

Aviation Investigation Final Report

Location:	AVOCA, Pennsylvan	ia	Accident Number:	NYC98LA072
Date & Time:	February 27, 1998, 2	0:15 Local	Registration:	N1173N
Aircraft:	Mooney	M20J	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 91: General avia	ation - Personal		

Analysis

The pilot was being vectored for an ILS approach in night visual meteorological conditions, when he felt a jolt and the airplane descended. He recovered control of the airplane and proceeded directly to the airport, and landed without further difficulty. Post flight examination revealed a goose imbedded in the vertical stabilizer of the airplane.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: APPROACH

Findings 1. (C) OBJECT - BIRD(S)

Factual Information

On February 27, 1998, about 2015 eastern standard time, a Mooney M20J, N1173N, was substantially damaged when it collided with a goose while on approach to the Wilkes-Barre/Scranton International Airport, Avoca, Pennsylvania. The certificated private pilot was not injured. Night visual meteorological conditions prevailed for the personal flight that originated at Bedford, Massachusetts, about 1830. The flight was conducted on an instrument flight rules (IFR) flight plan under 14 CFR Part 91.

In the NTSB Pilot/Operator Aircraft Accident Report, the pilot reported that he was at 4,000 feet, being vectored for the ILS approach when the bird strike occurred. He further stated:

"...I heard a thud and the airplane suddenly dropped in a hurry. I noticed a very large deflection on the VSI, probably 1,500 FPM, maybe more, maybe less...I pulled hard on the yoke and eventually was able to level the plane. Trim adjustment relieved the down pressure, steering seemed a little funny, but I could place the problem I would bank, but not turn very sharply...."

The pilot then requested to proceed directly to the airport and landed without incident. After engine shutdown, the pilot exited the airplane and found a goose imbedded in the vertical stabilizer. He also stated in the NTSB Report:

"...I had hit a very large goose; squarely in the middle of the Mooney tail, just above the middle set of rivets...The rudder was binding and the whole...[tail] section would bend when I pressed the rudder pedals...The goose impact had rotated the tail around the bolt so that the horizontal stabilizer was in a strong nose down attitude...."

A check of the airport NOTAMS found the following:

"A110-3 BIRDS ON & INVOF ARPT." [Birds on and in the vicinity of the airport.]

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 Medicalno waivers/lim.	Last FAA Medical Exam:	June 16, 1997
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	492 hours (Total, all aircraft), 152 hours (Total, this make and model), 463 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Mooney	Registration:	N1173N
M20J M20J	Aircraft Category:	Airplane
	Amateur Built:	
Normal	Serial Number:	24-1335
Retractable - Tricycle	Seats:	4
February 6, 1998 Annual	Certified Max Gross Wt.:	2740 lbs
3 Hrs	Engines:	1 Reciprocating
1307 Hrs	Engine Manufacturer:	Lycoming
Installed, not activated	Engine Model/Series:	IO-360-A3B6D
SCOTT E. CUTLER	Rated Power:	
	Operating Certificate(s) Held:	None
	Operator Designator Code:	
	M20J M20J Normal Retractable - Tricycle February 6, 1998 Annual 3 Hrs 1307 Hrs Installed, not activated	M20J M20J Aircraft Category: Amateur Built: Amateur Built: Normal Serial Number: Seats: February 6, 1998 Annual Certified Max Gross Wt.: 3 Hrs Engines: 1307 Hrs Engine Manufacturer: Installed, not activated Engine Model/Series: SCOTT E. CUTLER Rated Power: Operating Certificate(s) Held:

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	10°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	BEDFORD , MA (BED)	Type of Flight Plan Filed:	IFR
Destination:	(AVP)	Type of Clearance:	IFR
Departure Time:	18:30 Local	Type of Airspace:	Class C

Airport Information

Airport:	WILKES-BARRE/SCRANTON AVP	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	41.340915,-75.719886(est)

Administrative Information

Investigator In Charge (IIC):	Hancock, Robert
Additional Participating Persons:	THOMAS LAHOVSKI;
Original Publish Date:	July 26, 2001
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=39538

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 <u>here</u>.