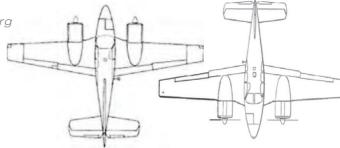
BARON AND TRAVEL AIR

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Short-Fuselage Barons

by George Brown

his article highlights each model year of the short-fuselage 55- and 56-series Barons beginning with the normally aspirated 95-55 of 1961 and continuing to the end of short-fuselage Baron production (95-B55 and E55) in 1982. Included are the serial number ranges, gross and approximate empty weights, number of airplanes built, and some noticeable airframe and powerplant changes that occurred during each model year. Turbocharged short-fuselage Barons were the 56TC and A56TC of 1967 through 1971.

Initial Baron development

By 1960, the Beech Travel Air's 180-horsepower engines put it at a competitive disadvantage in the light-twin marketplace. Cessna's 310 was powered by a pair of 260-horsepower engines, and Piper began delivering its new twin 250-horsepower Aztec. However, late 1960 saw Beech leveling the light-twin playing field with its introduction of its Model 95-55 Baron powered by two Continental IO-470L engines each delivering 260 horsepower. The prototype Baron (TC-1) was a modified 1959 Model 95 Travel Air (TD-185) pulled off the production line. (See the 55/56-Series Type Certificate sidebar.) The new Baron was easily recognized by its flat engine cowlings, long dorsal fin leading back to a large swept-back vertical stabilizer and rudder, and a trapezoid-shaped third window.

55/56-Series Type Certificate

The 95-55 Baron was certificated under CAR rules by type certificate number 3A16. Originally issued for the Model 95 Travel Air in June 1957, this certificate covers all short-fuselage Barons beginning with the 95-55 (approved in November 1960) and revised over the ensuing years for the 95-A55 (October 1961), 95-B55 (September 1963), 95-B55B (military T-42A) (August 1964), 95-C55 (August 1965), 56TC (May 1967), D55 (October 1967), E55 and A56TC (both in November 1969).

Primarily for the European market, the 95-B55, 95-C55, D55, and E55 each have a special reduced gross weight configuration indicated by the suffix A, such as 95-B55A.

Note that the Baron was the second in a series of twin-engine Beech aircraft to be named after nobility following the piston-powered Queen Air of 1959. Later named airplanes included the turboprop King Air of 1964 and pressurized piston-powered Duke of 1968.

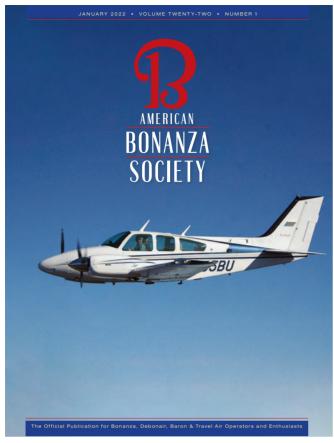
Initially, the Baron retained most of the airframe features of the five-place Travel Air including the 112-gallon fuel capacity, full-feathering constant-speed two-blade propellers, long-chord flaps, nose-mounted taxi light, Goodyear two-spot brakes, and 50,000 BTU gasoline-fired heater. Standard flight controls were the unique Beech single throwover yoke and adjustable rudder pedals on both pilot and copilot sides with toe brakes only on the pilot side. A dual yoke and toe brakes on both sides were options throughout production of the short-fuselage Barons. Factory-installed avionics were specified by each build order and varied from one aircraft to another. All short-fuselage Barons retained the Travel Air's nonstandard engine control lever arrangement of (left to right) propellers, throttles, and mixtures with the flap switch to the left of the engine control quadrant and the landing gear switch to the right.

260-Horsepower Barons

Barons powered by the Continental IO-470L engines were built through the entire 22-year production run of the short fuselage Barons. Commonly referred to as the 55, A55, or B55, let's look at the years run for each model.

95-55 - 1961

- Serial numbers: TC-1 through TC-190; 190 built
- Gross weight 4,880 pounds; approximate empty weight (less avionics) 2,960 pounds



1978 Model 95-B55 Baron

- Fuel (US gallons): Standard 112 gallons, 106 useable; optional 142 gallons, 136 useable. Main or auxiliary tanks selected individually. (TC-1 and after)
- Battery: Standard, 17-amp-hour 24-volt; optional, two 25-amp-hour 12-volt in series (TC-1 and after)
- Two 25-amp 28-volt generators (TC-1 and after)
- Optional manual surface deice boots and equipment (available TC-1 and after)
- Optional propeller and windshield fluid deice (available TC-1 and after)
- Ailerons changed from magnesium to aluminum (TC-66 and after)

95-A55 — 1962

- Serial numbers: TC-191 through TC-379 except TC-350, TC-371; 187 built (TC-350 was pulled off the production line and rebuilt as the prototype 95-C55; TC-371 was the flight-test prototype for 5,000-pound gross weight 95-B55.)
- Instrument panel redesign relocated the radio stack to the right of the engine controls (TC-191 and after)
- Side window thickness increased from 1/4" to 1/2" (TC-221 and after)
- Optional two-place folding fifth and sixth seat (available TC-238 and after)

 Optional electrothermal propeller deice, 2-blade only (available TC-350 and later)

95-A55 — 1963

- Serial numbers: TC-380 through TC-501; 122 built
- Baggage compartment loading increased from 270 to 400 pounds (TC-393, TC-400, and after)
- Optional automatic surface deice equipment (available TC-483 and after)

95-B55 — 1964

- Serial numbers: TC-371, TC-502 through TC-771; 271 built.
- Gross weight increased to 5,000 pounds; empty weight 2,995 pounds
- Optional 22.5" x 35.5" cargo bay door (available TC-502 and after)
- Optional nose cone without taxi light (available TC-502 and after)
- Optional aft baggage compartment (available TC-678 and after)

95-B55 — 1965

- Serial numbers: TC-772 through TC-965; 194 built.
- One-piece "Speed Sweep" windshield (TC-965 and after)

95-B55B (Military T-42A) — 1965

- · Serial numbers TF-1 through TF-25; 25 built
- Nickle cadmium battery in place of Beech-standard hour leadacid battery
- AC power system for certain Army avionics
- Instrument panel engineered to Army specifications for flight equipment and avionics
- · Manual cowl flap control levers replace electric motors
- Taxi light mounted on nose gear strut
- Dual yokes and brakes
- Four-port oxygen system

95-B55 — 1966

- Serial numbers: TC-966 through TC-1016; 51 built
- Gross weight increased to 5,100 pounds; empty weight to 3,024 pounds
- Cleveland brakes replaced Goodyear brakes (TC-984, TC-999, and after except TC-1002)
- Flap position indicator replaces indicator lights (TC-1011 and later)

95-B55B (Military T-42A) — 1966

- Serial numbers TF-26 through TF-65; 40 built
- Same specifications and equipment as TF-1 through TF-25
- One-piece "Speed Sweep" windshield (TF-26 and after)

95-B55 — 1967

Serial numbers: TC-1017 through TC-1042; 26 built

(continued on page 38)

- Empty weight increased to 3,075 pounds; gross weight unchanged
- Optional "Magic Hand" landing gear safety system (available TC-1024 and after)

95-B55 — 1968

- · Serial numbers: TC-1043 through TC-1156; 114 built
- Third latch point on cabin door to prevent deflection in flight (TC-1143 and after)
- Pointed propeller spinner (TC-1097 and after)
- Optional electrothermal propeller deice, 3-blade (available TC-1452 and later)

95-B55 — 1969

- Serial numbers: TC-1157 through TC-1287; 131 built
- Landing gear maximum extension speed increased from 165 mph to175 mph (TC-1157 and after)
- · Bonded wing walk assembly (TC-1215 and after)
- Optional belly strobe light (available TC-1261 and after)

95-B55 — 1970

 Serial numbers: TC-1288 through TC-1365, TC-1367, TC1369, TC-1371; 81 built

- Anti-slosh fuel leading edge fuel cell to prevent fuel starvation in turns, slips, and skids when fuel quantity is low (TC-1288 and after).
- Nose cone taxi light discontinued; taxi light on nose gear only (TC-1298 and after)
- Improved pilot's storm window (TC-1299 and after)
- Optional instrument-edge internal lighting (available TC-1299 and after)

95-B55 — 1971

 Serial numbers: TC-1366, TC-1368, TC-1370, TC-1372 through TC-1392, TC-1397 through TC-1401; 29 built. No noticeable changes.

95-B55B (Military T-42A) — 1971

 Standard B-55 equipped with technically updated Army avionics without a UHF transceiver or AC power system. Serial numbers: TC-1393 changed to TF-66, TC-1394 changed to TF-67, TC-1395 changed to TF-68, TC-1396 changed to TF-69, TC-1402 changed to TF-70: 5 built

95-B55 — 1972

- Serial numbers: TC-1403 through TC-1484; 82 built
- Flaps changed to short cord (TC-1403 and after)







- Emergency locator transmitter installation required by FAA (TC-1418 and after)
- Optional shoulder harness for pilot and copilot (available TC-1454 and after)

95-B55 — 1973

- Serial numbers: TC-1485 through TC-1607; 123 built
- Empty weight increased to 3,082 pounds; gross weight unchanged
- Chemical treatment of external skins to combat filiform corrosion (TC-1580 and after)
- Nose cone taxi light discontinued; steerable taxi light on nose gear only (TC-1602 and after)

95-B55 — 1974

- Serial numbers: TC-1608 through TC-1781; 174 built. This year's B55 saw more noticeable airframe changes than any other model year.
- Maximum ramp weight 5,121 pounds; maximum takeoff weight 5,100 pounds; empty weight increased to 3,115 pounds
- Interconnected fuel cells in each wing eliminating switching between separate main and auxiliary tanks. Standard capacity,106 gallons (100 usable); optional capacity, 142 gallons (136 usable) (TC-1608 and after)
- Flush wingtip navigation and strobe lights (TC-1608 and after)
- Landing gear position indicator lights changed from two-light (red-gear up, green-gear down) to four-light with a green light for each gear strut down and red for gear in transit (TC-1608 and after)
- 50-amp alternators standard, 25-amp generators optional (TC-1608 and after)
- Manual cowl flap control levers replace electric motors (TC-1608 and after)
- Narrow-band ELT transmitter required by FCC regulation (TC-1616 and after)
- Optional propeller synchronizer (available TC-1710 and after)
- Main landing gear positive downlock adopted from Model 60 Duke (TC-1721 and after)

Landing gear safety (squat) switches on both main gear struts (TC-1778 and after)

95-B55 — 1975

- Serial numbers: TC-1782 through TC-1905: 124 built
- Empty weight increased to 3,156 pounds: maximum ramp and takeoff weights unchanged
- Key lock battery (master) switch replaced by toggle switch (TC-1898 and after)

95-B55 — 1976

- Serial numbers: TC-1906 through TC-2002: 97 built
- Shoulder harnesses on all seats (TC-1947 and after)

95-B55 — 1977

- Serial numbers: TC-2003 through TC-2091; 89 built.
- Empty weight increased to 3,226 pounds; maximum ramp and takeoff weights unchanged
- Instrument and deice pneumatic system changed from vacuum to pressure (TC-2003 and after)
- Dual scale airspeed indicator: knots on outer scale, mph on inner scale (TC-2003 and later)

95-B55 — 1978

- Serial numbers: TC-2092 through TC-2180; 89 built
- Optional heavy-duty three-piston Cleveland brakes (available TC-2092 and after)

95-B55 — 1979

- Serial numbers: TC-2181 through TC-2275; 95 built
- Urethane exterior paint replaces vinyl acrylic paint (TC-2181 and after)
- Series plumbing on brakes eliminates shuttle valve (TC-2207 and after)

95-B55 - 1980

- Serial numbers: TC-2276 through TC-2354; 79 built
- Empty weight increased to 3,233 pounds; maximum ramp and takeoff weights unchanged

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 Starter energized annunciator light (TC-2340, TC-2355 and after)

95-B55 — 1981

- Serial numbers: TC-2355 through TC-2420; 66 built
- Empty weight increased to 3,236 pounds; maximum ramp and takeoff weights unchanged
- 25-amp generators discontinued (TC-2355 and after)
- Knots-only airspeed indicator replaces knots/mph indicator (TC-2355 and after)
- Heater hour meter standard (TC-2389 and after)
- Slower speed motor in landing gear actuator to provide increased clearance between sector and internal stop (TC-2399 and after)

95-B55 — 1982

- Serial numbers: TC-2421 through TC-2456; 36 built — B55 production ended
- Standard whole-aircraft corrosion proofing (TC-2421 and after)
- Lock mechanism added to opening window latch to prevent inadvertent opening (TC-2431and after)
- Beech Aircraft 50th anniversary edition with special exterior and interior trim (TC-2421 through TC-2545)
- Landing gear switch guard (TC-2443 and after)

Muscle Barons

Given the success of the 285-horsepower Continental IO-520B in the S35 Bonanzas, Beech introduced its line of "muscle Barons" powered by two 285 horsepower IO-520C engines beginning with the 95-C55 of 1966 (TE-1) and continuing through the last E55 (TE-1201) of 1982. Two-blade propellers were standard with three-blade propellers optional.

The nose (forward baggage compartment) extended 12 inches provided more room for avionics and baggage plus a wider center of gravity envelope. Additionally, the horizontal stabilizer/elevator span increased by 26 inches. With 25 more horsepower on each side, performance over that of the B-55

increased in all flight regimes. The longer nose and induction air intake scoops on top of each cowling visually differentiate the 95-C55 and its successor D55 and E55 from the 95-55, 95-A55, and 95-B55. Note that Beech dropped the 95 prefix from the D55 and E55 Barons.

95-C55 — 1966

- Serial numbers: TE-1 through TE-266 except TE-50; 265 built. (TE-50 became the engineering prototype for the 1967 Model 56TC Turbo Baron)
- Gross weight: 5,300 pounds; empty weight: 3,015 pounds
- Pilot-selectable induction air: filtered ram, unfiltered ram, alternate (TE-1 and after)
- Optional electrothermal propeller deice,
 2-blade only (available TE-1 and later)
- Nose wheel tire pressure increased from 50 PSI to 65 PSI (TE-190 and after)
- Flap position indicator replaced indicator lights (TE-198 and later)
- Optional "Magic Hand" landing gear safety system (available TE-252 and after)

95-C55 — 1967

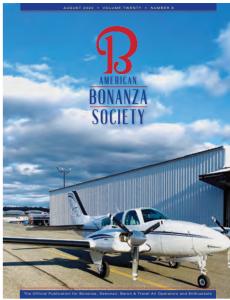
Serial numbers: TE-267 through TE-451;
 185 built. No noticeable changes.

D55 — 1968

- Serial numbers: TE-452 through TE-632; 161 built
- Empty weight increased to 3,075 pounds; gross weight unchanged
- One-piece "Speed Sweep" windshield (TE-452 and after)
- Third latch point on cabin door to prevent deflection in flight (TE-560 and after)

D55 — 1969

- Serial numbers: TE-633 through TE-767; 135 built
- Landing gear maximum extension speed increased from 165 mph to175 mph (TE-633 and after)
- Bonded wing walk assembly (TE-675, 684 and after)



1980 Model E55 Baron

- Optional belly strobe light (available TE-730 and after)
- Nose cone taxi light discontinued; taxi light on nose gear only (TE-767 and after)

E55 — 1970

- Serial numbers: TE-768 through TE-824, TE-826, TE-826; 59 built
- Empty weight increased to 3,120 pounds; gross weight unchanged
- Anti-slosh fuel leading edge fuel cell to prevent fuel starvation in turns, slips, and skids with low fuel quantity (TE-768 and after)
- Improved pilot's storm window (TE-768 and after)
- Optional instrument edge internal lighting (available TH-768 and after)

E55 — 1971

• Serial numbers: TE-825, 828 through TE-846; 20 built. No noticeable changes.

E55 — 1972

- Serial numbers: TE-847 through TE-879; 33 built
- Emergency locator transmitter installation required by FAA (TE-850 and after)
- Flaps changed from long chord carried over from Travel Air to short chord for

- common assembly with Bonanzas (TE-852 and after)
- Optional electrothermal propeller deice,
 3-blade (available TE-864 and later)

E55 - 1973

- Serial numbers: TE-880 through TE-937.
 TE-939 through TE-942: 62 built
- Chemical treatment of external skins to combat filiform corrosion (TE-929 and after)

E55 — 1974

- Serial numbers: TE-938, TE-943 through TE-1001; 60 built. This year's E55 saw more noticeable airframe changes than any other model year.
- Maximum ramp weight: 5,324 pounds; maximum takeoff weight: 5,300 pounds; empty weight increased to 3,189 pounds
- Pilot-selectable induction air limited to filtered ram or unfiltered alternate (TE-943 and after)
- Interconnected fuel cells in each wing eliminating switching between separate main and auxiliary tanks. Standard capacity, 106 gallons (100 usable); optional capacity, 142 gallons (136 usable) or 172 gallons (166 usable) (TE-938, TE-943 and after).
- Flush wingtip navigation and strobe lights (TE-938, TE-943 and after)
- Landing gear position indicator lights changed from two-light (red-gear up, green-gear down) to four-light with a green light for each gear strut down and red for gear in transit (TE-938, TE-943 and after)
- Main landing gear positive downlock adopted from Model 60 Duke (TE-990 and after)
- Manual cowl flap control levers replace electric motors (TE-938, TE-943 and after)
- Narrow-band ELT transmitter required by FCC regulation (TE-948 and after)
- Optional propeller synchronizer (available TE-981 and after)

E55 — 1975

 Serial numbers: TE-1002 through TE-1064; 63 built

- Empty weight increased to 3,191 pounds; gross weight unchanged
- Landing gear safety (squat) switches on both main gear struts (TE-1008 and after)

E55 - 1976

- Serial numbers: TE-1065 through TE-1083: 19 built
- Shoulder harnesses on all seats (TE-1078 and after)
- Provisions for installation of optional air conditioning (TE-1081 and after)

E55 - 1977

- Serial numbers: TE-1084 through TE-1113; 30 built
- Empty weight increased to 3,241 pounds; gross weight unchanged
- Dual scale airspeed indicator: knots on outer scale, mph on inner scale (TE-1084 and later)
- Instrument and deice pneumatic system changed from vacuum to pressure (TE-1084 and after)

E55 — 1978

- Serial numbers: TE-1114 through TE-1142: 29 built
- Optional heavy-duty three-piston Cleveland brakes (available TE-1114 and after)
- Series plumbing on brakes eliminates shuttle valve (TE-1119)
- Optional Beech-designed air conditioning (available TE-1119, TE-1125 and after)
- Optional 85-amp alternators (available TE-1122 and after)

E55 — 1979

- Serial numbers: TE-1143 through TE-1168; 26 built
- Urethane exterior paint replaces vinyl acrylic paint (TE-1143 and after)
- Continental IO-520CB with heavier crankshaft (TE-1143 and after)
- Series plumbing on brakes eliminates shuttle valve (TE-1154 and after)



• Optional 100-amp alternator (available TE-1163 and after)

E55 - 1980

- Serial numbers: TE-1169 through TE-1182; 14 built
- Empty weight increased to 3,286 pounds; gross weight unchanged
- · Starter energized annunciator light (TE-1181 and after)

E55 — 1981

- Serial numbers: TE-1183 through TE-1195; 13 built
- 60-amp standard alternator (TE-1183 and after)
- Knots-only airspeed indicator replaces knots/mph indicator (TE-1183 and after)
- Heater hour meter standard (TE-1191 and after)
- Slower speed motor in landing gear actuator to provide increased clearance between sector and internal stop (TE-1192 and after)

E55 — 1982

- Serial numbers: TE-1196 through TE-1201; 6 built E55 production ended
- Empty weight increased to 3,291 pounds; gross weight unchanged
- Beech Aircraft 50th anniversary edition with special exterior and interior trim (TE-1196 through TE-1201)
- · Landing gear switch guard (TE-1196 and after)
- Lock mechanism added to opening window latch to prevent inadvertent opening (TE-1198 and after)

56TC-Series Turbo Barons

In place of a planned new aircraft development program, the 56TC Turbo Baron was an off-the-cuff engineering hybrid of a C55 Baron airframe with Model 60 Duke engines and nacelles. It was said that Beech President Frank Hedrick asked how a Baron would perform with the 380-horsepower turbocharged Lycoming TIO-541-E1B4 engines from the then-in-development Duke. With the response that Beech would have the fastest twin-engine piston airplane on the market, Hedrick approved the project.



Model 56TC Baron

The 56TC Turbo Baron proved to be the undisputed pistonengine high-altitude speed merchant at that time. However, it was extremely noisy inside and the entire airframe had to be continually strengthened to absorb the stresses of extremely high engine power and operating altitudes. It quickly saturated its market of "discerning" buyers so had a short five-year production run.

56TC - 1967

- Serial numbers: TG-2 through TG-51; 50 built. (TG-1 was a flight-test-only airplane that did not conform to certification standards so was removed from service. TG-2 was the certification Turbo Baron).
- Gross weight: 5,990 pounds; empty weight: 3,625 pounds.
- Fuel: 182 gallons (178 useable).
 24-volt nickel cadmium battery, 24-volt, 60-amp alternators.

56TC — 1968

- Serial numbers: TG-52 through TG-71; 20 built
- One-piece "Speed Sweep" windshield (TG-52 and after)
- Fuel capacity increased to 207 gallons; 204 useable (TG-69 and after)

56TC — 1969

- Serial numbers: TG-72 through TG-83; 12 built
- Landing gear maximum extension speed increased from 165 mph to175 mph (TG-72 and after)
- Bonded wing walk assembly (TG-76 and after)

A56TC - 1970

- Serial numbers: TG-84 through TG-92; 9 built
- · Improved pilot's storm window (TG-84 and after)
- Optional instrument edge internal lighting (available TG-84 and after)

A56TC - 1971

• Serial numbers: TG-93, TG-94; 2 built. A56TC production ended.

Long-fuselage Barons

In a future issue we will highlight each model year of the long-fuselage 58 Barons from serial number TH-1 of 1969 to a representative contemporary G58. Also included will be the pressurized 58P and turbocharged 58TC. Stand by for clearance.

My sources were Larry Ball's From Travel Air to Baron: How Beech Created a Classic, the respective POHs, Beech parts catalogs pre- and post-TC1608/TE-943 (start of 1974 model year), and Beech's Commercial Genealogy - Serialization 1945 thru 2014. I was surprised at the number of disagreements between Ball's book and the other three sources, particularly serial number data and even model year. The information of this edition of "Baron and Travel Air" is as accurate as I could make it.