of the passengers who rode them, and you will get the same answer most of the time: a good airplane.

THE CONVAIR 880

The 880 was designed for medium-range routes, and was aimed, for the most part at attracting U.S. domestic operators. Smaller in size than the emerging 707 and DC-8, it was not intended to compete with them. The main attraction offered was speed, with a planned cruising velocity of 609 miles per hour. It was to "clean the clock" of any other airliner in existence or on the drawing board. The

fact that it would also guzzle kerosene with similar rapidity seemed of little significance at the time. After all, fuel was cheap....

The second major selling point was the performance planned for the 880 in areas of take-off, landing, and climbout ability. It was to be able to get in and out of 5,000-foot runways, common to many existing fields of the time, including very popular ones, such as New York's LaGuardia, Washington's National and Chicago's Midway airports. Combining the high cruise speeds with use of close-in airports, 880 operators would hold enviable competitive edges on some heavily travelled routes.

Initial plans called for the exterior metal to be of gold color, rather than silver, and the name of "Golden Arrow" was used, replacing the first name of "Skylark 600." But it was dropped, along with the novel idea to incorporate the gold anodized finish. Early tests revealed that matching of the various skin sections, cast from different batches of molten metal, would be impossible. This probably saved Convair millions more, as the planned process was extremely expensive as well. Some of the gold anodized interior cabin trim did survive however, and could be found in many of the airplanes, in the form of individual passenger air vents, window-shade trim, ashtray lids, door handles, and lavatory appointments. With "Golden Arrow" having to be forgotten, the name that would stick, "880" finally was chosen, from the intended cruise speed of 880 feet per second.



LEFT: The Sunfari Travel Club operated this single 880M, N5866, purchased from Boeing. Photo by Arnold F. Swanberg.

707 and DC-8 aircraft use) the 880 burned as much fuel as an Intercontinental 707, with only half the revenue capacity.

But the Convair 880 had some qualities which made it quite unique, and should be mentioned. For one thing, it was built "like a tank", as some put it. Over the years, the aircraft showed little wear in numerous areas, such as corrosion, metal fatigue, etc. Its physical integrity was reflected in extremely low cabin interior noise levels at cruise, which won the favor of its passengers and crew. And its five abreast coach seating was popular as well.

The 880's basic strength was given the supreme test early in the certification program, while high speed flutter tests were being conducted. A side-to-side rolling of the fuselage was introduced at 28,000 feet, which produced forces of a higher intensity than the aircraft could cope with. The cockpit crew reported feeling a sharp jolt. They were further jolted when they received a report from the chase plane behind them that most of the vertical stabilizer was missing (...uh, say again please?). After checking the plane's controls and essential systems, the crew requested permission to return to Lindbergh Field at San Diego, but they were instructed to make a precautionary landing at nearby Edwards Air Force Base, which was uneventful.

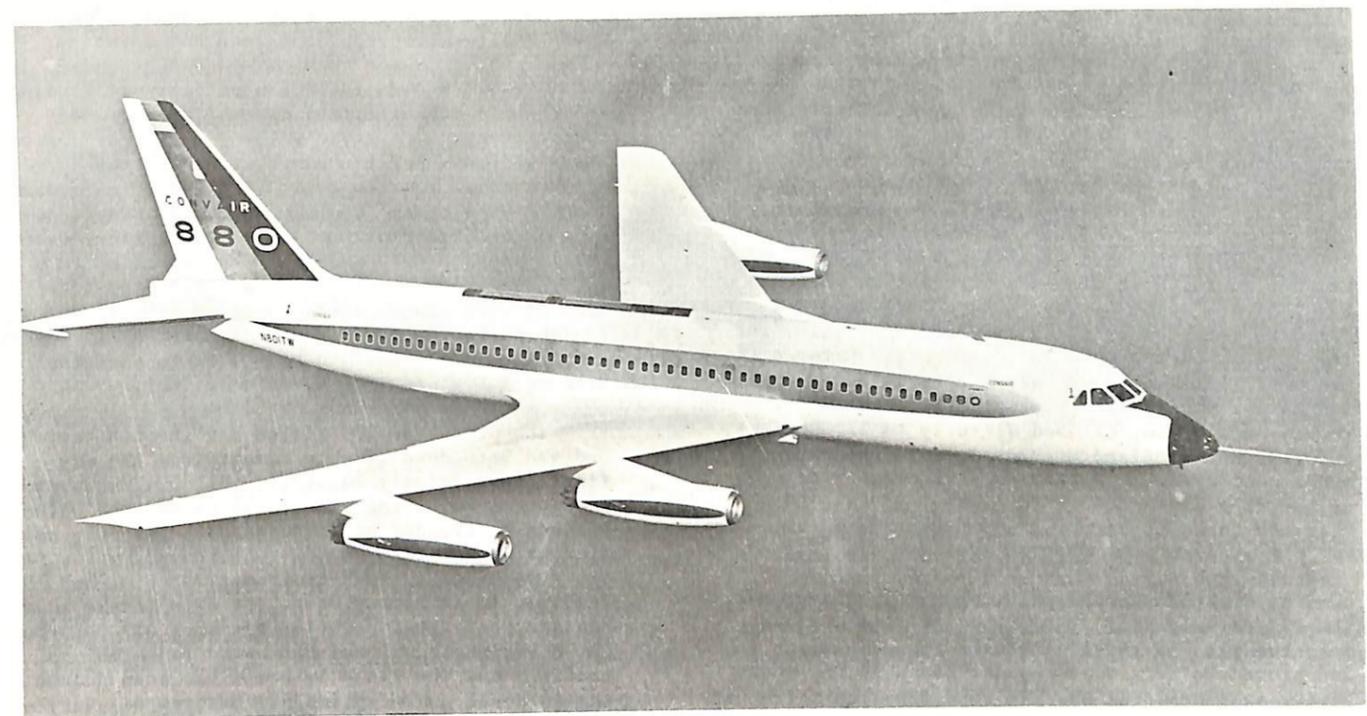
From the basic 880 came a variation, the model 880-22M, designed for overseas operations. And it



RIGHT: A Northeast 880 in "Yellowbird" colors, departing New York Int'l. Photo by Pete Black.

The optimistic attitude of Convair prompted a decision to put the 880 into production with only 40 orders on the books; 30 from Howard Hughes for TWA, and 10 from Delta. But the first blow came in the early 1960's, when traffic was booming with the advent of the jets. Speed became much less important to carriers than capacity. Instead of ordering medium capacity equipment, like the 880, second orders went to more spacious Boeing and Douglas jets. By the time the 880 entered service in 1960, Convair still had but 52 orders. And as if this wasn't a serious enough problem, performance goals so optimistically set by Convair were not met in the crucial area of runway performance. The 880 required 8600 feet at sea level for landing and stopping at maximum payload, and even at minimum landing weight its realistic limit was about 6000 feet, eliminating those close-in airports. Additionally, the approach and stall speeds for the 880 were quite high when compared with the 707 and DC-8. Maximum weight landing speed was 34 miles per hour greater than the 707.

Lack of capacity and performance effectively eliminated the orders Convair so desperately needed, and ultimately only 65 ships were built, far short of the break-even number. The sharp rises in fuel costs forced airlines to retire their Convairs early, with good reason. Even when flown at mach .82 (the speed most



THE PROTOTYPE 880 FLIES OVER THE PACIFIC ON ITS MAIDEN FLIGHT. A CONVAIR PHOTO.

did attract some customers; 18 of the 65 ships were built in this configuration. Along with additional fuel capacity, the "880M" incorporated leading edge slats and Krugor inboard flaps, along with an increase in the flap extension from 50 to 55 degrees. These changes gave it improved short field take-off and landing capabilities, plus an insignificant reduction in cruising speed.

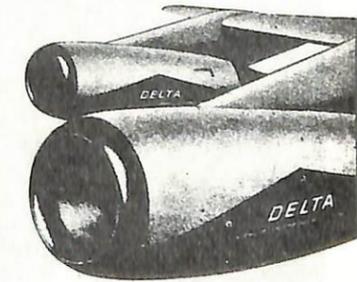
TWA and Delta were the chief domestic operators of the 880, and Cathay Pacific and Japan Air Lines operated the majority of the 880M models. Additionally, the ships saw service with Northeast Airlines, VIASA, Alaska Airlines, CAT (China), LANICA, and the FAA. They also served briefly, through interchange or lease arrangements, with KLM, Japan Domestic Airlines, and Swissair. An order for Capital Airlines was cancelled when the carrier merged with United.

One of the Convair's most impressive accomplishments was its amazing safety record. While in scheduled service, only three accidents with passenger fatalities occurred, one of which was caused by sabotage, while another involved a single death. But the ship also proved itself most unforgiving, as evidenced by the inordinate number of training mishaps. No less than five aircraft were destroyed during crew proficiency flights in the first five years of service. The first, a Delta ship, was lost only eight days after the 880 inaugural. All five training accidents were attributed to errors in the execution of specific maneuvers which were being conducted for training purposes. One pilot, flying for JAL, was involved in two of the accidents.

Most of the 880's still flying have been relegated to cargo service, although a few still carry passengers, on a charter basis. A program which may rejuvenate the frequency with which we see the old gals has been undertaken by the Gulfstream American (American Jet Industries), a company that is converting surplus 880's into pure freighter configurations. To be marketed as the "Airlifter", the conversion involves installation of a freight door on the forward port side of the fuselage, plus a cargo floor, stressed to 9g, and a reinforcement of the fuselage frame. With an estimated sale price of \$1.6 million each, the product will be a "mid-life" plane, with plenty of hours left on it. Sixteen ex-TWA ships are involved, most of which are in the 30,000 hour range. (Some Boeing and Douglas jets are still in active service today with over 60,000 hours.) Several options are available from Gulfstream American, including APU installations, livestock/bulk cargo barrier packages, etc. The Airlifter will be able to move a 50,000 lb payload over 1800 nautical miles at a speed of 450 knots, and a 3,000 mile range is advertised for reduced payload when a 400 knot cruise speed is introduced. It is hard to imagine what was to be the world's fastest jetliner lumbering along at 400 knots, but the fuel savings involved will enable the Airlifter to become an economical intermediate range jet freighter. And the low purchase price, along with the availability of the ships should attract customers.

NEW! Starting October 15
First and only Convair 880 Jets
San Francisco to Dallas

Only Delta offers the all-luxury 880 at the low tourist fare of **\$87⁸⁵** plus tax. Flight continues thru to New Orleans and Atlanta, connecting all the Southeast.



The first aircraft to be converted was expected to be certified by the end of April, 1979, after which a production line was to commence conversion of 22 ships at the Gulfstream American facility at Harlingen, Texas. The first two conversions were completed at Van Nuys, California. Unfortunately, TWA and Gulfstream were unable to come to an agreement on the remaining eight Convairs still at TWA's overhaul base, and they have been scheduled for scrapping.

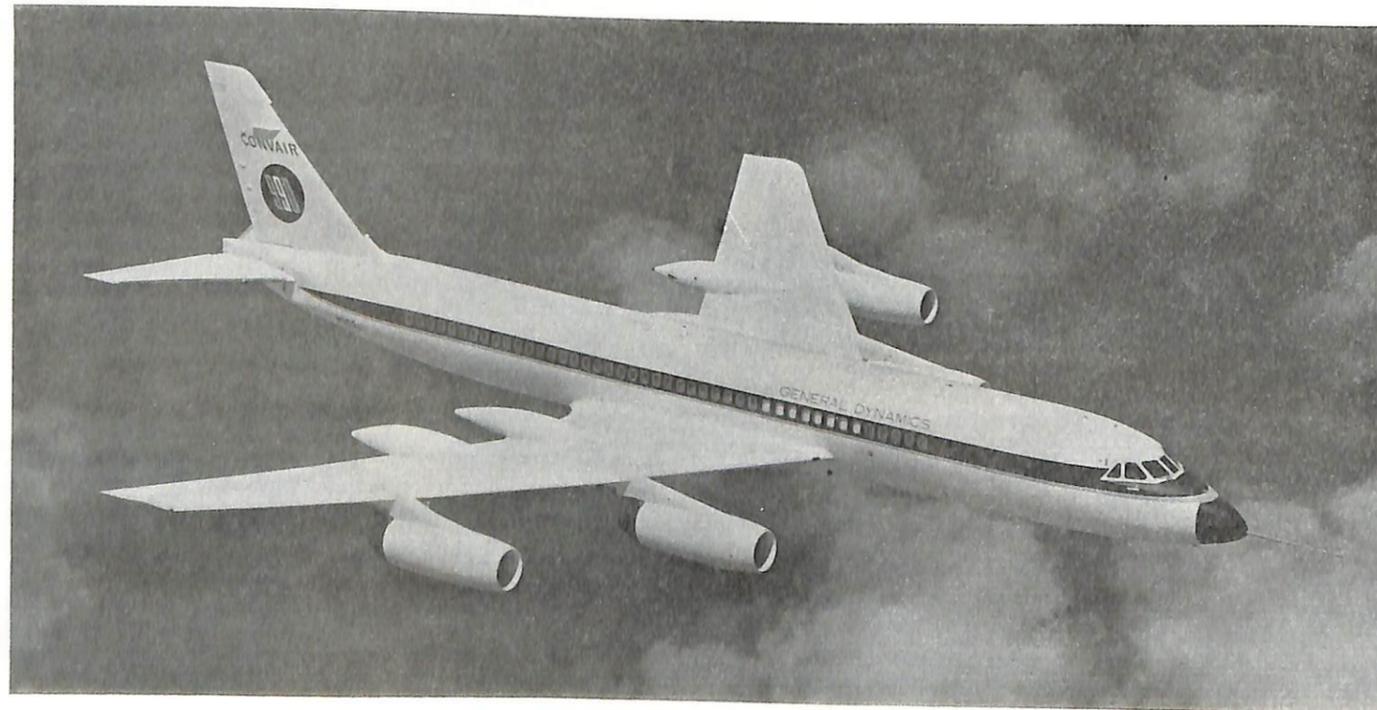
Probably the most significant tribute to the Convair in the eyes of its admirers came when the first of the ships purchased by Gulfstream American from TWA left the overhaul base at Kansas City for the conversion facility in California. After sitting forlornly for over four years, through hot summers and cold winters, ship 12, N818TW roared down the runway once again, climbed directly to 31,000 feet, and flew non-stop and without incident to Van Nuys, and a new career. "Just a good airplane," as one of her fans explained!

THE CONVAIR 990

If the Convair 880 was financially disastrous, the 990 cataclysmic! But, like its little sister, it served its masters faithfully for many years, and proved to be a very popular plane in the eyes of the passengers it carried, and crews that flew it.

The 990 was basically a growth version of the 880, incorporating an improved aft-fan engine and an increase in length of just over 10 feet. Also known initially as the "Model 600", its specifications were developed to meet the requirements of American Airlines, who placed the first order in July, 1958, for 25 ships, with an option on 25 more. Interestingly, the same ability to operate into and out of the Chicago, Washington and New York airports that the 880 was to have also was promised for the 990, and was a major consideration which convinced American to place the launch order. Swissair had contracted for five 880's initially, and in October, 1958 converted the order to seven 990's. Varig and

THE PROTOTYPE 990 IS SHOWN ON ITS MAIDEN FLIGHT. A CONVAIR PHOTO.



and Garuda bought three each, and NASA, APSA and Garrett Airesearch took one each.

The 990 design incorporated improved landing and takeoff capabilities, as well as increased speed. General Electric CJ-805-21 aft-fan engines, along with a superthin wing, allowed a top speed of mach .91. But along with this came increased drag, caused by air flowing over the thin wings at a supersonic rate, and Convair engineers eventually came up with a design incorporating two anti-shock bodies extending back from the trailing edge of each wing. These "speed pods", which resembled overturned canoes, diminished or delayed the shock wave effect to reduce drag, and also allowed for storage of additional fuel.

The prototype 990 rolled out in November, 1960, and ran into deep trouble almost from the day it first flew, January 24, 1961, following several postponements. Wing vibrations caused the outboard engines to shudder at high speeds. The only solution was a complete engine realignment, which seriously delayed the test program timetable, and then resulted in increased drag. It didn't take long to realize that the top cruise speed of 629 mph would be unobtainable without extensive research and testing, and the range Swissair had been guaranteed was in doubt. The entire 990 program was very nearly scrubbed at this point. In retrospect, this undoubtedly would have been a cheaper way out for Convair. But they immediately retrenched, and in the Fall of 1961 worked out an agreement with the customers to accept the 990 at 584 mph cruise speed, and deliveries further delayed, and the price tag lowered. Swissair took two 880M's on lease to fill the gap until their 990 deliveries began.

Meanwhile, extensive nacelle modifications were completed, plus installation of a leading edge "glove" over the mount and a large terminal fairing, extending aft of the nacelle on the inboard side. Some of the modifications varied between the American and Swissair models. Completion of the changes



THE FIRST DELIVERY TO AN AIRLINE, N5605 (C/N 9) IS SHOWN ON ITS MAIDEN FLIGHT, DEPARTING SAN DIEGO IN THE COLORS OF AMERICAN AIRLINES. A CONVAIR PHOTO.

brought the airplane up to the "990A" configuration. The airlines were so hard-pressed for deliveries that they accepted initial deliveries unmodified and flew them at reduced speeds until the "A" configuration changes could be made. Even doing this, Swissair's first 990 was hand over eight months behind schedule.

The name "Coronado" was given to the 990, but Swissair and SAS were the only ones to use the title. American kept "990", the name they had insisted upon; changed from "600" to denote a design supposedly superior to "880".

At one point, 55 ships were on the delivery schedule, including 12 for Howard Hughes, and 5 for KLM (on a speculative basis). When they did not materialize, the schedule slipped back, and only 37 ships were built.

Three operators had sizable fleets of second-hand 990's. Spantax of Spain acquired 13 ships altogether, and still have 12 in service. General Electric came up with a modification to the engines for Spantax, which provided a "clean burning" feature, to meet environmental standards.

Modern Air Transport, a supplemental carrier, operated a total of 10 before the company was dissolved. Denver Ports of Call Travel Club acquired six ships, and now operates four of them, with the other two purchased for spare parts.

Middle East Airlines, of Lebanon, operated a total six 990's, purchased for American Airlines, and later traded them back on the purchase of 720B's. Lebanese International (LIA) also had bought two from American. Both were destroyed at Beirut Airport during an attack by Israeli troops.

Additionally, the 990 has been in service with a number of carriers, both through purchase as well as lease. SAS, THAI, Air France, Iberia, Ghana, El Al, Air Ceylon, Balair, Northeast and Alaska Airlines all have operated the airplane at one time or another, as well as the Nomads Travel Club.

Today, only Nomads, Denver Ports of Call, NASA and Spantax use the 990. But she stirs a lot of memories for the author, who saw her fly for the first time and hitched a few rides, including a record two hour and forty-eight minute flight from San Diego to Chicago.

All photos in this article were provided by the author Jon Proctor. Some of his photos also will appear in several other articles in this issue of the LOG. Myself and other members of the staff would like to thank Jon for this real nice look at two of the favorites of the airline enthusiast.

PK-GJC OF GARUDA (C/N 37), SHOWN ON A TEST FLIGHT, PRIO TO DELIVERY. A CONVAIR PHOTO.





DECAL CAPERS

by

STEVE KENYON

I begin this issue with my humble apologies to any of the membership who may have used an incorrect design in one of my drawings to illustrate a model of ALIDAIR Airways, based in England (refer to Vol. IV, No. 3; Winter, 1979; CAPTAIN'S LOG; page 39, Figure 4). The error was an honest one and resulted from using a slide that was poorly interpreted by me as I projected it onto the silver screen. I sincerely apologize for any inconvenience caused.

Now let's correct it. The gravest mistake was the color of the cheatline. It is dark blue (thus my interpretation of black). This same color is maintained on the vertical stabilizer where the logo appears. Beneath the cheatline there is a narrow yellow pin stripe. The remainder of the lower fuselage is grey with a greenish tint. As for the horizontal stabilizer, it's color should be natural metal or silver. There are three windows

are the 5th, 7th and 8th windows counted rearward from the nose. These windows have a small white outline. Conversely to my drawing, there is a fitted string antenna, and the logo appearing on the nose of the aircraft is actually the standard Union Jack of the British Isles and not the Maltese Cross I depicted in my drawing. The last correction is the location of the red hazard beacon. It is located to the rear of the second "fish-hook" VHF antenna instead of forward (as I have it drawn) of the antenna.

As stated above, my sincerest apologies to all. I am deeply indebted to Mr. John Ellis of Nottingham, England for sending me the correct information along with a beautiful color slide to prove his point. John, thanks much for your timely tidbit for our reading audience.

Again may I reiterate the point proven above. We humans are all eligible to making mistakes. And when we do, especially

me, I expect to be corrected. So from now on if there is a question in your minds as to the correctness of any of my printed data or drawings, please drop me a line immediately and correct my error. Along this line I have but one request; please furnish me with sufficient evidence to support your claim before I stick my big foot in my mouth again! Thank you.

Problems? Do you, as a modeler, have any specific problems with building your models or painting them? If you have, why not send me a note or what's bothering you and let's see if we can't find a solution for you. This is your magazine and the writing staff is here to serve you, so drop me a line. I will try and answer your questions to the best of my ability. It may not be the precise answer you want to see in print; however, there will, in all probability, be sufficient other answers to assist you with your decision. So let's have your problems--big or small--because there are plenty of others facing the same situation and thus we help each other.

Now, as the "MC" would say, "On with the show!"

This issue's drawings deal with the delightful subject of Convair's efforts to penetrate the commercial airliners. As we are aware, the early "fiftys" spawned considerable units of airborne personnel carriers. The World had suddenly grown smaller and everyone was clamoring for new places to see and visit. Thus was born the "jet set" and the airlines found themselves short of conveniences through which the layman could satisfy his curiosity and cravings. The demand for new and faster forms of transportation--especially through the air--became the cry of the times.

By this time Vickers of Great Britain had definitely established her aviation position with the Viscount--the forerunner of the pure jet engine. Proving the point of kerosine and high engine whines, Lockheed as well as several other manufacturers, continued to pour fuel on the fire. This fire became so intense that Boeing took a

bold step and announced their creation of the 707 and was proven as their prototype took to the air and was certified shortly thereafter as an all pure "jet engine" airliner. Thus, the race was on. The cards were down and the betting began in earnest.

Following the introduction of Boeing's "707", General Dynamics decided to enter the race. Not to be outdone, GD's design was to be used on the shorter domestic routes but was to be faster than any of the others. Unfortunately, design problems arose and the aircraft failed to produce engineering forecasts. However, in spite of the problems, General Dynamics provided us with two examples which have become history but nevertheless are worthwhile and noteworthy of modeling.

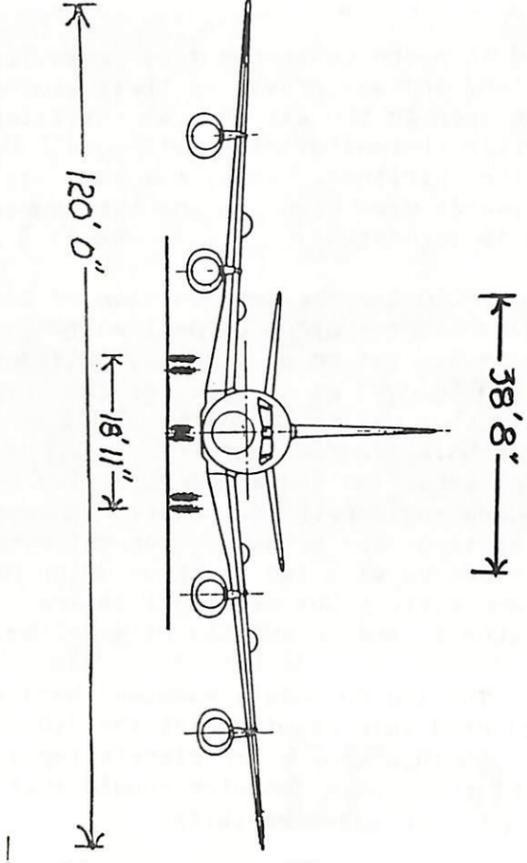
The two GD models examined here and projected into drawings are the 880 and 990. Both examples are classic replicas of history and no modeler should exclude them from his/her exhibits.

Let's first see what the aircraft look like.

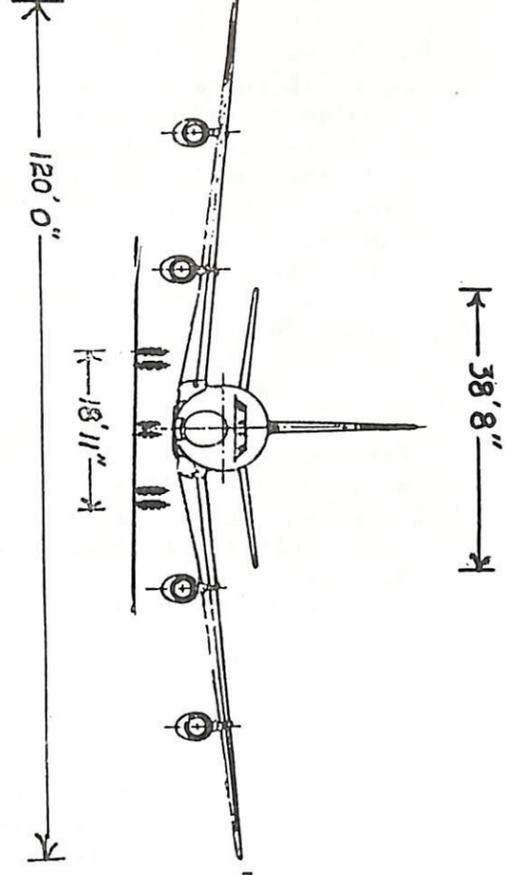
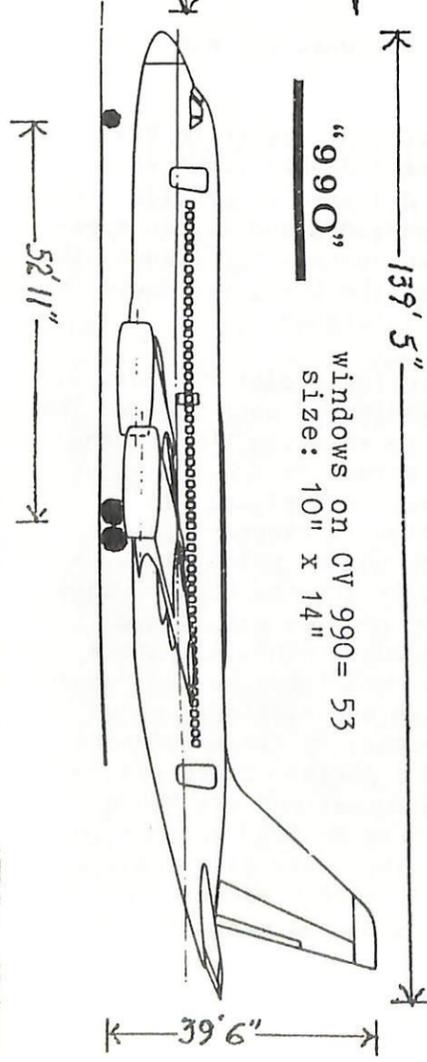
The first drawing (refer to Plate 1) is a composite of side and front views. It is primarily designed to provide the modeler with dimensions and engine appearances. From an overall appearance, the design approaches the DC-8; yet there is a considerable difference.

The next drawing (refer to Plate 2) is a top view drawing of both models. The purpose here is to show you the varying designs of flap structure and top appearances of the engine designs. It is also worth our time to closely examine the 990 since the engine pylon fixtures are brought up over the top of the wings and are curved to provide wing fences. These fences provide a wind-flow which benefits and are correlated to the "canoe shaped" pods which are stationed midway on the trailing edges of the wing (canoe shaped is a coined phrase of Jon Proctor). These odd-shaped formations are known technically as "area ruling" designs to increase speed. They were also designed and constructed in such a manner that they hold fuel and thus became known as ex-

PLATE 1
no scale

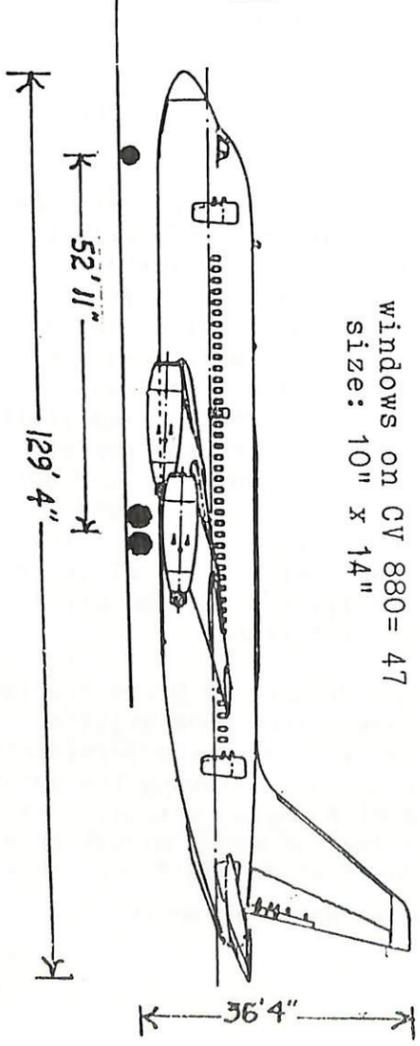


Note differences in front view of engines



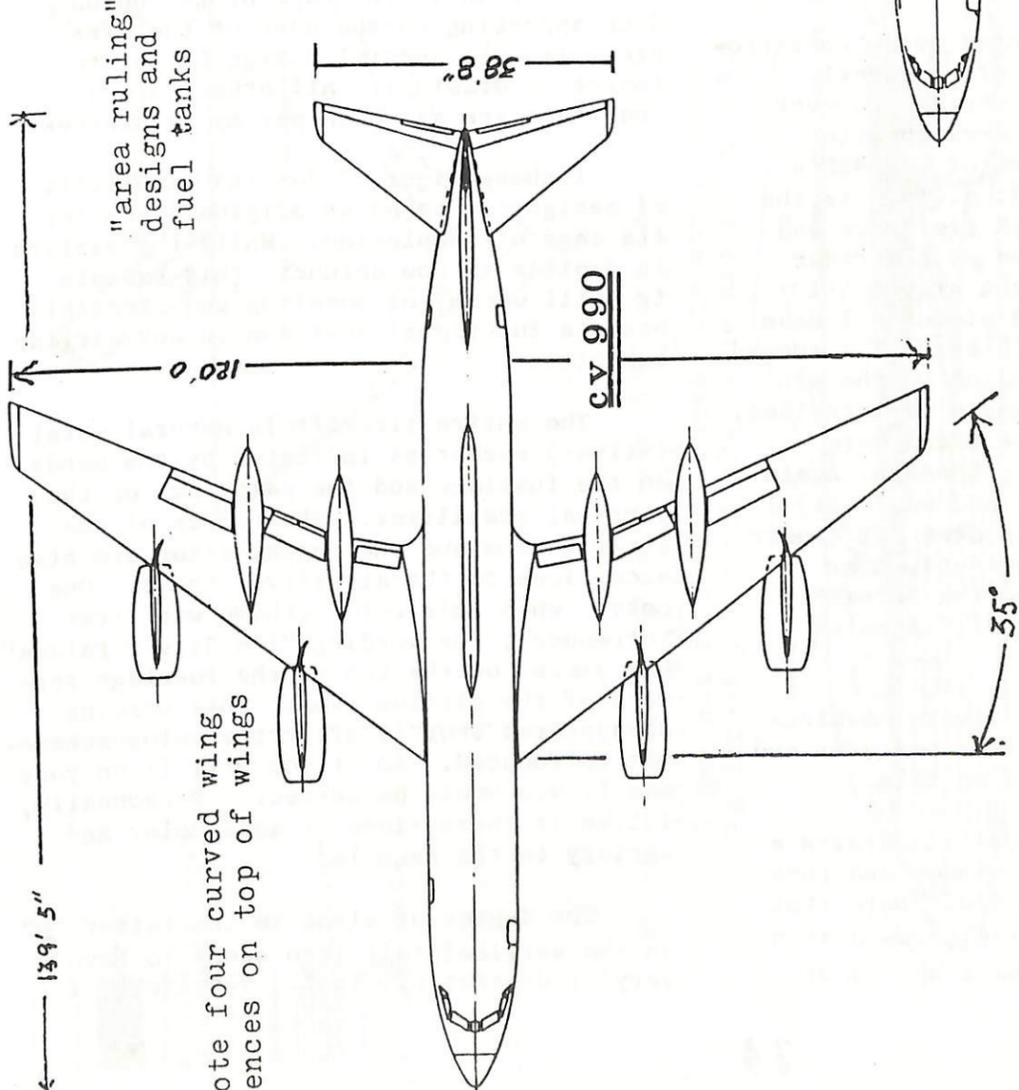
"880"

windows on CV 880 = 47 size: 10" x 14"



Drawings and layout by Steve Kenyon. All reference mat'l on file at IMMM ref. libr. 3/79

Drawings and layout by Steve Kenyon. All reference mat'l on file at IMMM ref. libr. 3/79



center lines
hidden outlines

note differences in engine designs of both models

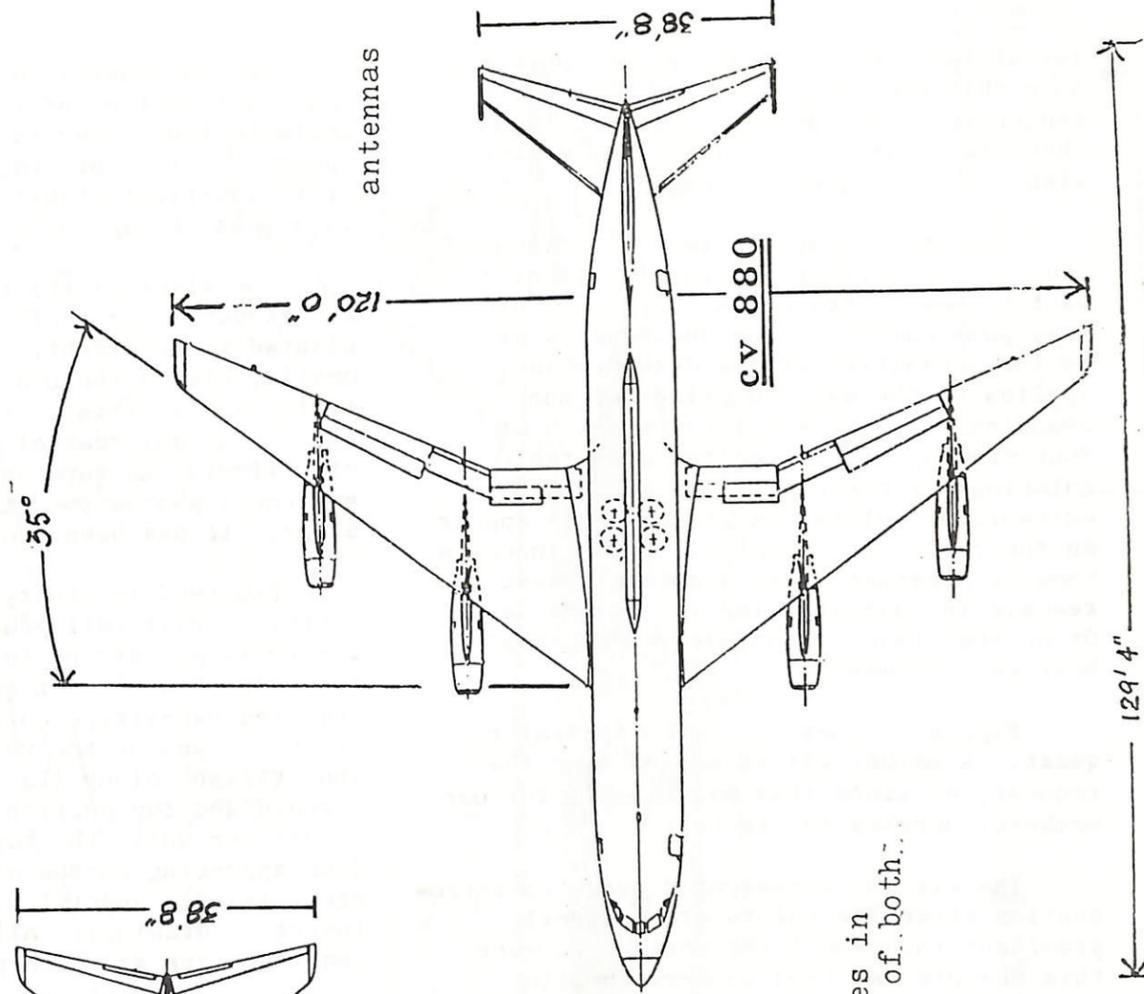


PLATE 2

no scale

ternal fuel cells serving a dual purpose. Note that the speed pods and the engine center lines are perfectly parallel and there is no off-set as sometimes occurs with other engineering designs.

Now, before we get into the discussion of the various airline liveries, I want to make a statement. And, I would like some comments from our readers as to the useability of the drawings as applies to the main colorings of the examples. I have submitted these next four drawings to our editor with the colorings of the cheatlines and other extremities colored exactly as they appear on the real-life examples. What I need to know is whether these drawings assist you readers in understanding the colors used? Or do they tend to confuse you? Let me hear your comments.

Figure 1 comes to you be special request. A member called me and made the request, so since this magazine is for our members, here is the request.

The airline represented needs no introduction since its colors are currently prominent throughout the world. However, this example may need some explanation since it differs from most of the 880's seen. The first item that differs is the radar nose. A small black tip shows and then the remaining portion of the radar section appears to be light grey. All other reference items and pictures I have show this entire area as black. The second big difference is the wording on the aft section of the fuselage which is inscribed, "Star Stream 880" with the small word Convair appearing directly beneath. Again from the examples (slides and pictures) I have on file, this wording does not appear on any other models. Therefore, I am assuming this example when the aircraft reached Kansas City--home of TWA maintenance and redesign.

The remainder of the livery markings remain the same for all other pictures and reference materials I have on file.

The design of the cheatline starts at the bottom of the pilot's window and runs aft in an arrow-shaped design. Note that the top part of the widening arrow design stops midway at the rear passenger door

and then culminates to a point at the lower aft section of the fuselage. The registration number is authentic and appears on the forward, lower section of the vertical stabilizer. All other colorings are as shown.

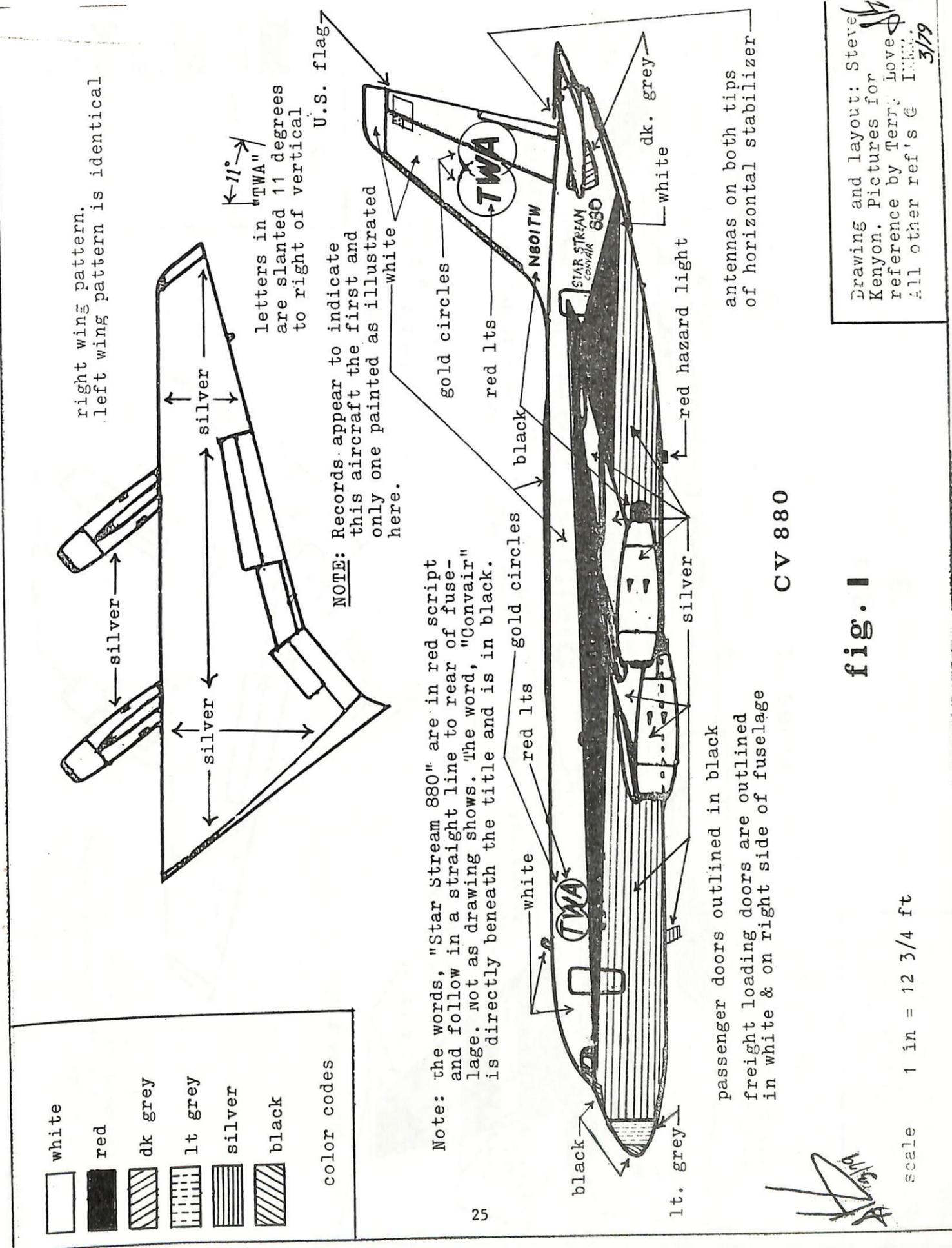
The slant of the letters in "TWA" are eleven degrees off vertical and are slanted to the right. TWA has, traditionally, placed the USA flag on their aircraft, and in this instance, it appears at the top and rear of the vertical stabilizer. Be sure and check your own reference photos for size, location and shape. It has been known to vary.

Figure 2 is pretty well self-explanatory. I will call your attention to the small pin stripe in red that surrounds the main cheatline of green. Also, this same red pin-stripe outlines the two broad white stripes on the vertical stabilizer. The British Colony flag appears on the forward and top portion of the vertical stabilizer while the logo of the Union Jack appearing on the nose of the aircraft is of a special design (refer to insert on drawing). All other colors and items are as shown per my references.

I chose figure 3 for its simplicity of design; of being an original; and for its ease of completion. While the airline it depicts is now defunct, this example is still worthy of modeling and certainly bears a functional position in our airline exhibits.

The entire aircraft is natural metal (silver) except as indicated by the bands on the fuselage and the paintings on the vertical stabilizer. The colors of the airline name and the registration are also exceptions to the all silver theme. One note: when this color scheme was first introduced, the wording "The Silver Palace" was placed on the top of the fuselage forward of the airline name. This wording disappeared shortly after the color scheme was introduced. So if you omit it on your model, you would be correct. Personally, I like it there since it adds color and variety to the example.

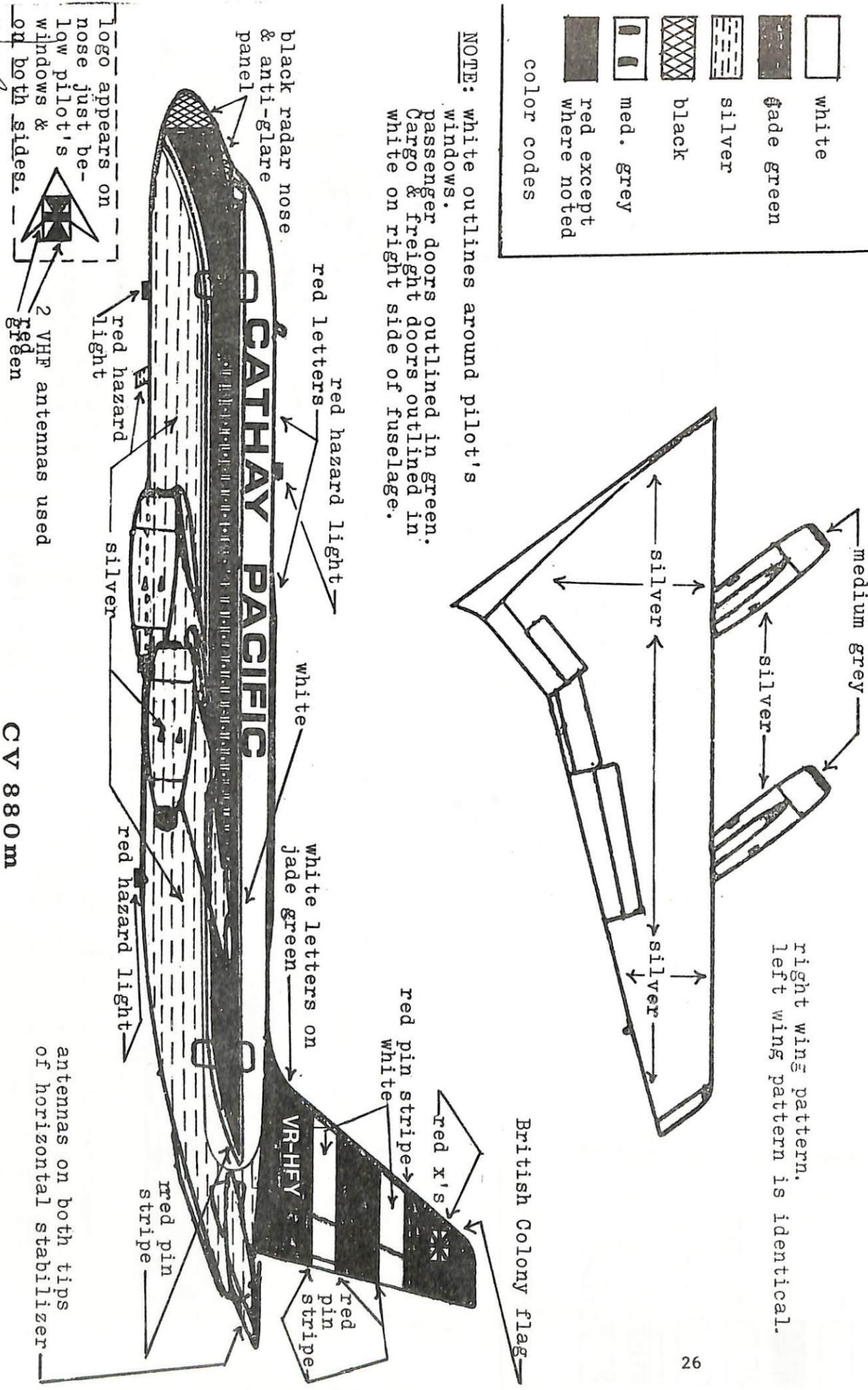
The degree of slant to the letter "M" on the vertical tail logo seems to have varying degrees of slant. Therefore, I



scale 1 in = 12 3/4 ft

fig. 2

CV 880 m



26

Drawing and layout: Steve Kenyon. Pictures for reference by Terry Love. All other refs @ IMM. 5/79

scale: 1 in = 13.2 ft

No color codes needed since engine aircraft is silver except as outlined on this drawing.

color codes

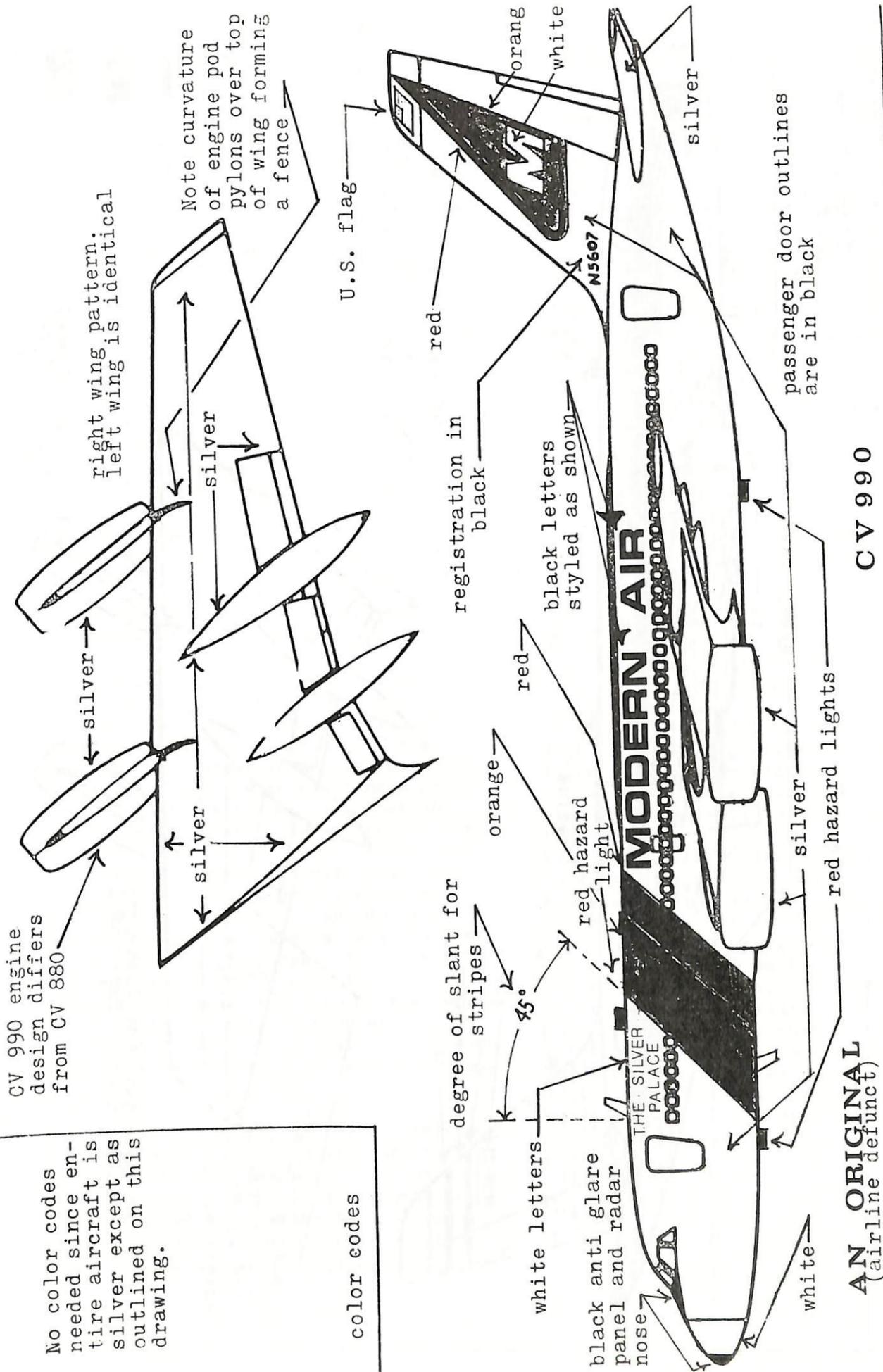


FIG. 3

Drawing and layout: Steve Kenyon. Pictures for reference by Terry Love. All other refs @ IMM. 5/79

HAWK
MONOGRAM
AURORA

MODEL SHOP

by
DAVE MINTON

MPC
ENTEX
REVELL
FROG

In modeling the Convair jetliners, the 880/990 series, one has available a fairly large range of kits. Listed below are some of the kits as known to me, giving the manufacturer, kit number, model, markings, scale, value, and availability, where known to me; + for still available, - for not.

The Microscale kit of the Convair 880 is made up of nine parts, including two black plastic stand pieces and four white daisy petal sound suppressors. This leaves, then, three parts for the actual aircraft model, and one of them is a very small nose cone. The other two parts, also white, are the

Aeros		CV880		1/285	10.00	-
Aurora	383	CV880	Delta	1/101	6.00	-
Aurora	384	CV880	TWA	1/101	6.00	-
Aurora	397	CV990	United	1/101	30.00	-
Coma	4005	CV880	Delta	1/179	12.00	-
Dubena		CV880	Delta	1/180	3.00	+
Hawk	519	CV880	Northeast	1/126	40.00	-
Hawk	519	CV880	Delta	1/126	15.00	-
Lindberg	409	CV880	TWA	1/189	3.00	-(U.S.)
Lindberg	409	CV880	TWA	1/189	2.00	+(Mexico)
Microscale		CV880	{See below}	1/144	10.00	-
Microscale		CV990	{text}	1/144	7.00	-
Revell	244	CV990	Swissair	1/135	10.00	-(U.S.)
Revell	244	CV990	Swissair/SAS	1/135	6.00	+(Mexico)
Revell	254	CV990	Swissair	1/135	10.00	-
Revell	717	CV990	Swissair	1/135	12.00	-
Revell	720	CV990	Garuda	1/135	60.00	-
Swana/TP	154	CV880	JAL	1/199	15.00	-

Decals included with the Microscale kits are, for the 880, TWA, Delta and CAT, and for the 990, Northeast (Yellowbird), Swissair and Alaska. There exists also some possibility that the Revell of Mexico 990 will be re-issued with AA and/or Spantax decals sometime later in the year.

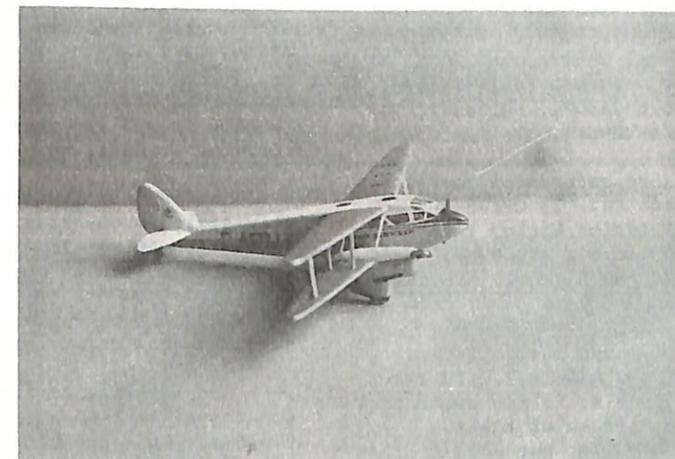
While I have not seen the Aurora kits for quite some time, I can make some few comments about them. The 880 is made up of about 41 parts and the 990 some 49 parts. They are molded none too crisply in a heavy, very slightly off white plastic. They look quite typical of the Aurora kits of the period and are therefore very similar to the DC-8 and Boeing 707. Perhaps the most interesting thing about them is that, except for the box art, decals, and instructions, they are identical kits, save for one feature. The 990 kit has separate "speed pods" to put on the wings. On the whole, the kits are somewhat large and bulky looking and would most likely make up into relatively inaccurate and crude models.

Much of the same comments are true for the Lindberg 880 kit, except for the size. It is molded in white plastic and made up of 24 parts, including two for the stand. There is a vague similarity between the shape of the wing on the model and the actual aircraft, otherwise, the model is pretty inaccurate in every respect, particularly outline and surface detail.

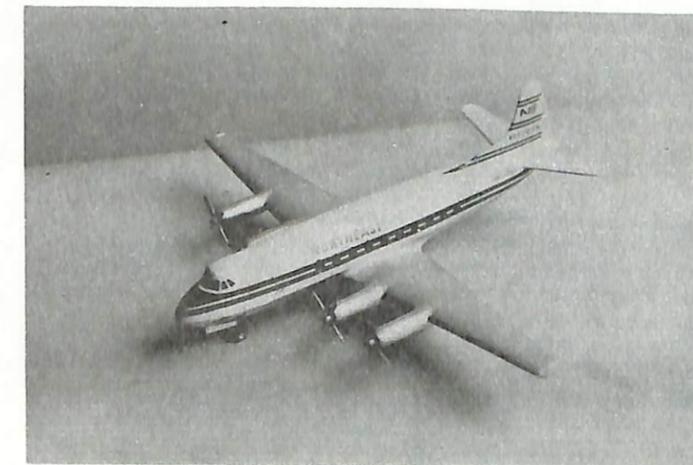
rear fuselage and tail assembly for one and the front fuselage, with wings and engines, for the other. Needless to say, assembly is very straightforward. There is considerable flash on the model, especially around the engine nacelles and pylons. For scale, the model checks at 37.80m (124 ft) in length, which is very close to the required 37.85m (124ft 02in). The span, however, is somewhat more inaccurate, being 35.97m (118 ft) instead of 36.58m (120 ft). Some corrections one might make in order to enhance the appearance of the model are (1) to continue the angle of the rear engine pylons all the way to the engine nacelles, (2) square off the front of the wing tips and the top of the vertical tail, (3) trim down the tail cone so it doesn't stick out to far past the tail assembly, (4) sand down the nose of the kit to a more pointed side view, (5) add the HF antennas on the horizontal tail tips, and (6) perhaps the engine nacelles are a tiny bit thin in the midsection, if you are feeling especially brave. Also, I can offer you a very important construction note here, especially if you expect you model to last when completed. When mounting the decals, put down the cheat line and let dry completely (48 hours), then coat the model with whatever clear coat you use, and again let dry. Then put down the window decal strip and go through the whole process again. If you do not do this, there is an extremely good chance that when the window strip decal dries, it will lift up the cheat line decal, so that eventually the whole thing will neatly flake off.



The above photo is that of the Microscale Convair 990. The landing gear is from a Revell DC-8. While the directions state that the lower part of the vertical fin should be white, on most, but not all, Swissair aircraft, this part is silver. Below is a Rareplanes model of the DH-89 Rapide. Decals are from many sources and props from Airfix DH-88.



Below is the International Models Viscount with decals from ATP. This same kit is now available with the same decals from ATP. Model was featured in last issue of the Captain's Log but the picture was not finished in time for printing.



The Revell kit is molded in about 60 pieces of white plastic. There are no clear parts for the front windscreen and the side windows are recessed in the style we have all come to know and love from Revell. The model scales very near 1/133 instead of the commonly advertised 1/135. Viewing the Revell of Mexico kit, one notices immediately that there is some flash on nearly every part, and it is particularly bad around the wing trailing edges and the tailplanes. Flash and sink marks are also present over much of the rest of the model. The fit of the nose and tail cones is extremely tight and the modeler may find it quite useful to trim the inside of these parts to secure a more workable fit. The trailing edges of the "speed pods" are very thick and will require work in order to achieve a correct and good fit. The engines and nacelles, make up of about six parts each, fit together fairly well, except for the nose and tail parts. The fit of the horizontal tail planes into the fuselage is extremely tight and must be carefully pre-fitted to insure good appearance on the model. Most disappointing, however, is the fit of the wings to the fuselage. The wing itself is much too thick at this point and does not fit.

The Micro Scale 990 kit is in 5 parts, including two black stand pieces. The model itself is, like the 880, 3 parts of slightly off white plastic. There is, as before, a considerable amount of flash, especially around the engines and pylons, and much sanding will be necessary. On the average, the model is quite close to 1/144 scale. The nose cone of the aircraft appears somewhat long and perhaps a little too pointy. And the vertical fin also needs to be squared off a bit. Another construction note here, if you decide to put the model on gear, it will sit quite correctly without the addition of weight in the nose. Use the decals as a guide for locating the doors, although the nose wheel door will have to be moved somewhat forward from the location suggested by the decal instructions. Gear could be taken from another model; I used the gear from a Revell DC-8, from which I had already used parts for another project.

To enhance the fit, one must either use a lot of filler at the wing root joint, especially at the top, or sand down the interior of the wing joint, particularly at the leading edge.

As far as the general outline of the model, there are also some problems in this area. The tip of the vertical tail is, as on the Micro Scale kit, not square enough. The sweep up of the fuselage appears also a bit shallow. The shape of the engine pylons is generally good, but the slope up from the nacelle to the wing could be made a bit straighter for more accuracy. The worst problem, which would be fairly difficult to fix, is that the speed pods on the wings are very much too thick spanwise.

If you are interested in other markings for the kit and don't want to wait for the Revell of Mexico reissue, you could use AA Boeing 707 decals and finish the model in 1960's AA livery. Typical registration might be N5615. Other possibilities include Iberia, EC-BJC, Spantax, EC-BNM, Varig, PP-VJF, Modern Air N5607, and Nomads, N990E. Most American Airlines aircraft were overall natural metal, but I have seen a photograph of an overall light gray one. (See Decal Capers this issue for other ideas on other 880/990 liveries.)

For the 880, there are also several interesting decal possibilities. One could do NE o/c N8495, and there was one NE Yellowbird, N8493H, and KLM, with either the horizontal or vertical tail stripes, YV-C-VIC, or Japan Airlines o/c JA8021, Swissair, HB-ICM, and Cathay Pacific o/c VR-HFS.

There are several very good references for the 880/990. Some of these are Vol. 25 CV880 and Vol. 26 CV990 of AIRLINERS, Aviation World, Inc. has several good post cards; Dean Slaybaugh has some very good slides; and, of course, World Airline Fleets, and Fleets Monthly.

Some new products recently made available and of interest to the modeler; the J & L DC-2 with TWA "The Lindberg Line" and USMC decals, is now available. It appears not quite as crisp as some of their earlier models, especially the DC-7C, but does seem that it will go together easily enough. The landing gear is pretty flimsy, and the cast props in my kit were pretty badly bent. The kit has both the early and the late type tails. I got my copy from Mail Call Models, price about \$8.00. The Aertec L.188 is now available, with Air Calif. decals, although the decal sheet does not include doors, which are pretty noticeable on the Electra. The model is in cast foam, although I believe the props are cast metal. Mine has not yet arrived; I ordered it direct from Airtec. I have heard from Gordon Stevens that the Rareplanes Stratoliner is not very far off, should be available in late spring. And the new Ian Allen monograph on the C-97 has many useful pictures, including some in color. Rumor is that next up from J & L is a Boeing 720 and Rareplanes will re-do the Beech 17. Last, but not least, the decals from Rareliners for the Trans Carib 727 are quite excellent. They come complete with color guides for the major colors and photographs of the actual aircraft to aid in the location of the decals. FLASH--Trans Carib to start up again possibly with 707 or 720 equipment. May use same color scheme they had when taken over by American!

IT'S A MANDARIN JET
 (The following appeared in the Cincinnati Enquirer on Sunday, March 4, 1962 under a by-line of Robert J. Serling, UPI Aviation Editor. Material from the collection of member Pete Krey.)

Not too long ago, a U.S. airline official came back from the Orient and committed the ultimate sin for any airline official.

He raved about another carrier's plane.

"I've never seen an aircraft cabin interior like it," he marveled. "It's got everything in this country beat a mile."

The airliner in question was a Convair 880 jetliner, operated by Civil Air Transport (CAT), the Formosa-based airline founded by the late Gen. Claire Chennault of Flying Tiger fame.

CAT's Convair is dubbed the "Mandarin Jet." And its unique interior has impressed more people than just the aforementioned official.

The predominant color is brushed gold. The seats are a deep black threaded with silver and gold. Above the windows, splashed in rich colors of Chinese black, red and peacock blue, is a series of murals depicting the story of Confucius' travels.

There are nine central figures in the procession ranging from a two-wheel cart to flag and pike-carrying Oriental knights.

The cabin bulkheads are decorated with authentically-styled moon-gates, dragons, lion-knobs and a Chinese Phoenix. The jet's exterior is only slightly less colorful. The big plane is painted in CAT's traditional colors of beige, silver and gold with a five-toed Dragon emblazoned on the front end of the fuselage just under the cockpit window.

The interior of this flying Oriental palace is so unusual that when the 880 was being built, Convair employees kept sneaking over to the assembly line to see if it was true.

The "Mandarin Jet" was c/n 44 and was a 880M type. The last record of this aircraft was on Sept. 11, 1975 going to Orient Pacific Airways.

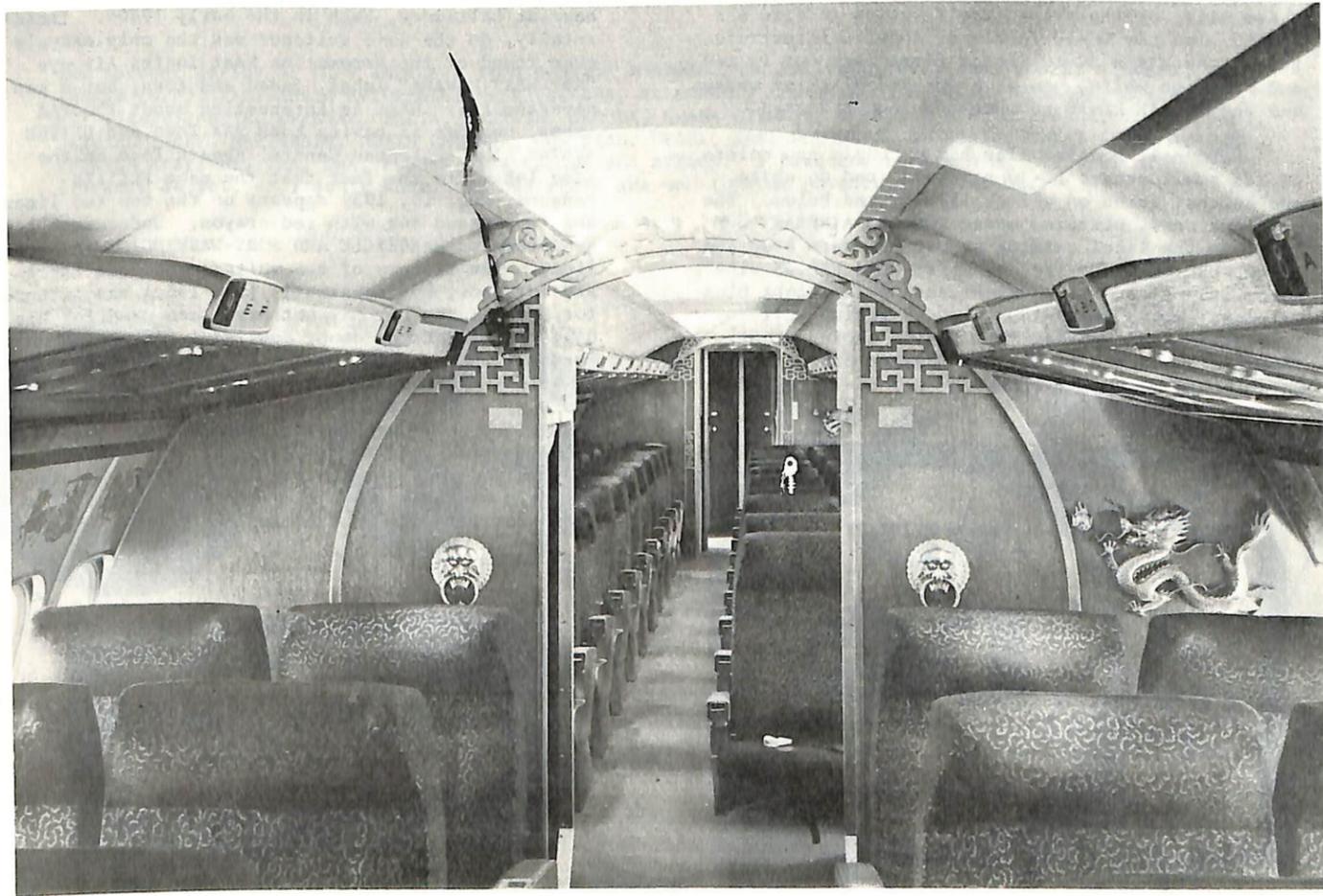


CAT
 CIVIL AIR TRANSPORT



ABOVE: Known as the "Mandarin Jet", B-1008 (C/N 44) was the first 880M to be delivered to an airline--CAT.

BELOW: Exotic interior of Civil Air Transport's 880M. Convair photo, as is the one above.



STICKER CHATTER

by
DON THOMAS

"STICKER CHATTER" will be a new feature, giving the latest news on new issues of labels and stickers, comments on collecting them, and any other news in this line which may interest readers. News and contributions are solicited from members, to be shared by all. Address: Don Thomas, 837 Majorca, Coral Gables, Florida 33134. We will report new issues as we hear and see them. I will appreciate loan or copy of anything which appears new, so it may be photographed for the Air Transport Label Catalog addendas. A copy for our reference collection would be appreciated; otherwise will return all items sent only on loan for photographing and describing.

Most of us are familiar with McDonnell-Douglas' series of DC-10 airline luggage stickers, many of which plug the theme "Happiness is a Flight on a DC-10", and also the DC-9 comma-type labels featuring "When You Have A Choice...DC-9". There are at least 43 of the DC-10s out so far, and at least 32 of the DC-9s. These stickers should be checked out carefully. As with any new label you get, compare it with your collection, even if you think you already have it. Sometimes you will find a different printing, in a different color or shade, lettering added, a new date, or the print itself varies in size and width. Two new DC-10 labels of Douglas illustrate this: the VIASA DC-10, which first came out in red and black on white, now is brown and black on white, and the CP AIR DC-10 now has the logo reversed.

McDonnell-Douglas also had a couple new colors of its small square DC-10 stickers, red on white, and another green on white, illustrated below. The previous ones, pictured under DOUGLAS AIRCRAFT COMPANY in the label catalog as USD-53, were blue and white, USD-54 light red and white, and USD-55 wine color and white. Large size rectangular light blue stickers show a happy-looking DC-9 facing left "FLY DC-9", and another "FLY DC-10" facing right. Then there are the larger size darker blue labels which could be bumper stickers "FLY DC-10" which



show a DC-3 inside the tail engine of a DC-10, which shows how much airplanes have grown. An original design if we ever saw one! The DC-10 center engine is 108 inches in diameter, which would accommodate the DC-3 fuselage, which is 95 inches in diameter. A cute trick, but they would have to remove the wings, wouldn't they? Another large one says "FLY DC JETS" and shows both the smiling jets. Still two more large ones show a nice DC-10 "FLY DC-10 See your travel agent", and "VUELE EL DC-10 consulte su agente de viajes" in Spanish.

I have just finished reading "HINDENBURG" by Michael M. Mooney, the same story which was made into a movie. I suppose anyone interested in Zeppelins had read it long ago. One of the survivors of the fiery crash was Philip Mangone, a dress buyer out of New York. Apparently Mr. Mangone was a frequent traveler to Europe, and not always by ship. Besides the Zeppelin, he apparently travelled on Pan American Airways new South Atlantic service to Europe. Illustrated (below) is a used baggage label (used labels are seldom found in collections; they are usually destroyed when the bag wears out). Anyhow, this label was pasted on an old suitcase owned by the manager of Pan American's seaplane base at Baltimore, back in the early 1940s. Incidentally, on the same suitcase was the only example ever found of the Aeromarine West Indies Airways "KEY WEST-HAVANA" label, faded and torn, but a gem nevertheless. What is interesting about the PAA label, besides it having both PAA logo and UNITED STATES LINES-European General Agents logo on the same label, is the fact that the name Phillip Mangone, Aug. 16, 1939 appears on the top two lines and is crossed out with red crayon. Underneath is handstamped MARSEILLE AND PORT-WASHINGTON in two lines. The history of the suitcase and the labels are not known, but apparently that label was intended for Mr. Mangone but may not have been used for his baggage. It was no doubt applied in the European terminal, Marseilles. Not only is Marseille spelled in this French way, not Marseilles as we use it in the U.S., but a dash is put in between PORT and WASHINGTON, the same way the French spell such double names as PORT-ETIENNE or NEW-YORK. Port Washington, Long Island, was the Western terminus of PAA's Atlantic services until the move to LaGuardia's seaplane facilities a year or two later.



New Issues are coming thick and fast. NATIONAL AIRLINES advertises their new service from Miami to Amsterdam with a round sticker, illustrated below. NATIONAL also has a rectangular sticker with the usual sunshine logo, perhaps to replace the round one used for so long.

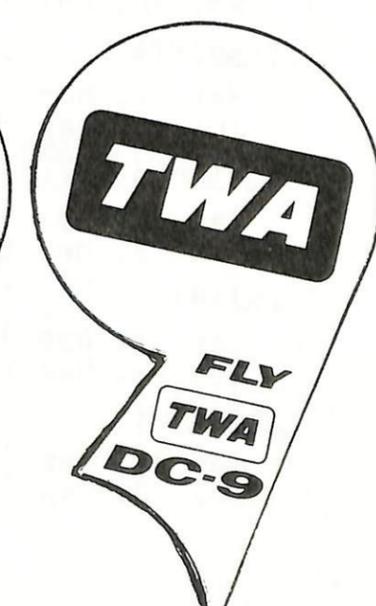
AIR FLORIDA advertises their new service to the Bahamas from Miami with a blue sticker "Do the Bahama Hop". With AIR FLORIDA operating or planning several new routes from Florida to places like Washington and San Juan, we may expect other new stickers, although none have shown up as yet. The new Hop sticker, illustrated below, as well as the round NATIONAL one will be sent to anyone who sends me a self-addressed stamped envelope (SASE).

Many of us have seen the white-on-red label "FLY THE FORD TRIMOTOR" used by ISLAND AIRLINES of Port Clinton, Ohio. This last of the Tin Gooses, or Tin Geese as the case may be, was out of service last season due to a crash, and it is hoped it can be back flying next season (this fall?). We are recalling this because the other day I saw an Eastern Airlines pilot with the same label on his flightbag, but it was bright BLUE in color. He said he got it in Ohio six or seven years ago. Readers PLEASE try to locate a BLUE one for posterity. Otherwise it may be lost to science forever!

Below are several samples of the Douglas DC-9 stickers that just arrived. Additional baggage labels can be found following the article on DELTA AIRLINES.



The current series of DC-9 stickers from Douglas includes the following airlines: HUGHES AIRWEST, PSA, IBERIA (o/c), INEX-ADRIA AVIOPROMET, AIR FLORIDA, ALLEGHENY, AEROMEXICO, AUSTRAL, FINNAIR, ALITALIA, ATI (Italy), BWIA, SPANTAX, DELTA, EASTERN, GARUDA, GHANA AIRWAYS, HAWAIIAN AIR, ALISARDA, TDA (Japan), JAT, KLM, ALM, MARTINAIR, NORTH CENTRAL, AUSTRIAN, OZARK, SAS, SOUTHERN, SWISSAIR, TEXAS INTERNATIONAL, TURKISH AIRLINES, TAA, TWA, AVENSA, AIR CANADA and AVIACO. I have not received my new sets of DC-10 stickers as yet, so I don't know what new items are now in that particular offering.





OF AIRLINE SCHEDULES

In this issue of the Captain's Log I'll be concluding the survey of regional airline schedules. Also on the following pages is a survey of U.S. airline schedules published during 1978.

Since the featured airlines this quarter are the Convair 880 and 990, I've included schedules of the airlines which originally operated these aircraft. For the 880 - Delta, Northeast, TWA, Alaska, Viasa, Cathay Pacific, Civil Air Transport, Swissair, and Japan; and the 990 - American, Varig (aircraft originally ordered by Real), SAS, Swissair, and Garuda.

Below is the survey of some U.S. airline schedules issued during 1978:

U.S. Trunks

American:

Jan 10, Apr 3, Apr 30, Jun 8,
Sep 6, Oct 29, Dec 14

Braniff:

Feb 1, Mar 1, Apr 30, Jun 15,
Jul 15, Sep 1, Oct 29, Dec 15

Continental:

Jan 15, Apr 30, Jun 1, Jul 1,
Oct 1, Dec 15

Delta:

Feb 1, Apr 30, Jul 1, Sep 15,
Oct 29, Dec 15

Eastern:

Jan 31, Mar 2, May 1, Jun 1,
Jul 2, Sep 6, Dec 13

National:

Jan 31, May 1, Jun 13, Sep 6,
Nov 1, Dec 13

Northwest: (S) = Strike Sked (GS) = Gen Sked CAB

Apr 29 (S), Apr 30, Jun 1 (S)
Jun 26 (S), Aug 7 (S),
Aug 20 (GS), Oct 1, Oct 29, Dec 14

Pan American:

Apr 30, Aug 1

TWA:

Jan 5, Mar 1, Apr 30, Jun 8,
Jul 1, Sep 7, Oct 29

United:

Jan 4, Jan 31, Apr 11, Apr 30,
Jun 9, Sep 6, Oct 29

Western:

Jan 15, Mar 1, Apr 30, Jul 1,
Sep 6, Oct 29

U.S. Regionals:

Air New England:

Jan 8, Jun 1, Jun 22

Alaska:

Jan 15, Jun 1, Sep 15, Nov 15

Allegheny:

Jan 7, Jan 7(II), Apr 1,
Jun 1, Aug 1, Sep 15, Oct 29

Aloha:

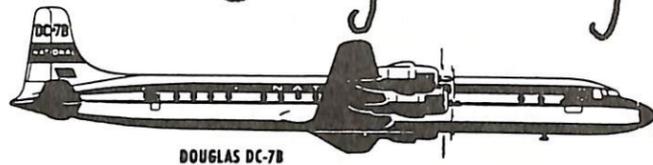
Apr 30

Frontier:

Jan 15, Jun 1, Aug 1, Nov 3

Hawaiian:

Apr 30



By:
George Cearley



Hughes Air West: LOCKHEED SUPER H CONSTELLATION

Jan 15, Apr 30, Jul 15, Sep 6,
Oct 29

North Central:

Apr 30, Jun 9, Aug 1, Sep 5,
Oct 29, Dec 15

Ozark:

Jan 15, Apr 1, Jun 1, Sep 1,
Oct 29, Dec 1, Dec 15

Piedmont:

Feb 1, Mar 15, Apr 30, Jun 15,
Jul 15, Sep 6, Oct 29, Oct 15,
Dec 1, Dec 15

Southern:

Mar 1, Jul 1, Oct 29

Texas International:

Mar 15, Jun 15, Sep 6

Wien:

Jun 1

Air California:

Apr 11, Jul 15, Sep 5, Oct 1,
Nov 1

Pacific Southwest:

Jan 4, Jun 21, Jul 19, Oct 11

Southwest:

Feb 13, Jul 1

Skyways:

Feb 1, Mar 1, Sum, Fall, Wint

Here is the conclusion of the survey of regional airline schedules covering those of Southern Airways, Trans-Texas Airways/Texas International Airlines, West Coast Airlines, and Wien Alaska. I wish to thank the following persons for comments and suggestions and help with the preparation of the schedule lists: Mary Cearley, Ed Cousens, Bruce Drum, Glen Etchells, Alan Folz, Don Garner, Gene Glending, Brian Gustafson, Mike Kaeser, David Keller, Kenn Lafargue, Frank Lichtanski, Jerry Marlette, Robert Morris, Kurt Niedrauer, Larry Potoski, Randy Reid, Perry Sloan, Rich Teehan, John Terry, Bob Van

Hemert, J. E. Wollam, Norman Aranha and Jeff Asay.

Southern Airways, Inc.

1952 - Nov 10
1953 - Sep 1
1954 - Feb 1
1955 - Dec 1
1956 - Jan 3, Apr 1, Dec 1
1959 - Sep 1
1961 - Jul 1
1962 - Oct 28
1963 - Jan 2, Mar 1, Apr 28,
Jul 1, Oct 27
1964 - Jan 2, Oct 25
1965 - Mar 1, Jul 6, Sep 1,
Oct 31
1966 - Jan 2, Mar 1, Apr 24,
Jun 1, Aug 1, Oct 30
1967 - Jan 3, Jun 15, Aug 1,
Oct 29
1968 - Jan 1, Feb 1, Apr 28,
Jul 15, Sep 3, Oct 27
1969 - Apr 1, Apr 21, Jun 1,
Jul 7, Aug 1, Oct 26
1970 - Jan 1, Feb 15, Mar 1,
Apr 1, Apr 26, Jun 1,
Jul 1, Oct 31
1971 - Jan 1, Apr 25, Jul 1,
Oct 31
1972 - Apr 30, Jun 1, Oct 1
1975 - Jan 31, Apr 1, Jun 1,
Jul 15, Aug 15, Dec 1
1974 - Feb 1, May 1, Jul 1,
Dec 4
1975 - Mar 1, Jun 1, Oct 15
1976 - Feb 1, Apr 1, Aug 1,
Oct 31
1977 - Feb 1, Aug 8, Dec 1
1978 - Mar 1, Jul 1, Oct 29

Trans-Texas Airways/Texas International Airlines

1952 - Jul 19, Nov 24
1953 - Jun 1, Jun 28
1954 - Apr 25, Sep 1
1955 - Mar 1, Sep 1
1956 - Jan 8, Feb 1, Apr 29,
Jul 1, Aug 1, Sep 1
1957 - Oct 1, Dec 1
1958 - Feb 1, Jul 1
1959 - Feb 1, Jul 1
1961 - Aug 1
1963 - Apr 29



CONVAIR 440

Trans-Texas Airways/Texas International Airlines (Cont'd)

- 1964 - Jun 15
- 1965 - Jul 1, Oct 31
- 1966 - Jan 1, Mar 1, Apr 1, Apr 24, Jul 1, Aug 1, Oct 30, Dec 1
- 1967 - Apr 30, Jul-Aug, Oct 1, Dec 1
- 1968 - Feb 1, Apr 1, Aug-Sep, Oct 27
- 1969 - Jan 1, Feb 1, Apr 1*, Apr 27, Jun 1, Jul 1, Aug 1, Sep 1, Oct 26
- 1970 - Jan 5, Mar 1, Apr 26, Jul 1, Oct 25
- 1971 - Jan 1, Mar 1, Apr 25, Jul 1, Sep 1, Oct 1, Oct 31
- 1972 - Jan 3, Aug 1, Dec 1
- 1973 - Feb 1, Apr 1, Jul 1, Sep 1, Oct 28
- 1974 - Mar 1, Jun 15, Oct 1, Dec 1
- 1975 - Feb 23, Jun 1, Sep 7, Dec 1
- 1976 - Sum, Jul 1, Oct 1, Dec 1
- 1977 - Mar 1, Apr 4, Jun 1, Sep 15, Nov 13
- 1978 - Mar 15, Jun 15, Sep 6

*First Texas International schedule.

West Coast Airlines

- 1955 - Jul 1
- 1958 - Jun 15
- 1961 - Jan 3
- 1962 - Jul 1
- 1963 - Jan 1, Aug 1, Oct 27
- 1964 - Apr 26, Oct 25
- 1965 - Apr 25, Nov 15
- 1966 - Jan 15, Apr 24, Aug 15, Sep 26, Dec 1
- 1967 - Mar 7, Dec 1

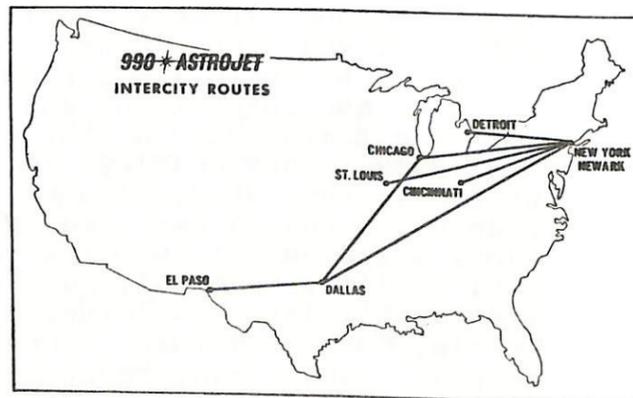
Wien GS = Gen Schedule CAB

- 1955 - Jun 5, Oct 10 (GS)
- 1965 - Oct 15
- 1973 - Nov 1
- 1974 - Nov 1
- 1975 - Jan 17, Oct 26
- 1976 - Apr 1, Jun 1, Nov 1
- 1977 - Jan 2
- 1978 - Jun 1

CAT

表間時機班航際國
INTERNATIONAL TIMETABLE
司公運空航民
CIVIL AIR TRANSPORT
EFFECTIVE Nov. 4-30, 1962

Civil Air Transport (Formosa) introduced Convair 880-M "Mandarin Jet Service" in 1961.



American Airlines Convair 990 routes as of June, 1962.

Effective April 24, 1960

One of America's Pioneer Scheduled Airlines

Delta presents the
CONVAIR 880
World's Fastest Jetliner
Starting May 15 - non-stop between
NEW YORK - NEW ORLEANS • NEW YORK - HOUSTON
ATLANTA - NEW YORK

Cover of Delta's April 24, 1960, timetable. The first 880 jet service, effective May 15 of that year, is shown in this schedule. The aircraft on the cover is a DC8-12.

NORTHEAST
December 15, 1960 AIRLINES

FIRST
880
JETS

WORLD'S FASTEST JETLINERS

BOSTON
PHILADELPHIA
MIAMI

Northeast leased six Convair 880-22-1's from TWA and inaugurated 880 service between Boston, Philadelphia & Miami in December, 1960. 707-331's lsd from TWA cont'd on the IDL-MIA run for a short while. 880 service between New York and Miami came later.

junior crew member insignia

by
BOB FELD

The following is the beginning of a continuing series on the Junior Crew Member insignia given out by most airlines at this time and by just about every airline at some point in their history. In this first group there will be drawings mixed with xerox copies of the wings. It will be through this trial and error method the method by which future items will be presented. If you have wings in your collection that do not appear in this article, please make a xerox copy and send to Insignia Editor Bob Feld, 630 East Avenue J-4, Lancaster, California 93534. Also send Bob xerox, or actual items, of insignia that you have available. We are planning on doing listings on the various items of insignia worn by airline employees. This will include patches, actual wings worn by the different employee groups i.e., pilots, engineers, stews, ticket/counter people, etc. So send Bob a copy of what ever you have.

This first series will be devoted to the U.S. carriers. This is mainly due to the fact that this is the type insignia readily available to the editor. Each wing will be assigned a number, not necessarily in date order. The number 1 American item will be, I am sure, not the first such wing issued by American. The number system, however, is not really that important. The important thing is that the wings be identified and cataloged so collectors will know what the airlines have used and what is available. The number will only help identify the item when two collectors are talking about a trade or trying to identify what is in his collection.

To make this system work, we will need the help of all collectors. If you have a item in your collection that does not initial appear in this article, send it to Bob or at least make him a xerox copy and send it to him with a description.

	Allegheny #1 Plastic-Pin back 2 1/2 inches by 7/8 inch Red, Gold Time: Present		Continental #3 Plastic-Pin back 2 5/8 inches by 5/8 in. Red, Silver and Gold Time: Present
	American Airlines #1 Metal-Safety pin back 2 inches by 3/4 inch Junior Pilot Gold color Time: ??		Delta #1 Plastic-Pin back 2 1/2 inches by 5/8 inch Delta logo Red, Blue, Gold Time: Present
	American Airlines #2 Metal-Safety pin back 2 inches by 3/4 inch Junior Stewardess Gold color Time: ??		Eastern #1 Plastic-Pin back 2 1/2 inches by 1 1/2 inches Eastern Blue, White, Gold Time: Present
	American Airlines #3 Metal-Safety pin back 2 inches by 1/2 inch Silver color Time: Present		Frontier Airlines #1 Plastic-Pin back 2 1/2 inches by 3/4 inch Frontier logo Light Blue, Gold Time: ??
	Continental #1 Metal-Safety pin back 2 1/2 inches by 3/4 inch Jr Hostess Time: ??		Frontier Airlines #2 Plastic-Pin back 2 1/2 inches by 3/4 inch New Frontier logo Red, White, Gold Time: Present
	Continental #2 2 inches by 3/4 inch Junior Crew Member Stylized airplane Time: ??		Hughes Airwest #1 Plastic-Pin back 2 3/4 inches by 7/8 in. Hughes Airwest logo Blue, Silver Time: Present

	National #1 Metal 2 1/2 inches by 3/4 inch Jr. Stewardess Color: ?? Time: ??		Trans World Airlines #5 Plastic-Pin back 1 1/2 inches by 1 1/2 inches Junior Hostess Red, White, Gold Time: ??
	National #2 Plastic-Safety pin back 2 1/2 inches by 3/4 inch National with logo Orange and Gold Time: Present		United Airlines #1 Metal-Safety pin back 2 1/2 inches by 3/4 inch Black, Burnt Gold Futher Stewardess Time: ??
	Northwest Orient #1 Plastic-Safety pin back 2 1/2 inches by 3/4 inch Company logo Red, Gold Time: Present		United Airlines #2 Metal-Pin back #3 2 inches by 1 inch Future Pilot #2 Jr. Stewardess #3 Red, Blue, Silver Time: ??
	Ozark #1 Plastic-Pin back 2 1/2 inches by 5/8 inch Company logo Green, Gold Time: Present		United Airlines #4 Plastic-Pin back 2 3/4 inches by 1 inch Future Stewardess Color: ?? Time: ??
	Pan Am #1 Metal-Safety pin back 2 1/2 inches by 7/8 inch Jr. Clipper Pilot Blue, Gold Time: ??		United Airlines #5 Plastic-Pin back 2 3/4 inches by 7/8 in. Future Flight Attendant Red, Blue, Gold Time: ??
	Pan Am #2 Metal-Safety pin back 2 1/2 inches by 7/8 inch Jr. Clipper Stewardess Blue, Gold Time: ??		United Airlines #6 Plastic-Pin back 2 3/4 inches by 3/4 in. Future Pilot Red, Blue, Silver Time: ??
	Piedmont #1 Plastic-Pin back 2 1/2 inches by 3/4 inch Company name and logo Blue, Gold Time: Present		United Airlines #7 ?? 2 inches by 3/4 inch Future Pilot Color: ?? Time: ??
	Trans World Airlines #1 Plastic-Pin back 2 3/8 inches by 3/4 in. Junior Crew Member Silver Time: Present		United Airlines #8 ?? 2 inches by 3/4 inch Jr. Stewardess Color: ?? Time: ??
	Trans World Airlines #2 Metal-Pin back #3 2 1/2 inches by 1 inch Junior Pilot Silver Time: ?? #3 same only Gold color		Western #1 Plastic-Pin back 2 5/8 inches by 1/2 in. Company name and logo Red, Gold, Silver Time: Present
	Trans World Airlines #4 Metal-Pin back 2 3/4 inches by 1 1/2 in. Junior Pilot Gold Time: ??	This concludes the insignia for this issue, however, the listing will continue in the next issue. If you have any insignia not listed, please send a sample or xerox copy to the Insignia Editor so we can account for all such items issued by the Airlines.	



The third annual Airlines International convention will be held July 13 through July 15, 1979, at the Quality Inn Cibola in Arlington, Texas, midway between Dallas and Fort Worth. Registration will begin Friday morning July 13 at 8 a.m. The trading and display areas will also be open at this time.

On display will be numerous schedules, photos, post cards, historical memorabilia, travel agent type display models and much much more. Everyone is invited to bring any material they so desire to display and/or trade.

There will be contests in the areas of models, timetables/schedules, black and white & color photos, color slides, post cards, baggage labels and miscellaneous general display.

Rooms will be available for discussions, refreshments, and slide/movie shows in addition to the main trading and display areas. All rooms, including the trading and display rooms, will remain open in the evening as late as everyone wishes.

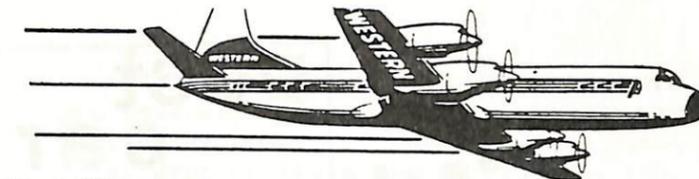
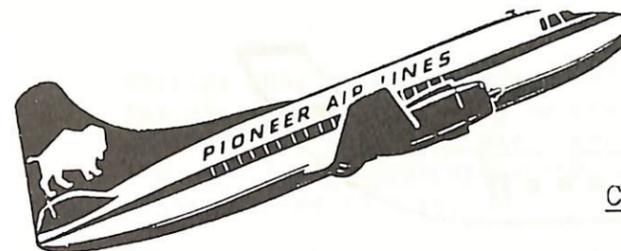
Featured at this year's convention will be tours of the American Airlines Flight Academy located at DFW Regional Airport. Also included will be a photo tour of DFW conducted by one of the convention committee members. The big feature at DFW this year will be the Air France/British Airways Concorde interchange flights with Braniff. If your a photo buff, don't miss it!

The banquet will be held Saturday evening, July 14. At this time nominations will be made for the location of the 1980 convention. Cities nominated will then be voted upon by all members attending the convention banquet. The city obtaining the most votes will be awarded the 1980 Airlines International.

Registration fee for this years affair will be \$18.00 for the whole package which includes the banquet, one display/trade table and the general registration fee. After APRIL 1, 1979, this fee will be \$22.00. GET YOUR REGISTRATION FEE IN EARLY!!

You will be receiving in the mail a flyer telling about the convention and the various fee schedules. If you have any questions at all, please contact the Airlines International "79" Committee, 4449 Goodfellow, Dallas, Texas 75229.

HOPE TO SEE ALL OF YOU IN DALLAS IN JULY!



CONVENTION DATA

PLACE: Quality Inn Cibola (Adjacent to Six Flags and Texas Rangers Stadium)
1601 E. Division
Arlington, Texas 76013

DATE: Friday, July 13 (8 A.M.) through Sunday, July 15, 1979

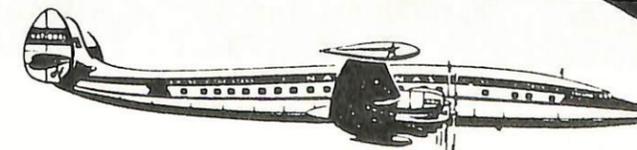
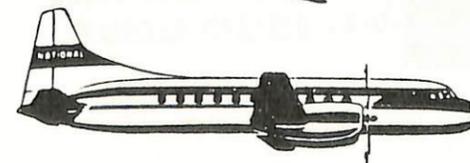
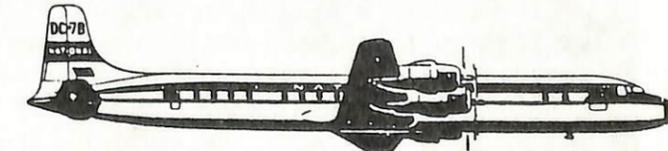
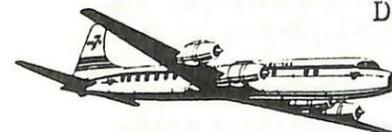
DISPLAY AND ASSOC. AREAS: We have secured a 46' x 75' display room, a tiered auditorium (38' x 60'), two connecting rooms for meetings and/or hospitality.

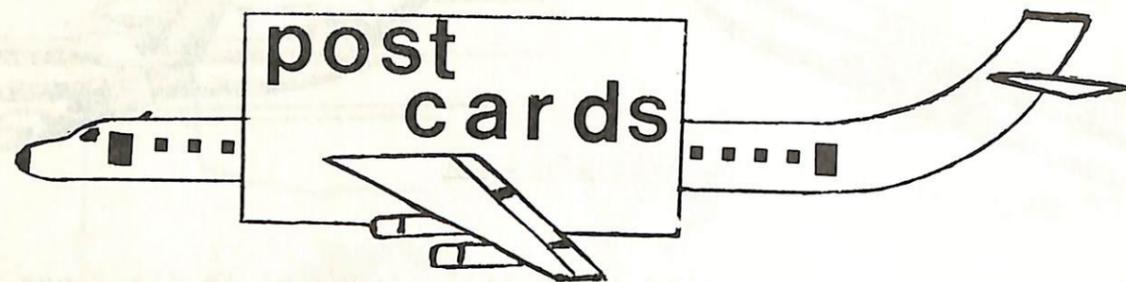
ACCOMMODATIONS: An adequate number of rooms have been set aside for the convention. Rates are \$28.00 single and \$35.00 double.

REGISTRATION FEE: Registration fees are broken down into one of the following options:

- B \$22.00 Regular Full Registration Fee, includes banquet dinner and program, one display table and registration fee. (Banquet \$15.00, one table \$2.00, Registration Fee \$5.00.) Applies after April 1.
- C \$ 7.00 General Registration Fee, plus one display table. (\$2.00 each additional table.)
- D \$ 5.00 General Registration Fee only.
- E \$20.00 Banquet plus General Registration Fee.
- F \$15.00 Banquet meal and program only, not including alcoholic beverages.

NOTE: There is no charge per se for the tour of the American Airlines Flight Academy and Learning Center nor the DFW photo tour.





PETE BLACK

We are sad to say that John Moore, our post card editor, and the man who is mainly responsible for the recent upsurge in organized airplane post card collecting has had to resign from the staff of the LOG due to other personal commitments. On behalf of all of us, thanks, John. You really helped get the ball rolling!

Recent issues by airlines have been few and far between. Allegheny has issued a card of one of their new 727s. (New to Allegheny, the aircraft are second hand.) Ransome Airlines has issued another card of a Nord 262 in Allegheny Commuter colors, their third in recent years. World Airways has issued a DC-10 card, and Frontier has just issued a card of a 737 in their new color scheme. Foreign carriers U.S. offices are just as bare of new issues, if not more so. Singapore Airways has issued a card of the side of the lone British Airways Concorde painted in their colors, and Japan Air Lines has issued a new DC-10 card. Iran Air has a new 747 and 727-200 card, but only from their Teheran office, and with the problems over there, they are hard to get. FLASH-Braniff has issued a Concorde card!

Commercially issued cards fare a bit better. Charles Skilton in merry old England has come out with a number of new cards, including an Iberia 727 in their new colors, a British Airways HS748, British Airways Merchantman, and several others. Unfortunately, the high quality they were known for seems to be a thing of the past. A friend who recently visited their offices outside London learned that they were working from 35mm originals, and that is the reason for the drop in quality. A Spanish printer

is also distributing cards in England, but these are all of common subjects, and some even use the same picture as others have already printed on a post card! Their quality, I am afraid is not too high.

A happier note is a recent set of super cards from Coincat, the German Aviation Society. These cards are of exceptional quality, and are of interesting subjects: Air Belize 720, Air Florida DC-9, Air California Electra and Air Bridge Carriers Viscount. They will be doing a set of VFW-614s as their next offering.

From Mike Clayton's Aeronautica outfit in the lad of the kangaroo comes a Garuda DC-8, Saturn Airways Hercules, Qantas DC-4 (see last issue LOG) and a Pearl Air Viscount. All of these are high quality cards.

The number of airport cards showing aircraft has dwindled over the years and is probably at an all time low. Three recent exceptions are a Maui (Hawaii) card with a Hawaiian DC-9-51, a Fargo, North Dakota card with a Northwest 727, and a Memphis card with a Braniff 727.

Down in the land of Juan Valdez, Moviefoto continues to pound out cards like there is no tomorrow. Unfortunately most of their recent issues are different views of aircraft they have already done. Would you believe that they have done at least seven different cards of Aerocondor 707 HK-1802? This would appear to be quite a waste, but maybe somebody out there really wants seven different cards of the same 707! I know I don't! A-men to that.

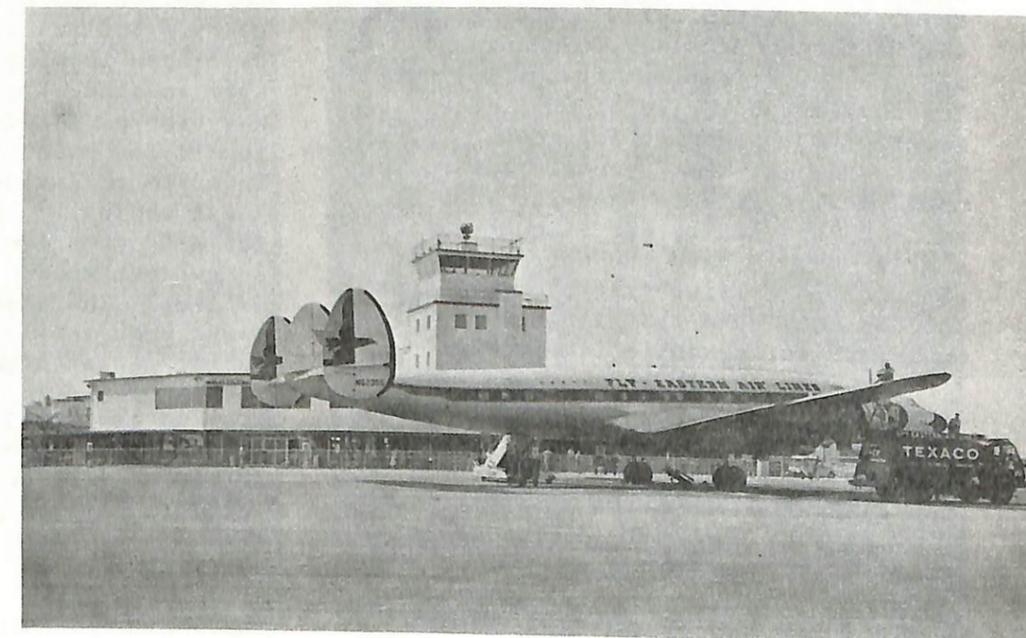
Last, but not least, Aviation World of Bethel, Conn. has just released cards of a TWA Martin 4-0-4, British Airways

Tristar 500, Command Airways SD3-30, Eastern Electra (delivery colors), TWA Tristar 100, Northeast Airlines Convair 880, Civil Air Transport DC-6B, and promises of more to come.

Many collectors have complained that there are no really nice albums for Continental size post cards. Twentieth Century Plastics, of Los Angeles has just come out with a large loose leaf album with vinyl pages that hold 12 4X6 cards (6 on each side). The price is a bit steep: an album with 25 pages cost \$20.25 plus \$2.75 for shipping. This works out to \$23.00 for 300 cards, or 7.6 cents per card. An album from the same company for standard size cards (3½ X 5½) that holds 400 cards costs only \$14.85 plus \$1.75 shipping. This works out to only 4.1 cents per card, little more than half of the cost of the larger size. While this new large size album page is most welcome, it will not fit the same size binder as the page for the smaller cards, so collectors using these albums would either have to use the larger album for all their cards (a bit untidy) or segregate their collections according to size. Then too, comes the problem of the oversize "giant cards" which will not fit either page!

I have seen some collections kept in the so called "Magnetic" photo albums. The problem with these is that the pages are coated with a substance like rubber cement, and over a period of time this decomposes into substances harmful to your post cards (and whatever else you have in it). STAY AWAY FROM THESE!

RIGHT: A new arrival at Club headquarters is this real nice card of a Eastern Connie at Pinellas County Int'l Airport. I.D. number on back is S-13069-1 and was printed by Florida PreVues, New Port Richey, Florida.



That is about it for this issue. If you have difficulty obtaining any of the post cards mentioned through usual channels, drop me (Pete Black, P.O. Box 188, Bethel, Conn. 06801) a line and I'll try to steer you to one. Until next time then, happy collecting.

Paul Collins, Editor of the LOG is still looking for DC-10 post cards of the following carriers. Your assistance is requested in obtaining these cards for a Club display. Condor; CP Air; Balair; Singapore Airlines; Sabena; AeroMexico; Turkish Airlines; Garuda; Philippine Airlines; Air Zaire; PIA; ONA; JAT; Varig and Air Siam. Will buy, trade or take contributions. Much thanks to those that sent in cards from ad in last issue of LOG. If I owe you anything, please drop a line and let me know.

Bill Demarest of the Airliner Information Club of Belgium (102 Tall Timbers Road, Glastonbury, Conn. 06033) has taken upon himself the mammoth task of compiling a listing of all known airline postcards. Bill has made out a chart that you can use in listing cards in your collection. Drop him a line requesting some copies of this form. He is going to need all the help he can get. Let's all pitch in and give him a hand.

Are You A...

Deltiologist?

The following is from our "guest" post card editor for this issue, Mr. William M. Demarest.

Are you a deltiologist? Don't worry, it's not a new strain of virus from the tropics of Africa nor is it a person who works for Delta Airlines. Quite simply, deltiologist means a person who collects post cards. The word itself comes from the Greeks and means "writing tablet". However, since we are airline enthusiasts, we only collect post cards with aircraft on them. Could we call ourselves Aero-plannis Deltiologists?

If you are an aeroplannis deltiologist like myself, the symptoms are well known to you. The blood pressure rises when the daily mail is brought in...your eyes scan the envelopes for the ones addressed to you. Clutching them to your chest, you rush to your private hide-a-way where no one will bother you. Ripping the envelope open, you hope and pray that it is a new trading list or even perhaps post cards from fellow collectors. You are rewarded! It's from a collector who usually has some interesting cards to offer. The eyes skim the page...picking up the good ones like a Mohawk BAC 1-11...Bonanza DC-9... and the newer British Airways Boeing 737. You look at your pile of duplicates... wishing you had something good to offer in return. At last, you see a card you would really like to have for your collection. If you are like myself, that's bad. I have the worse case of aeroplannis deltiologist sickness known to man. Any card that I don't have I must have for my collection!

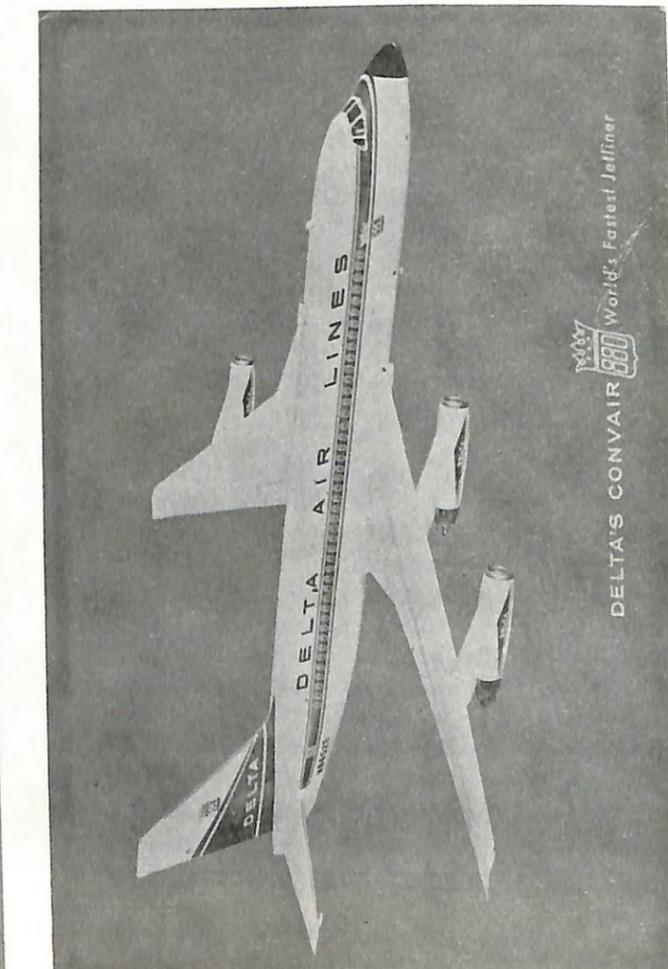
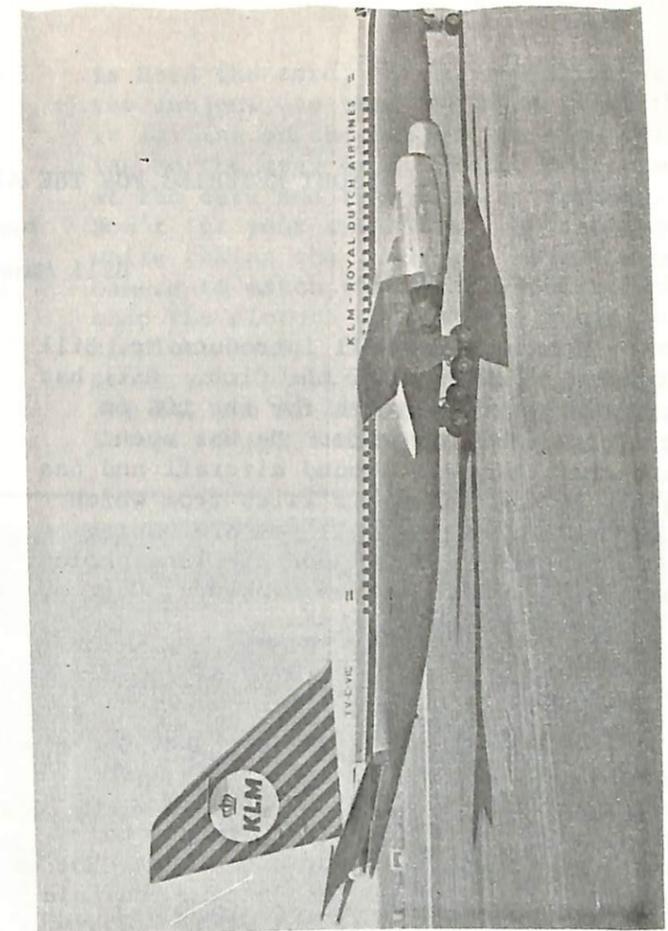
Next, you pull out your writing tablet and begin to pen a reply to your friend all the time praying that your letter will be the first to reach him. You have your eyes set on, for example, a Northeast DC-9 at Portland, Maine.

Your eyes roam to your post card collection...noting the empty spot just waiting for the DC-9. With all your flowery prose and wishing your correspondants grandmother the best of health, you stick the letter in the mail with your best offer. The eyes are glazed. The palms sweating and little beads of sweat form on the forehead. The nervous tension has set in. The wife, kids, and the dog know to leave daddy alone for the next week. With visions of Northeast DC-9's dancing in his mind, the family knows that the old man is beyond reach until the patron saint of all aeroplannis deltiologists, the mailman, arrives with the letter containing the treasured card.

After speaking with doctors at the noted Faber College, I was told that there is nothing known to man to cure this condition. Once it's in the blood, aeroplannis deltiologist is here to stay...and I'll attest to that!

Would you like to be a "guest" post card editor in the next issue of the LOG? Write the editor a page or two about your collection and how you feel about the hobby. Tell us about the cards that you have been looking for and have not been able to find...tell us about the ones you have looked for and FOUND. The biggest fun in the hobby is the HUNT! What is your favorite card--the one or ones you like least and why. This could be a fun column for all of us aeroplannis deltiologist, so get out your pen and pad and start writing. Sharing your hobby with others is as much fun as sharing it with that secret place to go to open your mail!

On the following page you will find some of the Convair 880/990 post cards in the collection of the editor, Paul Collins. I hope you enjoy them. Until next issue, happy collecting!



LIGHT METERING FOR THE AIRCRAFT PHOTOGRAPHER

by
Bill Manning

This article will introduce Mr. Bill Manning to members of the Club. Bill has offered to do articles for the LOG on photographing aircraft. He has spent a number of years around aircraft and has a ton of photos in his files from which to make comment on. If you are having some problems taking good airplane photos, drop Bill a line at 946 Florence, Colton, California 92324.

Now, on with the business at hand.

You know how it is. You just had a call that your slides were ready, and after rushing down to the processor and back home, you breathlessly open a box and withdraw one of your new slides. Not waiting to rig up the projector, you hold the little jewel up to the window to admire your handiwork, and aggggg!! What the hell happened?, you ask yourself, as you start to say unkind things about the processor, the film manufacturer and the camera maker? Well, by now you have the picture. It's happened to all of us at one time or another, and those that say it hasn't, threw all the bad ones out before anyone had a chance to see them.

Time and film are expensive and most of us can't afford to waste either. We need a solution to the problem of over and under-exposed slides.

Most of the poorly exposed slides we take are the result of misinterpretation of the data supplied by the light meters built into our cameras. The problem is not the fault of the light meter. All light meters are calibrated to read the light as eighteen per cent gray. Light meters do not see in color, they see in black and white, so we'll use black and white film for an example.

The object we are going to photograph for this example will be the flat wall of a building, half white and half

black. Point your camera at the black half of the building, take a meter reading, and set your camera to correspond with the reading. Most cameras accomplish this automatically as you line up two needles, a needle in a bracket, etc. Make sure your metering only the black half and take your picture. Now do the same, using the white half of the wall. When you get these two pictures back from the lab, you will note that they are exactly the same shade of gray. The meter read the black and the white both as eighteen per cent gray. Now, take a picture of the wall and fill the frame with half black and half white. When this picture comes back, the meter will have averaged the reading for the two colors and the picture will be properly exposed.

Assume that the flat wall of the building has been replaced by an aircraft against a bright sky background. If the aircraft occupies half of the picture, in your viewfinder, your camera will probably give you a decent shot. If the sky, as it will be in most cases, is the major portion of the frame, the meter will read mostly sky and underexpose the airplane accordingly. Unfortunately, the more sky there is, the darker the airplane will become, until it becomes nothing more than silhouette. A silhouette has a place in photography, but not if your trying to see what color a particular airplane is.

Professional photographers counter this problem by going to expensive spot meters and incident meters. Spot meters can isolate a small area of the subject and read only the light reflected from that small area. Incident meters don't read reflected light at all. They read the light falling on the subject instead. Both of these meter types will counter the problem of too much sky, but as mentioned earlier, they are expensive.

If you don't feel that you can justify the expense of one of these meters, there is still a way out. A Kodak eighteen per cent reflectance gray card is available at most camera shops and is very inexpensive. The gray card reflects eighteen per cent of the light striking it and, used with a reflected light meter, does essentially the same job as an incident meter.

The gray card comes with instructions, but basically all you have to do

is hold the card, in the direction of the subject, so that the same light that is falling on the subject is also falling on the gray card. Point your camera at the card and take a meter reading. Don't let your shadow fall on the card while taking the reading. Adjust your camera to match the meter reading. Now, snap the picture and nothing could be simpler. Well, nothing that could improve your pictures this much anyway. Try it, you'll like it. See you next issue. Happy snapping.



FLIGHT EXCHANGE

Robert W. Alexander, 29620 Sue Road, Evergreen, Colorado 80439 is disposing of several hundred items of aviation interest. Hobby magazines, aircraft posters, patches and much much more. Send a large SASE (.29¢) to the above address.

Jay Pickering, Route 1 Pickering Road, St. Clairsville, Ohio 43950 wants any present airport cards of U.S. airports, especially aerial views. Jay would rather buy but will consider trading. Write him at the above address.

Martin Hirshfield, 171 7 Avenida de Santa Ynez, Pacific Palisades, Calif. 90272 is looking to buy or trade commercial airline wings, pilot, co-pilot, engineer, stews, purser of domestic or foreign airlines.

P. C. Hodgdon, 218 S. 163rd E. Avenue, Tulsa, Okla. 74108 has airline kits, post cards, schedules, photos, slides, baggage labels, playing cards, book matches and emergency cards and other goodies. If your a switch hitter, have the above items, at least most, in military items. Over 250 military kits, along with photos, books, mags, post cards, slides, etc. Send SASE for list.

Karl Smalley, 5232 Curtis, Dearborn, Michigan 48126 wants slides taken at Willow Run when it was being used by the airlines also slides of Zantop Int'l Airlines aircraft, especially those taken prior to 1976. Will accept duplicates. Karl still wants anything on Capital Airlines and will trade prop post cards for your early jets. He has current Willow Run prop slides for trade.

Phil Fleener, 5926 Blanca Ct. Golden, Colorado 80401 wants decks of airline playing cards. Just starting collection--will purchase or trade models, decals, post cards, baggage stickers, etc.

Martin Marlow, 820 Kennedy Avenue, Grand Junction, Colorado 81501 is researching Frontier Airlines fleet from day 1. Primarily needs info on Challenger, Arizona, Monarch and Central fleets. Also needs set of 4 1/144 Revell P & W JT3D-3B engines for DC-8-61.

John T. Roderick, 361 Forest Meadows Drive, Medina, Ohio 44256 has the following books for sales: RUNWAY, 1973, is the story of the Capitol DC-8-63 crash at Anchorage \$5.50; TRANSOCEAN, 1953, is the story of a charter airline of the 50's \$7.00; HIGH HORIZONS, 1951, is the story of United Airlines \$6.00; HUNGRY TIGER, 1964, is the story of Flying Tiger Airlines \$8.00; AIRLINE SAFETY IS A MYTH, 1967, is a TWA captain's look at present, past and future airline safety \$7.00; CIVIL AIRCRAFT OF THE WORLD, 1974, contains lots of airliners \$7.00.

Victor Phillips, Jr. 6522 6th Street Northwest, Washington, D.C. 20012, would like to receive any extra material you have on the BAC 1-11. Victor is also interested in interior photos, advertisements, etc. He also desires anything you might have on the LTU L-1011.

Larry Williams, 30105 Windsor, Gibraltar, Michigan 48123 has desk models of the Electra, F-227, Gulfstream I and II, plus others for trade. Write him or call at 313-671-2241.

AERO PUBLISHERS, INC.

329 W. Aviation Road
Fallbrook, CA 92028



PRESS RELEASE

Immediate Release

Contact — Tom Bowen
(714) 728-8456

RE: New Book Published by Aero Publishers, Inc.

FALLBROOK, CA — Aero Publishers announces the November publication of the **Boeing 727 Scrapbook** by Len and Terry Morgan.

Here is the story of the most widely used airliner in service today. It is a truly remarkable aircraft featuring rear-mounted engines, twin rudders, twenty-six flaps, nosewheel brakes and a retractable tail skid. The "Three Holer" very nearly died on the drawing boards in Seattle. The decision to build is still remembered as a billion dollar gamble.

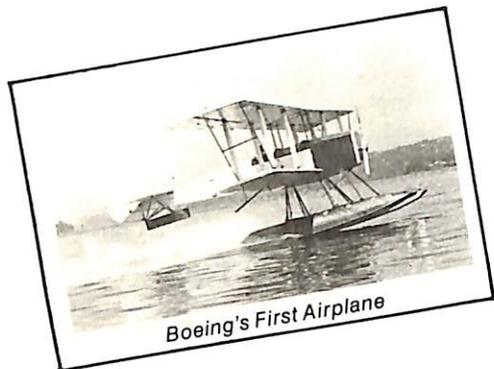
Here also is the story of Francis Pratt and Amos Whitney who formed the company which builds the 727's superb engines.

The 727's first test flight is recalled by the test pilots who flew it. The authors, who fly the ship in scheduled service; describe a routine airline trip. Details are given for four 727 flights which were anything but routine. Crew training (groundschool, simulator, flight checks) is also covered.

This book is a pot pourri: 104 pages, eight in beautiful color, illustrated with over 150 carefully selected photographs and scale drawings. It makes but one claim: whether passenger or pilot it will surprise you.

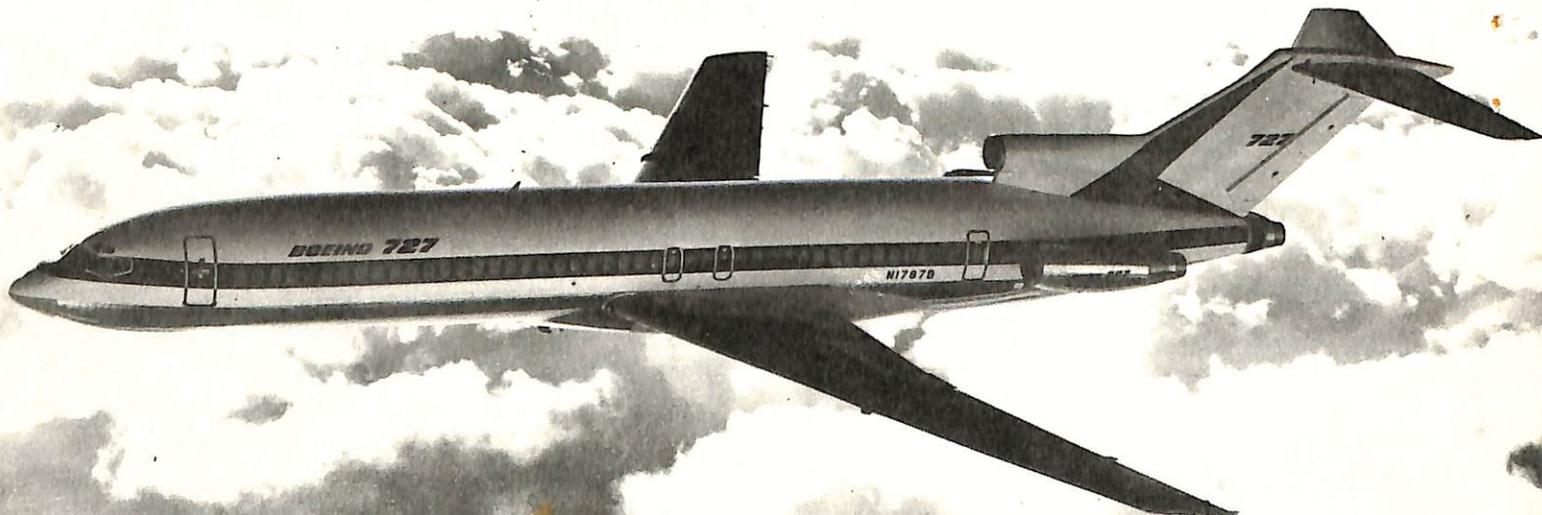
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Aero books are available at bookstores, aviation dealers or directly from Aero Publishers, Inc.



BOEING 727 SCRAPBOOK

by Len and Terry Morgan



World's Largest Publisher of Aviation Books . . . Since 1939