

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



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AIR TRAFFIC CONTROL

Specialist's Factual Report

July 28, 2022

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A. INCIDENT

Location: Atlanta, GA
Date: November 6, 2019
Time: 2115 eastern standard time (EST)
0215 coordinated universal time (UTC)
Airplane: Embraer ERJ 170-200LR, N117HQ

B. AIR TRAFFIC CONTROL SPECIALIST

Specialist Charles Olvis
National Transportation Safety Board
Washington, D.C.

C. SUMMARY

On November 6, 2019, about 2115 EST, Republic Airways, Inc. flight 4439, an Embraer ERJ 170-200LR, N117HQ, experienced a pitch trim anomaly shortly after takeoff from Hartsfield-Jackson Atlanta International Airport (ATL), Atlanta, Georgia. The flight crew declared an emergency and returned to ATL. None of the 9 passengers and crew onboard were injured and the airplane was not damaged. The airplane was operating under the provisions of Title 14 *Code of Federal Regulations* Part 121 as regularly scheduled passenger flight and was destined for LaGuardia Airport (LGA), New York, New York.

D. DETAILS OF THE INVESTIGATION

The NTSB air traffic control (ATC) investigator did not launch in support of this investigation. ATC data to include automatic dependent surveillance - broadcast (ADS-B) data, Atlanta Terminal Radar Approach Control (A-80 TRACON) communications, and Atlanta Air Traffic Control Tower (ATL) communication data were requested.

E. FACTUAL INFORMATION

1.0 History of Flight

At 0205:05, Brickyard 4439 was cleared for takeoff by the ATL local controller (LC), and the pilot read back the takeoff clearance on the RNAV departure direct LIDAS.

At 0206:53, the pilot of Brickyard 4439 contacted ATL LC stating "ah departure brickyard forty four thirty nine we would like to declare an emergency". The ATL LC requested the pilot to state the emergency.

At 0207:01, the pilot of RPA4439 replied "we got a trim runaway". The ATL LC requested the pilot to say again, and the pilot replied, "we've got a trim runaway for brickyard forty four thirty nine".

At 0207:05, the ATL LC replied "understand you need to return to the airport now?" The pilot replied "affirm".

At 0207:09, the ATL LC replied "brickyard forty four thirty nine you can make a right turn to enter the downwind for runway one zero". The pilot responded, "right turn to enter the downwind brickyard forty four thirty nine".

At 0207:21, the ATL LC asked the pilot of RPA4439 "what can we do for ya, ah let me know when you can the nature of your emergency and ah souls on board fuel on board and intentions".

At 0207:31, the pilot of RPA4439 responded "got six souls on board fuel is twelve thousand". The ATL LC acknowledged the transmission.

At 0207:40, the ATL LC transmitted "brickyard forty four thirty nine you can stop the climb and ah just descend your discretion for ah the right downwind for runway one zero runway ten".

At 0207:55, the ATL LC transmitted "brickyard forty four thirty nine do you want to stay with the tower and come back in and land or do you need to go back out and ah sort this out". There was no reply from the pilot.

At 0208:12, the ATL LC attempted to reach the crew of RPA4439 and transmitted "brickyard forty four thirty nine".

At 0208:15, the pilot of RPA4439 replied "forty four thirty nine we are in a stalling situation".

At 0208:25, the ATL LC transmitted "brickyard forty four thirty nine runway one zero you are cleared to land". There was no reply from the crew.

At 0208:55, the ATL LC transmitted "brickyard forty four thirty nine there is nobody on final for ten ah you can descend your discretion you are cleared to land runway one zero you are on the downwind now runway one zero all the traffic now is lined up for ah nine right so are you able to ah to to go west bound for the downwind"

At 0209:10, the pilot of RPA4439 responded "we can't pitch down for forty four thirty nine"

At 0209:13, the ATL LC responded "okay brickyard forty four thirty nine what do you need to do"

At 0209:15, the pilot of RPA4439 responded "we're trying to descend here" The ATL LC acknowledged the transmission.

At 0210:35, the ATL LC asked the pilot of RPA4439 if they attempted to contact the tower. The pilot did not respond.

At 0211:09, The pilot of RPA4439 transmitted "center brickyard forty four thirty nine what's the runway?"

At 0211:11, the ATL LC responded "brickyard forty four thirty nine ah we we've got ten available for you if you can enter the downwind for ten if you need something else let me know and we'll get everybody out of your way"

At 0211:18, the pilot of RPA4439 responded "straight in".

At 0211:19, the ATL LC asked the pilot of RPA4439 "straight into what"

At 0211:22, the pilot of RPA4439 responded "to ten right you said?"

At 0211:24, the ATL LC replied "we got ten open for you we can clear anybody out of the way if you need eight left or nine right just let me know what you need".

At 0211:33, the pilot of RPA4439 replied "roger give me a few seconds".

At 0211:46, the ATL LC transmitted "brickyard forty four thirty nine are you able to take a turn or no?"

At 0211:49, the pilot of RPA4439 replied "yes".

At 0211:50, the ATL LC transmitted "brickyard forty four thirty nine ah turn left heading two zero zero and we'll ah give you vectors for the ah runway one zero"

At 0211:58, the pilot of RPA4439 responded "two zero zero brickyard forty four thirty nine".

At 0212:00, the ATL LC transmitted "brickyard forty four thirty nine you can start your descent ah your discretion back down to ah six thousand".

At 0212:05, the pilot of RPA4439 responded "six thousand brickyard forty four thirty nine".

At 0212:14, the ATL LC transmitted "brickyard forty four thirty nine are you in a right turn?"

At 0212:16, the pilot of RPA4439 responded "yes".

At 0212:17, the ATL LC transmitted "that's fine right turn heading two zero zero".

At 0212:19, the pilot of RPA4439 responded "right turn zero two zero zero".

At 0212:39, the ATL LC transmitted "brickyard forty four thirty nine I see you're climbing again are you able to descend or no?"

At 0212:41, the pilot of RPA4439 responded "we're trying brickyard forty four thirty nine".

At 0212:44, the ATL LC responded "ok".

At 0213:21, the ATL LC transmitted "brickyard forty four thirty nine I see you in the turn I see your altitude coming back down just ah fly heading two zero zero and ah maintain just maintain six thousand".

At 0213:29, the pilot of RPA4439 responded "two zero zero six thousand brickyard forty four thirty nine".

At 0214:04, the ATL LC transmitted "brickyard forty four thirty nine on that two hundred heading you should bring you right across the front of the airport the ah east side of the airport maintain four thousand and ah let me know ah when you've got the airport in sight and we'll just go ahead and clear you for one zero and you can do what you need to do from there".

At 0214:17, the pilot of RPA4439 responded "alright down to ah four thousand and ah two eight zero heading for brickyard forty four thirty nine?"

At 0214:22, the ATL LC responded "two hundred heading and I'll I'll have a downwind turn here for you shortly"

At 0214:25, the pilot of RPA4439 responded "roger two hundred and four thousand brickyard forty four thirty nine".

At 0215:20, the ATL LC transmitted "brickyard forty four thirty nine turn right heading two five zero".

At 0215:23, the pilot of RPA4439 responded "right turn two five zero brickyard forty four thirty nine".

At 0215:53, the ATL LC transmitted "and brickyard forty four thirty nine the airport is about your nine to ten o'clock four miles maintain three thousand and ah just let me know when you see the airport".

At 0216:13, the ATL LC transmitted "and brickyard forty four thirty nine you still on the two fifty heading or are you tracking ah something else?"

At 0216:17, the pilot of RPA4439 responded "ah we're on a two eighty heading now".

At 0216:18, the ATL LC responded "two five zero two fifty heading please".

At 0216:20, the pilot of RPA4439 responded "two fifty".

At 0216:24, the ATL LC transmitted "just trying to vector you out so we can get you descended and then ah on a base".

At 0216:28, the pilot of RPA4439 responded "rog".

At 0217:28, the ATL LC transmitted "brickyard forty four thirty nine fly heading two seven zero".

At 0217:31, the pilot of RPA4439 responded "turn two seven zero brickyard forty four thirty nine".

At 0218:03, the pilot of DAL2304 transmitted "hey tower ah delta twenty three zero four".

At 0218:06, the ATL LC responded "delta twenty three oh four tower".

At 0218:08, the pilot of DAL2304 responded "yeah I ground ah sent me over I um she just asked if anybody has experience with the embraer I I was type rated on it at my previous airline um just if if you guys need any anything that I can offer just let me know".

At 0218:21, the ATL LC responded "brickyard forty four thirty nine did you copy any assistance he can offer you right now or?".

At 0218:25, the pilot of RPA4439 responded "so right now we have it under control we have it sourced to the F O side his side seems to be working we have system one and two cut out ah so we are in direct mode now and ah seems to be working okay now".

At 0218:39, the pilot of DAL2304 responded "did you guys ah you guys follow the Q R H?"

At 0218:43, the pilot of RPA4439 responded "yeah well we haven't had time to do it to be honest with you we just we just have to ah fly the plane we were fighting with the plane for a while but we got it done [unintelligible]".

At 0218:51, the pilot of DAL2304 responded "good job you guys are doing great".

At 0219:29, the ATL LC transmitted "brickyard forty four thirty nine turn right heading three six zero".

At 0219:31, the pilot of RPA4439 responded "right heading three six zero brickyard forty four thirty nine".

At 0219:58, the ATL LC transmitted "brickyard forty four thirty nine continue right turn heading zero seven zero maintain three thousand and ah you can join the localizer runway one zero".

At 0220:06, the pilot of RPA4439 responded "zero seven zero three thousand join the localizer brickyard forty four [unintelligible]".

At 0220:21, the ATL LC transmitted "and brickyard forty four thirty nine traffic ah about eleven o'clock and five miles eastbound on the final for eight left a seven seventeen descending".

At 0220:29, the pilot of RPA4439 responded "looking brickyard forty four thirty nine".

At 0220:31, the ATL LC responded "I see you you've still got your speed up just ah your best rate of turn there to join that ten final if you need to ah you can ah go through ten and join nine right it's your call".

At 0220:40, the pilot of RPA4439 responded with an unintelligible transmission.

At 0220:45, the ATL LC transmitted "brickyard forty four thirty nine heading zero make it zero eight zero and let me know when you do see the airport".

At 0221:16, the ATL LC transmitted "brickyard forty four thirty nine nice job there runway one zero cleared to land wind zero nine zero at four".

At 0221:20, the pilot of RPA4439 responded "runway one zero cleared to land brickyard forty four thirty nine".

At 0223:21, the ATL LC transmitted "airfield wind zero nine zero at five"

At 0225:58, the ATL LC transmitted "brickyard forty four thirty nine nice job you can exit here and go over to nineteen five he'll have your taxi instructions do you require any further assistance?"

At 0226:05, the pilot of RPA4439 responded "thank you guys but we are good for now".

There were no further transmissions pertinent to the incident.

2.0 Surveillance Data

ADS-B data is aircraft global positioning system (GPS) derived position reports and other aircraft information transmitted by the airplane and received through a ground infrastructure and shared with other users within the national airspace system (NAS). Air traffic controllers across the nation are able to monitor aircraft using either ground-based radar or ADS-B.

To improve the consistency and reliability of ADS-B and radar returns, airplanes are equipped with transponders. For ADS-B equipped airplanes, the transponders are assigned a unique Mode S address for each airplane registration. Republic Airways flight 4439 was operated by an Embraer ERJ 170-200LR with an FAA registration of N117HQ. The unique Mode S transponder address for N117HQ was A046F2 and the airplane was on an assigned an ATC transponder beacon code of 7121.

The ADS-B data for this report was obtained from the FAA and was of good quality.

F. FIGURES

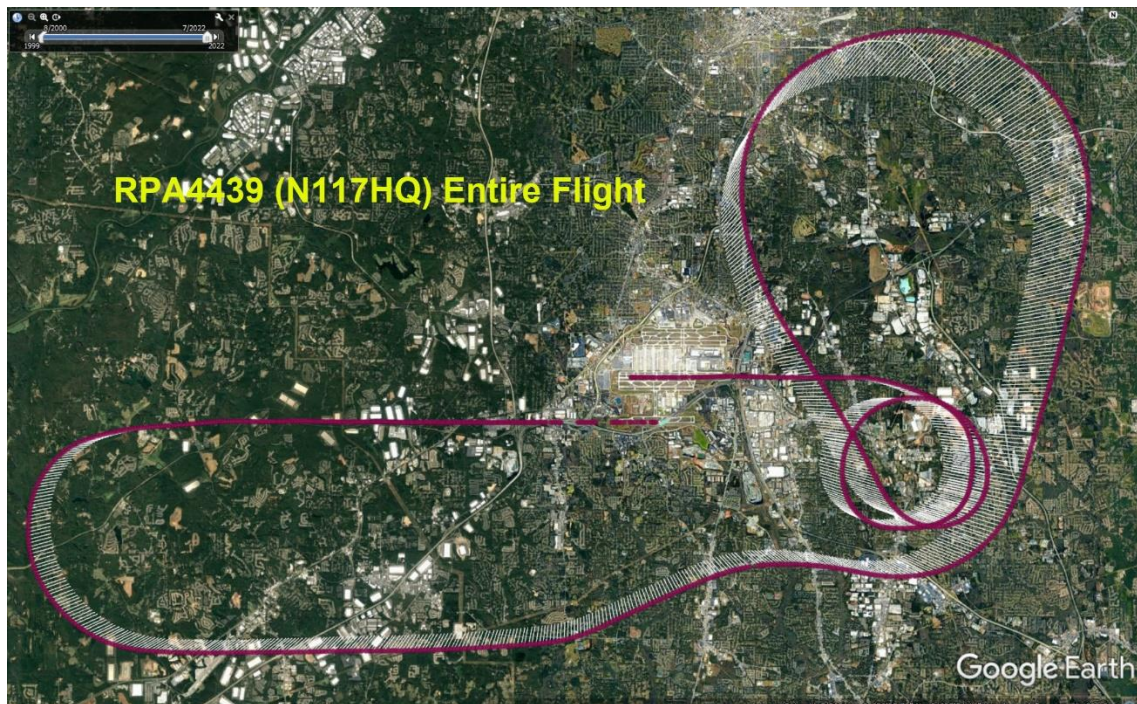


Figure 1 - Graphic made from the Automatic Dependent Surveillance - Broadcast (ADS-B) data showing the entire flight of RPA4439.

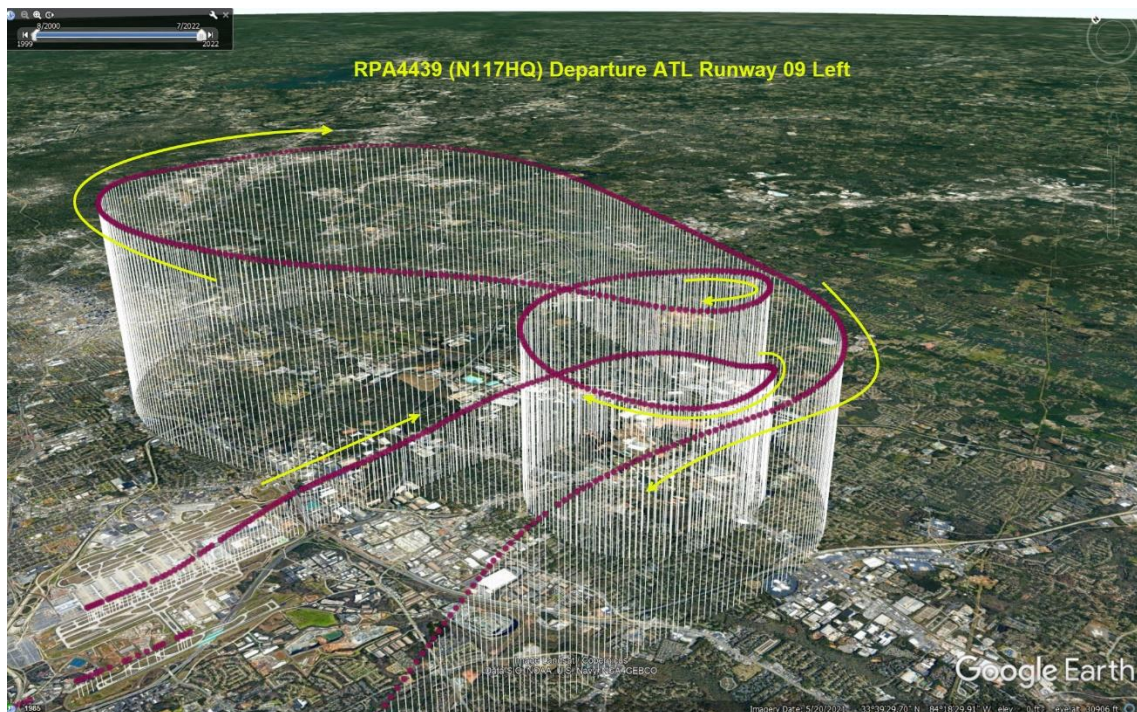


Figure 2 - Graphic made from the ADS-B data showing the departure segment of the incident flight.

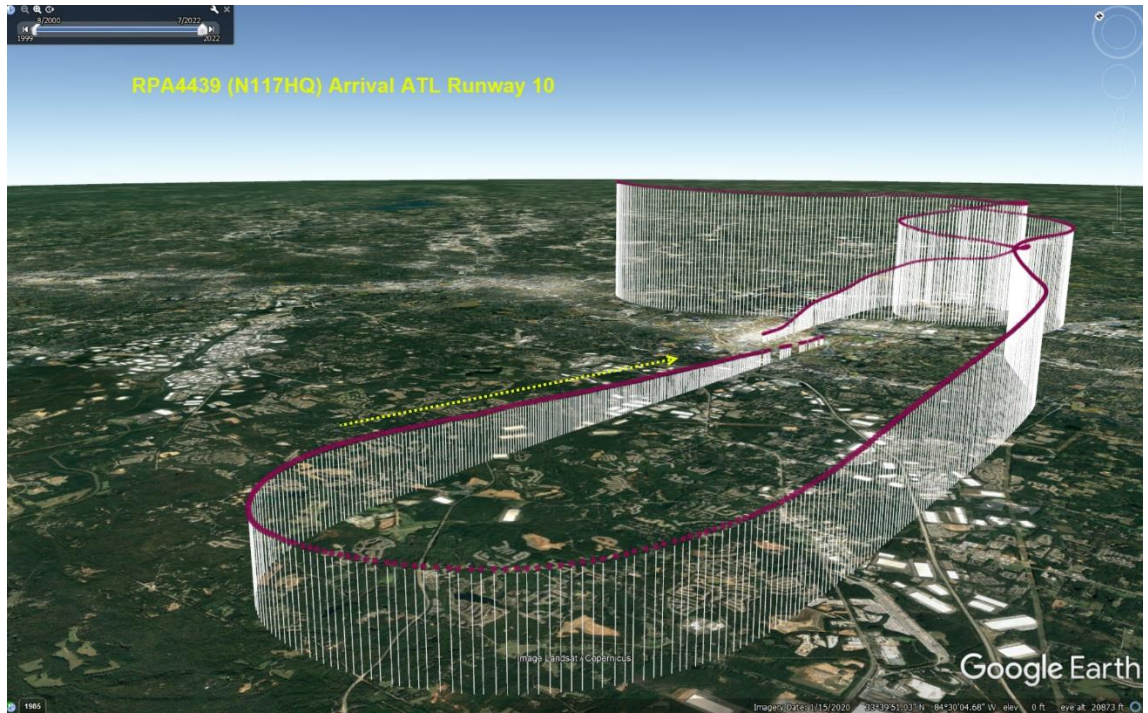


Figure 3 - Graphic made from the ADS-B data showing the arrival segment of the incident flight.

Submitted by:

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