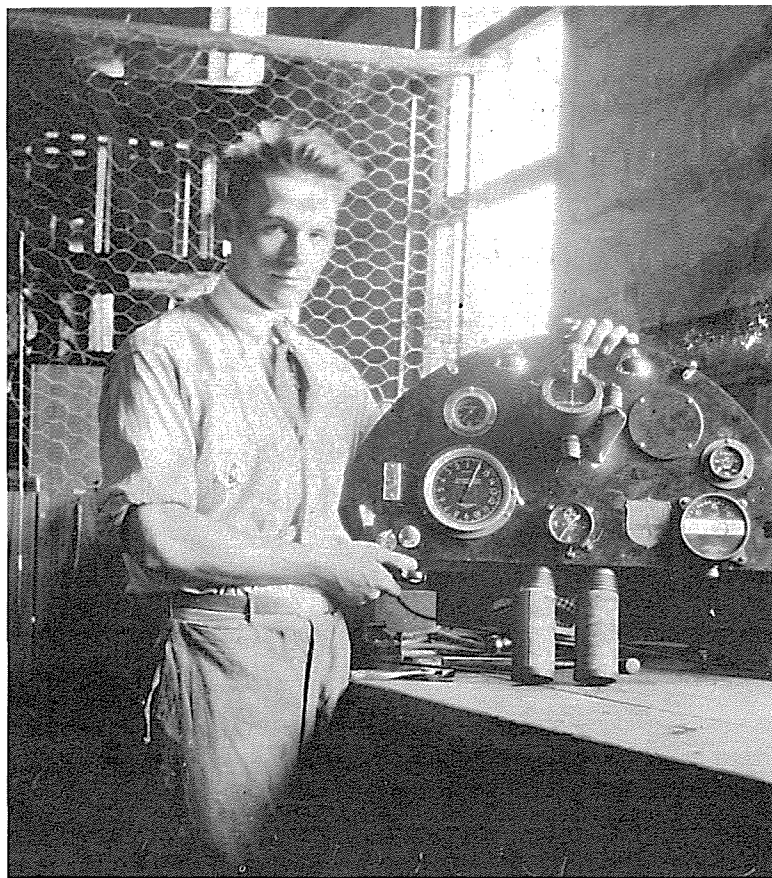


A Man of Aviation's Golden Age Brig Young

by Ed Young



1917 shield-shaped plaque has word "Liberty" so most probably is instrument panel for a Martin product.

This is the saga of an aviation pioneer, a story which indicates that pilot's wings were not necessarily always essential to a man who actively contributed to aviation's "Golden Age." Consider Donald Douglas, Jack Northrop, Wellwood Beall, Tony Stadleman, Dan Burnett, Woody Deeds, and many others unknown outside the industry. Take a minute to read about someone else who never acquired pilot's wings, but whose ability (first as an A&E mechanic, and later as boss of the DC-2 and DC-3 production lines) produced a career as exciting as any in the Golden Age of aviation. "Brig" Young, A&E License No. 559,¹ is the subject.

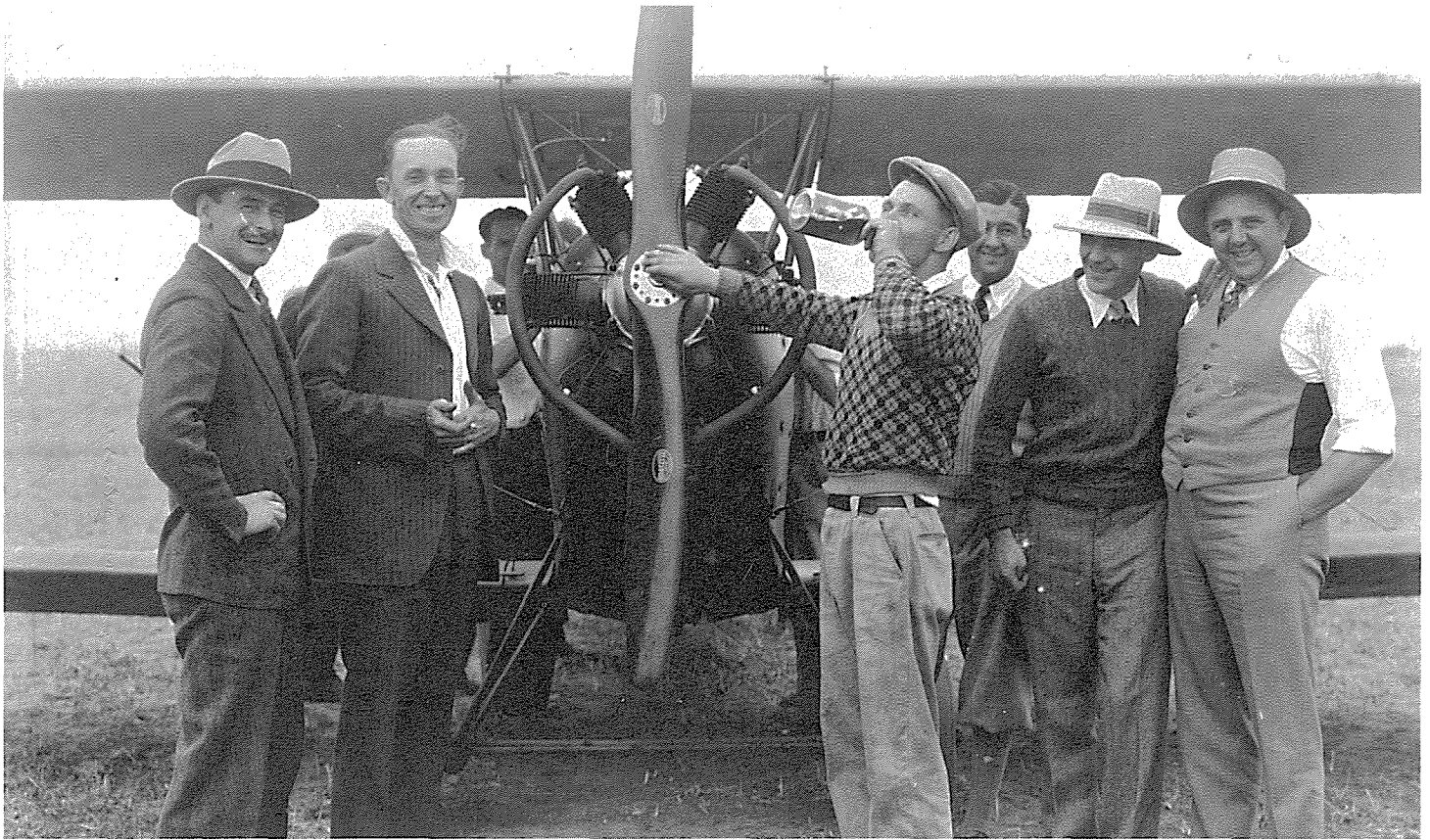
The story begins in 1917, in Los Angeles, at the Glen L. Martin Company. Jules E. Jung (the change to Brig Young occurred 10 years later), at age 19, installed instruments in the Martin bombers. Anne Frank, his future wife, was secretary to production boss George Strompl. Donald W. Douglas was the young and recently hired Chief Engineer. Harry Wetzel (father of today's Chairman of the Garrett Corporation) was the Chief Army Inspector. These were the frantic days of World War I. The Martin Company moved to Cleveland, but Harry Wetzel was assigned to build Curtiss "Jennies" under license at the Liberty Iron Works in Sacramento. The newly wedded Jules Jung and Anne Frank accompanied Wetzel to Sacramento, as did Elmer Hartz and his brother Harry (later the 1926 National auto racing champion). In Sacramento came the opportunity to expand knowledge: from instrument installations to fuselage and wing structures, fuel systems, aircraft electrical, OX-5 engine installation and maintenance, and rigging. This experience served as an excellent all-around training ground in fundamentals.

With the 1918 armistice came a return to Los Angeles and a 4 or 5-year hiatus from the fledgling aircraft factories, but not from aviation itself. One project in this interval was the construction, in the Jungs' backyard, of a single pontoon OX-5-powered biplane for Art Burns. Reportedly, it was built to fly on regular schedule between Wilmington, Calif., and Avalon, Catalina Island (26 miles across the bay as the song has it).

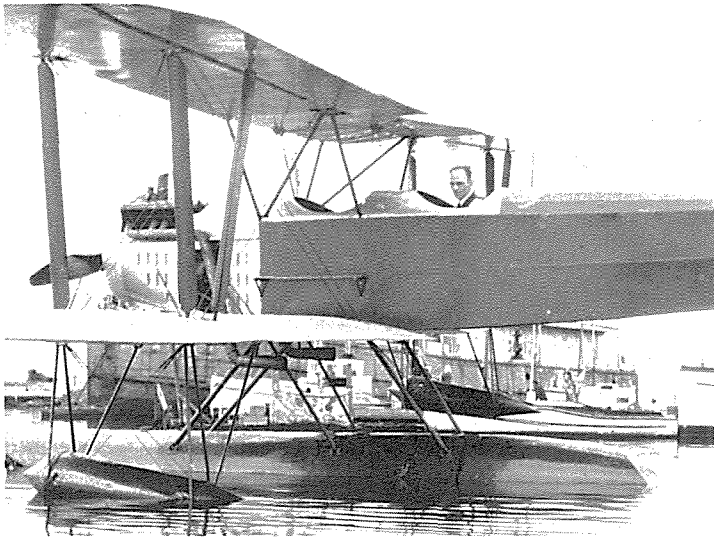
Then came news that Doug's plant in Santa Monica had received orders for several types of planes at one time. The word spread that the company could use some experienced hands, and soon it looked like a reunion: Hartz, Jung, and Wetzel joined Strompl, Guerin, Elkins, and Eric Springer. Properly pronounced, the name Jung (originally from Luxembourg) was the same as Young. With so many mispronouncing it, Jung became Young in writing as well as phonetically. The man at the workbench adjacent to Jules Young was Art Goeble, later the Oakland to Honolulu Dole Race winner. He is credited with rechristening Jules to "Brigham," later shortened to just "Brig."

Products of their hands during this period were the O-2 Army observation series, the M series mailplanes for Western Air Express and the U.S. Post Office (at \$11,400 and \$11,600 each), and the C-1 transports. These were the days when Douglas hired a man because it was the only way the company could obtain the use of the two lathes and a milling machine that the man owned. Also produced at this time were the T2Ds, the Commuter personal plane, and others. Schedules were just as tight in those days as now. Those of you who admired the sleek black and orange Douglas DA-1 Ambassador sport plane in the tent at the 1928 Air Races at Mines Field (LAX) in Los Angeles were probably unaware that when the display opened to the public the DA-1's paint was still wet. The aircraft was painted at 4 a.m. on the opening day of the show!

In their spare time these early Douglas employees, not content with eight or more hours a day with their beloved Douglas planes, "moonlighted." They were among those who kept Howard Hughes' WWI aircraft in flying condition at Cado Field in the San Fernando Valley for the movie "Hell's Angels." Brig and others built Leland Bryant's "Angel of Los Angeles"^{2,3} about this time at Vail Field, Alhambra, for the Oakland to Honolulu Dole Race. The Wright Whirlwind radial engine had proved itself, and the Douglas Company found that it had a surplus of the 12-cylinder Liberty liquid-cooled engines which had powered almost all

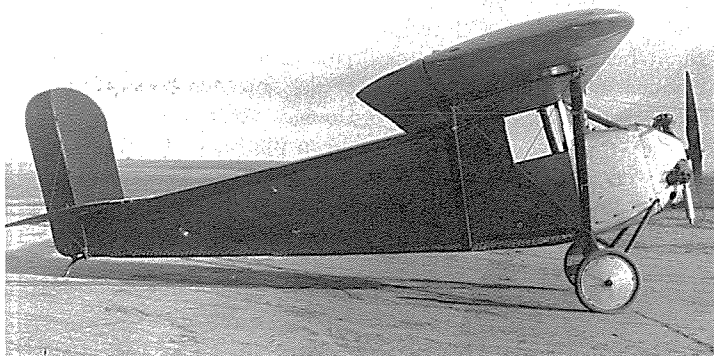


The "Christening" of the Doak & Deeds Biplane, Circa 1930. Ed Doak left Douglas to found Doak Aircraft Co. Their first airplane was built in a shed at the corner of 23rd and Ocean Park Blvd. On the left side is "Steve" Stephenson, next to the right is Brig Young and hitting the booze is Woody Deeds. Identity of others is unknown.



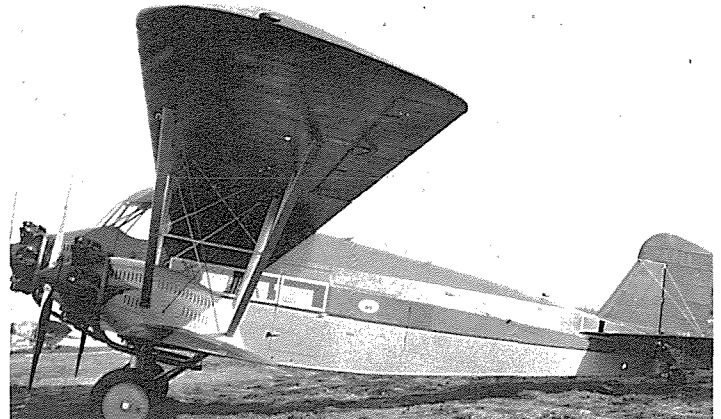
OX-5-powered biplane for Art Burns, Brig Young in cockpit, 1923. (Brig Young)

Douglas Commuter (1926). Lawrence, then Anzani, 60-hp powerplant.



Douglas DA-1 Ambassador, private sport plane, 1928 (Brig Young)

Hodkinson tri-motor at Glendale Airport, 1929-30. (Brig Young)





Northrop Alpha for Department of Commerce. Eddie Allen in cockpit. Note license No. NS1. (Northrop)

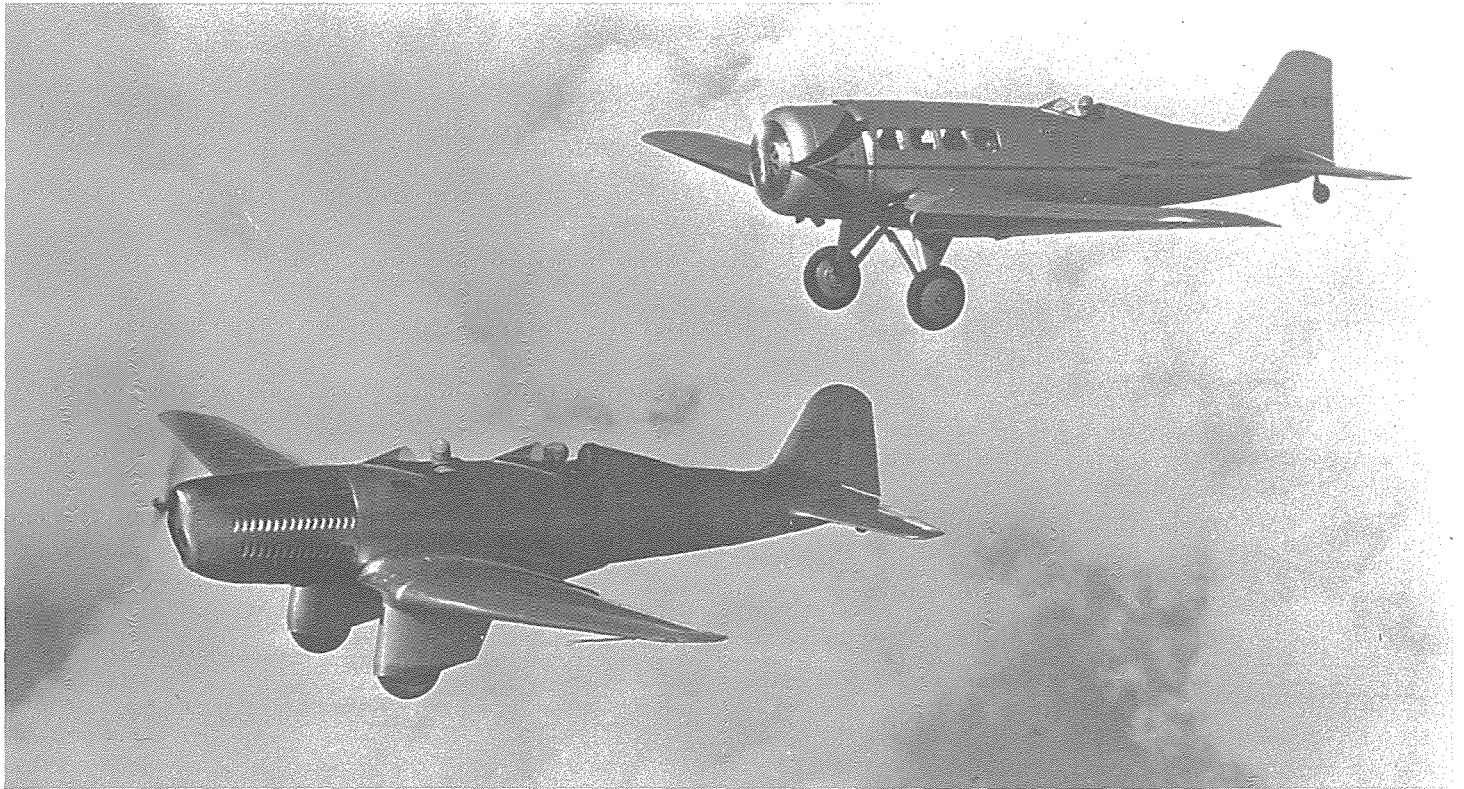
Douglas planes in the '20s. Up on blocks, they appeared to have no profitable future until the day several mysterious gentlemen purchased the lot. No, they weren't future competitors to Doug. These were prohibition days, and it was later discovered that the men used the engines in rum-running boats to outspeed the federal agents!⁴ Around this time, Brig's friends at the Aero Corporation of California won the airmail contract to Phoenix, and with a Fokker Universal started an airline. It was with some personal satisfaction that Brig watched that one-airplane airline develop into today's TWA!

About this time, Don Berlin, Douglas' chief draftsman, designed a six-passenger tri-motor sesqui-plane with Curtiss Challenger engines. Its mission was to fly mining equipment into the heart of Central America (and bananas out). An airline being created for the purpose needed about six planes of this type. An aircraft company was formed in Glendale to build them. Movie money was used for financing, and the number-one man was W.W. Hodkinson, formerly the president and organizer of the Paramount Film Corporation. Hence, the Hodkinson Aircraft Company was born and, would you believe, E.L. Hollywood was the production chief! About a dozen Douglas employees, Brig among them, were induced to be the cadre around which the new company would be organized. Initial construction began a few blocks from Glendale's Grand Central Airport. At the time this was the main airline terminal for the L.A. area. TAT was flying Ford tri-motors from the east, Maddox Air Lines from San Diego, also with Ford tri-motors, and Varney Speed Lines operated with Lockheed Orions from Reno and San Francisco. Mr. Slate was building his all-metal dirigible across the field. After only a few months, all Hodkinson activity was transferred to a hangar at the airport. Another group was also building a tri-motored aircraft in the same hangar. Called the Albatross, it served for many years as a gasoline station on Ventura Boulevard in the Studio City area of the San Fernando Valley. In record time the blue and yellow Hodkinson HT-1 beauty was built. Eric Springer came over from Douglas to test fly it. After a 20-minute flight he landed, loaded

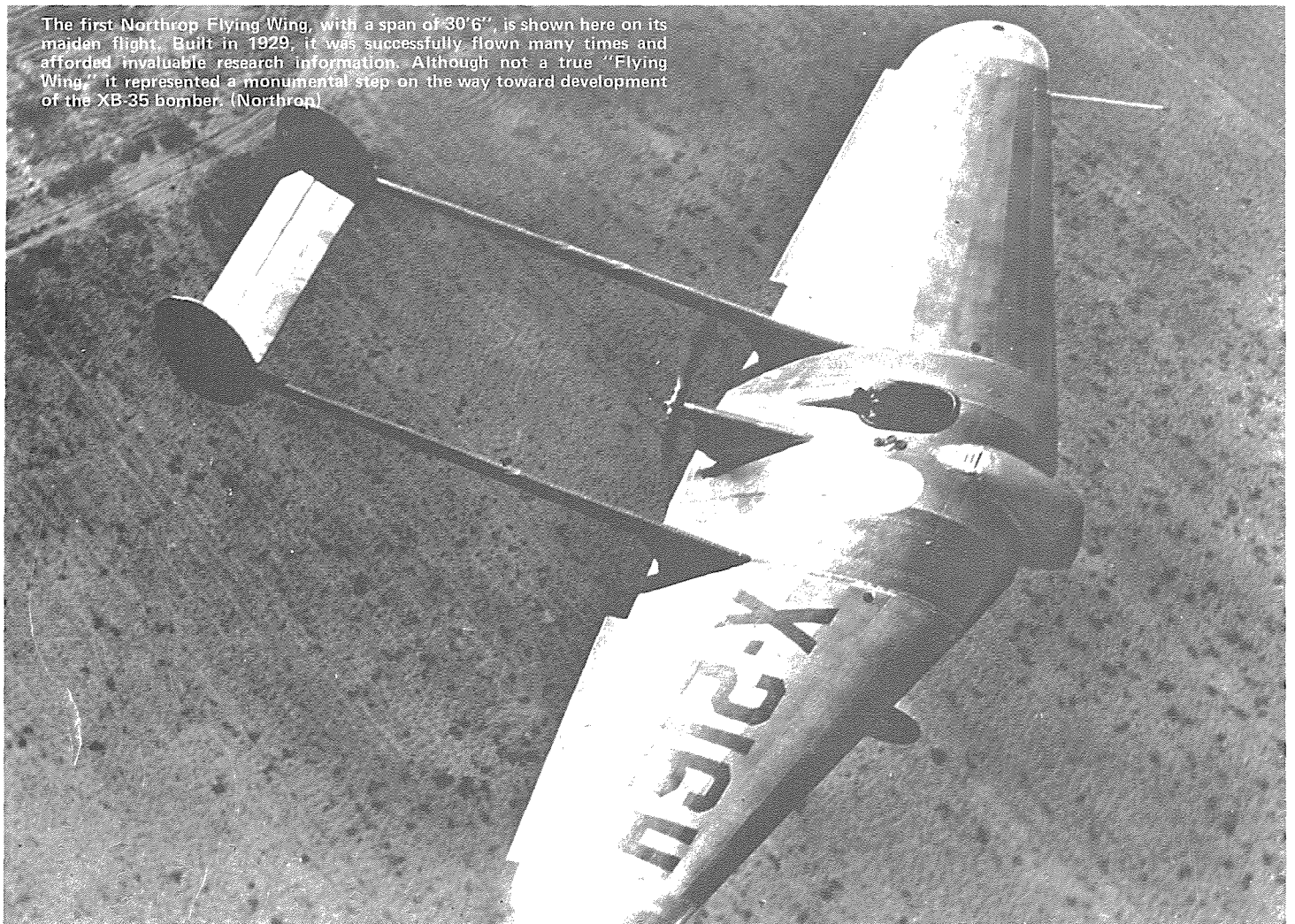
it with Brig and others and over the hills from Glendale they flew to rattle the tin roof on the Douglas plant in Santa Monica to show off their flying machine. Unfortunately, the 1929 stock market crash wiped out the new company's financing. Back over the hills to Douglas went everyone except Don Berlin, who went on to Curtiss, Allison, McDonnell, and Piaseki and eventually retired as vice president of Boeing-Vertol Division.

It wasn't much later that another ex-Douglas engineer lured Brig away from Santa Monica. Jack Northrop had built a "flying wing" (although it had twin booms leading to an empennage). In 1931, Northrop received orders for the six-passenger Alpha low-wing monoplane of metal monocoque fuselage design. Over the hills again, this time to United Air Terminal in Burbank (today's Lockheed Air Terminal). Brig was responsible for the Alpha final assembly. The Beta sport plane was built and was a little beauty (the famed Eddie Allen was one of its test pilots) but there were no orders for it in the depression days of 1931. Financial problems forced United Aircraft, the holding company, to split Northrop; part going to the Boeing plant in Seattle and part going to the Stearman plant in Wichita, later known as Boeing Wichita.

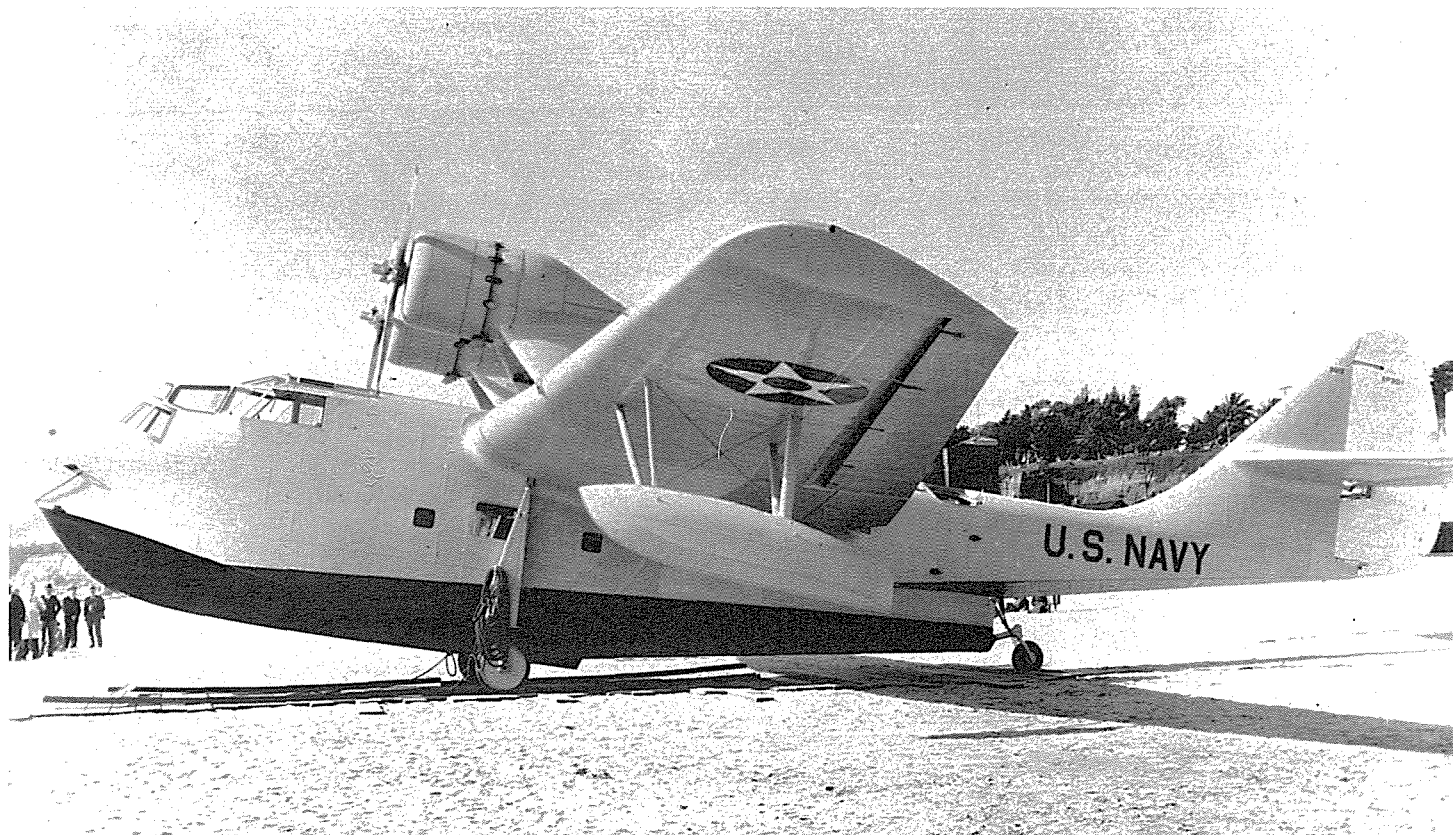
Douglas was getting involved with the DC-1 and could always use experienced help, so over the hills to Santa Monica again went Brig, this time for keeps. The DC-1 flew in July 1933, followed by a production run of DC-2s. Incidentally, just about everyone knows about the DC-1 nearly "buying the farm" on its maiden flight because the carburetor floats were hinged backwards. The engine men could not locate the problem. According to "Smokey" Johnson, a 40-year Douglas veteran and the man in the white smock so often pictured in photos of the DC-1, it was Brig who discovered the error. Brig was put in charge of the DC-2 installations and assembly. With worldwide sales to airlines, Brig's circle of friends became international as well as national. Coincidental with increased deliveries of DC-2s, Brig mounted a 17-year accumulation of aeronautical lapel insignia on a 14x16-inch frame in his office. Soon DC-2 delivery pilots and others began vying with each other to add to the display. In a few years' time the



Northrop Beta followed by Northrop Alpha, 1931. (Northrop)



The first Northrop Flying Wing, with a span of 30'6", is shown here on its maiden flight. Built in 1929, it was successfully flown many times and afforded invaluable research information. Although not a true "Flying Wing," it represented a monumental step on the way toward development of the XB-35 bomber. (Northrop)



XP3D-1 Navy Patrol, 1935 (Douglas Aircraft)

collection grew from 30 to over 400 pins.⁵ Friends who contributed included Tony Fokker, Ken Boedecker,⁶ Paul Mantz, Hobie Beals, Dutch Kindleberger, Vance Breese, and many others.

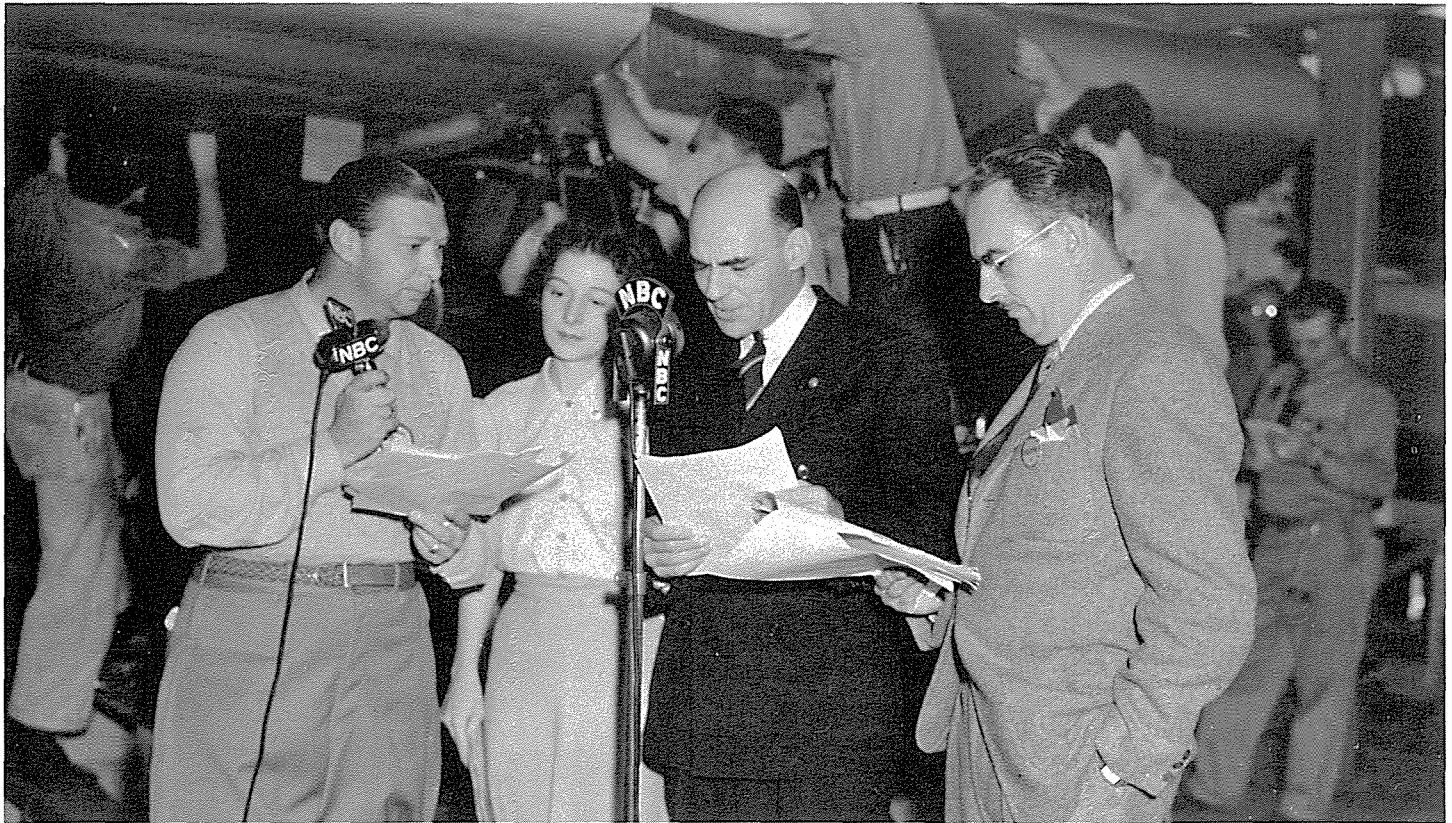
Sometimes assignments were frustrating. In March 1935, the Army Air Force took the DC-1 on bailment from TWA to prove out new navigation devices. To make the test flights out of the Oakland Municipal Airport, the Army Air Force assigned pilots Captain Clayton Bissell (later a General in the WWII CBI theater) and Captain Albert J. Hegenberger (of first-flight-to-Hawaii fame). Lieutenant A.R. Johns represented Wright Field for the antenna, and Chester Snow represented the Department of Commerce. The engine manufacturer furnished a representative and Brig represented Douglas. Many flights were made, most of them far out to sea. Sometimes the aircraft would be out so far that Honolulu was closer than Oakland.⁷ Special permission was required from the U.S. Department of Commerce to fly a landplane between the mainland and Honolulu. Approval to continue to Honolulu was sought many times by radio when the aircraft was near, or even past, the midpoint; but approval was never granted. Sometime later, the Department of Commerce official, whose approval was required, quit his government job to become an executive of the airline which was using flying boats rather than landplanes on scheduled flights over the Pacific!

One of the pleasures of the period was working with K.D. Parmentier when he was at the Douglas plant to take delivery of a KLM DC-2. The aircraft (PH-AJU) was subsequently entered in the October 1934 London-to-Melbourne race. It won second place even though it carried passengers and competed against specialized long-distance racing aircraft. Not as much of a pleasure, but at least something not routine occurred during this time. It was the launching of certain Douglas "flying boats," i.e., the XP3D-1 for the Navy, the DF-151s for Japan, and the DF-195s for Russia. The aircraft were launched from behind the breakwater at Santa Monica Harbor. So much time was spent floating

in the water rather than flying through the air that seasickness became an occupational hazard! Brig really took a ribbing from his family when he arrived home seasick every day.

Then on December 17, 1935, came the DC-3's first flight. Fitted with berths for American Airlines it actually was the DST sleeper transport version. Note the date, the DC-3 was born on the anniversary of the Wright Brothers flight! Brig had the assembly responsibility, from the fuselage jigs to flight line operation. A little later came the TDBs, the O-46s, and the initial triple-tailed DC-4. With war clouds over Europe came the DB-7 series for France and Britain, and A-20s for the U.S. Pearl Harbor brought an all-out endeavor to meet President Roosevelt's goal of 50,000 aircraft. Production at the Santa Monica plant reached a high of 322 A-20/DB-7 series a month (about 75 a week). Concurrently, C-53s (troop-carrying C-47s) and C-54s were rolling off their lines.

One of Brig's sons went into the Navy shortly after Pearl Harbor day. The other two were certain to be drafted. By this time, Brig was assistant superintendent with responsibility for all assembly and flight operations. With the stress of production schedules and three sons facing military duty, came severe hypertension. To alleviate the health problem, Brig was moved to the public relations office where he represented Douglas on the West Coast Aircraft War Production Council and coordinated wartime employee activities. Included were drives to solicit playing cards from employees to send to GIs overseas, and to act as liaison with a cigarette company which donated a carton to GIs each time a Douglas employee bought a carton. He also led a drive to have employees turn in excess tires to be used to overcome the rubber shortage. Unfortunately, the relief from pressure was too late and on June 23, 1943, at age 45, Brig suffered a stroke and passed away the same day. Thus, like a meteor with a brief but spectacular life, went a respected aviation pioneer, but who left an integral part of this glorious heritage for our generation of aviation enthusiasts to enjoy.



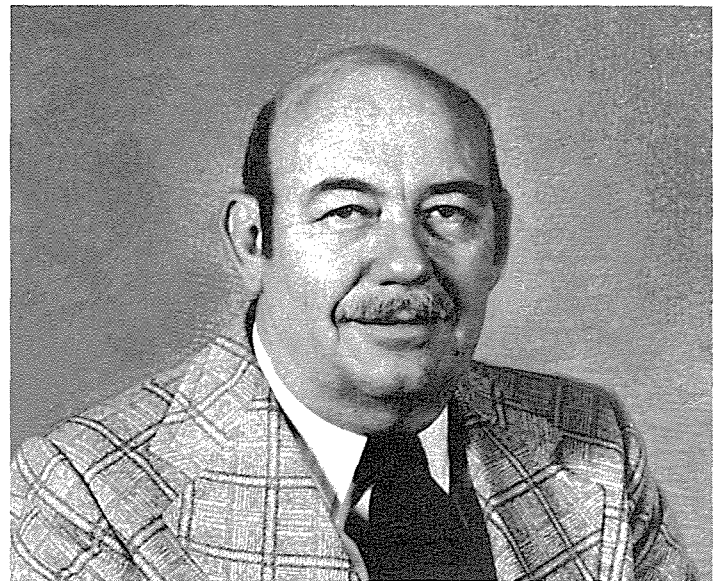
Wartime NBC radio broadcast from Douglas plant. Announcer Harry Von Zell, company librarian Patsy Kelly, Brig Young, and chief designer, Ed Burton (Douglas Aircraft).



With look-alike good friend and aviation enthusiast, actor Vince Barnett, 1940. (Brig Young)

REFERENCES

1. Air Transportation, April 7, 1928, p. 73.
2. American Aviation Historical Society Journal, Vol. 20, No. 3, Fall 1975, p. 156.
3. Los Angeles Record, August 13, 1927.
4. Airview News, Douglas Aircraft Company, June 29, 1943.
5. American Aviation Historical Society Journal, Vol. 12, No. 2, Summer 1967, p. 136.
6. "Boedy's Album," A Cross-Section of Aviation Personnel, 1938, p. 30.
7. Santa Monica Evening Outlook, March 21, 1935, p. 8.



ABOUT THE AUTHOR

Brig Young's son Ed, author of this article, says he really doesn't think that he was conceived in a fuselage like his father's friends infer, but he has been around aircraft since birth (in 1919). Growing up around Clover Field in Santa Monica, Grand Central in Glendale, and Union Air Terminal (Lockheed) in Burbank contributed greatly to his interest in aviation history of the '20's and '30's. Employed as a summer hire by Douglas in 1936 and 1937 while attending UCLA, Ed has been in the Engineering Department of Douglas/McDonnell Douglas since 1938 except for a brief stint on a carrier during WWII. Inheriting his father's 402 pilot wings and aeronautical lapel pins in 1943, Ed has since enlarged it to 1700 items and related the historical aspects of the collection in an article in the Summer 1967 Journal. For the past 10 years he has been Manager, Technical Documentation and Graphic Services for the McDonnell Douglas Astronautics Company in Huntington Beach, California.