



Aviation Investigation Final Report

Location:	MAYAGUEZ, Puerto Rico	Incident Number:	MIA88IA011
Date & Time:	October 15, 1987, 16:50 Local	Registration:	N436CA
Aircraft:	CASA C-212-200	Aircraft Damage:	Minor
Defining Event:		Injuries:	16 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Scheduled		

Analysis

THE COMMUTER FLT WAS TAXIING TO THE GATE, WHEN THE PLT OBSERVED A FIRE WARNING LIGHT FOR THE NO 2 ENG. THE FIRE BOTTLE WAS DISCHARGED & THE FIRE WAS EXTINGUISHED. AN EXAM REVEALED THAT A FUEL LINE, P/N 3103385-1, HAD BROKEN AND HAD STARTED A FIRE. AN EXAM OF THE FUEL LINE REVEALED TOOL MARKS ON THE LINE. A LABORATORY EXAM REVEALED THE LINE HAD FAILED DUE TO FATIGUE & THE FATIGUE HAD ORIGINATED IN THE AREA OF THE TOOL MARKS. THE TOOL MARKS SUGGESTED THAT A CRESCENT WRENCH OR SIMILAR TOOL HAD BEEN USED TO BEND THE LINE IN ORDER TO ALIGN THE LINE WITH THE ATTACH FITTING. THE COMPANY WAS ADVISED OF THE FINDINGS & A COMPANY DIRECTIVE WAS ISSUED TO DISCONTINUE THE PRACTICE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be:

Findings

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

- Findings
1. (C) FUEL SYSTEM,LINE - BENT

2. (C) MAINTENANCE, ALIGNMENT - IMPROPER - COMPANY MAINTENANCE PERSONNEL
3. (C) FUEL SYSTEM, LINE - FAILURE, TOTAL

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	25, 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 26, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5200 hours (Total, all aircraft), 1125 hours (Total, this make and model), 5010 hours (Pilot In Command, all aircraft), 275 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CASA	Registration:	N436CA
Model/Series:	C-212-200 C-212-200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	287
Landing Gear Type:	Retractable - Tricycle	Seats:	19
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	14300 lbs
Time Since Last Inspection:	70 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	6298 Hrs	Engine Manufacturer:	GARRETT
ELT:	Not installed	Engine Model/Series:	TPE331-10-511
Registered Owner:	EXECUTIVE AIR CHARTER, INC.	Rated Power:	1000 Horsepower
Operator:	EXECUTIVE AIR CHARTER, INC.	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:	AMERICAN EAGLE	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MAZ ,29 ft msl	Distance from Accident Site:	
Observation Time:	17:00 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	26°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SAN JUAN , PR (SJU)	Type of Flight Plan Filed:	None
Destination:	MAYAGUEZ , PR (MAZ)	Type of Clearance:	None
Departure Time:	16:05 Local	Type of Airspace:	

Airport Information

Airport:	MAYAGUEZ MAZ	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Minor
Passenger Injuries:	14 None	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	16 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Bird, Ronald
Additional Participating Persons:	JOE DOMINO; SAN JUAN , PR
Original Publish Date:	July 10, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=32043

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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](#).