



Aviation Investigation Factual Report

Location:	Sydnorsville, Virginia	Accident Number:	NYC01LA205
Date & Time:	August 8, 2001, 11:00 Local	Registration:	N56RP
Aircraft:	Rans S-7	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

On August 8, 2001, about 1100 eastern daylight time, a homebuilt Rans S-7, N56RP, was substantially damaged during a forced landing shortly after takeoff from a private airstrip in Sydnorsville, Virginia. The certificated private pilot was seriously injured. Visual meteorological conditions prevailed and no flight plan had been filed for the personal flight conducted under 14 CFR Part 91.

The pilot was conducting his first flight in the airplane. In a written statement, the pilot said he took off from the private airstrip, circled the area three times, and then elected to fly to the New River Valley Airport, Dublin, Virginia. As the airplane began to climb, the engine water pressure dropped to zero, and the engine began to overheat. The pilot turned back toward the private airstrip; however, the engine was losing power, and the airplane was not able to maintain altitude. The pilot attempted to perform a forced landing to field; however, the airplane struck a tree prior to coming to rest in a field. The pilot added that the engine appeared to stop just prior to the impact with the tree.

The wreckage was examined by a Federal Aviation Administration inspector. The airplane was equipped with an uncertificated Rotax 582 engine. The complete engine assembly was bent 90 degrees up and to the left, and the forward cockpit area was severely damaged. The composite propeller did not exhibit any damage consistent with rotation; however, the engine rotated freely, and compression was attained on both cylinders. The airplane's cooling system was impact damaged and a significant amount of engine coolant was observed on the ground.

The Rotax 582 Engine Operator's Manual stated:

"Danger!: This engine, by its design, is subject to sudden stoppage! Engine stoppage can result in crash landings. Such crash landings can lead to serious bodily injury or death. Never fly the aircraft equipped with this engine at locations, airspeeds, altitudes, or other circumstances from which a successful no-power landing cannot be made, after sudden engine stoppage."

The manual further stated:

"Warning!: This is not a certificated aircraft engine. It has not received any safety or durability testing, and conforms to no aircraft standards. It is for use in experimental, uncertificated aircraft and vehicles only in which an engine failure will not compromise safety...."

Pilot Information

Certificate:	Private	Age:	51,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	July 14, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	August 1, 2001
Flight Time:	132 hours (Total, all aircraft), 0 hours (Total, this make and model), 59 hours (Pilot In Command, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rans	Registration:	N56RP
Model/Series:	S-7	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1189060
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 1, 2001 Annual	Certified Max Gross Wt.:	1100 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	642 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	582
Registered Owner:	Cecil A. Philpott	Rated Power:	65 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ROA,1176 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	10:54 Local	Direction from Accident Site:	170°
Lowest Cloud Condition:	Clear	Visibility	3 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	30°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sydnorsville, VA (NONE)	Type of Flight Plan Filed:	None
Destination:	DUBLIN, VA (PSK)	Type of Clearance:	None
Departure Time:	10:50 Local	Type of Airspace:	Class G

Airport Information

Airport:	Private NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	900 ft msl	Runway Surface Condition:	Dry
Runway Used:	09	IFR Approach:	None
Runway Length/Width:	2800 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	36.989082,-79.88903(est)

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	Manuel M Carvalho; Richmond, VA
Report Date:	May 1, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=52967

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](#).