

**T**HE SEEDS FOR THE FORMATION OF TRANSCONTINENTAL Air Transport, Inc. (TAT) were planted in early 1928 by a small group of men meeting at an exclusive club in New York City. Among the participants were Clement M. Keys, Paul Henderson, Daniel M. Schaeffer, Chester E. Cuthell and Charles Lindbergh. These were the times when giant parent or holding companies were forming which owned, or had controlling interest in, aircraft and motor companies along with a network of airlines as an outlet for their products. Keys was among the leaders of the industry at the time.

Canadian-born Keys began his career with mutual investments as the Railroad Editor for the *Wall Street Journal* in 1903 and soon was in his own business as a banker and broker. In 1916 he was VP of the Curtiss Aeroplane and Motor Company. In 1920 he was President (Glenn Curtiss now headed the Engineering Department). In 1925 he raised \$10,000,000 to form National Air Transport (NAT), a holding company with Keys the Chairman of the Executive Board. NAT was the successful bidder for the airmail route from Chicago to Dallas which began operating in 1926. NAT was also the successful bidder for part of the coveted Post Office "Main Line," from Chicago to New York City, which began operations in 1927. Another giant in the industry, Boeing Air Transport, won the western portion from Chicago to San Francisco and began operating in 1927. Frederick Rentschler, of Pratt & Whitney, was soon to be another power in the industry and a bitter opponent of Keys. In 1928 Keys was President of Pitcairn Aviation (later known as Eastern AL), flying the airmail route from New York City to Miami.

Henderson served as Assistant Postmaster General from 1922 to 1925, and organized the night flying service on the Main Line. In 1925 he joined NAT as Operations Manager and later a Vice President. Schaeffer was a top executive with the Pennsylvania Railroad system, General W.W. Atterbury the President. Cuthell, a lawyer, was present as a legal advisor. Lindbergh needs no introduction.

Keys made little, or no, effort to develop the possibilities of the passenger market on NAT's combined routes for several reasons. Revenue for the airmail was more attractive and there was not the big question of passenger safety or comfort. A sack of mail didn't complain if the flight was late or canceled. It didn't get airsick and make a mess, and it didn't require the extra employees to sell a ticket, load the bags and passengers or tend to their en route needs. NAT's one flight a day schedule offered little for the passenger . . . a seat available, subject to the mail load, or no seats at all pending the addition of new equipment.

During his tenure with the Post Office, Henderson experimented with a combination of flying the airmail by day and, at certain designated cities, transferring the mail for overnight shipment by train. To a degree, the experiments worked and now Henderson proposed such an air/rail combination from coast to coast (New York City to Los Angeles) for passengers. He drew a crude outline of the U.S. on the back of an envelope with a line between the two cities; an "X" was marked across the line at three intervals with the following explanation. From New

# TRANS- CONTINENTAL AIR TRANSPORT, INC. by Ed Betts

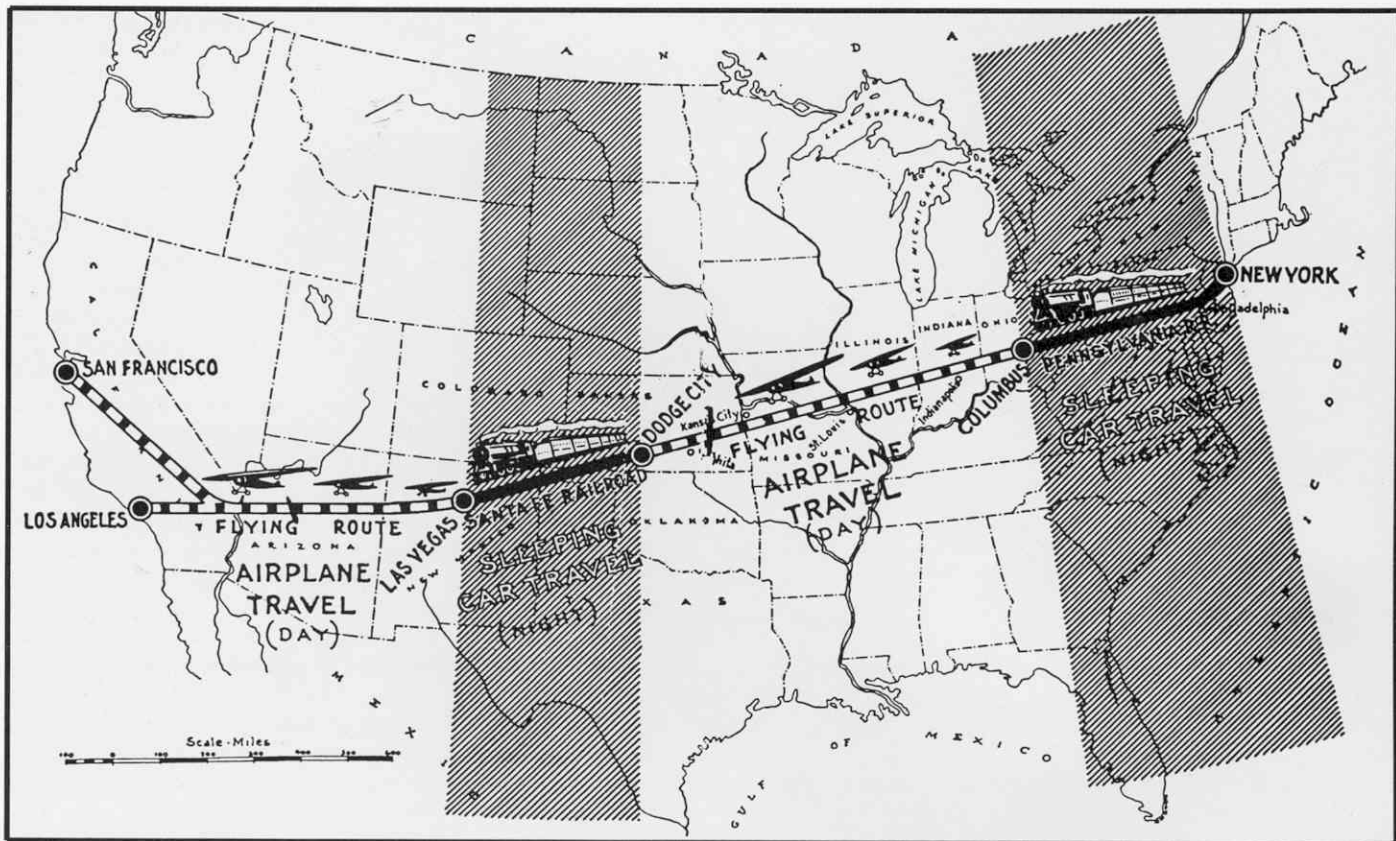
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The TAT Ford Trimotor , NC9606, City of Columbus in flight. It was used by Lindbergh as his flying office. Among the founders of Transcontinental Air Transport, Inc., (Insets, top to bottom) C.M. Keys was President, Col. Paul Henderson was vice president ,and Col. Charles Lindbergh was Chairman Technical Committee, and Consulting Aeronautical Engineer, Pennsylvania Railroad.





TRANSCONTINENTAL RAIL AND AIR ROUTE BETWEEN NEW YORK, LOS ANGELES AND SAN FRANCISCO

York City to the first "X," which designated a city west of the Allegheny Mountains (such as Cleveland, Pittsburgh or Columbus, Ohio), a passenger traveled overnight by train. He then flew all day to the second "X," a city in the Midwest (such as Dodge City or Garden City, Kansas). There he boarded a train for the second night to the third "X" (such as Las Vegas, New Mexico), and the following day made connections for the final leg to Los Angeles by air. The reverse for an eastbound trip. The total elapsed time would be about 2 days compared to the usual all-train trip of 3½ to 4 days.

The envelope was passed around, examined, and all agreed the idea sounded feasible. Keys assured the group that there would be no problem raising the necessary capital for such a venture through his clientele of aviation-oriented investors. Lindbergh's interest was the offer to be Chairman of the Technical Committee. This would include making all of the necessary arrangements: schedule of when and where the transfers between air and train would be made, other airports or cities to be served, the choice of air and ground equipment, personnel and everything essential to operate this joint venture.

The presence of Schaeffer, representing the Pennsylvania Railroad, may seem like a strange partner to such a proposal. The number of potential passengers they would gain was negligible. However, just a few years prior, the railroads passed up the opportunity to invest in, and be a partner to, the fledgling bus and trucking industries. They were rapidly becoming serious competition for both the passenger and freight markets. Schaeffer would report the proposal to Atterbury, and meet again soon with the group. At the next meeting Schaeffer announced the

answer: it was yes, but with a stipulation . . . this had to be a *first-class* operation in keeping with the railroad's tradition of service. All present agreed and Keys raised the necessary \$5,000,000 (500,000 shares at \$10 each).

On May 14, 1928, Transcontinental Air Transport, Inc., was officially incorporated with Keys the President, Vice Presidents Henderson and J.V. Magee, and Lindbergh Chairman of the Technical Committee. Lindbergh's incentive was a large block of stock (rumored to be 25,000 shares) and a \$10,000 annual salary. It would be over a year before Lindbergh made his announcement that "The Day We Are Properly Ready" had arrived, and service would officially begin. Other than the established mail routes out west, from Chicago to San Francisco (by





A Stearman used before first Ford delivered.

February 1929, Norton Field (Columbus, a military field), ceremony dedicating the City of Columbus. City Councilman Green welcoming Paul Henderson. (via Bill Larkins)

Penn Station. Amelia christening the Airway Limited. Lindy sent the signal to depart.

way of Salt Lake City) and Salt Lake City to Los Angeles, there were no adequate airports or an airway system . . . TAT would have to build and establish their own.

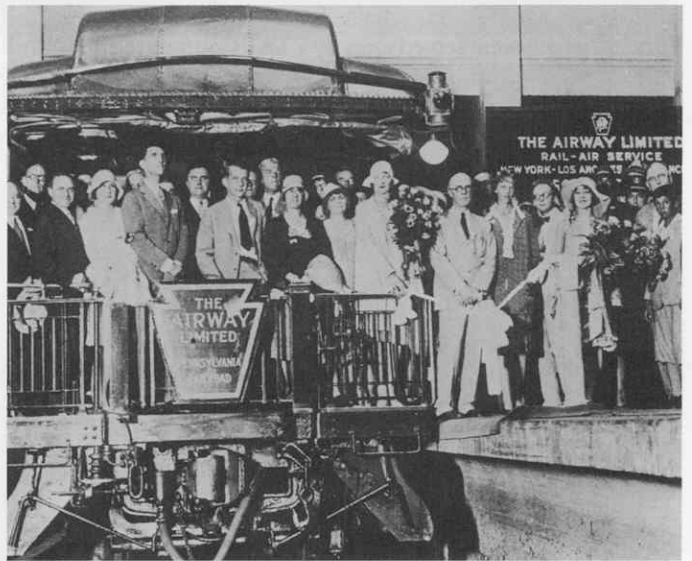
There were numerous changes in the cities to be served and delays due to construction before the final basic route structure was settled upon and completed. TAT was divided into an Eastern and Western Division, with the main headquarters based at St. Louis. Columbus was selected as the Eastern Division headquarters and the overhaul base. The city went all out to cooperate with a new and modern airport and facilities per TAT's specifications. In the November 1927 election the voters turned down an airport bond, but a year later a \$350,000 bond was approved after a great deal of campaigning by Mayor Thomas, with help of the local press and radio stations.

A 640-acre tract of flat farmland seven miles east of the city, and near the existing rail line, was purchased. A common fault of many airports in those days was inadequate drainage systems in wet weather conditions. The City Planning Commission made this a prime consideration before construction of the concrete runways, taxiways, parking areas, hangars and terminal building began. The Pennsylvania Railroad built a special spur route and siding which was a short walk to the terminal building (under a covered ramp). The new airport was entitled "Port Columbus." In those days the terminals were referred to as "Air Passenger Stations."

To the west, the cities of Indianapolis, St. Louis, Kansas City and Wichita agreed to extensive airport and terminal modifications according to TAT's specifications. However, further west, all the way to Los Angeles, TAT had to purchase land and build their own airports and facilities. Although it didn't own any stock, the Atchison, Topeka and Santa Fe Railways became an important partner to the system with the second overnight trip. Waynoka, Oklahoma, and Clovis, New Mexico, were selected as the connecting points. From Clovis the trip by air included stops at Albuquerque, Winslow, and Kingman, Arizona. The Grand Central Airport at Glendale, which was under construction until early 1929, was selected as the terminal for Los Angeles and the major overhaul base for the Western Division. All of the airports or cities served were located just a short distance from a railroad depot . . . just in case.

The TAT-built terminals and hangars were all of similar design and interior motif. The passenger terminal was of the old Spanish adobe style (complete with projecting logs from the flat roofs) and furnished with hand-carved tables and chairs, many of which were more than 100 years old. There was generally a room with divided sleeping compartments for the passengers to rest in case of "non-routine operations." There was also a huge fireplace and hanging above the mantel was a large portrait of the "Lone Eagle," Lindbergh.

A good example of the costs involved with establishing a new station was Waynoka. A total of \$297,202 was spent which included: land, \$72,082; station, \$18,252; radio station, \$5,764; ground radio equipment, \$21,264; hangar, \$134,221; garage,



\$3,080; a miscellaneous structure, \$6,721; shop equipment, \$1,545; weather house, \$147; office furniture and fixtures, \$5,356; fences and signs, \$1,187; pump and transfer house, \$6,483; and airfield beacon and lights, \$18,982. Another TAT innovation was special refueling trucks which pumped gas at exactly 60 gallons a minute.

An elaborate network of weather observation stations was arranged along the route out west, giving a report of the weather about 100 miles either side of the airway. The Santa Fe Railroad station personnel were trained to make their local observations and relay them by teletype to the nearest TAT meteorology office. Although night flying was not contemplated at the time, TAT also bought the sites and built their own airway beacons



between Waynoka and Clovis.

Ample time for connections between air and rail was allowed to have a hot breakfast or dinner on the ground, usually at a nearby (Fred) Harvey House. Harvey also catered the cold lunches which were served aloft by a TAT Courier (termed "Bull Hostesses" by the pilots). Meals were served with expensive china, silverware and linen napkins. Other passenger amenities included chewing gum, cotton to stuff in one's ears and an "urp bag." There was heat available when it was cold, when it was hot you opened the window. A special service was the "Aero Car" for ground transportation to or from the airports and connections with the train. It was a deluxe 16-passenger trailer with wicker seats that was towed by a Chrysler Roadster. Certain VIP passengers received this service to or from their office or home. There was a unique feature with the connecting times at Clovis. The train station, which was located downtown, was on mountain time. The airport (Port Air) was five miles east and operated on central time. A bit confusing for the average traveler making connections.

The first operations personnel were hired in November 1928, and included Paul "Dog" Collins, General Superintendent; John Collings, Superintendent Eastern Division; and Max Cornwell, Superintendent Western Division. Collins was a veteran pilot with the Post Office until 1925, when he joined NAT. Collings was Chief Pilot with the Ford Motor Company after Larry Fritz left to join Maddux Air Lines in mid-1927. Cornwell was not a pilot, but was General Manager for an airline out west.

Shortly after TAT was officially formed, the choice of aircraft and engine was made. Keys, of course, favored his Curtiss-built twin-motor *Condor* and engine, but the plane was still in the development stage and its performance unknown. The choice was the latest all-metal Ford trimotor and 11 Model 5 AT-Bs were ordered (total price \$720,000). Although the plane was capable of accommodating 14 passengers, TAT's version was 10 comfortable wicker seats adjustable in three positions (with individual reading lights). The first two planes were delivered in

November 1928, four in January 1929, and the remainder in the late spring.

Prior to the delivery of the first Ford, Lindbergh and his staff used a Stearman biplane for survey flights and inspections. Jack Herlihy (in later years VP-Operations for United AL) was the Chief Engineer. Others of Lindbergh's staff or advisors included Charles "Casey" Jones (President Curtiss Flying Service) and Major Thomas Lanphier (a career Army pilot who taught Lindy to fly). The first Ford (NC9606) was dedicated as the *City of Columbus*, with an elaborate ceremony, and used as Lindbergh's flying office until service began. There was also a local ceremony at the Kansas City airport dedicating the *City of Kansas City*. Miss Eleanor Beach, the Mayor's daughter, did the christening. Eventually, all of the fleet carried the name of a prominent city in the U.S. painted on the side of the fuselage (below the cockpit). Most were served by TAT.

The hiring of 1st Pilots (Lanphier's canvas and selection) and 2nd Pilots (copilots) took place in May and June. Qualifications



The 14 passenger Aero Car was designed and built by the Glenn Curtiss Company. The car was built of light aircraft type construction and had a PA system from the pilot car, a Chrysler Roadster. TAT had an Aero Car at each terminal.

Train arrival and transfer to the air terminal and plane.

Exterior shot of the Albuquerque terminal building. Service was indicated to begin on December 12, 1928. When Harry Gann and I were aboard the TWA-sponsored DC-2 flight that stayed overnight in Albuquerque (in 1988) this building was still in use by the Sandia Area Federal Credit Union. A historical monument. Building typical of TAT's out west.

Interior of the TAT terminal. I believe this is Albuquerque. Also typical of TAT's interior motifs out west.

July 7, 1929. Lindbergh at California Governor Young's desk ready to send the signal to begin operations. One is the Governor (I believe on Lindy's right) and the other the city Mayor.

for 1st Pilots was a minimum of 3,000 flight hours, 500 in multi-engine equipment. A total of 17 were hired, most were checked out or trained at the Ford School, at a \$500-per-month salary. John Collings flew to Kelly Field, Texas, and hired a large group of Army pilots as 1st Officers at a salary of \$300 a month. The entire group of 33 pilots met with company officials at the Jefferson Hotel in St. Louis with a banquet prior to the beginning of a series of dress rehearsal flights which began on June 10. The rehearsal flights carried 231 passengers 50,000 miles without a problem.

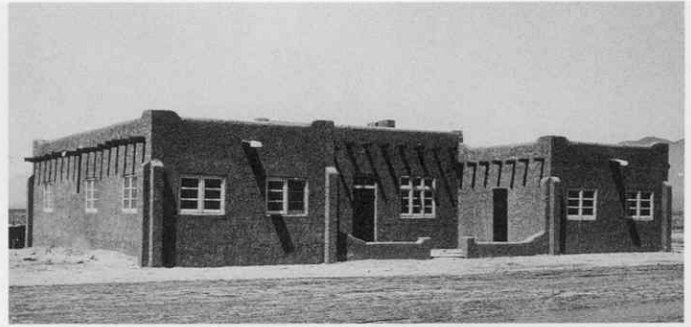
Another famous aviator hired by TAT was Amelia Earhart, as Assistant to the General Manager. Her job, as a consultant, was to give advice to the women passengers as to what to wear and answer (by mail or a newspaper article) any questions about flying, etc.

One reserve pilot, based at St. Louis, was Ben O. (Benny) Howard. He made two mistakes which caused his dismissal by Paul Collins. One was when he was ferrying a Ford, solo, and carried on a radio conversation with an operator on the ground. This would have left the cockpit unattended while he went to the rear of the cabin to unwind (and wind up) the long trailing antenna. The other was a super "buzz" job over a friend's house a few miles from the airport . . . the calls from irate neighbors preceded his landing at St. Louis. Within a few years, Howard was a pilot-engineer with United and was a leading racing pilot as well as producing his "Howard" aircraft.

Finally, after more than a year of preparation, Lindbergh gave the okay that "all was ready" and service would begin on July 7, 1929.

In the meantime TAT's competitors were already in operation with various combinations of fly by day and train at night. Western Air, starting in June, flew from Los Angeles to Kansas City (via Kingman, Holbrook, Albuquerque, Amarillo and Wichita) with train connections east. The entire trip to New York took 46 hours and the advertised price was \$245. Standard Airlines (headed by Jack Frye) offered a combination of flying from Los Angeles to El Paso, then by train to Sweetwater, another flight via Southwest Air Fast Express to St. Louis for further connections east by train. This was a 65 1/2 hour trip and cost \$217.

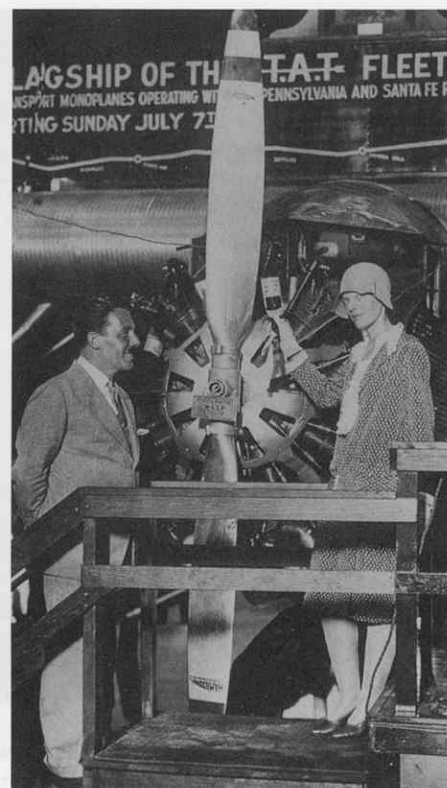
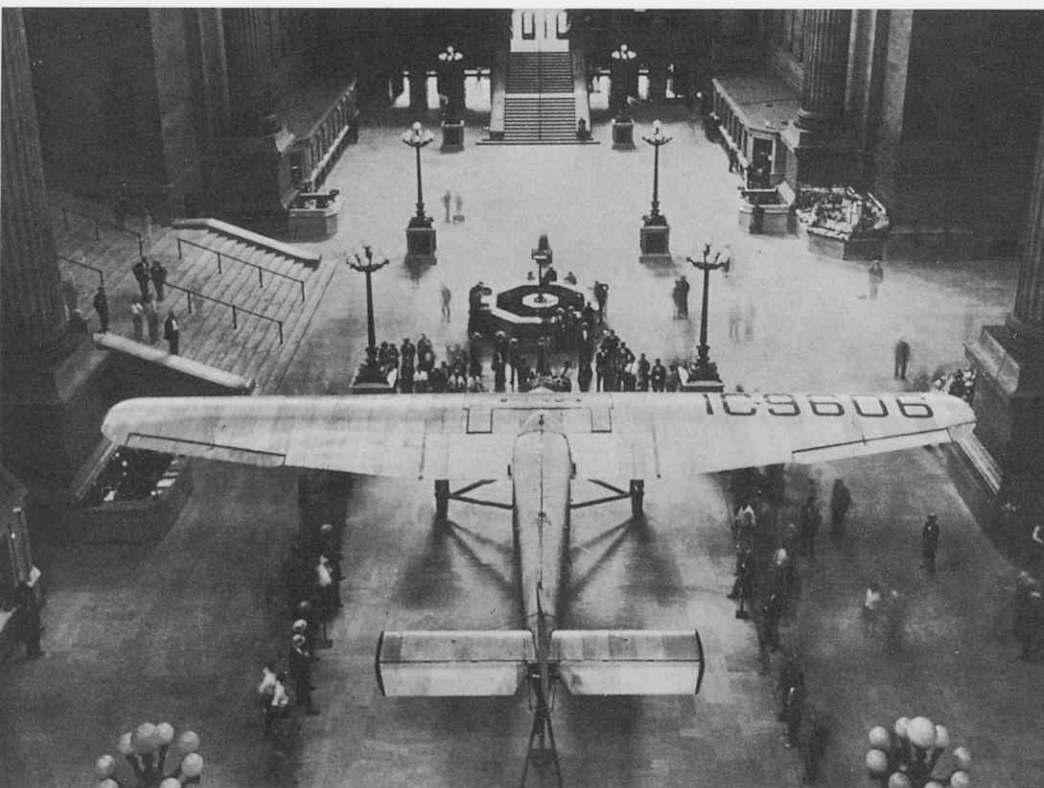
Universal Aviation Corporation (a group of five airlines including Braniff and Continental) offered a combination where they flew by day between Cleveland and Garden City, Kansas, connecting with overnight trains to either coast. This was a 67 1/2 hour trip and cost \$234. TAT advertised "48 Hours Coast-to-Coast"; actually it was 46 hours eastbound or 50 hours west, and the price depended on the type of train accommodations. The



air fare was \$290. Including train fares (a \$3 extra charge on the Airway Limited) the total ranged from \$337 to a high of \$403. There was a 10% reduction for a round trip on the air fare, which included a \$5,000 insurance policy.

Negotiations between TAT and Maddux Air Lines for a merger were already under way and completed later in 1929. Maddux pilots Eddie Bellande, John Guglielmetti, Steve Shore and Moye Stephens were already assigned to TAT and did the flying between Glendale and Winslow. Passengers arriving Los Angeles and ticketed to the San Francisco area had the option of





an overnight train that night or, after a stay in a hotel, taking a Maddux flight the next day (at no extra charge). The same type of option was available for an eastbound passenger from San Francisco.

The three days of inaugural ceremonies at each station along the entire route were a press agent's dream with famous names in the entertainment industry, business, politics and aviation scheduled to take part. In preparation, a Ford's wings and motors were removed and the fuselage towed from a local airport to the Penn Station in downtown New York City. It was reassembled in the main lobby and on public display. On the evening of July 7, Amelia Earhart, with a bottle of grape juice (Prohibition days), christened the plane as the *City of New York*. A second christening ceremony was held on the observation platform of the waiting train. It was christened the *Airway Limited*. At the same time these ceremonies were going on, Lindbergh was at the desk of California Governor Young with his finger poised over a small telegraph key. At the exact moment for the train to depart (6:05 P.M.) he pressed the key which sounded a loud gong at the Penn Station . . . the signal for operations to begin.

Besides the 20 passengers (including Amelia) who were to continue on to Los Angeles, the train was loaded with company VIPs and other well-wishers. Dinner and breakfast for the through passengers were served on the train which arrived Columbus at 7:55 A.M.. Numerous festivities were already under way with stunt flying, bombing (fake) and parachute jumps by Army pilots. A fireworks display and local "joy rides" kept the crowd entertained. There was little time scheduled for the passengers other than a fast walk to the waiting planes (two sections). A band played *California Here I Come*. At 8:15 A.M., from Washington, D.C., a signal was sent by telegraph from Secretary of Commerce Lamont, which rang a gong and the two planes departed. Among the crowd of spectators and dignitaries

who braved the rainy day were Henry and Edsel Ford, Harvey Firestone, William Mayo and Ohio Governor Myers Cooper. After the planes departed over 200 invited guests were hosted to a big breakfast in the TAT hangar, complete with speeches by officials and dignitaries.

That same morning Lindbergh was at the Glendale Airport where ceremonies were held before a huge crowd seated in bleachers. On display was a Ford with a battery of floral decorations. First, the *City of Los Angeles* was christened by Mary Pickford (with husband Douglas Fairbanks, Jr., watching). A second Ford was christened the *City of Philadelphia* by Gloria Swanson. Also on hand was Lindy's bride, Anne. Then Lindy and Eddie Bellande departed at 8:45 A.M. for Kingman with the first section with a full load of passengers. The scheduled stop for refueling was 15 minutes and they were off to Winslow. Lunch was served en route. They arrived Winslow at 2:14 P.M., where a Clovis-based crew took the flight on east. Per the normal crew pattern, Lindy and crew spent the night in a hotel awaiting the arrival of the westbound flight, scheduled to depart the next afternoon at 1:27 P.M.

The westbound train arrived at Clovis on time and the two flights were scheduled to depart at 8:10 A.M. However, the first section, which carried most of the VIPs, had a major problem . . . while on the takeoff roll an engine failed, the plane ground-looped, ran across some plowed land, and a wing struck the hangar. A spare plane was readied but the change took valuable time. The second section continued as scheduled. Once under way the first section was trying to make up lost time . . . Lindy and crew took over at Winslow, still running late. However, the second section circled the Los Angeles area so that Lindy and group would be the first to land. The publicity of having Lindbergh and Earhart on the same plane brought out another huge crowd for the arrival. Gloria Swanson and Anne were among the

NC9606 now renamed *City of New York* on display in the Penn Station in downtown New York City.

Amelia Earhart christening the *City of New York* in Penn Station. New York Governor Grover Whalen on steps.

Anne, Mary Pickford and Lindy.

Dedication ceremony (*City of Los Angeles*). Seated, Douglas Fairbanks, Jr., and wife Mary Pickford and Governor Young, Lindy, second from far left, the Los Angeles Mayor. Jack Maddux second from far right.

welcomers with bouquets of flowers. The story is told how TAT had to turn down over a thousand requests for seats aboard the inaugural flights.

TAT was off to a grandiose start and business was fairly good. During the first month they carried 433 passengers; 153 were from coast to coast. The average load factor was 38%, and 99.4% of schedules were completed. The Eastern Division was making plans for expansion which included utilizing three 18-passenger Curtiss *Condors*. The *Condor* was powered by two 600-hp liquid-cooled *Conqueror* motors. The cabin divided into three sections of six plush seats in each compartment. It was considered by many to be the ultimate in passenger comfort. However, there was a question of the plane's engine-out performance over the high terrain out west, so they were restricted to the Eastern Division. The Keystone factory had one of their trimotor *Patriotics* painted in TAT livery, which they hoped to sell. It was very nose-heavy, and required power for the approach and landing, which made it unacceptable.

On September 4, all operations came to a halt following the crash of the *City of San Francisco* (NC9649) in the mountains somewhere between Albuquerque and Winslow. A vast search by TAT and the military was made and a reward of \$5,000 offered for locating the plane. Ten days later George Rice was pilot of an eastbound Western F-10A and spotted the wreckage



in the area of Mt. Taylor, 60 miles west of Albuquerque. All eight aboard, including pilots J.B. Stowe and E.A. Dietel, were killed. Apparently the pilots were trying to detour some thunderstorms in the area and struck the mountain. TAT's operations resumed, but there was a noticeable drop in the loads. Western also suffered a fatal crash of an F-10A which further destroyed the public's confidence in flying. Then, in October, there was the infamous stock market crash, and business hit a further skid. Average load factors, the percent of seats occupied, dropped to 15% towards the end of the year.

**TAT-Maddux**—On November 10, 1929, the merger was completed and the company was now known as TAT-Maddux. Keys





was Chairman of the Board of Directors; Jack Maddux, President; Sheaffer, Chairman Executive Committee; D.W. "Tommy" Tomlinson, Manager Operations at Los Angeles; and S.D. "Steve" Welsh the same at Columbus. Paul Collins, Luther Harris and Eugene Vidal left the company and joined Ludington Line (and were later President, Senior VP and General Manager with Northeast Airlines). Vidal, starting in 1933, was head of the U.S. Bureau of Aeronautics. Although the flight crews wore the same uniform, it was some time before the combined fleet of Fords and *Condors* were painted with the new logo of "TAT-Maddux."

The company was now operating three daily schedules between Columbus and Kansas City, one continued on to Waynoka and the transcontinental trip. Dayton and Terre Haute were added as flag stops. The cost of the air fare from Columbus to Los Angeles was reduced to \$144 (\$174 for the entire trip from New York City to Los Angeles) in an effort to attract passengers. The flight crews sometimes outnumbered the paying passengers on board a flight out west . . . ground personnel often rode along between stops to help keep the cabin from appearing so empty. There was also the situation of delays or cancellations due to mechanical or weather problems, which caused missed connections with the trains. The stranded passengers would be taken by the Aero Car to the nearest railroad depot for transfer, short of the usual Clovis or Waynoka airports. The courier was kept busy making out revised tickets for the remainder of the trip, baggage transfers, etc. Sometimes he accompanied the passengers on the train with hopes they would eventually make a

connection with a flight along the line. There were some who laughingly referred to TAT as "Take A Train."

On December 22, 1929, Dean Burford flew into St. Louis with the *City of Indianapolis* (NC9647) during a snowstorm in the late evening. After landing they hit a snow-covered tree stump which tore off the left gear and motor. There was also a six-foot-long gash torn in the bottom of the fuselage and one passenger was killed. A few weeks later, on January 16, Earl Fleet had problems landing at St. Louis with an icy runway and ran through the fence. The damage was not extensive and there were no injuries. However, on January 19, TAT-Maddux suffered another fatal accident (plane NC9689, a former Maddux Ford). Pilot Basil Russell was returning from San Diego (and Agua Caliente) when he ran into a rain squall near San Clemente in the late afternoon. LaMar Nelson was pilot of a Western F-10A in the area and witnessed what occurred. Russell was attempting to turn back at a very low altitude and dragged a wing along the ground. This was, at the time, the nation's worst air tragedy as 15 on board, including Russell and copilot F.L. Walker, were killed in the crash and fire which followed. Tommy Tomlinson had flown the company's *Robin* to Palm Springs on his honeymoon; he was notified and flew immediately to the accident scene to take charge of the investigation. Another TAT-M Ford (NC9651) was severely damaged on May 22, after making an emergency landing on a farm near LaLande, New Mexico. There were no injuries and the damaged props and left gear were repaired and the plane ferried out to a TAT-M base for further repairs.





Lawrence "Larry" Fritz left Maddux to help Erle Halliburton get his Southwest Air Fast Express airline established, flying from Dallas or Sweetwater to Kansas City or St. Louis. He returned to TAT-M in June of 1930 as Supervisor of the Eastern Region. A personal observation by the author of the men now in charge, whom I have had the pleasure of knowing in the past: John Collings, Tommy Tomlinson and Larry Fritz were known to be tough "taskmasters" and sometimes not too popular with a pilot who was guilty of carelessness. Perhaps this was a qualification to get the job done during these early years.

It was obvious that TAT-M could not survive without the added revenue from an airmail contract. The Postmaster General, Walter F. Brown, announced there would be contracts open to bid for a central and a southern transcontinental airmail route. Western Air Express owned, or had controlling interest in, Colorado Airways, Pacific Marine Airways, West Coast Air Transport and Standard AL, plus the American-built Fokker plant. It considered itself a strong contender for one or for both routes. Brown had other ideas, and suggested a merger with TAT-M for the central route. WAE, headed by Harris M. Hanshue, wanted no part of the money-losing TAT-M, and refused any further discussions. Brown had dictatorial powers and insisted. These discussions and award of contracts were later the subject of the infamous "airmail scandal" initiated by the new Democratic Congress in late 1933 that resulted in the cancellation of all contracts in February 1934.



July 8, Glendale, California, a large crowd in the temporary bleachers watch as the Aero Car arrived and the passengers and dignitaries board the TAT Ford NC 9646. (Larkins)

The Aero Car seen parked in front of the bleachers after the passengers have transferred to the Ford. (Larkins)

A Curtiss Condor of Maddux Air Lines with the TAT logo painted above the Maddux name after the TAT/Maddux merger.

This Keystone Patrician K-78D shown here in TAT markings, was built for TAT but was not accepted even though the price was reduced from \$90,000 to \$65,000. The aircraft was too nose heavy, requiring power right up to touchdown.

The TAT Portair at Clovis, New Mexico.



**Transcontinental and Western Air Express**—Brown even dictated some of the terms of the merger such as: each company would own 47 ½ % of the new airline with Pittsburgh Air Industries Corporation owning the remaining 5%. PAIC was included because of their Pittsburgh-Butler airport and pioneering rights over the state of Pennsylvania. For WAE and TAT-M it was take it or leave it. The merger was official on July 21 with the newly formed Transcontinental and Western Air Express (TWA). WAE retained their original airmail and passenger route from Los Angeles to Salt Lake City and, for the following year, Hanshue was the President of both airlines. Keys was Chairman of the Board, Schaeffer the Executive Committee and Lindbergh the Technical Committee. Jack Maddux was 1st VP and Jack Frye the VP-Operations.

T&WA inaugurated service on October 25, 1930, with a 36-hour transcontinental trip from New York City (Newark) to Los Angeles. The trains were eliminated from the system (but still available) and an overnight stop at a hotel in Kansas City was scheduled for passengers; the airmail kept moving for a 24-hour elapsed trip. The fleet was now a combination of Fords and Fokkers, including two of the latest 4-motor, 32-passenger F-32 models.

Thus ended a short, but important, chapter in the history of our nation's airlines. TAT introduced first-class service at its finest for the period, which might have eventually succeeded on its own, but the odds against survival were too much at the time. It wasn't until the introduction of the Douglas DC-2, in May 1934, that an airliner was produced which could make a profit without the benefit of the added revenue by the Post Office. The traveling public was still wary of flying except in an emergency. The roots for TWA now included a major part of WAE (their Los Angeles-Kansas City route and facilities, equipment and personnel); some personnel and equipment by way of Aero Corporation of California and its subsidiary, Standard Airlines; Maddux Air Lines . . . all were based in Los Angeles, and all of TAT's personnel, routes and assets.

Quite a number of these aviation pioneers were to have important positions in the years to follow with TWA or other airlines. From TAT-Maddux these included pilots Tomlinson and Fritz who were executive VPs in the prewar years; during the war Tomlinson, a Navy Captain, was in charge of NATS-Pacific and then the Navy's operation with the Berlin Airlift; Fritz, later a Major General, headed the North Atlantic Division of the Air Transport Command and after the war as VP-Operations for American Airlines. Collings was always in management and promoted to VP-Operations after the war. Otis Bryan started out as a TAT copilot, in 1939 was the system Chief Pilot and headed the company's Intercontinental Division during the war under contract with the Air Transport Command. He flew President Roosevelt on several of his trips abroad, and was promoted to VP of TWA's wartime projects.

Ground personnel who were later VPs with TWA included Oswald Cocke, John Clemson, Fred Betts and Clyde McCollum. Before TAT was formed, Clemson was the youngest conductor on the Penn Railroad system. Daniel Sheaffer recognized his talents and talked him into joining the airline and he started out as the first station manager at Clovis. Eddie Bellande left TWA in 1941 to join Jack Northrop; in later years he was Chairman of the Board with Garrett AiResearch. Moye Stephens flew with TWA a short time and then spent two years flying famous author Richard Halliburton on a 40,000-mile trip through Europe, Africa and Asia. The plane was a small Stearman biplane dubbed the *Magic Carpet*. Upon his return Stephens was an executive and Chief Pilot with Northrop.

These are just a sample of the men who are an important part of TWA's roots and they all had one thing in common . . . back in the formative years, they had a strong conviction there was a future in commercial aviation. They were correct. There is another group who deserve recognition . . . the paying passengers who supported the airlines in spite of a few delays or other inconveniences. It might have been a noisy cabin which could be too hot or too cold, depending on the prevailing conditions.





July 8, 1929, Port Columbus, Ohio, TAT's inaugural flight. First Section Ford trimotor NC 9648 is reading for takeoff, with 2nd Section in the rear.

Interior of a Ford cabin looking aft, with original wicker seats. The Ford was designed for 14 passengers, but TAT limited it to 10 for maximum passenger comfort (as well as better performance over the mountains). The Ford had individual reading lights and curtains.

At Port Columbus, Ohio on July 8, 1929, Ford Motor company's plane flew in with dignitaries. (Larkins)

A TAT/Maddux Ford made an emergency landing near LaLande, New Mexico on May 22, 1930 with obvious damage. (Larkins)

Early refueling of the "City of Columbus" Ford was quite primitive by present standards.

They were a hardy group, and many returned for another flight or train combination. It may have been a business or emergency trip, others just loved to fly. □

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#### TAT FORD TRIMOTORS

This list of TAT Model 5-AT Fords does not include those formerly owned by Maddux Air Lines. All but NC9649 were officially registered with the new TWA on April 6, 1931. The TAT or TAT-Maddux city title is mentioned in parentheses. Del is the delivery date to TAT.

Serial Number	NC Number	TAT Fleet No.	TWA Fleet No.	REMARKS
5-AT-4-B	NC-9606	A-9	614	Del 11-24-28 (Columbus, later New York City). Sold 2-14-35.
5-AT-5-B	NC-9607	A-2	607	Del 11-22-28 (Kansas City). Crashed near Quay, NM, 8-29-33.
5-AT-6-B	NC-9643	A-6	612	Del 1-18-29 (Albuquerque). Sold 4-5-35.
5-AT-7-B	NC-9644	A-7	603	Del 1-18-29 (Washington). Sold 3-27-36.
5-AT-8-B	NC-9645	A-3	608	Del 1-18-29 (Wichita). Sold 7-16-35.
5-AT-9-B	NC-9646	A-8	604	Del 1-18-29 (Los Angeles). Sold 9-22-37.
5-AT-20-B	NC-9649	A-9		Del 6-14-29 (San Francisco). Crashed 9-3-29 near Mt. Taylor, NM
5-AT-21-B	NC-9647	A-4	609	Del 6-1-29 (Indianapolis). Crashed Harrisburg, PA, 1-27-31.
5-AT-34-B	NC-9651	A-10	605	Del 5-16-29 (Philadelphia, also New York City). 8-3-36 modified to Hi-Speed configuration. Used for developing and testing radio apparatus. Sold 1-30-41.
5-AT-37-B	NC-9650	A-5	610	Del 5-22-29 (St. Louis). Crashed Amarillo, TX, 12-14-32.
5-AT-49-C	NC-8411	A-11	616	Del Scenic Airways 6-18-29. Sold to TAT 4-18-30. Modified to Hi-Speed configuration 12-30. Sold 7-30-37.
5-AT-57-C	NC-9648	A-1	606	Del 7-3-29 (Columbus). Modified to Hi-Speed configuration 1-9-31. All-cargo 10-13-36. Sold 7-19-37.

Information listed above was obtained from Bill Larkins and Ed Peck.

