



Aviation Investigation Preliminary Report

Location:	Easton, MD	Accident Number:	ERA24FA305
Date & Time:	July 16, 2024, 09:32 Local	Registration:	N7875E
Aircraft:	Cessna 402	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Positioning		

On July 16, 2024, about 0932 eastern daylight time, a Cessna 402B, N7875E, was substantially damaged when it was involved in an accident near Easton, Maryland. The airline transport pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 repositioning flight.

According to the operator, the purpose of the accident flight was to reposition the airplane to Easton Airport (ESN), Easton, Maryland, to conduct future atmospheric testing flights. Two days prior to the accident flight, ground engine runs were performed by maintenance personnel at the conclusion of an annual inspection. Following the ground engine runs, the pilot stated to his manager that 12 gallons of fuel remained in each main (tip) fuel tank, and he was going to add 20 additional gallons to each main fuel tank so that he did not have to switch tanks during the upcoming flight to ESN (accident flight). However, airport security video showed that the pilot added 20 gallons of fuel to each auxiliary fuel tank, rather than the main fuel tanks. The airplane was not flown from the time of that fueling, to the accident flight.

Review of preliminary information from the Federal Aviation Administration (FAA) revealed that the flight departed Tipton Airport (FME), Fort Meade, Maryland at 0857. The flight proceeded uneventfully toward ESN. About 0928, the pilot contacted the ESN air traffic control tower and reported a “pretty significant engine problem.” At that time, the airplane was about 12 miles southwest of ESN and the controller instructed the pilot to enter a right base leg of the airport traffic pattern for runway 15 and to report a 2-mile right base leg.

About 1 minute later, the pilot reported that the airplane was at 2,400 ft mean sea level and setting up for a right base leg, with a “pretty bad right engine.” About 30 seconds later, the pilot declared an emergency and stated that both engines were losing power. The controller cleared the airplane to land on runway 15 via an approach from any direction; however, the pilot replied that he was not going to reach the airport and was going to try to land in a field. The airplane subsequently impacted the Tred Avon River about 4 miles southwest of ESN.

The left wing, including left engine, separated about 1 ft outboard of the wing root and was not located. The remaining wreckage remained intact and was subsequently examined at a recovery facility.

The cockpit remained intact. The pilot seat lapbelt and shoulder harness remained attached and were unfastened. The left engine controls were in the full forward position. The right engine controls were between mid-range and full forward. The right fuel selector handle was in the auxiliary fuel tank position and the left engine fuel selector handle was in the crossfeed position. The flap handle was in the 15° flap extended (approach flaps) setting. The landing gear was in the extended position. Flight control continuity was confirmed from the cockpit controls to the elevator, elevator trim, rudder, and rudder trim. Aileron control continuity for both wings was confirmed from the yoke to the nacelle area. Both right wing fuel tanks were breached during impact.

The bottom sparkplugs were removed from the right engine and the propeller was rotated by hand. The sparkplug electrodes were intact and exhibited some corrosion consistent with water immersion. Water emanated from the sparkplug holes during rotation. Crankshaft, camshaft, and valve train continuity were confirmed to the rear accessory section of the engine. Both magnetos sparked at all leads when bench tested. The unmetred fuel line, from the engine driven fuel pump to the fuel metering valve, contained about 1/2 ounce of fuel. The fuel was blue, clear, and absent of any visible contamination. A few drops of fuel were recovered in the engine driven fuel pump and in the screen at the metering valve, but in total, less than 1 ounce of fuel was recovered from the right engine and its fuel system. The fuel nozzles, fuel manifold screen, and oil filter screen were absent of contamination.

The pilot's most recent FAA first-class medical certificate was issued on March 27, 2024. At that time, he reported a total flight experience of 4,100 hours, with 0 hours accrued during the preceding 6 months.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7875E
Model/Series:	402 B	Aircraft Category:	Airplane
Amateur Built:			
Operator:	UNIVERSITY RESEARCH FOUNDATION	Operating Certificate(s) Held:	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	ESN,72 ft msl	Observation Time:	09:32 Local
Distance from Accident Site:	4 Nautical Miles	Temperature/Dew Point:	31°C /25°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	6 knots / , 220°
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	29.87 inches Hg	Type of Flight Plan Filed:	IFR
Departure Point:	Tipton, MD (FME)	Destination:	Easton, MD (ESN)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	38.749383,-76.120883

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	Philippe Derosier; FAA/FSDO; Baltimore, MD Ricardo Asencio; Textron; Wichita, KS J Farrell; Continental Motors; Mobile, AL Eric Heidhausen; University Research Foundation; Greenbelt, MD
Investigation Class:	Class 3
Note:	