



National Transportation Safety Board Aviation Accident Final Report

Location:	OPA LOCKA, FL	Accident Number:	MIA96LA136
Date & Time:	05/02/1996, 1052 EDT	Registration:	N64819
Aircraft:	Beech UC45J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

During departure, the rubber connector for the fuel supply line to the right engine oil dilution valve split at the dilution valve on the aft side of the firewall. The engine would not operate unless the electric boost pump was turned on. While returning to the departure airport, a fire erupted in the right wheel after the landing gear was extended. The cockpit filled with smoke during the landing rollout, and the pilot lost directional control do to not being able to see. The aircraft rolled into a canal and came to rest. The split rubber fuel line connector was dry and brittle and did not have any fire damage. No other sources of fuel leakage was found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: inadequate inspection of the fuel line connector by company maintenance personnel, and failure of a connector resulting in a fuel leak and fire.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CLIMB

Findings

1. (C) FUEL SYSTEM,LINE - ROTTED/WEATHERED
2. (C) MAINTENANCE,INSPECTION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL
3. (C) FUEL SYSTEM,LINE - RUPTURED
4. (C) FLUID,FUEL - LEAK

Occurrence #2: FIRE

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

5. VISUAL LOOKOUT - NOT POSSIBLE - PILOT IN COMMAND
6. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

7. TERRAIN CONDITION - RAVINE

Factual Information

On May 2, 1996, about 1052 eastern daylight time, a Beech UC-45J, N64819, registered to Aero Caribe Express and operated by Sky Charters, Inc., as a 14 CFR part 91 positioning flight, had a fire in the right main gear wheel well and went off the runway into a canal while returning to Opa Locka Airport, Opa Locka, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft sustained substantial damage and the airline transport-rated pilot was not injured. The flight originated from Opa Locka, Florida, a few minutes before the accident.

The pilot stated that during departure, while performing the climb checklist he turned off the electric boost pumps. The right engine began to run rough and he noticed the fuel pressure was zero. He turned the right electric boost pump back on, fuel pressure increased to normal levels, and the engine began to run normally. He elected to return to the departure airport.

While en route back to the airport, he switched the right engine fuel selector from the main tank to the auxiliary tank position. He then turned off the electric boost pump, and fuel pressure again dropped to zero and the engine began to fail. He turned the electric boost pump back on and switched the right fuel selector back to the main tank position. While landing, the air traffic controller informed him that the right engine was on fire. He visually inspected the engine but did not see any flame or smoke. While shutting down the right engine, the cockpit immediately filled with smoke. He was unable to see, and while attempting to open the cockpit hatch the aircraft veered to the left. The aircraft entered a canal where it came to rest.

Postcrash examination of the aircraft showed it had sustained fire damage in the right wheel well aft of the engine firewall. The right main landing gear wheel, which had been retracted for the flight and extended on short final approach, did not have any fire damage. The right engine driven fuel pump operated normally. A pressure check of all fuel lines showed a rubber fuel line had split and was leaking at the engine oil dilution valve on the aft side of the engine fire wall, upper outboard corner. This rubber fuel line connected a pressurized, metal fuel supply line from the carburetor to the inlet of the oil dilution valve. The line was dry and brittle and did not have any fire damage on it. No other fuel line leaks were found.

Pilot Information

Certificate:	Airline Transport	Age:	41, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/02/1995
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	8064 hours (Total, all aircraft), 2245 hours (Total, this make and model), 2622 hours (Pilot In Command, all aircraft), 165 hours (Last 90 days, all aircraft), 51 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N64819
Model/Series:	UC45J UC45J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	52-3762
Landing Gear Type:	Retractable - Tailwheel	Seats:	2
Date/Type of Last Inspection:	04/24/1996, 100 Hour	Certified Max Gross Wt.:	10100 lbs
Time Since Last Inspection:	14 Hours	Engines:	2 Reciprocating
Airframe Total Time:	4254 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R985-14B
Registered Owner:	AERO CARIBE EXPRESS	Rated Power:	450 hp
Operator:	SKY CHARTERS, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	OSYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OPF, 9 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1053 EDT	Direction from Accident Site:	180°
Lowest Cloud Condition:	Scattered / 2500 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 10000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28° C
Precipitation and Obscuration:			
Departure Point:	(OPF)	Type of Flight Plan Filed:	None
Destination:	FT. LAUDERDALE, FL (FXE)	Type of Clearance:	None
Departure Time:	1045 EDT	Type of Airspace:	Class D

Airport Information

Airport:	OPA LOCKA (OPF)	Runway Surface Type:	Asphalt
Airport Elevation:	9 ft	Runway Surface Condition:	Dry
Runway Used:	9L	IFR Approach:	None
Runway Length/Width:	8002 ft / 150 ft	VFR Approach/Landing:	Traffic Pattern

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:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JEFFREY L KENNEDY	Report Date:	10/22/1996
Additional Participating Persons:	RICHARD ARUJO; MIAMI, FL		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).