

It's little wonder that the Culver Cadet attracted so much attention when it was introduced in December 1939. It had a factory-guaranteed cruise speed of 120 miles per hour while emptying the fuel tank at only 4.2 gallons per hour. Specific range was an incredible 28.6 miles per gallon. Other two-place airplanes of that era struggled to achieve 80 mph using the same 75-horsepower engine. The petite Cadet rapidly became America's sweetheart, the darling of the sportsman pilot.

The story of the Culver Cadet began in 1938 when Knight Culver Jr. purchased the design rights to the Monosport aircraft and founded the Dart Aircraft Company, which later became Culver Aircraft. The purchase included retaining a young, self-educated, and accomplished designer who would make an indelible mark on general aviation: Al Mooney. (Culver also hired Al's brother, Art, as factory superintendent.)

One of Mooney's assignments was to design an airplane that would take advantage of the new 75-hp flat-four Continental A-75-B engine that rapidly rendered obsolescent the small radial engines that had been so popular. (The A-75 engine was a faster-turning version of the 65-hp Continental A-65.)

The result was the Mooney-designed Culver Cadet (also known as Mooney's "wooden wonder"). It was Mooney's twelfth design, which he designated according to his personal list of designs as the M-12. The structure was predominantly wood because metal was in short supply during that post-Depression, pre-war era. From such aircraft eventually came the cliché "claiming with tongue in cheek that wood airplanes stay together only because the mechanics are holding hands."

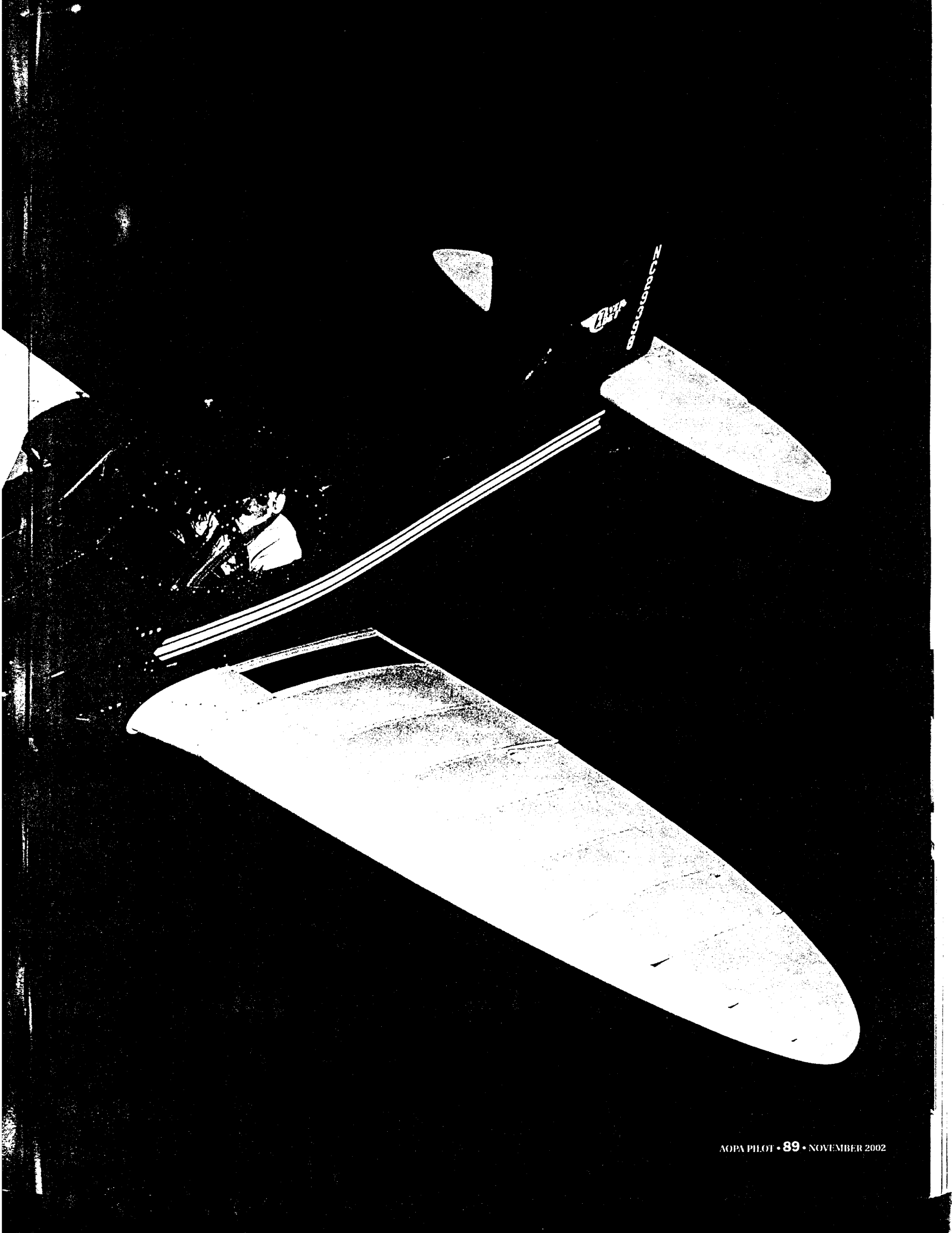
Mooney's
"wooden wonder"
is a darling

BY BARRY SCHIFF

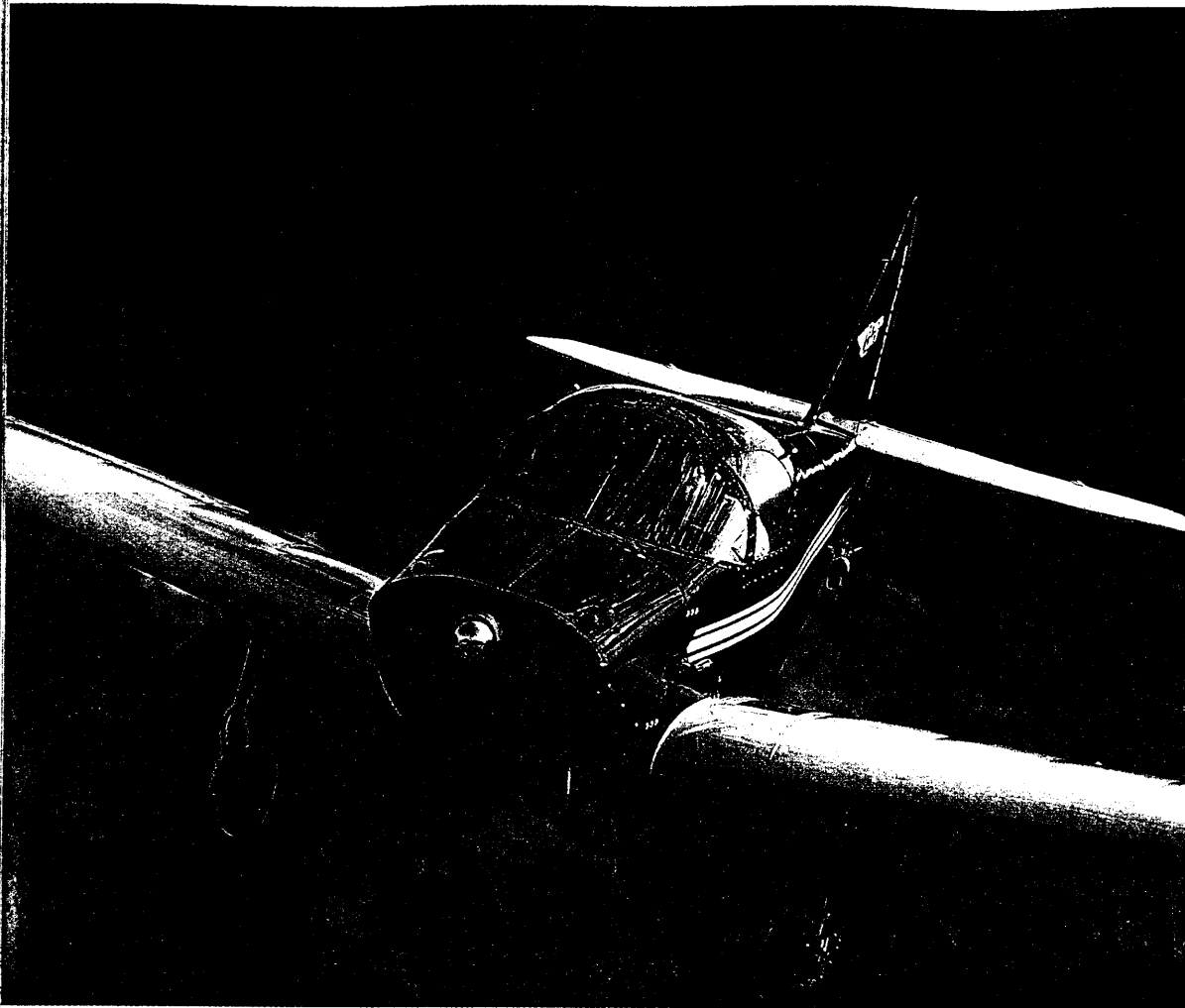
PHOTOGRAPHY BY MIKE FIZER



ca's
eheart



The clean lines of the Culver Cadet are apparent during this approach into Santa Paula Airport in Southern California.



The Culver Cadet LCA made its maiden flight on December 3, 1939, and sold for \$2,395. A later version, the Model LFA, had an 80-hp Franklin 4AC-176-F3 engine, was equipped with an electrical system and starter, and cost \$200 more.

Original Cadets were built in Columbus, Ohio, but the factory was relocated to Wichita after being purchased by Walter Beech and attorney Charles Yankey.

A total of 359 Cadets were produced from 1939 through early 1942. Production ended so that the company could concentrate on the war effort and the building of thousands of drones to serve as targets for anti-aircraft practice. The significant differences between the Cadet and the Culver PQ-8 Drone were that the drones had tricycle landing gear and were coated with aluminum paint to make them better radar targets.

Al and Art Mooney eventually formed their own company, which is when Al developed the single-place M-18

Mooney Mite and the four-place Mooney M-20, the progenitor of an entire family of popular four-place airplanes. (The 150-hp Mooney M-20 was the first four-place production airplane capable of cruising at more than one mph per hp.)

Carl Walston, whose airplane appears on these pages, became enamored of the Cadet when he was in grade school but did not begin flying until years later in 1961. At the time he lived in New Canaan, Connecticut, was in the securities business, and wanted to use his own airplane to travel from Wall Street to his other offices in the Northeast. For this he used a Cessna 310, a Piper Apache, and an Aero Commander 500. He accumulated 1,100 hours of flight time, including 400 hours in sailplanes.

When Walston began planning his retirement in Santa Barbara, California, he decided that he would make a dream come true by spending his care-free hours aloft in a Culver Cadet. Although there were more than 100 on the FAA's registry, Walston estimated

that only 20 or so were airworthy, and none of these rare machines was for sale. Realizing his dream would require that he restore a basket case.

His search for a Cadet eventually led him in 1995 to Wallkill, New York, where he purchased N29398 (serial number 191) from a pilot's widow. The airplane originally had been built from scratch and in its entirety in Wichita during the week between Christmas and New Year's Eve, 1940. It was now a collection of bits and pieces.

When Walston's wife, Mimi, saw her husband's purchase, she thought he was nuts. It reminded her of an oversize model-airplane kit containing uncountable balsa-wood parts. The airplane had no logbooks, no airworthiness certificate, and had not flown since 1957.

Walston enlisted Carl Badgett of Winsted, Connecticut, to do the fabric and woodwork, and Mark Grusauski of Wingworks in Canaan, Connecticut, to do the metal and mechanical work.

The Cadet was restored as much as possible to its original condition, but