



# Aviation Investigation Final Report

<b>Location:</b>	Wilmington, Delaware	<b>Accident Number:</b>	NYC02LA038
<b>Date &amp; Time:</b>	October 30, 2001, 16:35 Local	<b>Registration:</b>	N90688
<b>Aircraft:</b>	Aero Vodochody Aero. Works L-39C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

While taxiing, the pilot noticed smoke emanating from the right side of the airplane. He shut down the engine, activated the emergency fire suppression system, and exited the airplane. Examination of the airplane after the fire revealed that an oil line from the APU had ruptured, and sprayed oil on the APU's exhaust pipe.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A ruptured oil line, which resulted in oil spraying onto the APU exhaust and a subsequent fire.

### Findings

Occurrence #1: FIRE  
Phase of Operation: TAXI

- Findings
1. (C) LUBRICATING SYSTEM,OIL LINE - RUPTURED
  2. FLUID,OIL - LEAK

## Factual Information

On October 30, 2001, at 1635 eastern standard time, an Aero Vodochody L-39C, N90688, was substantially damaged when it caught fire while taxiing at New Castle County Airport (ILG), Wilmington, Delaware. The certificated private pilot was not injured. Visual meteorological conditions prevailed at the time of the accident. A visual flight rules flight plan was on file for the flight, to Canandaigua Airport (D38), Canandaigua, New York. The personal flight was to be conducted under 14 CFR Part 91.

The pilot reported that he flew to Wilmington earlier in the day to have the airplane's brakes checked. After the inspection, he prepared for departure, and had the airplane turned into the wind. The start sequence was normal, and afterwards, he began to taxi the airplane to the active runway. According to the pilot:

"As I was taxiing, I received a light indicating electrical failure and RAT displayed. I also noticed smoke coming from the right side of the aircraft. The control tower then radioed and asked if the plane was all right because they saw smoke as well. As I answered, total electrical failure occurred. At this point, I hit fuel cutoff, shut down the engine, and engaged the emergency fire suppression system and exited the aircraft."

According to the maintenance technician who inspected the airplane after the fire, an oil line from the auxiliary power unit (APU) had ruptured, and sprayed oil onto the APU's exhaust pipe.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	48, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	December 4, 2000
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	July 23, 2001
<b>Flight Time:</b>	2079 hours (Total, all aircraft), 60 hours (Total, this make and model), 23 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Aero Vodochody Aero. Works	<b>Registration:</b>	N90688
<b>Model/Series:</b>	L-39C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	430424
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 25, 2001 AAIP	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>	52.7 Hrs	<b>Engines:</b>	1 Turbo jet
<b>Airframe Total Time:</b>	2675.2 Hrs at time of accident	<b>Engine Manufacturer:</b>	Ivchenko
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	AI-25
<b>Registered Owner:</b>	DeWight Cartwright	<b>Rated Power:</b>	3800 Lbs thrust
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	ILG,79 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	16:51 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	340°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.45 inches Hg	<b>Temperature/Dew Point:</b>	14°C / 3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	DE (ILG )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Canadaigua, NY (D38 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	New Castle County ILG	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	79 ft msl	<b>Runway Surface Condition:</b>	Unknown
<b>Runway Used:</b>		<b>IFR Approach:</b>	Unknown
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	On-ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	39.729824,-75.539596(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Cox, Paul
<b>Additional Participating Persons:</b>	Jim Moll; FAA/FSDO; Philadelphia, PA
<b>Original Publish Date:</b>	June 18, 2002
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=53910">https://data.ntsb.gov/Docket?ProjectID=53910</a>

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