



# Aviation Investigation Final Report

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<b>Location:</b>	Maui, Pacific Ocean	<b>Accident Number:</b>	WPR15LA089
<b>Date &amp; Time:</b>	January 25, 2015, 16:44 Local	<b>Registration:</b>	N7YT
<b>Aircraft:</b>	Cirrus SR22 - NO SERIES	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel starvation	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Positioning		

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## Analysis

The pilot reported that, during the transpacific flight, he was unable to transfer fuel from the aft auxiliary fuel tank to the main fuel tanks. Despite multiple attempts to troubleshoot the fuel system issue, he was unable to correct the situation. After transferring fuel from the forward auxiliary fuel tank to both main fuel tanks, he estimated that there was only enough fuel in the main tanks to reach within about 200 miles of land, so he decided to divert to a nearby cruise ship. Once the airplane was in the immediate vicinity of the cruise ship, the pilot activated the airplane's parachute system, the parachute deployed, and the airplane descended under the canopy into the ocean. The pilot immediately exited the airplane and inflated an emergency life raft; he was recovered from the water a short time later. The airplane subsequently became submerged in the water and was not recovered. The reason for the pilot's inability to transfer fuel from the aft auxiliary fuel tank to the main fuel tanks could not be determined.

## Probable Cause and Findings

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

The pilot's inability to transfer fuel from the aft auxiliary fuel tank to the main fuel tanks for reasons that could not be determined because the airplane was ditched and not recovered.

## Findings

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**Not determined**

(general) - Unknown/Not determined

## Factual Information

### History of Flight

Enroute-cruise	Fuel related
Enroute-cruise	Fuel starvation (Defining event)
Enroute-cruise	Ditching

On January 25, 2015, about 1644 Hawaiian standard time, a Cirrus Design Corporation SR22, N7YT, ditched into the waters of the Pacific Ocean about 230 miles east of Maui, Hawaii. The airplane was registered to Cirrus Design Corporation, Duluth, Minnesota, and operated by The Flight Academy, Kirkland, Washington, under the provisions of Title 14 Code of Federal Regulations Part 91. The commercial pilot, sole occupant of the airplane, was not injured. Visual meteorological conditions prevailed and an instrument flight rules flight plan was filed for the repositioning flight. The cross-country flight originated from Tracy, California, about 0530, with an intended destination of Maui.

In a written statement to the National Transportation Safety Board (NTSB) investigator-in-charge, the pilot reported that the flight was uneventful, and a previous fuel transfer from the front and aft auxiliary fuel tanks was successful as the flight was about 200 miles offshore. However, as the flight passed the BILLO intersection, the pilot opened the valves to transfer fuel from the aft auxiliary fuel tank to the right wing fuel tank and did not observe any fuel flow. Upon verifying that the pressure line was open, he closed the valve to the aft tank and opened the valve for the forward auxiliary fuel tank, and observed that fuel immediately began flowing to the right wing fuel tank.

The pilot further stated that as he was well past the half-way point to Hawaii, he performed various maneuvers in an attempt to get fuel to flow from the aft auxiliary fuel tank to either the left or right main wing fuel tanks with no success. The pilot utilized a satellite phone and obtained further troubleshooting assistance from company personnel. After transferring fuel from the forward auxiliary fuel tank to both left and right wing fuel tanks, he estimated that he had about enough fuel onboard to be about 200 miles short of Hawaii.

The pilot stated that numerous attempts to transfer fuel from the aft auxiliary fuel tank to the main fuel tanks were unsuccessful, and siphoning fuel from the aft auxiliary to the forward auxiliary fuel tank was partially successful, however, eventually fuel would not transfer into either wing fuel tank.

While in contact with the United States Coast Guard, the pilot made the decision that he would eventually have to deploy the Cirrus Airframe Parachute System (CAPS). The pilot was informed of a cruise ship near his location, and subsequently diverted towards that location. He further reported that once he was in the immediate vicinity of the cruise ship, he activated the CAPS and the parachute deployed. The airplane descended under the canopy into the waters of the Pacific Ocean. The pilot stated that he immediately exited the airplane and inflated an emergency life raft; he was extracted from the water a short time later.

The airplane became submerged within the water shortly thereafter. At the time of this report, there is no intention of recovering the wreckage.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	25
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	October 31, 2014
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	November 18, 2013
<b>Flight Time:</b>	2500 hours (Total, all aircraft), 2000 hours (Total, this make and model), 2000 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cirrus	<b>Registration:</b>	N7YT
<b>Model/Series:</b>	SR22 - NO SERIES NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2015	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	4164
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	Reciprocating
<b>Airframe Total Time:</b>	25 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental Motors Inc
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO-550-N
<b>Registered Owner:</b>	Cirrus Design Corporation	<b>Rated Power:</b>	
<b>Operator:</b>	The Flight Academy	<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>	PHOG,50 ft msl	<b>Distance from Accident Site:</b>	223 Nautical Miles
<b>Observation Time:</b>	02:54 Local	<b>Direction from Accident Site:</b>	250°
<b>Lowest Cloud Condition:</b>	Scattered / 500 ft AGL	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	Overcast / 1700 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	18 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	30°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	20°C / 19°C
<b>Precipitation and Obscuration:</b>	Moderate - None - Rain		
<b>Departure Point:</b>	Tracy, CA (TCY)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Maui, HI	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	00:53 Local	<b>Type of Airspace:</b>	

## 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>	20.870527,-156.449676(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Cawthra, Joshua
<b>Additional Participating Persons:</b>	Kyle M Bartler, Federal Aviation Administration; Honolulu, HI
<b>Original Publish Date:</b>	July 13, 2015
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=90653">https://data.ntsb.gov/Docket?ProjectID=90653</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](#).