National Transportation Safety Board
Aviation Accident Final Report

Location:	SAN DIEGO, CA	**Accident Number:**	LAX99LA174
Date & Time:	05/07/1999, 2230 PDT	**Registration:**	N3303S
Aircraft:	Cessna T303	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane departed Houston, Texas, for a VFR flight to San Diego, California. The pilot in the left seat said that they originally planned to purchase fuel at Gila Bend, Arizona, but were told that the fueling was closed. The left seat pilot said they elected to land at a private airstrip and made arrangements to have an individual drive to Casa Grande airport to purchase fuel for them. The left seat pilot said they were worried about adequate runway length, so they elected to only purchase 65 gallons of fuel for the remainder of the flight to San Diego. En route to San Diego, the right seat pilot obtained weather for the destination from FSS and was advised of 1,000-foot overcast ceiling. The right seat pilot then requested and received an instrument clearance. The TRACON controller advised the pilot of the accident airplane that he would have to keep speed up due to jet traffic or be given delay vectors for traffic spacing. The pilot told ATC that they were fuel critical and later said they had about 45 minutes to 1 hour of fuel. The right seat pilot was cleared for the localizer runway 27 approach. Approximately 18 minutes later, the pilot elected to do a missed approach because he was too high to land and moments later told San Diego radar that he was fuel critical and only had about 5 minutes of fuel left. San Diego radar began to give the pilot vectors to the closest airport and told the pilot not to descend any further. The right seat pilot replied that they were a glider and later told San Diego police that they had run out of fuel. There were no discrepancies noted with either the airframe or the engines during the postaccident aircraft examination.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's inaccurate fuel consumption calculations that resulted in fuel exhaustion and the subsequent ditching.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: MISSED APPROACH (IFR)

Findings
1. ALL ENGINES
2. FLUID,FUEL - EXHAUSTION
3. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND

Occurrence #2: DITCHING
Phase of Operation: DESCENT - EMERGENCY

Findings
4. TERRAIN CONDITION - WATER
5. LIGHT CONDITION - DARK NIGHT

Factual Information

HISTORY OF FLIGHT

On May 7, 1999, at 2230 hours Pacific daylight time, a Cessna T303, N3303S, impacted the water in San Diego Bay following a loss of power in both engines during a missed approach to runway 27 at Lindbergh Field, San Diego, California. The airplane was owned and operated by the second pilot, who holds a private pilot certificate without a multiengine class rating. The aircraft sank in the bay and sustained substantial damage. The airline transport pilot, who was at the controls flying from the right seat, and the private pilot, who was in the left seat, were not injured. The personal cross-country flight was being conducted under 14 CFR Part 91. The airplane had departed from Sugar Land Airport, Houston, Texas, at 1330 central daylight time on the day of the accident and was destined for San Diego. No flight plan was filed for the flight; however, the pilot had requested and received an instrument clearance for the approach into San Diego. Basic visual meteorological conditions prevailed with 7 miles visibility and a 1,000-foot overcast ceiling at the time of the accident.

The pilot of the airplane contacted San Diego Flight Service Station (AFSS), en route to San Diego and asked to obtain the weather for Lindbergh field. AFSS replied that the last report for Lindbergh was "wind one five zero at four, visibility seven, ceiling one thousand overcast, temperature one four, dew point one two, vfr flight not recommended." The pilot then replied that they'd like to have flight following and mentioned that they'd file an IFR flight plan at a later time. At 2120, the pilot filed an IFR flight plan and requested a routing via victor 66 direct to San Diego.

The pilot contacted San Diego AFSS at 2146 and inquired about the weather at Gillespie field as an alternate airport. San Diego FSS reported that the weather for Gillespie field was missing, but that Montgomery field was reporting 5 miles, visibility mist, and ceiling 600 broken.

The pilot contacted San Diego West Radar Sector (SDWR) at 2159 and said his destination was Lindbergh field. SDWR told the pilot that the Lindbergh weather was: "wind one five zero at four, visibility seven, ceiling one thousand overcast, altimeter two niner niner two, runway two seven in use, expect localizer approach." Seven minutes later SDWR told the pilot to maintain maximum forward airspeed due to jet traffic behind him, and if he missed this opportunity, he would be delayed quite a bit. At 2209, SDWR told the pilot that he was "not fast enough and to turn right heading three one zero delay vectors."

At 2210:05, the pilot said "San Diego from zero three sierra, we're kinda fuel critical if we keep our speed up better can we come on in?" SDWR replied, "uh no sir, fly heading three one zero, you have an American jet behind you about ten miles going almost three times as fast," then asked the pilot how much time in fuel he had. The pilot replied "oh, forty five minutes, an hour perhaps."

At 2214:53, SDWR told the pilot to turn right heading 260 and intercept the localizer. He then cleared the airplane for the localizer runway 27 approach at 2215:46, and was subsequently told to contact Lindbergh tower 2 minutes later.

San Diego Air Traffic Control Tower (SAN) told SDWR via landline at 2221:11, that the airplane was going around because he was "too high." On initial checkin with SDWR at 2227:19 the pilot said, "we're uh fuel critical at this point." SDWR asked the pilot how much time he had in fuel. The pilot replied, "we are just about there now." He later stated that he had 5 minutes of

fuel left.

SDWR told the pilot that there was an airport 1 o'clock, 8 miles that was VFR, and asked him if he'd like to head toward that airport. The pilot replied, affirmative. SDWR told the pilot that there was an airport 12 o'clock, 6 miles and the airport was Brown airport. The pilot asked for the radio frequency for Brown and was told there was no tower there and then told the pilot not to descend any further.

At 2229:45, the pilot stated, "we can't help it, we're a glider now." SDWR said "understand you have lost your engines . . . ", and the pilot replied affirmative, and that they had them feathered. Two minutes later the pilot told SDWR that they were out of the clouds, then radio contact was lost.

According to a San Diego Police Department Regional Officer's report, their dispatch received a telephone call from San Diego Sheriff's department stating that an airplane had crashed in the South San Diego Bay. Officers responded to the scene about 0035, and they found the Cessna tail up in 5 1/2 feet of water. Two adult men were standing atop the fuselage and they were recovered and told the police department personnel they were unhurt. Police department officers had the two men evaluated by emergency medical personnel and also contacted the Safety Board. The two men told Safety Board personnel "they ran out of gas."

Both pilots told San Diego officers that they intended to stop at Gila Bend, Arizona, for fuel but they were told that services were not available for that airport. They said they landed at a private ranch airport and took on 3 hours of fuel. They said that after they arrived at Lindbergh Field they were told to circle, and they were "fuel critical" and they could not make the runway a second time and had to put the airplane down.

The private pilot was interviewed by telephone and reported to Safety Board investigators that they departed from Houston, and that they were intending to fly to San Diego, Lindbergh Field. They originally planned on landing at Gila Bend to top the aircraft off with fuel. While they were talking on the CTAF frequency, another pilot told them that the fueling was closed at Gila Bend. The right seat pilot decided to land at a nearby private airstrip for fuel and they touched down approximately 1830-1900. They made arrangements to have a pickup truck with a fuel tank in the bed drive to the Casa Grande Airport and purchase 65 gallons of 100 low lead fuel and return to the airstrip. The left seat pilot said they put in approximately 63 gallons of fuel, drained fuel samples, and did not see any sediment or water in the fuel. He said that the right seat pilot was concerned about the length of the runway, which he stated was less than 2,000 feet, so they limited the amount of fuel they purchased. En route to San Diego, the right seat pilot called flight service to find out about weather in the San Diego area, and, after hearing that instrument conditions existed, requested a clearance to Lindbergh Field.

The left seat pilot stated that air traffic control (ATC) had them fly toward the VOR, then to an unknown intersection, and then proceed directly to San Diego. He said that when they received their IFR clearance, he estimated that they had 1:30 to 1:40 hours of fuel left. He said that approximately 30-40 miles from the airport, ATC told them to increase their speed for spacing and that they were unable to do so. He then said ATC took them out on vectors for traffic, then sequenced them back in for the approach. During the approach on the localizer runway 27, he said they broke out of the clouds at minimums, and were about 600-700 feet above the runway threshold and unable to make a normal landing from that altitude. The right seat pilot asked the control tower for permission to do a left turn and enter downwind for the

runway. ATC told the pilot to do a missed approach. During the missed approach an engine failed, followed by the other engine, and the right seat pilot feathered each propeller and set up for a ditching in the bay.

Safety Board investigators contacted the City of Sugar Land Municipal Airport officials who stated that they topped of the accident airplane with 0.6 gallons of AvGas on Friday May 7, 1999 at 1250 local time. Additionally, they stated they had put 51.8 gallons of AvGas in the accident airplane on May 6, 1999.

A review of the Casa Grande Desert Aero Center Fuel Log dated May 7, 1999, showed that 65.3 gallons of fuel was put in a can type container and the recipient paid cash.

The left seat pilot said that the right seat pilot had been giving him some instruction in the airplane. He reported that "numerous times" during the flight, he told the right seat pilot that they should stop at Tucson for fuel, go back to Casa Grande for more fuel, land short of San Diego, or declare an emergency.

PERSONNEL INFORMATION

The left seat pilot had a private pilot certificate, but did not have a multiengine rating at the time of the accident. He had a second-class medical certificate which was issued January 2, 1999. No logbooks were found to indicate the amount of flight time he had accumulated. He reported a total of 280 hours of total time, with 30 hours in this make and model airplane.

The right seat pilot held an airline transport pilot certificate with single and multiengine airplane ratings. He also had a flight instructor certificate which, according to the Federal Aviation Administration (FAA) database, expired April 30, 1999. He held a second-class medical certificate issued June 2, 1998, with limitations that the pilot shall wear correcting glasses and use hearing amplification while exercising the privileges of his airman certificate. No logbooks were found to indicate the amount of time he had in this aircraft, or his total time. He was a former airline pilot with type ratings in several large transport category airplanes. In the Pilot/Operator report, the left seat pilot indicated that this pilot had in excess of 25,000 hours of flight time, with 200 hours in this make and model airplane.

A statement which is appended to this report from a certified flight instructor states that he gave the right seat pilot a flight review in March 1999, and he also gave the pilot a checkout in the Cessna 303.

AIRCRAFT INFORMATION

The left seat pilot said he purchased this airplane on March 18, 1999. The most recent annual inspection was dated December 11, 1998. The airplane had accumulated 106 hours since last inspection, and 1832 hours total time.

AIRCRAFT EXAMINATION

The airframe and engines were examined at Aircraft Recovery Services, Compton, California on May 18, 1999. The airplane was submerged in ocean salt water for 7 days before recovery. All magnesium and magnesium alloy components exhibited severe corrosion.

Hydrodynamic distortion was noted to the forward lower fuselage and main landing gear doors. Both the left and right landing gear hydraulic actuator shafts were torn from the gear attach points, with elongation of the bolt holes noted. The nose landing gear was observed partially extended and hydrodynamically damaged.

The forward seat track attach point for the left seat was found separated. The seat remained to the floor by the rear attach points.

Both propellers were undamaged and visually appeared to be at or near the feathered position. All the respective blades were found tight and in their hubs.

Fuel system continuity was established in both wings to the respective left and right firewalls. Fuel system continuity was established between the firewall lines and the cylinders. All line fittings were intact, with no staining evident. The engine fuel selector valves are cable actuated from the cockpit to remote mounted fuel selector valves located in the wings inboard of the nacelles. The wing inspection panels for the wet-wing cells were opened. No liquid, foreign objects, or other debris were found in the tanks. The fuel quantity float sending units were intact and free to move.

The left fuel valve was found in the normal feed position. The right fuel valve was found in the cross-feed position. Both fuel valve selector handles were in the cross-feed position. The fuel vent lines were clear and the check valves worked correctly when tested.

The left engine was identified as a Continental LTSIO-520-AE, serial number 524007. External visual examination revealed no impact damage. Corrosion was evident to the accessory gear case, fuel pump/metering unit, and magnetos. The induction and exhaust air paths were examined and no obstructions were noted. The turbocharger compressor and turbine impellers were free to rotate.

The top Champion RHB32E spark plugs were removed and examined. They exhibited a light ash gray color with electrode gaps that visually appeared to be in the normal recommended range. The ignition harnesses were intact. Both magnetos were wet and could not be tested.

The interior of the cylinders and the piston crowns were viewed through the spark plug holes. Removal of the rocker box covers revealed evidence of lubricants. Rotation of the crankshaft produced compression in each cylinder, with accessory gear and valve train continuity established.

The right engine was identified as a Continental LTSIO-520-AE, serial number 524007. External visual examination revealed no impact damage. Corrosion was evident to the accessory gear case, fuel pump/metering unit, and the magnetos. The induction and exhaust air paths were examined, with no obstructions noted. The turbocharger compressor and turbine impellers were free to rotate.

The top Champion RHB32E spark plugs were removed and examined. They exhibited a light ash gray color with the electrode gaps appearing to be in the normal recommended range. The ignition harnesses were intact and both magnetos were wet and could not be tested.

The interior of the cylinders and the piston crowns were viewed through the spark plug holes. After removing the rocker box covers, there was evidence of lubricants present. Rotation of the crankshaft produced compression in each cylinder, with accessory gear and valve train continuity established.

MEDICAL INFORMATION

On May 9, 1999, at 1700, the San Diego Police Department officers responded to a radio call concerning two men who were seen rowing a dinghy toward the airplane that crashed into the water. Officers said they arrived at the airplane about 1755 and they didn't find any vessels in

the area so they responded to the Chula Vista launch ramp. Upon their arrival at the launch ramp, they said they noticed that there was an ambulance leaving they area with its lights and siren on. The subject in the ambulance was identified as the right seat pilot. He was "experiencing some sort of medical emergency," while they were rowing back to shore from the airplane.

The right seat pilot was pronounced dead on arrival at the hospital. An autopsy was performed by the San Diego County Medical Examiner's office. The attesting pathologists stated that he died from natural causes due to coronary disease, and that there was "no trauma whatsoever" from the airplane crash 2 days before.

ADDITIONAL INFORMATION

The wreckage was released to the insurance company, representing the registered owner on October 6, 1999.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	**Age:**	70, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	**Toxicology Performed:**	
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	06/02/1998
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	25000 hours (Total, all aircraft), 200 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N3303S
Model/Series:	T303 T303	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	000018
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	12/11/1998, Annual	**Certified Max Gross Wt.:**	5000 lbs
Time Since Last Inspection:	106 Hours	**Engines:**	2 Reciprocating
Airframe Total Time:	1832 Hours	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	TSIO-520AE2B
Registered Owner:	NOVA STAR INTERNATIONAL	**Rated Power:**	250 hp
Operator:	NEVILLE A. LEWIS	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Night/Dark
Observation Facility, Elevation:	SAN, 14 ft msl	**Distance from Accident Site:**	5 Nautical Miles
Observation Time:	1051 PDT	**Direction from Accident Site:**	90°
Lowest Cloud Condition:	Scattered / 0 ft agl	**Visibility**	7 Miles
Lowest Ceiling:	Overcast / 1000 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	140°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	14°C / 12°C
Precipitation and Obscuration:			
Departure Point:	SUGAR LAND MUNI, TX (SGR)	**Type of Flight Plan Filed:**	None
Destination:	(SAN)	**Type of Clearance:**	IFR
Departure Time:	1330 CDT	**Type of Airspace:**	Class B

Airport Information

Airport:	LINDBERGH FIELD (SAN)	**Runway Surface Type:**	Concrete
Airport Elevation:	14 ft	**Runway Surface Condition:**	Dry
Runway Used:	27	**IFR Approach:**	Localizer Only
Runway Length/Width:	9400 ft / 200 ft	**VFR Approach/Landing:**	Forced Landing

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	DEBORAH L CHILDRESS	**Report Date:**	11/22/2000
Additional Participating Persons:	STEVE C DREW; SAN DIEGO, CA HENRY J SODERLUND; WICHITA, KS MICHAEL J GRIMES; LANCASTER, CA		
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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		