



National Transportation Safety Board Aviation Incident Data Summary

Location:	Denver, CO	Incident Number:	DEN05IA046
Date & Time:	01/03/2005, 1934 MST	Registration:	N202UX
Aircraft:	Beech 1900D	Injuries:	1 Minor, 15 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

According to witnesses, the tug was parked behind the left wing of the airplane, facing in the opposite direction, with its engine running. The airplane's engines were not running. When the tug operator "jumped" onto the tug, he lost his footing and slipped. As he grabbed for something to catch his balance, his right arm hit the tug's gearshift lever. As the tug started moving forward in a right turn, the tug operator's left foot became caught between the tug's frame and left rear tire. The tug circled around the left wing tip of the airplane and it struck the left engine nacelle. The tug operator's foot became wedged between the tug and the airplane's stairs, resulting in a sprained left ankle and a few minor lacerations. The airplane sustained minor damage to the left engine nacelle and one propeller blade. According to the FAA, the tug operator's training records did not reflect the tug operator's qualifications to operate ground equipment, including the gas powered Kubota tug involved in this incident.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: the tug driver's failure to maintain operational control of the tug, resulting in impact with an airplane. Contributing factors include the tug driver's improper procedure, the tug driver's inadequate initial ground equipment training, and the company/operator's inadequate certification/approval of the tug driver.

Findings

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

Findings

1. (C) MISCELLANEOUS - DRIVER OF VEHICLE
2. (F) IMPROPER USE OF PROCEDURE - DRIVER OF VEHICLE
3. (F) INADEQUATE INITIAL TRAINING - DRIVER OF VEHICLE
4. (F) INADEQUATE CERTIFICATION/APPROVAL - COMPANY/OPERATOR MGMT
5. (F) OBJECT - VEHICLE

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	26
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):		Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	3000 hours (Total, all aircraft), 2150 hours (Total, this make and model), 1450 hours (Pilot In Command, all aircraft), 259 hours (Last 90 days, all aircraft), 89 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Beech	Registration:	N202UX
Model/Series:	1900D	Engines:	2 Turbo Prop
Operator:	Great Lakes Aviation LTD.	Engine Manufacturer:	Pratt & Whitney Canada
Air Carrier Operating Certificate:	Flag carrier (121)	Engine Model/Series:	PT6a-67D
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KDEN, 5431 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	
Condition of Light:	Night/Dark	Wind Speed/Gusts, Direction:	4 knots, 20°
Temperature:	-4° C / -5° C	Visibility	4 Miles
Precipitation and Obscuration:			
Departure Point:	Denver, CO (DEN)	Destination:	Denver, CO (MCK)

Airport Information

Airport:	Denver Internationl (DEN)	Runway Surface Type:	Unknown
Runway Used:	NA	Runway Surface Condition:	Unknown
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Minor
Passenger Injuries:	13 None	Aircraft Fire:	None
Ground Injuries:	1 Minor	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): Arnold W Scott

Adopted Date: 06/08/2005

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.