NTSB ID: SEA00LA094B Aircraft Registration Number: N60825

Occurrence Date: 05/24/2000 Most Critical Injury: None

Occurrence Type: Accident Investigated By: NTSB

Location/Time

Airport Proximity: On Airport	Distance From	n Landing Facility:		Direction Fro	m Airport:
SEATTLE	WA	98108	1740	PDT	
Nearest City/Place	State	Zip Code	Local Time	Time Zone	

Aircraft Information Summary

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Aircraft Manufacturer	Model/Series	Type of Aircraft
Cessna	150J	Airplane

Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

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. 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.

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:

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.

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

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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.

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AVIATION	rence Type	: Accident										
Landing Facility/Approach In	formation											
Airport Name		1	Airport ID:	Airport Ele	vation	Run	way Used Runway Lengt			th	Runw	ay Width
KING CO INTL/BOEING FIELD)		BFI	18	Ft. MSI	_ 0						
Runway Surface Type:				•		•						
Runway Surface Condition:												
Type Instrument Approach:												
VFR Approach/Landing:												
Aircraft Information												
Aircraft Manufacturer				l/Series						Number	r	
Cessna			150J						1507	70603		
Airworthiness Certificate(s): Utility												
Landing Gear Type: Tricycle												
Homebuilt Aircraft? No	Number of Seats: 2	2	Certifie	Certified Max Gross Wt.			1600 LBS Numbe		er of Engines: 1		1	
				Engine Manufacturer: Model/Series: O-200						Rated Power: 100 HP		
- Aircraft Inspection Information												
Type of Last Inspection			Date of Last Inspection Time Sir			nce Last Inspection			Airfram	ne Tota	al Time	
Unknown							Hours				Hours	
- Emergency Locator Transmitter (ELT) Information											
ELT Installed?	ELT Operate	ed?			EL	T Aided i	n Locating Ad	ccident S	Site?			
Owner/Operator Information												
Registered Aircraft Owner			Street	Address 635.10	9TH A	VE. S.E	:					
ROBERT A. SHEPP			City							State	e	Zip Code
											98004	
Operator of Aircraft			Street A		as Red	a'd Aircra	aft Owner					
Same as Reg'd Aircraft Owner				Same as Reg'd Aircraft Owner City						State	е	Zip Code
Operator Does Business As:	Operator Designator Code:											
- Type of U.S. Certificate(s) Held: I	Vone					•						
Air Carrier Operating Certificate(s)	:											
Operating Certificate:				Operato	r Certifi	cate:						
Regulation Flight Conducted Unde	r: Part 91: Genera	ıl Aviati	on									
Type of Flight Operation Conducted												
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AVIATION				Occurrence Type: Accident				1					
First Pilot	Information												
Name						City				St	ate	Date of Birth	Age
On File						On File	n File On File						49
Sex: M	Seat Occupied:	wn				Certifica	ate Num	ber:	·				
Certificate(s): Priva	ate											
Airplane Rating(s): Single-engine Land													
Rotorcraft/Glider/LTA: None													
Instrument Rating(s): None													
Instructor Rating(s): None													
Type Rating/Endorsement for Accident/Incident Aircraft? Current Biennial Flight Review?													
Medical Ce	rt.: Class 3	Medica	l Cert. Status	S: Valid Med	dicalw/ wa	aivers/lim	١.		Date o	f Last M	/ledical E	Exam: 10/1999	
- Flight Tim	ne Matrix	e Matrix All A/C This Make and Model Single Engine Mult-Engine				Night	Instru Actual		strument Simula	ıment Simulated		Glider	Lighter Than Air
Total Time		362	351	362			21		1 4				
Pilot In Cor	nmand(PIC)	309	298	309			16						
Instructor							\dashv						
Last 90 Day	•	31	31	31			1			2			
Last 30 Day		16	16	16		1	\dashv			2			
		Observ	1-111	1110 V				Joan Dorf	ormod? N	<u>_</u>	T	acond Dilat2 N	_
Seatbelt Us	sea? Yes	Snou	lder Harness	Used? Yes			OXICO	logy Peri	ormed? N	10	s	econd Pilot? N	0
Flight Pla	n/Itinerary												
Type of Flig	ht Plan Filed: No	one											
Departure F	Point					- 1	State Airport Ide		rport Iden	rt Identifier Departui		rture Time	Time Zone
Same as	Accident/Incide	nt Location					BFI		FI	0000		ı	
Destination State Airport Identifier													
FRIDAY HARBOR						V	WA FHR						
Type of Clearance: None													
Type of Airspace: Class D													
Weather Information													
Source of Briefing: No record of briefing													
Method of	Briefing:										_		
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Occurrence Type: Accident

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Weather Information													
WOF ID	Observation Time	Time Zone	WOF	Elevatio	n	WOF D	WOF Distance From Accident Site						;
BFI	1753	PDT		18 Ft. I	MSL				0 NM			0 Deg.	Mag.
Sky/Lowes	st Cloud Condition: Scatt	ered					9000 Ft.	AGL	Condition o	of Ligh	nt: Day		
Lowest Ce	illing: None			0 Ft. <i>A</i>	∖GL	Visib	ility:	10	SM	Altimeter: 29.		29.00	"Hg
Temperatu	ıre: 19 °C [Dew Point:		6 °C	Wind	Direction	: 280			Der	nsity Altitude:		Ft.
Wind Spee	ed: 6	Gusts:			Weath	ner Condt	ions at A	ccident S	Site: Visual C	Cond	itions		
Visibility (F	RVR): 0 Ft.	Visibility	(RVV)	0	SM	Intensit	y of Preci	pitation:	Unknown				
Restriction	s to Visibility: None												
Type of Pro	ecipitation: None												
Accident	Information												
Aircraft Da	mage: Substantial		Airc	raft Fire	: None				Aircraft Exp	losio	n None		
Classificati	ion: U.S. Registered/U.	S. Soil											
- Injury Su	mmary Matrix	Fatal	Serious	Minor		None	TOTAL	T					
First Pi	lot					1		1					
Second	d Pilot												
Studen	t Pilot												
Flight I	nstructor							\neg					
Check	Pilot							\neg					
Flight E	Engineer												
Cabin A	Attendants							\neg					
Other 0	Crew												
Passen	ngers												
- TOTAL A	ABOARD -					1		1					
Other 0	- Ground	0	0		0			0					
- GRANE	O TOTAL -	0	0		0	1		1					
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AVIATION
FTYBOR

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Occurrence Type: Accident

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Investigator-In-Charge (IIC)

GREGG NESEMEIER

Additional Persons Participating in This Accident/Incident Investigation:

DON MICKNACK FAA FSDO RENTON, WA 98055