



Aviation Investigation Final Report

Location:	WAGONTIRE, Oregon	Accident Number:	SEA87LA096
Date & Time:	May 17, 1987, 14:00 Local	Registration:	N3523X
Aircraft:	MOONEY M20F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

DURING TAKEOFF WITH FULL FLAPS AND A DENSITY ALTITUDE OF ABOUT 6,200 FEET THE AIRCRAFT FAILED TO GAIN FLYING SPEED. SHORTLY AFTER BECOMING AIRBORNE THE AIRCRAFTS GEAR CAUGHT ON A BARBED WIRE FENCE AT THE DEPARTURE END OF THE RUNWAY. THE AIRCRAFT THEN STRUCK THE GROUND COLLAPSING THE LANDING GEAR.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (F) OBJECT - FENCE
3. (C) AIRCRAFT PERFORMANCE, TAKEOFF CAPABILITY - EXCEEDED
4. (C) LOWERING OF FLAPS - IMPROPER - PILOT IN COMMAND
5. (C) PERFORMANCE DATA - NOT UNDERSTOOD - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Occurrence #3: GEAR COLLAPSED
Phase of Operation: LANDING

Factual Information

Pilot Information

Certificate:	Private	Age:	54, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	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 18, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	411 hours (Total, all aircraft), 299 hours (Total, this make and model), 372 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N3523X
Model/Series:	M20F M20F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	670060
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 5, 1987 100 hour	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:	48 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2645 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360
Registered Owner:	DAVID W. ROBINSON	Rated Power:	200 Horsepower
Operator:	DAVID W. ROBINSON	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / 8 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WAGONTIRE , OR (OR03)	Type of Flight Plan Filed:	None
Destination:	JOHN DAY , OR (U33)	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	WAGONTIRE OR03	Runway Surface Type:	Dirt
Airport Elevation:	4700 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	2300 ft / 30 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	43.830276,-121.489784(est)

Administrative Information

Investigator In Charge (IIC): Carrera, Candace

Additional Participating Persons: LEW SANDERS; HILLSBORO , OR

Original Publish Date: May 2, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=40626>

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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](#).