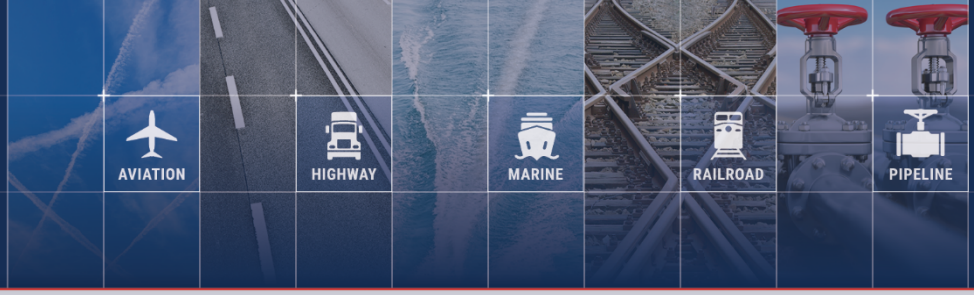

Aviation Investigation Final Report

Location:	CLEVELAND, Ohio	**Accident Number:**	NYC95LA092
Date & Time:	April 23, 1995, 21:55 Local	**Registration:**	N9969X
Aircraft:	MOONEY M20J	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT WAS APPROACHING THE AIRPORT TO LAND WHEN THE ENGINE BEGAN TO RUN ROUGH. AS HE NEARED THE AIRPORT, THE ROUGHNESS STOPPED. HE THEN ELECTED TO OVERFLY THE AIRPORT AND LAND ON A DIFFERENT RUNWAY. AS THE AIRPLANE TURNED FINAL, THE ENGINE LOST ALL POWER AND THERE WAS INSUFFICIENT ALTITUDE TO REACH THE RUNWAY. THE PILOT DITCHED IN THE WATER, AVOIDING A ROCKY AREA NEXT TO THE RUNWAY. FUEL WAS FOUND IN THE FUEL TANKS. THE ENGINE WAS ROUGH WHEN RAN. THE FUEL CONTROL UNIT, FUEL INJECTORS AND FUEL SERVO WERE CHECKED, AND FOUND TO BE WITHIN THE MANUFACTURER'S SPECIFICATIONS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the loss of engine power for undetermined reasons, and the pilot's improper decision to fly an extended landing pattern after experiencing a partial loss of engine power.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: APPROACH

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: DITCHING
Phase of Operation: DESCENT - EMERGENCY

Findings
2. (C) PLANNED APPROACH - IMPROPER - PILOT IN COMMAND
3. TERRAIN CONDITION - WATER

Factual Information

On April 23, 1995, at 2155 eastern daylight time, a Mooney M20J, N9969X, ditched in Lake Erie after the engine lost power while on approach to Burke Lakefront Airport, Cleveland, Ohio. The private pilot and passenger received minor injuries. The airplane was substantially damaged. Visual meteorological conditions prevailed, and the flight was operated on an instrument flight rules (IFR) flight plan, under 14 CFR 91. The flight had departed from Norfolk, Virginia, at 1915.

At 2152:24, the pilot transmitted, "lakefront tower six niner xray is experiencing some engine roughness." The pilot was given his choice of runways and chose runway 24R.

At 2153:17, the pilot transmitted, "ok the engine seems to have smoothed out i'll overfly the field and come in on six if that's ok now." This was approved.

The air traffic controller stated:

...His last transmission was his report overlying the field. I cleared N9969X to land Runway 6L and issued the wind...I watched N9969X turn final for Runway 6L. I saw the aircraft hit the water at the northwest corner of the field near the approach to runway 6L...."

In the NTSB Accident Report, the pilot stated:

...As I began to turn final [runway 6], the engine quit altogether. I tried to extend the glide, but as airspeed was dropping through 60 knots, and we were heading for rocks, I turned to the left...retracted the gear, leveled out, and braced for a water landing.

The airplane was removed from Lake Erie on April 24. Prior to arrival of the FAA, and without their permission, an insurance adjustor opened fuel lines, and drained water from the fuel tanks. The engine was run briefly by the insurance adjustor. In a written report, the adjustor stated:

...the engine would start, but flood the moment [the] mixture was advanced....

The FAA examined the airplane on April 25. The engine was run again, and in a written report, the FAA stated:

...Engine ran rough and quit when mixture was advanced. Restarted and leaned mixture almost to the point of cutoff, engine ran like a top. There was very little mag drop on the left mag and about 300 RPM on the right. There appeared to be a fuel metering problem....

The fuel metering system, including the servo fuel injector control, fuel manifold valve, injector lines, and injectors were forwarded to Pacific Aeromotive for additional examination. According to their "Incident Investigation Report", dated May 11, 1995, "...Connected unit to flow bench and found operation of unit satisfactory...Flow Divider and all fuel nozzles tested within manufacturer's flow specifications...."

Pilot Information

Certificate:	Private	**Age:**	46,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	January 19, 1995
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	250 hours (Total, all aircraft), 26 hours (Total, this make and model), 166 hours (Pilot In Command, all aircraft), 52 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	**Registration:**	N9969X
Model/Series:	M20J M20J	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Utility	**Serial Number:**	24-1243
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	April 6, 1994 Annual	**Certified Max Gross Wt.:**	2740 lbs
Time Since Last Inspection:	43 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4544 Hrs	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, not activated	**Engine Model/Series:**	IO-360
Registered Owner:	CLEVELAND AIR INC	**Rated Power:**	200 Horsepower
Operator:	DENNIS W. MAREK	**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night/dark
Observation Facility, Elevation:	BKL ,584 ft msl	**Distance from Accident Site:**	
Observation Time:	21:45 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Unknown	**Visibility**	15 miles
Lowest Ceiling:	Overcast / 10000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	50°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	6°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	NORFOLK , VA (ORF)	**Type of Flight Plan Filed:**	IFR
Destination:	(BKL)	**Type of Clearance:**	IFR
Departure Time:	19:15 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	BURKE LAKEFRONT BKL	**Runway Surface Type:**	Asphalt
Airport Elevation:	584 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	0	**IFR Approach:**	Visual
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Minor	**Latitude, Longitude:**	41.520927,-81.680099(est)

Administrative Information

Investigator In Charge (IIC):	Hancock, Robert
Additional Participating Persons:	LEE WHITE; CLEVELAND , OH JIM DAVIDSON; CLEVELAND , OH
Original Publish Date:	November 8, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=38947