



National Transportation Safety Board Aviation Accident Final Report

Location:	BOSTON, MA	Accident Number:	NYC99LA092
Date & Time:	04/12/1999, 1926 EDT	Registration:	N347BE
Aircraft:	Saab-Scania AB (Saab) 340B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	9 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

A baggage belt-loader struck the parked airplane in an area below the cargo door. The vehicle approached the airplane without stopping, and the driver jumped off just before the collision. At the time, the airplane's engines were secured, the wheels were chocked, the seat belt sign had been turned off, and the parking checklist had been completed. The passengers were standing, and the flight attendant was waiting for the signal to open the door. Ground support personnel checked the belt-loader braking system immediately after the collision and found no discrepancies. The airline had a published procedure in place, wherein the belt-loader driver was required to stop the vehicle 50 feet prior to the airplane, and again, at least 8 feet away from the airplane. The driver was then required to approach the airplane with the belt-loader at a 'creep' speed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The belt-loader driver's loss of control of the vehicle, and his failure to follow published procedures for approaching the airplane with the belt-loader.

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: STANDING - ENGINE(S) NOT OPERATING

Findings

1. FUSELAGE,SKIN - CUT/SEVERED
2. FUSELAGE,STRINGER - CUT/SEVERED
3. OBJECT - VEHICLE
4. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - DRIVER OF VEHICLE
5. (C) MISCELLANEOUS EQUIPMENT - UNCONTROLLED - DRIVER OF VEHICLE

Factual Information

On April 12, 1999, at 1926 Eastern Daylight Time, a Saab 340B, N347BE, operated as Business Express flight 6240, was substantially damaged when a baggage belt-loader sliced through a portion of the fuselage, in an area under the cargo door. The airplane had just been parked at the gate, at General Edward Lawrence Logan International Airport (BOS), Boston, Massachusetts. The two pilots, one flight attendant, and six passengers onboard were uninjured, as was the belt-loader driver. An instrument flight rules flight plan had been filed for the scheduled passenger flight, which arrived from Northern Maine Regional Airport (PQI), Presque Isle, Maine. The flight was conducted under 14 CFR Part 121.

According to the captain's statement, the airplane was parked and chocked, with the engines secured, when the belt-loader struck it. The airplane's seat belt sign had been turned off, and the parking checklist had been completed. The passengers were standing, and the flight attendant was waiting for the signal to open the door.

According to the airline's director of safety, the operator of the belt-loader drove the vehicle towards the airplane's cargo door area without stopping. As it approached the airplane, the driver jumped off the belt-loader, just before it impacted the fuselage. Ground support personnel checked the belt-loader braking system immediately after the collision, and found no discrepancies.

According to the airline's Ground Support Manual, "Any vehicle approaching an aircraft is required to stop 50 ft. (15 m.) away. Then, it will be eased up to within 8 ft. (2 m.) and again come to a stop. From that point, the driver will carefully creep up to the aircraft. Ground equipment aircraft strikes will be prevented by using this 'Fifty 'N Eight' stop - stop - creep technique."

Pilot Information

Certificate:	Airline Transport	Age:	51, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
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 Medical Exam:	01/06/1999
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	11500 hours (Total, all aircraft), 3500 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Saab-Scania AB (Saab)	Registration:	N347BE
Model/Series:	340B 340B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	187
Landing Gear Type:	Retractable - Tricycle	Seats:	37
Date/Type of Last Inspection:	Continuous Airworthiness	Certified Max Gross Wt.:	28500 lbs
Time Since Last Inspection:		Engines:	2 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	GE
ELT:	Installed, not activated	Engine Model/Series:	CT7
Registered Owner:	BUSINESS EXPRESS AIRLINES	Rated Power:	1735 hp
Operator:	BUSINESS EXPRESS AIRLINES	Air Carrier Operating Certificate:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	PLGA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BOS, 15 ft msl	Observation Time:	1956 EST
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Temperature/Dew Point:	9°C / -8°C
Lowest Ceiling:	None / 0 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	12 knots, 330°	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	PRESQUE ISLE, ME (PQI)	Type of Flight Plan Filed:	IFR
Destination:	(BOS)	Type of Clearance:	IFR
Departure Time:	1806 EST	Type of Airspace:	

Airport Information

Airport:	GEN EDW LWRNCE LOGAN INTL (BOS)	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:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:	6 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	9 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PAUL R COX	Adopted Date:	04/18/2001
Additional Participating Persons:	NANCY RISSO; BOSTON, MA,		
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/ .		

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