PILOT FLIGHT CHECK:

THE BELLANCA SCOUT

A 1,500-mile test drive in a pint-sized plane that can do it all

by DON DOWNIE / AOPA 188441

■■ If a Jeep had wings it would be called a "Scout"; at least that's what Bellanca Aircraft calls it. This long-legged, fat-tired, growling child is the Minnesota planemaker's answer to what it hopes are backland aviation's needs.

Born some years ago as a hybrid Citabria, the Scout has now come into its own. The new Scout, certificated just this April, has a 180-hp Lycoming—30 more horses than that of its predecessor—as well as a larger stabilizer, larger wing and stronger gear.

"This is an entirely different airplane" than the old model Scout, maintained Bellanca spokesman Norm Dunn. He said the "original concept" of the Scout was fine, "but it just needed more beef to it."

And what is that now meaty concept, pray tell? The Bellanca people believed there was a market for a plane that could live in the wild on wheels, floats or skis, that could spray crops, train students, tug banners and gliders, or land on a patch with a quarter-ton of cargo.

Their belief is apparently valid. Some 75 of the original 150-hp Scouts were produced and sold and now the new Scouts are already back-ordered to October. Bellanca plans a production run of 160 Scouts in fiscal 1975 and would like to build more. "The demand for this aircraft is almost phenomenal," said Dunn.

Unfortunately, Bellanca's Osceola plant where the Scout is built is also the iron works for brothers Citabria and Decathlon and is running at near capacity now. Plans are being developed to expand the plant.

Bellanca was so confident of the new Scout's design it began running them through the production line while certification was still underway—a chancy proposition. If during the certification trials the Feds demanded some major modification, all the planes on the line would have had to be torn apart. Fortunately for Bellanca the Scout came through like a champ.

The plane was certificated on April 30. Bellanca got a production certificate the following day, and the day after that, the first three production Scouts were delivered. These people don't fool around.

We lucked out and got to ferry two new Scouts from their Minnesota incubator to Santa Paula, Calif., in May. Although the five-day, 1,500-mile cross-country was plagued by headwinds, turbulence and all-around scud, the twin Scouts were right at home.

My ferry partner, Robert Weston, had just 400 hours logged when we arrived at the factory, but his check-out in the unfamiliar bird was a snap. His quick adaption proved the little freighter, if anything, is easier to fly than a stock Citabria.

That beefed-up landing gear and oversized 8.00 by 6 tires, coupled with Cleveland disc brakes and conventional toe brake pedals, make landing this taildragger a fairly straightforward affair. The tailwheel is steerable and controlled by the pedals.

Aside from being strengthened, the new Scout's main gear has been lengthened by a foot. Trevor Litton-Smith, engineer for the Scout project, explained that the gear was stretched to give it a shorter takeoff roll. That it does. On one takeoff, with full fuel and 50 pounds of baggage, the bird was up in about 400 feet. The density altitude at the time was 10,000 feet.

The high gear also gives the plane a 13¾ inch prop clearance in the level position, which is reassuring when you're flying in concreteless country.

Increased power is obvious on takeoff and climb. While calm air was a rarity throughout the trip, we did record initial rate of climb in excess of 1,500 fpm. And that was with both 18-gallon tanks topped.

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BELLANCA SCOUT

Specifications

Engine	Lycoming O-360-C2A, 180 hp
Propeller	McCauley 80-in, fixed-pitch
Empty weight	1,315 lb
Useful load	835 lb (normal category)
Gross weight	2,150 lb (normal category)
Baggage	100 lb
Wingspan	36 ft 3 in
Wing area	180 sq ft
Length	23 ft
Height	7 ft 8 in
Fuel capacity	35 gal (usable)
Oil capacity	8 qt
Wing loading	11.9 lb/sq ft
Power loading	11.9 lb/hp
Basic price	$16,995

Performance

Top speed	135 mph
Rate of climb	1,100 fpm
Takeoff distance	485 ft
Landing distance	400 ft
Stall, full flaps	52 mph

A Jeep named "Scout," doing what comes naturally. Photos by the author.

The bigger engine was chosen to increase the Scout's useful load to 835 pounds, up over 300 pounds from the original model. Fitted with a 90-gallon Sorensen spray unit and operated in the restricted category, it can weigh in at 2,540 pounds—almost double its empty weight—and still be legal.

The aircraft lists at $16,995. The Sorensen unit costs an additional $1,952, thus making the Scout the lowest priced agplane around. It was to increase its low-speed handling as a bug bomber that Litton-Smith's men raised the Scout's vertical stabilizer by four inches, increasing its tail area by two-and-a-half square feet.

Two wing modifications on the new Scout include stretching it two-and-a-half feet to 36 feet 2 inches, and replacing the old droop-type wingtips with straight Hoerner tips. The latter change, explained Litton-Smith, was "basically due to aesthetics . . . I thought they [the droop tips] looked rather atrocious." Since they served no real aeronautical purpose, off they came.

Retained in the redesigned Scout, however, were proven features like the removable rear control stick and removable rear seat. Once the stick and seat are out, you can stuff 445 pounds of whatever back there. Bellanca supplies the cargo tiedown rings as standard equipment.

A third handy feature is the Scout's removable belly skin. You can strip the underside, from the main gear back to the tail, in about ten minutes. This makes inspection and service of the entire control system a simple proposition. The rest of the aircraft, excepting the engine compartment, is dacron-covered.

Also standard on the Scout are dual controls, nav, landing and strobe lights, shoulder harnesses front and rear and a quick jettison door.

When dawn broke on our day of departure, the weather didn't. Still wet and windy. A quick circle of the factory indicated we'd have to fly south to get to California because there was no way we could go west VFR.

Mason City, Iowa, was our first stop. Flight service gave surface winds of 22 knots, gusting to 35, from 270 degrees. The broad runways there are 30 and 35 with almost all the other airports in the area having north/south strips. We were in a bind.

The book lists the Scout's demonstrated crosswind component as only 15 knots, and while I suspect that the plane will handle considerably more than that, I didn't want to be proved wrong 1,500 miles from home. So we circled the field and elected to land across the runway, taxiway and runup pad. With full 27 degrees of flap, our touchdown was incredibly short.

This unconventional arrival proved to be almost standard procedure during the next four days. Of the 13 landings we made on the flight, we used conven-

Daddy Longlegs filling up during the long cross-country to his new California home.

tional runways only 7 times. We took off straight into the wind from the tiedown ramp in Dodge City, used a 600-foot taxiway at Tucumcari, N.M., and parking ramps did the job at Dalhart and Daggett. It was an interesting trip.

As with any new production plane, the Scout had its faults. Both Weston and I found the front seats too low, so we perched on our flight jackets all the way west. Yet even with this extra padding, there was still ample room between brains and beam.

Both planes were equipped with the regular Decathlon five-point harness attached to an inertia reel. Personally, I would prefer a manually-adjustable shoulder harness for flights in turbulent weather. The inertia reel locks up only with a brisk forward jerk and gives no protection from side loads. Both of us hit the sides of the cockpit in heavy turbulence.

The Whelen strobe units mounted on each wing also were something of a bother; they kept feeding back into the radio receiver. The cycling of the strobe capacitors sounds somewhat akin to an ELT signal so we taxied back for a check before our first takeoff. Inspection showed the Sharc 7 ELT, a $185 option, to be correctly switched to the armed position, and we surmised then that the strobes were the noisy culprit.

Ventilation was no problem until we reached the desert and then the airflow was uncomfortably inadequate. Weston tried opening his left window in flight, but his maps made like bats in a belfry, and he had to shut it and sweat.

The plane's single door is split horizontally, just like a J-3 Cub. You can fly with both the left and the door windows open up to 130 mph.

One really uncomfortable leg had nothing to do with ventilation. I noticed an intermittent surge of green 100 octane coming off the top of Weston's right wing. Closer inspection indicated that the gas cap was on, but every time the plane hit a bump, fuel spewed all over the sky. When we landed after that one-hour flight, Weston's plane took on 22.6 gallons while mine used only 9.8. The problem here was a faulty alignment of clips on the fuel caps. You had to use a pipe wrench to screw them down completely.

A final complaint has to do with the flaps. They're not very effective during landing with a light load. However, their use during takeoff does improve performance even though such a procedure is not included in the manual.

Rough air made speed checks a problem, but at 8,500 feet and 2,400 rpm I got 115–120 mph true out of the Scout.

In all, I thought it was a fun, though jarring, venture in a bird that seemed to thrive the rougher the going got. I wasn't so sure my fledgling ferry partner enjoyed it quite as much. I inquired as to his impression.

"There was just one thing I didn't like on this whole trip," he answered. "Having to give up the keys." □