



National Transportation Safety Board Aviation Accident Final Report

Location:	Teterboro, NJ	Accident Number:	DCA05MA031
Date & Time:	02/02/2005, 0718 EST	Registration:	N370V
Aircraft:	Bombardier CL-600-1A11	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 Serious, 9 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

The Safety Board's full report is available at <http://www.nts.gov/publictn/publictn.htm>. The Aircraft Accident Report number is NTSB/AAR-06/04.

On February 2, 2005, about 0718 eastern standard time, a Bombardier Challenger CL-600-1A11, N370V, ran off the departure end of runway 6 at Teterboro Airport (TEB), Teterboro, New Jersey, at a ground speed of about 110 knots; through an airport perimeter fence; across a six-lane highway (where it struck a vehicle); and into a parking lot before impacting a building. The two pilots were seriously injured, as were two occupants in the vehicle. The cabin aide, eight passengers, and one person in the building received minor injuries. The airplane was destroyed by impact forces and postimpact fire. The accident flight was an on-demand passenger charter flight from TEB to Chicago Midway Airport, Chicago, Illinois. The flight was subject to the provisions of 14 Code of Federal Regulations (CFR) Part 135 and operated by Platinum Jet Management, LLC (PJM), Fort Lauderdale, Florida, under the auspices of a charter management agreement with Darby Aviation (Darby), Muscle Shoals, Alabama. Visual meteorological conditions prevailed for the flight, which operated on an instrument flight rules flight plan.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilots' failure to ensure the airplane was loaded within weight and balance limits and their attempt to takeoff with the center of gravity well forward of the forward takeoff limit, which prevented the airplane from rotating at the intended rotation speed.

Contributing to the accident were: 1) PJM's conduct of charter flights (using PJM pilots and airplanes) without proper Federal Aviation Administration (FAA) certification and its failure to ensure that all for-hire flights were conducted in accordance with 14 CFR Part 135 requirements; 2) Darby Aviation's failure to maintain operational control over 14 CFR Part 135 flights being conducted under its certificate by PJM, which resulted in an environment conducive to the development of systemic patterns of flight crew performance deficiencies like

those observed in this accident; 3) the failure of the Birmingham, Alabama, FAA Flight Standards District Office to provide adequate surveillance and oversight of operations conducted under Darby's Part 135 certificate; and 4) the FAA's tacit approval of arrangements such as that between Darby and PJM.

Findings

Occurrence #1: OVERRUN

Phase of Operation: TAKEOFF - ABORTED

Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - FLIGHTCREW
2. (C) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - FLIGHTCREW
3. (C) ROTATION - NOT ATTAINED - FLIGHTCREW
4. (F) INFORMATION - COMPANY/OPERATOR MANAGEMENT
5. (C) INFORMATION UNCLEAR - COMPANY/OPERATOR MANAGEMENT
6. (C) INADEQUATE SURVEILLANCE OF OPERATION - COMPANY/OPERATOR MGMT
7. (F) INFORMATION
8. (C) INADEQUATE SURVEILLANCE OF OPERATION - FAA(ORGANIZATION)

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ABORTED

Findings

9. OBJECT - FENCE
10. OBJECT - VEHICLE
11. OBJECT - BUILDING(NONRESIDENTIAL)

Factual Information

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Pilot Information

Certificate:	Airline Transport	Age:	58, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Without Waivers/Limitations	Last FAA Medical Exam:	08/01/2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	15060 hours (Total, all aircraft)		

Co-Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	31, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Without Waivers/Limitations	Last FAA Medical Exam:	01/01/2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	11/01/2004
Flight Time:	5957 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bombardier	Registration:	N370V
Model/Series:	CL-600-1A11	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	
Landing Gear Type:	Retractable - Tricycle	Seats:	9
Date/Type of Last Inspection:	01/01/2005, Continuous Airworthiness	Certified Max Gross Wt.:	41400 lbs
Time Since Last Inspection:	46 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	6900 Hours at time of accident	Engine Manufacturer:	Allied Signal
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	ALF-502-L22
Registered Owner:	DDH Aviation/448 Alliance	Rated Power:	7500 lbs
Operator:	Platinum Jet Managment	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	YDBA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dawn
Observation Facility, Elevation:	KTEB, 18 ft msl	Distance from Accident Site:	
Observation Time:	0653 EST	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.53 inches Hg	Temperature/Dew Point:	-6° C / -8° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Teterboro, NJ (KTEB)	Type of Flight Plan Filed:	IFR
Destination:	Chicago, IL (KMDW)	Type of Clearance:	IFR
Departure Time:	0716 EST	Type of Airspace:	Class D

Airport Information

Airport:	Teterboro NJ (KTEB)	Runway Surface Type:	Asphalt
Airport Elevation:	18 ft	Runway Surface Condition:	Dry
Runway Used:	6	IFR Approach:	Unknown
Runway Length/Width:	6000 ft / 150 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	2 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	8 Minor	Aircraft Fire:	On-Ground
Ground Injuries:	2 Serious	Aircraft Explosion:	None
Total Injuries:	4 Serious, 9 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	William R English	Report Date:	02/01/2007
Additional Participating Persons:	Eric West; AAI-100		
Publish Date:	02/04/2009		
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](#).