



Polished Perfection

Every once in a while you see an airplane that prompts slack-jawed silence; you recognize the airplane's perfection as one of the best examples of its type. A few months ago, a Model G18 Twin Beech stopped by our airport and immediately captured the attention of all the classic airplane lovers on the field. It was quite a sight sitting on the ramp, all primped and polished. From first glance, then after an up-close inspection, it was

A shining example of a classic

BY MICHAEL MAYA CHARLES
PHOTOGRAPHY BY MIKE FIZER

obvious that the gleaming gem was one rare Beech.

This stunning example of a corporate time machine belongs to Jim Warren and his wife, Georgia, of Denver. Although it looks vintage 1940s, Warren's airplane was actually manufactured in 1960. It's a Super G18 and was the last of the taildragger twin Beeches. The company built a final version, the model H18, with a funny wheel under the nose—but it just never looked right to most twin Beech aficionados. To the purists, the G model was the last of the "real" twin Beeches.

As it sits on the ramp, the Beech 18 is grand and imposing. With a wingspan of 49 feet, eight inches, and 10 feet five inches from the ground to the tip of its rounded, retro antenna atop the fuselage, this is obviously not your average Baron. The size of the airplane is a large part of its allure.

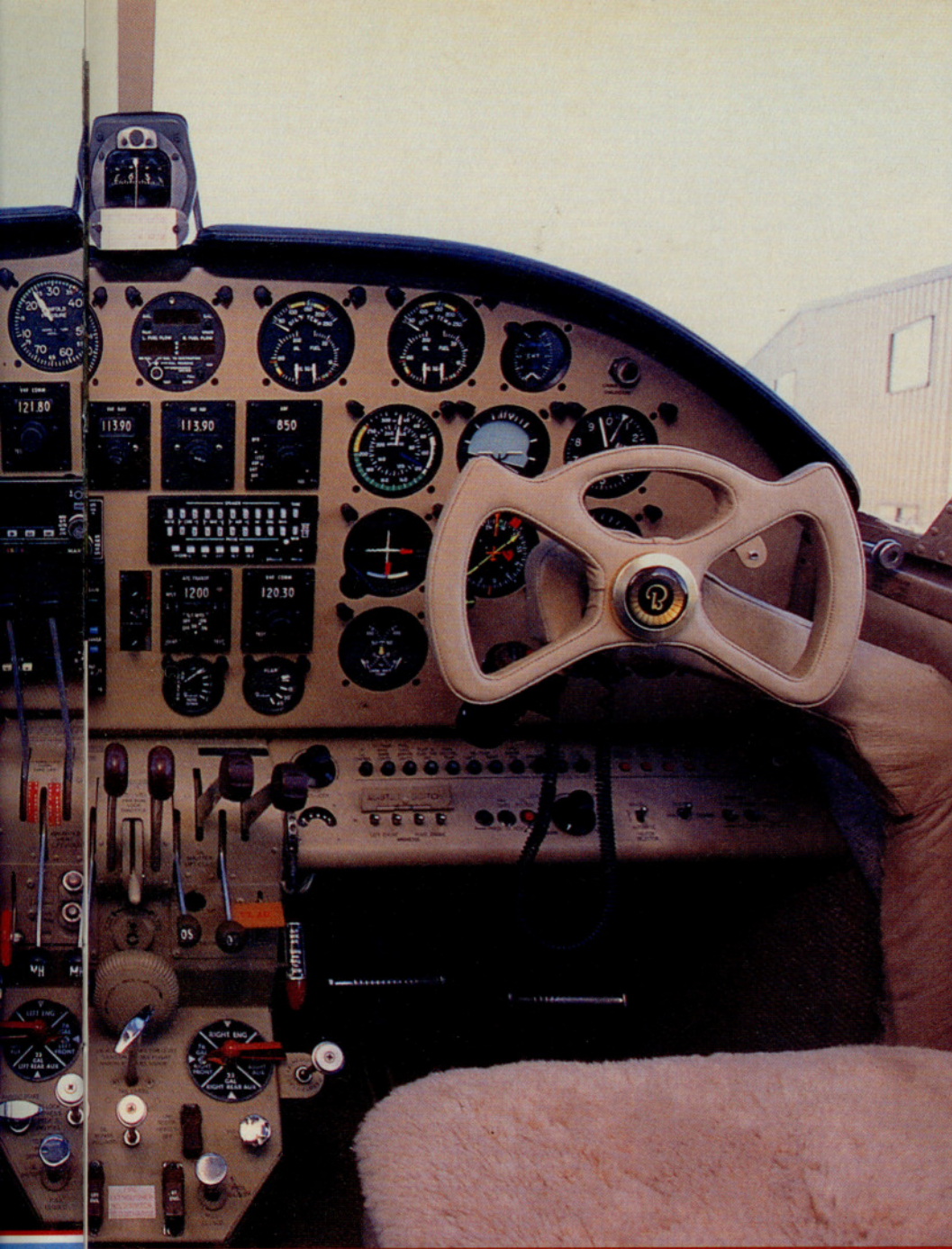
The Model 18 Beech first flew in 1937 and was manufactured alongside the Model 17 Staggerwing. As Beech's first twin-engine airplane, it must have turned some heads when it was first introduced. Cessna's T-50 "Bamboo Bomber" was still a couple of years away. The twin Beech served many of the armed forces in World War II as a transport, high-altitude reconnaissance trainer, and bomber trainer—an estimated 90 percent of

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the bomber pilots in World War II trained in the Beech 18. Over the 32-year production run, 7,091 aircraft were built, with the last of the production running concurrently with the turbine-powered Model 65-90 King Air. Production of the Model 18 ended in 1969, with the final aircraft, a tri-gear H model, going to Japan Airlines as a trainer.

Most twin Beeches are never seen; they haul countless tons of auto parts, mail, fish, or newspapers in the middle of the night, with oil dripping off every trailing edge and patched fabric control surfaces the norm, not the exception. There is no glory to this kind of work; the Beech 18 just gets

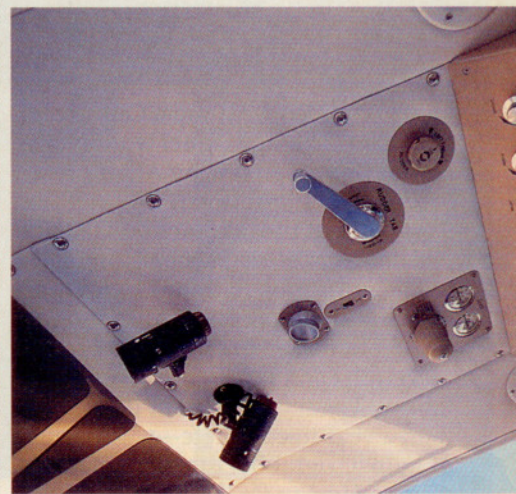




the job done night after night. But this polished Beech never slung ice or dirtied its floor as a freighter; it has served its previous four owners and Jim Warren only as a corporate chariot.

Warren bought the airplane in June 1993 from a rebuilder in Oklahoma. About 95 percent of the polished airframe restoration was completed, and it was in pretty good shape when Warren took it home. But as soon as he got it into his meticulous hangar at Centennial Airport in Colorado, Warren began another long phase of the airplane's metamorphosis into a show-stopper.

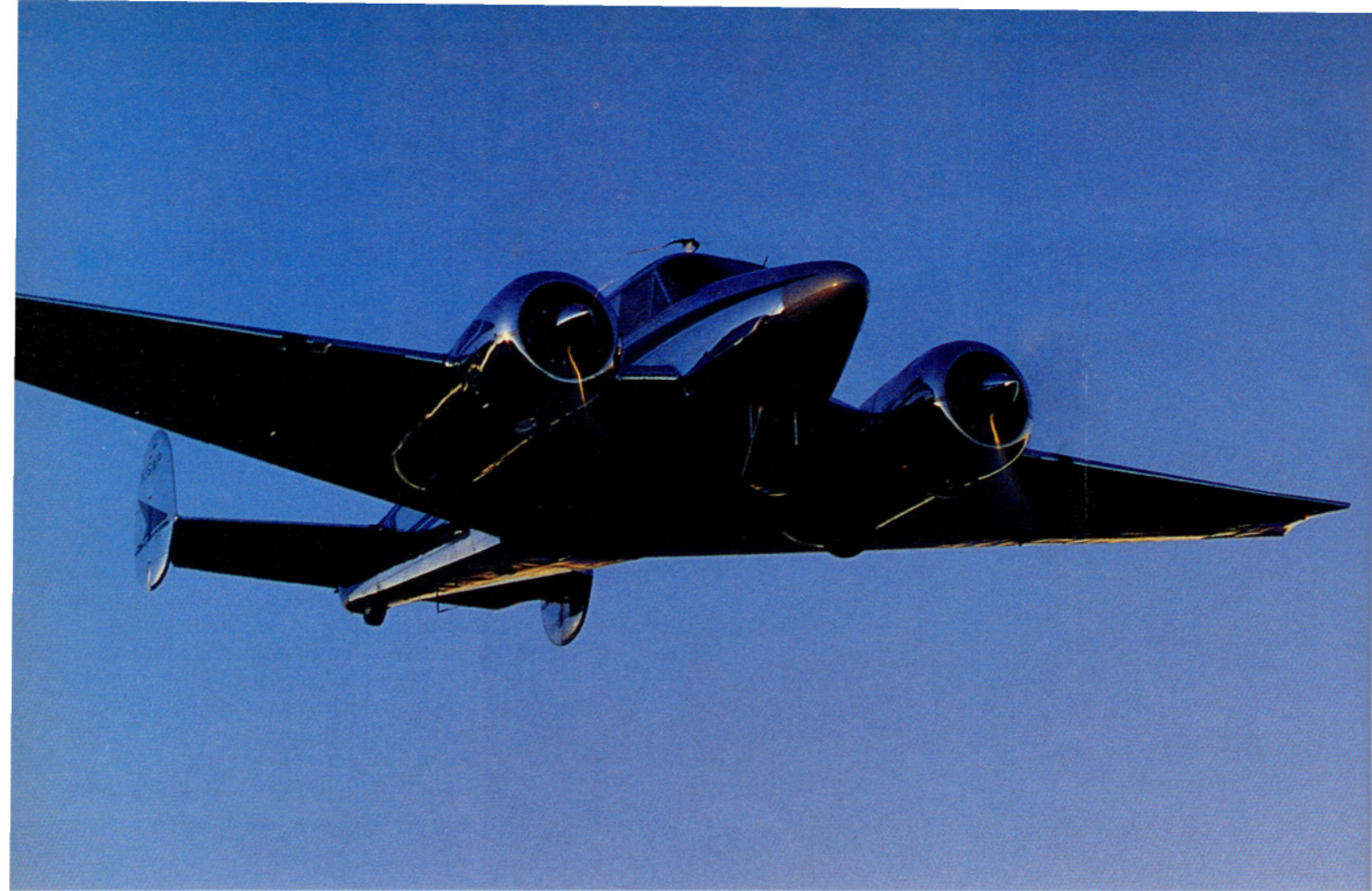
Every restoration project, it seems, has at least one incredible story that illustrates the synchronicity of these labors of love and lira. When Warren bought his twin Beech, he gutted the inside of the airplane and immediately began redesigning the instrument panel, which was vintage hodgepodge. Around 10:30 one night, while Warren and a helper were working on the airplane, a man walked up, admired the



Beech for a moment, then asked, "Would you like to have a blank instrument panel for this airplane?"

The late-night visitor was a local pilot who had found an uncut instrument panel hanging in his neighbor's garage; the neighbor had apparently bought the panel blank at a garage sale years before and had no clue as to what it really was. The neighbor gladly gave away this "worthless" piece of aluminum and the pilot visitor had saved it for...well, he really didn't know what, until he stood in the doorway of Warren's hangar, admiring the polished Beech.

Warren bought the panel, and it is now filled with a modern mixture of Bendix/King avionics and color radar,



an IFR-certified GPS, and a Century III autopilot. The new panel would look right at home in a King Air. Warren regularly flies the aircraft IFR, and the capability of the avionics has been a real boon to the big Beech's utility.

The interior would look equally at home in the Model 18's bigger kerosene-burning brethren. Warren picked the soft tan color scheme and fabrics. The refurbishment took more than a year to complete—with plenty of help. Originally, the airplane featured a factory-installed three-place bench seat along one wall. Warren changed it to a more practical center club arrangement. The bar/refreshment center and small potty in the rear of the cabin make long cross-country flights very comfortable affairs. "This airplane is creature-comfort comfortable," Warren proudly boasts. Georgia, his wife of 23 years—whom Jim describes as "a white-knuckle flier"—loves the Beech and finds the comfortable interior a major improvement over their other aircraft, an open-cockpit Waco QCF-2.

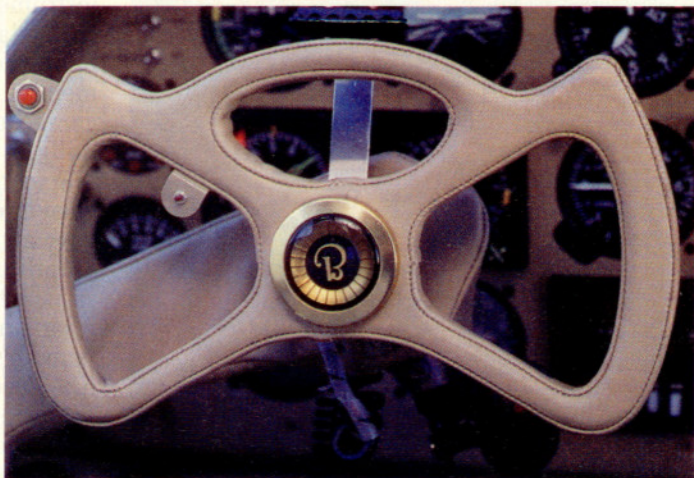
Headsets are a must for this old girl if you want to have any hearing in your old age.

The Beech's Pratt & Whitney R-985 radials were re-built by Sam Thompson of Tulsa Aircraft Engines, the "finest round engine shop in the world," Warren claims. When re-assembling the parts, Warren asked

the overhauler to paint the cylinder barrels gray, not black, and the inside of the cowling white to make oil leaks easier to intercept. By the way, there are *no* oil leaks on this Beech; Warren doesn't allow that kind of thing. In two days of flying the airplane for this article, I never saw a drop of oil on the floor, in the wheel wells, or on the cowling. That's unheard of for a round engine. For engines that have always been acknowledged to be a little leaky ("If it ain't leaking, it's out of oil"), to see an engine as clean as this one makes you wonder if you aren't missing a cleanup crew's after-hours efforts.

Warren spent two and a half years finishing the airplane's restoration, doing much of the work himself—he was a maintenance officer and crew chief on Sikorsky helicopters in the military. Much of his effort was supplemented by local corporate pilot and A&P Jeff Benger, who provided the expert eye and know-how to finish the job right.

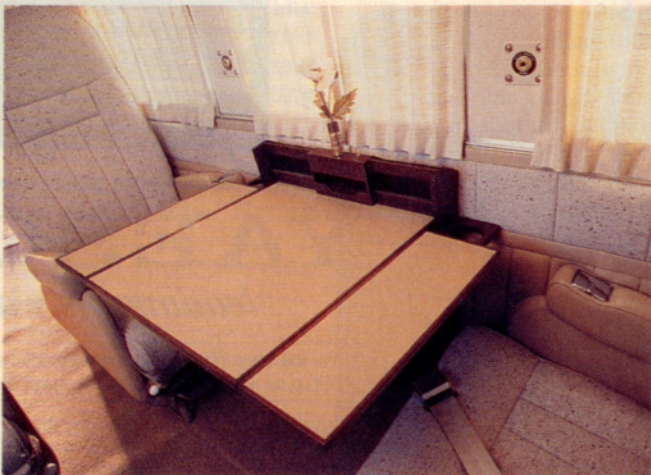
With the project done, Warren has flown his air-





“This airplane is creature-comfort comfortable,” proudly boasts its owner.

plane almost 300 hours, including trips as far away as Bangor, Maine, and Buffalo, New York. After 20 years as a hospital administrator and owner of a company that manufactured hospital surgical products, Warren now builds self-storage units along the Colorado Front Range.



His goal is to fly his Beech to Europe and Alaska, although he admits either would be "one helluva trip" even in the luxury of his leather-trimmed cabin. Since his airplane has no deice boots and is not equipped for flight into known icing conditions, he is very cautious about weather forecasts.

Warren estimates his cruise speed at 150 knots and figures that he burns 19 to 20 gph per engine at 60-percent power. With 318 gallons of fuel, the Beech has great range—Warren figures about six hours, or just under 1,000 nautical miles, with good reserves.

Warren is compulsive about this Beech; he insists that your feet are clean (or shoes removed) before walking up the airstair door. He often walks around the airplane with a cleaning rag in hand as it sits on the ramp or in the hangar, removing errant fingerprints and kamikaze bugs. It takes that kind of effort to produce and keep an airplane like this one—a critical eye, and devotion to making it perfect.

Flying a twin Beech is a pleasure. The airplane's ailerons delight and surprise you with their nimbleness, causing you to forget you are flying a 10,000-pound airplane designed as a corporate barge. The Model 18 is solid and stately, without being too stodgy. The large cockpit windows make it easy to see out of the Beech, even while taxiing nose-high on the ground. You sit in line with the polished 95-inch Hartzell props, which makes visibility to the sides quite good. But the price for this view is noise; active noise-canceling headsets are a must for this old girl if you want to have any hearing in your old age.

With oil cooler shutters, carburetor air controls, and cowl flaps all bristling from the center console, the airplane needs to be monitored and managed procedurally; this is not an airplane in which to "kick the tires, light the fires, and show me the go handles." The nature of the big Pratts requires additional attention, and a checklist goes a long way.

Although the airplane has a bit of a reputation for ground looping, it's undeserved if you just give it the attention that any taildragger deserves—and get the tailwheel locked before takeoff and landing. I never did get to land the airplane—Warren isn't comfortable with the idea

There are no oil leaks on this Beech; the owner doesn't allow that kind of thing.



of other hands on the controls for landing—but having landed several other twin Beeches, I can say that there's nothing cantankerous about the airplane's ground habits. As with most taildraggers, the tailwheel must be on the deck before the rudder loses effectiveness—especially in a crosswind, but that's just taking care of business in a twin Beech. It's got a great, fat wing that allows easy slow flight and gentle stalls; final approach speeds of 90 miles per hour (78 knots) are quite comfortable.

When asked what he likes most about his twin-tailed Beech, Warren admits, "That little donut under the tail" (He means the tailwheel). He then talks at length about his love of radial engines, and the era of the airplane. Are you a hopeless romantic? I ask. "Yes," he admits without hesitation. □

For more information, contact Ron Hyde, president of the Beech 18 Society, a division of the Staggerwing Museum Foundation, Inc., Post Office Box 550, Tullahoma, Tennessee 37388; 830/583-9897; fax 830/583-9749; e-mail rhyde@fnichols.com

Beech G18

Price when new: \$63,000

Price as tested: \$400,000

Specifications

Powerplants	(2) 450-hp Pratt & Whitney R-985AN-14B
Recommended TBO	1,450 hr
Propellers	Hartzell, 3 blade, constant speed, full feathering HC-330-2E, 95 in dia.
Length	35 ft 2 in
Height	10 ft 5 in
Wingspan	49 ft 8 in
Wing area	324.4 sq ft
Wing loading	29.9 lb/sq ft
Power loading	10.78 lb/hp
Seats	7
Cabin length	10 ft 5 in
Cabin width	4 ft 4 in
Cabin height	5 ft 6 in
Empty weight	5,910 lb
Empty weight, as tested	6,625 lb
Maximum gross weight	9,700 lb
Useful load	3,790 lb
Useful load, as tested	3,075 lb
Payload w/full fuel	1,882 lb
Payload w/full fuel, as tested	1,167 lb
Maximum takeoff weight	9,700 lb
Maximum landing weight	9,400 lb
Fuel capacity, std	318 gal (312 gal usable)
	1,908 lb (1,872 lb usable)
Oil capacity, ea engine	28 qt
Baggage capacity	250 lb

Performance

Takeoff distance over 50-ft obstacle	1,980 ft
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Max demonstrated crosswind component	20 kt
Rate of climb, sea level	1,410 fpm
Single-engine ROC, sea level	255 fpm
Maximum level speed, sea level	194 kt
Cruise speed/endurance w/45-min rsv, std fuel (fuel consumption, ea engine)	
@ 66.7% power, best economy	166 kt/5.5 hr
9,000 ft	(143 pph/23.8gph/eng)
@ 53.3% power, best economy	161 kt/7.5 hr
10,000 ft	(113 pph/18.9 gph/eng)
Service ceiling	21,000 ft
Single-engine service ceiling	7,750
Landing distance over 50-ft obstacle	1,850 ft

Limiting and Recommended Airspeeds

V _{MC} (min control w/critical engine inoperative)	71 KIAS
V _X (best angle of climb)	81 KIAS
V _Y (best rate of climb)	100 KIAS
V _{YSE} (best engine-out rate of climb)	101 KIAS
V _A (design maneuvering)	133 KIAS
V _{FE} (max flap extended)	104 KIAS
V _{LE} (max gear extended)	139 KIAS
V _{LO} (max gear operating)	139 KIAS
V _{NO} (max structural cruising)	178 KIAS
V _{NE} (never exceed)	222 KIAS
V _R (rotation)	87 KIAS
V _{S1} (stall, clean)	81 KIAS
V _{SO} (stall, in landing configuration)	73 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.