



Aviation Investigation Final Report

Location:	DFW AIRPORT, Texas	Incident Number:	FTW94IA099
Date & Time:	March 4, 1994, 14:50 Local	Registration:	N253AT
Aircraft:	AEROSPATIALE ATR-72	Aircraft Damage:	Minor
Defining Event:		Injuries:	56 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

WHILE TAXIING, THE NUMBER ONE ENGINE FIRE WARNING LIGHT ILLUMINATED. THE PILOT AND CO-PILOT INITIATED AN ENGINE SHUTDOWN AND COMPLETED APPROPRIATE EMERGENCY PROCEDURES. AN EXAMINATION OF THE AIRCRAFT REVEALED THAT THE NO. 1 ENGINE MANIFOLD WAS BLOCKED WITH COKING DEPOSITS RESULTING IN FUEL SPILL AND SUBSEQUENT FIRE WITHIN THE NACELLE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: THE BLOCKED NUMER 1 ENGINE DRAIN MANIFOLD.

Findings

Occurrence #1: FIRE
Phase of Operation: TAXI - FROM LANDING

- Findings
1. (C) FUEL SYSTEM,DRAIN - BLOCKED(TOTAL)

Factual Information

On March 4, 1994 at 1450 central standard time, an Aerospatiale ATR-72, N253AT, operating as American Eagle flight 3740, experienced an engine cowling fire while taxiing at the DFW Airport, Dallas/Fort Worth, Texas. The four crew members and 52 passengers were not injured. Visual meteorological conditions prevailed for the intended 14 CFR Part 121 flight.

In the Pilot/Operator report, the pilot stated that the number one engine fire warning light illuminated. He further stated that he and the co-pilot performed the emergency checklist and then evacuated the passengers out of the rear door of the aircraft.

The fire was suppressed by the crew using the published emergency procedures.

A detailed examination of the aircraft by the operator revealed that the No. 1 engine drain manifold was blocked with "coking" deposits. The operator also stated that "internal pressure caused a fuel spill inside the nacelle with resultant fire."

Pilot Information

Certificate:	Airline transport	Age:	45, 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):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 23, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft), 480 hours (Total, this make and model), 185 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AEROSPATIALE	Registration:	N253AT
Model/Series:	ATR-72 ATR-72	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	253
Landing Gear Type:	Retractable - Tricycle	Seats:	68
Date/Type of Last Inspection:	Continuous airworthiness	Certified Max Gross Wt.:	47400 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed	Engine Model/Series:	PW127
Registered Owner:	GPA ATR II INC.	Rated Power:	2700 Horsepower
Operator:	SIMMONS AIRLINES	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:	AMERICAN EAGLE	Operator Designator Code:	SIMA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	SHREVEPORT , LA (SHV)	Type of Flight Plan Filed:	IFR
Destination:	(DFW)	Type of Clearance:	IFR
Departure Time:	00:00 Local	Type of Airspace:	Class B

Airport Information

Airport:	DALLAS/FORT WORTH DFW	Runway Surface Type:	
Airport Elevation:	603 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	Minor
Passenger Injuries:	52 None	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	56 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Ellis, Matthew
Additional Participating Persons:	ANTHONY P PIRRELLO; DFW AIRPORT , TX
Original Publish Date:	February 14, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=18938

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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](#).