



# National Transportation Safety Board Aviation Incident Final Report

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<b>Location:</b>	ATLANTA, GA	<b>Incident Number:</b>	OPS11IA410
<b>Date &amp; Time:</b>	03/11/2011, 1321 EDT	<b>Registration:</b>	
<b>Aircraft:</b>	BOEING 757-232	<b>Aircraft Damage:</b>	None
<b>Defining Event:</b>	Air traffic event	<b>Injuries:</b>	130 None
<b>Flight Conducted Under:</b>			

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## Analysis

A Boeing 757-200 departed from Atlanta, Georgia, without its transponder activated, and the pilots did not contact air traffic controllers for about 8 minutes after departure. The airplane flew through one controller's airspace and entered another controller's airspace without coordination before radar and radio contact was established.

While the incident airplane's transponder was not activated, the airplane's radar data tag (which contained identification, altitude, and airspeed information) did not automatically appear on the controllers' radar displays as it normally would have. Consequently, the airplane was displayed only as an enhanced primary target with no identifying information. Although local procedures require that Atlanta tower controllers verify that departures have a radar data tag before transferring communications to departure controllers, the tower controllers did not do so. Review of primary radar data determined that a loss of lateral separation occurred between the incident airplane and the following three airplanes: 1) a Beechcraft 55 (closest proximity 1.44 miles); 2) a Pilatus PC-12 (closest proximity 0.81 miles), and 3) a Canadair Regional Jet CRJ-100 (closest proximity 2.36 miles).

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: The air traffic controllers' failure to adhere to required radar identification procedures, which resulted in loss of separation between the departing Boeing 757 and three other airplanes. Contributing to the incident was the pilots' inadequate preflight checks, which resulted in the airplane departing with an inoperative transponder.

## Findings

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<b>Personnel issues</b>	Incomplete action - Pilot (Factor)
	Planning/preparation - Flight crew (Factor)
	Task performance - ATC personnel (Cause)
	Incomplete action - ATC personnel (Cause)

## Factual Information

### SUMMARY

On Friday, March 11, 2011, at about 1321 eastern daylight time (EDT), Delta Air Lines flight 2086 (DAL2086), a Boeing 757-200 operating as a regularly scheduled passenger flight under 14 Code of Federal Regulations Part 121 (14 CFR part 121), departed from runway 27R at Hartsfield - Jackson Atlanta International Airport (ATL), Atlanta, Georgia, en route to La Guardia Airport (LGA), New York, New York. The flight crew did not activate the aircraft's transponder before takeoff, and did not contact air traffic control for approximately eight minutes after departure. The airplane flew through one controller's airspace and entered another controller's airspace without coordination before radar and radio contact was established.

During the period that DAL2086's transponder was deactivated, the airplane's flight data block did not auto-acquire on the TRACON's radar displays. Consequently, the airplane was displayed only as an enhanced primary target with no identifying information. Although local procedures require that Atlanta Tower controllers verify that departures have a radar data tag before transfer of communications to A80, the tower controllers did not notice that the data block had not auto-acquired when the aircraft departed, and therefore did not notify Atlanta TRACON that DAL2086 had not tagged up. No radar altitude information was available on DAL2086 until the aircraft's transponder was activated.

Review of primary radar data determined that a loss of lateral separation occurred between DAL2086 and the following aircraft: N36638, a Beechcraft 55, with the closest proximity 1.44 miles, N825MK, a Pilatus PC-12, with the closest proximity 0.81 miles, and Atlantic Southeast Airlines flight 5046, a Canadair Regional Jet CRJ-100, with the closest proximity 2.36 miles. No injuries were reported on any of the flights. These incidents occurred during daytime visual meteorological conditions (VMC).

N36638, was operating under the provisions of 14 Code of Federal Regulations Part 91 (14 CFR part 91), from Clayton County - Tara Field (4A7), Hampton, Georgia, to John C Tune Airport (JWN), Nashville, Tennessee.

N825MK was operating under the provisions of 14 CFR Part 91, from DeKalb-Peachtree (PDK) airport, Atlanta, Georgia to Sarasota/Bradenton International (SRQ) airport, Sarasota, Florida.

ASQ5046 was on a regularly scheduled passenger flight from Augusta Regional (AGS) airport, Augusta, Georgia, to ATL, and was operating under the provisions of 14 CFR Part 121.

### HISTORY OF FLIGHT

At about 1318, the ATL tower LC-3 controller instructed DAL2086 to line up and wait at the displaced threshold of 27R. One minute later the controller instructed DAL2086 "...RNAV to FUTBL 27R cleared for takeoff." DAL2086 had filed the UGAAA 2 RNAV standard instrument departure (SID) from runway 27R, which required the pilot to, "climb heading 272 degrees to intercept course 247 degrees to FUTBL, then on depicted route to UGAAA, maintain 250 knot indicated airspeed until ZALLE, maintain 10,000 feet and expect clearance to filed altitude ten minutes after departure."

At about 1320, one minute after DAL2086 was airborne, the LC-3 controller instructed the pilot to turn left to FUTBL and contact departure. The pilot read back the instructions correctly; however, he did not contact departure control until about 1328.

According to the LC-3 controller, when DAL2086 departed, he did not notice that the flight had failed to auto-acquire because his attention was temporarily drawn to a situation at the approach end of runway 27R.

At about 1324:54, the Atlanta TRACON south departure controller (DEP-S) realized he had an unaccounted for flight strip on DAL2086 and asked ATL tower about the status of the flight. The LC3 responded that DAL2086 had departed, but they would check into it. The LC informed the Traffic Management Coordinator (TMC) about the inquiry from the DEP-S controller and he began searching the Traffic Situation Display (TSD) for a target. According to the TMC, he saw a target approximately 40 miles northeast of ATL that appeared to be DAL2086. The tower reported that target location to the DEP-S controller. Review of radar data indicated that DAL2086's primary target was approximately 11 miles south of ATL. Due to the large number of primary targets in that area, the TMC could not positively identify which target was DAL2086, only which target appeared to be following the departure routing that was assigned to DAL2086.

According to the DEP-S controller, after he conducted a futile search of the radar display for DAL2086's target, he informed his supervisor about the situation. They searched for DAL2086's data block and primary target along the general vicinity of the UGAAA2 RNAV route, but could not identify a potential target.

At about 1326:53, DAL2086 contacted ATL tower asking; "...you still want us down here at 10?" The LC responded "DAL2086 you're supposed to be on departure sir." The LC immediately informed the DEP-S controller that DAL2086 had just contacted him. Twenty seconds later, DAL2086 contacted departure stating "...with you at one zero thousand." The DEP-S controller responded "...say your position." DAL2086 reported "... just off the east end of the runway...just 8 miles from ESTWU."

The DEP-S controller then requested that the pilot verify that his transponder was turned on. Six seconds later, the pilot reported the transponder was on and the airplane's radar data block appeared on the controller's radar display. Radar data indicated that DAL2086 was approximately 20 miles east of ATL. Due to the airplane's proximity to the arrival traffic inbound to ATL, the departure controller expedited DAL2086's climb to 14,000 feet, and at about 1329 established radar contact. The DEP-S controller immediately handed the airplane off to Atlanta Center since it was approaching their airspace boundary. The flight continued to New York LaGuardia airport without further incident.

For further information, see the Air Traffic Control Group Chairman's Factual Report in the docket for this case.

## History of Flight

Takeoff	Preflight or dispatch event
Initial climb	Air traffic event (Defining event)

## Pilot Information

Certificate:	Age:	
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:	Unknown Unknown	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

## Co-Pilot Information

Certificate:	Age:	
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:	Unknown Unknown	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BOEING	Registration:	
Model/Series:	757-232	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	29725
Landing Gear Type:	Tricycle	Seats:	178
Date/Type of Last Inspection:		Certified Max Gross Wt.:	232000 lbs
Time Since Last Inspection:		Engines:	2 Turbo Fan
Airframe Total Time:		Engine Manufacturer:	P & W
ELT:	Installed, not activated	Engine Model/Series:	PW2037
Registered Owner:		Rated Power:	37530 lbs
Operator:		Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	DALA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KATL	Observation Time:	1252 EDT
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:	Few / 5000 ft agl	Temperature/Dew Point:	9°C / -3°C
Lowest Ceiling:		Visibility	10 Miles
Wind Speed/Gusts, Direction:	9 knots/ 16 knots, Variable	Visibility (RVR):	
Altimeter Setting:	30.17 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	ATLANTA, GA (KATL)	Type of Flight Plan Filed:	IFR
Destination:	New York, GA (KLGA)	Type of Clearance:	IFR
Departure Time:	1321 EDT	Type of Airspace:	Air Traffic Control; Class B

## Airport Information

Airport:	Atlanta (KATL)	Runway Surface Type:	Concrete
Airport Elevation:	1026 ft	Runway Surface Condition:	Dry
Runway Used:	27R	IFR Approach:	RNAV
Runway Length/Width:	9000 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	6 None	<b>Aircraft Damage:</b>	None
<b>Passenger Injuries:</b>	124 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	130 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Betty Koschig	<b>Adopted Date:</b>	08/07/2012
<b>Additional Participating Persons:</b>	Todd Luepker; Federal Aviation Administration; Washington, DC Paul Fink; Delta Airlines; Atlanta, GA Chad Sneve; National Air Traffic Controllers Association; Atlanta, GA		
<b>Publish Date:</b>	08/07/2012		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78668">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78668</a>		

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