



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	TULSA, OK	<b>Accident Number:</b>	FTW00LA222
<b>Date &amp; Time:</b>	08/01/2000, 1000 CDT	<b>Registration:</b>	N817R
<b>Aircraft:</b>	ROMERO SEA REY	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

The pilot reported that during cruise flight at 1,100 to 1,200 msl in the vicinity of a lake, she 'blacked out' and that she had 'no pre-warning of impending danger physical or otherwise.' The experimental amphibious airplane impacted the lake and came to rest floating upside down in the water. Review of the pilot's medical records revealed the pilot had a heart condition diagnosed as PSVT (paroxysmal supraventricular tachcardia), and for over ten years had experienced episodes of symptomatic atrial fibrillation. At the time of the accident, the pilot's experience was consistent with a transient ischemic attack (TIA or 'mini-stroke') as a result of a clot that formed in her heart. Such clots typically form during periods of atrial fibrillation and are propelled into the brain when the heart resumes beating normally again. The pilot had not complied with physician instructions regarding the use of medication. On her FAA medical certificate applications (third class and second class), the pilot had not provided a complete medical history.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of control by the pilot due to incapacitation for unknown reasons.

## Findings

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Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CRUISE

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) INCAPACITATION(LOSS OF CONSCIOUSNESS) - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - WATER

## Factual Information

On August 1, 2000, at 1000 central daylight time, a Romero Sea Rey, homebuilt experimental amphibious airplane, N817R, sustained substantial damage when it impacted the water at Lake Keystone, approximately 15 nautical miles west of Tulsa, Oklahoma. The airplane was owned and operated by private individuals under 14 Code of Federal Regulations Part 91. The commercial pilot, sole occupant, received serious injuries. Visual meteorological conditions prevailed for the local personal flight, and a flight plan was not filed. The flight departed the Richard Lloyd Jones Jr Airport, Tulsa, Oklahoma, at 0845.

On the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), the pilot reported her intentions to fly over and around Lake Keystone with no intentions for landing. The pilot reported that she had retracted the landing gear following the departure from Tulsa. She remembered the airplane was configured at a power setting of 4,800 rpm and the airspeed of 75 mph, with 10 degrees of flaps extended for the flight. The airplane was at an altitude of 1,100 to 1,200 msl. The pilot further stated that "I blacked out," and that she had, "no pre-warning of impending danger physical or otherwise."

Local authorities reported that the airplane was found intact and floating upside down in water approximately 7 to 10 feet deep, and it "appeared that the main landing gear was extended."

The pilot completed dual flight training in Florida in the same make/model of aircraft. The FAA airworthiness certificate was issued for the airplane on April 4, 2000. The pilot had accumulated a total of 28 flight hours in the aircraft. The pilot held a second class medical certificate, issued December 23, 1999, at the time of the accident.

The following information was extracted by the NTSB Medical Officer from medical records maintained on the pilot by the FAA Civil Aeromedical Institute Aeromedical Certification Division and from personal medical records supplied by the pilot. The pilot was diagnosed with an abnormal heart rhythm in 1987. By May 1990, following a full cardiac workup, the pilot was placed on medication.

In August 1990, the pilot applied for a third-class medical. The pilot's physician(s) reported to the FAA that the pilot's PSVT (paroxysmal supraventricular tachycardia) was under control with medication. In a letter submitted to the FAA, one of the physicians wrote that the heart condition "would not handicap her in any way in the operation of an airplane."

The pilot was issued an FAA third-class medical certificate in November 1990, and an FAA second-class medical certificate in 1994. Each time a medical certificate was issued, the pilot's eligibility letter from the FAA stated that the pilot's operation of an aircraft was prohibited any time new symptoms or changes occurred, or if the pilot experienced side effects or required a change in medication.

The pilot had several episodes of atrial fibrillation that were not reported to the FAA. In 1996, the pilot did not report to the FAA an episode of a sudden loss of vision in one eye, which was attributed to cardiac embolization secondary to PSVT. Following the loss of vision, she was prescribed Coumadin (a blood thinner). The pilot continued to experience episodes of paroxysmal atrial fibrillation. The use of Coumadin was not reported to the FAA.

Emergency room records, following the accident, said "she [pilot] is supposed to be on Coumadin, but she refuses to take it." The pilot demonstrated "intermittent atrial fibrillation,

rapid ventricular response during the hospitalization."

In a letter to the NTSB Medical Officer dated February 22, 2001, the pilot stated "I would always have warning when an episode of atrial fibrillation would be coming on. Of course I never flew when I had any symptoms, nor did I have any symptoms the day of the accident."

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	57, Female
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<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 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	12/23/1999
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	911 hours (Total, all aircraft), 36 hours (Total, this make and model), 41 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	ROMERO	<b>Registration:</b>	N817R
<b>Model/Series:</b>	SEA REY SEA REY	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	IDK198
<b>Landing Gear Type:</b>	Retractable - Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	06/30/2000, Annual	<b>Certified Max Gross Wt.:</b>	1370 lbs
<b>Time Since Last Inspection:</b>	12 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	27 Hours	<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>		<b>Engine Model/Series:</b>	912S
<b>Registered Owner:</b>	GABRIEL AND SONDR ROMERO	<b>Rated Power:</b>	100 hp
<b>Operator:</b>	GABRIEL AND SONDR ROMERO	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TUL, 638 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	0853 CDT	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 10000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23° C / 21° C
Precipitation and Obscuration:			
Departure Point:	, OK (RVS)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	0845 CDT	Type of Airspace:	Class E

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	JOYCE ROACH	Report Date:	07/02/2001
Additional Participating Persons:	RICHARD FLETCHER; OKLAHOMA CITY, OK		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).