
Uncontained engine failure and fuel tank puncture, Boeing 747-130, August 14, 1995

Micro-summary: Uncontained #1 engine failure results in collateral damage in the reserve fuel tank for this Boeng 747-130.

Event Date: 1995-08-14 at 1950 EDT


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


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


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		NTSB ID: NYC95IA192		Aircraft Registration Number: N603FF	
		Occurrence Date: 08/14/1995		Most Critical Injury: None	
		Occurrence Type: Incident		Investigated By: NTSB	
Location/Time					
Nearest City/Place JAMAICA		State NY	Zip Code 11430	Local Time 1950	Time Zone EDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 747-130		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On August 14, 1995, about 1950 eastern daylight time, a Boeing 747-130, N603FF, operated by Tower Air Inc, as Flight 36, had an uncontained engine failure and was forced to return to John F. Kennedy International Airport, Jamaica, New York. The airplane received minor damage, and there were no injuries to the flightcrew or the passengers. Visual meteorological conditions prevailed, and a IFR flight plan had been filed. The flight was being conducted in accordance with 14 CFR Part 121, as a regularly scheduled international air carrier flight.</p> <p>Flight 36, destined for Paris, France, was on the departure climb and had reached an altitude of 14,000 feet mean sea level (MSL), when the crew reported a severe vibration in the number 1 engine. The crew shut the engine down, declared an emergency, and returned to Kennedy Airport.</p> <p>At the time of the incident the P&W, JT9D7A engine, was leased by Tower Air, and had 105 cycles since being installed on July 7, 1995.</p> <p>Examination of the engine revealed a turbine shroud had separated, and penetrated the turbine exhaust case at the 6 to 9 o'clock position, exited the cowling and punctured the #2 outboard reserve fuel tank, plate. There was a fuel leak, but no fire.</p> <p>There was no evacuation of the passengers. The airplane landed and taxied to the gate.</p> <p>Numerous attempts were made to secure an NTSB Form 6120.1/2, without success.</p>					
FACTUAL REPORT - AVIATION					

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: NYC95IA192			
		Occurrence Date: 08/14/1995			
		Occurrence Type: Incident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach:					
VFR Approach/Landing: Precautionary Landing					
Aircraft Information					
Aircraft Manufacturer Boeing		Model/Series 747-130		Serial Number 19746	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 471	Certified Max Gross Wt.	734000 LBS	Number of Engines: 4	
Engine Type: Turbo Fan	Engine Manufacturer: P&W	Model/Series: JT9D7A	Rated Power: 46250 LBS		
- Aircraft Inspection Information					
Type of Last Inspection AAIP	Date of Last Inspection 07/1995	Time Since Last Inspection Hours	Airframe Total Time 10690 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? No	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner TOWER AIR		Street Address HANGER #17, JFK AIRPORT			
		City JAMAICA	State NY	Zip Code 11430	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As: TOWER AIR			Operator Designator Code: TWRA		
- 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; International; Passenger Only					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: NYC951A192
	Occurrence Date: 08/14/1995
	Occurrence Type: Incident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	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

Airplane Rating(s): Multi-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--no waivers/lim.	Date of Last Medical Exam: 08/1995
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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		4700								
Pilot In Command(PIC)		4700								
Instructor										
Last 90 Days		214		214						
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 JFK	Departure Time 0000	Time Zone
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Destination PARIS	State OF	Airport Identifier ORY	
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Type of Clearance: IFR

Type of Airspace:

Weather Information

Source of Briefing:
Company

Method of Briefing:

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: NYC95IA192
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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
	0000		0 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Unknown			0 Ft. AGL	Condition of Light: Night/Bright	
Lowest Ceiling: Unknown		0 Ft. AGL	Visibility: 0 SM	Altimeter: "Hg	
Temperature: °C	Dew Point: °C	Wind Direction:		Density Altitude: Ft.	
Wind Speed:	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: Minor	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				1	1
Cabin Attendants				13	13
Other Crew					
Passengers				420	420
- TOTAL ABOARD -				436	436
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	436	436

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: NYC95IA192

Occurrence Date: 08/14/1995

Occurrence Type: Incident

Administrative Information

Investigator-In-Charge (IIC)

ALAN J. YURMAN

Additional Persons Participating in This Accident/Incident Investigation:

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VALLEY STREAM, NY 11582