



Aviation Investigation Final Report

Location:	NEW CASTLE, Delaware	Accident Number:	BF094LA058
Date & Time:	April 2, 1994, 19:15 Local	Registration:	N2542L
Aircraft:	PIPER PA-38-112	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT WAS DOING A STRAIGHT-IN APPROACH TO RUNWAY 14 AT WILMINGTON, DE, AT NIGHT WHEN THE AIRPLANE STRUCK BIRDS. THE AIRPLANE WAS DESCENDING THROUGH 1800 FEET MSL AND 7 MILES FROM THE AIRPORT WHEN THE BIRD STRIKE OCCURRED. THE PILOT REPORTED HE EXPERIENCED A LOSS OF ELECTRICAL POWER, YAW CONTROL PROBLEMS, AND A PARTIAL LOSS OF ENGINE POWER; HOWEVER, HE CONTINUED TO THE AIRPORT AND LANDED. THE ENGINE BEGAN TO LOOSE POWER A MILE FROM THE AIRPORT. EXAMINATION OF THE AIRPLANE REVEALED THE BATTERY CASE, FIREWALL, AND WINGS WERE DAMAGED BY THE BIRD STRIKE. ALSO, THERE WAS DEBRIS IN THE ENGINE AIR INLET FROM THE BIRD STRIKE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Inadequate clearance from obstacles, which resulted in birds strike. A factor was night conditions.

Findings

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

Findings

1. (C) OBJECT - BIRD(S)
2. (F) LIGHT CONDITION - DARK NIGHT

Factual Information

On April 2, 1994, at 1915 eastern standard time, a Piper PA-38- 112, N2542L, collided with birds enroute to New Castle County Airport, Wilmington, Delaware. The certificated private pilot, the sole occupant, was not injured while the airplane sustained substantial damage. The personal flight was being operated under 14 CFR 91 and originated in Delaware. Visual meteorological conditions prevailed and a flight plan was not filed.

According to the pilot, it was a dark night and he was returning from a local flight. He stated that he was descending out of 2000 feet MSL for 1100 feet MSL, and upon reaching 1800 feet MSL he heard a loud bang. The pilot stated that he lost all electrical power and was unable to contact the tower. The airplane struck a flock of birds and some of the birds were ingested into the airplane's engine air inlet as well as in the cockpit. A landing was made without power due to loss of engine and electrical power. The pilot also stated that he did not have any aileron control during the landing.

Examination of the airplane by the FAA revealed that there were bird strikes to the right side battery case, firewall, and both wings. According to the Airport Facilities Directory in the Airport Remarks, it states in part "birds on and in vicinity of airport."

Pilot Information

Certificate:	Private	Age:	20, 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-w/ waivers/lim	Last FAA Medical Exam:	October 12, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	222 hours (Total, all aircraft), 181 hours (Pilot In Command, all aircraft), 58 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2542L
Model/Series:	PA-38-112 PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-79A0756
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-235-L2C
Registered Owner:	DAWN AERONAUTICS	Rated Power:	112 Horsepower
Operator:	DAWN AERONAUTICS	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:	ILG ,80 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	18:00 Local	Direction from Accident Site:	140°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:50 Local	Type of Airspace:	Class E

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	1600 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Straight-in

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:	39.659233,-75.569725(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Beverley
Additional Participating Persons:	JIM SHEPHARD; PHILADELPHIA , PA
Original Publish Date:	March 27, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=8903

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