

King Air C90A, which appeared as the Model 90 in 1964. However, the 33 and 90 have a few years to go to equal the V-tail Model 35 Bonanza's 35-year production run, which ended in 1982.)

What gives the F33A such value today is its combination of payload, perfor-

mance, and price.

Stultz and I flew N1550D, a 1989 F33A that Beech has assigned to its transportation department for use by employees on company business. Despite its 500 hours, it is a cream puff—shiny clean and well-equipped with an optional Bendix/King KFC 150 flight control system and air conditioning. It also has dual controls, a mixed blessing. Two can fly, but the massive yoke bar obscures the entire subpanel containing electrical switches and circuit breakers; gear, flap, cowl flap, and trim switches and indicators; and the power controls.

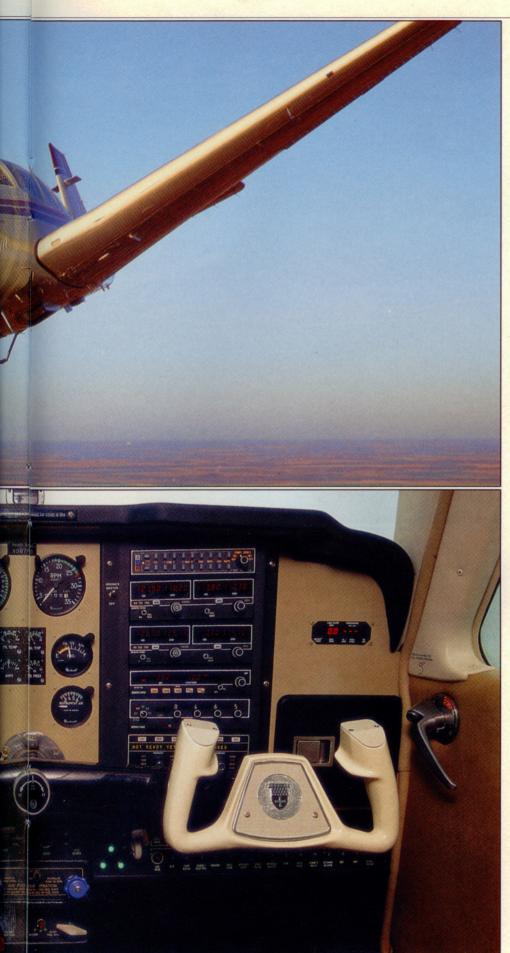
My only real beef with the F33A is the outdated panel configuration. Avionics are shunted off to the right side of the panel, while the engine instrument cluster is assigned center stage. Just about everything else is hidden away down on the subpanel. The flap switch is to the left of the gear switch, and the throttle and prop controls are separated by an auxiliary fuel pump switch, while the mixture control is below the throttle. Beech fixed the panel layout on the 36 series in 1984, but the F33A remains

unchanged.

It's the little things that, even after all these years, set the F33A apart. The baggage door is cargo size and fitted with large, robust latches. The baggage area is cavernous and can swallow 270 pounds of cargo. A fifth seat can be installed in the baggage hold, but its use is limited by weight and balance restrictions. All placards are silkscreened onto the panels rather than applied as adhesive labels. Strobe and recognition lights are faired into the metal wing tips. The three-light strobe system is standard equipment, as are the heated pitot tube and a profusion of static wicks.

The cabin is tall, with plenty of legand headroom. The generously sized windows contribute to the feeling of spaciousness and make for excellent inflight visibility. The standard F33A interior is by no means Spartan. Cloth seats and carpeting throughout are included in the base price. Leather is not listed as an option, but in fact, if a customer demands to lounge on King Air leathers, it will be done. The leather upholstery shown in the photographs with this





story is in a 1990 F33A offered by United Beechcraft in Wichita.

The F33A is a solid "full fuel and three adults" airplane. N1550D was topped off with 74 gallons usable fuel when three of us boarded for a lunch flight to Ponca City, south of Wichita. The calculations showed that we could top off the tanks at Ponca City, then go in and eat 30 pounds of excellent Mexican food at the airport café and still stay on the legal side of the 3,412-pound maximum ramp weight. This despite Beech's inhouse F33A being a bit heavy on empty weight due to the 70-pound air conditioning system. Minus the AC and 10 gallons of fuel, another Beechcrafter could have joined us for lunch.

The 285-horsepower Teledyne Continental IO-520 engine and three-blade, 80-inch McCauley propeller give the F33A good performance. After takeoff, power was reduced from full throttle and 2,700 rpm to 25 inches manifold pressure and 2,500 rpm. The initial 96knot best rate climb speed yielded 1,200 feet per minute and no view over the nose. At a more comfortable 115 knots, the rate was 800 fpm, which decreased to 600 fpm as we passed through 8,000 feet. The F33A does not have rudder trim, but the engine is canted to offset torque, and it took minimal rudder pressure in the climb to center the ball.

Bonanzas have a deserved reputation for smooth, effortless handling, especially in roll. Control surfaces are attached with roller bearings, and the ailerons and rudder are interconnected. In steep turns, the airplane can be trimmed for hands-off flying.

Once at altitude, we sampled a variety of cruise power configurations and found performance to be slightly better than promised in the pilot's operating handbook. At 8,500 feet and 75-percent power (2,500 rpm and full throttle), indicated airspeed was 150 knots for 173 knots true on 14.4 gallons per hour. But engine and airframe seemed to prefer 65-percent power (2,300 rpm). Vibration was noticeably less than at 75 percent or even 55 percent (2,100 rpm).

At 65 percent, cruise true airspeed worked out to be about 165 knots on just under 14 gph. Four hours flown at 65-percent power would be a comfortable leg. That would leave a full hour's fuel in the tanks for insurance. Don't want to stop enroute? Then back the power off to 45 percent and drone along at about 135 knots for 6.5 hours.

Bonanzas build up speed quickly in a

descent, but the F33A has some built-in safeguards: The landing gear and approach flaps can be extended at 154 knots, 12 knots below Vno. The drag from gear and flaps is such that the nose can be pushed over and the VSI pegged at better than 4,000 fpm down without exceeding 154 knots.

The high gear and flap speed allows for great flexibility in the terminal area. We practiced a couple of high-speed instrument approaches, flying the localizer course at 165 knots. Coming up on the outer marker or final approach fix, reduce power to slow to 154, then dump gear and flaps and slide down the final approach course at about 120 knots, which is within the white arc.

If the landing is the measure of a flight, then an F33A pilot will finish with a flourish every time. Dual pitch-trim tabs are helpful for nailing the final approach speed and angle, and the oversize main tires help to make each touchdown a squeaker. It really is one of the nicest-landing airplanes.

The F33A is certified in the Utility category to higher load limits than is a Normal category airplane. Beech built an aerobatic version, the F33C, that is identical to the 33A except for some structural strengthening in the fuselage.

The standard Bendix/King avionics package in the F33A includes a pair of KX 155 nav/coms (one with glideslope receiver) and indicators, KR 87 ADF and indicator, KN 63 DME and indicator, KT 76A transponder, KMA 24 audio panel with marker beacon, and avionics master switch.

Up to now, Beech has not included an altitude encoder in the standard package. To do so would have affected the bottom line, and not every customer wanted one. But with altitude encoding now a prerequisite for operating in ARSAs as well as within 30 miles of a terminal control area airport, Beech has decided to add a Bendix/King KEA 130A encoding altimeter to the standard equipment list for 1991.

Few factory-installed options are available for the F33A compared to the 36-series Bonanzas. The most popular is the Bendix/King KFC 150 flight control system, which includes a two-axis autopilot, horizontal situation indicator, and flight director. Other avionics options include a 3M WX-1000 Stormscope, yaw damper, control-wheel microphone button, and ground communications switch. This year, Beech is adding a Bendix/King KLN 88 loran and control-



The generously sized windows contribute to the feeling of spaciousness and make for excellent in-flight visibility.





Beech F33A Bonanza Base price: \$156,000

Specifications

		opeciment	IOIIO	
	Powerplant	Teledyne (Continental IO-520-BB,	
			285 hp at 2,700 rpm	
	Recommended	TBO	1,700 hr	
	Propeller		three-blade, constant-	
			speed, 80-in diameter	
	Length		26.7 ft	
	Height		8.25 ft	
	Wingspan		33.5 ft	
	Wing area		181 sq ft	
	Wing loading		18.8 lb/sq ft	
	Power loading		11.9 lb/hp	
	Seats		4-5	
	Cabin length		10.08 ft	
	Cabin width		3.5 ft	
	Cabin height		4.17 ft	
	Empty weight		2,237 lb	
	Empty weight, as	tested	2,365 lb	
	Max ramp weight		3,412 lb	
	Useful load		1,175 lb	
	Useful load, as tes		1,047 lb	
	Payload w/full fu		731 lb	
	Payload w/full fu		603 lb	
	Max takeoff weigh	nt	3,400 lb	
	Max landing weig	ht	3,400 lb	
	Fuel capacity, std		80 gal (74 gal usable)	
			480 lb (444 lb usable)	
	Oil capacity		12 qt	
	Baggage capacity		270 lb, 35 cu ft	
Performance				
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1,000 ft

1.740 ft

Takeoff distance, ground roll

Takeoff distance over 50-ft obstacle

Max level speed, sea level	182 k
Cruise speed/endurance w/45-min	rsv, std fuel
(fuel consumption)	
@ 75% power, best economy	172 kt/4.2 h
	pph/15.2 gph)
@ 65% power, best economy	
	pph/12.3 gph)
@ 55% power, best economy	
	pph/10.4 gph)
Service ceiling	17,858 ft
Landing distance over 50-ft obstacle	
anding distance, ground roll	760 ft
Limiting and Recommended	
Vx (best angle of climb)	77 KIAS
Vy (best rate of climb)	96 KIAS
Va (design maneuvering)	134 KIAS
Vie (max flap extended)	154 KIAS
VIe (max gear extended)	154 KIAS
Vlo (max gear operating)	134 KIAS
Extend	154 KIAS
Retract	154 KIAS
/no (max structural cruising)	167 KIAS
Ine (never exceed)	196 KIAS
/s ₁ (stall, clean)	
	64 KIAS
so (stall, in landing configuration)	52 KIAS

Max demonstrated crosswind component

1,157 fpm

Rate of climb, sea level

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, sea level, gross weight conditions unless otherwise noted.

For more information, contact Beech Aircraft Corporation, Post Office Box 85, Wichita, Kansas 67201-0085; telephone 316/681-7111.

wheel-mounted transponder ident button to the options list.

Back in 1985, Beech Aircraft Corporation launched an effort to boost sagging sales of the F33A, the sole remaining four-place, piston-powered single produced by the company. It was a simple plan: Make the most popular optional features, including IFR avionics, standard equipment, and price the equipped airplane attractively.

Although the \$171,000 price represented a saving of about \$11,000, the cut was not deep enough to pull customers off the street. Beech bit the bullet again and dropped the price further, to \$164,750. Still the response was modest.

In 1987, Beech recalculated. To roll back the price even further, some economies of scale were necessary. Production was increased to 100 airplanes for the year. (About 30 had been built the year before.) Equipping each identically and offering few options made for more efficient and less costly manufacturing. In addition, Beech got commitments from Teledyne Continental and Bendix/King to provide engine and avionics at special prices and passed the savings along.

The savings were extraordinary, given the history then of large annual price hikes for general aviation airplanes. List price of a 1987 F33A was \$131,750—a \$33,000 discount over the 1986 model. Prices have since crept up incrementally, an average of about 5 percent per year. A 1990 F33A listed for \$156,000. Beech has not announced the 1991 price, but it will be higher. One reason is the addition of the encoding altimeter. Another is that Beech's profit margin on the F33A is said to be slim to none.

Late in 1990, rumors began to surface that Beech would back out of building piston-powered models entirely. Not true, according to Beech. In fact, an increase in production had been planned for 1991. However, rising fuel prices and uncertainty over the direction of the economy softened the market for new airplanes. Beech now plans to build 100 F33As in 1991.

There may not be much that is new about the F33A, but it still is one of the most popular singles on the market and has been since Beech began its special pricing program. That says a lot about the depth of pilots' regard for the name Bonanza. And there is one other remarkable fact: You probably can buy one in 1991 for no more than you would have paid a half-dozen years ago. Not a bad value, that.