

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location Nearest City/Place: <u>INDIANA</u> State: <u>PA</u> ZIP: <u>15701</u> Country: <u>INDIANA</u> Latitude: <u>40-37-51.8170N</u> Longitude: <u>079-06-05.4967W</u> (Enter in decimal degrees or degrees:minutes:seconds)		Accident/Incident Date/Time Date: <u>09/02/2018</u> Local Time: <u>9:20</u> mm/dd/yyyy Time Zone: <u>DST</u>	
Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None			

AIRCRAFT INFORMATION

Registration Number: <u>N4059C</u> Manufacturer: <u>STINSON</u> Model: <u>108-3 FLYING STATION WAGON</u> Serial Number: <u>108-5059</u> Year of Manufacture: <u>1949</u> Amateur-Built: ☒ Yes ☐ No If Yes: ☐ Kit/Plans ☐ Make: _____ ☐ Original Design		☐ IFR-Equipped and Certified ☐ Commercial Space Flight ☐ Unmanned Aircraft Maximum Gross Weight: <u>2400</u> lbs Weight at Time of Accident/Incident: <u>1395</u> lbs Number of Seats: <u>4</u> Flight Crew Seats: _____ Cabin Crew Seats: _____ Passenger Seats: _____ Number of Engines: <u>1</u>	
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Category of Aircraft ☒ Airplane ☐ Balloon ☐ Blimp/Dirigible ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift ☐ Rocket ☐ Ultralight ☐ Unknown	Type of Airworthiness Certificate (Check all that apply) <table style="width: 100%;"> <tr> <th style="text-align: left;">Standard</th> <th style="text-align: left;">Special</th> </tr> <tr> <td>☒ Normal</td> <td>☐ Restricted</td> </tr> <tr> <td>☐ Aerobatic</td> <td>☐ Limited</td> </tr> <tr> <td>☐ Balloon</td> <td>☐ Provisional</td> </tr> <tr> <td>☐ Commuter</td> <td>☐ Special Flight</td> </tr> <tr> <td>☐ Transport</td> <td>☐ Experimental</td> </tr> <tr> <td>☐ Utility</td> <td>☐ Special Light-Sport</td> </tr> <tr> <td></td> <td>☐ Experimental Light-Sport</td> </tr> </table> ☐ Certificate of Authorization or Waiver (COA) ☐ None ☐ Unknown	Standard	Special	☒ Normal	☐ Restricted	☐ Aerobatic	☐ Limited	☐ Balloon	☐ Provisional	☐ Commuter	☐ Special Flight	☐ Transport	☐ Experimental	☐ Utility	☐ Special Light-Sport		☐ Experimental Light-Sport	Landing Gear (Check all that apply) ☐ Retractable ☐ Tricycle ☒ Tailwheel ☐ Amphibian ☐ High Skid ☐ Emergency Float ☐ Skid ☐ Float ☐ Ski ☐ Hull ☐ Ski/Wheel ☐ Other Launch/Recovery System ☐ None ☐ Unknown	Engine Type (Select one) ☒ Reciprocating ☐ Liquid Rocket ☐ Turbo Shaft ☐ Solid Rocket ☐ Turbo Prop ☐ Hybrid Rocket ☐ Turbo Jet ☐ None ☐ Turbo Fan ☐ Unknown ☐ Electric Fuel System Type (Reciprocating) ☒ Carburetor ☐ Fuel-Injected
Standard	Special																		
☒ Normal	☐ Restricted																		
☐ Aerobatic	☐ Limited																		
☐ Balloon	☐ Provisional																		
☐ Commuter	☐ Special Flight																		
☐ Transport	☐ Experimental																		
☐ Utility	☐ Special Light-Sport																		
	☐ Experimental Light-Sport																		

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: ^{TOP} Inspection (hours)	Overhaul (hours)
Eng. 1	FRANKLIN	6A4-165-B3	32873	?	165	2493.8		7%
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type ☐ 100-Hour ☐ Continuous Airworthiness ☐ AAIP ☐ Conditional Inspection ☒ Annual ☐ Unknown Date Last Inspection: <u>05/24/2018</u> mm/dd/yyyy Airframe Total Time: <u>2493.8</u> hrs hours measured at (Select one) ☒ Last Inspection ☐ Time of Accident/Incident	Propeller 1 ☒ Fixed Pitch ☐ Controllable Pitch ☐ Ground Adjustable Manufacturer: <u>SENSOVICH</u> Model: <u>M74DB-O-58</u> Propeller 2 ☐ Fixed Pitch ☐ Controllable Pitch ☐ Ground Adjustable Manufacturer: <u>N/A</u> Model: <u>N/A</u>	ELT Installed: ☒ Yes ☐ No If Yes: ELT Manufacturer: <u>ACK TECHNOLOGIES</u> Model or Part No.: <u>E-01/SERIAL #5947</u> TSO No.: ☐ OC91 (121.5 MHz) ☐ OC91a (121.5 MHz) ☐ OC126 (406 MHz) Was ELT still mounted in aircraft? ☒ Yes ☐ No Was ELT still connected to antenna? ☒ Yes ☐ No Did ELT Activate? ☐ Yes ☒ No If activated: Did ELT Aid in Locating Aircraft: ☐ Yes ☐ No If not activated: Indicate Reason: ☐ Impact Damage ☐ Fire Damage ☐ Battery Expired/Damaged ☒ Unknown
Additional Equipment (Check all that apply) ☐ ADS-B ☐ Airframe Parachute ☐ Angle of Attack Indicator ☐ Autopilot ☐ Data Recorder ☐ Electronic Flight Bag or Handheld Device ☐ Electronic Multifunction Display ☐ Electronic Primary Flight Display ☐ Handheld GPS ☐ Heads Up Display ☐ Onboard Weather ☐ Satellite Tracking Device ☒ Stall Warning System ☐ Video Recording Device ☐ Other, Specify: _____		
Type of Maintenance Program (Select one) ☒ Annual ☐ Conditional (Amateur-built only) ☐ Manufacturer's Inspection Program ☐ Other Approved Inspection Program (AAIP) ☐ Continuous Airworthiness ☐ Other, specify: _____		
Description of Fire Extinguishing System ☒ None ☐ Specify: _____		

"FLIGHT CREWMEMBER 1" INFORMATION

"Flight Crewmember 1" Responsibilities at the Time of Accident/Incident

☐ Pilot ☐ Co-Pilot ☒ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

"Flight Crewmember 1" was pilot flying ☐ Yes ☐ No

"Flight Crewmember 1" Identification

First Name: JAMES City of Residence: INDIANA
 Middle Initial: A State: PA ZIP: 15701
 Last Name: DUNCAN Country: USA
 Age at time of Accident/Incident: 63 Date of Birth: [REDACTED] mm/dd/yyyy
 Certificate Number: N/A

Degree of Injury ☐ None ☐ Fatal ☐ Minor ☐ Unknown ☒ Serious	Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single	Restraint Type Available ☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☒ Student ☐ Sport ☐ Flight Engineer		Medical Certificate Validity ☒ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance	
Principal Occupation ☐ Pilot ☒ Other ☐ Unknown	Medical Certificate ☐ None ☒ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown	Date of Last Medical <u>05/13/2018</u> mm/dd/yyyy	

Medical Certificate Limitations

NONE

Medical Certificate Special Issuance

NONE

Date of Last Flight Review
 or Equivalent, Including
 FAR 121/135 Checks:

N/A

mm/dd/yyyy

Flight Review Aircraft

Make: N/A

Model: N/A

Airplane Rating(s) (Check all that apply) ☒ None ☐ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) (Check all that apply) ☒ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) (Check all that apply) ☒ None ☐ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) (Check all that apply) ☒ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
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Type Ratings

N/A

Student Endorsements (Include dates)

N/A

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	26.3	18.9	26.3	0	0	0	0	0	0	0
Pilot in Command (PIC)	0	0	0	0	0	0	0	0	0	0
Time as Instructor	0	0	0	0	0	0	0	0	0	0
This Make/Model						0	0			
Last 90 Days	0.8	0.8	0.8	0	0	0	0	0	0	0
Last 30 Days	0	0	0	0	0	0	0	0	0	0
Last 24 Hours	0	0	0	0	0	0	0	0	0	0

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)

Crew Name and Address	Seat Occupied	Injury
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____	☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign	Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No	Total Flight Time at the Time of this Accident/Incident: _____ hrs	

Crew Name and Address	Seat Occupied	Injury
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____	☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign	Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No	Total Flight Time at the Time of this Accident/Incident: _____ hrs	

PASSENGER(S) / OTHER PERSONNEL (Include cabin crew; continue on separate sheet if necessary)

Name and Address	Seat	Injury	Restraint Type	Inflatable Restraints	Age
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

DAMAGE TO AIRCRAFT AND OTHER PROPERTY**Aircraft Damage**

- ☐ None ☐ Substantial
☐ Minor ☒ Destroyed
 ☐ Unknown

Aircraft Fire

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Fire at Unknown Time
☐ On-Ground ☐ Unknown

Aircraft Explosion

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Explosion at Unknown Time
☐ On-Ground ☐ Unknown

Description of Damage to Aircraft and Other Property (Use additional sheet if necessary)

AIRCRAFT WAS A TOTAL LOSS WITH BENT PROP, BROKEN MOTOR MOUNT
CRUSHED FUSELAGE, BROKEN WINDSHIELD, DOORS BROKEN OFF, SPINNER CRUSHED,
COWLING CRUSHED LANDING GEAR FOLDED UP BENT/DAMAGED WINGS, DAMAGED RUDDER,
DAMAGED HORIZONTAL STAB AND BENT FIREWALL AND INTERNAL WING STRUCTURE
DAMAGED TREES AT LANDING SITE ALONG WITH DISLODGED UTILTY BOX COVER

NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and location, services obtained, and intended destination. Provide as much detail as possible.

SEE ATTACHED STATEMENT

ADDITIONAL INFORMATION (Please type or print in ink)

Use this space if additional space is needed for any answers.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report 11/05/2018 Name of Pilot/Operator: JAMES A DUNCAN
mm/dd/yyyy Signature: [REDACTED]
-- or -- ☐ Check here to electronically sign this document

If a Person Other than Pilot/Operator is Filing Report

Name: _____ Title: _____
Signature: _____
-- or -- ☐ Check here to electronically sign this document

FOR NTSB USE ONLY

NTSB Accident/Incident No. ERA18LA242	Reviewed by NTSB Regional Office ERA - VA	Name of Investigator H. Kemner	Date Report Received 12/4/18
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JAMES A. DUNCAN

INDIANA, PA 15701

September 19, 2018

To: Mr. Glasser, FAA

Mr. Bellmont, Claims Adjuster

My memories of my flight of September 2, 2018 in my 1949 Stinson 108-3, tail number N4059C are as follows. I performed a thorough preflight inspection of my aircraft while still in my hanger. I found all to be in good order with no issues noticed. I hand dipped both fuel tanks as is my habit and noted that there was better than 12.5 gallons of fuel in each tank. I also checked engine oil and found it clean and in sufficient quantity. When my instructor Mark Henck arrived, we discussed a plan for the flight, pushed the aircraft out of the hanger and made ready for the lesson. I selected the right tank for fuel as is my usual habit. The engine started immediately and all systems seemed normal. With me in control of the aircraft we taxied from the hanger for departure on runway 29. I performed the usual run up checks finding no issues, taxied out and made a normal departure. We practiced pattern work for some time and performed four or five "three point landings." We then decided to leave the pattern and headed north to practice air work which included a couple of stalls. I switched to the left tank while north of the pattern approximately 35 minutes into the flight. We returned to the pattern and practiced a couple "wheel landings." I should mention that all landings were performed according to the POH which recommends the use of carb heat below 1500 RPM. All take offs were performed at full power and without carburetor heat.

After the second wheel landing I decided to try a third and powered up for the take off. All systems were functioning normally the entire flight up to and including this, the last take off. I applied throttle and the engine went to full power smoothly. We lifted off and attained an altitude of approximately 300 feet when the engine suddenly and inexplicably shut off. I declared "engine out," and simultaneously Mark declared "my airplane!" He pushed the nose over, and apparently didn't like what he saw, jockeyed the throttle, with no response from the engine which just wind milled a couple of times. He looked right, turned right and effected the best landing possible in the only "uninhabited" piece of ground available. As I recall we hit hard on my side and I experienced excruciating pain in my lower back. After impact I remember saying and performing "fuel, off; mags, off; and master, off." Mark asked of my condition, then unbuckled, departed the aircraft to check on what turned out to be an underground electrical box that we had dislodged. Mark noticed that fuel was leaking from the left wing tank and was making its way to the underground cable connections. After that announcement, I "ejected" myself out the right hand door opening, onto the wing struts, then onto the ground. The next think I remember is Mark dragging me clear of the aircraft. He then called 911 for assistance. It seems to me that we were up just over an hour and that it was only a matter of seconds from engine out to impact.

James A. Duncan

