



Aviation Investigation Final Report

Location:	New York, New York	Accident Number:	CHI06LA161
Date & Time:	June 8, 2006, 17:00 Local	Registration:	N403TZ
Aircraft:	Boeing 737-300	Aircraft Damage:	Substantial
Defining Event:		Injuries:	143 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

The airplane was damaged when a piece of aluminum diamond plate material that was left on the taxiway during taxiway maintenance became airborne and struck the tail of the airplane while it was taxiing for takeoff. Examination by the Federal Aviation Administration (FAA) revealed that the plate had been left on the taxiway by workers for a company performing maintenance on the taxiway. The plate was used to cover the area on the taxiway that was receiving maintenance. According to the FAA representative, the plate was an aluminum diamond plate material, not steel, and was supposed to have been a thicker and hence heavier steel plate to prevent it from being affected by the jet blast from taxiing airplanes. Guidance to the construction company regarding the use of such plates was provided by the FAA and the airport authority.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The foreign object damage to the horizontal stabilizer during taxi as a result of improper airport maintenance by contract maintenance personnel. The aluminum plate was a factor.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: TAXI - TO TAKEOFF

Findings

1. (C) HORIZONTAL STABILIZER - FOREIGN OBJECT DAMAGE
2. (C) OTHER AIRPORT/RUNWAY MAINTENANCE - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. (F) OBJECT - OTHER

Factual Information

On June 8, 2006, about 1700 eastern daylight time, a Boeing 737-300, N403TZ, operated by American Trans Air, Inc., and piloted by an airline transport pilot, sustained substantial damage when a foreign object struck the tail of the airplane during taxi for takeoff at the LaGuardia Airport, New York, New York . The 14 CFR Part 121 flight was operating in visual meteorological conditions and was on an instrument flight rules flight plan. There were no injuries to the 5 crewmembers or 138 passengers on board the airplane. The flight was originating at the time of the accident and the intended destination was the Chicago Midway International Airport, Chicago, Illinois.

According to a report from the airplane's operator, a piece of steel plate measuring about 25 inches by 60 inches struck the right horizontal stabilizer of the airplane while it was taxiing for takeoff on taxiway B.

Investigation revealed that the plate had been left on the taxiway by workers for a company performing maintenance on the taxiway. The plate was used to cover the area on the taxiway that was receiving maintenance. According to the FAA representative, the plate was an aluminum diamond plate material, not steel. The plate was supposed to have been a thicker and hence heavier steel plate to prevent it from being affected by the jet blast from taxiing airplanes. Guidance to the construction company regarding the use of such plates was provided by the FAA and the airport authority.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	49, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
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:	February 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 1, 2005
Flight Time:	13948 hours (Total, all aircraft), 5465 hours (Pilot In Command, all aircraft), 159 hours (Last 90 days, all aircraft), 57 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Airline transport; Commercial	Age:	36, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
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:	November 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 1, 2005
Flight Time:	8438 hours (Total, all aircraft), 3356 hours (Pilot In Command, all aircraft), 162 hours (Last 90 days, all aircraft), 53 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:		Age:	36, Male
Airplane Rating(s):		Seat Occupied:	
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	February 1, 2006
Occupational Pilot:		Last Flight Review or Equivalent:	December 1, 2005
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N403TZ
Model/Series:	737-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	24664
Landing Gear Type:	Retractable - Tricycle	Seats:	143
Date/Type of Last Inspection:	March 1, 2006 Continuous airworthiness	Certified Max Gross Wt.:	130000 lbs
Time Since Last Inspection:	514 Hrs	Engines:	2 Turbo fan
Airframe Total Time:	41717 Hrs at time of accident	Engine Manufacturer:	General Electric
ELT:	Not installed	Engine Model/Series:	CFM56-3C1A
Registered Owner:	AMERICAN TRANS AIR INC	Rated Power:	20000 Lbs thrust
Operator:		Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	AMTA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LGA, 21 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:51 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 7000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	0 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.76 inches Hg	Temperature/Dew Point:	19°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	New York, NY (LGA)	Type of Flight Plan Filed:	IFR
Destination:	CHICAGO, IL (MDW)	Type of Clearance:	Unknown
Departure Time:	17:00 Local	Type of Airspace:	

Airport Information

Airport:	LA GUARDIA LGA	Runway Surface Type:	
Airport Elevation:	21 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Passenger Injuries:	138 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	143 None	Latitude, Longitude:	40.777221,-73.872497

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	John Monaco; Federal Aviation Administration; New York, NY
Original Publish Date:	May 29, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63953

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).