



Aviation Investigation Final Report

Location: KENT ISLAND, Maryland Accident Number: IAD98LA099

Date & Time: August 22, 1998, 19:45 Local Registration: N6532U

Aircraft: Mooney M-20C Aircraft Damage: Substantial

Defining Event: 3 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot began the takeoff roll from the sod runway 'using a soft field technique.' He applied back pressure on the yoke and then full throttle. The pilot reported the engine provided full takeoff power. Witnesses reported the airplane in a nose-high attitude as it dragged its tail the length of the runway. The airplane went off the departure end of the runway and came to rest in the Chesapeake Bay. Examination of the airplane after the accident revealed the flaps were fully retracted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper takeoff technique and his failure to abort the takeoff.

Findings

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) SHORT FIELD TAKEOFF/PROCEDURE - IMPROPER - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings
2. (C) ABORT - NOT PERFORMED - PILOT IN COMMAND

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Factual Information

On August 22, 1998, at 1945 eastern daylight time, a Mooney M-20C, N6532U, was substantially damaged after a loss of control during takeoff from runway 28 at the Kentmorr Airport (3W3), Kent Island, Maryland. The airplane came to rest submerged in the Chesapeake Bay. The certificated commercial pilot and two passengers were not injured. Visual meteorological conditions prevailed for the personal flight that originated at 3W3, at 1945. No flight plan was filed for the flight conducted under 14 CFR Part 91.

The pilot was interviewed by a Federal Aviation Administration (FAA) Aviation Safety Inspector by telephone on two occasions. The Inspector documented each conversation in a Record of Telephone call. The pilot said:

"I took off towards the Bay. I used a soft field take off technique procedure. I used all the available runway. I provided back elevator pressure, then applied full power. I then checked that the engine was developing full power by looking at the instruments. When the airplane broke ground, approximately before the end of the runway, I can't tell exactly where, but it was before the end of the runway. At that point, the airplane seemed to settle into the water."

The pilot said he was beyond the point where he could safely abort the takeoff when he "...determined there was something wrong..." and ditched the airplane in the water.

When questioned about the airplane's configuration and power output, the pilot stated the flaps were set in the takeoff position (15 degrees), and that the engine RPM was "...just under red line."

A witness who resides near the departure end of runway 28 provided a statement to the FAA Inspector. He said:

"It sounded like he did a run-up all right...Everything seemed all right. The nose came up. He was in a soft field attitude. The tail was way down, actually dragging the ground. When he passed by our house, he was committed to go. He dragged the tail to the gravel road. He just went right off the end."

The witness identified ground scars near the shore where the undercarriage of N6532U had contacted the ground. According to the Inspector:

"The strobe light from the underside of the Mooney was found approximately 12 feet from the shore's edge."

The airplane was recovered from the Chesapeake Bay on August 25,1998. The recovery was

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supervised by the FAA Inspector and no further damage was sustained by N6532U. Examination of the airplane by the Inspector revealed no pre-impact anomalies and the flaps and flap indicator in the fully retracted position. Control continuity was established to all flight control surfaces except the left aileron, which was damaged by impact. Movement of the flight controls revealed the "..left aileron rod moved fully and freely."

The pilot's most recent medical certificate was issued on June 30, 1998. On that date the pilot reported he had 310 hours of flight experience. The pilot submitted his NTSB Pilot/Operator report approximately 13 months after the accident. In the report, the pilot stated he had 550 hours of flight experience.

Pilot Information

Certificate:	Commercial	Age:	21,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 30, 1997
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	550 hours (Total, all aircraft), 50 hours (Total, this make and model), 500 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6532U
Model/Series:	M-20C M-20C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2315
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	0-360-AID
Registered Owner:	GUS YIALAMAS	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Vieual (VMC)	Condition of Links	Day
Conditions at Accident Site.	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ESN ,74 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	19:55 Local	Direction from Accident Site:	130°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(3W3)	Type of Flight Plan Filed:	None
Destination:	TRENTON , NJ (TTN)	Type of Clearance:	None
Departure Time:	19:45 Local	Type of Airspace:	Class G

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Airport Information

Airport:	KENTMORR AIRPORT 3W3	Runway Surface Type:	Grass/turf
Airport Elevation:	10 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	2050 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	38.989875,-76.299171(est)

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Administrative Information

Investigator In Charge (IIC): Rayner, Brian

Additional Participating Persons:

Original Publish Date: September 7, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=43784

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.

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