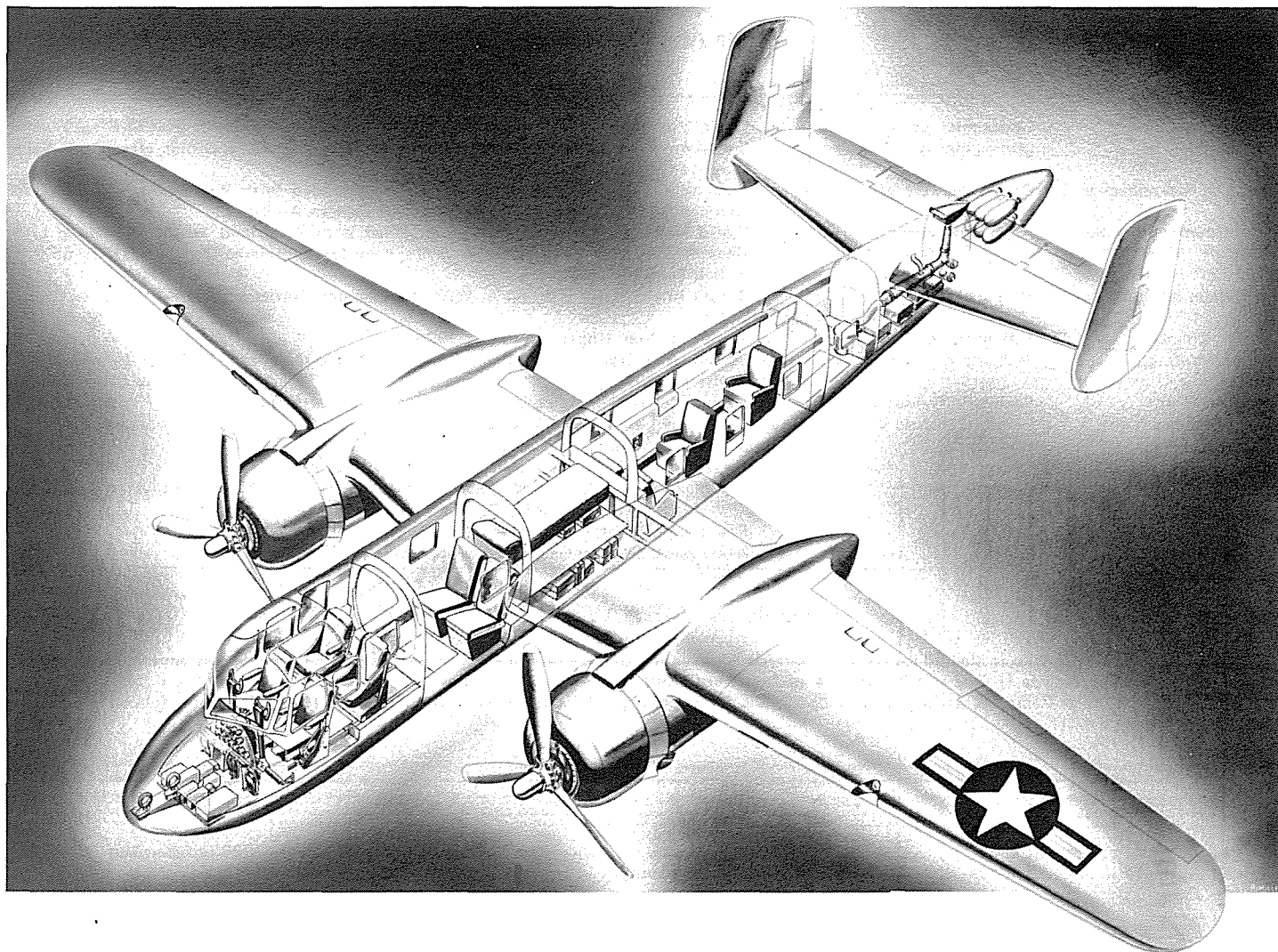




North American's B-25 Transports

by Norman L. Avery

The factory modified B-25 transports are presented as part of a continuing effort of RP 7021 on lesser known B-25s. These airplanes were modified in the Field Service hangar a short distance from the main NAA factory. They received little attention except from the few engineers and mechanics directly concerned, and few former employees remember them. Company records of these variants were minimal and most engineering was done by sketches and the proverbial handwaving. No records or drawings have been found. The films of the record cards for aircraft 43-4030 and 44-28945, the airplanes used by Generals Eisenhower and Arnold respectively, do not appear on the record film strips at the Smithsonian Institution, a rather strange coincidence.

In some old NAA records a handwritten photo index sheet was found relating to Gen. Arnold's B-25C. It was referred to by the name of 'Lil Abner' but no serial number was noted. The photo with this account is the only one located.

Should other AAHS members have any information relating to any of these B-25s the author would appreciate hearing from them.

All photographs are courtesy of North American Aviation Inc. via Rockwell Intl.

Many thanks to Gene Boswell of Rockwell Intl., Mr. E.A.

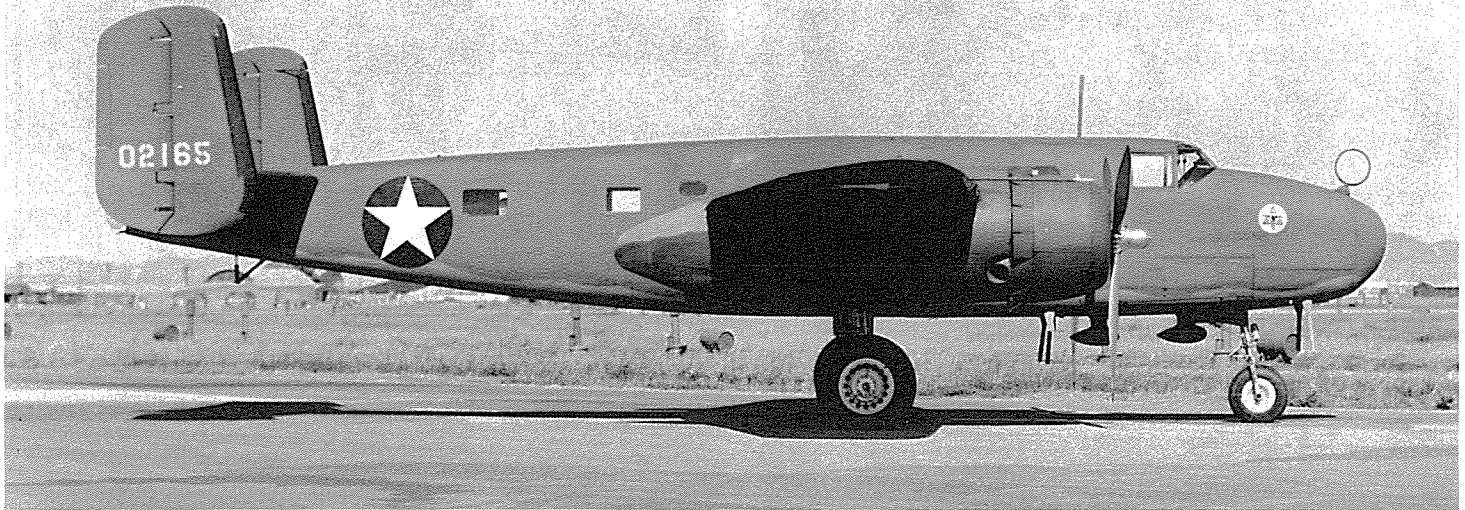
Stewart and to Mr. E.W. Virgin whose informative correspondence has contributed significantly to many facets of B-25 history.

Between late 1942 and 1949 six B-25s were modified by North American Aviation Inc. to RB-25 personnel transports. Two were converted for company use, three for generals and the sixth as a combination prototype for a corporate transport or a military twin-engine trainer.

Early in World War II, the company's operations had expanded from the single plant at Inglewood, California, to include equally large plants at Kansas City, Kansas, and Dallas, Texas. Frequent trips to these divisions and other nationwide locations were required by company executives and engineers. Wartime travel conditions by rail or airline DC-3s was inefficient at best, frequently delayed and always crowded. An independent means of travel was imperative.

In December 1942, the first B-25, 40-2165, was taken off flight test status and brought to the experimental department for modification. In all probability it was the first military aircraft converted for business use. After removal of all military equipment passenger accommodations were installed. Five seats were located in the aft fuselage, and for business while flying, a desk

Mechanically complete, the first RB-25 on the flight ramp at North American's Inglewood California plant. The airplane was later stripped of paint and flown in aluminum finish. Common to all similarly converted RB-25s and for reasons never determined, the aft pilot's windows were skinned over. Most often used by company president J.H. Kindleberger, it was generally called Dutch's bird or 'The Whiskey Express'.



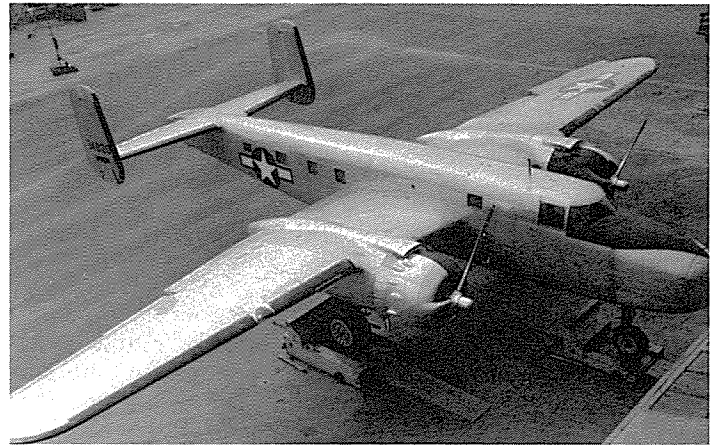
and intercom system. Two more seats were positioned ahead of the bomb bay immediately behind the pilots. The bomb bay was converted for baggage and a bunk installed on the crawl passage above it. The bombardier's greenhouse was replaced by a 'solid' nose which housed the radio and navigation equipment. Only the absence of armament and the windows installed in the aft fuselage suggested that it was not a combat machine, as it was marked with Air Corps Insignia and serial numbers.

Mechanically completed in April 1943, it was not upholstered and ready for use until May. Frequently referred to as 'Dutch's Airplane' or 'The Whiskey Express', it served as the company transport for two and a half years until it was scrapped following a crash landing near the factory.

In mid-1943 General H.H. Arnold arrived at North American's California plant to give final approval for the P-82 Twin Mustang fighter. Taking more than casual interest in the company's B-25 transport, he initiated action for a similarly converted airplane for his personal use. At the General's request, a B-25C was diverted from final assembly to the Field Service Department and configured the same as 40-2165. All work was accomplished under a master change record with government funding.

Of the factory modified B-25 transports, this is the only one not positively identified. It is reported to be 41-13251 which was owned by Howard Hughes for nearly 20 years, and donated in 1974 by the Summa Corp. to the Antelope Valley Aero Museum. The previous owner purchased it soon after WW II from Air Force surplus and was told that it had been made especially for Gen. Arnold and never used in combat. No records or log books could be located. The airplane was used by Gen. Arnold until December 1944 and flown by his pilot, Col. C.A. Peterson.

On March 1, 1943, B-25J-1 No. 43-4030 was flown to North American for conversion to a personal airplane for General Eisenhower. No administrative details are known. Two shifts of engineers and mechanics working under the direction of the Field Service Department completed the work on May 11 under a sales



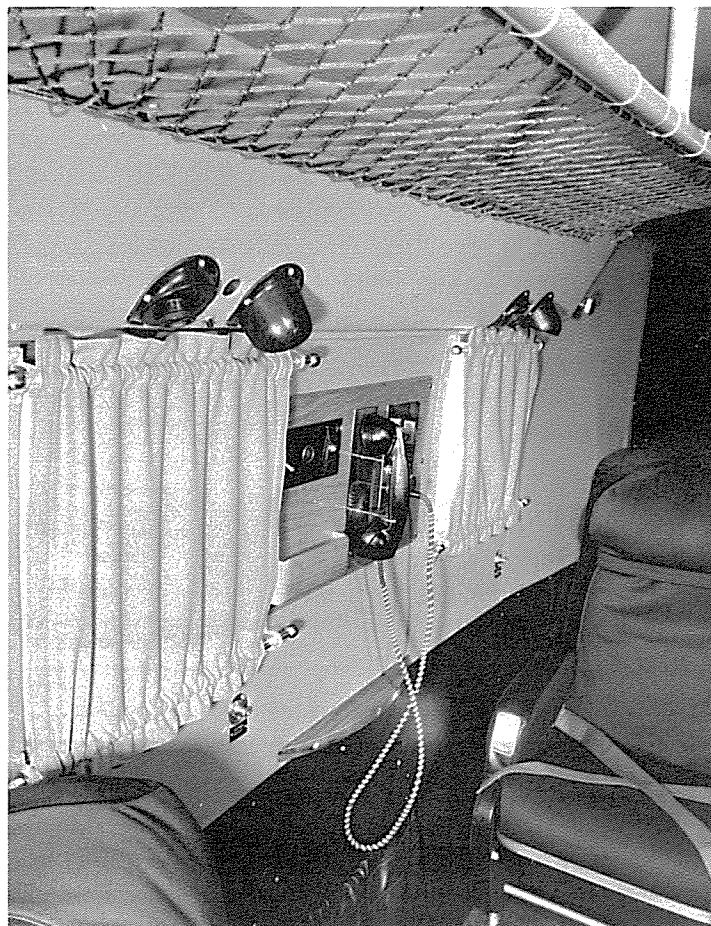
Gen. Eisenhower's RB-25J on the scales for weight and balance determination. Devoid of armament the B-25 reveals unusually clean lines.



General H.H. Arnold's first RB-25 on the NAA Field Service Department flight ramp. The General's four-star flag is visible on the aft fuselage but the serial number has not been painted on the tail.



Neither 'posh' nor spacious by modern standards, old No. 1 provided comfort with lots of convenience. The quilted upholstery, known as 'skyfelt', was commonly used for insulating heating and ventilating ducts.



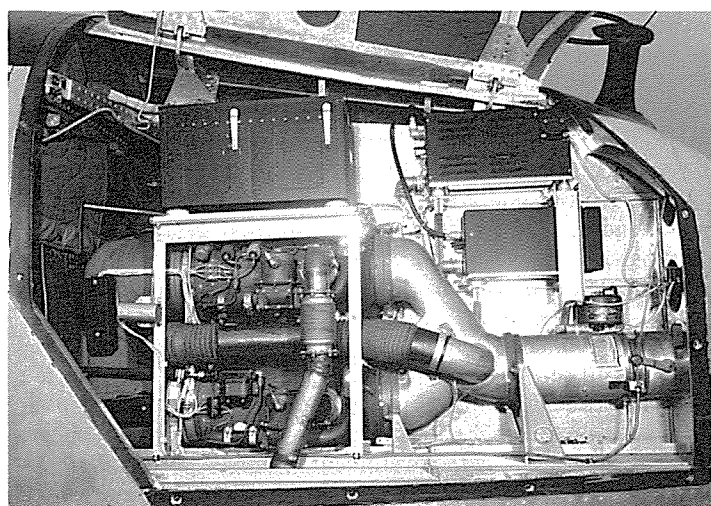
The interior of Gen. Eisenhower's airplane shows refinement of upholstery and addition of a luggage rack.

order and master change record with government funding. The airplane was flown the following day, presumably by company test pilot, Joe Barton.

The experience gained from the two previous transports was used to advantage for Gen. Eisenhower's airplane. Further refinements include blue fabric upholstery instead of the olive drab quilted 'skyfelt' material commonly used on military aircraft at that time. The solid nose incorporated clam shell doors for easy access to the radio and navigation equipment. The aft entry hatch was moved farther aft to provide an increase in usable floor area and a luggage rack was installed above the seats. De-icer boots, common to B-25J airplanes, were retained and a long range ferry fuel tank was fitted into the top of the bomb bay above the baggage area.

In 1944 Gen. Arnold, for reasons unknown, switched from his RB-25C to a newly converted RB-25J-15 No. 44-28945. Modified by the Field Service Department, it was almost identical to Gen. Eisenhower's airplane. The only visible difference was the replacement of the Clayton exhaust stacks with a collector ring reminiscent of earlier models. This was surely at the General's request because of the continual problem of the Clayton stacks separating from the top cylinders, creating a fire hazard, and the inconvenience of replacement. Gen. Arnold used this airplane until January 1946, during which time it was alternately designated B-25J and RB-25J. It survived to see Air Force service into the 1950s as did General Eisenhower's.

The crash of the first B-25, 40-2165, left the company without a transport and the conversion of B-25J-25 No. 44-30047 was

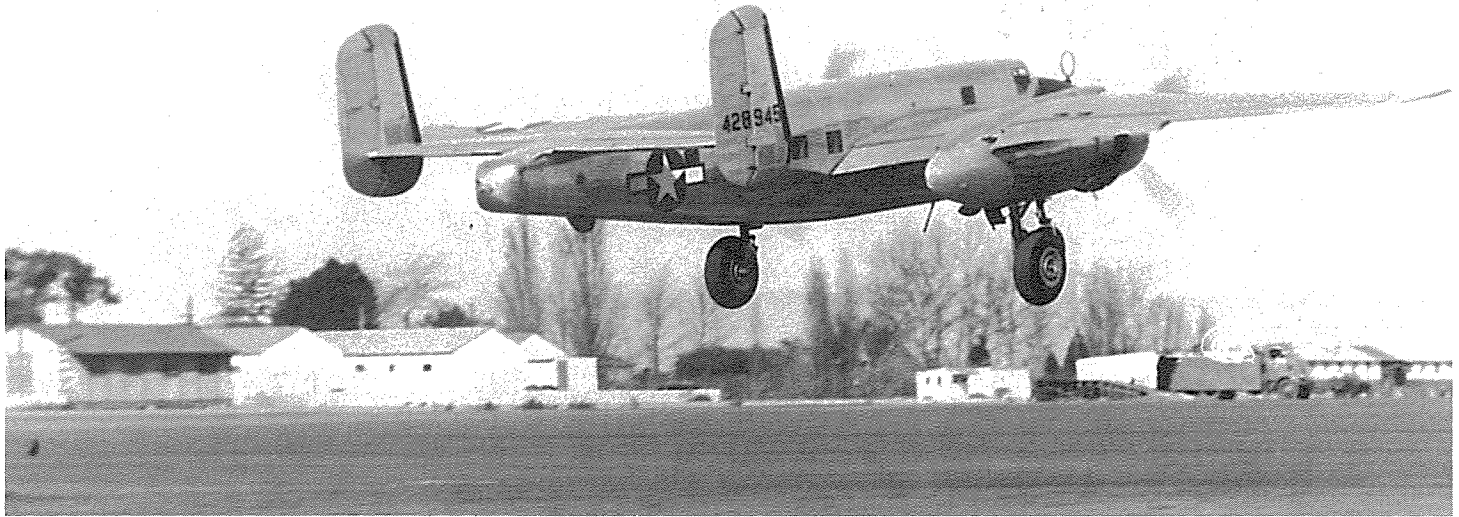


The standard 8 gun nose shell used on 44-30047 was ideally suited for radio and heater. The doors, used unchanged, provided excellent maintainability. The heater was provided ram air from a small port.

begun in January 1945. Another transport was an immediate company requirement but as the end of the war neared this configuration was considered appropriate for development of a new idea, that had been in management's minds for some time.

The interior arrangements and appointments were generally the same as the two previous conversions. A number of other features, however, were considerably revised. A heater was installed in the nose under the radio gear and the direction finder located beneath the nose. Access to radio equipment was simplified.

Chief test pilot Ed Virgin takes Gen. Arnold's second RB-25 on a functional test flight. Clearly visible are the added windows and aft fairing replacing the tail turret. Virgin made four flights for a total of 3 hours 30 minutes before the General took delivery.



fied by the use of a standard 8 gun nose, sans gun ports. The large door on each side provided easy access for maintenance.

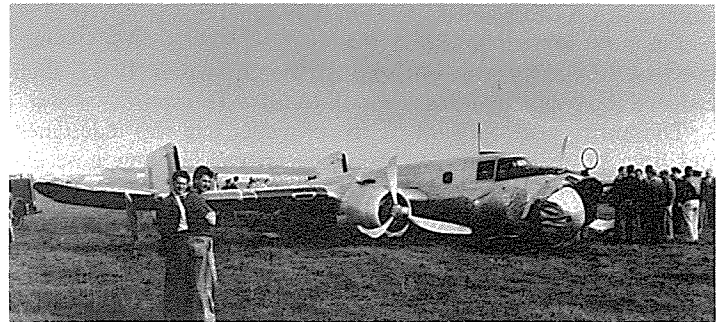
The airplane was completed by mid-March and tested by company test pilot, Joe Barton. It then served as a replacement for 40-2165 until the end of the war. By that time NAA management had taken a good look at the postwar general aviation market. Plenty of low time B-25s were expected to be available and a market for B-25 transports appeared highly probable.

Preparations were begun for a program of qualification tests on 44-30047 leading to commercial certification by the CAA. Although the airplane continued in company service, intermittent qualification tests were conducted through the balance of the year and into early 1946.

On February 27 pilot Joe Barton, test engineer Cowles and CAA inspector McCutcheon were on a routine certification flight off the California coast. A radio message was received from Barton reporting a fire in one wing. One witness reported seeing an offshore flash which was assumed to be the airplane exploding from a fuel fire. No other message was received and very little debris was recovered.

The loss of the airplane and certification program was insignificant compared to the loss of the crew. Barton was one of NAA's most competent and highly respected test pilots, whose prominence was well earned, the result of his high-speed dive tests on P-51s.

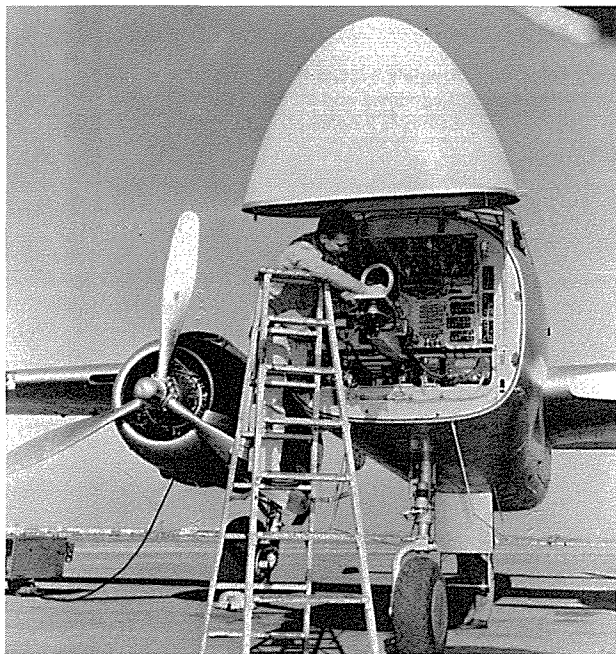
The sixth and last B-25 transport was by far the most extensively reworked. It was developed for potential sales to corporations and the military. The two airplanes used by the company had proved reasonably adaptable for this purpose, and were inexpensive. The day of the true business aircraft had not yet arrived. NAA believed that an airplane like a converted B-25 could fill an interim business requirement. Surplus low time airframes were readily available and spare parts and engines were equally abundant, although any WW II medium bomber left much to be desired as a passenger aircraft because of the bomb bay. In the case



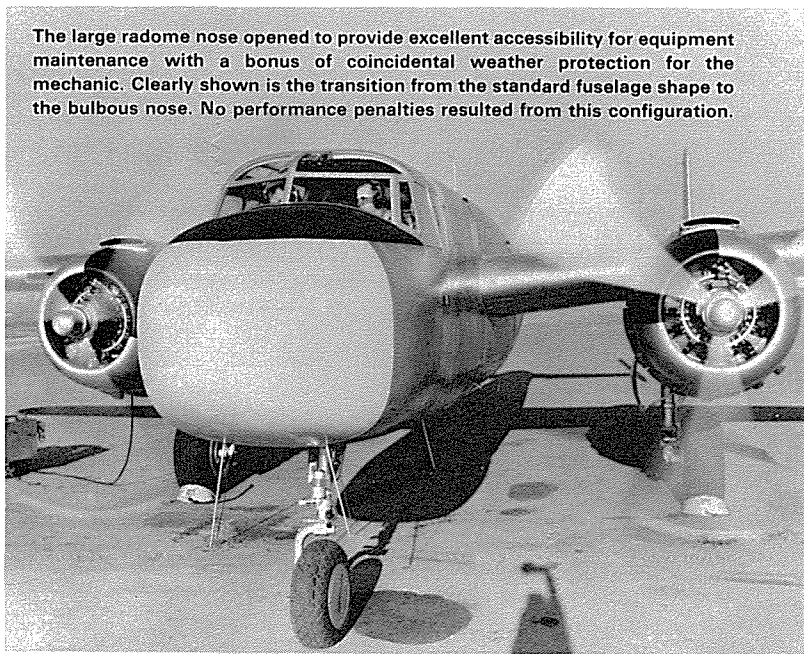
After two and a half years as a company transport, 40-2165 tags in for the last time. Due to a hydraulic malfunction from a faulty part, and one engine out and feathered, company pilot Ed Stewart elected a belly landing in the open bean fields near the present site of the Los Angeles International Airport tower. Stewart, co-pilot Henry Eathorne and crew chief Jack Maholm were uninjured but the airplane was beyond repair.



The second RB-25 transport used by North American being pre-flighted on the NAA ramp. The rear hatch has been moved farther aft than on standard models to provide more efficient floor area. This airplane crashed in the ocean from a fire during CAA qualification tests.



The large radome nose opened to provide excellent accessibility for equipment maintenance with a bonus of coincidental weather protection for the mechanic. Clearly shown is the transition from the standard fuselage shape to the bulbous nose. No performance penalties resulted from this configuration.



of the B-25, the comparatively narrow fuselage was an additional detriment. Considering this, NAA could still produce a transport at a price attractive to many civilian customers. Another old customer also looked like a good bet, the USAF. The new variant was also proposed as an advanced twin-engine military trainer, which would hopefully provide additional trainer business, in addition to AT-6Gs and T-28s then in production.

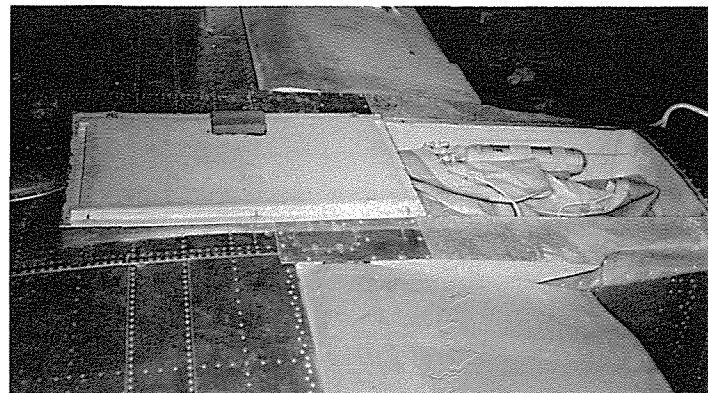
For a prototype, B-25J-25 No. 44-30975 (Navy 35848) was purchased by the company from Air Force surplus. It was then assigned the company designation 'Executive Transport'.

The entire nose forward of the propeller line was redesigned and bore no resemblance to its predecessors. The new nose extended nearly 40 inches farther forward than a standard 'greenhouse' nose and widened to a comfortable 70 inches, fairing back to the original cross-section at the propeller line. This prompted the unofficial title of 'Bulbous Nosed B-25'. The pilot's seats were moved forward and four more seats were added forward of the bomb bay. This arrangement provided excellent passenger accommodation for business use, and as a military trainer permitted an instructor to have three students in the cockpit instead of one.

The spacious plastic nose hinged at the top like the four-gun cannon nose, common to the B-25H, providing access to the radio and navigation equipment. The bomb bay doors were removed and skinned over for a baggage compartment. The forward end was fitted with a loading hatch and an electrically operated baggage elevator.

In January 1950 the finished product was on the flight line, checked out and waiting for chief test pilot, Ed Virgin, and co-pilot Miles Towner. Some speculation existed regarding stability with the nose extended forward, although calculations predicted no problems. Virgin and Towner found the "aero boys" to be correct, as the airplane flew as any other B-25. They made four functional check flights, totaling 6 hours and 25 minutes, between Feb. 15th and 23rd.

A sales tour was organized in March to demonstrate the airplane to potential customers, both commercial and military. A seven-man team consisted of pilot Miles Towner, co-pilot Jack Steppe, who also represented customer relations, structural and instrumentation engineers, a CAA inspector and a crew chief. It was also reported that Mr. Kindleberger accompanied them as far as Albuquerque, New Mexico.



Common to all RB-25 factory conversions was the replacement of the tail turret with life raft and flares. A flare ejection tube is just visible at the lower right of the photo.

The tour agenda is unknown except for the return date of March 25. It is reported to be from Texas. Westbound, just east of Phoenix, Arizona, they encountered a storm front and extreme turbulence. Radio communications were garbled and indistinct. The crew of an eastbound USAF B-25 reported the worst turbulence they had ever encountered. Shortly thereafter the airplane crashed near the town of Chandler. There were no survivors. The wreckage was scattered over a wide area, indicative of structural failure from turbulence. The circumstances immediately preceding the crash were never determined. Only personal opinions and theories remain as to the cause.

Towner, a former Marine pilot from South Pacific service, was a highly regarded and very competent pilot. The loss of seven prominent people was a severe blow to the company, and the project was never developed.

ABOUT THE AUTHOR

Norm Avery's first engineering job began in 1941 with North American's Power Plant Group. He was personally involved with production B-25s as well as the R-2800 conversion and the XB-25E Heated Wing. Entering the military a bit late in WW II he served with the USAF, the 33rd Inf. Div. in the Philippines and finally in the Ordnance Dept. He is currently a design engineer with the Atomics Intl. Div. of Rockwell and is working on a history of the entire B-25 series.

Erroneously reported as never having been built, the 'Executive Transport' was a successful reality. Assigned civil registry No. N5126N the combination transport-trainer is characterized by the oversize white radome nose and Convair 240 windshield assembly. De-icer boots, common to B-25Js, have been removed and the Clayton exhaust stacks of the top cylinders replaced by a half collector ring.



Bearing no resemblance to standard B-25s, the widened cockpit area of N5126N featured comfortable seating for four. Note the Convair 240 instrument panel.

