

Aviation Investigation Final Report

Location: Portsmouth, New Hampshire Accident Number: DCA18CA252

Date & Time: July 27, 2018, 04:50 Local Registration: N641GT

Aircraft: Boeing 767 Aircraft Damage: Substantial

Defining Event: Hard landing **Injuries:** 250 None

Flight Conducted Under: Part 121: Air carrier - Non-scheduled

Analysis

On July 27, 2018, about 0452 eastern daylight time, Atlas Air Incorporated flight 8601, a Boeing 767, N641GT, experienced a hard landing at Portsmouth International Airport at Pease, (KPSM), Portsmouth, New Hampshire. There were no injuries to the 250 passengers and crew onboard. The airplane was substantially damaged. The non-scheduled supplemental international passenger flight was operated under the provisions of 14 Code of Federal Regulations Part 121 from Frankfurt-Hahn Airport (HHN), Hahn, Germany, to KPSM.

The captain, a line check-airman, was the pilot monitoring and the first officer was the pilot flying and was completing his first operational evaluation. The takeoff, cruise and descent were normal. Visual meteorological conditions with light winds prevailed at the time of the landing. As the FO initiated the landing flare, the airplane became slightly high on the approach path (1 red and 3 white on the Precision Approach Path Indicators). According to the operator, the airplane touched down with limited flare and the engines were at nearly 50% N1, which inhibited the speedbrakes from deploying. The Quick Access Recorder (QAR) data indicated that the airplane porpoised five times down the runway. The maximum load factor recorded during landing bounces was about 2 g's.

Post landing inspection of the airplane found visibly wrinkled, dented and creased skin in the forward fuselage upper crown area, deformation to the nose wheel-well side web, and buckling/fracture of multiple frames and stringers.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

an improper landing flare technique and the lack of the appropriate bounced landing recovery procedure.

Findings

Personnel issues

Aircraft control - Flight crew

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Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)	
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Pilot Information

Certificate:	Airline transport; Commercial	Age:	55,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	January 9, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 4, 2018
Flight Time:	19000 hours (Total, all aircraft), 198	4 hours (Total, this make and model)	

Co-pilot Information

Certificate:	Airline transport; Commercial	Age:	24.Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Right
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Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 21, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 13, 2018
Flight Time:	2465 hours (Total, all aircraft), 16 ho	ours (Total, this make and model)	

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Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N641GT
Model/Series:	767 38E	Aircraft Category:	Airplane
Year of Manufacture:	1992	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	25132
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	July 26, 2018 Continuous airworthiness	Certified Max Gross Wt.:	400998 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	84172 Hrs at time of accident	Engine Manufacturer:	General Electric
ELT:	Installed, not activated	Engine Model/Series:	CF6-80C2B6F
Registered Owner:	Atlas Air Inc	Rated Power:	24995 Horsepower
Operator:	Atlas Air Inc	Operating Certificate(s) Held:	Flag carrier (121), Supplemental

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dawn
Observation Facility, Elevation:	PSM,84 ft msl	Distance from Accident Site:	
Observation Time:	08:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 7000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	19°C / 19°C
Precipitation and Obscuration:			
Departure Point:	Hahn, Germany (EDFH)	Type of Flight Plan Filed:	IFR
Destination:	Portsmouth, NH (PSM)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Unknown

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Airport Information

Airport:	Portsmouth Intl At Pease PSM	Runway Surface Type:	Asphalt;Concrete
Airport Elevation:	84 ft msl	Runway Surface Condition:	Dry;Rubber deposits
Runway Used:	34	IFR Approach:	RNAV
Runway Length/Width:	11322 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	10 None	Aircraft Damage:	Substantial
Passenger Injuries:	240 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	250 None	Latitude, Longitude:	43.078056,-70.823333(est)

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Administrative Information

Investigator In Charge (IIC):	Lovell, John
Additional Participating Persons:	
Original Publish Date:	June 8, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97898

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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