

# National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA24FA104

## **AIRCRAFT INFORMATION AND WRECKAGE EXAMINATION SUMMARY**

December 30, 2025

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## **A. ACCIDENT**

Location: Clearwater, Florida  
Date: February 1, 2024  
Time: 1907 EST  
0007 coordinated universal time (UTC), UTC Date February 2, 2024  
Airplane: N6659L, Beech V35B

## **B. AIRCRAFT INFORMATION AND WRECKAGE EXAMINATION SUMMARY**

|                   |                                                                            |
|-------------------|----------------------------------------------------------------------------|
| IIC               | Timothy W. Monville<br>NTSB-OAS/ERA<br>Washington, DC                      |
| Party Coordinator | Christopher Oaks<br>FAA Flight Standards District Office<br>Tampa, Florida |
| Party Coordinator | Peter Basile<br>Textron Aviation<br>Wichita, Kansas                        |
| Party Coordinator | J Ferrell<br>Continental Aerospace Technologies<br>Mobile, Alabama         |

## **C. SUMMARY**

On February 1, 2024, about 1907 eastern standard time, a Beech V35B, N6659L, was destroyed when it impacted two residences and the ground near Clearwater, Florida. The commercial pilot was fatally injured. Two occupants of one directly impacted residence were fatally injured, and one occupant of the second directly impacted residence sustained minor injuries. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

According to Federal Aviation Administration (FAA) Automatic Dependent Surveillance - Broadcast (ADS-B) data and air traffic control information, the flight departed about 1809 from Vero Beach Municipal Airport (VRB), Vero Beach, Florida, on an instrument flight rules (IFR) flight plan destined for Clearwater Air Park (CLW), Clearwater, Florida. The flight proceeded towards CLW, then when in close proximity the pilot made a radio call on the CLW common traffic advisory frequency (CTAF),

that was not recorded, announcing that he had a "fire."<sup>1</sup> The airplane was observed descending and impacted into several residences with a resulting postcrash fire. Several vehicles and manufactured homes were damaged and/or destroyed.

An on-scene investigation was conducted by personnel from the National Transportation Safety Board (NTSB), Federal Aviation Administration<sup>2</sup> (FAA), Textron Aviation, and Continental Aerospace Technologies.

## D. DETAILS OF THE INVESTIGATION

### 1.0. General Airplane Information

#### 1.1 Airplane Description

The four-place, low-wing airplane, serial number D-10279 was manufactured in 1979. It was powered by a 285 horsepower at 2,700 rpm Continental Motors, Inc., IO-520-BB (87) engine, serial number (SN) 1032502, and equipped with a McCauley 3A32C76-S-M constant-speed, three-bladed propeller, SN 793943.

#### 1.2 Airplane Airworthiness Information and Modification Entries

On July 30, 1979, the airplane was inspected, and a Standard Airworthiness Certificate was issued (Figure 1).

| INSPECTION RECORD<br>F.A.R. 43.11 - 91.217 |                             |                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DATE                                       | AIRCRAFT TIME<br>IN SERVICE | KIND OF INSPECTION - STATUS & DISCREPANCY LIST<br>SIGNATURE - CERT. NO. OF PERSON APPROVING OR DISSAPPROVING AIRCRAFT FOR SERVICE                                                                                                                                                       |
| 7-30-79                                    | 2:25                        | I Have Inspected This Aircraft And<br>Issued A <u>STANDARD</u> Airworthiness<br>Certificate. Dated <u>JULY 30 1979</u><br><br>D. M. Porteous<br>For BEECH AIRCRAFT CORP.<br>Delegation Option, PC #8 |

**Figure 1 Airworthiness Certificate Issuance Entry**

Review of the airplane airworthiness file revealed that in June 2020, the original wingtips were removed and 20 gallon tip tanks, transfer pump switch plate, and aileron balance weights were installed in accordance with (IAW) Supplemental

<sup>1</sup> Refer to entitled Record of NTSB Conversations contained in the NTSB public docket.

<sup>2</sup> Several FAA inspectors participated in the on-scene investigation.

Type Certificate (STC) SA02722CH. The airworthiness file also indicated that in September 2020, Vortex generators were installed IAW STC SA09074SC.

## 2.0. General Engine Information

### 2.1 Engine Maintenance History

A review of the airframe maintenance records revealed a factory rebuilt engine was installed on June 27, 2016 (Figure 2).

| YEAR<br>20____<br>DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | RECORDING<br>TACH<br>TIME | TODAY'S<br>FLIGHT | TOTAL<br>TIME IN<br>SERVICE | Description of Inspections, Tests, Repairs and Alterations<br>Entries must be endorsed with Name, Rating and Certificate Number of<br>Technician or Repair Facility. (See back pages for other specific entries) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                           |                   |                             |                                                                                                                                                                                                                  |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6/27/2016                 | N#                | 6659L                       | A/C S/N D-10279                                                                                                                                                                                                  |
| HM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3361.25                   | TT                | 3361.25                     | TSMOH                                                                                                                                                                                                            |
| C/W AD 95-04-03 BY DYE PEN CHECK NO CRACKS FOUND, C/W AD94-20-04R2 TAIL INSPECTION FOUND<br>NO DISCREPANCIES NEXT DUE AT TACH 3461, INSPECTED ELT IAW 91.207(d) REPLACED ELT BATTERY<br>WITH NEW BP-1026 EXP 5/2018, REMOVED LEFT EXHAUST RISER SENT OUT FOR REPAIR REINSTALLED,<br>REPLACED VACUUM FILTERS P/N D9-14-5 AND 2J4-7, REPLACED FUEL CAP O-RINGS WITH NEW P/N<br>MS29513-338, JACKED AIRCRAFT CONDUCTED GEAR SWING, CHECKED GEAR DOWNLOCK TENSION<br>OK, CHECKED UNLOCK CLEARANCE OK, REPLACED UPLOCK SPRINGS P/N 35-815115, REMOVED ENGINE<br>S/N 573023 AND INSTALLED FACTORY REBUILT ENGINE S/N 1032502 SEE ENGINE LOG FOR DETAILS<br>REMOVED PROPELLER AND GOVERNOR SENT OUT FOR OVERHAUL AND REINSTALLED SEE PROPELLER<br>LOG FOR DETAILS, GREASED LANDING GEAR, LUBED ALL CONTROLS. TEST RAN ENGINE ADJUSTED FUEL<br>PRESSURE AND IDLE RPM. |                           |                   |                             |                                                                                                                                                                                                                  |
| I CERTIFY THAT THIS AIRCRAFT HAS BEEN INSPECTED IN ACCORDANCE WITH A ANNUAL<br>INSPECTION AND HAS BEEN DETERMINED TO BE IN AN AIRWORTHY CONDITION AS OF THIS DATE.<br>EVAN LOBDELL PA&P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                           |                   |                             |                                                                                                                                                                                                                  |

**Figure 2 Entry in Airframe Logbook Showing Rebuilt Engine Installation.**

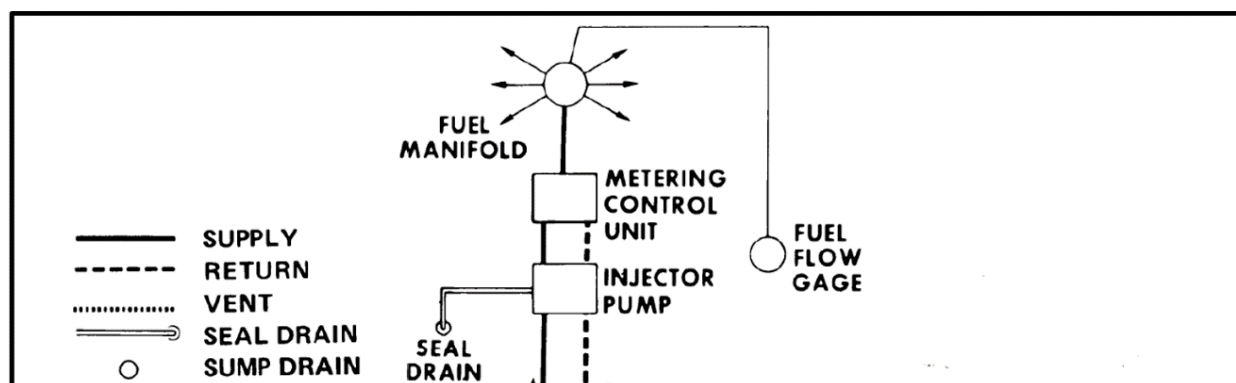
Review of the airplane's maintenance records revealed that since installation of the rebuilt engine in June 2016, there was no specific entry regarding the flexible metered fuel hose from the outlet of the metering valve to the inlet of the manifold valve. A summary of the engine logbook entries are captured below (Figure 3).

| NTSB Investigation ERA24FA104  |                 |                    |                                                              |
|--------------------------------|-----------------|--------------------|--------------------------------------------------------------|
| Engine Logbook Details/Entries |                 |                    |                                                              |
| Date                           | Tachometer Time | Hour Meter Reading | Summary of Work Performed                                    |
| 8/25/2016                      | 3398.53         | 2602               | Drained & Refilled Engine Oil                                |
| 4/18/2017                      | 3446.73         | Not Recorded       | Drained & Refilled Engine Oil                                |
| 7/3/2017                       |                 | 3470.72            | Annual Inspection of Engine. Changed Engine Oil              |
| 12/1/2017                      |                 | 3541.66            | Drained & Refilled Engine Oil                                |
| 8/2/2018                       | 3571.13         | 2741.5             | Annual/100-Hour Inspection of Engine. Drained & Refilled Oil |
| 12/17/2018                     | 3613.9          | 2775.1             | Drained & Refilled Engine Oil                                |
| 8/26/2019                      | 3664.43         | 2813.8             | Annual Inspection of Engine.                                 |
| 8/31/2020                      | 3664.4          |                    | Airframe Annual Inspection Entry                             |
| 9/23/2021                      | 3821.9          |                    | Annual Inspection of Engine. Drained & Refilled Engine Oil   |
| 11/17/2022                     | 3899.5          | 3001.5             | Annual Inspection of Engine                                  |
| 11/13/2023                     | 3945.2          |                    | Annual Inspection of Engine. Drained & Refilled Engine Oil   |

**Figure 3 Engine Logbook Maintenance Record Entry Summary**

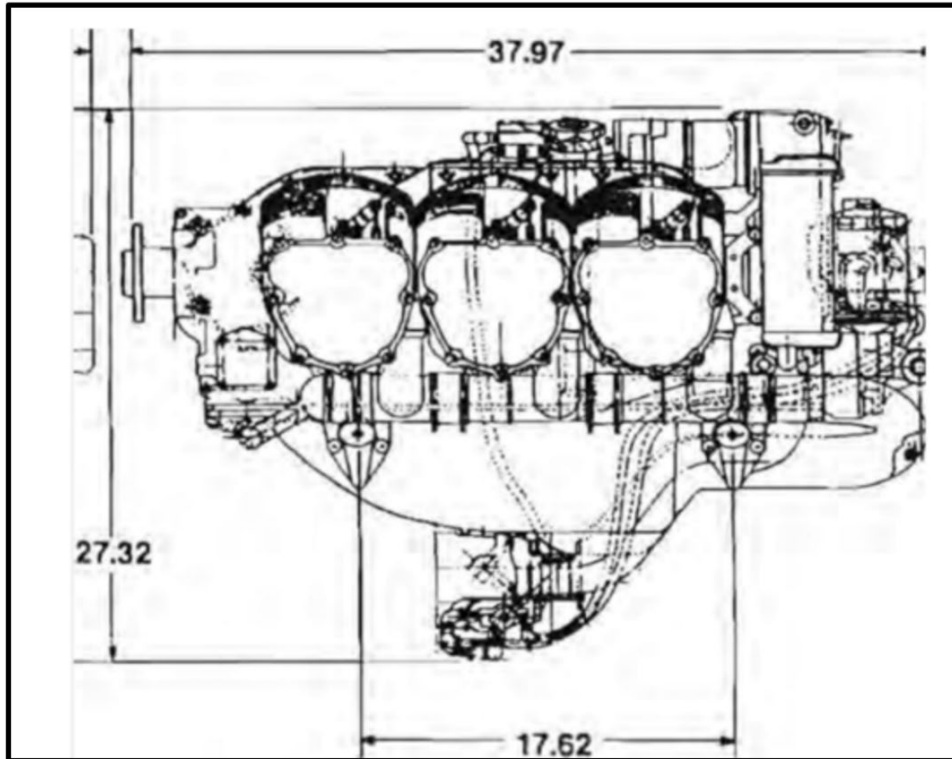
## 2.2 Fuel System Description Firewall Forward

The airplane's fuel supply and return systems forward of the firewall consisted in part of an engine-driven fuel pump, unmetered fuel hose from the engine-driven fuel pump to the metering valve, mixture return hose from the metering valve to the engine-driven fuel pump, metered fuel hose from the metering valve to the fuel manifold valve, fuel injector lines from the fuel manifold valve to fuel injector nozzles installed in each cylinder (Figure 4).



**Figure 4 View of the Fuel Supply and Return Systems Firewall Forward.**

The unmetered fuel supply hose from the engine-driven fuel pump to the metering valve, the metered fuel supply hose from the metering valve to the manifold valve, and the mixture return hose from the metering valve to the engine-driven fuel pump were routed on the right side of the engine (Figure 5).



**Figure 5 Left Side Engine View from the Continental IO-520 Permold Series Overhaul Manual. Note the fuel supply and mixture return hoses on the right side of the engine compartment.**

### **3.0. On-Scene Airplane and Engine Documentation**

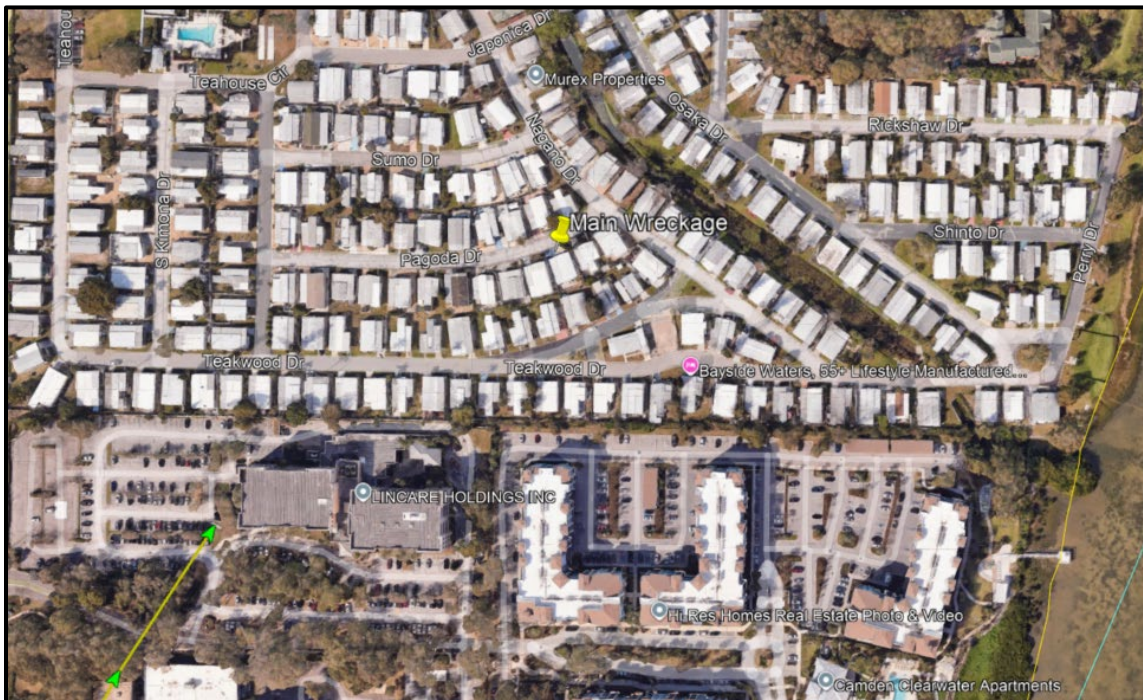
#### **3.1 Accident Site Location and Description**

The airplane crashed in a densely populated manufactured home community called Bayside Waters (Figure 6). Four manufactured homes sustained varying degrees of damage.

Further examination of the accident site revealed the first impact location along the route of flight was on the roof of the adjacent manufactured home at 2645 Pagoda Road. A portion of the right-wing fuel tip tank was found on top of the house. Fragments of the right fuel tip tank were also found inside the home. The roof exhibited a tear in the roof oriented on a magnetic heading of 075°. The damage was located at 27.950134° north latitude and -082.727050° west longitude.

Pieces of wreckage were noted in the street immediately adjacent to the resting position of the main wreckage, in the first impacted manufactured home, and away from the wreckage. The farthest piece of the wreckage was the tailcone that was located about 84 ft east of the main wreckage, or at 27.950209° north and -082.726655° west longitude.

Examination of the tailcone revealed no evidence of soot on the interior or exterior; the interior exhibited normal coloration.



**Figure 6 Annotated Google Earth Image Showing ADS-B Targets, and Accident Site Location**

### 3.2 Airframe

Examination of the wreckage revealed the cockpit, cabin, both wings, and the empennage were nearly destroyed by the post crash fire. The main wreckage consisting of the remainder of the cockpit, cabin, wings, and engine assembly came to rest upright on a magnetic heading of  $164^{\circ}$  at  $27.950234^{\circ}$  north latitude and  $-082.726914^{\circ}$  west longitude with an elevation of 15 ft mean sea level. The airplane wreckage was among debris of a manufactured home at address 2647 Pagoda Drive, Clearwater, Florida 33764. The home was destroyed by impact and the postcrash fire and the entire structure of the manufactured building was displaced about 5 ft to the east.

### 3.3 Engine Initial Observations

As first observed only a portion of the engine and section of propeller blade were visible. Additional details regarding the engine are contained in Sections 4.2 and 4.3 of this summary and in NTSB Materials Laboratory Factual Reports 24-057 and 24-058, contained in the public docket.

### 3.4 Empennage

The empennage was nearly consumed by the postcrash fire.

### 3.5 Wings

Examination of the wings revealed only small sections of both were recovered. One wing tank fuel cap remained attached to the structure which was structurally separated. The other fuel cap sealing surface was found with the remains of the fuel cap consisting of a shaft, shim, and pin for the handle which remained attached by a lanyard.

### 3.6 Flight Controls System and Flaps

There was no evidence of preimpact failure or malfunction of the pitch, roll, or yaw flight control cables. Further details concerning the factual observations of the elevator, rudder and aileron flight control systems are described below.

Examination of the elevator control system revealed control cable continuity was established from the control column connections in the forward cabin to the terminal ends in the tail cone. The up and down elevator cables in the cockpit area were identified at the accident site, labeled with tape, and cut to facilitate recovery. During the examination of the wreckage at the storage facility, the up elevator cable was separated from the swaged fitting during extraction from behind the compressed instrument panel. The pitch control autopilot bridle cable remained clamped to the down elevator cable in the aft tail cone while the up elevator bridle cable clamp was found partially melted and separated from the up elevator cable. The elevator reduction bellcrank and the differential mechanism were consumed by the post impact fire. The short lower elevator cable was continuous from the elevator reduction bell crank terminal end to the differential mechanism terminal end.

The nose up trim cable was continuous from the trim tab control drum assembly at the instrument panel to the forward cabin floor assembly where it was found impact separated in the compressed wreckage. The impact separated nose up trim cable was traced from the cabin floor area to the tail cone where the trim cable end was found separated from the trim tab actuator. The nose down trim cable was continuous from the trim tab control drum assembly at the instrument panel to the tail cone where the trim cable end was found separated from the trim tab actuator. The nose down trim cable in the cockpit was identified with tape, and cut to facilitate recovery. The trim tab actuator housing assembly, bellcrank, and pulleys located in the tail were consumed by the postcrash fire.

Examination of the aileron flight control system revealed the left aileron drive cable was continuous from the impact fractured chain and sprocket located behind

the instrument panel to the wing area where it was found impact separated approximately 5' from the terminal end. The remaining 5' long piece of left aileron drive cable, which included the terminal end, was located in the wreckage. A 5' long piece of the post impact fire damaged left aileron was observed in the wreckage. The left aileron bellcrank was consumed by the post impact fire. The right aileron drive cable was continuous from the impact separated chain and sprocket located behind the instrument panel to the terminal end found in the post impact fire damaged wing. The right aileron and bellcrank were consumed by the post impact fire. The aileron balance cable was continuous from the left terminal end to the right terminal end. The cable exhibited impact damage approximately 5' inboard of the left aileron bellcrank location. Repeated handling of the balance cable assembly during the investigation caused the cable to separate in the impact damaged area.

Examination of the rudder flight control system revealed rudder control cable continuity was established from the terminal ends in the forward cabin floor area to the terminal ends in the tail cone. The rudder bellcranks and ruddervators were consumed by the post impact fire. The rudder balance cable was continuous from the terminal ends of the differential. One ruddervator push/pull rod sustained minor thermal damage and remained relatively intact. The other ruddervator push/pull rod about 4 inches in length was found with no fire damage. Both ends exhibited overload fracture.

Both flap drive cables were located but each flap actuator was not identified.

### 3.7 Landing Gear

The left, right, and nose landing gear assemblies sustained impact and thermal damage. The landing gear actuator was found in the down position.

### 3.8 Cockpit

Examination of the cockpit revealed the following observations:

Pilot's Control Horn-Separated and both horns intact

Co-Pilot Control Horn-Left horn fractured

Pilot's restraint- the webbing was destroyed but the male/female remained clasped and the shoulder harness steel end remained with the clasped buckle

EDM 700-Remained secured in instrument panel but extensively heat damaged

Ignition Switch-Unknown position

Pilot Switch Panel-Displaced from its normal position unknown positions.

Co-Pilot Circuit Breaker Panel-Unknown positions.

Throttle Control-0.7 inch from full in

Mixture Control-Full In

Propeller Control-0.4 inch from full in

Flap Selector-Unknown position  
Landing Gear Selector Handle-Unknown position  
Cowl Flap Selector-Full in  
Oil filler cap and gauge-Found in co-pilot's seat area with impact damage to 1 lock tab of the cap. The gauge was bent.  
Avionics, flight and engine instruments-Sustained heavy fire and impact damage.

### 3.9 Survivability

The accident was not survivable.

### 3.10 Fuel/Fuel System

The fuel selector valve sustained impact and thermal damage. It was found loose in the wreckage. The fuel selector handle was separated from the assembly. The lower portion of the fuel selector valve assembly was melted, and the fuel screen access door was not observed. The fuel screen and spring remained stuck in place by molten aluminum. The fuel selector valve was partially disassembled. The fuel tank selector rotor was found in a position located between the left and right fuel tank inlet ports.

### 3.11 Other Systems

### 3.12 Device with Non-Volatile Memory

An Appareo Stratus PRX V2, part number 150500-000003, serial number 202733 which was heavily heat damaged was recovered from the wreckage and retained (Figures 7 and 8)<sup>3</sup>.

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<sup>3</sup> Refer to NTSB Electronic Device - Specialist's Factual Report and Attachments 1 and 2 contained in the NTSB public docket.



**Figure 7 View of Appareo Stratus**



**Figure 8 View of Opposite Side of Appareo Stratus**

#### **4.0. Follow-Up Examination**

##### **4.1 Parts Recovered Following Initial NTSB Examination**

Parts recovered from the initial impacted house following the initial NTSB on-scene investigation consisted of about a 2 foot-long inboard section of the right tip tank with attached and secured fuel filler cap, and the left tip tank fuel cap and housing that was recovered from an unknown location. The tip tank finger screen was clean. The grounding strap was in place at the filler opening and at the aluminum fuel lines. The later recovered portions of the right tip tank did not contain any evidence of in-flight or postcrash fire. The left tip tank fuel filler cap and receptacle were found separated from the fuel tank. The cap remained attached to the receptacle. The cap/receptacle were closed and locked and the assembly exhibited evidence of postcrash fire.

##### **4.2 Engine Examination**

Examination of the engine revealed the propeller separated from the engine and the crankshaft flange was fractured missing about 1/2 of its diameter. The upper engine cowling was destroyed by the post impact fire.

Due to frontal engine impact damage which shifted the crankshaft aft, crankshaft rotation could not be performed. The crankcase half at the nose seal was impact damaged and a hole was visible. Holes were drilled in the crankcase and using a lighted borescope, no defects were noted with the crankshaft or connecting rods. Following removal of the oil sump dirt associated with the ground contact and impact damaged crankcase was noted.

Inspection of the camshaft and accessory gears revealed no evidence of preimpact failure or malfunction. Inspection of each cylinder with a lighted borescope revealed no evidence of preimpact failure or malfunction of the cylinders, pistons, or valves.

The air induction system exhibited heat damage. All cylinders had the hoses properly clamped. Impact damage was noted to the balance tube. The foam portion of the air filter was observed and did not exhibit any evidence of extensive fire.

Impact and/or ground fire damage was noted to the ignition, exhaust, and fuel metering systems. Examination of the left and right mufflers revealed both flame cones were intact with no evidence of preimpact failure or malfunction.

#### 4.3 Engine Throttle Body and Metering Valve and Fuel Supply Hoses

Examination of the throttle body and metering valve revealed it was impact separated, sustained heat damage, but remained attached by the throttle and mixture control cables, and flexible fuel hose. The throttle control was wide open, while the mixture control was 1/8 inch from the full rich stop. Fuel supply hoses were continuous from the firewall fitting to the inlet fitting of the engine-driven fuel pump, fuel metering valve, then to the inlet fitting of the manifold valve. Impact fractures of fuel supply fittings were noted at the inlet of the engine-driven fuel pump, the inlet fitting at the fuel metering valve, and the metered outlet fitting at the fuel metering valve (Figure 9). The b-nut of the fuel supply hose at the outlet of the fuel metering valve was 1.25 flats loose from being finger tight<sup>45</sup>. All remaining b-nuts of fuel supply hoses were tight at their respective fittings included fittings that were fractured.

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<sup>4</sup> According to the ICAO Appendix 12 Fire Investigation manual, loose b-nuts may be caused by either mechanical damage or fire. The manual also indicates that if a b-nut is more than a quarter of a turn loose, it is not the result of the postcrash fire.

<sup>5</sup> Per the Continental Aerospace Technologies Standard Practices M-0 manual, the proper torque value for a b-nut with a steel fitting is 135-to-190-inch pounds.



**Figure 9 Arrow Points to Fractured Outlet Fitting of the Metering Valve and the Attached Flexible Metered Fuel Hose**

#### 4.4 Propeller

Examination of the propeller, which impact separated from the engine revealed a section of crankshaft flange remained attached to the propeller flange. One blade was separated from the hub but found in close proximity to the engine while the propeller hub with 2 attached propeller blades was also found in close proximity to the engine. Further examination of the propeller revealed details below. There was no evidence of preimpact failure or malfunction.

Blade No. 1- Impact separated from the propeller hub. The blade exhibited a gentle radius forward bend beginning about 10 inches from the hub, and a slight aft bend beginning about 27 inches from the hub. Fire damage and blistered paint was noted on the cambered side of the blade. The blade was missing about 1 inch of the blade tip. The trailing edge at the blade tip exhibited heat damage and the blade back exhibited spanwise scratches near the hub. Thermal damage was noted to the middle portion of the blade. The blade pitch pin was impact fractured.

Blade No. 2- Remained secured inside propeller hub but was displaced aft and twisted 90° towards high pitch. It was bent forward about 90° beginning about 9 inches from the propeller hub and the leading edge was twisted towards low pitch beginning about 22 inches from the propeller hub. Heavy gouges in the leading

edge were noted beginning about 16 inches from the hub and to the blade tip. The blade back exhibited diagonal scars about 10 inches from the propeller hub.

Blade No. 3-Remained secured inside the propeller hub but was displaced. The leading edge was twisted towards low pitch. An aft gradual arc of about 30° began at the hub and continued to about 24 inches from the propeller hub, then the last 11 inches of the blade was twisted 360°. Slight chordwise scratches were noted on the cambered side of the blade for the last 11 inches. Nicks were noted on the leading edge, and spanwise scratches were noted on the cambered side of the blade between 3 inches and 18 inches from the propeller hub.

#### 4.5 Propeller Governor

The propeller governor remained attached to the engine and the control cable remained connected to the propeller governor which was about 1/4 inch from the full forward stop. Movement of the control head resulted in corresponding and appropriate movement of the spool. Rotation of the shaft revealed a gurgling sound and pumping of oil inside the unit. There was no evidence of preimpact failure or malfunction of the propeller governor.

#### 4.6 Empennage

The empennage was nearly consumed by the postcrash fire.

### 5.0. PARTS RETURN

The NTSB retained parts were returned<sup>6</sup>.

Submitted by:

Timothy W. Monville  
Sr. Air Safety Investigator

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<sup>6</sup> Refer to NTSB Wreckage Release and Evidence Control Forms contained in the public docket.  
AIRCRAFT INFORMATION AND WRECKAGE EXAMINATION SUMMARY