



National Transportation Safety Board Aviation Incident Data Summary

Location:	Baton Rouge, LA	Incident Number:	CEN11IA615
Date & Time:	09/01/2011, 1725 CDT	Registration:	N875AS
Aircraft:	BOMBARDIER INC CL-600-2B19	Injuries:	53 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

While configuring the airplane for landing, the flight crew observed a landing gear disagree message and an indication that the left main landing gear was not down and locked. The flight crewmembers followed procedures to address the landing gear disagree message; however, they were unable to get the left landing gear to extend. The captain declared an emergency and chose to land the airplane with only the right main landing gear and nose landing gear extended. The airplane came to rest in an upright, left-wing-low position. Postincident examination of the left main landing gear system revealed that the upper attachment bolt for the left main landing gear uplock assembly, which is designed to be attached to both the uplock mechanism and the structure, was attached only to the airplane structure. The left main landing gear uplock assembly had been removed and reinstalled the day before the incident flight. The mechanic who performed the maintenance did not have training on nor prior experience performing the installation of the uplock assembly, and the maintenance inspector who inspected its installation did not have training on inspecting the uplock assembly. Neither the mechanic nor the maintenance inspector observed any problems during the postinstallation inspection. Thus, it is likely that the uplock assembly was installed incorrectly due to the lack of training in both the installation by the mechanic and the inspection by the inspector.

Flight Events

Landing - Landing gear not configured

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: The improperly installed upper attachment bolt in the left main landing gear uplock assembly, which led to the failure of the left main landing gear to extend before landing. Contributing to the accident was maintenance personnel's lack of training on the installation and inspection of the uplock assembly.

Findings

Personnel issues-Task performance-Maintenance-Installation-Maintenance personnel - C
Personnel issues-Experience/knowledge-Experience/qualifications-Total experience w/ equipment-Maintenance personnel - F
Personnel issues-Task performance-Inspection-Post maintenance inspection-Maintenance personnel - F

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	31
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	5305 hours (Total, all aircraft), 4312 hours (Total, this make and model), 198 hours (Last 90 days, all aircraft)		

Co-Pilot Information

Certificate:	Commercial	Age:	27
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	998 hours (Total, all aircraft), 715 hours (Total, this make and model), 175 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BOMBARDIER INC	Registration:	N875AS
Model/Series:	CL-600-2B19	Engines:	2 Turbo Fan
Operator:	ATLANTIC SOUTHEAST AIRLINES INC	Engine Manufacturer:	General Electric
Air Carrier Operating Certificate:	Commuter Air Carrier (135)	Engine Model/Series:	CF34-3B1
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	BTR, 70 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	11 knots, 100°
Temperature:	29° C / 24° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Atlanta, GA (ATL)	Destination:	Baton Rouge, LA (BTR)

Airport Information

Airport:	Baton Rouge Metropolitan (BTR)	Runway Surface Type:	Asphalt
Runway Used:	13	Runway Surface Condition:	Dry
Runway Length/Width:	6407 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Minor
Passenger Injuries:	50 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): Timothy LeBaron

Adopted Date: 01/30/2014

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=81683>

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.