



COURTESY OF LEEON DAVIS

MOWER POWER TO THE PEOPLE THE DAVIS DA-11

Look closely . . . this is not the Davis DA-9 we had on the cover of our August issue. This is Leon Davis' even lighter DA-11. Although it is about the same size, having a 12 ft. 9 in. span vs. the DA-9's 12 ft. 6 in., the all-metal DA-11 weighs only 177 pounds empty! With a useful load of 198 pounds, it has a gross weight of 375 pounds, which is only two pounds more than the empty weight of the DA-9. Amazingly, Leon has achieved this feat of lightness despite an equipment list that includes a 12 volt battery, starter, alternator, regulator, ammeter, key start, electric fuel pump, engine driven fuel pump, fuel pressure gage, recording tach, two removable wet wing fuel tanks, tricycle gear, steerable nose wheel, adjustable rudder pedals, hydraulic brakes, three tie-down rings and a Terra TX 720 radio.

How does he do it?

The secret . . . and this airplane has indeed been under wraps for some time . . . is its powerplant: an 18 h.p. Briggs & Stratton 4-cycle lawn mower engine. That, of course, is where Leon got the name "Mower Power To The People."

With its span of 12 ft. 9 in. and a chord of 30.1 in., the wing area is 32 sq. ft. The aspect ratio is 5.1 to 1, and the airfoil is the tried and true USA 35B that Leon has always used in his various designs. The wing loading is



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11.72 lbs./sq. ft. and the power loading is 20.83 lbs. per h.p. The airplane is redlined at 155 mph and it cruises at 125 mph with its mower power. The stall occurs at 60 mph. Fuel capacity is 6 gallons (36 pounds) and the engine, which has a full-flow oil filter, holds 3.25 pints of oil (3 pounds). Fuel consumption averages 1.17 gph, so endurance is just over five hours to dry tanks. At 125 mph, that's a no-wind range of about 625 miles!

The DA-11 is a tiny airplane, so there has to be a limit on the size and weight of the pilot. People come in all shapes, so size is dictated by whether one can squeeze into the cockpit . . .

but they must not weigh more than 160 pounds. For the segment of the population that falls within that envelope, the DA-11 could provide a very inexpensive way to fly - while still enjoying useful speed and range.

It could be . . . but there is a fly in the ointment. Leon wants to market the DA-11 as a kit, but, obviously, the key is the engine around which the airframe was designed. He wants to use one of the little four cycle industrial grade engines like the Briggs & Stratton because they are extremely reliable, parts are available at most hardware stores and they are, compared to aircraft engines, dirt cheap.

Predictably, however, none of the manufacturers of such engines want to sell them to Leon to include in his kits. If he

wanted to build and sell Enduro class go-carts that go 100 mph with the drivers flat on their backs and with absolutely no protective structure around them, there would likely be no problem - but we all know the panic that clutches the throats of business people when their products and the term aviation are mentioned in the same sentence.

It would really be a shame for such a neat and potentially affordable little airplane to go no further in its development. If you'd like to encourage Leon Davis to continue, his address is 2201 SCR 1060, Midland, TX 79706.