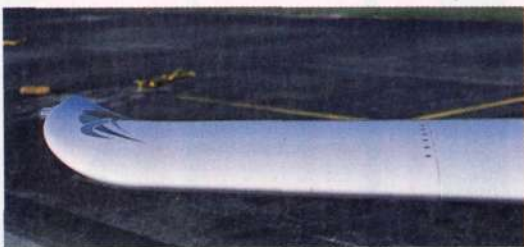


Flight Test Cirrus SR22



Top: wing-tip extensions give 1m of additional wing span to the SR22 and aid the pilot through the stall.

Middle: Cirrus has added a stylised logo to differentiate this model from the SR20.

Bottom: The SR22's all-electric panel includes Garmin avionics and an Arnav multifunction display



essential. In the unlikely loss of the main alternator, main battery and secondary alternator, the number two battery will deliver about 45min of power to the essential bus. The latter carries the electrically powered attitude indicator, turn co-ordinator, S-Tec System Fifty Five X autopilot, and the primary nav/com – in this case, Garmin International's GNS 430, with instrument flight rules GPS, VHF transceiver, and VOR/ILS receiver.

For an active private pilot who regularly endures serious instrument conditions, the SR22's multiply-redundant electrical system and all-electric panel seem more comforting than a combination electrical/vacuum system. Aircraft with redundant suction sources seldom also possess an electrical system back-up.

The combination of differences results in a typically equipped SR22 weighing about 1,020kg (2,250lb) – about 135kg more than its stablemate. At its 1,540kg gross weight, that same typically equipped SR22 can carry a full 318litres (84USgal) of fuel, plus about 300kg of passengers and baggage – sufficient for two adults, a couple of children, and light luggage for a trip.

On a typical 800km (500nm) flight, no one should feel squeezed or claustrophobic thanks to a spacious cabin with ample rear-

seat leg room and generous 32ft³ (0.9m³) luggage space with 60kg capacity.

With full fuel plus reserves, the SR22 can cover about 650nm (1,200km) in about 3.5h of cruising on the high side of 180kt (330km/h) true airspeed. Interestingly, the approximately 68litres/h fuel consumption at 75% power gives the SR22 a range about 80km less than that of the 160kt SR20, which can eke out 700nm on 230litres, and the time difference is about 45min.

Of course, the SR20 can carry only about 260kg of payload with full fuel – but, with its 42litres/h efficiency, leaving a few litres behind lets the SR20 pilot pretty much match the SR22's full-fuel payload, but not the ground it covers in the same time. And covering ground is where the SR22 shines.

Getting started

With its fixed-gear simplicity and savvy design, pre-flight inspection of the SR22 takes as little effort as with any other simple aircraft. Check all the normal, logical spots – fuel tanks, engine oil, wheels, tyres, brake lines, control-surface hinges, lights, antennas – and it is ready to board. Despite its tall stance, a pair of fixed steps attached to the fuselage just aft of the wing trailing edge makes boarding relatively easy. White-tinted non-skid surfaces provide foot traction on a wing that elsewhere advertises a slippery nature with its gleaming seamless shine.

Once inside, you can see the Cirrus designers have placed virtually everything the pilot needs to touch within reach of the left seat – starting with the main switch panel, conveniently located on a horizontal surface on the bottom of the panel directly ahead of the pilot. The master switch, avionics switch, back-up electrical system and fuel boost-pump controls are wide rocker switches, both easy to read and operate. On the right side of this panel surface are dimmers for the interior lights.

Rock the fuel-pump switch back to its primer setting; when fuel flows stop the prime function and turn the key. Once the engine fires, advance the mixture to full rich, set the power at idle and the aircraft is up and running. Flick the avionics master switch and on comes the large Arnav multifunction display that dominates the centre of the panel.

Cirrus has stacked the avionics directly below the display, in a sports-car-like

“The SR22 is a double threat: to the high-power aircraft in its horsepower class, and to lower-powered aircraft in its price range”