
Fan cowling separation resulting in horizontal stabilizer damage, Airbus A320-232, June 12, 2000

Micro-summary: On rotation, the #1 fan cowling separated resulting in horizontal stabilizer damage to this A320.


Event Date: 2000-06-12 at 1314 PDT


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


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

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		NTSB ID: LAX00LA223		Aircraft Registration Number: N655AW	
		Occurrence Date: 06/12/2000		Most Critical Injury: None	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place LAS VEGAS		State NV	Zip Code 89115	Local Time 1314	Time Zone PDT
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Airbus Industrie		Model/Series A320-232		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 June 12, 2000, at 1314 hours Pacific daylight time, an Airbus A320-232, N655AW, was substantially damaged when the engine cowling separated and struck the horizontal stabilizer during takeoff at McCarran International Airport, Las Vegas, Nevada. The airline transport certificated pilot, the second pilot, 3 flight attendants and 147 passengers were not injured. The aircraft was operated by America West Airlines, Inc., under 14 CFR Part 121 as flight 2747, a regularly scheduled domestic passenger flight, destined for Columbus, Ohio. Visual meteorological conditions prevailed and the flight was operating on an instrument flight plan.</p> <p>According to the operator, the pilot reported there had been an abnormal vibration as the aircraft accelerated through takeoff rotation speed (Vr). Several passengers pressed their flight attendant call buttons and alerted the flight attendants who, in turn, reported the cowling separation to the cockpit crew. The return for landing at the departure airport at 1331 was unremarkable. The aircraft was taxied to the terminal gate and the passengers deplaned normally.</p> <p>Postflight inspection revealed that the outboard, forward cowl door on the left (number 1) engine had separated from the engine nacelle. There was a 10-inch cut through the landing gear (strut) door and there were 3 holes in the lower surface of the left horizontal stabilizer, each approximately 2 inches wide and 8 inches long. The cowling door hold-open rod penetrated the lower skin and aft spar web of the horizontal stabilizer. No damage was observed on the wing or wing flap. The opposite (inboard) cowl door and the "bull nose," where the two doors hinge at the 12 o'clock position, were damaged but remained attached to the nacelle. The cowl door over-center type latches on the inboard door were found latched, however, the hooks were intact and undamaged. Similarly, the latch receptacles on the outboard door were visibly undamaged. The latches were painted red.</p> <p>The operator reported that the aircraft remained overnight in Las Vegas and an "RON-check" (Remain Over Night) had been performed during hours of darkness. The RON-check required that the cowling doors be opened; however, the mechanic performing the work reported that the cowl doors were closed and re-latched about 0530 - 0600 during hours of daylight. In the morning, the aircraft was handed over from the maintenance graveyard shift to the day shift. Maintenance items remained to be completed in areas of the aircraft other than the number 1 engine. The takeoff where the cowling separated was the first flight following return to service.</p>					
FACTUAL REPORT - AVIATION					
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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: LAX00LA223			
		Occurrence Date: 06/12/2000			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
MCCARRAN INTERNATIONAL	LAS	2179 Ft. MSL	25R	14505	150
Runway Surface Type: Asphalt					
Runway Surface Condition: Dry					
Type Instrument Approach:					
VFR Approach/Landing:					
Aircraft Information					
Aircraft Manufacturer		Model/Series		Serial Number	
Airbus Industrie		A320-232		1075	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 156	Certified Max Gross Wt.	169750 LBS	Number of Engines: 2	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Fan	Int'l Aero En	V-2527-A5	27000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
AAIP	05/1999	3012 Hours	3012 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? No	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner		Street Address			
AMERICA WEST AIRLINES, INC.		4000 E. SKY HARBOR BLVD.			
		City	State	Zip Code	
		PHOENIX	AZ	85034	
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:			Operator Designator Code: AWXA		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): Flag Carrier/Domestic					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 121: Air Carrier					
Type of Flight Operation Conducted: Scheduled; Domestic; Passenger Only					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: LAX00LA223
	Occurrence Date: 06/12/2000
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth	Age 49
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Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport; Commercial

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.: Class 1	Medical Cert. Status: Valid Medical--w/ waivers/lim.	Date of Last Medical Exam: 04/2000
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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	20300	8000								
Pilot In Command(PIC)										
Instructor										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? Yes
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Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point Same as Accident/Incident Location	State	Airport Identifier LAS	Departure Time 1310	Time Zone PDT
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Destination COLUMBUS	State OH	Airport Identifier CMH	
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Type of Clearance: IFR

Type of Airspace: Class B

Weather Information

Source of Briefing: Company

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
LAS	1256	PDT	2179 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Unknown			0 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		25000 Ft. AGL		Visibility: 10 SM	Altimeter: 29.00 "Hg
Temperature: 95 °C	Dew Point: 43 °C	Wind Direction: Variable		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: Substantial	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				3	3
Other Crew					
Passengers				147	147
- TOTAL ABOARD -				152	152
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	152	152

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX00LA223

Occurrence Date: 06/12/2000

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

RICHARD B. PARKER

Additional Persons Participating in This Accident/Incident Investigation:

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