



# **Aviation Investigation Final Report**

Location:	Hudson, Massachusetts	Accident Number:	ERA23LA373
Date & Time:	September 17, 2023, 11:20 Local	Registration:	SE-BMA
Aircraft:	Liore et Oliver Nieuport 28	Aircraft Damage:	Substantial
Defining Event:	Unknown or undetermined	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

#### Analysis

The pilot of the 1918-vintage former military fighter airplane reported that during a flight in the airport traffic pattern the engine lost power on the downwind leg. The engine briefly regained power, which allowed the pilot to quickly turn onto the base leg and then onto final approach, but the engine lost power again. The airplane landed hard on the runway, fractured the main landing gear, and nosed over. The postaccident engine examination did not reveal evidence of any preimpact mechanical malfunctions or failures. The reason for the loss of engine power could not be determined based on available information.

## **Probable Cause and Findings**

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

A total loss of engine power for undetermined reasons.

#### Findings

Aircraft

(general) - Unknown/Not determined

# **Factual Information**

**History of Flight** 

Approach-VFR pattern downwind	Unknown or undetermined (Defining event)
Landing	Hard landing
Landing	Nose over/nose down
Landing	Abnormal runway contact

On September 17, 2023, about 1120 eastern daylight time, an experimental Liore et Oliver Nieuport 28, Swedish registration SE-BMA, was substantially damaged when it was involved in accident near Hudson, Massachusetts. The pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to the pilot, he was flying the airplane in the airport traffic pattern when, on the downwind leg of the traffic pattern for runway 17, the engine lost power briefly. He was going to set up for an off-field landing when the engine regained power. He turned onto the base leg and then quickly turned onto the final approach when the engine lost power again. The airplane landed hard on the runway and the main landing gear fractured, resulting in a nose-over. The airplane's wings, engine mounts, and braces were substantially damaged.

A Federal Aviation Administration inspector observed the postaccident engine examination conducted by a mechanic who was familiar with the 1918 Gnome 9N rotary engine. The rotary engine's mixture and throttle settings were set on the ground and no adjustments could be made during flight. The pilot could only turn on/off electrical ignition pulses to the engine cylinders to control power. The examination did not reveal evidence of any preimpact mechanical malfunctions or failures of the engine.

#### **Pilot Information**

Certificate:	Airline transport; Foreign	Age:	63,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	June 14, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 21, 2022
Flight Time:	13500 hours (Total, all aircraft), 8 hours (Total, this make and model), 10000 hours (Pilot In Command, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	Liore et Oliver	Registration:	SE-BMA
Model/Series:	Nieuport 28	Aircraft Category:	Airplane
Year of Manufacture:	1918	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	512
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	September 13, 2023 Condition	Certified Max Gross Wt.:	1609 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Gnome
ELT:	Not installed	Engine Model/Series:	9N
Registered Owner:	<b>Collings Foundation Inc</b>	Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

#### Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	BED,128 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	11:51 Local	Direction from Accident Site:	65°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	22°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hudson, MA	Type of Flight Plan Filed:	None
Destination:	Hudson, MA	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

## **Airport Information**

Airport:	Private N/A	Runway Surface Type:	Grass/turf
Airport Elevation:	180 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2400 ft / 200 ft	VFR Approach/Landing:	Forced landing

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.389893,-71.51776(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Boggs, Daniel
Additional Participating Persons:	Aidan Seltsam-Wilps; FAA/FSDO; Burlington, MA
Original Publish Date:	July 24, 2024
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=193076

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.