Certified Appraisal Report of N350AJ, A 1990 Beech Super King Air 350



Prepared for:
David Mahaffey
Carter County Bank
Elizabethton, Tennessee

Prepared by: Tennessee Aircraft Appraisals June 29, 2001

NATIONAL AIRCRAFT APPRAISERS ASSOCIATION **AIRCRAFT APPRAISAL REPORT**

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Aircraft Identification

Make: BEECH AIRCRAFT COMPANY Model: 350 - King Air

Serial No. FL-22 Reg. No. N350AJ **Yr. Mfq.** 1990

Type of Aircraft: Multi-Engine Prop-Jet

Airframe Total Time: 2663 Hrs. No. Landings: 1912 Cycles: 1912

Airframe Condition: Extra Fine

Log Books in Aircraft Appear: Original.

Comments: From the information provided in the log books this aircraft appears to have been well maintained from its origin. Its original registration number was N56734 and one log book entry notes the engines were installed on 9/4/90. It is a beautiful aircraft given to detail in all of its component parts. The painted surfaces have a high gloss appearance with good paint adhesion to the substrate. The interior of the aircraft defines a very executive and elegant nature. There are many additions that bring extra value to the aircraft which will be noted in this report.

Beginning 10/8/92 the aircraft apparently was registered in Zimbabwe under the registration number ZS-NGI. New log books were used once in South Africa with log book entries noting relevant details from the original books. The South African log books appear to be meticulous in detail as well. These log books are very legible and easily read and followed. Maintenance on the aircraft was carried out by Execujet Maintenance (PTY) Ltd. in Lanseria, South Africa. There are no log book entries in the original log books from 9/11/92 to 6/20/01. Note made in the South African log books: Log Book closed 6/20/01. New log book notes were then entered in the original books from there.

There are thirteen seats on the aircraft; two pilots' seats and then two sets of club seats on each side. The last three seats are a belted potty seat facing sideways and then two jump seats in the rear of the aircraft. The access doors on the exterior of the aircraft have stainless steel screws instead of painted screws. This adds to the executive effect (see picture).



The airframe is almost flawless. There are a couple of small gaps between rivets on the left fuselage/wing trim piece at the rear along with a small separation. These are pictured. The right wing trim is okay. Otherwise there were no other noticed defects. There is a log book note that on 5/10/00 #13 LH & RH access door cracks were stop drilled.



Maintenance Status

Maintenance Annual Date: 06/01 On Progressive Inspection: Yes.

Comments: There is a log book note that ADs have been researched through biweekly issue 2001-11. These recent maintenance items have been performed:

- Transponder mode C intermittently inoperative; repairs made (6/22/01)
- Removed all three landing gears. Disassembled and cleaned. Performed visual magnetic particle and zyglow inspection on all parts per King Air 350 Component Maint. Manual (6/26/01).
- Removed nacelle 5 year flammable fuel and oil hoses and installed new fuel and oil hoses on left and right engines (6/26/01)
- Installed new 10 year landing gear retraction and extension Teflon hydraulic hoses (6/26/01)
- Installed an overhauled left hand starter/generator (PN 23085-001) overhauled by Precision Avionics & Instruments, Inc. Installed a serviceable copilot's windshield repaired by PPG Ind. (6/26/01)
- Left engine and right engine-removed fuel nozzles and performed a boroscope inspection of visible areas of hot section (6/26/01)
- Fresh Phases 1-4

Other relevant prior maintenance:

9/5/95- five year mid life inspection carried out.

5/10/00-at 2507 hours Phases 1-4 were carried.

A rental engine was installed on the aircraft replacing the left engine from 9/11/98 to 11/24/98 and then replaced the right engine from 12/17/98 to 4/19/99.

Time Life Limited Systems: Yes. Cycle Life Limited Systems: Yes.

Comments: Cycle counts are included in most log entries.

Service Bulletin Status: Pertinent service bulletins appear to have been complied with. On 6/20/00 the Raytheon Aircraft mandatory service bulletin 2718 rev. 2 was complied with.

AD's Complied With: Yes. Estimated Cost for AD's Compliance: N/A

Tires Condition: Good Type Brakes: disc Anti-Skid: No

Exterior Paint Condition: Extra Fine

Repaint Date: 7/13/00 **Repainted By:** Corporate Aircraft Refinishing Inc.

Comments: The exterior surface of this aircraft is well protected by the applied coating. Prior to painting the aircraft was stripped and then painted with awlgrip snow white G8044. The stripes were painted with awlgrip Claret G7305, aeristo

blue G5003 and PPG pearl fawn 27815. There is excellent adhesion between the substrate and the coating. The striping is straight and without flaw. All surfaces are of a high gloss finish. The painted surface behind the engines is very dirty but appears that it would clean up without paint deteriorating. There are two flaws in the painted areas: At the top left of the tail trim there is a 4" X 2" paint chip that has been repainted with an excellent color match. The color match and the height of the area (fifteen feet vertical) make it difficult to detect

(pictured).



There is also a small area under the "Beechcraft" decal on the right rear about two feet below the decal that has a dull finish. It is about three inches in diameter but appears that it would buff out to a high gloss with buffing compound. Only a close inspection from a few inches would notice this effect. These are two very small blemishes on an excellent paint job.

The interior has a very executive look and feel. The headliner is exceptional (pictured). It is a #3700 ivory ultra/leather. The carpet is pembrook from Sandpiper Interiors. It has a runner that covers the walkway. The carpet underneath is flawless. The seats are a leather aeronappa dove. There are a couple of seats with small marks on them but otherwise they are luxurious. Even the side panels are covered with fabric- myers contrac fiber whose pattern is everglade and color is shadin. There is cabinetry throughout with no flaws. There are four game tables and a couple of magazine racks. There is a sliding door which separates the potty seat (and jump seats) from the rest of the cabin. The door cable covers have normal wear.



The cockpit area is flawless. There are no paint chips around any avionic including the pedestal where chips are usual. The dashboard has no apparent marks and even the pilots' seat coverings are in excellent condition.



Interior Condition: Extra Fine Cabin Configuration: Passenger

Cockpit Condition: Excellent Panel Layout: Good

Pressurized Cabin: Yes. Window Condition: Good

Comments: The windows are in very good condition. A serviceable copilot's windshield was replaced on 6/26/01. The weatherstripping around the cockpit window is very neat and helps give the aircraft a professional look. There are non-glare windows installed in the cabin area that can be swiveled to change views.

Airframe Modifications

None known or reported.

Damage History

Current Damage: None Listed.

Historical Damage: None Listed.

Engines & Props

Engine Manufacturer: Pratt and Whitney Model: PT6A-60A

Engine Type: Prop Jet

Engine Fire Detection: Yes. Engine Fire Bottles: Yes.

Prop Type: Constant Speed. **Propeller TBO:** 3000

Engine #1 Serial No: PCE-95516

Time Since New: 2602 Hrs.

Engine Overhauled By: N/A Recommended TBO: 3500

Comments: First HSI was performed on 9/11/92 at 538 hours due to high ITT. Hot section was reworked IAW maint manual. Next HSI was performed on 11/21/95 at 1426 hours. On 9/11/98 engine was removed from aircraft and rental engine serial #PCE-PK-0161 was installed at 2167.7 aircraft hours. On 11/24/98 the rental engine was removed and PCE-95516 was replaced at 2228 hours. There are 61 hours difference between airframe hours and engine hours on PCE-95516.

Orginal left prop was Serial # FW1012. The propeller was overhauled on 5/10/00 at 2507.1 hours and 1834 cycles by Placo (PTY) Ltd. The new serial # is noted below. At this time a new collar and new harnesses were fitted.

On 4/11/94 the log book notes a lightning strike on the aircraft and notes damage found after flight inspection on the tail cone static wick. On further investigation the LH propeller was found "struck". The prop was removed and sent to Propeller Shop, Lanseria, South Africa for overhaul. Prop returned and refitted at 984.4 hours. The power section of the left engine was removed and sent to Anglo African Airmotive for repair.

Propeller Make: Hartzell Model: HC-BMP-3C Number of Blades: 4

TSO/NEW: 156 Date O/H: 5/10/00 Serial Number: FWA-3238

Engine #2 Serial No: PCE-95517

Time Since New: 2599 Hrs.

Engine Overhauled By: n/a **Recommended TBO:** 3500

Comments: First HSI was performed on 9/11/92 at 538 hours due to high ITT. Hot section was reworked IAW maint manual. Next HSI was performed on 11/21/95 at 1426 hours. On 12/17/98 engine was removed from aircraft and rental engine serial #PCE-PK-0161 was installed at 2246.6 aircraft hours. On 4/19/99 the rental engine was removed and PCE-95517 was replaced at 2310 hours. There are 64 hours difference between airframe hours and engine hours on PCE-95517.

Orginal left prop was Serial # FW1011. The propeller was overhauled on 5/10/00 at 2507.1 hours and 1834 cycles by Placo (PTY) Ltd. The new serial # is noted below. At this time a new collar and new harnesses were fitted.

Propeller Make: Hartzell Model: HC-BMP-3C Number of Blades: 4

TSO/NEW: 156 **Date O/H:** 5/10/00 **Serial Number:** FWA-3235

Engine Modifications

None known or reported.

Known Maintenance Problems with Engine(s): none

Estimated Cost to Repair: \$0

General Engine Comments: The engines appear to have been properly maintained through their life. There is a log book note on 4/12/2000 that hot section repair was carried out at 2445.9 at 1723 cycles by Pratt & Whitney Canada CSC (Africa) (PTY) Ltd. On 8/30/99 Phase 4 inspection was performed. At that time an exhaust crack was repaired by Alclad Sheet Metal on both engines. There is a note that new igniter plugs were installed. There is also a log book entry that an inspection of hot sections were made at 2182.7 hours.

<u>Instrumentation</u>

Full Panel: Yes. Dual Panel: Yes.

Panel Configurations: Good. Panel Condition: Good.

IFR Equipped: Yes.

Comments: IFR certification was updated on 6/22/2001. The cockpit area is very professional and unusually organized and uncluttered. The glass in the instruments is clear and easily readable.

Avionics

Type of Avionic: NAV

Mfg: COLLINS Model: VIR 32 Mfg: COLLINS Model: VIR 32

Type of Avionic: DME

Mfg: COLLINSModel: DME 42Mfg: COLLINSModel: DME 42

Type of Avionic: TRANSPONDERS

Mfg: COLLINSModel: TDR 90Mfg: COLLINSModel: TDR 90

Type of Avionic: HSI

Mfg: COLLINS Model: HSI 85

Type of Avionic: ALTIMETERS, ENCODING

Mfg: COLLINS Model: ALI 80A

Mfg: AEROSONIC Model: 101450-11950

Type of Avionic: AUDIO PANEL

Mfg: COLLINS Model: MAP 65

Type of Avionic: WEATHER RADAR

Mfg: COLLINS Model: WXR 250B

Type of Avionic: COMM

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Mfg: COLLINSModel: VHF 22AMfg: COLLINSModel: VHF 22A

Type of Avionic: AUTOPILOTS

Mfg: COLLINS Model: APS 65

Type of Avionic: GPS

Mfg: BENDIX Model: KLN 90 B (with KLN 90 A

adapter)

The Avionics On This Aircraft Are Considered To Be: Above Average.

Additional Equipment

Dual Controls: Yes. **Type:** Yoke.

Stall Warning System: Yes. Stick Shaker: No.

Rotating Beacon: Yes. Strobe Light: Yes.

Taxi Lights: Yes. Navigation Lights: Yes.

Long Range Fuel: Yes. Aux Fuel Qty: 158

Single Point Refuel: No.

Toilet: Yes. Lavatory: No.

Galley: No. Cabinetry: Yes.

Other Equipment: The aircraft has a Collins DGS-65 directional gyro and a

Collins CTR-22 comm control.

Comments: There are two jump seats in the rear of the aircraft that spring out of the way when not in use. There are four game tables and a couple of magazine racks. There is a coffee and water dispenser behind the cockpit with a full complement of storage areas for beverages and snacks.

De-Icing Systems

Known Ice System: Yes. Ice Lights: Yes.

Prop De-Ice: Yes. **De-Ice Type:** Electric.

Wing Tail Boots: Yes. Boots Condition: Very Good

Windshield De-Ice: Yes. Windshield Wipers: Left & Right.

Jet Intake De-Ice: Yes. Pitot Heat: Yes.

Comments: On 6/3/99 Boots West Aviation removed all patches and restored all holes on the deice boots. The wing deice boot trim partially covers an access door on the wing. There is some flaking around the access door at the taped area (see picture) as well as minor frayed edges but all are in good condition. The deice surfaces for the most part still have a glossy surface and are still soft. The prop deice boots are in good shape but have lost some gloss. On 6/7/99 Aeropropeller (PTY) Ltd. replaced the deice kits on the propellers.

Aircraft Appraisers Comments

This aircraft is exceptional in all aspects. One drawback is that it doesn't have an EFIS which is typical for this aircraft. The airframe, paint, and interior are nearly flawless. The aircraft has had appropriate maintenance throughout its life.

Incremental value has been given to the standard value generated in the following areas and related reasons:

- Extensive recent maintenance including hose replacement and fresh inspections
- The detail and extent of the interior upgrade. These include the swivel non glare windows on all cabin windows as well as the executive appointments of the seats, headliner and cabinetry.
- The jump seats and associated reinforced cargo area.
- The stainless steel exterior screws.
- The cockpit appeal.

The appraiser did not subtract value because of the lightning strike as any damage appears to have been limited to engine power section and propeller which were repaired. No longer with the aircraft are a B&D cockpit voice recorder, a Collins ADF-60, a King KA167, and a Fairchild Flight Data Recorder. A Form 337 was completed for this work.

This aircraft, N350AJ, was personally inspected on: 6/27/01 by: David McMurtry, member of the National Aircraft Appraisers Association at: Greenville Donaldson Center Airport, located at Greenville, Greenville County, South Carolina.

Appraisal Computation

Average Green Aircraft Value	\$1,973,550
Add for Airframe Condition	\$229,430
Add for Airframe Low Total Time	\$0
Add for Annual and Mandatory Inspection	\$1,970
Add for Exterior Paint Value	\$10,000
Add for Interior Value	\$24,000
Add for Airframe & Engine Modifications	\$0
Add for Engine(s) Residual Value	\$66,760
Add for Propeller(s) Residual Value	\$7,030
Add for Avionics Value	\$81,770
Add for De-Ice Systems Value	\$0
Add for Additional Equipment	\$82,000
Total Additions	\$502,960
Deduct for Airframe Condition	\$0
Deduct for Airframe High Total Time	\$0
Deduct for Damage History	\$0
Deduct for Airframe/Engine Maintenance Items	\$0
Deduct for Exterior Paint Value	\$0
Deduct for Interior Value	\$0
Deduct for AD's Estimated Cost for AD Compliance	\$0
Deduct for Estimated Cost to Repair Avionics	\$0
Total Deductions	******** \$0
Based on the above, the computed retail value of N350AJ is	\$2,476,510

NATIONAL AIRCRAFT APPRAISERS ASSOCIATION 12620 Lamplighter Square St. Louis Missouri 63128

The information herein has been prepared from many sources and is believed to be correct. The National Aircraft Appraisers Association does not warrant the accuracy of the source material.

A physical inspection and inventory was conducted by a physical examination of the external surfaces of the aircraft, the cockpit and the passenger cabin: along with an inventory and assessment of the condition of avionics, instrumentation and aircraft systems. No inspection plates were removed for internal inspection. Further, the log books and other aircraft records were carefully examined for compliance with FAA regulation relating to Airworthiness Directives, damage and maintenance history, along with other required inspections and signatures. All aircraft records were presumed to be authentic, unaltered, and signatures and inspections therein by persons designated and appropriately licensed. AD compliance was attested to by referencing the date of last Annual Inspection or other appropriate Inspection.

In the event of error or omission, the liability of the Association, or Association Members, if any, is limited and may not, in any event, exceed the amount paid for the appraisal. Further, the National Aircraft Appraisers Association accepts no responsibility for usage of this form unless signed by an officer or current Member of the Association.

David McMurtry Certified Aircraft Appraiser

National Aircraft Appraisers Association Certificate of Appraisal

A visual inspection and log book analysis was performed 6/27/01 on the aircraft N350AJ at: Greenville Donaldson Center Airport, located at: Greenville, South Carolina. It is the opinion of this appraiser that the fair market value of the above aircraft is:

\$2,476,510

This appraisal is valid when accompanied by appraisal work sheet number #20010627N350AJ and signed by an Aircraft Appraiser Certified by the National Aircraft Appraisers Association.

David B. McMurtry

CERTIFIED AIRCRAFT APPRAISER





N350AJ





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