

National Transportation Safety Board
Washington, DC 20594

Printed on : 6/9/2009 10:28:26 AM

Brief of Accident

Adopted 12/03/2004

SEA03FA024 File No. 16787	01/08/2003	Medford, OR	Aircraft Reg No. N409QX	Time (Local): 18:15 PST		
Make/Model:	Bombardier / DHC-8-401			Fatal	Serious	Minor/None
Engine Make/Model:	Pratt & Whitney / PW 150-A		Crew	0	1	2
Aircraft Damage:	Substantial		Pass	0	0	29
Number of Engines:	2					
Operating Certificate(s):	Flag Carrier/Domestic					
Name of Carrier:	HORIZON AIR INDUSTRIES INC					
Type of Flight Operation:	Scheduled; Domestic; Passenger Only					
Reg. Flight Conducted Under:	Part 121: Air Carrier					
Last Depart. Point:	Seattle, WA			Condition of Light:	Night/Bright	
Destination:	Same as Accident/Incident Location			Weather Info Src:	Pilot	
Airport Proximity:	Off Airport/Airstrip			Basic Weather:	Visual Conditions	
				Lowest Ceiling:	None	
				Visibility:	20.00 SM	
				Wind Dir/Speed:	Calm	
				Temperature (°C):	7	
				Precip/Obscuration:		
Pilot-in-Command	Age: 54			Flight Time (Hours)		
Certificate(s)/Rating(s)				Total All Aircraft:	18662	
Airline Transport; Flight Instructor; Multi-engine Land; Single-engine Land				Last 90 Days:	Unk/Nr	
				Total Make/Model:	4922	
Instrument Ratings				Total Instrument Time:	UnK/Nr	
Airplane						

The aircraft, which was on a downwind for a night visual approach, impacted a flock of Lesser Scaups (diving ducks). The nose structure of the aircraft and the windshield directly in front of the captain received multiple bird strikes. Some of the birds penetrated the aircraft's skin, but there was no direct penetration of the windshield. Although the windshield was not penetrated, hundreds of small pieces of glass were ejected from the most inner of the windshield's three panes, and approximately 70 of these pieces imbedded themselves in the face, forehead, and scalp of the captain. The first officer ultimately completed a successful landing, while using backup flight instruments. The investigation determined that the windshield certification process defined in Part 25 of the Federal Aviation Regulations and the Canadian Aviation Regulations does not take into account the effects of multiple bird strikes on the same windshield.

Brief of Accident (Continued)

SEA03FA024

File No. 16787

01/08/2003

Medford, OR

Aircraft Reg No. N409QX

Time (Local): 18:15 PST

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (C) WINDOW, FLIGHT COMPARTMENT WINDOW/WINDSHIELD - FRACTURED
2. (C) WINDOW, FLIGHT COMPARTMENT WINDOW/WINDSHIELD - OVERLOAD
3. (F) OBJECT - BIRD(S)
4. (F) LIGHT CONDITION - DARK NIGHT

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.

The fracture and spalling of the inner-most pane of the aircraft's port side windshield while on a downwind for a night visual approach due to an imposed load beyond that required for windshield certification (multiple bird strikes). Factors include a dark night, and a flock of ducks (Lesser Scaups) flying in the location of the visual traffic pattern.