



National Transportation Safety Board Aviation Accident Final Report

Location:	TAMPA, FL	Accident Number:	MIA94LA038
Date & Time:	12/01/1993, 1538 EST	Registration:	N700RR
Aircraft:	CESSNA 650	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General Aviation - Executive/Corporate		

Analysis

THE PILOT STATED THAT THE AIRPLANE STARTED TO WEATHERVANE WHILE TURNING OFF THE RUNWAY ONTO THE TAXIWAY. NOSEWHEEL STEERING WAS INITIATED WITH NEGATIVE RESULTS. FULL POWER WAS APPLIED ON THE THRUST REVERSERS; THE AIRPLANE DEPARTED THE TAXIWAY AND CAME TO A STOP IN THE GRASS. THE PILOT THEN TAXIED FORWARD, AND THE NOSEWHEEL COLLIDED WITH A CEMENT PAD COLLAPSING THE NOSE GEAR. EXAMINATION REVEALED THAT THE LEFT HAND MAIN GEAR ASSEMBLY TRAILING LINK CONNECTORS PW₂₁ AND PW₂₃ ANTI-SKID TRANSDUCERS WERE CROSSED, AND RESPONDED OPPOSITE OF HOW THEY SHOULD HAVE OPERATED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PIC'S IMPROPER DECISION TO TAXI THE AIRPLANE OFF THE TAXIWAY. CONTRIBUTING TO THE ACCIDENT WAS THE IMPROPER WIRING OF THE ANTI-SKID SYSTEM.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (F) LANDING GEAR,ANTI-SKID BRAKE SYSTEM - IMPROPER

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: TAXI

Findings

2. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND
3. OBJECT - OTHER

Factual Information

On December 1, 1993, about 1538 eastern standard time, a Cessna 650, N700RR, registered to Consolidated International Services Inc., operating as a 14 CFR Part 91 executive/corporate flight, collided with a cement pad while taxiing back to the taxiway in the grass, collapsing the nose gear. Visual meteorological conditions prevailed and an IFR flight plan was filed. The airplane sustained substantial damage. The pilot-in-command, second officer, and two passengers were not injured. The flight originated from Morristown, New Jersey, about 2 hours 15 minutes before the accident.

The pilot-in-command stated that after landing the airplane started to weather vane while transitioning to a taxiway. Nosewheel steering was initiated with negative results. Full power was applied on the thrust reversers and the airplane departed the taxiway and came to a stop in the grass. FAA personnel on duty in the control tower asked the pilot if he would be able to taxi the airplane back on to the taxiway. The pilot-in-command evaluated the situation and started to taxi forward. The airplane rolled forward about 10 to 15 feet and the nose gear collapsed. The pilot-in-command exited the airplane, observed that the nosewheel had contacted a cement pad, turned 90 degrees to the left, and the gear had collapsed.

Examination of the airplane by personnel from Cessna Product Engineering, and the Director of Maintenance, Consolidated International Services, Inc., revealed the left hand main gear assembly trailing link connectors PW21 and PW23, antiskid transducers were crossed, and responded opposite of how they should have operated.

The accident was initially reported to the NTSB by the FAA as an incident. As additional information was received from repair personnel, the incident was reclassified as an accident on December 13, 1993.

Pilot Information

Certificate:	Airline Transport	Age:	62, Male
Airplane Rating(s):	Multi-engine Land; Single-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):	Airplane Multi-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/26/1993
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	7711 hours (Total, all aircraft), 3062 hours (Total, this make and model), 5661 hours (Pilot In Command, all aircraft), 103 hours (Last 90 days, all aircraft), 55 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N700RR
Model/Series:	650 650	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	650-0025
Landing Gear Type:	Retractable - Tricycle	Seats:	11
Date/Type of Last Inspection:	11/20/1993, 100 Hour	Certified Max Gross Wt.:	21500 lbs
Time Since Last Inspection:	23 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	3431 Hours	Engine Manufacturer:	GARRETT
ELT:	Installed, not activated	Engine Model/Series:	TFE-731-3B
Registered Owner:	CONSOLIDATED INT SERVICES INC.	Rated Power:	3650 lbs
Operator:	CONSOLIDATED INT SERVICES INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TPA, 27 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1550 EST	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 6000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24° C / 14° C
Precipitation and Obscuration:			
Departure Point:	MORRISTOWN, NJ (MMU)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1323 EST	Type of Airspace:	Class D

Airport Information

Airport:	TAMPA INTERNATIONAL (TPA)	Runway Surface Type:	Asphalt
Airport Elevation:	27 ft	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	Visual
Runway Length/Width:		VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	CARROL A SMITH	Report Date:	12/02/1994
Additional Participating Persons:	MIKE CURTIS; ORLANDO, FL ROBERT WHITE; WICHITA, KS		
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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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](#).