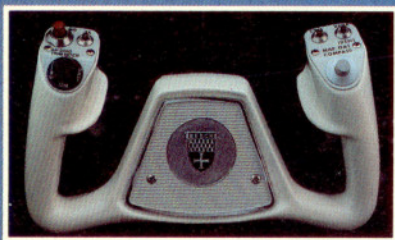


# BEECH BONANZA F33A

**If you have always wanted a Bonanza  
but were afraid of the price, Beech  
now may have a deal you cannot refuse.**

BY MARK M. LACAGNINA



A major topic of conversation in general aviation circles during the past few years has been the incredible slump in sales of new aircraft. Clinging to hopes for a return to the boom years of the late 1970s, airframe manufacturers have heaped ashes upon themselves as innocent victims of circumstances beyond their control. Inflation, high interest rates, the flagging economy and, then, lack of buyer confidence in a recovering economy were among the villains marched to the pillory in news releases







## F33A



and speeches to market analysts.

One villain, however, has been left to hide in corporate haystacks, plainly visible to anyone who has considered buying a new aircraft. The villain has two faces: One consists of price tags imprinted with numbers that have outpaced the steady climb in consumer price indices; the other is decades-old technology stamped with the labels of "new" and "improved."

There is no doubt that there is considerable pent-up demand for new aircraft. What is needed, more than new excuses, is some good, old-fashioned salesmanship: the old-school "give them a deal they can't refuse."

At least one manufacturer, Beech Aircraft, is experimenting with this gutsy brand of marketing; and the company has selected a likely airplane, the F33A Bonanza, as its guinea pig.

The airplane was introduced as the Model 33 Debonair in 1960 (see "Debonair," April 1982 *Pilot*, p. 86). It was basically a stripped-down Model M35 Bonanza with a conventional tail, a smaller engine (a 225-hp Continental IO-470) and a smaller price tag: \$19,995 versus \$25,300 for the V-tail Bonanza. The Debonair was intended to attract buyers away from Piper's popular Comanche 250, which cost \$19,800 in 1960. In that respect, the airplane did well—233 were sold the first year. (That, however, was the record.) The Model 33's name was changed to Bonanza in 1968. There were three Model 33s: the E33 retained the 225-hp engine; the E33A had a 285-hp Continental IO-520 engine; the C-model was certified for aerobatics. The basic model designation was changed to F two years later.

Beech intended the Model 33 Debonair/Bonanza to appeal to pilots who wanted a relatively low-cost, economical, high-performance single. (Exterior paint initially was an option.) Several things have thrown that formula into a cocked hat. One is that buyers typically have rejected the no-frills concept, selecting enthusiastically from the F33A's options list. Another is the base price, which has tripled in the past 10 years while the consumer price index merely doubled. In addition, 14.5 gallons of fuel an hour might have been peanuts once, but no more.

As a result, pilots looking for an eco-

nomical, high-performance single have found other airplanes—particularly Mooney Aircraft's 201 and 231, much more attractive. Beech sold 29 F33A Bonanzas last year; Mooney sold five times as many airplanes.

That obviously got Beech's (or parent-company Raytheon's) attention. It isn't hard to imagine a late-1984 marketing meeting, with a paneled-office dweller pounding the table, saying something like, "Now, we know those pilots really would rather be flying Bonanzas. So, let's make them a deal they can't refuse."

Here's what Beech did: First, they looked at F33A sales documents and made a list of the most popular items selected from the options list. The list included: a stack of King Silver Crown radios; a large cargo door; a three-blade propeller; "super" soundproofing; various exterior and interior light systems; an exhaust-gas temperature gauge; and an alternate static source. These items were taken off the options list and made standard equipment.

Then, Beech figured the 1984 price for a Bonanza F33A with this equipment. The total came to \$181,059. The company then took a deep breath, cut the figure to \$170,085 and established it as the suggested selling price for an equipped 1985 F33A.

Did it work? One Beech staffer told *Pilot* that response to the campaign has been very positive.

Although interest apparently has been stimulated, sales have not, yet. Only five F33As were delivered during the first four months of this year. So, in an apparent attempt to get hesitant buyers off the dime, Beech cut the price to \$167,726 last month.

What Beech is now offering is an IFR-equipped (by the company's definition) F33A for only \$7,000 more than the base price of the six-seat, 300-hp A36 Bonanza. The F33A's price tag also is very attractive when compared with those for a similarly equipped Mooney, Cessna 210R Centurion or Piper Saratoga SP.

The F33A's standard radio stack includes two KX-165 nav/coms (one with a glideslope receiver), KN-63 distance-measuring equipment, a KT-76A transponder, a KR-86 automatic direction finder and a KMA-24 audio control panel and marker beacon receiver.





Equipped according to the specifications recommended in *AOPA Pilot's* IFR Operations/Equipment Category—which includes a three-axis autopilot, a second transponder, an encoding altimeter, an area navigation system (RNAV), anti-icing/deicing and weather detection/avoidance equipment (see “AOPA Pilot Operations and Equipment Categories,” June *Pilot*, p. 94)—the price comes to more than \$200,000.

*Pilot* editors wanted to take a close look at Beech's new package-deal Bonanza, but the only airplane available for short-term lease was the factory demonstrator, N6455U, which is relatively lavishly equipped. We leased it, anyway. And, although we convinced ourselves that we could live without some of N6455U's options, we did find the KFC-200 flight control system (\$24,175) and KNS-80 RNAV (\$2,395) very handy at times. We also found that the optional ventilation blower

(\$780) was able to take some of the misery out of ground and slow-speed operations when flying in hot weather.

I was unpleasantly surprised to find a few rough edges in the fit and finish of the airplane, which had only a little more than 100 hours on the Hobbs meter. A corner of the panel covering was hanging loose, and the carpets in front of the rear seats were poorly cut. The keys fit poorly in the cargo and

passenger door locks. The aileron trim decal came loose several times, and we had a few problems with screws that backed out on the push-buttons for the vernier engine controls. If these appear to be minor details, the point is that I have rarely seen even small examples of shoddy workmanship in Beechcraft products.

The F33A Bonanza, which is still called Debonair by some die-hard pilots and air traffic controllers, has pleasing lines and an appearance of great structural strength. The apparent strength is more than skin deep, of course; the airplane is certified and built to the standards for Utility category airplanes.

A proper preflight inspection requires relatively little time and effort for the pilot. The fuel system has three drains—two for the bladder sumps and one for the fuel selector valve sump. Usable fuel capacity is 74 gallons, which is enough to keep the engine





# F33A

running at 75 percent power for nearly four and a half hours with a 45-minute reserve. Each tank has a tab with markings to facilitate visual inspection of fuel quantity. To prevent potential unporting, takeoff is prohibited with less than 13 gallons of fuel in either one of the tanks.

The upper portions of the engine cowl of the F33A can be opened for a thorough visual inspection of oil and brake fluid quantities, and to check engine component and battery security and condition. The Hartwell cowl latches (lever mechanisms) are easy to operate but do require some care and attention in order to ensure that the cowl sections are secured properly.

The large cargo door facilitates access to the cavernous baggage compartment. Maximum capacity of the 37-cubic-foot compartment is 270 pounds. The compartment also provides the space for a fifth seat—a 16-pound, \$1,350 option.

There is substantial flexibility for weight and balance considerations. Maximum ramp weight is 3,412 pounds, and standard payload with full fuel is about 843 pounds. Beech's well-equipped demonstrator was within the loading envelope with four 170-pound people, 20 pounds of baggage and full fuel aboard.

The Bonanza F33A is a delightful airplane to fly. The cabin is roomy, and the seats are very comfortable. Visibility is excellent, except on initial climb, when the high eyebrow of the panel affects forward visibility.

Performance is impressive. The airplane accelerates rapidly on the takeoff roll. Several times, I caught myself glancing at the manifold pressure gauge to ensure that I was not overboosting the engine. The 285-hp, fuel-injected Continental IO-520 is not turbocharged, of course, but it does give the feeling that it is boosted. Another *Pilot* staff member reported very good performance during a maximum-performance departure he conducted to avoid wake turbulence from a heavy airliner. Rate of climb at maximum continuous power (full throttle and 2,700 rpm) is 1,167 fpm. I found that cruise climb power (25 inches and 2,500 rpm) and 120 knots resulted in climbs between 700 and 900 fpm, on



warm days, with good forward visibility. One climb of 10,700 feet in this configuration was made in 13 minutes in very warm air.

According to the performance tables in the pilot's operating handbook, the F33A's cruise performance is best at 6,000 feet on a standard day. The tables show 172 knots, true, and 15 gph at 75 percent power.

The Bonanza's controls are light and responsive. The aileron and rudder controls are interconnected, and shallow turns can be made without using the rudder. There is no pilot-controllable trim system for the rudder, and the pilot's right leg gets a workout during takeoff and climb. A single, throw-over control column is standard; dual controls are available for an extra \$650.

Yaw and roll stability are not the F33A's strong points. The airplane does an endless series of Dutch rolls in even light turbulence; and when a wing drops, it tends to stay down unless the pilot takes corrective action. These characteristics, combined with the light control feel, would suggest that the airplane is a handful to hand-fly on instruments. This subject is debatable, but the consensus among *Pilot* staff members who flew the Bonanza was that the responsiveness and delightful feel of the controls are worth the extra work load, which includes concentration on basic attitude flying.

What really adds to pilot work load—especially for pilots, like myself,

**The F33A is built to  
the standards for  
Utility-category airplanes.**







who have not flown the airplane long enough for intimate familiarity—is the arrangement of controls and instruments. The F33A's panel design reflects misguided symmetry, and a lot of space is wasted. Most of the instruments are mounted in a cream-colored plastic floating panel in front of the pilot. The radio stack is in a black metal panel in front of the right seat. In the middle, set in simulated wood-grain vinyl in a hub-and-spokes arrangement, are the engine gauges and fuel-quantity indicators. Engine, flap and landing gear controls, as well as the course deviation indicators, switches and circuit breakers, are scattered in low sub-panels and blocked from the pilot's normal line of sight by the massive flight-control bar.

I was checked-out in N6455U by *Pilot* Editor Edward G. Tripp, who picked up the airplane at the factory. Tripp drilled into my mind the necessity to check and double-check each and every action, before and after. Suffice it to say that I discovered his advice to be very well founded. With considerable craning and neck-twisting, I conducted one ILS approach to minimums in light turbulence with no problem at all. Then, relaxing after taxiing the airplane to the pumps, I wondered why the engine would not shut off. I discovered that I was cycling the propeller control, which is located where the mixture control resides in other airplanes that I regularly fly. (The mixture control in

the F33A is beneath the throttle.)

The airplane could greatly benefit from the intelligent panel redesign performed last year with the 36-series Bonanzas and 58-series Barons (see "Pilot News: Beech Repanels Bonanza, Baron," December 1983 *Pilot*, p. 27). If nothing else, we believe Beech should at least move the landing gear position lights where the pilot can check them in a normal scanning pattern.

However, our nit-pickings with the F33A's panel paled in comparison with the anguish we suffered when our short-term lease of N6455U expired and we had to return the airplane to Beech. The Bonanza helped us to fulfill a number of editorial missions in a variety of weather conditions and traffic situations. (For example, one hub airport controller asked Tripp to maintain 165 knots to the marker. The relatively high landing gear and flap speeds of the F33A helped to make it a no-sweat *fait accompli*.)

Beech has taken a bold step in its marketing program for the F33A, and we hope that it is, indeed, an aggressive effort to stimulate sales and not an end-game strategy for the last of the short-fuselage Bonanzas. (Production of the V-tail Model 35 was suspended a few years ago.)

In short, the F33A is a delightful and capable airplane. If potential Bonanza buyers have, indeed, been holding out for a deal they cannot refuse, they need hold out no longer. □

#### Beechcraft Bonanza F33A

Base price: \$167,726

Price as tested: \$200,612

AOPA Pilot

#### Operations/Equipment Category\*:

Cross-country: \$173,640

IFR: \$206,240 to \$245,800

#### Specifications

Powerplant	Teledyne Continental IO-520-BB
	285 hp @ 2,700 rpm/full throttle
Recommended TBO	1,500 hr
Propeller	McCayley constant-speed
	three-blade, 80 in dia
Recommended TBO	1,500 hr or 5 yr
Length	20 ft 8 in
Height	8 ft 3 in
Wingspan	33 ft 6 in
Wing area	181 sq ft
Wing loading	18.8 lb/sq ft
Power loading	11.9 lb/hp
Seats	4 or 5
Cabin length	10 ft 1 in
Cabin width	3 ft 6 in
Cabin height	4 ft 2 in
Basic empty weight	2,125 lb
Empty weight, as tested	2,268 lb
Max ramp weight	3,412 lb
Useful load	1,287 lb
Useful load, as tested	1,144 lb
Payload w/full fuel	843 lb
Payload w/full fuel, as tested	700 lb
Max takeoff weight	3,400 lb
Max landing weight	3,400 lb
Fuel capacity, std	480 lb (444 lb usable)
	80 gal (74 gal usable)
Oil capacity	12 qt
Baggage capacity	270 lb, 36.7 cu ft

#### Performance

Takeoff distance, ground roll	1,000 ft
Takeoff distance over 50-ft obst	1,769 ft
Max demonstrated crosswind component 17 kt	
Rate of climb, sea level	1,167 fpm
Cruise speed/endurance w/45-min rsv	
(fuel consumption)	

@ 75% power, 8,000 ft 170 kt/4.4 hr  
(86.4 pph/14.4 gph)

@ 65% power, 8,000 ft 163 kt/4.8 hr  
(79.8 pph/13.3 gph)

Service ceiling	17,858 ft
Landing distance over 50-ft obst	1,324 ft
Landing distance, ground roll	800 ft

#### Limiting and Recommended Airspeeds

V <sub>x</sub> (Best angle of climb)	77 KIAS
V <sub>y</sub> (Best rate of climb)	96 KIAS
V <sub>a</sub> (Design maneuvering)	134 KIAS
V <sub>fe</sub> (Max flap extended, approach)	154 KIAS
V <sub>fe</sub> (Max flap extended, full)	123 KIAS
V <sub>le</sub> (Max gear extended)	154 KIAS
V <sub>lo</sub> (Max gear operating)	154 KIAS
V <sub>no</sub> (Max structural cruising)	167 KIAS
V <sub>ne</sub> (Never exceed)	196 KIAS
V <sub>s1</sub> (Stall, clean)	64 KIAS
V <sub>so</sub> (Stall in landing configuration)	52 KIAS

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

\*Operations/Equipment Categories are defined in June 1985 *Pilot*, p. 94. The prices reflect the costs for equipment recommended to operate in the listed categories.