BRITAIN'S BRAWNY BEAGLE

This puppy's more like a bulldog than a greyhound

BY PETER A. BEDELL

Why show up in an ordinary Cadillac when you could have brought a classic Rolls-Royce Silver Cloud limo? That's the sort of analogy that would describe taxiing up to the ramp in the rare Beagle B206, compared to any other light twin. The Beagle is radically different enough to swing the heads of even casual ramp lurkers.

PHOTOGRAPHY BY MIKE FIZER

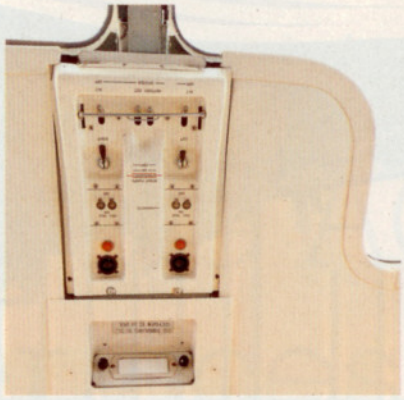
First, the Beagle is big. The fact that there are only two or three side windows (depending on which side you're looking at) belies the airplane's size. Those windows are huge and as you near the airplane, you quickly realize this is a whole different doggie. A huge door with a drop-down airstair welcomes you to a massive cabin with a three-place, side-facing divan that reminds one of corporate jets from the 1960s and 1970s. The size and width of the cockpit are more in line with that of the Beechcraft Twin Bonanza, but with the visibility of a modern Light Sport airplane. Designers of the Beagle knew how to make an impression. Walking up a wing and stepping into a tiny cabin would not do.

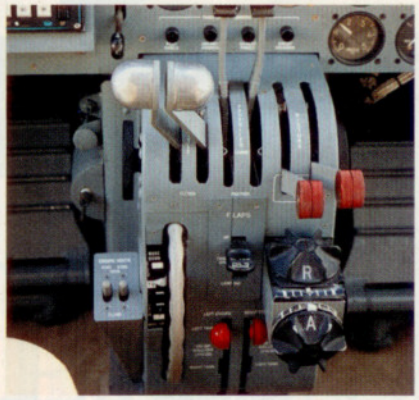
Once seated, Beagle passengers are bathed in an airy cabin, in an attempt to negate any feelings that you are in a "small airplane."

Gene Whiddon of Fort Lauderdale, Florida, knows the feeling—he currently owns two Beagles. Everywhere he goes people ask, "What is it?" As there are only five flying in the world, the Beagle has become quite a rare breed since its relative heyday in the 1960s and 1970s. Beagle is an acronym, of sorts, for British Executive and General Aviation Limited. It's a somewhat unfortunate name given to an airplane that seems built more like a bulldog.

Beagles were designed to military standards in the hopes that the company would land a lucrative contract to supply airplanes to the Royal Air Force. Each Beagle was hand built and very labor intensive. Under the skin, you'll find all of the Beagle's innards are coated with polysulfate to resist corrosion. Nearly all American airplanes of this vintage left the factories naked on the inside.

Beagle hoped to build 80 B206s for the military alone. In the end, the RAF ordered only 20, with an option for 20 more, and orders from individuals were scarce. The company relied on infusions of government cash in the 1960s to keep production moving, but the labor-intensive design meant just a trickle of airplanes out the door—a total of 43, to be exact. When Beagle approached the government for another handout in 1969, Parliament balked, and Beagle was out of business.





The panel is large enough to accommodate any avionics gear an owner might need (below). Big-airplane features include a beefy power control quadrant and an overhead panel. Note the airspeed indicator, which requires you to add a 0 for indicated airspeed. The tachometer reads engine rpm rather than prop rpm.

At first glance, the Beagle doesn't look like a 7,500-pound airplane, partially because of the large windows. As you near the Beagle, however, its ramp presence is imposing with its huge props and 45-foot wingspan. The large props turn slowly, thanks to the reduction gearing of the Continental engines.

The late Jim Hill Sr. worked for the sole U.S. importer of Beagles in the late 1960s at Miami's Opa Locka Airport. When the British gave up producing the Beagle, Hill bought all the parts, jigs, and tooling; crated it; and shipped it to his shop at the Fort Lauderdale-Hollywood International Airport. In 1971, South Florida Aircraft Sales and Leasing set up shop on the north side of the field; Hill, together with his son, Jim Jr., provided "factory" support for Beagles all over the world. In the 1960s, the "Beagle Barn"—as it was informally known among airport locals—did a lot of business maintaining, acquiring, and restoring Beagles from around the globe. Then, as today, owners loved the big-airplane quality and roominess.

In the following decades, the Hills improved and modernized Beagles. "Those were exciting times, a lot of fun," said Jim Jr. But over the years, the relatively few Beagles that existed, disappeared—one at a time. They were abandoned, stolen by drug runners, or crashed, and as a result Hill's business slowed to a trickle. A huge blow to the Beagle was the passing of Hill Sr. in 1992. Today, few Beagles remain that Hill Jr. is aware of. Because of this tiny fleet, Hill has only a corner of a gang hangar at one of the airport's FBOs to support the few airworthy airframes.

Great growl

Whiddon, a real-estate company president and business partner with Hill, is deciding which of his two Beagles to keep. Both of Whiddon's airplanes are Series II Beagles with turbocharged, geared Continental engines. There are no Series I Beagles around anymore, and there is only one Series III Beagle—in Brazil—that Hill is aware of. The III ditched the tadpole-like fuselage for a fastback-style tail and added another seat behind the boarding door.

The Beagle's Continental GTSIO-520-C engines are identical to those used on the Cessna 411, also built in the 1960s. For a more modern comparison, the powerplants are very similar to the 375-horsepower GTSIO-520s used on the Cessna 421. But the Beagle's engines are manifold pressure limited to create only 340 horsepower, giving the Beagle a better shot at making its 1,600-hour TBO.

Because the engines utilize a 0.75:1 reduction gearbox, the large props turn at a slow 1,900 rpm, a more efficient setting compared to faster-spinning, small-diameter props on other twins such as the Beechcraft Duke. Largely based on rumor, many pilots label geared engines a nightmare. In reality, however—if flown often, maintained correctly, and treated with respect—these engines should make it to term. Plus, they sound really cool when they fly over.

The -C version of the engines are out of production but parts should be readily available, since most are common to the -M used in the 421. Factory overhauls start at $42,986 for the similar M model. Hill said the last field overhaul he had done on a Beagle engine cost about $23,000.

The Beagle's wing design is something vastly different from its American counterparts. Except for the tips, the wing is a one-piece design employing flush riveting throughout. Just looking at the Beagle's beautifully smooth and tapered wing tells you it's a labor-intensive design. Double-slotted Fowler flaps morph the wing from high-speed cruiser to low-speed flier.

Performance-wise, the Beagle lacks the zippy takeoff and climb performance of a Beechcraft Baron, for example. Flaps (20 degrees) are needed for takeoff to heft all that weight off the runway at a sedate 75 to 80 knots. Once cleaned up and climbing, you can expect about 1,000 fpm at max takeoff weight and 110 knots. With two average-size guys and half fuel, the Beagle mustered about 1,300 fpm on a warm Florida day.

Once you lower the nose for cruise flight, the Beagle's efficient wing begins to pay dividends. At a density altitude of more than 11,000 feet, the Beagle topped out at 187 KTAS, a respectable speed for an airplane as heavy and roomy as the Beagle. Performance of the Beagle seemed in the league of turbocharged Piper Senecas. With engine rpm set at 2,600 rpm (propeller rpm 1,900), the big Continentals consume about 20 gph per side.

The double-slotted Fowler flaps allow the Beagle to fly at incredibly low speeds. Because of this, the Beagle can land on runways that it can't get out of. Notice the use of flush riveting for a smooth surface. That long, smooth wing is optimized for high speed and makes descent planning a challenge for Beagle pilots.

Below 10,000 feet, most normally aspirated twins like the Baron and Cessna 310 will outrun the Beagle on about 10 fewer gallons per hour, but Beagle owners like Whiddon are happy to forgo the speed for the voluminous cabin. At higher altitudes, Beagles can true out at 200 knots or better if you're willing to strap on oxygen.

Up front, the cockpit visibility is unparalleled—almost helicopter like. The seats are high, providing a vista over the nacelles. The windshield is so low on the side that it starts at your thigh, allowing you to observe the cowl-flap position and the main landing gear doors (when open) far below you. The rear edge of the windshield goes back to your shoulders. Despite the greenhouse of acrylic, the air conditioning did an adequate cooling job on an 80-degree Fahrenheit day in Fort Lauderdale.

The Beagle is a joy to fly. Baron owners will feel right at home in the Beagle when it comes to roll sensitivity and fun-to-fly characteristics. The pushrod-actuated controls provide a solid, direct connection to the control surfaces. Pitch forces are heavier than roll but still pleasing. Trimming is only required in pitch during normal flight profiles.

Descent planning is critical in the Beagle. Like most light twins, the airplane doesn't go down and slow down simultaneously. And the efficient-cruising, long-span wing makes the Beagle harder to get down than other light twins. Even if you get the gear and flaps out to 20 degrees, the descent rate doesn't get much better—about 1,000 feet per minute. Adding to the problem is the low 140-knot limitation on dropping the gear and deploying flaps.

The Beagle has an auto-trim function that trims the nose down as the effective flaps are extended, to reduce the amount of pitch-up. Approaches are very stable and flown at about 100 to 120 knots, with flaps 20. With landing assured and flaps 45, the Beagle can be slowed to about 95 knots over the fence on a visual approach. Ease the power back and hold the nose off, and the Beagle will land nicely on the mains. With just two up front, the pitch forces are high to fight the big flaps—but a few passengers in the rear ease the landings.

With that long, smooth, and efficient wing, the Beagle stalls at a very slow 60 KIAS in the landing configuration. There is no stall warning system other than the wing's natural prestall buffet. With such docile slow-speed handling, you can squeeze the Beagle into some short runways. Unfortunately, it can't get out of short strips, so plan accordingly. Hill recommends using runways of 3,000 feet or more.

There is no nose baggage compartment, but there are two small wing lockers in the nacelles. The right one houses the alcohol tank (for propeller anti-ice), leaving only enough

SPECSHEET

1969 Beagle B206S Series II

Base price 1969: $125,000

Specifications

Powerplants	Two 340 hp Continental GTSIO-520-C
Recommended TBO	1,600 hr
Propellers	McCauley three blade, 90-in dia, full feathering
Length	33 ft 8 in
Height	11 ft 4 in
Wingspan	45 ft 9 in
Wing area	214 sq ft
Wing loading	35 lb/sq ft
Power loading	11 lb/hp
Seats	8
Empty weight, as tested	5,568 lb
Useful load, as tested	1,957 lb
Payload w/full fuel, as tested	589 lb
Max takeoff weight	7,500 lb
Zero fuel weight	7,050 lb
Fuel capacity, std.	234 gal (228 gal usable) 1,404 lb (1,368 lb usable)

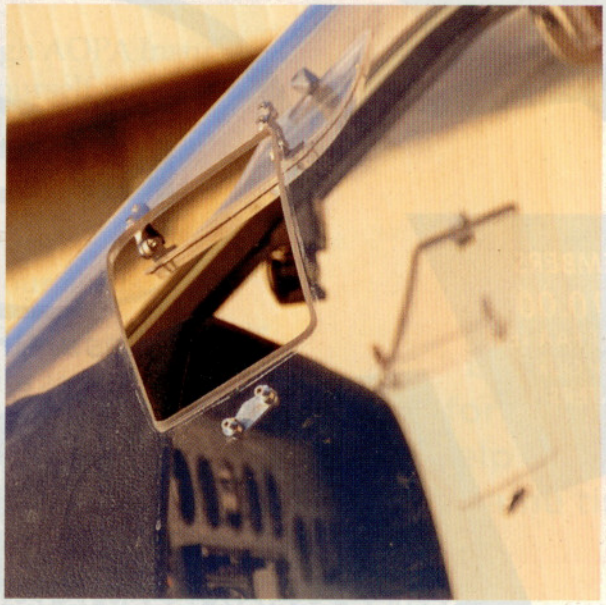
Performance

Takeoff distance over 50-ft obstacle	2,400 ft
Max demonstrated crosswind component	23 kt
Rate of climb, sea level	1,100 fpm
Single-engine ROC, sea level	190 fpm
Cruise speed/endurance w/45-min rsv, std fuel (fuel consumption, ea engine)	
@ 75% power, best power, 16,000 ft	200 kt/4.5 hr (120 pph/20 gph)
@ 60% power, best power, 12,000 ft	185 kt/5.9 hr (102 pph/17 gph)
Service ceiling	30,000 ft
Single-engine service ceiling	8,000 ft
Landing distance over 50-ft obstacle	3,100 ft

Limiting and Recommended Airspeeds

V_{MC} (min control w/critical engine inoperative)	66 KIAS
V_X (best angle of climb)	85 KIAS
V_Y (best rate of climb)	110 KIAS
V_{YSE} (best single-engine rate of climb)	100 KIAS
V_A (design maneuvering)	155 KIAS
V_{FE} (max flap extended)	140 KIAS
V_{LE} (max gear extended)	140 KIAS
V_{NO} (max structural cruising)	210 KIAS
V_{NE} (never exceed)	235 KIAS
V_{S1} (stall, clean)	67 KIAS
V_{SO} (stall, in landing configuration)	60 KIAS

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.



The large entry door and stairs are far more civilized than climbing up a wing and stepping into a cramped cabin like many other light twins. The vent windows in the windshield can be opened in flight and suck air out of the cabin. Jim Hill Sr. used to smoke cigars in his Beagle without smoking up the cabin.

"When you examine the robust construction and innovative design of these aircraft, it is obvious that it just cost too much to manufacture."

—Jim Hill Jr.

room for a fuel sampler, some rags, and maybe a quart of oil. The lockers have a 25-pound capacity, but unless you're carrying lead weights, you'll bulk out the small compartments before you ever reach the weight limit. Sizable luggage has to ride in the cabin.

Cabin seating is comfortable with room for up to six in the back. The rearmost seat is wide enough for two, preferably the shortest occupants. At 68 inches tall, my hair was brushing the ceiling in the rearmost seats. A three-place, side-facing divan is installed in Whiddon's two airplanes—although, as far as crashworthiness is concerned, anyone seated there will likely suffer serious injuries if they survive a crash. One nice safety feature of the Beagle is that all of its fuel is stored between the two spars in a wet-wing tank.

Most of the high-wear items from the firewall forward are shared with other airplanes and are widely available. And since the Beagle is built so stoutly, airframe parts shouldn't be needed often. If they are needed, call Hill—chances are he's got it or he can fabricate it.

When asked what happens to the Beagle in the event of his death, Hill Jr. said he has trained a number of mechanics in the past 37 years and Whiddon will have access and control of spare parts and manuals. "Without the encouragement, enthusiasm for the Beagle, and financial help provided by [Whiddon], this latest restoration project would not have been possible," said Hill.

The Beagle won't win any performance or economy competitions among its many competitors, but it will always be a rare, unique ride for the owner who enjoys a nice-flying twin with a huge cabin and superb visibility.

What would it take to buy one? According to Hill, the airplane is so rare now that you can't really assign an average retail price, since it's a collectible. "If anybody wants to know what one is worth, they have to call me," said Hill.

He and Whiddon have invested more than $500,000 in N26GW. Ironically, the cost of its robust manufacturing killed the Beagle, but that same stout construction will likely keep the few remaining Beagles flying for generations to come. ACPA

Pete Bedell is a 10,000-hour ATP who flies for a major airline. He is co-owner of a Cessna 172 and Beechcraft Baron D55.