

# NATIONAL AIRCRAFT APPRAISERS ASSOCIATION AIRCRAFT APPRAISAL REPORT

**Name:** Knoxville Flight Training Center  
**Company:** JC Flight, Inc.  
**Address:** 3511 Silverside Road Suite 105  
Wilmington DE 19810-4902

**Attention:** Anthony Huddleston  
**Phone:** 865-573-8359

## Aircraft Identification

**Make:** BEECH AIRCRAFT COMPANY      **Model:** 76 - Duchess

**Serial No.** ME-42      **Reg. No.** N5149M      **Yr. Mfg.** 1978

**Type of Aircraft:** Multi-Engine Piston

**Airframe Total Time:** 5672.6 Hrs.    **No. Landings:** N/A    **Cycles:** N/A

**Airframe Condition:** Good

**Log Books in Aircraft Appear:** Original

**Comments:** The aircraft appears to be well maintained throughout its life. Some minor corrosion was noted on the bottom of the right hand side of the rudder. There is extensive cracking of the plastic wing caps at the screw holes, but no cracks in aluminum were observed. No obvious fuel or oil leaks were noted. The cabin and baggage doors fit the fuselage properly. The flight controls were unlocked and all axes moved without impediment. The fuel tanks were not full. The propellers were clean and appeared free of nicks and dings. There are currently three airframe logs spanning a continuous period from manufacture through the present.

The left tachometer is used to track airframe and engine times. The left tachometer reads 5672.6 hours and the hobbs meter reads 1050.5. The left tachometer is original to the airframe, while the logbooks indicate the hobbs was replaced on 9/88, 3/92 and 7/98. There are no other indicated changes.

The aircraft's registration and airworthiness certificate were located in the plastic pouch on the aft bulkhead. An owner's operating manual for the aircraft was located behind the right front seat. It indicates a last update on 7/94. The last weight and balance located was dated 1/28/04.

AD notes are tracked throughout the logbooks and on several computer sheets in the logbooks. The annual performed 7/04 indicates all ADs have been complied with.

## Maintenance Status

**Maintenance Annual Date:** 7/8/2004

**On Progressive Inspection:** No

**Comments:** This aircraft is maintained on an annual inspection basis. The aircraft has been in annual with regular 100 hour inspections from at least 1979 through the present. The logs indicate the heater was replaced 6/98, the hydraulic power pack was replaced 4/98, the compass was replaced 7/98, the L/H alternator was replaced 3/00, the R/H alternator was replaced twice, on 8/03 and 8/04, and the L/H vacuum pump was replaced on 8/04.

**Time Life Limited Systems:** No

**Cycle Life Limited Systems:** No

**Comments:** The last IFR certification was completed 7/03. The ELT battery is due to be replaced 9/05.

**Service Bulletin Status:** The logbooks indicate many service bulletins have been completed during the life of the airframe.

**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:** High Average

**Repaint Date:** 7/31/92

**Repainted By:** Airframe and Powerplant mechanic

**Comments:** Aircraft painted with an Imron white base coat. There are areas of blue and red trim, both of which are faded on upper surfaces, especially the plastic wing caps. A substantial amount of bare metal is showing on the L/H nose access door to the hydraulic reservoir. There are paint cracks on the R/H engine upper forward cowl. Both engine cowls behind the propeller spinner show significant paint chipping and exposed primer. There is a stop drilled crack on the R/H landing light cover. The R/H exterior door handle is missing.

**Interior Condition:** Good

**Cabin Configuration:** Passenger

**Cockpit Condition:** High Average

**Panel Layout:** Good

**Pressurized Cabin:** No

**Window Condition:** Good

**Comments:** The interior was refurbished 7/11/02 with all conforming materials. Seats are leather and many windows have been recently replaced. No windows have stop drilled cracks or haze. Carpets are not frayed or showing detectable wear and still have a uniform color. The headliner shows staining and has a 21 inch by 1.5 inch

area above the pilot's head where the headliner has been pulled away from the trim by an impact. The sun visors are not installed, but are in the cargo compartment. The pilot's yoke is cracked in the center and is missing the Beech craft emblem. The interior in general shows a good fit and reasonable wear.

### **Airframe Modifications**

**Date of Modification:** 7/14/04

**Modification:** STC SA71GL for Brackett Filters both engines.

### **Damage History**

**Current Damage:** None Listed

**Damage Event:** 1/9/96      **Extent of Damage:** Minor

**Repairs:** Hard landing damage. Installed new Main Landing Gear A frames on both R/H and L/H MLG. Re bushed and replaced hardware. Repaired skin and installed doublers to damage in gear wells.

**Damage Event:** 9/25/95      **Extent of Damage:** Superficial

**Repairs:** Removed baggage door, recountoured skin and re installed.

### **Engines & Props**

**Engine Manufacturer:** Lycoming

**Model:** O-360-A1G6D

**Engine Type:** Piston

**Engine Fire Detection:** No

**Engine Fire Bottles:** No

**Prop Reversers:** No

**Prop Type:** Constant Speed

**Propeller TBO:** 2000

**Engine #1 Serial No:** L-24893-36A

**Time Since Overhaul to New Engine Limits:** 1601.5 Hrs.

**Engine Overhauled By:** Western Cylinder Overhaul, Inc.

**Recommended TBO:** 2000

**Comments:** There are two log books for this engine. It has been installed on the airplane since new and overhauled twice. The logbooks do not indicate repair or replacement of cylinders during the current overhaul period.

The propeller was overhauled by Sensenich Propeller Company on 8/03 and reinstalled in its original location.

**Propeller Make:** Hartzell      **Model:** HC-M2YR-2CLEUF-FJC7666A      **Number of Blades:** 2

**TSO/NEW:** 555.4      **Date O/H:** 8/5/03      **Serial Number:** FB78

**Engine #2 Serial No:** L-144-71A

**Time Since Field OH:** 1973.0 Hrs.

**Engine Overhauled By:** Pacific Aero Mods **Recommended TBO:** 2000

**Comments:** Only one logbook exists for this engine, although it was an overhaul/exchange installation in 1994 with zero hours since major overhaul. The logbooks do not indicate repair or replacement of cylinders during the current overhaul period.

The propeller was overhauled by Sensenich Propeller Company on 8/03 and reinstalled in its original location.

**Propeller Make:** Hartzell      **Model:** HC-M2YR-2CEUF-FC7666A

**Number of Blades:** 2      **TSO/NEW:** 555.4      **Date O/H:** 8/5/03

**Serial Number:** FB98

### Engine Modifications

None known or reported.

**Known Maintenance Problems with Engine(s):** None

**Estimated Cost to Repair:** \$0

**General Engine Comments:** N/L

## Instrumentation

**Full Panel:** Yes

**Dual Panel:** No

**Panel Configurations:** Good

**Panel Condition:** Average

**IFR Equipped:** Yes

**Comments:** The panel has been completely revamped and now has the Storm scope at the bottom left, GPS control to the right of the NAV/COMM stack and GPS display at the far right. All controls are easy to read and all gauge glass is clear.

## Avionics

**Type of Avionic:** ADF

**Mfg:** COLLINS

**Model:** ADF 650

**Type of Avionic:** ALTIMETERS, ENCODING

**Mfg:** KING

**Model:** KE 0127

**Type of Avionic:** AUDIO PANEL

**Mfg:** COLLINS

**Model:** AMR 350

**Type of Avionic:** AUTOPILOTS

**Mfg:** CENTURY

**Model:** CENTURY III

**Type of Avionic:** COMM

**Mfg:** COLLINS

**Model:** VHF 251

**Mfg:** COLLINS

**Model:** VHF 251

**Type of Avionic:** DME

**Mfg:** COLLINS

**Model:** DME 451

**Type of Avionic:** GS

**Mfg:** COLLINS

**Model:** IND 351 A

**Mfg:** COLLINS

**Model:** IND 350

**Type of Avionic:** GPS

**Mfg:** KING

**Model:** KLN 90 B

**Type of Avionic:** NAV

**Mfg:** COLLINS

**Model:** VIR 351

**Mfg:** COLLINS

**Model:** VIR 351

**Type of Avionic:** STORMSCOPE

**Mfg:** B.F. GOODRICH

**Model:** WX 900

**Type of Avionic:** TRANSPONDERS

**Mfg:** COLLINS

**Model:** TDR 950

**The Avionics On This Aircraft Are Considered To Be:** Average

### **Additional Equipment**

**Dual Controls:** Yes

**Type:** Yoke

**Stall Warning System:** Yes

**Stick Shaker:** No

**Rotating Beacon:** No

**Strobe Light:** Yes

**Taxi Lights:** Yes

**Navigation Lights:** Yes

**Long Range Fuel:** No

**Aux Fuel Qty:** 0

**Single Point Refuel:** No

**Toilet:** No

**Lavatory:** No

**Galley:** No

**Cabinetry:** No

**Other Equipment:** Tanis heater and Sigtronics intercom.

**Comments:** N/L

## De-Icing Systems

**Known Ice System:** No

**Ice Lights:** No

**Prop De-Ice:** No

**De-Ice Type:** None

**Wing Tail Boots:** No

**Boots Condition:** N/A

**Windshield De-Ice:** No

**Windshield Wipers:** None

**Jet Intake De-Ice:** No

**Pitot Heat:** Yes

**Comments:** N/L

## Aircraft Appraisers Comments

This aircraft received its original airworthiness certificate in 1978. The aircraft logbooks indicate it may have been based in California and Tennessee during its life. The airplane is hangared and regularly flown as a trainer. The aircraft records are well kept, show no gaps or unexplainable omissions, and are readily available. The logbooks indicate that routine maintenance is completed when required and that defects are corrected as they occur.

**This aircraft, N5149M, was personally inspected on: 10/13/2004 by: Michael M. Long, member of the National Aircraft Appraisers Association, at: Knoxville Downtown Airport, located at Knoxville, Knox County, TN.**

## Appraisal Computation

Average Green Aircraft Value	\$64,880
Add for Airframe Condition	\$5,510
Add for Airframe Low Total Time	\$0
Add for Annual and Mandatory Inspection	\$870
Add for Exterior Paint Value	\$7,150
Add for Interior Value	\$8,060
Add for Airframe & Engine Modifications	\$0
Add for Engine(s) Residual Value	\$2,920
Add for Propeller(s) Residual Value	\$3,610
Add for Avionics Value	\$17,100
Add for De-Ice Systems Value	\$0
Add for Additional Equipment	\$0
	=====
<b>Total Additions</b>	<b>\$45,220</b>
Deduct for Airframe Condition	\$0
Deduct for Airframe High Total Time	\$0
Deduct for Damage History	-\$1,950
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
	=====
<b>Total Deductions</b>	<b>-\$1,950</b>
<b>Based on the above, the computed retail value of N5149M is</b>	<b>\$108,150</b>



# NATIONAL AIRCRAFT APPRAISERS ASSOCIATION

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

An inspection and inventory was conducted by a physical examination of the external surfaces of the aircraft, cockpit and passenger cabin. It includes an inventory and assessment of 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 regulations relating to Airworthiness Directives, damage and maintenance history, along with other required inspections. All aircraft records are presumed to be authentic, unaltered, and signatures and inspections therein performed by persons designated and appropriately licensed. AD compliance was attested to by referencing the date of last Annual Inspection or other appropriate inspections.

In the event of error or omission, the liability of the National Aircraft Appraisers 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 a current Member of the National Aircraft Appraisers Association.

**Michael M. Long**  
***Certified Aircraft Appraiser***

***National Aircraft  
Appraisers Association  
Certificate of Appraisal***

A visual inspection and log book analysis was performed 10/13/2004 on the aircraft N5149M at: Knoxville Downtown Airport, located at: Knoxville, TN. It is the opinion of this appraiser that the fair market value of the above aircraft is:

**\$108,150**

This appraisal is valid when accompanied by appraisal work sheet number #20041013N5149M and signed by an Aircraft Appraiser Certified by the National Aircraft Appraisers Association.

SIGNED \_\_\_\_\_

**Michael M. Long  
CERTIFIED AIRCRAFT APPRAISER**