

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA24LA229

EXAMINATION SUMMARY

July 25, 2024

TABLE OF CONTENTS

A. ACCIDENT	3
B. FIELD NOTES	3
C. SUMMARY	3
D. DETAILS OF THE EXAMINATION.....	4
1.0 ACCIDENT SITE	4
2.0 AIRFRAME EXAMINATION.....	4
2.1 Fuselage.....	5
2.2 Empennage	6
2.3 Wings	7
2.4 Landing Gear.....	9
2.5 Cockpit.....	10
2.6 Survivability.....	12
3.0 PILOT INFORMATION	14
4.0 AIRCRAFT INFORMATION	14
5.0 METEOROLOGICAL INFORMATION	14

A. ACCIDENT

Location: Salisbury, MD
Date: May 26, 2024
Time: 1200 Local
Airplane: Great Lakes 2T-1 (Menasco Special), N818K

B. EXAMINATION SUMMARY

IIC	Ryan Enders NTSB Washington, DC
Specialist	John Ellis NTSB Washington, DC
Party Coordinator	Luis Castro FAA/FSDO Baltimore, MD

C. SUMMARY

On May 26, 2024, at 1200 eastern daylight time, a Great Lakes 2T-1 (Menasco Special), N818K, was substantially damaged when it was involved in an accident near Salisbury, Maryland. The pilot and pilot-rated passenger were seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The airplane departed from Bennett Airport (1N5), Salisbury, Maryland just before 1200. According to the pilot-rated passenger, this was the second flight of the day for the pilot and for the airplane. The pilot had completed a flight previously with another passenger that was uneventful. The passenger stated that she remembered taxiing out to runway 35 for departure, and normal engine operation to that point. She could not recall any other details from the flight.

The passenger from the previous flight watched the airplane depart from runway 35 for the accident flight and make a right turn. This was the same flight track that was flown during his flight. Shortly after the right turn, he watched the airplane make a 180° turn to back toward the airport. The airplane was descending and went behind trees when he lost sight of it. He then reported hearing a "thud" and saw a puff of dust in the distance. He could not remember hearing the engine due to the distance to the accident location.

Prior to the first flight of the day, the pilot and both passengers completed a preflight inspection of the airplane that included adding 5 gallons of fuel to the single fuel tank.

An airframe and engine examination were conducted on July 25, 2024, at Bennett field. The engine examination was conducted by AS-40. Nothing was found during the examination that would have preclude normal operation of the airplane prior to the accident.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

The airplane impacted a grassy field 0.5NM north of the airfield. The airplane did not generate a debris field travelled roughly 30 feet from the initial point of contact.



Accident Site (Courtesy of FAA)

2.0 Airframe Examination

The airplane sustained substantial damage to the wings, engine mount, and lower forward fuselage. The empennage was mostly undamaged. Nothing was found during the airframe examination that would have precluded normal operation prior to the accident.



Airplane Overview

2.1 Fuselage

The airplane fuselage received substantial damage to the structure between the front and aft seats, and the structure below the forward seat. The structure was constructed of wood with a fabric covering.



Left Side Fuselage

2.2 Empennage

The empennage was mostly undamaged. The leading edge of the vertical stabilizer displayed a dent just above the empennage structure. The rudder cables were slack as a result of the buckling of the lower forward fuselage. Control cable continuity to the rudder, elevator, and stabilator trim were confirmed. The right-hand elevator cable partially tore the empennage fabric at its exit point from the airplane during the accident sequence. An ELT was not installed in the airplane.



Ride Side of Empennage



Empennage Overview from Left Side

2.3 Wings

The left and right bi-wings were substantially damaged. Both sets of top wings were displaced forward and, in a left, turning direction. The right set of wings were displaced more forward than the left set of wings. The left-wing assembly had multiple fractures and wrinkles in the fabric covering on the top and bottom wing structures. The left-wing inner support brace folded at the midpoint forward. The left-wing outer support remained attached to the top and bottom wing and was undamaged. The right wing flying and landing wires remained attached but were slack as a result of the damaged wing structure. The right-wing assembly had multiple fractures and wrinkles in the fabric covering on the top and bottom wing structures. The bottom wing was significantly damaged beginning at the outer supporting brace. The outer support brace of the right wing was undamaged. The inner support brace folded at the midpoint forward. The left wing flying and landing wires remained attached but were slack as a result of the damage to the wing structure. The right aileron actuated when the control stick was moved. The left aileron was wedged from the damaged wing structure and control cable continuity was visually established.

The wings contained a combination of 100LL and automotive gasoline. The finger screen remained installed on the left top wing and contained minor debris. The fuel cap was secured, but was surrounded by an unknown putty. The fuel pick up from the wing gravity fed to the engine fuel filter forward of the firewall.



Left Wing Outer Support



Right Wing Outer Support



Wing Assembly Overview

2.4 Landing Gear

The airplane was in a tail-wheel configuration. The tail wheel remained attached to the empennage and was undamaged. The right main landing gear was broken at the bottom mount and displaced in an outward, aft, direction. The left main landing gear was broken at the bottom mount and displaced aft.



Right Main Landing Gear



Left Main Landing Gear

2.5 Cockpit

The airplane had tandem seating. The pilot rated passenger was sitting in the forward seat and the pilot was in the aft seat. The forward cockpit was intact and undamaged. The forward cockpit was equipped with an engine RPM gauge, reading 0, an altimeter reading 900, altimeter setting of 30.2", an airspeed indicator that read

0, and a turn and bank coordinator. The control stick moved freely and operated the right aileron and elevators. The rudder pedal cables were married to the aft cockpit rudder controls. The forward rudder cables were slack as a result of the damaged fuselage structure. The forward cockpit had a throttle lever that was married to the aft cockpit lever.



Forward Cockpit Overview

The aft cockpit magneto switch was "off". The RPM gauge read "0". The four individual cylinder head temperature gauges read "0". Airspeed read "0". The altimeter read 680' and the altimeter setting read 29.8". The cockpit had a placard that read "max RPM for all operations 1975". The fuel valve was found in the "off" position. The throttle was in the "open" position. Throttle control continuity was established to the engine, but the cable was damaged and bent at the carburetor. The carburetor heat lever was in the "closed" position and continuity was confirmed to the engine. The stabilator trim lever operated normally. The control stick moved freely and operated the right aileron and elevators.



Aft Cockpit Overview

2.6 Survivability

The aft seat was equipped with a four-point harness with two over the shoulder straps. The over the shoulder straps remained in place and were undamaged. The bottom straps anchored to the supporting seat structure. The seat structure was cut on both sides of the seat and the seat belts had been slid from the supporting tubular structure to remove the pilot. The forward seat was equipped with a four-point harness with two over the shoulder straps. The over the shoulder straps remained installed and undamaged. The laps straps remained secured to the seat structure and were undamaged.

There was no ELT installed in the airplane.

The passenger received serious injuries and was transported to a local hospital with a broken nose and lacerations. The pilot was flown to a trauma unit in critical condition. Neither occupant has memory of the events of the accident flight. Both occupants have recovered.



Forward Seat Lap Restraints



Aft Seat Shoulder Restraints



Forward Seat Shoulder Restraints

3.0 Pilot Information

The holds an ATP and flight engineer pilot's certificate with ratings SEL and MEL and instrument rating for airplane. Type ratings in B727, B757, L1011. He holds a class 2 medical and must wear glasses. Date of last medical was May 2023. The pilot received serious injuries. The pilot has since recovered with memory loss of the accident.

4.0 Aircraft Information

N818K is a 1929 Great Lakes 2T-1 Menasco Special. Serial number 79. The airplane is constructed of wood and fabric. The airplane was substantially damaged in the accident and is being held in the owner's hangar at Bennet field (1N5).

5.0 Meteorological Information

KSBY 261554Z 29004KT 10SM SCT030 BKN038 28/21 A2992 RMK AO2
SLP132 T02780206

Submitted by:

Ryan Enders
Aviation Accident Investigator.