



National Transportation Safety Board Aviation Accident Final Report

Location:	AURORA, OR	Accident Number:	SEA94LA088
Date & Time:	03/01/1994, 1330 PST	Registration:	N306DM
Aircraft:	Mikoyan MiG MIG-17T	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

IMMEDIATELY AFTER TAKEOFF, THE PILOT EXPERIENCED AN EXPLOSION IN THE TAIL OF THE MIG-17T. HE RETURNED TO THE FIELD AND THE FIRE WAS EXTINGUISHED BY THE FIRE DEPARTMENT. INSPECTION REVEALED THAT AN ALUMINUM FUEL LINE IN THE AFT SECTION HAD EXPERIENCED METALLURGICAL FAILURE. THE OWNER ADVISED ALL OTHER MIG-17 OPERATORS TO REPLACE THAT, AND OTHER, FUEL LINES WITH STAINLESS STEEL LINES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF A METAL FUEL LINE, RESULTING IN AN EXPLOSION.

Findings

Occurrence #1: FIRE/EXPLOSION
Phase of Operation: CLIMB

Findings

1. (C) FUEL SYSTEM,LINE - FAILURE,TOTAL

Factual Information

On March 1, 1994, at 1330 Pacific standard time, a Mikoyan- Gurevich MiG-17T, N306DM, sustained substantial damage after an in-flight fire shortly after takeoff from the Aurora, Oregon, airport. The ATP pilot, who was the sole occupant of the aircraft, was uninjured. No flight plan was filed for the local flight. Visual meteorological conditions prevailed at the time of the accident.

The pilot stated that the former military jet fighter, operated under experimental exhibition category provisions, had .9 hours on the engine since overhaul. He used an afterburner takeoff from runway 17 at Aurora. Climbing through about 500 feet, he felt an explosion and rudder vibration, pulled back the power, and selected afterburner off. He declared an emergency, returned to the airport, landing within a couple minutes of takeoff, where the fire department put out the fire. Investigation revealed that an alloy fuel line failed, allowing fuel to flow aft, where an electrical inverter in the tail ignited the fuel. Damage due to the fire was substantial.

Pilot Information

Certificate:	Airline Transport	Age:	53, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	02/23/1993
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	6000 hours (Total, all aircraft), 103 hours (Total, this make and model), 5272 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mikoyan MiG	Registration:	N306DM
Model/Series:	MIG-17T MIG-17T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Experimental	Serial Number:	0714
Landing Gear Type:	Retractable - Tricycle	Seats:	1
Date/Type of Last Inspection:	01/15/1994, AAIP	Certified Max Gross Wt.:	13500 lbs
Time Since Last Inspection:	0 Hours	Engines:	1 Turbo Jet
Airframe Total Time:	1847 Hours	Engine Manufacturer:	CHINA
ELT:	Not installed	Engine Model/Series:	WP5/BK1
Registered Owner:	YAK ATTACK, INC	Rated Power:	5000 lbs
Operator:	WILLIAM R. REESMAN	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 15000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16 °C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1330 PST	Type of Airspace:	

Airport Information

Airport:	AURORA STATE AIRPORT (3S2)	Runway Surface Type:	Asphalt
Airport Elevation:	200 ft	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	5000 ft / 150 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	In-Flight
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	MICHAEL L STOCKHILL	Report Date:	01/26/1995
Additional Participating Persons:	DAN BACHELDER; HILLSBORO, OR		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).