Alpha NC-11Y: Beginning To Look Like Her Old Self

by Jerry Cosley

Originating in perhaps the most colorful and romantic era in aviation history, the journey of TWA's Northrop Alpha NC-11Y starting from Burbank, California in 1930 to the Smithsonian's National Air and Space Museum next year traces the legacy of dreams and technical advances which built the foundation for modern American air commerce.

Presently undergoing painstaking restoration by TWA "Alpha Project" volunteers at MCI, NC-11Y will occupy a prominent display position with four other aircraft from the '30s in the new NASM beginning July 4, 1976.

The what expected seven million annual visitors to the museum will be privileged to see will be a circa 1935 Stearman-Northrop Alpha 4-A, the last known to exist anywhere in the world, now being carefully and lovingly restored by TWA's MCI craftsmen down to the last rivet. What won't be visible, however, is the remarkable story of NC-11Y and the lives she touched.

Born in the imagination of John K. Northrop, a self-made engineer who designed the outstanding all-wood "Vega" series for Lockheed Aircraft in 1927, the Alpha was the original design by which Northrop was to test and prove his advanced ideas for producing an all-metal airplane adaptable to then-existing machine methods of quantity production.

Northrop left Lockheed in 1928 to form his own company at Burbank, which in 1929 was to become a division of the United Aircraft and Transport Co. headed by William E. Boeing.

The Northrop Alpha prototype design moved ahead with TWA in 1930 with the Northrop development team of 10 engineers and 50 mechanics.

Francisco daily on a 23-hour Alpha schedule to New York. Other exotic payloads included silk worms, medicinal serum, perfume, auto parts, textiles and even boxes of false eyelashes. The operating route called for stops at Los Angeles, Winslow, Albuquerque, Amarillo, Wichita, Kansas City, St. Louis, Terre Haute, Indianapolis, Columbus, Pittsburgh, Harrisburg, Philadelphia and New York.

Jack Frye insisted on the latest radio and navigational instruments and night flying gear for TWA's Alpha pilots. In fact, the first commercial installation of Goodrich deicer "boots," flexible rubber panels on wing and empennage leading edges to prevent ice build-up, was tested and installed on TWA's Alphas for winter operation on the eastern division.

Fairly bristling with innovations in aircraft design and construction, the Alphas quietly launched part of a new aviation era, and set a bright new pattern for transport 1, she was delivered to Col. Clarence M. Young, Assistant Secretary of Commerce for Aeronautics, who used the Alpha as his personal ship for checking airways and facilities. Painted a sleek black and orange, NS-1 and Col. Young were a familiar sight at airports until April 16, 1931, when she was purchased by the Ford Motor Co. of Dearborn, Michigan.

Later that same month she was sold to National Air Transport of Chicago and received a new registration NC-11Y. She joined TWA on November 27, 1931, when NAT sold her to Transcontinental & Western Air, Inc., 929 Graybar Bldg., New York. NC-11Y performed air service until February, 1932, when she went to Wichita for the conversion to Model 4-A. At that time she had accumulated a total of 1,826:38 flying hours.

She flew the line unevenly as a 4-A until April 26, 1935, when she was sold to Frederick B. Lee of New York. Most of her sister ships were sold or retired in 1934-35.
Northrop left Lockheed in 1928 to form his own company at Burbank, which in 1929 was to become a division of the United Aircraft and Transport Co. headed by William E. Boeing.

The Northrop Alpha prototype design moved ahead quickly in 1930 with type certification by the Department of Commerce before year's end. An order from Jack Frye at Transcontinental & Western Air for five of the production version guaranteed the Alpha's niche in air transport history.

Northrop had turned out just what the visionary Frye was looking for—a high-performance, all-metal monoplane that could carry mail and passengers out of small airfields with good flight and maintenance characteristics.

As originally configured, the TWA Alphas could carry three passengers and 465 pounds of mail and cargo behind the 420 HP Pratt & Whitney “Wasp” R-1340-C engine at a cruising speed of 145 mph.

All of TWA’s fleet were modified by 1932 to Alpha 4-A’s by Stearman Aircraft in Wichita with the addition of large, streamlined metal “skirts” to enclose the fixed landing gear struts and improve cruise speed by nearly 10 mph. The model 4-A also stepped up to the 450 hp P&W “Wasp” SC-1 engine. Passenger seats were removed and all but two of the fuselage windows were blocked out. Payload was increased from 1,060 to 1,250 pounds, along with a two-foot increase in wing span.

Popularity of air express shipments and lack of passenger traffic stimulated TWA’s conversion to the 4-A. Freshly cut California gardenias were shipped out of San Francisco.

FOLLOWING conversion to Model 4-A by Stearman Aircraft at Wichita in 1932, NC-11Y sports a new engine, longer wings, skirts on the landing gear and new metal covering passenger windows on right side.

FIRST JOB for NC-11Y was as personal plane of Col. C.M. Young. Black paint was found on interior of fuselage by Alpha Project volunteers at MCI.

NC-11Y spent early TWA years in combination passenger/cargo configuration, as this night-loading shot shows. Anyone able to identify the people?
DAN MC GROGAN (right) leads Alpha Project volunteers in extracting NC-11Y fuselage from the Experimental Aircraft Association's barn in Hales Corners, Wisconsin.

FREDERICK B. LEE bought NC-11Y from TWA in 1935 and converted her to a seaplane for a trip around the world.

with the hope of preserving at least one of the remarkable ships for posterity. He never realized his dream, but it remains alive in the "Spirit of '76" motto of the Alpha Project volunteers. When Hannaford died in 1971, his will bequeathed the Alpha material to the Experimental Aircraft Association in Hales Corners, Wis.

It was in the EAA's red barn near Burlington, Wis., that the Smithsonian found 11Y, and it was there that the TWA volunteers in 1974 became the first of her long lost family to view her sad remains in 39 years. They were there at the request of the Smithsonian to see what could be done to save her for the Bicentennial display.

Dan McGrogan, technical coordinator for the Alpha Project, led the inspection team. "More than 30 years had passed since last airworthy and she showed every hour of it," he said. Volunteers from MCI and ORD gently gathered her up for the truck ride to Kansas City in March (Skyliner, March 24, 1975), and the restoration began.

"It's taken several months just to get her apart for cleaning and inspection," says McGrogan, "but we turned the corner in July and she's beginning to look more like her original self as each day goes by."

Jack Northrop is still active in California and will be invited to the roll-out ceremony slated for early next year.

(Edited's Note: Upon reading of the Alpha Project in the Skyliner, March 24, 1975, retired pilot Howard E. "Sonny Boy" Hall wrote to Dan McGrogan from his home in Cape Coral, Fla.)

"Dear Dan:

"It has been interesting even from away down here to follow the above project in the TWA Skyliner, for I was one of the TWA pilots that was assigned to fly those mail planes Newark to Columbus and sometimes west, during the contact days of night mail.

"I was with Jack Frye in Burbank when he met with Lloyd Stearman and placed the orders for these airplanes. Later, I transferred from a Ford passenger flight in Kansas City to Newark to replace one of two pilots who jumped minutes and fifty miles of each other when they loaded up with ice, Dean Burford and Andy Andrews...Andrews is living in California now.

"The Skyliner speaks of this airplane as a single-motored passenger-mail carrier. Very few were allowed to ride as passengers.

"This airplane would ground/loop so fast that a pilot would end up seeing the back of his head. Frye offered a prize for anyone that would come up with a remedy. A mechanic named Ben Kelly did. He got $25.00. (TWA was really poor.)

"It was often said, in the early days, that this airplane and the night mail flights separated the 'men from the boys'. This I believe.

"Yes, sir, there was a Jack Northrop. He and Stearman were both in on this deal. Jack Frye drove a very hard bargain in many things. He was the greatest! Of course, he had the "solid citizen" image he had himself."

Howard Marder
Modern Packaging
New York, N.Y.

BEST KIND OF P.R.

Ellen Schwartz, a TWA flight attendant based in San Francisco, is, without a doubt, the best public relations asset your airline has.

On a recent flight (942, SFO-JFK August 3) Ms. Schwartz's bright, cheery smile and contagious good humor let me know, even before takeoff, that this was going to be a good flight.

When a leak from the ceiling got my suit wet, Ms. Schwartz was not only helpful in drying it off but properly apologetic for what was obviously not her fault. She very kindly gave me a form for reimbursement for having the suit cleaned.

The concern that she expressed, along with her extremely cheerful manner, made this flight one of the most enjoyable I've had.

As a professional business writer I get to travel all over the world and I have been exposed to all types of service aboard both domestic and international carriers. I can honestly say that Ellen Schwartz is the best flight attendant I've ever come across. Because of her you can be sure that TWA will always be my first choice when I have to travel, and I will not hesitate to recommend it to my colleagues and to my readers, whenever possible.

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During periods of crises in a company's life, I know from personal experience that it is necessary to be told that your people are committed and your customers are staying with you. I want to take this opportunity to do both.

My family and I just returned from a three-week vacation in Morocco, flying TWA both directions. As usual, TWA provided the comfort and ease to make the flights relaxing and enjoyable. TWA remains the best airline, and I'll be flying TWA again next year.
"Yes, sir, there was a Jack Northrop. He and Stearman were both in on this deal. Jack Frye drove a very hard bargain in many things. He was the greatest! Of course, he had the 'solid citizen' Paul Richter on his side. They made a great team. These grand little airplanes did a great job 'feeding' a lot of TWA mouths until greener pastures could be found by Frye & Richter.

"I would like to compile the list of night-mail original pilots if I knew where to start in TWA records. No, I don't want to write a book. These little airplanes and those throttle-jockeys surely wrote a big first-page in TWA's financial history. (I was not one of this group, but I came along soon after ... and not by choice.)

"If I wasn't so far away, I'd surely lend a hand. About all I could do is scrub and shine ... Because I know what these little airplanes meant to so many TWA people at one time ... This night-mail contract saved our hides.

"Hope to hear more about how you are getting along."

Howard

"P.S. On the inside of the Skyliner is a picture of a pilot dismounting. I believe that is my picture."

IS THIS Capt. Howard "Sonny Boy" Hall watching as mail is loaded into his Northrop Alpha at Glendale, California's Grand Central Air Terminal in the 1930's?