

NATIONAL TRANSPORTATION SAFETY BOARD

NTSB Form 6120.1

PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

Email the pilot/operator aircraft accident/incident report to the investigator-in-charge of your accident/incident. If email is not available, mail the report per the instructions below.

If your accident/incident occurred in Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, the District of Columbia, Puerto Rico, or the US Virgin Islands, send the form to: NTSB, ERA, 45065 Riverside Parkway, Ashburn, VA 20147.

If your accident/incident occurred in Ohio, Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, Arkansas, Louisiana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Colorado, or New Mexico, send the form to: NTSB, CEN, 4760 Oakland Street, Suite 500, Denver, CO 80239.

If your accident/incident occurred in Montana, Wyoming, Idaho, Utah, Arizona, Nevada, Washington, Oregon, California, Hawaii, or the territories of Guam or American Samoa, send the form to: NTSB, WPR, 505 South 336th Street, Suite 540, Federal Way, WA 98003.

If your accident/incident occurred in Alaska, send the form to: NTSB, ANC, 222 West 7th Avenue, Room 216, Box 11, Anchorage, AK 99513.

Rules pertaining to notification of aircraft accidents and incidents, as well as overdue aircraft are found in 49 Code of Federal Regulations (CFR) Part 830 http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr830_main_02.tpl. These rules state the authority of the NTSB, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification of accidents and incidents by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall send a report to the office listed above, based on accident/incident location; immediate notification is required by 49 CFR 830.5(a). **The report shall be filed within 10 days after an accident for which notification is required by Section 830.5, or after 7 days if an overdue aircraft is still missing.**

An aircraft accident, as defined in 49 CFR 830.2, is determined as an occurrence that involves a fatality or serious injury, or substantial damage to the aircraft. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, NTSB, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM

It is necessary that ALL questions on this report be answered completely and accurately.

If more space is needed, continue on a blank sheet of paper.

Nearest City/Place: Use the name of the nearest community in the state where the accident/incident occurred.

Date/Time: Indicate the date and local time of the event. Be sure to indicate the time zone.

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of the producer of the kit or plans, unless an NTSB employee instructs otherwise.

Maximum Gross Weight: Enter the certificated maximum gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Engine: Enter engine make and model information as indicated on the engine data plate.

The NTSB uses this form for aircraft accident prevention activities and for statistical purposes. NTSB regulations (49 CFR Part 830) require that ALL questions be answered completely and accurately. Completion of this form will take approximately 60 minutes. The NTSB does not guarantee the privacy of any information provided in this form. You need not complete this form unless it displays a valid OMB control number, in accordance with 5 C.F.R. § 1320.5(b), which applies to this collection of information.

B. DEFINITIONS

1. "Aircraft Accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death, or serious injury, or in which the aircraft receives substantial damage. For purposes of this form, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined at 49 CFR 830.2.

2. "Substantial Damage" means damage or failure that adversely affects the structural strength, performance or flight characteristics of the aircraft, and that would normally require major repair or replacement of the affected component. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing or cowl, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for purposes of this report.

3. "Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

4. "Fatal Injury" means any injury that results in death within thirty (30) days of the accident.

5. "Serious Injury" means any injury that (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fracture of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle, cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "doing business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting revenue sightseeing operations under 14 CFR Part 91 at the time of the accident.

Air Medical Flight: Indicate whether the accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

Public Aircraft: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Indicate whether the flight was conducted by the armed forces, federal, state, or local government.

Purpose of Flight: 14 CFR Parts 91, 103, 133, 136, and 137: Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

AERIAL APPLICATION--Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION--These flights include aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP--Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW--Includes any flight operations conducted as part of an organized air race or public demonstration.

BUSINESS--includes all personal flying without a paid professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE--Company flying with a paid, professional crew.

FERRY--Non-revenue flight under a special flight or "ferry" permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

FLIGHT TEST--Flight for the purpose of investigating the flight characteristics of an aircraft/aircraft component or evaluating an applicant for a pilot certificate or rating.

INSTRUCTIONAL--Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

OTHER WORK USE--Miscellaneous flight operations conducted for compensation or hire such as construction work (not 14 CFR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

PERSONAL--Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

POSITIONING--Non-revenue flight conducted for the primary purpose of relocating the aircraft. Examples include moving the aircraft to a maintenance facility or to load passengers or cargo etc.

UNKNOWN--Use only if the primary purpose of flight is not known.

Other Aircraft--Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check "Collision with other aircraft" under Basic Information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport Information: Complete this section if the accident/incident occurred on approach, landing, takeoff, departure, or within 3 statute miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identifier: Provide the official 3 or 4 character airport identifier number.

Runway: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: Indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply.

Condition of Runway/Landing Surface: Indicate the condition of the intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/incident site at the time of occurrence. If no weather reporting was available for the accident/incident site, indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/incident.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident/incident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud ceiling present at the time of the accident/incident (reported as broken or overcast).

NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs: Describe all NOTAMs (distant (D) or Flight Data Center (FDC), if known), AIRMETs, SIGMETs, and PIREPs in effect near the accident/incident.

Flight Crewmember Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Flight Crewmember 1" and "Flight Crewmember 2" do not refer to a specific pilot position or responsibility. If more than one pilot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate "none." If the pilot holds a pilot certificate other than student and was flying an aircraft requiring an endorsement, enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as "Pilot-in-Command (PIC)" and all dual flight instruction given should be included as "Time as Instructor."

Additional Flight Crewmembers: Complete this section if there were more than two required flight crewmembers on the aircraft. This also includes a check airman performing official duties but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Enter identification and injury severity information for all passengers, cabin crew, and other personnel involved in the accident. See Page 1 of the instructions for the official definition of injury levels.

Several questions throughout the form allow for multiple responses; when appropriate, choose all responses that apply.

These instructions only pertain to major issue areas covered by NTSB Form 6120.1 *Pilot/Operator Aircraft Accident/Incident Report*. For additional definitions of questions and responses, please refer to www.nts.gov.

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: Ypsilanti State: MI

ZIP: _____ Country: _____

Latitude: _____ Longitude: _____

(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 08/13/2023 Local Time: 1610

mm/dd/yyyy

Time Zone: _____

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☐ None

AIRCRAFT INFORMATION

Registration Number: N23UB

Manufacturer: Mikoyan-Gurevich

Model: MiG-23

Serial Number: _____

Year of Manufacture: _____

Amateur-Built: ☐ Yes ☒ No If Yes: ☐ Kit/Plans ☐ Original Design Make: _____

☐ IFR-Equipped and Certified

☐ Commercial Space Flight

☐ Unmanned Aircraft

Maximum Gross Weight: _____ lbs

Weight at Time of Accident/Incident: _____ lbs

Number of Seats: 2 Flight Crew Seats: 2

Cabin Crew Seats: _____ Passenger Seats: _____

Number of Engines: _____

Category of Aircraft

- ☒ Airplane
- ☐ Balloon
- ☐ Blimp/Dirigible
- ☐ Glider
- ☐ Gyroplane
- ☐ Helicopter
- ☐ Powered Lift
- ☐ Rocket
- ☐ Ultralight
- ☐ Unknown

Type of Airworthiness Certificate

(Check all that apply)

Standard

- ☐ Normal
- ☐ Aerobatic
- ☐ Balloon
- ☐ Commuter
- ☐ Transport
- ☐ Utility

Special

- ☐ Restricted
- ☐ Limited
- ☐ Provisional
- ☐ Special Flight
- ☒ Experimental
- ☐ Special Light-Sport
- ☐ Experimental Light-Sport

☐ Certificate of Authorization or Waiver (COA)
☐ None ☐ Unknown

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

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: Inspection (hours)	Overhaul (hours)
Eng. 1								
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

- ☐ 100-Hour ☐ Continuous Airworthiness
- ☐ AAIP ☐ Conditional Inspection
- ☐ Annual ☐ Unknown

Date Last Inspection: _____

mm/dd/yyyy

Airframe Total Time: _____ hrs

hours measured at (Select one)

☐ Last Inspection ☐ Time of Accident/Incident

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: _____

Propeller 1

- ☐ Fixed Pitch
- ☐ Controllable Pitch
- ☐ Ground Adjustable

Manufacturer: _____

Model: _____

Propeller 2

- ☐ Fixed Pitch
- ☐ Controllable Pitch
- ☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☐ Yes ☐ No

If Yes:

ELT Manufacturer: _____

Model or Part No.: _____

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☐ C126 (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: _____

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>Daniel Filer</u> Fractional Ownership Aircraft: ☐ Yes ☐ No		City: _____ State: _____ ZIP: _____ Country: _____	
Operator of Aircraft ☐ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		☐ Same Address as Registered Owner City: _____ State: _____ ZIP: _____ Country: _____	
Operating Certificates Held <i>(Check all that apply)</i> ☐ None ☐ Flag Carrier Operating Certificate (FAR 121) ☐ Supplemental ☐ Air Cargo ☐ Foreign Air Carriers (FAR 129) ☐ Rotorcraft External Load (FAR 133) ☐ Commuter Air Carrier (FAR 135) ☐ On-Demand Air Taxi (FAR 135) ☐ Commercial Air Tour (FAR 136) ☐ Agricultural Aircraft (FAR 137) ☐ Pilot School (FAR 141) ☐ Certificate of Authorization or Waiver (COA) ☐ Commercial Space Transportation Experimental Permit ☐ Commercial Space Transportation License ☐ Other Operator of Large Aircraft	Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 415 ☐ FAR 103 ☐ FAR 133 ☐ FAR 431 ☐ FAR 121 ☐ FAR 135 ☐ FAR 435 ☐ FAR 125 ☐ FAR 137 ☐ FAR 437 ☐ FAR 91 Special Flight ☐ Non-US, Commercial ☐ Non-US, Non-commercial ☐ Public Aircraft <i>(Select one)</i> ☐ Armed Forces ☐ Federal ☐ State ☐ Local ☐ Unknown	Revenue Operation for FAR 121, 125, 129, 135 <i>(Select one for each group)</i> ☐ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi ☐ Domestic ☐ International ☐ Passenger ☐ Cargo ☐ Mail Contract Only	
Revenue Sightseeing Flight ☐ Yes ☒ No		Air Medical Flight ☐ Yes ☒ No	
AIRPORT INFORMATION <i>(Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)</i>			
Airport Name: <u>Willow Run</u> Airport Identifier: <u>KYIP</u> Proximity to Airport: ☐ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A		Distance From Airport Center: _____ sm Direction From Airport: _____ degrees true Airport Elevation: _____ ft. msl	
Runway Information Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft		Condition of Runway/Landing Surface <i>(Check all that apply)</i>	
Runway/Landing Surface <i>(Check all that apply)</i> ☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water ☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown ☐ Dirt ☐ Ice ☐ Snow		☐ Dry ☐ Snow-Compacted ☐ Water-Calm ☐ Holes ☐ Snow-Crusted ☐ Water-Choppy ☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy ☐ Rough ☐ Snow-Wet ☐ Wet ☐ Rubber Deposits ☐ Soft ☐ Unknown ☐ Slush-Covered ☐ Vegetation	
Approach/Departure Segment <i>(Select one)</i> ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach ☐ Takeoff ☐ IFR Departure Procedure/Clearance ☐ Landing ☐ Base ☐ Go Around ☐ Initial Climb ☐ Crosswind ☐ Aborted Landing (after touchdown) ☐ Unknown			
IFR Approach <i>(Check all that apply)</i> ☐ None ☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice ☐ SDF ☐ Sidestep ☐ LDA ☐ GPS ☐ VOR/TVOR ☐ ILS ☐ ASR ☐ Visual ☐ Contact ☐ TACAN ☐ Localizer Only ☐ Visual ☐ Circling ☐ LOC-back course ☐ RNAV ☐ Unknown		VFR Approach <i>(Check all that apply)</i> ☐ None ☐ Traffic Pattern ☐ Stop and Go ☐ Straight-In ☐ Touch and Go ☐ Valley/Terrain Following ☐ Simulated Forced Landing ☐ Go Around ☐ Forced Landing ☐ Full Stop ☐ Precautionary Landing ☐ Unknown	

"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: _____

City of Residence: _____

Middle Initial: _____

State: _____ ZIP: _____

Last Name: _____

Country: _____

Age at time of Accident/Incident: _____ Date of Birth: _____ mm/dd/yyyy

Certificate Number: _____

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

Principal Occupation

☐ Pilot
☐ Other
☐ Unknown

Medical Certificate

☐ None ☐ Class 3
☐ Class 1 ☐ Driver's License (Sport Pilot only)
☐ Class 2 ☐ Unknown

Medical Certificate Validity

☐ Without limitations/waivers ☐ Unknown
☐ With limitations/waivers ☐ N/A
☐ Special Issuance

Date of Last Medical

____ mm/dd/yyyy

Medical Certificate Limitations**Medical Certificate Special Issuance****Date of Last Flight Review
or Equivalent, Including
FAR 121/135 Checks:**

____ mm/dd/yyyy

Flight Review Aircraft

Make: _____

Model: _____

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

Type Ratings**Student Endorsements** (Include dates)**Flight Time** (Enter appropriate
number of hours in each box)

All
Aircraft

This Make
& Model

Airplane
Single
Engine

Airplane
Multiengine

Night

Instrument
Actual Simulated

Rotorcraft

Glider

Lighter
Than Air

Total Time

Pilot in Command (PIC)

Time as Instructor

This Make/Model

Last 90 Days

Last 30 Days

Last 24 Hours

"FLIGHT CREWMEMBER 2" INFORMATION**"Flight Crewmember 2" Responsibilities at the Time of Accident/Incident**

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

"Flight Crewmember 2" was pilot flying ☐ Yes ☐ No

"Flight Crewmember 2" Identification

First Name: Mark

City of Residence: Dallas

Middle Initial: _____

State: TX ZIP: _____

Last Name: Ruff

Country: _____

Age at time of Accident/Incident: 41 Date of Birth: _____ mm/dd/yyyy

Certificate Number: _____

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

Principal Occupation

☒ Pilot
☐ Other
☐ Unknown

Medical Certificate

☐ None ☐ Class 3
☒ Class 1 ☐ Driver's License (Sport Pilot only)
☐ Class 2 ☐ Unknown

Medical Certificate Validity

☒ Without limitations/waivers ☐ Unknown
☐ With limitations/waivers ☐ N/A
☐ Special Issuance

Date of Last Medical

_____ mm/dd/yyyy

Medical Certificate Limitations

none

Medical Certificate Special Issuance**Date of Last Flight Review
or Equivalent, Including
FAR 121/135 Checks:**

_____ mm/dd/yyyy

Flight Review Aircraft

Make: _____

Model: _____

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

Type Ratings

B777, A320, DC-9, CL-65, SF-340, EMB-500, EMB-505
Exp. Auth. S.211, L39

Student Endorsements (Include dates)

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	15000	12								
Pilot in Command (PIC)										
Time as Instructor										
This Make/Model										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)								
Crew Name and Address First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			Seat Occupied ☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown			
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer			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 First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			Seat Occupied ☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown			
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer			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 First Name: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		Seat ☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	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	Age ☐ 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

FLIGHT ITINERARY INFORMATION

Last Departure Point Airport ID: <u>KYIP</u> City: <u>Ypsilanti</u> State: <u>MI</u> Country: <u>USA</u>	Time of Departure Time: <u>1600</u> Time Zone: _____	Destination Airport ID: <u>KYIP</u> City: <u>Ypsilanti</u> State: <u>MI</u> Country: <u>USA</u>	Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown
---	---	--	---

Type of ATC Clearance/Service (Check all that apply)

☐ None	☐ Special VFR	☐ Special IFR	☐ VFR Flight Following	☐ Cruise
☐ VFR	☐ IFR	☐ VFR On Top	☐ Traffic Advisory	☐ Unknown / NA

Airspace where the accident/incident occurred (Check all that apply)

☐ Class A	☐ Class G	☐ Military Operations Area (MOA)	☐ Special	Altitude of In-Flight Occurrence: _____ ft msl
☐ Class B	☐ Demo Area	☐ Airport Advisory Area	☐ Air Traffic Control Area	
☐ Class C	☐ Warning Area	☐ Jet Training Area	☐ Unknown	
☒ Class D	☐ Prohibited Area	☐ TRSA		
☐ Class E	☐ Restricted Area	☐ FAR 93		

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Source of Pilot Weather Information**

(Check all that apply)

☐ National Weather Service	☐ Company
☐ Flight Service Station	☐ Military
☐ TV/Radio	☐ Internet
☐ Automated Report	☐ None
☐ Commercial Weather Service (DUATS)	☐ Unknown
☐ On-Board Weather	

Weather Observation Facility

Facility ID: _____

Observation Time: _____

Time Zone: _____

Distance from Accident Site: _____ nm

Direction from Accident Site: _____ degrees true

Basic Conditions

- ☒ VMC
☐ IMC
☐ Unknown

Light Condition

- ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown
☒ Day ☐ Night ☐ Bright Night

Sky/Lowest Cloud Condition

- ☐ Clear ☐ Thin Broken
☐ Few ☐ Thin Overcast
☐ Partial Obscuration ☐ Unknown
☐ Scattered

Ceiling

- ☐ None (Clear) ☐ Obscured
☐ Broken ☐ Indefinite
☐ Overcast ☐ Unknown

Temperature: _____ (C) or _____ (F)**Dew Point:** _____ (C) or _____ (F)**Altimeter Setting:** _____ in. Hg
or _____ MB**Lowest Cloud Condition Height**

_____ ft agl

Ceiling Height

_____ ft agl

Wind Direction

- ☐ Variable

-or-
Direction: _____ degrees true

Wind Speed

- ☐ Calm
☐ Light and Variable

-or-
Speed: _____ kts

Wind Gusts

- ☐ Not Gusting

-or-
Speed: _____ kts

Visibility _____ miles

RVR: _____ feet

RVV: _____ miles

Density Altitude: _____ ft**Intensity of Precipitation**

- ☐ Light
☐ Moderate
☐ Heavy
☐ N/A
☐ Unknown

Type of Precipitation (Check all that apply)

- ☒ None ☐ Drizzle ☐ Freezing Rain
☐ Rain ☐ Ice Pellets ☐ Snow Shower
☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower
☐ Hail ☐ Snow Grains ☐ Freezing Drizzle
☐ Rain Showers ☐ Ice Crystals

Restriction to Visibility (Check all that apply)

- ☐ None ☐ Fog
☐ Blowing Dust ☐ Ground Fog
☐ Blowing Sand ☐ Haze
☐ Blowing Snow ☐ Ice Fog
☐ Blowing Spray ☐ Smoke
☐ Dust ☐ Unknown

Icing Forecast

- | | |
|---------------------------------------|-------------------------------|
| Amount | Type |
| ☒ None | ☐ N/A |
| ☐ Trace | ☐ Rime |
| ☐ Light | ☐ Clear |
| ☐ Moderate | ☐ Mixed |
| ☐ Severe | ☐ Unknown |
| ☐ Unknown | |

Icing Actual

- | | |
|--------------------------------|-------------------------------|
| Amount | Type |
| ☐ None | ☐ N/A |
| ☐ Trace | ☐ Rime |
| ☐ Light | ☐ Clear |
| ☐ Moderate | ☐ Mixed |
| ☐ Severe | ☐ Unknown |
| ☐ Unknown | |

Turbulence

- | | |
|--|-----------------------------------|
| Type (Check all that apply) | Severity |
| ☐ None | ☐ Light |
| ☐ Clear Air | ☐ Moderate |
| ☐ Terrain-Induced | ☐ Severe |
| ☐ Convective Turbulence | ☐ Extreme |

NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:

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 destroyed

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.

The owner of N23UB is a highly experienced pilot who has spent his career in crew operated aircraft. When operating N23UB, the owner, rightfully so, insisted on having a highly experienced pilot with him in the other seat. Not always the back seat, simply the other seat. Whichever pilot was in the front seat was generally the Pilot Flying. The pilot in the back seat was generally the Pilot Monitoring. This proved to be an effective way to operate this complex and extremely high performance aircraft.

While descending and accelerating to 350kts for a banana pass at show center, the wings were swept back to 45 degrees. Approaching show center, the front seat pilot moved the throttle forward into the afterburner range. At this moment the thrust from the engine dropped to near zero and the aircraft began to decelerate. The deceleration was such that the occupants were pulled forward in their seats against the shoulder straps. The descent bottomed out around 500ft AGL and the front seat pilot began a climbing left turn. The front seat pilot stated over the intercom: "we have a problem." The rear seat pilot agreed over the intercom. The front seat pilot moved the throttle to idle. Then forward to the maximum thrust without afterburner range. Then past the gate into the afterburner range. There was no engine RPM change, no restoration of thrust and no change in engine noise. Throughout the entire accident sequence, the engine RPM needles remained split averaging 65%. The front seat pilot repeated this throttle movement at least three more times. As the altitude increased, the speed further decayed and the back seat pilot read off airspeeds as the aircraft slowed. The back seat pilot stated: "we need the wings to 16 degrees." The front seat pilot agreed. The wings were not selected to 16 degrees so the rear seat pilot selected them to 16 degrees. The wings moved to 16 degrees. The climbing left turn continued and the airspeed decayed below 200kts. The rear seat pilot declared an emergency over the airshow Show Boss frequency. There was brief discussion back and forth between the pilots about the engine problem. The front seat pilot asked: "can we make 27?" A reference to attempting an emergency Dead Stick landing on Runway 27 at KYIP. The back seater looked out the canopy to the left and at the GPS navigator and knew that was not possible with the current energy state of the aircraft and stated: "No." Runway 27 was more than 3 miles to the north and the aircraft was still in a turn from flying away from the airport to flying back towards the airport. The aircraft continued a left turn. The aircraft peaked at 900ft. AGL and the front seat pilot was now trading altitude to preserve the remaining airspeed. The aircraft was in and out of the stall buffet and the rear seat pilot asked if they needed flaps. The front seat pilot said yes, and selected flaps to takeoff. The rear seat pilot looked left and right and verified the flaps and slats were extended to the takeoff position. The aircraft is now descending in a left turning arc that intersects terrain well outside of the airport perimeter and over 2 miles south of Runway 27. The aircraft continued the left turning descent and the front seat pilot is modulating the pitch of the aircraft to optimize the glide. Any increase in pitch too high and the wing begins to stall more and the sink rate increases. Any decrease in pitch too low and the stall margin gets better, but the sink rate increases even more. With the nose of the aircraft pitched slightly up, and a trajectory down towards terrain off-airport, the rear seat pilot referenced having to eject per the MiG-23 checklist and manuals. Several seconds went by with no response from the front seat pilot. Descending through 350ft and back in the stall buffet, the rear seat pilot activated the ejection system. Both pilots were ejected to safety and no one on the ground was injured.

Both KM-1 seats functioned as designed and gave the pilots a near flawless low altitude ejection sequence (in other words, all high altitude ejection features of the seat were correctly inhibited). The rear seat pilot is ejected first and the front seat pilot is ejected .5 seconds later. The entire ejection sequence from activation, to both crew members under a parachute and decelerated to survivable speed takes up to 5 seconds. The dynamics and velocity vectors during that 5 seconds, along with terrain and obstructions in the area are what determine if the ejection is survivable. At the time of ejection, the bank angle was approximately 45 degrees and the sink rate was approximately 3000 feet per minute. Both of these factors heavily increase the minimum altitude at which a successful ejection can be achieved. During a normal approach to landing, the minimum altitude for a successful ejection with the KM-1 is 180ft AGL. This was not a normal landing and the conditions raised the minimum altitude. The video evidence shows the rockets from the seats cancel the sink rate and the pilots appear to hover in a fixed place, rather than climb to a higher altitude. That energy impulse up and to the side provided enough time for the 5 second automatic sequence to unfold and both pilots gained (Continued on Page 11)

RECOMMENDATION (How could this accident/incident have been prevented?)**Operator/Owner Safety Recommendation**

There are many classic and vintage Experimental Exhibition category aircraft flying in the United States. They are living history. For this particular flight, a back seat pilot / safety observer was specifically authorized by the FAA. That decision was correct and saved lives. Many aircraft such as F-100s, F-4s, A-4s, CT-33s, F-5s, MiGs, L-39s, and S.211s continue to fly in airshows with empty back seats. This is due to resistance from the FAA in order to prevent passengers flying in airshows. This resistance is well founded. Passengers have no place in airshow performances and demonstrations. However, a robust Safety Observer program with qualified, certificated aviators in the additional crew member seat with training specific to that aircraft and its systems, increases safety and protects the public. These Experimental Exhibition category aircraft do not fly often and the pilots struggle to maintain proficiency. During an inflight emergency over a populated area, a second qualified aviator to act as a Safety Observer and assist the other pilot in checklist reference, energy state management, navigation, and communications is indispensable.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)**Was there Mechanical Malfunction/Failure?** ☒ Yes ☐ No*(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)*

The engine experienced a catastrophic loss of thrust while maneuvering at low altitude. Photographic evidence shows that during the entire accident sequence, the exhaust nozzle is full open and slumped down by gravity, without afterburner. The only time this engine exhibits these features is when it is shut down on the ground. The nozzle is operated by fuel pressure. Depending upon throttle position, different thrust is commanded from the engine. These demands cover the spectrum from ground idle, to flight idle, to subsonic exhaust gas flow (non-afterburning), to supersonic exhaust gas flow (afterburning). Nozzle function is critical to safe operation with an engine capable of supersonic flow. In this accident sequence, the engine entered a failure mode where the RPM rolled back to idle and did not respond to the throttle, with a slumped nozzle and no thrust.

**Total Time/Cycles
On Part**

unknown Hours

unknown Cycles

**Time Since This Part
Inspected/Overhauled**

unknown Hours

FUEL & SERVICES INFORMATION**Fuel on Board at Last Takeoff***(Convert from pounds, as necessary)*

3000 liters Gallons

Fuel Type☐ 80/87☐ 100 Low Lead☐ 100/130☐ 115/145☒ Jet A☐ Jet A-1☐ Jet B☐ JP8☐ Automotive☐ Other, specify _____**Other Services, if Any, Prior to Departure****EVACUATION OF AIRCRAFT****Was an emergency evacuation of the aircraft performed?** ☒ Yes ☐ No**Method of Exit** – Describe how the occupants exited and how many occupants evacuated each location**OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)****Aircraft Registration Number****Manufacturer:** _____**Model:** _____**Damage to Other Aircraft**☐ Destroyed☐ Substantial☐ Minor☐ None**Registered Owner of Other Aircraft**

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

Pilot of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

ADDITIONAL INFORMATION (Please type or print in ink)

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

a full parachute and decelerated to a surviveable speed before impact with terrain (the surface of Lake Belleville). The front seat pilot falls for a second or two longer than the back seat pilot until full opening shock of the parachute is achieved, 50 feet above the treetops in the area.

After reading the preliminary report, the back seat pilot recognized inaccuracies and misinformation concerning the accident, the crew, their injuries, and their actions. It became clear that the front seat pilot has a massive financial interest in the accident being someone else's fault. On September 1, 2023 the aircraft owner invited the back seat pilot to his hagar in East Texas to discuss the accident. Out of an abundance of caution, the back seat pilot recorded the 85 minute conversation. That recording has been provided to the NTSB. The following statements are of note. The owner states: "Someone forwarded me something stating he (the NTSB investigator) is only supposed to put out the cause of the crash, the ejection was not the cause of the crash." Also of note, the owner speaks of his expectations of the investigation, stating: "we were losing altitude, I was managing airspeed, I was trying one more thing...I wanna know if I ever got to it...the emergency engine controller. If I got...it doesn't matter...". The switch can take up to 20 seconds to function. The owner further states: "if the ejection was delayed...there's almost a 100% chance that we'd be much more broken up, if not dead. Half a second delay would've put me on the ground." Once again the owner is acknowledging that there was no time left to trouble shoot the engine failure mode, and the ejection envelope was at its limit. The owner further states that whatever troubleshooting he was doing in the front seat was futile and had a slim chance of making any difference for restoring engine thrust. "Man, I'm glad we went over it and you asked to check my seat and my harness and all of that stuff. Cause the way we were flying a couple times...it wasn't...so yeah, half a second would have been very painful and, um, there was only a very slim possibility that whatever I was doing was going to make it different." With respect to initial reports of a crew disagreement or communication breakdown, the owner states that this is not true. And the back seat pilot fully agrees that those reports were inaccurate. The fact is, this was a professional crew working together to solve an unsolvable problem and working for the best possible outcome. By using CRM training from decades of airline experience, the crew divided duties and utilized the limited time available to attempt an emergency landing. The owner states: "I got a link about crew communication broke down. I go, I don't think so!" The owner is correct, crew communication did not break down. Both crew members were calm, cool, and collected throughout the ordeal. When asked by the back seat pilot: "but what are your thoughts? I mean were... was there, did you have any thoughts about pulling the handles, or...The Owner: not until you said it. Not until you said it. I didn't have that thought." The owner acknowledges that he was task saturated and unaware of the aircraft's undesired energy state. He was unaware that both crew members were exiting the ejection seat envelope. An illustration of the owner's mentality is exhibited when he references airshow performer Randy Ball exiting his parking space next to N23UB and some pebbles being thrown towards N23UB by the other aircraft's jet blast. The owner: "wouldn't it be great if we could pin this on him!" As of September 1, 2023, the owner was still searching for someone else to blame for the engine failure and crash of his MiG-23. At the end of the conversation, before giving the back seat pilot a hug, the owner states: "thanks for a...keeping us alive." The owner is acknowledging that under those extreme circumstances and intense pressure of life and death decisions, he was not capable of initiating the ejection sequence in time to save both lives. The safety observer recognized this and acted in the best interest of the crew and the public.

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

Date of this Report

06/16/2025

mm/dd/yyyy

Name of Pilot/Operator: Mark Ruff

Signature: 

-- 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.

CEN23FA361

Reviewed by NTSB Regional Office

AS-CEN

Name of Investigator

J. Brannen

Date Report Received

6/16/2025