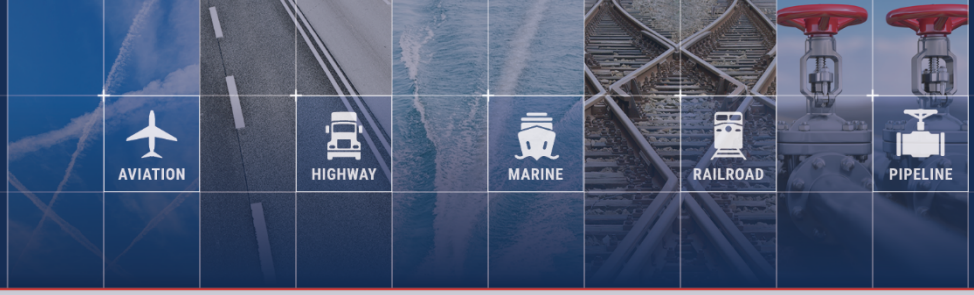

Aviation Investigation Factual Report

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.ntsb.gov/Docket?ProjectID=66540