



Aviation Investigation Factual Report

Location:	Kapolei, Hawaii	Accident Number:	LAX07LA253
Date & Time:	August 25, 2007, 09:50 Local	Registration:	N559AW
Aircraft:	EDRA Aeronautica Seastar	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

On August 25, 2007, about 0950 Hawaiian standard time, an Edra Aeronautica Seastar experimental light sport airplane (LSA), N559AW, experienced a loss of power and collided with terrain during the initial climb from Kalaeloa Airport (John Rogers Field), Kapolei, Hawaii. The pilot/builder was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. The sport pilot, the sole occupant, was not injured; the airplane sustained substantial damage. The personal local flight was originating from Kapolei at the time of the accident. Visual meteorological conditions prevailed, and a flight plan had not been filed.

In both a written statement and telephone interviews, the pilot reported that the accident flight was to be the airplane's first flight (maiden voyage). The departure roll was smooth and the controls felt normal. As the airplane reached about 30 feet above ground level (agl), the engine experienced a loss of power. The pilot configured the airplane in a nose-low attitude in an effort to prevent a stall. The airplane landed hard on the left main landing gear, which subsequently collapsed. The airplane skidded off the left side of the runway, incurring damage to the left wing spar.

Following the accident, the wreckage was examined by a Federal Aviation Administration (FAA) inspector. He stated that the pilot reported that the wing fuel tanks were empty during departure, with 6 gallons contained in the interior fuselage fuel (header) tank. The inspector reported that the manufacturer of the kit from which the pilot built the airplane advises that flight with the airplane in such a configuration is allowable. Upon disassembly of the carburetor, the FAA inspector found a small amount of water (several drops) with some fuel in the bowl.

The airplane's wings were repaired and reinstalled in attempt to perform an engine run. The FAA inspector reported that the engine started normally with no difficulties noted. The engine sustained both idle and accelerated power settings with ease. He opined that the pilot failed to have an adequate supply of fuel onboard the airplane during departure, resulting in fuel starvation.

The FAA inspector noted that the airplane's manual does not prescribe a minimum amount of fuel that should be on board, nor is there a minimum fuel requirement in the wing tanks. The wing fuel tanks have a capacity of 7 gallons each side, with the fuselage tank's capacity around 10.5 gallons. An electric fuel pump is utilized to draw fuel from the fuselage tank to the engine, however, the wing tanks are designed for fuel to be gravity fed to the fuselage tank. The FAA inspector thought it was possible during takeoff (nose-high attitude) for the fuel to flow from the fuselage tank to the wing tanks, resulting in a fuel starvation event.

Pilot Information

Certificate:	Sport Pilot	Age:	48, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 1, 2006
Flight Time:	56 hours (Total, all aircraft), 8 hours (Total, this make and model), 21 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	EDRA Aeronautica	Registration:	N559AW
Model/Series:	Seastar	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special); Special light-sport (Special)	Serial Number:	S0169
Landing Gear Type:	Tricycle; Amphibian	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1430 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	0 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	912S
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PHJR,30 ft msl	Distance from Accident Site:	
Observation Time:	09:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kapolei, HI (PHJR)	Type of Flight Plan Filed:	None
Destination:	Kapolei, HI (PHJR)	Type of Clearance:	None
Departure Time:	09:50 Local	Type of Airspace:	

Airport Information

Airport:	Kalaeloa Airport (John Rogers) PHJR	Runway Surface Type:	Asphalt
Airport Elevation:	30 ft msl	Runway Surface Condition:	Dry
Runway Used:	4L	IFR Approach:	None
Runway Length/Width:	4500 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:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	21.307222,-158.070281

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Herman Rios; Federal Aviation Administration; Honolulu, HI
Report Date:	February 29, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=66540

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](#).