



Aviation Investigation Final Report

Location:	Branchville, New Jersey	Accident Number:	IAD05LA095
Date & Time:	July 5, 2005, 13:00 Local	Registration:	N6061L
Aircraft:	Grumman American AA-5	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While in cruise flight over mountains, the pilot smelled a combination of "electrical smoke and fuel." He opened the canopy and at the same time, fire came out from under the instrument panel. He then closed the canopy, and the fire diminished. He did not execute the 'In-Flight Electrical Fires' checklist, and chose to attempt a forced landing on top of a ridge in a state forest. During the landing, the airplane struck trees, and began to leak fuel. Examination of the airplane revealed fire damage in the vicinity of the airplane's battery and the electrical wiring harness that lead from the battery. The engine, engine accessories, and surrounding structure were undamaged by fire. The airplane's most recent annual inspection was completed approximately 6 months prior to the accident, and as part of the inspection, work was performed on wiring going to the cigar lighter, and the cables for the electric starter.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An electrical fire of unknown origin. A factor in the accident was the pilot's failure to perform

the In-Flight Electrical Fires checklist.

Findings

Occurrence #1: FIRE

Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ELECTRICAL SYSTEM - FIRE
2. (F) EMERGENCY PROCEDURE - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

Findings

3. OBJECT - TREE(S)

Factual Information

On July 5, 2005, about 1300 eastern daylight time, a Grumman American AA-5, N6061L, was destroyed during a forced landing near Branchville, New Jersey. The certificated commercial pilot was seriously injured. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight, which departed Mountain Bay Airpark (PA49), Hawley, Pennsylvania destined for Lincoln Park Airport (N07), Lincoln Park, New Jersey, conducted under 14 CFR Part 91.

According to a Federal Aviation Administration (FAA) inspector, while in cruise flight over the Appalachian Mountains, the pilot smelled what seemed like a combination of "electrical smoke and fuel." He responded by opening the canopy to vent the cabin, and at the same time, fire came out from under the instrument panel. He subsequently closed the canopy, and the fire appeared to diminish. He did not execute the 'In-Flight Electrical Fires' checklist, and chose to attempt a forced landing on top of Kittatinny Ridge in Stokes State Forest.

During the landing, the airplane struck several trees, and began to leak fuel as it penetrated the forest canopy. After the airplane came to rest, the pilot exited the airplane from the right rear passenger window.

An FAA inspector examined the 100-yard debris field, and found most major portions of the airplane located in that area. The majority of the airplane's fuselage had been destroyed by fire, with the exception of the outer wing panels, and the nose section forward of the firewall.

During a detailed examination of the airplane's firewall area, it was noted that fire damage in the engine compartment was only evident in the area of the airplane's battery and the electrical wiring harness that lead from the battery. The engine, engine accessories, and surrounding structure were undamaged by fire.

The airplane's most recent annual inspection was completed on January 18, 2005, and as part of the inspection, work was performed on wiring going to the cigar lighter, and the cables for the electric starter.

According to the Grumman American AA-5 'In-Flight Electrical Fire' checklist, the procedure for responding to an in-flight electrical fire was:

- 1) Master Switch: OFF
- 2) All electrical switches: OFF
- 3) Ignition switch: ON
- 4) Cabin air vents: OFF
- 5) Proceed to nearest suitable airport for landing

Pilot Information

Certificate:	Commercial	Age:	68, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-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 With waivers/limitations	Last FAA Medical Exam:	October 1, 2003
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2100 hours (Total, all aircraft), 130 hours (Total, this make and model), 1950 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman American	Registration:	N6061L
Model/Series:	AA-5	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AA5-0161
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 1, 2005 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3490.86 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-320-E2G
Registered Owner:	Northcross Properties, LLC.	Rated Power:	150 Horsepower
Operator:	Peter John Horvat	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FWN,421 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:		Visibility	7 miles
Lowest Ceiling:	Broken / 1700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	24°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hawley, PA (PA49)	Type of Flight Plan Filed:	None
Destination:	Lincoln Park, NJ (N07)	Type of Clearance:	
Departure Time:	12:30 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	Both in-flight and on-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	41.161388,-74.814445

Administrative Information

Investigator In Charge (IIC):	Gunther, Todd
Additional Participating Persons:	Robert Ference; FAA FSDO-05; Allentown, PA
Original Publish Date:	August 29, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=61899

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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](#).