

Factual Report - Attachment 1
Controller Interview Summaries

AIR TRAFFIC CONTROL

ERA20FA118

Interviewee: Tyrone Mercer (TM)
Representative: Nichole Surunis - NATCA Facility Vice President

Date / Time: March 12, 2020 / 1150 eastern daylight time (EDT)
Location: Atlanta Terminal Radar Approach Control (A80 TRACON)
Present: Paul Suffern - NTSB, Millicent Hill - NTSB, Jeffrey Hall - FAA, Amy Huschka - NATCA, and Chad Sneve - NATCA
Investigator: Brian Soper - NTSB

During the interview, Mr. Mercer provided the following information:

He began working at A80 TRACON in May 2006, was a certified professional controller (CPC) and assigned to the Athens radar (RA) position at time of the accident. He held no collateral duties and had not been on any recent details.

He described his overall health as "good," with no waivers or restrictions to his medical clearance. In the past 12 months he had no significant changes to his health, finances, or personal life, good or bad, that would have affected his performance on the day of the accident.

He could not recall if a relief briefing had been conducted when he assumed the position but assumed it had been. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 2 around the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 3-4 around the time of the accident. He considered the traffic volume normal for the time of day and tempo of operations, however considered the complexity to be greater than normal.

He recalled that overall, there had been areas of VFR¹ and IFR² conditions with a broken line of light to extreme precipitation extending from approximately 10 miles east of Athens to approximately 30-35 miles west of Athens. The areas to the south and southwest had areas of moderate precipitation as well, from what he could see.

Mr. Mercer provided the following recollection surrounding the time of the event:

He had initially accepted the hand-off of N43368 from Augusta Airport Traffic Control Tower (AGS ATCT). N43368 was flying to Tuscaloosa National Airport (TCL)

¹ VFR - Visual Flight Rules - Rules that govern the procedures for conducting flight under visual conditions. The term "VFR" is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.

² IFR - Instrument Flight Rules [ICAO]- A set of rules governing the conduct of flight under instrument meteorological conditions.

on a direct routing at the time of the hand off. He recalled that routing would have taken the aircraft just north of Atlanta (ATL) ATCT airspace which would normally require a reroute to remain about 40 miles from ATL airport. However, from where the aircraft was entering the airspace, it was not really feasible at that time to turn him north of the line of weather that was over Athens without forcing the pilot to reverse course. Therefore, he called and coordinated an overflight with the satellite P sector. He then advised the pilot of N43368 that he would have to reroute him around ATL and asked if he wanted to go north or south of ATL; the pilot said north, so he amended the routing to LOGEN direct DALAS³ direct TCL and obtained the approval from the satellite P sector for the routing.

Meanwhile, he continued working another flight conducting a practice approach into Green County Airport (3J7), which subsequently flew the published missed approach and then entered holding. Sometime after he had provided the pilot of N43368 the amended routing, the pilot requested to deviate 10° left for weather which he approved and provided a description of the weather he could see displayed as broken areas of light and moderate precipitation with a few areas of heavy precipitation. He then observed an area of light precipitation about 15 miles ahead of N43368 that he felt he could get the airplane through, then continuing to LOGEN and beyond.

He then accepted a hand-off on an unrelated flight that was destined for Gwinnett County Airport-Briscoe Field (LZU), which after making contact, he provided the weather and advised the pilot of the type of approach to expect into LZU. Around the same time, the aircraft that had conducted the practice approach to 3J7 generated a low altitude (LA) alert to which he broadcast to the pilot however there was no response as the pilot was still on UNICOM⁴ frequency.

Then, a Lear Jet pilot who he had earlier directed through an area of light precipitation inbound to LZU advised that ride conditions were good overall with "ragged" bases at approximately 3,300 feet (ft) or 3,200 ft. Before that, and before N43368 had checked in, he had one aircraft overfly at 10,000 ft from the southeast to northwest through the same area he was planning to send N43368 through. As N43368 approached the area, he assigned him a 300° heading that would take him through an area of level 1 [light] precipitation, but the pilot questioned it advising that heading would take him into thunderstorms. The pilot said he wanted to turn northbound because it looked better to the north, so he advised the pilot if that looked better, that was fine and described the weather he had displayed in that area as moderate precipitation in one mile and extending about four miles north. It was not his intention to direct the pilot through that area, but the pilot chose that routing.

³ LOGEN and DALAS are navigational airspace fixes in the Atlanta area.

⁴ UNICOM - Universal Communications - A station is an air-ground communication facility operated by a non - air traffic control private agency to provide advisory service at uncontrolled aerodromes and airports and to provide various non-flight services, such as requesting a taxi, even at towered airports.

As N43368 began entering the displayed precipitation, he asked the pilot to say flight conditions, to which the pilot replied "rain." He did not hear a callsign, but assumed it was the pilot of N43368. Shortly after that he recalled N43368 climbing approximately 400 ft then descending about 700 ft, or maybe the other way around he was not certain. Then the airplane began to turn right to the east, and he attempted to contact the pilot with no response. He continued watching N43368 turn further right and attempted contact again with no response. He recalled no further transmissions from the pilot after the "rain" response. It was shortly after this that he observed "XXX" in the N43368 data tag⁵, and he informed the Controller in Charge (CIC) that he may have lost an aircraft. He asked another aircraft that was flying to LZU if they could attempt to contact N43368, and they received no response. He continued to work briefly and was relieved from position shortly after.

The group (identified below as "NTSB") then asked Mr. Mercer (identified below as TM) a series of questions and the following summarizes the questions asked, and answers provided:

NTSB: When you issued the 300° heading and he said it looked better to the north what were your thoughts?

TM: At first thought maybe, the pilot was looking out the window, but appeared after he entered IMC⁶ that he had lost control of the aircraft. He offered to turn him south to avoid the weather as well, but the pilot chose to go north bound. He was trying to avoid the weather to the north when he issued the 300° heading and said if the pilot had flown it for about 10 miles, he would have entered heavy to extreme, but he was going to weave him through before that.

NTSB: Did you think anything was off or did you consider doing something else at all?

TM: The pilot did not give any indication he had a problem or state that he needed to stay in VFR conditions. The only indication he gave was the potential of flying into the thunderstorms. He did offer the pilot a turn to the south as an out to avoid the weather all together, but when the pilot said he wanted to go north, assumed he was good.

NTSB: Did you recognize this callsign as an aircraft that you had worked before or

⁵ ATC radar systems display airplane information using a multi-line "tag" that provides information about the airplane/flight for use by ATC. This is known as the "data tag" and contains information including but not limited to aircraft callsign, type aircraft, ground speed, altitude, and transponder code.

⁶ IMC - Instrument Meteorological Conditions - Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling less than the minima specified for visual meteorological conditions.

that operated here regularly?

TM: No.

NTSB: When the pilot responded that the proposed turn would take him into thunderstorms, what did you think he was referencing to see that?

TM: He thought it was visual, like he was riding the line of that weather and maintaining VFR.

NTSB: Was there any time you thought he was flying too close to the line of weather or did it seem normal?

TM: He did not think too much about it, the previous aircraft had done basically the same thing, hugging the weather then turning north through the that area.

NTSB: Was there any previous coordination with other sectors pertaining to N43368?

TM: Not to his knowledge. Standard procedure was that aircraft overflying at that altitude shall be re-routed around ATL airspace. In this case he felt stuck with this aircraft at the position and altitude he had entered the airspace. The pilot said he could climb, but he needed to get to 16,000 ft and he would not make it in that distance. He also thought that this was something that should be coordinated before aircraft entered their airspace. It was known that aircraft filed through ATL airspace below 16,000 ft would be required re-routing around ATL, so why not have that already done when coming to A80 TRACON so that they did not have to do it within more limited airspace.

NTSB: How much flight time do you have?

TM: About 300 hours.

NTSB: How frequently do you have conversations about the weather with pilots? Is it common or not that much?

TM: It was extremely common - on a daily basis.

NTSB: Is it any harder to work either commercial or general aviation (GA) air traffic?

TM: There was no difference.

NTSB: Have you seen this type of thing before where you give a pilot a heading around/through weather and they choose to take a different way based on other information they have?

TM: Yes, it did occur, but there was not usually an extreme difference, more like being given 240° heading and them taking a 250° heading instead. It depended on the pilot's comfort zone what instructions they would accept.

NTSB: Is it your experience that commercial pilots usually stick with what was given and GA pilots tend to do their own thing?

TM: He did not really notice a difference. Usually, pilots if they can see VFR conditions that's where they wanted to go instead of going into weather.

NTSB: Do you get valuable information from the Pre-Duty Weather Briefing (PDWB)⁷?

TM: It provided a general overall view of what may or may not happen for the day.

NTSB: Is the PDWB tailored for the TRACON?

TM: No, not necessarily.

NTSB: If you could have one weather source to look at before starting your shift to prepare you for the weather what would it be?

TM: Local TAFs⁸ probably, current radar displays, a list of local airport METARs⁹, and winds aloft were always good.

NTSB: Have you ever been providing services to a pilot, and they said " my weather radar shows..." and what you see on you radar display is different?

TM: Yes.

NTSB: When you hear a pilot reference weather from the cockpit do you believe that is radar, XM¹⁰ or what?

TM: He did not think anything, just that the pilot had something that he relied on, and that it may or may not be current weather.

⁷ The Pre-Duty Weather Briefing is designed to increase controller situational awareness. It is a condensed weather briefing produced by the Center Weather Service Unit three times daily and made available to all ATC facilities within each CWSU's area of coverage. The FAA requires all air traffic controllers to obtain the most current PDWB before assuming ATC duties daily. After hours or during changing weather conditions, this briefing may not represent the latest information.

⁸ TAF - Terminal Aerodrome Forecast - According to NWS Instruction 10-813: "An NWS TAF consists of the expected meteorological conditions significant to aviation at an airport for a specified time period. For the U.S., this is the area within five (5) statute miles (SM) of the center of an airport's runway complex." www.nws.noaa.gov/directives/sym/pd01008013curr.pdf.

⁹ METAR - Aviation Routine Weather Report - The METAR has been adopted by the United States to provide surface observations of current weather conditions in support of aviation for the terminal. It is issued at fixed times hourly.

¹⁰ XM Weather is a satellite based commercially available product that provides real-time, high-resolution animated weather data directly to your compatible aviation or marine device. Weather conditions across the continental U.S. and 100 miles into U.S. coastal waters can be viewed and is provided via a paid subscription service.

NTSB: How far around ATL is normal when re-routing?

TM: Typically, the routings are 30° to 50° left or right, and if they waited until they were in A80 TRACON airspace before rerouting, it could add a lot of distance onto the flight.

NTSB: Have you had to get more assertive with a pilot to get them to do something around weather?

TM: He remembered once working someone through weather that was all around ATL and had to provide "S" turns around depicted weather, and the pilot said it was going to put him into weather, and he had to encourage the pilot to trust him, and in the end, it worked out.

NTSB: How is the STARS¹¹ weather here?

TM: With FUSION¹² he thought it was a very good representation. Up until recently, working the final positions, they would use only the ATL sensor, so with just one sensor, the radar intensity would be different from what FUSION weather showed us now. They were using FUSION weather on final now as well but it still has a lot of stitching.

NTSB: What do you feel is the best source of weather when you need tactical Weather support?

TM: The PDWB before the shift, IDS¹³ that showed METARs for the local airports, and local TAFs. PIREP¹⁴ information was the most direct and current, but they did not have a way of viewing those.

NTSB: What is the lifecycle of a PIREP here?

TM: It was written on the PIREP form, forwarded to the flight data (FD) position, and they would enter it into the computer. The paper copy went to the operations manager (OM).

¹¹ STARS - Standard Terminal Automation Replacement System - A system that receives radar data and flight plan information and presents the information to air traffic controllers on high resolution, 20" x 20" color displays allowing the controller to monitor, control, accept hand-off of air traffic, and assist with weather avoidance.

¹² FUSION - The combination of all available surveillance sources (airport surveillance radar [ASR], air route surveillance radar [ARSR], ADS-B, etc.) into the display of a single tracked target for air traffic control separation services.

¹³ IDS - Information Display System - A system that provides the ATC environment with a single point of access to static data, such as documents, lists, and maps, and to dynamic data, such as weather display systems or automated tools with quick accessibility to the controller.

¹⁴ PIREP - Pilot Weather Report - A report made by a pilot of meteorological phenomena encountered by an aircraft in flight.

NTSB: How do you receive PIREP information?

TM: Sometimes another sector or Center would call and give information directly. On a rare occasion a severe report would get put into IDS and "blasted" to everyone in the room. It was not a very direct process and could be delayed.

NTSB: How does a SIGMET¹⁵ get disseminated to the controllers?

TM: It was printed out at the FD position, then delivered to the OM who would confirm it was valid, enter it into IDS, and blast it to the room.

NTSB: Before FUSION what was the weather like in the Athens sector?

TM: They used to use the long-range radar (which did not have weather) or the LZU radar. Previously, there was a part of the sector that was non-radar, which was why they changed the airspace and gave some up to Atlanta Center and some to Augusta [AGS ATCT].

NTSB: You have "T routes"? What are those?

TM: Yes, he had designed them. There were several, the ones that enter the 40 DME around ATL, 7,000 ft or below typically ran about 35 miles away from ATL, others that roughly went 50 miles around ATL, A80 TRACON did not typically use, but Atlanta Center would. It was just a predetermined routing that they could throw up without coordination, except for a flight plan amendment which served as coordination.

NTSB: How does the "LOGEN..DALAS" routing compare to the T routes?

TM: It was much shorter, but in this case would have resulted in the pilot having to transition the line of weather in either case, even south would have taken the pilot through moderate precipitation.

NTSB: Since the accident, is there anything that you have thought of that could have been done differently or could be done differently in the future?

TM: For starters, when he was asked about climbing (in hindsight he wished he would have asked if the pilot wanted to do it instead of assuming it would not work). His thoughts when N43368 checked in was "how am I going to get him through" (hindsight he said he could have asked AGS ATCT to turn him north bound to the Valley sector. He also kept thinking about spin and recovery procedures, and if it would have helped had he broadcast that information.

NTSB: Do you do anything differently since the accident?

¹⁵ SIGMET - Significant Meteorological Information - A weather advisory issued concerning weather significant to the safety of all aircraft. SIGMET advisories cover severe and extreme turbulence, severe icing, and widespread dust or sandstorms that reduce visibility to less than 3 miles.

TM: If it was brand new today, no. His expectation was that an IFR rated pilot should be able to hold altitudes and headings, and if he could not accept a clearance to say so and then they could change the plan.

NTSB: If you had lightning data available to you on position, would that be helpful?

TM: Yes. And said that gust front, microburst, and windshear information would all be beneficial as well.

NTSB: If the supervisor had a tool that could help tell when a gap in the weather was closing in a predicted amount of time, do you feel that would be helpful?

TM: Yes.

NTSB: Is there anything we have not asked that you think we should have or are surprised we did not?

TM: He wondered about the pilots' capabilities. What was his IFR proficiency, and was he current and capable? He lost control within a mile or so and they have had some of the flight schools out there and they would file a clearance IFR in aircraft not rated for IFR, and the workforce has been told "we shall".

Interview concluded at 1325 EDT.

Interviewee: Thomas Sutton (TC)
Representative: Nichole Surunis - NATCA Facility Vice President

Date / Time: March 12, 2020 / 1600 EDT
Location: A80 TRACON
Present: Paul Suffern - NTSB, Millicent Hill - NTSB, Jeffrey Hall - FAA, and Amy Huschka - NATCA
Investigator: Brian Soper - NTSB

During the interview, Mr. Sutton provided the following information:

He began working at A80 TRACON in February 2002 and was CPC. He had been on the Local Safety Council (LSC) for about six months and had not been on any recent details.

He described his overall health as "good," with a requirement to wear corrective lenses while performing ATC duties and stated he was wearing them at the time of the accident. He had no other waivers or restrictions to his medical clearance. In the past 12 months he had no significant changes to his health, finances, or personal life, good or bad, that would have affected his performance on the day of the accident.

A relief briefing was conducted when he assumed the position, it was recorded, and a checklist was used. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 2-3 around the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 2 around the time of the accident. He considered both the traffic volume and complexity as normal for the time of day and tempo of operations.

He recalled around the time of the accident there had been weather in the satellite sector and Athens sector with pockets here and there moving west to east, but could not recall the speed exactly, just that it seemed fast but not all over the airspace.

Mr. Sutton provided the following recollection surrounding the time of the event:

He was providing general supervision for the satellite wall, routine stuff. He did not recall monitoring any specific position leading up to the time of the accident and stated that he could watch and hear what the controllers were saying. He was walking back and forth between positions and heard Ty [the RA controller] vectoring and giving weather information which piqued his curiosity. So, he looked and seen where the airplane was going, and it still seemed routine. At the time there was an on-the-

job training instructor (OJTI) and trainee that were going to relieve Ty, and he had come down to listen to the position relief briefing. Normally, he would just listen and then walk away, but while this one was starting is when everything happened, and it was all very quick. He added that in that situation "you're just reacting" and that was kind of it.

The group (identified below as "NTSB") then asked Mr. Sutton (identified below as TC) a series of questions and the following summarizes the questions asked, and answers provided:

NTSB: Did anything stand out to you as unusual at the time?

TC: Not really.

NTSB: When weather is in the area, do you have a resource to go to for additional weather information when you see weather building quickly or different than what was expected?

TC: There is, but it was not available at the Athens sector. ITWS¹⁶, but that only contained weather for "inside the 40" around ATL area, and he utilized that. He also used the TSD¹⁷ and other weather feeds.

NTSB: Now that you have watched the replays, did anything stand out to you as you listened to the entire event unfold?

TC: Just that it seemed like the pilot was kind of unsure.

NTSB: As CIC, do you have any input on the routing?

TC: No, that is mostly the pilot and controller.

NTSB: Have you had training on ITWS?

TC: Only limited training but he knew a few things from using it before.

NTSB: What is a good weather resource for you when you need it?

TC: Whatever is on the TSD is a good tool (not sure where that came from but it showed trending) and ITWS. The other weather feeds they get, and just understanding the local trends.

¹⁶ ITWS - Integrated Terminal Weather System - An automated weather information system, and it uses a variety of weather sensors to make full use of airport runways in all kinds of weather. The ITWS receives data from weather and surveillance radars and sensors, and then uses computer software to display current weather information in graphic and text formats. The ITWS provides weather products that are easy to understand, and it removes the need for interpretation by meteorologists.

¹⁷ TSD - Traffic Situation Display - A tool used by Traffic Management Specialists and air traffic controllers to monitor the position of air traffic and to determine the traffic demand on airports and sectors.

NTSB: Do you ever call the Center Weather Service Unit (CWSU) for weather support?

TC: No.

NTSB: Was there anything else in the TRACON that may have provided more weather info to the Athens sector, that did not get there?

TC: Well, they were a PIREP facility, but said he could not speculate on that. He knew there was weather in most of the sectors, but did not know if that information was disseminated.

NTSB: Regarding re-routes, as CIC do you ever get involved in any of the re-routing decisions to go north / south around ATL, or is that up to controller?

TC: Just the controller at that time.

NTSB: Do you feel that re-routes should be done prior to aircraft being handed off to A80 TRACON?

TC: Adjacent facility controllers did not know their airspace and fixes well enough to be trusted to make those decisions. Additionally, he did not think it would be helpful to have canned or preferred routings because the controller would likely end up having to change them anyway.

NTSB: Do you have access to ITWS, and if so, where would you go to look at that?

TC: Yes, they had access to ITWS. If he was at the radar scope or monitoring controllers, he would sit between and look at the same displays they were looking at. Or he would look at the TSD behind the scopes, or the ITWS a few positions down from where they were sitting. Part of it was TSD and part was the ITWS station.

NTSB: [NTSB showed a picture of CoSPA¹⁸ the computer] Would this predictive tool be helpful if you had access?

TC: Yes, as CIC or controller either one it would.

NTSB: Would you like access to CoSPA?

TC: Yes and would use it if available.

NTSB: Does a PIREP taken within the facility make it back to the controllers during

¹⁸ CoSPA - Consolidated Storm Prediction for Aviation - Combines aviation-oriented storm research in a coordinated fashion, by assimilating radar reflectivity and lightning, including the Rapid Refresh, High-Resolution Rapid Refresh (HRRR), and ensemble-based products from both. This information can then be accessed and displayed for use by weather services and ATC personnel.

dissemination?

TC: Not really. Center would call if they had a PIREP that applied, and within the facility they would just call each other. Sometimes controller to controller or supervisor to supervisor.

NTSB: Hindsight being 20/20, is there anything you feel could have been done differently?

TC: It was hard for him to speculate on things like that as a controller because he thought everything was done right and it was an unfortunate, "perfect storm" type of thing.

NTSB: Was this "north or south around ATL" the normal progression?

TC: Yes. Generally, the area 40 miles around ATL is a no overflight zone. They knew they were going to get re-routed around ATL's 40.

NTSB: So, anything we should have asked or anything you are surprised we did not?

TC: He knew why we were there, but just did not know what to expect, but felt better about things after our discussion.

Interview concluded at 1645 EDT.