Aviation Investigation Final Report

Location:	AVOCA, Pennsylvania	**Accident Number:**	NYC98LA072
Date & Time:	February 27, 1998, 20:15 Local	**Registration:**	N1173N
Aircraft:	Mooney M20J	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - 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 Medical--no 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

Aircraft Make:	Mooney	**Registration:**	N1173N
Model/Series:	M20J M20J	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	24-1335
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 6, 1998 Annual	**Certified Max Gross Wt.:**	2740 lbs
Time Since Last Inspection:	3 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1307 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	IO-360-A3B6D
Registered Owner:	SCOTT E. CUTLER	**Rated Power:**	
Operator:		**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:		**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 Precipitation		
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:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=39538