



Aviation Investigation Final Report

Location:	THIEF RVR FALLS, Minnesota	Accident Number:	CHI88LA154
Date & Time:	July 5, 1988, 16:35 Local	Registration:	N11652
Aircraft:	MOONEY M20J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Probable Cause and Findings

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

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING - ABORTED

Occurrence #3: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: DESCENT - UNCONTROLLED

Occurrence #4: NOSE DOWN
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	37, 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:	May 1, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	326 hours (Total, all aircraft), 136 hours (Total, this make and model), 235 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N11652
Model/Series:	M20J M20J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1353
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 18, 1988 100 hour	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:	29 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2441 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A3B
Registered Owner:	WILLMAR AIR SERVICE	Rated Power:	200 Horsepower
Operator:	WILLMAR AIR SERVICE INC.	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:	Day
Observation Facility, Elevation:	TVF ,1116 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	15:55 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	25 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GRAND FORKS , ND (GFK)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:10 Local	Type of Airspace:	Class D

Airport Information

Airport:	THIEF RVR FALLS REGIONAL TVF	Runway Surface Type:	Asphalt
Airport Elevation:	1112 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	6500 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Dinwiddie, Carl
Additional Participating Persons:	MIRLO E OCHOA; WEST CHICAGO , IL
Original Publish Date:	July 26, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=14107

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](#).