



# Aviation Investigation Final Report

<b>Location:</b>	LINDEN, New Jersey	<b>Accident Number:</b>	NYC94LA044
<b>Date &amp; Time:</b>	December 23, 1993, 19:00 Local	<b>Registration:</b>	N31617
<b>Aircraft:</b>	MOONEY 20E	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

JUST AFTER TAKEOFF, AT AN ALTITUDE OF APPROXIMATELY 300 FEET, THE PILOT EXPERIENCED A TOTAL LOSS OF ENGINE POWER. HE ELECTED TO LAND ON THE RUNWAY WITH THE LANDING GEAR RETRACTED. THE EXAMINATION OF THE AIRPLANE REVEALED 'LARGE QUANTITIES OF WATER,' FOUND IN THE FUEL INJECTORS, GASCOLATOR, MAIN FUEL LINE, AND THE RIGHT FUEL TANK.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE PREFLIGHT INSPECTION WHICH FAILED TO DETECT WATER-CONTAMINATED FUEL AND RESULTED IN THE LOSS OF ENGINE POWER.

## Findings

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

### Findings

1. (F) FLUID,FUEL - CONTAMINATION
  2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

-----

Occurrence #3: GEAR NOT EXTENDED

Phase of Operation: LANDING

Findings

3. TERRAIN CONDITION - RUNWAY

4. LANDING GEAR - NOT SELECTED - PILOT IN COMMAND

## Factual Information

On December 23, 1993, about 0930 eastern standard time, a Mooney 23E, N31617, piloted by Mr. John Sanford, collided with the terrain during a forced landing at the Linden Airport, Linden, New Jersey. The airplane was substantially damaged, and the pilot was not injured. Visual meteorological conditions prevailed at the time, and no flight plan had been filed. The flight was being conducted under 14 CFR 91.

The airplane had just departed the airport, and at an altitude of 300 feet the airplane's engine lost total power. The pilot elected to land back on the runway with the landing gear retracted.

The FAA took fuel samples and according to FAA Inspector, Victor Roxas's written report, fuel taken from the injectors, "revealed large quantities of water." Fuel samples taken from the gascolater, main fuel lines, aft of the mechanical pump, and the left fuel tank, "...also revealed large quantities of water."

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	27, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	September 3, 1993
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	547 hours (Total, all aircraft), 145 hours (Total, this make and model), 547 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MOONEY	<b>Registration:</b>	N31617
<b>Model/Series:</b>	20E 20E	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	2A3
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	2575 lbs
<b>Time Since Last Inspection:</b>	150 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-A1A
<b>Registered Owner:</b>	TED MEBLAGHLIN	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	JOHN SANFORD	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	20°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	CHARLESTON , SC (JZI )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	19:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	LINDEN MUNICIPAL LDJ	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	29 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	9	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	4139 ft / 75 ft	<b>VFR Approach/Landing:</b>	Forced landing

## 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>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Yurman, Alan
<b>Additional Participating Persons:</b>	VICTOR ROXAS; TETERBORO , NJ
<b>Original Publish Date:</b>	September 13, 1994
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=38724">https://data.ntsb.gov/Docket?ProjectID=38724</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](#).