Aeronca Sedan

by Tom Weissmann

THERE'S SOMETHING STATELY about flying this plane. It's like driving an old Rolls or Bentley in downtown traffic. It's slow, but comfortable as an old pair of shoes. It ambles across the country at a purposeful but leisurely pace. Every time I fly it I can't help but feel like a chauffeur taking the dowager out for a Sunday drive in the Rolls.

There's plenty of room in this four-seater and when you address your passengers you just naturally tend to raise your voice to bridge the distance between seats. Not that the noise level is higher than ordinary, it just seems that your friends are that much farther from you. There's none of this chummy togetherness of some flying machines. In fact, when you fly solo and look around the cabin, you may feel rather forlorn amidst all this Spartan spaciousness.

But this regal way of drilling through the atmosphere is at times a bit discouraging, especially when heading against the wind, for you might discover on occasion that auto traffic is inching away from you as you motor above a freeway. This bird wasn't made for speed, but rather to carry a good load and to give its passengers plenty of room, while at the same time retaining the flying characteristics of a simple and honest plane: in short, a worthy four-seat successor to the Aeronca Champ and Chief flying machines.

Until about a year ago I was the proud owner of one of about eight Aeronca 15AC Sedans on the active register in Canada. I flew about 100 hours per year, and CF-AKT (Serial 145) carried me, friends, family and cocker spaniel, with nary a complaint. Well, not quite. There was that one time when I lost a tailwheel on landing on a rough strip. Apart from that, the "ol' See-Dan" just kept a-chugging along at its sedate 100-mph clip.

By most lightplane standards, the Sedan is a pretty big bird—about the size of a Cessna 180—and is a taildragger of the old school. Its rudder and fin shape reveal the Aeronca lineage, but its 39-foot wingspan makes it one of the biggest winged machines around. A single strut reinforces the impression of being in a 180 but, alas, the Sedan is utterly devoid of the 180's flaps, or vast quantity of power. It's not really under-powered, but then it isn't over-powered either. It's simply a roomy machine without frills that demands minimum maintenance. It is a plane that can be flown with great confidence out of grass and gravel strips in the boondocks, thanks to a sturdy undercarriage and good-sized tires.

Power for the Sedan comes from a six-cylinder C-145 Continental of the size powering the ubiquitous Cessna 172 (pre-1968 versions). The engine is somewhat lost beneath the plane's cavernous cowling, but some of the bush pilots have corrected this by installing larger engines, up to the 200-horsepower range, to get a bit more oomph when operating on floats.

Airframe construction is steel tubing and fabric with metal wing spars. Fuel is in two 18-gallon wing tanks which give the bird about four hours' fuel or about 400-mile range.

Entrance is through a single door on the right hand side, a fixed step aiding entrance for less agile types. The left seat is adjustable and controls are readily accessible. In the test plane, priming is accomplished with the throttle, and a couple of pumps on this plunger got things primed up so that the Continental jumped to life without hesitation.

The current owners of the Sedan have installed a primer to make winter starting easier.

With the huge rudder and the long fuselage as a lever, taxiing and turning are simple even in strong winds. With an aileron held into the wind, the huge wings are easily kept from lifting even when gusts shake other, lighter machines. The view over the nose is quite good and little S-turning is needed to keep an eye on things ahead. Toe brakes on the left side assist direction control, but the weight of the plane is such that it keeps pretty well moving into the direction it is being aimed without needing much help from the brakes. Gross weight of the Sedan is 2,050 pounds.

CF-AKT has a full panel, with gyros driven by two venturies. The radio is a King KX-150 navcom which serves the owners satisfactorily for day and night VFR in the area where they are based.

Lined up for take-off, with a last minute check of the overhead trim, the throttle is eased to the wall. Not impulsively, but rather deliberately, the Sedan picks up a few mph, hoists its tail and trundles down the center stripe with little urging from the elevator control. At about 50, it gets light on the wheels and breaks ground. This is at about 60 on the clock with two on board, full fuel, and operating at 600 feet elevation. With the temperature in the seventies, the ground roll under these conditions is about 350 feet. The Sedan breaks ground smoothly and first-time passengers sometimes don't notice that the plane has left the ground. With 70 on the indicator (go to 80 if it's choppy), the plane doesn't exactly claw for altitude, but it gets there at about 600 feet per minute. The only thing that needs attention throughout is the trim. Adjustments are made by a diminutive overhead crank which moves a trim tab

on the elevator. It takes only a very small amount of cranking and you have a strong effect. In fact, this is the only feature about this plane which I didn't like. It takes very small, fractions-of-an-inch adjustments on the crank to get the plane onto the step for cruising flight, and it is not difficult to pre-set the trim and find the plane in an out-of-trim condition. A less sensitive trim would be preferable, particularly for take-off settings.

Visibility during climb out is very good in all directions, except behind and above. Sound level is acceptable, the cavernous engine cowling obviously attenuating the growl of the Continental. Conversation demands a bit of voice-raising, as it does in many older planes. But, there's space in this bird. Even old Bonanza drivers admit that the Sedan has as much elbow room as the butterfly-tailed flying machine.

The controls have a solid feel, with quick response from the ailerons. Tight 360s can be flown comfortably with little rudder assistance needed. The huge tail surface and rudder areas undoubtedly add to the effectiveness of the control.

Cruising speeds are not spectacular. With 2,000 rpm at 2,500 feet at 60 F., the airspeed indicator will show you 90. This can be bettered by going to 2,400 rpm which will give you just a notch over 100; say about 103 with the plane on the step. At this power setting, it isn't slurping gas at a massive rate, but using from 7½ to 8 gallons per hour to give a range of about 400 miles with reserve.

The Sedan is a docile plane and stalls the same way. Aileron control remains throughout and if you use a bit of rudder to keep wings level, it'll hang there as long as you can stand it, the airspeed fluttering at 45 mph, as you mush down at about 300 fpm. Use a more spirited stall entry and you'll get a clear break with the plane's nose dropping straight through the horizon, then picking up flying speed and carrying on with the flying business as if nothing had happened.

As you can gather, this Sedan is a simple and happy flying machine. Landings are easy as far as taildraggers are concerned. Keep the initial approach speed to between 70 and 80, depending on load and wind conditions, and you are in the groove. Trim a bit nose high when getting over the threshold with the speed at about 65 to 60, and flare a bit higher than you might do with the tricycle-geared machine you are accustomed to. Keep the Sedan flying as long as it wants to. At the same time, ease back on the wheel as she wants to settle. You'll find this Aeronca doesn't float excessively but settles smoothly with little bounce if you keep the wheel nicely back. The tail is fairly heavy and she'll stay down, making for a straight roll out, which calls for minimal footwork, even in a crosswind.

Wheel landings call for a bit more attention but can be accomplished without sweat. I have flown the Sedan in 40 mph crosswinds and landed it in a three-point attitude using both crabbing and cross-wind correction, without putting a strain on the undercarriage.

Because the Sedan has no flaps, judging the approach is most important. If you are too high, you can treat your passengers to a smartly executed side slip (tell 'em you aren't crashing—this is a normal maneuver). The Sedan's large fuselage side area allows beautiful slips and makes it simple to land on short strips. Landing over trees calls for a bit of skill, but the specifications say you can do it at gross weight within 1,800 feet. To get over those trees on your way out, the specs suggest that it'll take about 1,400 feet.

I am of the conservative grain and prefer a bit more room. But I've never found it a problem getting in and out of 1,600 to 2,000-foot strips with clear approaches with light loads and under moderate conditions. I might add that the disc brakes are quite effective and can really stop the plane. Once you're down, you can stop within 500 feet without too much effort.

The only items I missed on this plane were control locks. But, by spending a few dollars for strips of wood and wing-nuts and bolts, aileron, elevator and rudder control locks can be made to keep the control surfaces secure when the Sedan is tied down.

The Sedan is the sort of plane that should appeal to the camping buff. Two people can load it with camping gear, right to the ceiling, and still have room for themselves and their charts, etc., without going beyond the gross weight limit. (You might go beyond it if you insist on taking the anchors for your uncle's 50-foot yacht along.) There's a baggage compartment behind the rear seat. It can take 120 pounds, but can only be reached from the inside. With all this space available, you can stow sleeping bags, blankets, snorkling gear and what else you must cart along without getting too cramped.

You'll be moving slowly, but pleasurably and serenely, for the Sedan is as comfortable as that Sunday ride in the Rolls.

Oh yes, about that tailwheel. Nothing to worry about, really. I had landed on a strip under construction and contacted a rough spot. Hundreds of hours of flying had weakened the single spring attachment bolt to the point where it couldn't take another landing and just gave up. There was no damage, since the tailwheel attachment support protrudes from the fuselage like a landing skid and takes the plane's weight. Since then the bolt has been replaced by one of appropriate strength and heat treatment, and those "tail first" landings have since been free from any strain on either man or machine.

AERONCA 11AC SEDAN
Specifications

Gross weight	2,050 lb.
Empty weight	1,190 lb.
Useful load	862 lb.
Luggage	120 lb.
Fuel	36 gal. (34 usable)
Cruising speed	105 mph
Rate of climb	600 fpm
Stalling speed	45 mph
Service ceiling	12,000 ft.
Take-off over 50 ft.	1,400 ft.
Landing over 50 ft.	1,800 ft.
Engine: C-145 Continental 145 hp	


CF-AKT