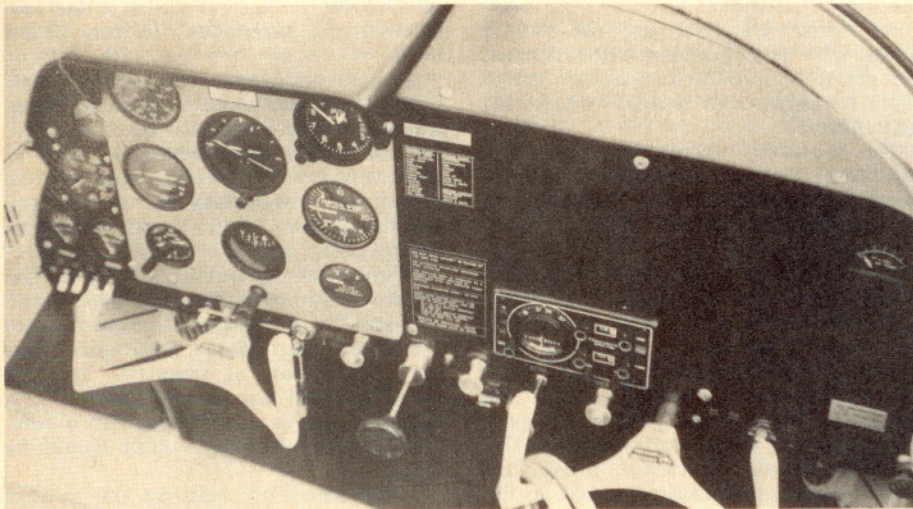


'Oh, Me? I Own a—er— Mooney!'



Instrument panel of the M-10 features standard airline "T" layout plus plenty of extra radio room.



The Cadet can be flown "open air" at speeds up to 100 mph.

by DON W. ABBOTT / AOPA 261323

■ ■ "Hey, I see a Mooney swallowed your Aircoupe! Har, har."

This is only one of the wisecracks you hear when you own an M-10 Cadet, Mooney's redesigned version (no longer in production) of Alon's Aircoupe, formerly the Forney Aircoupe, and before that the Erco Aircoupe.

When you have fostered a love affair with Ercoupes, Forneys, Alons, and Cadets for as long as I have, comments like this don't really bother you—after all, you're flying one of only 61 straight-tailed "Coupes" built. (Mine is a 1970 model, serial number 13.)

Having rebuilt three 415-C Ercoupes (the last one requiring 2½ years of solid free-time work), I must say that when I saw the first pictures of the Mooney straight tail on the M-10 Cadet, my reaction was, "Get that thing off there and quit messing around!" But my attitude quickly changed when I saw my Cadet, N9523V, in person.

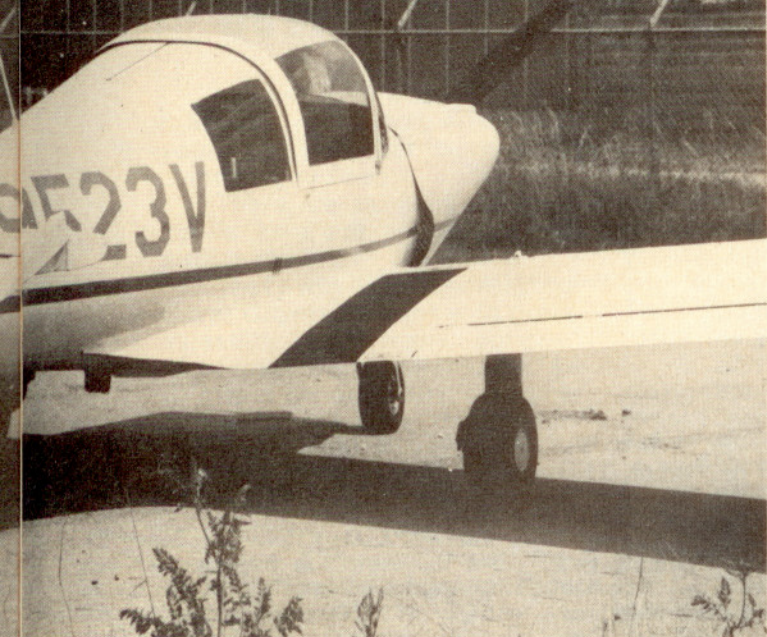
The Cadet's tail (which replaced the twin tail on the Alon Aircoupe) is not a Mooney free-flying type, but only shares the forward-sweep design of its other Mooney big brothers. That's where the similarity stops. Standard designs are carried out in the elevator and dual trim tabs. The tail is preceded by a rather large dorsal fin to improve lateral stability,



since the surface of the rudder is not much greater than that of the old twin-tail design. The rudder is connected to dual rudder pedals, and toe brakes and nosewheel steering improve ground handling.

Other features of the Cadet include the reappearance of two rear side windows, while the sliding Alon plexiglass canopy has been retained. The full-span ailerons, rudder and elevator are of corrugated construction, in lieu of the smooth aluminum skins of older models. With the return of heavy

It's hard to believe, but the first version of the sleek little M-10 Cadet (the Erco Erco Coupe 415-C) received its type certificate nearly 35 years ago. Vertical tail is the most obvious modification by Mooney, the last owner of the design. Photos by the author.



has been greatly improved. Another change is the addition of a new landing-gear system made of spring steel rather than the old, dependable and (my guess) costly oleo system. The old-style gear was available as an option on the M-10 for around \$300, and my plane was blessed with it by the original owner.

The M-10's fuel system is still the "pump from the wing tank into the fuselage tank, gravity-feed to the engine system," and still uses a wire float gauge to tell you when the engine-driven pump has quit or the main tanks are out of fuel. My owner's manual gives the figure of 2½ gallons of unusable fuel in the fuselage tank. Since this tank only holds six gallons, you should check the length of the wire often.

The fuselage tank gave me the problem of leaking around the strainer plate early after delivery of my bird. After the tank was repaired, the main shutoff valve started to leak and had to be replaced. I have also noted that the overflow from the fuselage tank returns to the left main tank, and if you are carrying full fuel, much of it will siphon over the trailing edge of the wing during the first 30 to 45 minutes of flight. The loss of a few gallons of go-juice doesn't really bother me since the useful load of my Cadet is only 437 precious pounds.

As trainers (the primary purpose of Mooney's acquisition of the Coupe), many Cadets have probably taken off well out of the weight-and-balance envelope. If I adhere to the books, I can carry myself (185 pounds), full fuel (129 pounds), a passenger (113 pounds), and no baggage.

Flying the M-10 is as simple as flying any small trainer, once you get used to a few in-built characteristics. Even though the Cadet has no flaps, it does have a sink rate that, when used to your advantage, will equal that of the huge barn doors of a Cessna 150. Of course, with the redesigned tail and rudder pedals, you can slip the aircraft quite well.

Preflight is normal, starting with a visual inspection of all surfaces, tires, and prop—and the engine compartment, for hitchhiking birds. Four fuel drains are located at the bottom of the fuselage for the three tanks and strainer bowl. A large access door on the left side of the cowl permits you to check proper oil level (4+ quarts).

Once inside the aircraft, remember to turn on the wing-tank feed valve to the fuel pump. (If you leave this valve on, the fuselage tank will gravity-feed back through the fuel pump to the wing tanks.)

After a normal start, a mag, carb heat, and controls check, and a set of the trim tab, you line up on the runway and apply full power. Field elevation at my home base, Indianapolis Brookside Airpark, is 854 feet msl, and the M-10 breaks ground at 50 mph indicated. Eighty mph is a good climb speed that will yield a 500–800 fpm climb with pilot and full fuel.

Cruising rpm for the 90-hp Continental, at 75% power, is 2,350 for general pattern and low-level flight. The M-10 will indicate 108–112 mph while burning a stingy 4.7–6.0 gph.

Approach is made by throttling back to 1,500 rpm on the downwind leg and trimming to 80 mph indicated. This is held through base onto final, with a vertical speed of 500–600 fpm down. If you want to lose altitude in a hurry, decrease rpm and trim to 70–75 mph and you will show a loss of 1,000–1,200 fpm!

The M-10 is a delight to fly, even in turbulent air, although it is reminiscent of a wandering fish swimming upstream. It's a great airplane for my type of flying—a little pattern-hopping and some short 110-mph-cruise cross-countries—or for just sitting back and admiring as one of a very few recently manufactured versions of a legend in aviation: the Coupe. □

aileron counterbalance weights, which roll into and out of a large hole in the wing, comes the addition of more drag. (It seems that no one ever gave drag very much consideration in the design of any model of the Coupe.)

The M-10's instrument panel is very modern and affords enough room for all electronics needed for IFR flight. (That's a statement made as of today; heaven knows how much gear will be required in the future.) The two roomy bucket seats are adjustable, fore and aft, and the air-vent system