

In June, 1912, Waite purchased Atwood's Burgess-Wright plane, a Model F, No. 20. Reportedly this was the same machine Atwood used when he made his historical FIRST landing on the White House lawn in Washington, D.C. After repeated attempts to get his aviator friends to "check him out" on his own plane, he went at it alone and taught himself to fly. He was very active and during August made 136 flights. Actively continuing his practice, Waite received his license, No. 186, on November 12, 1912, at Cliftondale, Mass. Now anxious to make a living in aviation he established the Cliftondale School of Flying at Cliftondale, Mass. to instruct, carry passengers and do exhibition work. There he flew actively during the Fall and Winter months of 1912. He was one of the first to advocate the use of the aeroplane for advertising purposes.

In the spring of 1913, Waite became an instructor for the Burgess Co. at Marblehead, Mass. where he remained until September of that year, receiving a special letter of commendation from Mr. Burgess for his excellent flying record and assistance in training some of the early Naval aviators. He became a Lieutenant in the U. S. Naval Reserve at the same time. He desired to return to exhibition work so he joined the so-called Berger Aviators for exhibition work in the South. During October he made flights at the Greensboro Central Carolina Fair, Union, S.C., and the Charlotte, N.C. Fair. In November he flew at the Waterboro, S.C. Annual Fair and at Florence, N.C. He used a Wright Model B and a Burgess-Wright airplane, in company with Howard Rinehart and George Gray. (5)

Returning to Massachusetts in late 1913 Waite assisted A. A. Merrill and Chauncey Redding design and build an experimental tailless tractor biplane, using a 7-cyl. Gnome rotary engine. This was done at M.I.T. during the winter and spring months of 1913-1914. Waite made several flights with this plane in June, which ended in a bad smash-up. Luckily he escaped serious injury. He continued flying for the Burgess Co. but later in the year his Burgess-Wright was wrecked beyond repair when his friend Chauncey Redding, flying with Phil Bulman, had an accident and both were killed. Following this, Waite gave up active flying. He had accumulated approximately 2,000 flights in 250 hours of flying time.

Waite next accepted a position as Foreman for the Sturtevant Aeroplane Co. at Jamaica Plain, Mass. Grover Loening was Chief Engineer at that time, and together

they designed and built what was probably one of the first all metal airplanes. He also acted as the first Inspector of Aeroplanes for the state of Massachusetts. Waite became Shop Superintendent when Grover Loening formed his Loening Aircraft Engineering Corp. at Long Island City, N.Y. He remained there until he accepted a position with the Bureau of Steam Engineering, Navy Dept., as the Navy's first civilian aircraft inspector during World War I.

In 1918 he was transferred to the Bureau of Construction and Repair, Navy Dept. and when the Bureau of Aeronautics was established in July, 1921, Waite was transferred into the new Department as Technical Advisor.

(6) This was the beginning of a long and worthy service with the Bureau, during which time he received many high honors, becoming Senior Administrative Assistant. He retired in May 1952, after 35 years service with the Navy. On that date he was given a Special Service award and particular mention was made of the Catalog of Naval Aeronautical Materials which he had prepared and put into general use.

Waite feels that his greatest honor was to have been selected to supervise the bringing of the original Wright "Flyer" to Washington when it was returned from England in December, 1948. He supervised its assembly for display in the Smithsonian Institute where it remains, in the National Air Museum, for future generations of Americans to view. (7)

As an active Early Bird, one of New England's first aviators, and a devoted flying pioneer of early American aviation, Roy Waite lives at Norwood, Mass. He holds Department of Commerce License No. 1, and District of Columbia License No. 2. N. Roy Waite has served aviation in all its phases - mechanic, designer-builder, pilot, instructor and through a long period of inspection and advisory work where his early experience was of great value. A firm believer in "safe flying", his lifetime efforts have contributed much to the development of American aviation.

(5) Howard Rinehart - JOURNAL of A.A.H.S., Vol 4, No. 3
George Gray - Ibid, Vol 4, No. 2, p.94

(6) Bureau of Aeronautics - U. S. Naval Aviation 1910-1960, NAVWEPS 00-80P-1

(7) National Air Museum - JOURNAL of A.A.H.S., Vol. 5, No. 3, p. 209.

MAIL SACK

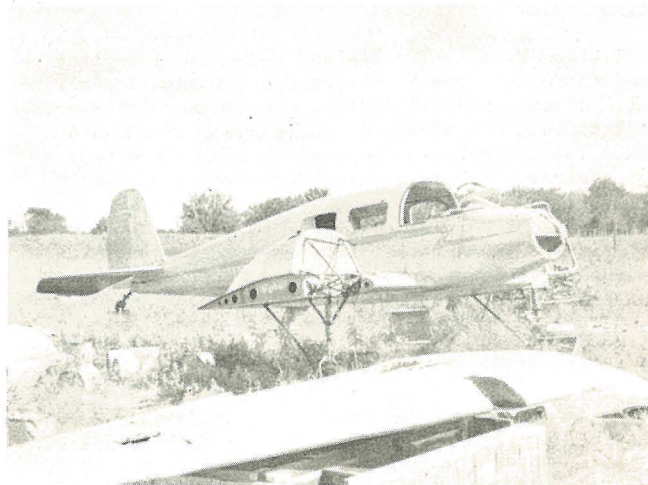
ADVERTISING PAYS

"Hud" Weeks' Beachey biplane with F.A.A. approved lettering on upper wing.



WHATSSIT???

Discovered by Mitch Mayborn near Arlington, Texas. Reg. No. NX86400



MAIL SACK

HIGH INTEREST IN LINCOLN BEACHEY, or, ADVERTISING PAYS

Member E.D. "Hud" Weeks sent the Editor the following letter which is very descriptive of the wonderful response obtained through the Membership of this Society.

In the Summer JOURNAL, Vol. 6, No. 2, Weeks had published his "Lincoln Beachey's Last Ride" and offered to supply at his cost copies of his 16 mm. motion picture film of Beachey's flying. He reports that they are to be in the mail by late November.

We repeat it here because we think it is typical of what can be done through cooperative efforts among Members.

What I like about the A.A.H.S.: - You spend a couple years collecting material on a subject and think maybe you have it pretty well covered. The flood of material really comes in after your article appears. Here is a partial list of personal gains from my Beachey article.

1. Blanche Noyes of the F.A.A. heard about my Beachey replica from A.A.H.S. Members and arranged a waiver of numbers for name on the Top Wing. I enclose a photograph.
2. George Shane, a local photographer, who read the A.A.H.S. JOURNAL, sent me a terrific 8x10 of Beachey & Oldfield at Denver with top wing extensions for 5,000' flights. I now have 54 Beachey photos.
3. Member Jack McRae sent me a photo of Beachey taken the instant before striking the spectator at Hammondsport.
4. Member Winter wanted a 3-view of the monoplane. Member Fisk told me of one in MODEL AIRPLANE NEWS. I relayed the information to Winter. The Editor of M.A.N. sent both Winter and me the 3-view I had never seen and long sought.
5. I was able to acquire an original Beachey/Oldfield Race Poster from Ed Stearne plus some missing AERO & HYDRO Magazines from this same swell San Francisco aeronautical book dealer.

A Biplane, here in the midwest, built by Benoest or by an early airman around 1915, with Benoest parts, has to be disposed of this month of October, due to space. The National Air Museum appears to be passing it up. It was stored in flying condition, with engine. I did not want this model and think I have it placed with an A.A.H.S. Member. If for some reason it is not taken by this Member, I'll answer letters sent by anyone interested as it will go outside Nov. 1 if not purchased. I'll advise A.A.H.S. as soon as I know.

E.D. "Hud" Weeks, 120 Des Moines Ave., Des Moines, Iowa.

WHATSSIT?

The enclosed print should be of interest as a Whatssit? I took this on Sept. 20, 1958 at a little airport near Arlington, Texas. The airplane was on the scrap heap there. That's all I know, except that its registration number was NX86400. Can anybody tell us who made it and what flight history it might have had?

Mitch Mayborn, P.O. Box 6701, Dallas 19, Texas.

NAVY C & R BULLETIN

The Editor, Sir:

My papers contain a great mass of early aeronautical material going back to W.W. I when my first connection with aeronautics took place. I ran across one publication in particular that I feel might be of interest to you at this particular period. The document I have reference to is Navy Department, Bureau of Construction and Repair Bulletin #101 of December 1, 1919, captioned "Types of Aircraft Used in Naval Aviation, 1917-1919."

WINTER - 1961

It comprises about 40 pages and carries about 60 photographs. In fact, it is mostly photographs and accompanying descriptions, plus a chart: "Weight Characteristic and Performance Chart of Flying Boats, Seaplanes, Airplanes and Airships." It carries as a sort of introduction the following:

"The purpose of this Bulletin is to furnish in elementary form a very broad outline of the principal types of aircraft, both heavier-than-air and lighter-than-air in use from 1917 to 1919. For each type there is given a description and one or more photographs. There is appended a chart giving in tabular form more specific data on each type."

I was instrumental in having the bulletin prepared and it became a "best seller" at the time and the issue was exhausted very early. I suspect most of the copies that were printed have become lost or buried. There are only a couple of file copies that I know of in the Navy Department files.

Capt. Garland Fulton, USN (Ret)
(AAHS Member, Edit.)

The following aircraft are described briefly by the C&R Bulletin:

- R-6 Seaplane - Training type (Curtiss)
- R-9 Seaplane - Training type (Curtiss)
- Aeromarine 39-A Seaplane - Training type
- Aeromarine 39-B Seaplane - Training type
- N-9 Seaplane - Training type (Curtiss)
- Boeing Seaplane - Training type
- JN-4D Airplane - Training type (Curtiss)
- JN-4H Airplane - Training type (Curtiss)
- Model F Flying Boat - Training type (Curtiss)
- Model M F Flying Boat - Training type (Curtiss)
- Model 40 Flying Boat - Training type (Aeromarine)
- DeHavilland-4 Airplane - Service type
- HS-1-L Flying Boat - Antisubmarine patrol (Curtiss)
- HS-2-L Flying Boat - Antisubmarine patrol (Curtiss)
- H-16 Flying Boat - Antisubmarine patrol (Curtiss)
- F-5-L Flying Boat - Antisubmarine patrol (N.A.F., Curtiss)
- NC Flying Boat - Antisubmarine patrol (Curtiss)
- NC-TA Flying Boat - Trans-Atlantic type (Curtiss)
- D-4 Seaplane - Experimental light bomber (Gallaudet)
- Liberty Fighter, HA type Seaplane - Experimental Fighter (Curtiss)
- Curtiss Model 18-T Airplane - (Kirkham Fighter) - Experimental Fighter
- U.S.A.-12" "Liberty" Engine
- Curtiss "OX" 90 Horsepower Engine
- Parachute, Spencer type
- Kite Balloon winches
- Types "R" and "M" Kite Balloons
- Class "A" to "F" Dirigibles

There is also a rather complete chart of statistics and specifications of each of the types described, plus at least one photograph for each.

MIXED CAPTION

I just point out a mixed caption on Page 119. The "bent Mustang" is not a TP-51D-25-NT. The Temco conversion of the TP-51D was characterized by a long humped canopy, more like the Wisconsin National Guard airplane that is listed as a P-51D-30-NT. From the 3/4 rear view of this airplane it is hard to say for sure that it is actually a TP. It looks as if there is a hardface behind the seat which would not exist in the TP. I do know that the Mississippi NG airplane is not a TP-51D; I've spent too much time cramped between the radiator and that humped canopy to be fooled on that one. Good pictures, though.

The negative library sounds like a good idea. I'll screen my negatives to see what I have to donate.

David Brazelton, 5007 W. Linda Curve, Bartonville, Ill.

MAIL SACK

PHONETIC MARKING ERROR

Referring to the Boeing 40-A illustrated on Page 122 of the Summer Journal, the number that appears on the tail is 3270, with the 3 located alone above the other three digits. While not visible in that particular photo, the four digits were all in line on the wings. The error is that the number should be C270. Apparently someone was told what numbers to paint, and heard "C" as "3". (Maybe that was the reason for the little "Verbal Orders Don't Go" memo pads). The error was caught and corrected later,*but not until after the airplanes had gone into service on the airline.

Twenty-five Model 40-A's were built, with registrations C268 through C292. Twenty-four went to the airline and the last one went to Pratt & Whitney for use as a test bed. Later, all were returned to the factory for conversion to Model 40-B with "Hornet" engines substituted for the "Wasps".

Peter M. Bowers, 13826 Des Moines Way, Seattle 88, Wash.

VOUGHT FIGHTERS

May I take a few lines in the next issue of the JOURNAL to amplify a point of detail in my study of the early Vought naval fighters, published in the Winter 1960 issue? In that article, which was based on official data, I quoted the maximum speed of the FU-1 as 125 m.p.h. Since that time I have obtained additional data that presents a more nearly complete view of the capabilities of this aircraft. It appears from these sources that the full speed of the FU-1 landplane at various altitudes was actually as follows:

Sea level	125 m.p.h.	16,000 ft.	145 m.p.h.
4,000 ft.	136 "	20,000 ft.	138 "
8,000 ft.	144 "	24,000 ft.	127 "
12,000 ft.	147 "		

Although the performance characteristics presented in my article were entirely authentic, they did not, as can be seen by comparison with these figures, tell the whole story. Supercharged engines were uncommon in 1927, and their effect upon the performance of aircraft at altitude was, I assume, simply not taken into consideration when the official characteristics of the FU-1 that I used were compiled. Maximum speed with unsupercharged engines was, of course, sea level speed, and it was the 125 m.p.h. sea level figure that was entered as the maximum speed for the FU-1.

It is interesting to note that the FU-1's supercharger, despite the relatively low rated power of its J-5 engine, gave it a distinct superiority at altitude over certain other fighter types of more advanced design. Above 16,000 ft., for example, it was faster than the unsupercharged XF3B-1 and XF7C-1, and above 23,000 ft. it could also outrun the XF6C-4. Thanks to its low wing loading, its rate of climb above 14,000 ft. was better than that of any of these later fighters, and its service ceiling was also higher than that of any of its contemporaries.

While these facts still do not warrant rating the FU-1 as a paragon of the naval fighters of its day, they do put its performance in a better light than did my original information, and reflect greater credit upon those who were responsible for its design and procurement.

Robert Krauskopf, 5812 Nevada Ave., N.W., Washington 15, D.C.

DIESEL AIRCRAFT ENGINES

Though I am not in favor of continuing a discussion of minor interest through too many issues, particularly when the original question was accidentally raised, I

would like to offer the following information concerning the early years of the aircraft Diesel engine for the benefit of those interested. The information comes from reliable sources, but not original documents, and could be in occasional error, though I believe it to be accurate.

Dr. Hugo Junkers began development of an opposed-piston Diesel engine in 1910, based somewhat on his opposed-piston industrial powerplants, for use in a machine of his own design. This first aircraft Diesel, the four-cylinder MO-3, was completed in 1913 and was followed by the MO-8 six-cylinder engine the following year. The MO-3 apparently developed about 200 HP. Junker's next aviation Diesel was the FO-2 of 1916 which developed 500 HP. None of these engines was apparently flown and development slowed considerably after the Armistice.

In 1926, the 830 HP Junkers FO-3 was put on public display at the International Aviation Exhibition in Berlin in a test stand installation and, again, I can find no record that this five-cylinder engine ever left the ground, though it created a tremendous impact on the aviation field. In 1928, the smaller 700 HP six-cylinder FO-4 appeared, flying for the first time in a modified Junkers F-24 monoplane in 1929 on a flight from Dessau to Cologne. I can find no record of an earlier Junkers Diesel powered flight and presume that this was the first.

In 1931, Deutsche Lufthansa began flying a single Diesel-powered Junkers F-24 equipped with the FO-4, now known as the Jumo 4. Shortly, this engine was redesignated the Jumo 204. Several other single-engined aircraft were adapted to take the Diesel and flown by German airlines and, in 1935, four Junkers G-38 of Deutsche Lufthansa had their regular gasoline engines removed and replaced with the Jumo 204. These four-engined forty-passenger ships were flown regularly alongside their conventionally powered sisters. During the next two years, a variety of Diesel-powered passenger and military airplanes took to the air in Germany; the Do 18, Junkers 86, to name a few, so there were a tremendous number of flights preceding the "Nordwind" and "Nordmeer". Most of these used the Jumo 5 or Jumo 205 as it was redesignated.

With the demise of the Packard liquid-cooled military engines, the company turned to the commercial field and the Diesel. Under the leadership of Lionel Woolson of Packard and the German Professor Dohner, the DR-980 of 225 HP was designed. Begun in 1928, it made the first Diesel-powered cross-country flight in the U.S. in 1929. In 1930, the Army flew it in the experimental XPT-8 and XPT-8A trainers. A variety of planes were experimentally equipped with the DR-980 in 1931, including a Ford Tri-motor, but after Woolson's death in a crash in 1930 development of the engine stopped. My records, unfortunately, do not contain the day and month of either the Junkers F-24 or U.S. Diesel flight of 1929, so I cannot state which was first.

Subsequently, almost every major aircraft producing country of the world undertook Diesel development, their interest pivoting directly on the Jumo 4 and, in some cases, beginning shortly after the FO-3 showing of 1926. One of the earliest engines of interest is the Allison 765 HP 6-cylinder Diesel airship engine built for the Navy in 1927. With the realization that sufficient water ballast could not be recovered from its exhaust, it was dropped after initial testing. It probably never flew.

When one realizes the considerable handicap experienced by German aviation under the terms of the Treaty of Versailles, it is not too surprising that Junker's idea of 1910 and experiments of WW I did not yield success until the late 1920's.

Robert Casari, 25 North Fork Dr., Chillicotte, Ohio