



Aviation Investigation Final Report

Location:	DFW INT'L ARPT, Texas	Incident Number:	FTW92IA009
Date & Time:	October 10, 1991, 18:55 Local	Registration:	N425AE
Aircraft:	BRITISH AEROSPACE 3100	BAE	Aircraft Damage: None
Defining Event:		Injuries:	13 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Scheduled		

Analysis

DURING THE TAKEOFF ROLL, THE PILOT OBSERVED THE TORQUE INDICATIONS OF THE RIGHT ENGINE DROP TO 80 PERCENT AND THE FIRE WARNING LIGHT FOR THE SAME ENGINE ILLUMINATE. THE PILOT ABORTED THE TAKEOFF AND DEPLANED THE PASSENGERS. AIRCRAFT FIRE AND RESCUE PERSONNEL EXTINGUISHED THE FIRE IN THE RIGHT ENGINE. A TEARDOWN AND ANALYSIS OF THE RIGHT ENGINE REVEALED THAT THE ELECTRICAL CONNECTOR OF THE TORQUE SENSING UNIT BECAME LOOSE. THE LOOSE CONNECTION RESULTED IN EXCESS FUEL BEING DUMPED IN THE ENGINE CAUSING A POOLING FIRE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: THE PARTIAL DISCONNECTION OF THE ELECTRICAL CONNECTOR AT THE TORQUE SENSING UNIT.

Findings

Occurrence #1: FIRE
Phase of Operation: TAKEOFF - ROLL/RUN

- Findings
1. (C) FUEL INJECTION CONTROL, TORQUE BOX - DISCONNECTED

2. (C) COMBUSTION ASSEMBLY - FIRE
3. ABORTED TAKEOFF - PERFORMED - PILOT IN COMMAND
4. EMERGENCY PROCEDURE - PERFORMED - PASSENGER

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	43, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	August 6, 1991
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8379 hours (Total, all aircraft), 1621 hours (Total, this make and model), 7319 hours (Pilot In Command, all aircraft), 223 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BRITISH AEROSPACE	Registration:	N425AE
Model/Series:	BAE 3100 BAE 3100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	777
Landing Gear Type:	Retractable - Tricycle	Seats:	21
Date/Type of Last Inspection:	January 2, 2000 Continuous airworthiness	Certified Max Gross Wt.:	15000 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:		Engine Manufacturer:	GARRETT
ELT:	Installed, not activated	Engine Model/Series:	TPE331-10UGR
Registered Owner:	FIRST SECURITY BANK	Rated Power:	900 Horsepower
Operator:	METRO FLIGHT, INC.	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:	AMERICAN EAGLE	Operator Designator Code:	MTRA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	WACO , TX (ACT)	Type of Clearance:	IFR
Departure Time:	18:55 Local	Type of Airspace:	Class D

Airport Information

Airport:	DALLAS/FORT WORTH DFW	Runway Surface Type:	Concrete
Airport Elevation:	603 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	9300 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	None
Passenger Injuries:	11 None	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	13 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Ellis, Matthew
Additional Participating Persons:	ANTHONY PIRRELO; DFW , TX
Original Publish Date:	May 5, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=18384

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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](#).