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

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)

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), 1984 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
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 hours (Total, this make and model)		

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

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)

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