
Jet blast damage between a Boeing 767 and Cessna 150 at Seattle, May 24, 2000

Micro-summary: This Boeing 767's jet blast tossed a Cessna 150 around on the ground.

Event Date: 2000-05-24 at 1740 PDT


Investigative Body: National Transportation Safety Board (NTSB), USA


Investigative Body's Web Site: <http://www.nts.gov/>

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		NTSB ID: SEA00LA094A		Aircraft Registration Number: N767AX	
		Occurrence Date: 05/24/2000		Most Critical Injury: None	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place SEATTLE		State WA	Zip Code 98108	Local Time 1740	Time Zone PDT
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 767-200		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>On May 24, 2000, approximately 1740 Pacific daylight time, a Cessna 150, N60825, was blown up onto its nose and wingtip while awaiting takeoff clearance for runway 31R at Boeing Field/King County International Airport, Seattle, Washington, for a 14 CFR 91 flight to Friday Harbor, Washington. The Cessna 150 sustained substantial damage in the occurrence, but the private pilot-in-command of the Cessna was not injured. The Cessna pilot reported that his aircraft was upset by jet blast from an Airborne Express Boeing 767 (B-767), N767AX, operating as Airborne Express flight 1414 on a 14 CFR 121 non-scheduled domestic cargo flight from Wilmington, Ohio. At the time the Cessna was upset, the B-767, which had just landed at Boeing Field, was executing a left turn into the Airborne Express ramp adjacent to the Cessna, which was in the runway 31R runup area at taxiway A8.</p> <p>There were no injuries to the airline transport pilot-in-command, first officer, or a jumpseat rider aboard the B-767, and no damage to the B-767 in the accident. Also, no other damage to any other property nor injuries to other persons were reported. Visual meteorological conditions, with winds from 300 degrees true at 6 knots, were reported at Boeing Field at 1753. The B-767 was on an instrument flight rules (IFR) flight plan, and the Cessna was not on a flight plan.</p> <p>The Cessna pilot indicated that at the time of the occurrence, his airplane was in the south portion of the runup area, headed generally north. He stated that he had just completed his runup and switched to the tower frequency, and that another aircraft in the runup area moved out of the runup area and onto runway 31R for departure just ahead of him. The Cessna pilot stated that as the B-767 approached his aircraft, there was "lots of vertical clearance" from the B-767's wingtip to his aircraft, although the lateral clearance from the B-767's wingtip to his aircraft "appeared very close." He reported that as the B-767 reached a position abreast of him, it turned away from him. The Cessna pilot reported:</p> <p>When my position was relative aft of the B767 the jet blast raised my right wing rolling the aircraft left and forward onto the left wing tip and propeller...The plane continued a left roll to what felt like a high angle of rotation on the left wingtip-prop axis....[Then] the turn of the B767 relieved the blast pressure, and my aircraft came back down on her gear.</p> <p>Statements from the B-767 flight crew (provided by Airborne Express) indicated that after exiting runway 31L to the right at taxiway A4 in accordance with the tower's instructions, as the aircraft taxied southeast-bound on taxiway A (which parallels the two parallel runways on the east side of the airport), the flight crew noted two aircraft in the runway 31R runup area. The crew reported that the captain taxied slightly left to ensure adequate clearance with these two aircraft, then, after passing the aircraft, the captain returned to the taxiway centerline. The B-767 captain reported that when he started the turn into the parking area, the B-767's ground speed was 3 knots, "with enough power to maintain forward progress for [an] approximately 130 [degree] left turn." The crew reported there was limited room in the parking area, with an Airborne Express DC-8 aircraft parked in the area and "several ramp loaders and other ground equipment" between the</p>					
FACTUAL REPORT - AVIATION					
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	Occurrence Type: Accident

Narrative (Continued)

B-767's parking spot and the parked DC-8. The B-767 flight crew reported they were unaware of the occurrence with the Cessna until maintenance personnel informed them after engine shutdown.

The Cessna pilot and (in a written statement to the FAA) the individual who marshaled the B-767 into its parking spot both stated that to avoid a jet blast incident, the B-767 captain had the option to stop his aircraft on the taxiway and hold short of the runup area until it was clear. Alternatively, the Cessna pilot suggested, large aircraft taxiing to parking areas in the vicinity of runup areas could be directed by ATC ground control to taxi down parallel taxiway B (to the west of the runways) to parking. This taxi route is free of potential jet blast conflicts with the taxiway A8 runup area for runway 31R but requires a crossing back across the primary instrument runway, 13R/31L.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: SEA00LA094A			
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Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
KING CO INTL/BOEING FIELD	BFI	18 Ft. MSL	0		
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach:					
VFR Approach/Landing:					
Aircraft Information					
Aircraft Manufacturer		Model/Series		Serial Number	
Boeing		767-200		22785	
Airworthiness Certificate(s): Experimental (Special)					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats:	Certified Max Gross Wt. LBS		Number of Engines: 2	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Fan	GE	CF6-80	60030 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection		Airframe Total Time	
Unknown		Hours		Hours	
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner		Street Address			
ABX AIR INC.		145 HUNTER DR.			
		City	State	Zip Code	
		WILMINGTON	OH	45177	
Operator of Aircraft		Street Address			
Same as Reg'd Aircraft Owner		Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As: AIRBORNE EXPRESS			Operator Designator Code: ABXA		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): Supplemental					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 121: Air Carrier					
Type of Flight Operation Conducted: Non-scheduled; Domestic; Cargo					
FACTUAL REPORT - AVIATION					

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First Pilot Information

Name On File	City On File	State On File	Date of Birth	Age 51
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Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number:
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Certificate(s): Airline Transport

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
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Medical Cert.: Unknown	Medical Cert. Status: Unknown	Date of Last Medical Exam:
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	16000	30								
Pilot In Command(PIC)										
Instructor										
Last 90 Days	30									
Last 30 Days										
Last 24 Hours										

Seatbelt Used?	Shoulder Harness Used?	Toxicology Performed?	Second Pilot? Yes
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Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point WILMINGTON	State OH	Airport Identifier ILN	Departure Time 1538	Time Zone EDT
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Destination Same as Accident/Incident Location	State	Airport Identifier BFI	
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Type of Clearance: VFR

Type of Airspace: Class D

Weather Information

Source of Briefing:
No record of briefing

Method of Briefing:

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
BFI	1753	PDT	18 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			9000 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: None		0 Ft. AGL	Visibility: 10	SM	Altimeter: 29.00 "Hg
Temperature: 19 °C	Dew Point: 6 °C	Wind Direction: 280		Density Altitude: Ft.	
Wind Speed: 6	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0	SM	Intensity of Precipitation: Unknown		
Restrictions to Visibility: None					
Type of Precipitation: None					

Accident Information		
Aircraft Damage: None	Aircraft Fire: None	Aircraft Explosion: None

Classification: U.S. Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew				1	1
Passengers					
- TOTAL ABOARD -				3	3
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	3	3

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National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: SEA00LA094A

Occurrence Date: 05/24/2000

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

GREGG NESEMEIER

Additional Persons Participating in This Accident/Incident Investigation:

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