

# The Twin-Bug Lacey M-10C

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**T**HE FIRST twin-engine Volkswagen-powered aircraft in the world, plus a swivel wing and sleeping space for two people, has been combined into a single airplane by Joseph Lacey and R. G. Huggins, both of Tulsa, Okla.

Construction of the "Twin Bug", as it is known around Tulsa, started in November of 1967. The ship was completed and first flown on May 29, 1968, six months and five days from start to finish.

After building the single-engine Lacey M-10, powered with the Continental C-90 and which has attended the annual EAA Convention for several years, Joe had received over 1,200 letters from interested builders all over the world in regard to his design. From these letters, he learned that many could not afford the powerplant which alone cost around a thousand dollars.

It was then that Joe and Bob Huggins got together and decided to build the twin-engine version of the M-10. Knowing that one Volkswagen engine would not do the job, they thought that possibly two of them could. They still wanted an airplane that could be towed behind a car, stored in a garage, light in weight, inexpensive to build, and capable of sleeping two. The sleeping arrangement was decided upon originally, due to the fact that Joe likes to attend the annual Convention each year at Rockford. Since accommodations at Rockford become overtaxed, many of the pilots choose to sleep on the ground next to their airplanes. Joe doesn't like to sleep on the ground, hence the "flying camper" aspect of the M-10C.

The "Twin Bug" has dual overhead control sticks, as were in the first ship. It has an empty weight of 740 lbs. against a gross of 1,140 lbs. The wing span is 20 ft., and overall length is exactly the same. Cruising at 100 mph, it will burn off fuel for both engines at the rate of seven gallons per hour.

The engines were converted by R. G. Huggins, who has since retired from Volkswagen development work.

For towing, four bolts are removed where the wing fastens to the fuselage. A jack is placed inside, the wing



(George Goodhead, Jr. Photo)

The "Twin Bug" even has a bug-like appearance when viewed from the front. The full cantilever wing employs full span ailerons and tip plates.

is raised four inches, and then the wing is swiveled to a position parallel with the fuselage and let down.

The instruments are the standard flight display, including a \$1.00 hardware store compass, and tachometer, oil and manifold pressure gauges for each engine. The 19 gal. fuel supply is checked by watching transparent fuel lines. Both fuel tanks are made from fiberglass, and the wood propellers were carved by Ray Hegy of Marfa, Texas.

The only problem that turned up in the flight testing was the overheating of one engine. In checking, it was found that one of the air-cooled auto engines had more cooling surface than the other. This overheating problem was soon solved with some minor modifications.

The "Twin Bug" has proved to be a success. Additional details on the design are available from Joseph Lacey, 7720 E. 25th Place, Tulsa, Okla.



(George Goodhead, Jr. Photo)

The rear seat is accessible through a door on the left side; the front seat through a door on the right.