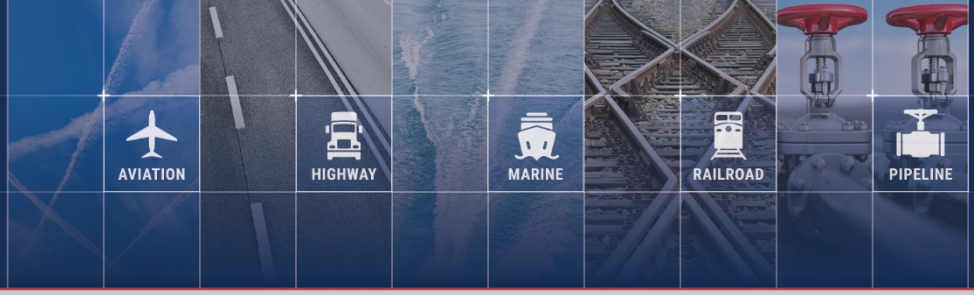

Aviation Investigation Final Report

Location:	Wilmington, North Carolina	**Accident Number:**	ERA22LA277
Date & Time:	June 20, 2022, 15:50 Local	**Registration:**	N337AX
Aircraft:	Hawker Hunter	**Aircraft Damage:**	Substantial
Defining Event:	Powerplant sys/comp malf/fail	**Injuries:**	1 Serious
Flight Conducted Under:	Public aircraft		

Analysis

The vintage military jet was being operated under an experimental certificate. The airplane experienced a partial loss of engine power over an ocean at flight level 240. Specifically, the engine rpm reduced and stabilized to about 5,000. The pilot knew that 6,800 to 7,200 rpm would be required to maintain altitude and return to an airport. After two unsuccessful attempts to restore engine power, the pilot ejected at 3,000 ft mean sea level.

The fuel system was examined at a maintenance facility after the wreckage was recovered from the ocean. The examination revealed that a bearing failed in the high-pressure fuel pump governor, which prevented pump output pressure from increasing above 850 pounds per square inch (psi); the operating range limit was between 1,900 to 2,200 psi.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A bearing failure in the high-pressure fuel pump, which resulted in a partial loss of engine power.

Findings

Aircraft	Fuel pumps - Failure

Factual Information

History of Flight

Enroute-cruise	Powerplant sys/comp malf/fail (Defining event)
Enroute-cruise	Loss of engine power (partial)
Emergency descent	Miscellaneous/other

On June 20, 2022, about 1550 eastern daylight time, an experimental Hawker Hunter MK.58, N337AX, was substantially damaged when it impacted the Atlantic Ocean about 40 miles southeast of Wilmington, North Carolina. The commercial pilot was seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 public use flight.

According to the operator, while performing an exercise with the US Navy, the airplane experienced a partial loss of engine power at flight level 240. Specifically, the rpm reduced and stabilized to about 5,000. The pilot knew that 6,800 to 7,200 rpm would be required to maintain altitude and return to an airport. After two unsuccessful attempts to restore engine power, the pilot ejected from the airplane at 3,000 ft mean sea level. The pilot was subsequently rescued by a nearby fishing vessel; however, he suffered a serious back injury during the ejection.

The fuel system was examined at a maintenance facility after the wreckage was recovered from the ocean. The examination revealed that a bearing failed in the high-pressure fuel pump governor, which prevented pump output pressure from increasing above 850 psi; the operating range limit was between 1900 to 2200 psi.

Pilot Information

Certificate:	Commercial	**Age:**	54,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Single
Other Aircraft Rating(s):	None	**Restraint Used:**	5-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	January 6, 2022
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	October 19, 2021
Flight Time:	4865 hours (Total, all aircraft), 486 hours (Total, this make and model), 4620 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hawker	**Registration:**	N337AX
Model/Series:	Hunter Mk.58	**Aircraft Category:**	Airplane
Year of Manufacture:	1959	**Amateur Built:**	
Airworthiness Certificate:	Experimental light sport (Special)	**Serial Number:**	41H-697456
Landing Gear Type:	Retractable - Tricycle	**Seats:**	1
Date/Type of Last Inspection:	January 13, 2022 AAIP	**Certified Max Gross Wt.:**	25000 lbs
Time Since Last Inspection:	19 Hrs	**Engines:**	1 Turbo jet
Airframe Total Time:	5165 Hrs as of last inspection	**Engine Manufacturer:**	Avon
ELT:	C126 installed, activated, aided in locating accident	**Engine Model/Series:**	203/7
Registered Owner:	Hunter Aviation International	**Rated Power:**	10150 Lbs thrust
Operator:	Airborne Tactical Advantage Company	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KILM,31 ft msl	**Distance from Accident Site:**	41 Nautical Miles
Observation Time:	15:53 Local	**Direction from Accident Site:**	324°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.19 inches Hg	**Temperature/Dew Point:**	31°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Newport News, VA (PHF)	**Type of Flight Plan Filed:**	IFR
Destination:	Cherry Point, NC (NKT)	**Type of Clearance:**	IFR
Departure Time:	14:26 Local	**Type of Airspace:**	Warning area

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious	**Latitude, Longitude:**	33.769722,-77.488889

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	David Laylock; FAA/FSDO; Greensboro, NC
Original Publish Date:	November 8, 2023
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=105301