



# Aviation Investigation Factual Report

<b>Location:</b>	Loveland, Colorado	<b>Accident Number:</b>	CEN10LA242
<b>Date &amp; Time:</b>	May 9, 2010, 10:00 Local	<b>Registration:</b>	N3255U
<b>Aircraft:</b>	JORRITSMA JERROLD S BERKUT	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Factual Information

On May 9, 2010, approximately 1000 mountain daylight time, a Jorritsma Berkut, N3255U, was substantially damaged during a forced landing following a total loss of engine power during initial takeoff. The private pilot, the sole occupant, was not injured. The airplane was owned and operated by the pilot. Visual meteorological conditions prevailed and no flight plan was filed for the Title 14 Code of Federal Regulations Part 91 personal flight. The local flight was departing the Fort Collins-Loveland Municipal Airport (KFNL), Loveland, Colorado at the time of the accident.

According to a statement provided by the pilot, shortly after departing KFNL and climbing through 7,500 feet mean seal level, the pilot made a power reduction. A loud bang was heard and vibrations were felt by the pilot. The pilot scanned the engine instruments and determined that the engine was "rolling back" and losing power. The pilot attempted to return to the airport, but impacted terrain short of the runway. The airplane's landing gear collapsed during the forced landing, and substantial damage was sustained to the fuselage and both wings.

The engine was equipped with an experimental engine. The Jorritsma T58-8F was a turbojet engine based on General Electric T58-GE-8F turboshaft design. The engine's compressor section has variable stators which are actuated by the fuel controller. An examination of the engine by the owner/manufacturer revealed that a malfunction of the fuel controller resulted in conditions conducive for compressor stalls.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 18, 2009
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	97 hours (Total, all aircraft), 15 hours (Total, this make and model), 97 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	JORRITSMA JERROLD S	<b>Registration:</b>	N3255U
<b>Model/Series:</b>	BERKUT	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	54
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	March 20, 2010 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>	10 Hrs	<b>Engines:</b>	1 Turbo jet
<b>Airframe Total Time:</b>	40 Hrs at time of accident	<b>Engine Manufacturer:</b>	JORRITSMA
<b>ELT:</b>	C91A installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	T58-8F
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	500 Lbs thrust
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KFNL	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	09:55 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.93 inches Hg	<b>Temperature/Dew Point:</b>	9°C / 0°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Loveland, CO (KFNL)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Loveland, CO (KFNL)	<b>Type of Clearance:</b>	
<b>Departure Time:</b>	10:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Fort Collins-Loveland Muni KFNL	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	5016 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	15	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	8500 ft / 100 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	40.451946,-105.01139(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Aguilera, Jason
<b>Additional Participating Persons:</b>	Rick Hosker; Federal Aviation Administration; Denver, CO
<b>Report Date:</b>	June 8, 2010
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=75967">https://data.nts.gov/Docket?ProjectID=75967</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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 [here](#).