



National Transportation Safety Board Aviation Accident Final Report

Location:	Montrose, CO	Accident Number:	DEN05MA029
Date & Time:	11/28/2004, 0955 MST	Registration:	N873G
Aircraft:	Canadair CL-600-2A12	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal, 3 Serious
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

On November 28, 2004, about 0958 mountain standard time, a Canadair, Ltd., CL-600-2A12, N873G, registered to Hop-a-Jet, Inc., and operated by Air Castle Corporation dba Global Aviation as Glo-Air flight 73, collided with the ground during takeoff at Montrose Regional Airport (MTJ), Montrose, Colorado. The on-demand charter flight was operated under the provisions of 14 Code of Federal Regulations (CFR) Part 135 on an instrument flight rules (IFR) flight plan. Instrument meteorological conditions prevailed, and snow was falling. Of the six occupants on board, the captain, the flight attendant, and one passenger were killed, and the first officer and two passengers were seriously injured. The airplane was destroyed by impact forces and postcrash fire. The flight was en route to South Bend Regional Airport (SBN), South Bend, Indiana.

The complete report of this accident investigation was adopted by the Safety Board on May 2, 2006, and is available on : <http://www.nts.gov/publicn/2006/AAB0603.pdf>

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the flight crew's failure to ensure that the airplane's wings were free of ice or snow contamination that accumulated while the airplane was on the ground, which resulted in an attempted takeoff with upper wing contamination that induced the subsequent stall and collision with the ground. A factor contributing to the accident was the pilots' lack of experience flying during winter weather conditions.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF

Findings

1. (F) WEATHER CONDITION - ICING CONDITIONS
2. (C) AIRFRAME - ICE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

3. AIRCRAFT CONTROL - NOT MAINTAINED - FLIGHTCREW
4. (F) LACK OF TOTAL EXPERIENCE - FLIGHTCREW
5. (C) STALL/MUSH - ENCOUNTERED - FLIGHTCREW

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. TERRAIN CONDITION - GROUND

Factual Information

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Pilot Information

Certificate:	Airline Transport; Commercial	Age:	50, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last Medical Exam:	11/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	06/01/2004
Flight Time:	12396 hours (Total, all aircraft), 913 hours (Total, this make and model), 10851 hours (Pilot In Command, all aircraft), 165 hours (Last 90 days, all aircraft), 87 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport; Commercial	Age:	30, Male
Airplane Rating(s):	Multi-engine Land; Single-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):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last Medical Exam:	04/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	09/01/2004
Flight Time:	1586 hours (Total, all aircraft), 46 hours (Total, this make and model), 76 hours (Last 90 days, all aircraft), 46 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Canadair	Registration:	N873G
Model/Series:	CL-600-2A12	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	3009
Landing Gear Type:	Retractable - Tricycle	Seats:	13
Date/Type of Last Inspection:	11/01/2004, Continuous Airworthiness	Certified Max Gross Wt.:	44600 lbs
Time Since Last Inspection:	8.9 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	14316.6 Hours	Engine Manufacturer:	General Electric
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	CF34-3A2
Registered Owner:	Hop-A-Jet Incorporated	Rated Power:	8729 lbs
Operator:	Air Castle Corporation	Air Carrier Operating Certificate:	None
Operator Does Business As:	Hop-A-Jet Incorporated	Operator Designator Code:	YQCA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MTJ, 5750 ft msl	Observation Time:	0953 MST
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:	Few / 500 ft agl	Temperature/Dew Point:	-1 °C / -2 °C
Lowest Ceiling:	Overcast / 900 ft agl	Visibility	1.25 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	29.67 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Montrose, CO (MTJ)	Type of Flight Plan Filed:	IFR
Destination:	South Bend, IN (SBN)	Type of Clearance:	IFR
Departure Time:	1055 MST	Type of Airspace:	

Airport Information

Airport:	Montrose Regional (MTJ)	Runway Surface Type:	Asphalt
Airport Elevation:	5759 ft	Runway Surface Condition:	Slush covered
Runway Used:	31	IFR Approach:	Unknown
Runway Length/Width:	7500 ft / 100 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	2 Fatal, 1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal, 2 Serious	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	3 Fatal, 3 Serious	Latitude, Longitude:	38.511111, -107.906111

Administrative Information

Investigator In Charge (IIC): Arnold W Scott **Adopted Date:** 05/03/2006

Additional Participating Persons: Jennifer Kaisaer; National Transportation Safety Board; Denver, CO
Christine K Soucy; Federal Aviation Administration; Washington, DC
William J Hughes; Federal Aviation Administration; Salt Lake City, UT
Mark Z Rushton; Federal Aviation Administration; Salt Lake City, UT
John Heath; Bombardier; W. Dorval, Canada,
Francois Pelletier; Bombardier; W. Dorval, Canada,
Leslie McVey; General Electric
Howard Winkler; General Electric
Robert Johnson; Jet Alliance/Air Castle Worldwide Executive Jet Ch; Millville, NJ
Michael E Woolston; Air Castle Worldwide Executive Jet Charter; Millville, NJ
Scott Brownlee; Montrose Regional Airport; Montrose, CO
Mark Young; Montrose City/County Coroner; Montrose, CO
Mark Schelling; Montrose Police Department; Montrose, CO
Jim McMenemy; Transport Canada; Ottawa, Canada,
Dan Poulin; Transport Canada; Ottawa, Canada,
David McNair; Transportation Safety Board of Canada; Edmonton, Canada,
John Pearson; Transportation Safety Board of Canada; Edmonton, Canada,
Mike Tomm; Transportation Safety Board Of Canada; Edmonton, Canada,

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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