

Factual Report – Attachment 1

Interview Summaries

AIR TRAFFIC CONTROL

ERA17FA136

Interviewee: Bobby Sharp
Representative: Joseph Duckworth – NATCA Facility Representative (FACREP)

Date / Time: April 7, 2017 / 1630 central daylight time (CDT)
Location: Birmingham Air Traffic Control Tower (KBHM ATCT)
Present: Don Eick – NTSB, Millicent Hill – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.
Investigator: Brian Soper

During the interview, Mr. Sharp stated the following:

His air traffic control (ATC) experience began in December 2009 at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of initial ATC training, he was assigned to KBHM ATCT in March 2010.

His regular work schedule was a rotating shift schedule with regular days off on Tuesday and Wednesday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	0600–1400	
Monday	2215–0615	
Tuesday	Off	
Wednesday	Off	
Thursday	1445–2245	
Friday	1300–2100	
Saturday	0700–1500	(Day of accident)

His operating initials were BS and his supervisor of record was Tray Travick. He was the south radar (RS) controller at the time of the accident, and was working the position with the north radar, final radar, west satellite radar, and east satellite radar positions combined to it. He was certified on the RS position in October 2012 and was current and proficient on the positions he was working at the time of the accident in accordance with facility standards. He had no suspensions or documented operational incidents while at KBHM ATCT. He held no collateral duties and had not been on any recent details. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in May 2015. He had no waivers or restrictions to his medical certificate. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift and recalled no unusual distractions around the time of the accident. He recalled that the weather was 10 miles of visibility, overcast ceiling at 7,000 feet above ground level (agl) with rain coming in from the west. He had reviewed the audio and video replay of the event prior to the interview. He stated that he was training a developmental controller on the RS position at the time of the accident. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 3 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 3 at the time of

the accident. He mentioned that the developmental controller was only at about 45% in his qualification process and would have classified the traffic volume and complexity as 4 out of 5 for the developmental. He said that a relief briefing was conducted when he assumed the position, and that it was recorded, and a checklist was utilized. He performed toxicology testing more than 9 hours after the accident. He stated that he filed an ATSAP¹ report as a result of this accident.

He said he had been on position for about 45 minutes prior to the accident. He was not aware that the ILS² for runway 24 was out of service or that there had been a power interruption during his last break. The training team had taken a handoff on N6563D from Montgomery (KMGM) approach control. KMGM approach called to advise that N6563D was deviating, and he recalled observing that the aircraft was in the clearest area [with regards to displayed weather] on the STARS³ radar display at that time. He said that normally KMGM approach would have given them a reason for the deviation, and they did not think to ask why. He said they had a couple of aircraft coming into the airspace from the west, one of them was issued the weather and the pilot requested to deviate. When the pilot of N6563D first checked in, he noticed that his altitude indicated 10,300 feet above mean sea level (msl)⁴, then he saw it indicated 10,700 feet, at which time he informed the developmental controller that he was training. The developmental controller queried the pilot about the altitude deviation, and the pilot said he was going back down to 10,000 feet. Mr. Sharp said that about 25 miles later, the pilot of N6563D requested to climb to 12,000 feet, so they coordinated with the Atlanta Air Route Traffic Control Center (KZTL ARTCC), climbed him to 12,000 feet and instructed the pilot to contact KZTL. He recalled there being a PIREP⁵ of cloud tops at 10,000 feet with bases at 5,100 feet and that N6563D was above that at the time. He then noticed that N6563D had rapidly descended 1,000 feet and he asked the controller in-charge (CIC) to "watch him." As the aircraft continued to descend, KZTL called to coordinate the altitude deviation, and informed the CIC in a separate call that they had lost communications with the aircraft.

He stated that the radar positions were normally combined during training and that it was during a standard arrival bank at the time. He felt that if he had not been training a developmental controller, he may have acted quicker, and that when the pilot of N6563D requested higher, he would have asked the pilot if he had weather radar on board. He said that the flight data (FD)

¹ ATSAP – The FAA's voluntary safety reporting program for ATC personnel based on the Aviation Safety Action Program (ASAP) model. A defined partnership model where safety issues are resolved through corrective action rather than through punishment or discipline. The program includes collection, analysis, and retention of safety data reviewed and acted upon by the FAA and NATCA.

² ILS – Instrument Landing System – A precision instrument approach system that normally consists of a Localizer, Glideslope, Outer/Middle Markers, and approach lights utilized by a properly equipped pilot to conduct an ILS approach.

³ 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.

⁴ All altitudes are in feet above mean sea level (msl) unless otherwise noted, and in the case of cloud ceilings which are in feet above ground level (agl).

⁵ PIREP – Pilot Weather Report – A report made by a pilot of meteorological phenomena encountered by an aircraft in flight.

controller would normally pass any SIGMETs⁶ or CWAs⁷ that printed on the FDIO⁸ directly to the applicable radar controller. He said that some FD controllers would deliver strips immediately and others would wait for a few to print before delivering the strips. He stated the CIC was not normally involved in deciding what weather information was disseminated.

The display above the radar position was normally set to the traffic situation display (TSD) with the weather also displayed on it. He said they normally used the weather depicted on the radar display and not the weather displayed on the TSD. He felt that it was hard to tell how consistent the weather on the radar display was. Sometimes pilots would go through the weather and report no problems and others would request deviations. He believed that the line of weather on the day of the accident was just the “normal rain” because it was mostly level 1 and 2 precipitation with some level 3 precipitation near KBHM which an airliner had requested to deviate around.⁹ When asked if a SIGMET being graphically depicted on the TSD would be beneficial to him, he agreed that it would be. He was pretty sure he had received weather and PIREP refresher training but could not recall when. He said that the requirements for weather dissemination had changed and that they had received briefings in CEDAR¹⁰ since the accident.

He did not believe that conditions at the time of the accident would have required the solicitation of PIREPs. He recalled no reports of thunderstorm activity, and said that KBHM was clear therefore, PIREPs were not required according to his understanding. He stated that a previously received PIREP was relayed to a departure that was headed in that direction, and to an arrival that they vectored through the same hole in the weather as a previous arrival that had requested to deviate for weather. He stated that when N6563D checked in, the pilot was already deviating in an area not directly affected by weather and they had other aircraft in the vicinity of weather that were higher priority. Because N6563D had climbed, he thought the pilot was trying to miss a cloud and assumed the 10,000-foot tops report covered the entire area.

He said that when they needed more information about current weather conditions, they would contact Anniston Flight Service Station (FSS). Additionally, any PIREPs disseminated outside the facility were passed through FSS as well rather than entered via AISR¹¹. When asked,

⁶ 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.

⁷ CWA – Center Weather Advisory - An aviation weather warning for conditions meeting or approaching national in-flight advisory (AIRMET, SIGMET or SIGMET for convection) criteria. The CWA is primarily used by air crews to anticipate and avoid adverse weather conditions in the en route and terminal environments.

⁸ FDIO – Flight Data Input/Output - A system utilized to distribute flight plan information, weather information, and general information to associated ATC facilities across the National Airspace System.

⁹ Weather is displayed in six levels which correlate into the four precipitation intensity levels (light, moderate, heavy and extreme) in the STARS terminal radar system. Level 1 – Light, Level 2 – Moderate, Levels 3 and 4 – Heavy, and Levels 5 and 6 – Extreme.

¹⁰ CEDAR – Comprehensive Electronic Data Analysis and Reporting - The CEDAR system provides air traffic management with an electronic means of capturing safety-related information, events, and metrics. It streamlines several facility managers’ responsibilities, including assessing air traffic employee performance and managing resources, and provides a standard interface for the collecting, retrieving, and reporting of data from multiple sources.

¹¹ AISR – Aeronautical Information System Replacement - a web-enabled, automation means for the collection and distribution of Service B messages, weather information, flight plan data, Notice to Airmen (NOTAM) messages, Pilot Report (PIREP) message, and other operational information to all FAA Air Traffic facilities.

he said that they did not have access to the terminal area forecast (TAF). He remembered that occasionally they would get PIREPs from adjacent areas especially concerning icing and turbulence.

When asked about the facilities use of the simulator in training, he stated that the facility did have a simulator, but that it was only used in the very beginning portion of training. Additionally, he stated that one of the problems with the current simulator set up at KBHM ATCT was that there was no dedicated ETVS¹² for training, and he had recently had a discussion with the air traffic manager (ATM) about acquiring one, but that was as far as it had went to his knowledge.

Looking back, he said that the one thing he would have done differently was to have issued the weather to the pilot of N6563D again when he requested 12,000 feet. He also stated that he would instruct developmental controllers to issue the weather, even if it was 50 miles out; issue it when they see it. When asked, he also stated that when he performed duties as CIC and weather was in the area, that he would ask controllers if they were issuing weather to pilots as required.

Interview concluded at 1645 CDT.

Interviewee: Joseph Pennington

Representative: Joseph Duckworth – NATCA FACREP

Date / Time: April 7, 2017 / 1630 CDT

Location: KBHM ATCT

Present: Don Eick – NTSB, Millicent Hill – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.

Investigator: Brian Soper

During the interview, Mr. Pennington stated the following:

His ATC experience began in the United States Air Force (USAF) where he served as an air traffic controller from 2009 to 2015. After being honorably discharged from the USAF he was hired by the FAA in September 2015 and reported directly to KBHM ATCT. Following certification in the tower, he successfully completed radar training at the FAA Academy in Oklahoma City, Oklahoma in June 2016 and returned to KBHM ATCT.

His regular work schedule was a rotating shift schedule with regular days off on Tuesday and Wednesday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	0700–1500
Monday	0600–1400
Tuesday	Off
Wednesday	Off

¹² ETVS – Enhanced Terminal Voice Switch – is a non-blocking, fully integrated, digital voice communications system designed to allow air traffic controllers to communicate with planes while in the air and on the runways, other controllers by intercom and conferencing, as well as with other ATC facilities by telephone, and various types of emergency facilities, such as security forces, fire departments, and other agencies by radio and telephone.

Thursday	1300–2100	
Friday	1300–2100	
Saturday	0800–1600	(Day of accident)

His operating initials were MP and he was training on the RS position (RS-DEV) which had the north radar, final radar, west satellite radar, and east satellite radar positions combined to it at the time of the accident. His on the job instructor (OJTI) was Bobby Sharp. He said that approximately 50% of his training had been conducted in this combined configuration, and the other 50% had been conducted not combined. He had no suspensions or documented operational incidents while at KBHM ATCT. He held no collateral duties and had not been on any recent details. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

His supervisor was Tray Travick. He possessed a current second-class medical certificate but could not recall the date of his last ATC physical. He had no waivers or restrictions to his medical certificate. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift. He stated they had lost the runway 24 localizer due to a “power bump” and felt that may have been a distraction around or leading up to the time of the accident. He could not recall if he had trained at the sector previously in the shift, or if this was his first session training on this sector that day. He recalled a line of precipitation extending from north to south to the west of BHM around the time of the accident, and that it was predominantly visual meteorological conditions (VMC) to the east. He had reviewed the audio and video replay of the event five days prior to the interview. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 3 to 4 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 3 to 4 at the time of the accident. He said that a relief briefing was conducted when he assumed the position, and that it was recorded, and a checklist was used. He filed an ATSAP report as a result of this accident.

He did not recall how long he had been on position prior to N6563D checking in. He said that N6563D checked in from KMGM approach control already deviating right for weather (which had been previously coordinated). He recalled the pilot of N6563D checking on frequency at 10,000 feet, deviating right, and he issued the pilot the KBHM altimeter. He recalled there being light to moderate precipitation to the west of KBHM but did not issue that weather to the pilot because it was not near the aircraft at that time, nor in the area he was deviating. He did not solicit a PIREP for flight conditions from the pilot of N6563D. He stated that his OJTI had alerted him to N6563D’s altitude indicating 10,700 feet. He asked the pilot of N6563D to verify his altitude and instructed him to maintain 10,000 feet. He recalled the pilot of N6563D requesting a climb to 12,000 feet and he coordinated the climb request with KZTL. He then instructed the pilot of N6563D to climb and maintain 12,000 feet and then transferred communication and control to KZTL. He observed N6563D descending and was watching the aircraft’s data block as it continued to descend. He received a point-out and coordination from KZTL advising that N6563D was descending and that they had lost communications with the aircraft. He continued to watch the data block of N6563D until losing primary radar and going into a coast (CST)¹³ status.

¹³ CST – Coast Track – Status of an aircraft that is no longer giving a primary radar return. This will generate a track

A SkyWest flight had entered the sector from the west and he remembered issuing weather information to the pilot of that aircraft. He also recalled approving the pilots request to deviate for weather and receiving a PIREP reporting cloud bases. He recalled vectoring a Southwest flight that had also entered the sector from the west but did not issue weather to the pilot. He was not sure why he did not issue weather information to the Southwest flight, but he remembered that he wanted to get the flight through the same hole that the SkyWest flight had gone through. He also received a PIREP from the pilot of a Delta flight, but he did not record it on a PIREP form and did not disseminate the information to any other aircraft. He could not recall if there were any SIGMETs or CWAs valid at the time of the accident. He knew that the observed weather in the northern portion of the airspace required the solicitation of PIREPs, however the weather in the area where N6563D had been flying did not require it. He did not recall any PIREPs for icing and did not know the freezing level in the area at the time of the accident. He stated that at KBHM ATCT, PIREP information was written down and given to the CIC or front-line manager (FLM) for input into the AISR. He stated that prior to the accident, PIREP solicitation was not very common; however, since the accident, PIREP solicitation had become more common.

During his radar training at the FAA Academy, he remembered receiving instruction on PIREP solicitation and dissemination. During that training, he stated that they wrote down PIREPS on a form and disseminated, much like the procedure in place at KBHM ATCT. He did not recall any specific information during this training on intensities of displayed precipitation.

When asked further about the weather on the day of the accident, he stated that the weather he observed on that day was typical for what he had seen during his time at KBHM ATCT. He observed mostly level 1 and 2 precipitation and stated that he would issue weather information on level 3 or greater precipitation, as well as offer alternative routing as necessary. He had never suggested that a pilot turn around because of weather. When asked if he felt that the weather information displayed on the radar display was accurate, he stated that he felt it was. He believed that other controllers also believed that the displayed weather at BHM ATCT was accurate.

The last weather-related training he could recall in the previous few months was conducted via CEDAR but could not recall the content. When issuing SIGMETs, AIRMETs¹⁴, and CWAs, he would broadcast the information that was received printed on a flight progress strip, annotate the printed strip with his initials, and file it. He stated that when he worked the FD position, he would read all received weather-related information and if it was within 150 miles of KBHM, he would deliver it to the appropriate radar sector(s) for dissemination. If the weather information was greater than 150 miles from KBHM approach control airspace, he would not deliver the strip and would just file it.

At the time of the accident, he recalled the WSP¹⁵ display as being on, but did not recall if it was displayed on the overhead monitor above the radar position. He said that he could obtain

message on the air traffic controllers radar display utilizing the acronym "CST" and will temporarily continue displaying the aircraft's predicted movement based on the last known heading and speed.

¹⁴ AIRMET – Airmen's Meteorological Information - In-flight weather advisories issued only to amend the area forecast concerning weather phenomena which are of operational interest to all aircraft and potentially hazardous to aircraft having limited capability because of lack of equipment, instrumentation, or pilot qualifications.

¹⁵ WSP – Weather Systems Processor – A system utilized in medium air traffic density airports that provides an accurate, current, and predicted, local severe weather picture that allows for assessment of near-term severe weather

satellite airport weather information using the weather request function of the FDIO. He did not know how to get information about developing weather from outside of the facility. He stated he had access to TAF¹⁶ information but did not look at it. When asked, he said that he did not receive any type of weather briefing before reporting for work.

When discussing weather radar equipage on aircraft, he stated he knew that smaller general aviation aircraft did not have weather radar; however, he stated that most commercial aircraft were equipped with on board weather radar. He stated that when N6563D checked in and was already deviating for weather, he assumed that the aircraft had some type of on-board weather radar.

In discussing what he might have done differently with regard to this accident, he said he would have asked the pilot why he was climbing to 12,000 feet, and also would have issued information about the weather that he observed in the western portion of the KBHM approach control airspace.

Interview concluded at 1725 CDT

Interviewee: Jacob Roberts
Representative: Joseph Duckworth – NATCA FACREP

Date / Time: April 8, 2017 / 1245 CDT
Location: KBHM ATCT
Present: Don Eick – NTSB, Millicent Hill – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.
Investigator: Brian Soper

During the interview, Mr. Roberts stated the following:

His ATC experience began in the United States Marine Corps (USMC) where he served as an air traffic controller from 2006 to 2011. After being honorably discharged from the USMC he was hired by the FAA in June 2012 and attended initial training at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of initial ATC training, he was assigned to KBHM ATCT in September 2012.

His regular work schedule was a rotating shift schedule with regular days off on Monday, Thursday, and Sunday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	Off
Monday	Off
Tuesday	1300–2300
Wednesday	1300–2300
Thursday	Off

impacts on terminal area operations.

¹⁶ TAF – Terminal Aerodrome Forecast – A concise statement of expected meteorological conditions at an airport during a specified period of time (usually 24 hours).

Friday	1300–2300	
Saturday	1300–2300	(Day of accident)

His operating initials were TR and his supervisor was Robert Clay. He was the CIC at the time of the accident. He was certified CIC in late 2015 and was current and proficient on the position in accordance with facility standards. During the month prior to the accident, he had traveled to Pensacola for training as the facility recurrent training cadre and was set to begin training the KBHM ATCT workforce within the following month. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in March 2017. He had no waivers or restrictions to his medical certificate. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift, and recalled that there had been a power outage that resulted in the localizer for runway 24 being out of service. He recalled that there was light and moderate precipitation west of the airport but KBHM was still reporting visual flight rules (VFR) conditions. He had reviewed a FALCON¹⁷ video replay of the event on the day of the accident as part of his CIC duties. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 1 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as a 1 to 2 at the time of the accident because of the weather in the airspace. He said that a relief briefing was conducted when he assumed the position, that it was recorded, and a checklist was utilized.

He said that he had been on position for about 45 minutes prior to loss of communication with N6563D and remained on position for about 90 minutes after. He was first made aware of N6563D in the airspace when he overheard the RS-DEV controller and OJTI discussing the aircraft's climb from 10,000 feet to 10,700 feet. He also learned from them that the aircraft had checked in with KBHM approach control already deviating. Sometime later he heard the RS-DEV or his OJTI issue N6563D a climb to 12,000 feet and instructions for the pilot to contact KZTL. He became aware that there was a problem concerning N6563D when, while on the phone coordinating other flight information, someone from KZTL called to point out the N6563D descending. He then observed the aircraft climbing and descending and then appearing to recover momentarily, but then rapidly descending. He called KZTL to see if they were still in communication with N6563D and when he learned they were not, offered to file the ALNOT¹⁸. KZTL replied that they would issue the ALNOT. He then notified the Domestic Events Network (DEN) as required, in order to initiate search and rescue efforts. Afterwards, while locating the local emergency responders he received a call from the Blount county sheriff's office. He relayed the last radar observed latitude and longitude of the aircraft to the sheriff's office representative.

¹⁷ FALCON – A software system utilized for the instant / rapid replay of ATC operational incidents in a format much like the one displayed to the ATC specialist. It is used in terminal radar facilities to review training management issues, investigate accidents and operational errors, develop facility specific specialty training programs, and present facility-wide briefings on operational incidents.

¹⁸ ALNOT – Alert Notice – A request originated by FSS or an ARTCC for an extensive communication search for overdue, unreported, or missing aircraft.

He then called FSS and asked for additional flight plan information and passed it to the sheriff's office as well.

When asked if he relieved the controllers working the RS position, he stated that he did not right away as he was initially concerned with getting help for the pilots and passengers of N6563D. Everybody in the control room, including the FLM was trying to help. He said that he had been trained on how to react during aircraft accidents.

Mr. Roberts stated that it was common at KBHM ATCT for a controller to staff the CIC position and that he was comfortable working the position. He said that he had worked CIC many times while there was precipitation or significant weather in the area.

When asked about weather training and pre-briefing, Mr. Roberts said that the only weather briefing that he normally received was the pass down from the controller he was relieving who would discuss items on the NIDS¹⁹, WSP, TAF, and TSD²⁰. He did not remember how big the line of precipitation was or what direction it was moving but that it was only light to moderate and not alarming. He said that it was uncommon to see light precipitation not accompanied by moderate precipitation. He had been trained on the WSP a long time ago but had not received training on the TSD. If he needed additional weather information, he could contact the FSS or local weather office.

When asked if he ensured controllers were soliciting PIREPs when required while he was CIC, he stated that he tried to and that it was normal for FLMs and CICs to ask controllers to solicit PIREPs. He did recall hearing the RS-DEV controller issuing weather prior to the accident, but he was busy working the power issue at the time. When he received a PIREP from a controller he shared the PIREP with other controllers if it were pertinent and then enter the information into AISR but was unsure of where the AISR information went afterwards. He stated that since the accident he was more likely to solicit PIREPs from controllers in his area when he was CIC.

When asked if there were any weather advisories in effect at the time of the accident, he stated that after the accident a CWA and convective SIGMET were found in the FDIO.

When asked about his role as recurrent training cadre he stated that he recently spent one and a half days in Pensacola, Florida receiving training. He really liked the program and said it was a great opportunity for controllers and managers to work together. The program did a great job and allowed controllers to come together, share information, and discuss what was or was not working.

Interview concluded at 1355 CDT.

¹⁹ NIDS – NAS Information Display System– Replacement tool for the Information Display System (IDS-4) that integrates a number of systems displaying traffic, weather, and surveillance data, into one easy-to-use and fully customizable workstation with a touchscreen display.

²⁰ 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.

Interviewee: Javon Smith
Representative: Joseph Duckworth – NATCA FACREP

Date / Time: April 8, 2017 / 1630 CDT
Location: KBHM ATCT
Present: Don Eick – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.
Investigator: Brian Soper

During the interview, Mr. Smith stated the following:

His ATC experience began in the USAF where he served on active duty as an air traffic controller from 2005 to 2015. After his honorable discharge from the USAF, he was hired by the FAA and began working at KBHM ATCT in September 2015.

His regular work schedule was a rotating shift schedule with regular days off on Thursday and Friday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	Leave
Monday	Leave
Tuesday	Leave
Wednesday	Leave
Thursday	Off
Friday	Off
Saturday	1430–2230 (Day of accident)

His operating initials were JS and his supervisor was Robert Clay. He was the FDR controller at the time of the accident. He was certified on FDR in January 2016 and stated that he was current and proficient on the position he was working at the time of the accident in accordance with facility standards. He stated that he had no documented operational incidents or suspensions while at KBHM ATCT. He held no collateral duties and had not been on any recent details. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in March 2017. He had no waivers or restrictions to his medical certificate. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift and did not recall any unusual distractions around the time of the accident except for reports of the ILS for runway 24 being out of service. He did not recall much about the weather in the area around the time of the accident but did remember seeing a line of precipitation displayed on the radar display extending from the southwest to the northeast portion of the airspace. He recalled it being kind of scattered and could not remember if it was moving east or northeast. He did not recall if it had rained in Birmingham on the day of the accident. He had not reviewed any replays of the event. He stated there was no training being conducted on the FDR position at or leading up to the time

of the accident. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 1 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 2 at the time of the accident. He said that a relief briefing was conducted, a checklist was utilized, but he could not recall if it was recorded. He said he had been briefed by the FAA just prior to this interview and said that it lasted approximately 30-40 minutes. He did not perform toxicology testing as a result of this accident.

He had been on position for about 20 to 30 minutes prior to the accident and remained on position for about 20 minutes after. He recalled that KZTL had called and reported they had lost communication with N6563D, but he was busy updating the NIDS and performing other administrative duties and did not recall any other details about the accident. He stated that he really had no role or responsibility in support of the accident coordination.

Regarding advisories received over the FDIO (i.e., SIGMETs, PIREPs, CWAs), it was his practice to grab them as soon as he heard them come over the printer and would pass the information directly to the appropriate controllers. When asked about the PIREP solicitation process at KBHM ATCT, he did not have much involvement with PIREPs when working FDR, but when training on the RS position he would normally write down the information on a PIREP form, or on the back of a flight progress strip, then pass it to the supervisor to enter into AISR. He tried to ensure he solicited at least one PIREP per hour during periods of required solicitation, and the amount of time he would continue passing the information to other aircraft was based on the weather at the time and information being reported.

He said that he was currently training on all radar positions and that he was at about 53%. He would normally get 1 to 3 hours of training per shift; routinely on the higher end of that spectrum unless needed for staffing. He felt that training on radar seemed to help him perform his FDR duties better because it improved his situation awareness.

He had attended the radar training course at the FAA Academy in Oklahoma City, Oklahoma. He recalled that during the course, they covered weather information (book knowledge), but did not recall if they ever went over what the visual depiction of that weather would look like on the controller's radar display. He recalled weather coming through the area a couple of times this season, prior to the day of the accident, but that it was kind of a new thing for him in radar; however, had seen plenty of weather while working in the tower.

He knew that CWAs, AIRMETs, SIGMETs, and urgent PIREPs came over the FDIO, but did not recall if AWWs²¹ did. He received no formalized weather briefing before signing on to a position but would "self-brief" by checking the WSP display, displayed precipitation on the radar display, and what was in the NIDS. He did not recall what the weather was when he began his shift on the day of the accident. He thought that from the end of March until July or August was the common time for severe weather in the Birmingham area, but was not completely sure.

²¹ AWW – Airport Weather Warning – A meteorological product that addresses weather phenomena which can adversely impact airport ground operations. It is prepared and issued by select National Weather Service (NWS) Forecast Offices, per agreement between airport operations personnel, and the NWS. AAWs are NOT intended for use by in-flight operations.

When asked about weather related training, he recalled receiving a weather briefing in CEDAR sometime in the previous three months, and thought he had a face to face briefing as well but was not sure if he had done anything in eLMS²². Since the accident, he had received a briefing in CEDAR specifically about the dissemination of weather-related advisories. Additionally, he had received a briefing from the ATM, about the details of the accident and what his expectation of the controller workforce was moving forward. He understood the expectation concerning weather to be, “issue it...don’t worry about who is responsible, just do it.”

When he broadcasted weather advisories received over the FDIO such as SIGMETs, CWAs, etc., he just broadcasted them once upon receipt and then filed the strip. He said that as a trainee, it was just the easiest thing for him to do, just read it and file it. When asked about how he determined if an advisory was in his airspace, he said that he was not sure all advisories included the boundaries like SIGMETs did, or if it gave the actual weather phenomena, but they at least had the states that they applied to. There was a website he could go to in order to get the complete information on advisories if it was not listed on the strip and knew there was a link to it in the tower but was not sure about radar. He felt it would be easier for him if he had a graphical depiction of the advisories.

Interview concluded at 1725 CDT.

Interviewee: James Winton

Representative: Dan McCabe – NATCA FACREP

Date / Time: April 10, 2017 / 1200 eastern daylight time (EDT)

Location: Hampton Police Station (at request of interviewee for off-site)

Present: Don Eick – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.

Investigator: Brian Soper

During the interview, Mr. Winton stated the following:

His ATC experience began in December 1989 at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of initial ATC training, he was assigned to KZTL in March 1990.

His regular work schedule was a rotating shift schedule with regular days off on Tuesday, Wednesday, and Thursday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	0700–1700
Monday	0600–1600
Tuesday	Off
Wednesday	Off

²² eLMS – Electronic Learning Management System– The official system of records for Department of Transportation (DOT) employees’ training. eLMS provides online courses, instructor-led-training, and capabilities for Individual Development Plans (IDP’s) and competency management.

Thursday	Off	
Friday	1200–2200	
Saturday	0930–1930	(Day of accident)

His operating initials were GF and his supervisor was Wendy Muhammad. He was working the sector 13 radar (R13) controller at the time of the accident. He had been certified on R13 for more than 20 years and was current and proficient on the position he was working at the time of the accident in accordance with facility standards. He stated that he had no suspensions or any documented operational incidents while at KZTL. His collateral duties included local meetings working on the Atlanta Metroplex design team. He also served as a volunteer as a subject matter expert (SME) for short notice projects but had not yet been called upon. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in April 2016. He had a restriction to carry corrective lenses while performing ATC duties and was wearing them at the time of the accident. He had no other waivers or restrictions to his medical certificate. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift. He recalled there being a fairly solid line of moderate to heavy precipitation extending over 100 miles of the airspace from the northeast to southwest. It was between 5 and 15 miles wide and moving slowly. The line appeared small and did not have terrible weather in it like some of the larger fronts that had come through the area. He had not received any reports of lightning or thunderstorms in the area.

He had not reviewed a replay of the event prior to the interview. He stated there was no training being conducted on the R13 position or leading up to the time of the accident. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 1 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 1 at the time of the accident. He said that a relief briefing was conducted when he assumed the position and that checklists were normally used but could not remember if one had been used for that relief briefing. He performed toxicology testing as a result of this accident several hours after the accident. He filed an ATSAP report as a result of this accident.

He recalled being on position for about 15 minutes prior to the loss of radar on N6563D and remained on position for approximately 5 minutes afterward. He recalled working the high-altitude sector earlier in the day, but this was his first rotation on the low-altitude sector. Aircraft were not deviating for the depicted precipitation in the higher altitudes but were in the lower altitudes. The handoff of N6563D was taken from sector 4. The pilot checked on frequency and was flying northwest bound and climbing to 12,000 feet. He issued the displayed precipitation to the pilot of N6563D and the pilot advised that he was deviating to the right; information that he had not received from the transferring controller. After a few minutes he noticed N6563D at 12,300 or 12,400 feet, then descending below his assigned altitude, and he asked the pilot to check his altitude. He then requested that the CIC assign a radar associate controller in order to help with the developing situation. The altitude continued to indicate the aircraft was low, so he instructed the pilot to work eastbound. He then lost radar contact on N6563D and marked the scope to indicate

where the last known aircraft position was. He continued to try reaching the pilot by relaying through another aircraft in the area in hopes that the pilot of N6563D had just descended below radio and radar coverage, but there was no response.

When asked about the procedures when receiving a PIREP he said that it was his practice to keep the information at the sector for dissemination to other pilots and also pass the information to a radar associate controller if one was available for entry into ERIDS²³, or to an FLM who would pass the information to the Center Weather Service Unit (CWSU). He would issue the PIREP to other aircraft for about 30 minutes and then solicit more in the area to see if the reported weather was still present. He said that entering PIREPs into ERIDS could be cumbersome, but the system was usable. After entering the PIREP into ERIDS, he was unsure how long it took for the information to be disseminated through the system and out to affected controllers. He had not solicited any PIREPs while on position prior to losing contact with N6563D, and he felt that it was uncommon for an FLM to instruct a controller to solicit PIREPs.

When asked about the weather information he received prior to starting a shift, he stated that he would check the WSP display to see what was affecting the area. Since it had a center map overlay it was easy to see what affected his area. It was rare for an FLM to give a briefing when he would first report to an area. On occasion after stand-up briefings, the FLM would come back to the area and make a general statement about the weather, but it was usually information he already knew. Unless weather in the area was bad, FLMs did not normally engage in operations, they were busy with other things like break rotations, training requirements, and assigning reliefs to controllers whose shifts were ending. He mentioned that the CWSU would drop off a convective forecast at the area desk sometimes.

CWAs and SIGMETs would be displayed on the EDST²⁴ as a general information (GI) message and strips were not used much anymore. His procedure was to read the weather advisory once and then suppress the advisory, so it did not prevent other messages from populating at the top of the message list. When asked if he had issued any weather advisories the day of the accident, he thought he had issued a SIGMET or AIRMET for the area.

When asked about the weather near N6563D, he did not remember what weather N6563D had been deviating around and remembered there only being one other aircraft in the vicinity, and several others more than 100 miles to the south. The pilot asked for guidance through the weather but did not initially sound distressed. When asked if he would issue vectors to an aircraft trying to fly through depicted precipitation he said probably not because the weather information displayed on radar could be between 5 and 15 minutes old and there was no way to know exactly where the

²³ ERIDS – En Route Information Display System– An interactive touchscreen display system utilized in Air Route Traffic Control Centers to give air traffic controllers direct access to pertinent air traffic control related information on position.

²⁴ EDST – En Route or ERAM Decision Support Tool– an en route decision support tool that is used by the sector team in performing their strategic planning responsibilities. EDST uses flight plan data, forecast winds, aircraft performance characteristics, and track data to derive expected aircraft trajectories, and to predict conflicts between aircraft and between aircraft and special use or designated airspace. Applicable hazardous in flight weather advisories and urgent PIREPs are displayed on the EDST display at the controller workstation as well.

weather was. He did not know what weather equipment N6563D had on board and the pilot did not say.

When asked about his interaction with the CWSU at the facility, he said that he rarely requested information from them. They did not come down to the areas very often and mainly supported the Traffic Management Unit (TMU). They would also redistribute PIREP information when they received it from others at the facility. A few weeks ago, the CWSU had provided a briefing to controllers and within the last couple of months he had completed the annual recurrent spring weather training.

When asked if something could be done differently to prevent similar accidents in the future, he said it would be good to know a pilot's experience. If the information was depicted on the strip it would give the controller a better idea of how much help or assistance the pilot may need. There was not enough time to treat every pilot as a student pilot, but controllers wanted to help if they could. In this case, once the aircraft began climbing and descending, he felt that telling the pilot he was declaring an emergency for him would have only made the problem worse. He would at times tell a pilot to turn the aircraft around and land, however in this situation, there was not much time to do anything. He could not issue vectors through the weather because he did not know what area was good, so he fell back on his training and issued the depicted precipitation to the pilot as required.

Interview concluded at 1325 EDT.

Interviewee: James Hossenlopp

Representative: Dan McCabe – NATCA FACREP

Date / Time: April 10, 2017 / 1430 EDT

Location: KZTL

Present: Don Eick – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.

Investigator: Brian Soper

During the interview, Mr. Hossenlopp stated the following:

His ATC experience began in May 2008 at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of initial ATC training, he was assigned to KZTL in September 2008.

His regular work schedule was a rotating shift schedule with regular days off on Thursday and Friday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	1400–2200	
Monday	0800–1700	
Tuesday	0700–1400	
Wednesday	2230–0630	(Mid watch from Tue night to Wed morning)
Thursday	Off	

Friday Off
Saturday 1600–Mid (Day of accident)

His operating initials were JL and his supervisor was Eric Batule. He was the sector 13 radar associate (D13) controller at the time of the accident. He was certified on D13 in April 2009 and was current and proficient on the position he was working at the time of the accident in accordance with facility standards. He stated that he had no suspensions or any documented operational incidents while at KZTL. He held no collateral duties and had not been on any recent details. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in March 2017. He had a restriction to wear corrective lenses while performing ATC duties and was wearing them at the time of the accident. He had no other waivers or restrictions to his medical certificate. He held a single engine commercial instrument rating but was not current.

On the day of the accident, he was working his normally scheduled shift and did not recall any unusual distractions around or leading up to the time of the accident. He recalled there was a line of weather moving eastbound through Alabama, and remembered it was a thin but fairly long line. He had reviewed the audio and video replay of the event prior to the interview. He stated there was no training being conducted on the D13 position at or leading up to the time of the accident. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 1 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 2 at the time of the accident. He said that a relief briefing was not conducted when he assumed the position, as he was opening the position and the radar controller was busy handling N6563D. He did not perform toxicology testing after the accident. He filed an ATSAP report as a result of this accident.

He recalled that he was assigned to D13 by the CIC to help the R13 controller who was working N6563D. He was selected because he was the first person available. After he plugged in, he coordinated with KMGM approach control for a deviation, coordinated a point out for N6563D with an adjacent sector and coordinated a few other items as needed. He noticed that N6563D was gaining and losing altitude. He remembered the radar controller trying to re-establish communications with the pilot of N6563D, including attempting to relay through another aircraft in the area, but received no response. The N6563D data tag then went into a CST status and KBHM approach control reported they had lost radar contact with the aircraft as well. He recalled obtaining a latitude and longitude where the tag had been lost.

He did not recall any CWAs or convective SIGMETs in effect at the time of the accident. He remembered before his shift that day that there was weather moving through the area and he had observed it on radar as well. He stated that sometimes controllers were briefed by the supervisor on forecasted weather for the day after the stand-up briefing. He also recalled that sometimes there was a weather briefing from the CWSU that was available at the supervisor's desk that showed trends expected throughout the shift. He was qualified CIC and had attended the stand-up briefings in the past, although not very often. In those cases where he had attended stand-up, he would brief the controllers about the weather when he returned to the area. He also said that

some supervisors would pass the weather information to controllers that were on break at the time as soon as they returned to the area.

When he received a PIREP, he would enter it into ERIDS, and believed that the report went to flight data but did not know where it was disseminated from there. He did not recall how long it took information to be further disseminated after entry into the ERIDS. Also, when receiving a PIREP, he would keep it displayed and issue it to subsequent aircraft entering the affected area. It was his normal practice to broadcast, acknowledge, and then suppress SIGMET and AIRMET information that was provided via the EDST. He said that if he did not suppress the information, he may miss new information coming in. He stated that he did not get acknowledgments from pilots when issuing AIRMETs, SIGMETs, and CWAs; he would only get an acknowledgment of his weather information when issuing PIREPs. He generally did not vector aircraft through perceived holes in the weather unless a pilot requested it. He would explain the weather that he observed on his radar display and possibly give suggestions on where to go.

He recalled receiving weather-related training within the last month and was a verbal briefing provided by the CWSU as well as computer-based instruction. He remembered the verbal briefing lasted about 45 minutes and covered the difference between moderate chop and moderate turbulence. The CWSU brief also emphasized the importance of soliciting and disseminating PIREPs of a positive nature, such as smooth rides. He stated that he had received weather training as a commercial pilot but did not feel he had a better understanding of weather information than other controllers at KZTL. He said that he would not ask pilots if they had weather radar on board and would expect the pilot would tell him if he needed to know. When informing small general aviation pilots of displayed precipitation, he would always let them know that he did his display did not depict light precipitation, and therefore the pilot may encounter light as well. He said that he would still issue the depicted weather even if a pilot checked in and said he was deviating around weather he could see on his NEXRAD²⁵.

He stated that the primary function of the CWSU was to assist the controllers in relaying weather information to pilots. He had a relationship with the CWSU because he had spent some time in the TMU. Additionally, the CWSU was a huge help for TMU in establishing routings for weather avoidance, and as a controller would reach out to them to get additional weather information if needed. He recalled a pilot recently asking for the cloud tops, so he called the CWSU to get an estimate. CWSU personnel would occasionally communicate with the supervisors about weather when delivering a briefing sheet to the supervisor's desk. The CWSU did not ask controllers to solicit PIREPs, that request would normally come from the supervisor after the stand-up briefing.

He would not have done anything differently if he had been working the R13 position. He thought the controller did a great job and that every pilot reacted differently when issued weather information by ATC.

Interview concluded at 1550 EDT.

²⁵ NEXRAD – Next Generation Radar - a system of Doppler radars across the US that is used to track the location and movement of storm systems.

Interviewee: Eric Batule
Representative: Mark Tomicich – FAA Attorney
Date / Time: April 11, 2017 / 0800 EDT
Location: KZTL
Present: Don Eick – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.
Investigator: Brian Soper

During the interview, Mr. Batule stated the following:

His ATC experience began in October 2008 at the FAA Academy in Oklahoma City, Oklahoma. After successful completion of initial ATC training, he was assigned to KZTL in February 2009.

His regular work schedule was a rotating shift schedule with regular days off on Thursday and Friday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	1100–1900	
Monday	1100–1900	
Tuesday	0600–1400	
Wednesday	2230–0630	(Mid watch from Tue night to Wed morning)
Thursday	Off	
Friday	Off	
Saturday	1500–2300	(Day of accident)

His operating initials were EY and his supervisor was Kenny Smith. He was the FLM at the time of the accident and had also been signed on as the sector 8 radar associate (RA8) controller up until just before the accident. He had no suspensions and two operational incidents involving losses of separation while at KZTL. His collateral duties included the Area 5 Quality Control Liaison but could not recall if he had been assigned to that prior to or subsequent to the accident and had not been on any recent details. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in June 2016. He had a restriction to wear corrective lenses while performing ATC duties and was wearing them at the time of the accident. He had no other waivers or restrictions to his medical certificate. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift and did not recall any unusual distractions around or leading up to the time of the accident. He recalled that there was a line of weather extending from well north of Birmingham to the Gulf of Mexico in the south with moderate to extreme precipitation. However, within his operational area he observed mostly light to heavy precipitation with scattered areas of extreme precipitation. He had reviewed the audio and video replay of the event prior to the interview. He stated there was no training being conducted in the area at or leading up to the time of the accident. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 1 at the time of the accident. On a scale of 1 to 5 (5

being the most complex) he classified the traffic complexity as 1 at the time of the accident. He did not receive a relief briefing from the CIC when he assumed the FLM position but believed that a relief briefing was conducted when he assumed the RA8 position; however, could not recall if it was recorded or if a checklist was utilized. He did not file an ATSAP report as a result of this accident.

He had been on position for between 30 and 60 minutes prior to the accident and did not recall how long he remained on after. While working the RA8 position he heard the R13 controller say something that indicated an aircraft was having an issue with its altitude. He asked the CIC what was happening, and the CIC said a pilot was having difficulty maintaining altitude and was headed into weather. He said the CIC assigned a controller to the D13 position to assist the R13 controller. Mr. Batule then combined the RA8 position with the sector 8 radar (R8) controller position and stood behind the R13 controller to monitor the situation. He observed N6563D going up and down in altitude and then observed a rapid descent. He asked the R13 controller to record the latitude and longitude of the area in which he observed the rapid descent and asked the CIC to provide that information to the Operations Manager (OM) and advise him that an aircraft may have gone down. He said he put a wireless headset on to monitor R13, but not until after the accident. He instructed the CIC to relieve the R13 controller. He recalled that around the time of the position relief briefing that the sector received a call from KBHM approach control advising that they had been contacted by the local sheriff's department who informed them that there was an aircraft down, and that information was coincident with the latitude and longitude provided to the OM. He then advised the OM about the report of a downed aircraft.

Prior to the accident, he had been working in sector 8 which he described as an ultra-high-altitude sector handling traffic at or above 35,000 feet. He said the sector overlaid a similar geographic area which was sector 13 and was located on the opposite side of the operational area. He did not receive a briefing on weather in the area prior to the accident but was provided with a general overview of traffic and weather by the R8 controller when he was opening the RA8 position. He was advised that aircraft were deviating around the weather and that there were reports of turbulence. He was not aware of any convective activity but felt that since aircraft were deviating, there was something more than just precipitation. He was informed that a SIGMET and CWA were active prior to the accident; however, he did not learn this until after the accident. He believed they had likely been disseminated prior to his arrival at the RA8 position since they were not on the EDST. He did not believe the SIGMET area of coverage was near the area N6563D was transiting.

He said PIREP solicitation was required at the time because there had been reports of moderate turbulence. He did not recall any PIREPs for lightning or thunderstorms. He stated that any information about thunderstorm or convective activity was provided to him following the accident. He said that PIREPs were entered via ERIDS and that only those marked as urgent would appear on the EDST. His observation was that it took somewhere between 15 and 45 minutes for urgent PIREPs to appear in the EDST. When asked about dissemination of non-urgent PIREPs to other controllers, he stated that they were passed during controller position relief briefings and via sector-to-sector coordination.

He briefed controllers on any pertinent weather information provided during the facility's 0900 and 1605 stand-up briefings, once he had returned to the area. He added that anytime there was a significant hazard, he would advise controllers. He said that most controllers were already aware of weather conditions because they had already been working. He said that controller briefings on weather usually took place during position relief briefings and the information was better than what he may have been briefed at stand up since it was constantly changing. They did not post weather information to the ESIS²⁶ board in the area and that the main source of weather information was from the WARP²⁷ display above the FLM's workstation or at the sector. He said that the weather settings on the WARP display were preset and would most likely require help from the CWSU to adjust. He said he was familiar with some of the functions of the TSD, including the ability to display weather information. He had no formal training on either TSD or WARP and said he only knew probably about half of what could be done on the TSD.

He received weather briefings during the daily stand-up briefings from the CWSU. He stated that the CWSU used slides during their briefings, but he did not know if there was a way for him or the controllers to access the slides later from within their assigned area. He had some direct interaction with the CWSU when deciding whether traffic may need to be shut off due to weather. However, he also said that the CWSU generally interacted directly with the TMU, and that TMU then assisted the areas with flow. He stated that he had received requests from the CWSU periodically to solicit PIREPs and found the CWSU to be helpful to him.

He described the R13 controller as a strong and technically knowledgeable controller. He said that he was a "great" OJTI and was one of his go-to people for training. He said that based upon the information that was available at the time, the R13 controller was taking the best action possible. In hindsight, he said he would have had the controller turn the aircraft around but that the weather did not look that bad at the time and they were doing the best thing possible.

Interview concluded at 0925 EDT.

Interviewee: Steven Barron

Representative: Dan McCabe – NATCA FACREP

Date / Time: April 11, 2017 / 1200 EDT

Location: KZTL

Present: Don Eick – NTSB, Steven Pinkerton – FAA, Ryan Krejce – NATCA, and Dan Meyers – NATCA.

Investigator: Brian Soper

During the interview, Mr. Barron stated the following:

²⁶ ESIS – Electronic Status Information System – A large display system utilized in ARTCCs to display management selected information in the radar control room. It is often used to display information such as traffic management initiatives, restrictions, and current weather information for use by air traffic controllers.

²⁷ WARP – Weather and radar processor - A device that provides real-time, accurate, predictive, and strategic weather information presented in an integrated manner in the National Airspace System (NAS). Details surface conditions as derived from METAR and other surface observations and is displayed on ATC radar displays.

His ATC experience began in May 2002 when he was hired by the FAA and began working at KZTL.

His regular work schedule was a rotating shift schedule with regular days off on Thursday and Friday. His work schedule for the week leading up to, and the day of the accident was:

Sunday	1300–2200	
Monday	0700–1500	
Tuesday	0645–1345	
Wednesday	2230–0630	(Mid watch from Tue night to Wed morning)
Thursday	Off	
Friday	Off	
Saturday	1500–2300	(Day of accident)

His operating initials were CO and his supervisor was Eric Batule. He was the CIC at the time of the accident. He had been certified CIC for more than six years and was current and proficient on the position he was working at the time of the accident in accordance with facility standards. He stated that he had no suspensions or any documented operational incidents while at KZTL. He held no collateral duties and had not been on any recent details. He recalled nothing remarkable about the 72 hours leading up to the time of the accident, with routine daily activities, sleep, and meals.

He possessed a current second-class medical certificate and his last ATC physical had been conducted in September 2016. He had no waivers or restrictions to his medical clearance. He held no other aeronautical ratings or certificates.

On the day of the accident, he was working his normally scheduled shift and did not recall any unusual distractions around or leading up to the time of the accident. He did recall a pretty heavy line of weather from around Mobile, up the west side of Birmingham, and stretching about 20 to 30 miles into Memphis ARTCC (KZME) airspace. He had reviewed the audio and video replay of the event prior to the interview. He stated there was no training being conducted on the CIC position at or leading up to the time of the accident. On a scale of 1 to 5 (5 being the heaviest) he classified the traffic volume as 2 at the time of the accident. On a scale of 1 to 5 (5 being the most complex) he classified the traffic complexity as 3 at the time of the accident. He said that a relief briefing was conducted when he assumed the position and it was not recorded. He did not perform toxicology testing after the accident.

While working as CIC he was standing behind the R13 position when he heard the R13 controller advise the pilot of N6563D to check his altitude. He looked at the radar display and noticed that the aircraft appeared to be having trouble maintaining 12,000 feet. He plugged a handset into the D13 position and coordinated a point out with KBHM approach control in case they had traffic in the vicinity. He noticed Mr. Hossenlopp arriving to the area and asked him to open the D13 position. He then went to the FLM desk, called the watch desk to inform the OM of the aircraft having difficulties, and afterwards returned to the sector 13 position. Once radar contact with N6563D was lost, he noted the last observed latitude and longitude and forwarded the information to the watch desk for issuance of an ALNOT. He was relieved as CIC by Mr. Batule,

and then he proceeded to relieve the R13 controller. Shortly after assuming the R13 position, he received a call from KBHM approach control informing him that an aircraft accident had been confirmed by the sheriff's department.

When he had received his position relief briefing upon assuming CIC duties, he was told about the weather in the area and that not many aircraft were flying through the line of precipitation. He did not recall if there were SIGMETs for the area but did not have any reports of lightning. He said that the SIGMETs would not print on strips but instead they were sent as electronic messages and were displayed on the EDST.

It was a common practice for controllers to staff the CIC position, which routinely occurred about four hours of every shift. CICs did not normally attend the stand-up briefings and did not normally brief controllers arriving for their shifts about weather information in the area. The CWSU weather outlook brief was available for reference if the controllers wanted it, but normally controllers would get pertinent weather information from the controller that they were relieving during the position relief briefing. When asked if he was wearing a headset, he said that CICs did not normally wear wireless headsets in the area like the FLMs did, but he would keep his headset on and ready if the area was busy.

He said that the CWSU would give a weather briefing to supervisors twice a day and that the FLMs would return to the areas and brief the controllers on any pertinent weather information. The CWSU would also deliver a weather outlook briefing sheet to the area desks twice a day. Occasionally, the CWSU would call or come to the area with weather information as well, but CICs did not normally reach out to the CWSU unless they need assistance in entering PIREP information. When asked if a daily weather briefing at the beginning of the shift would be valuable, he reiterated that controllers would normally get weather related information from the controller in which they were relieving, and some days there would not be any weather at all.

Mr. Barron noted that the last time he was trained on weather dissemination was about a month ago when he had received a face to face spring weather briefing by Dr. West from the CWSU. He said that the information was well received by the controller workforce and felt that having a knowledgeable, respected source present the information made it more beneficial.

When asked if anything could have been done differently that may have helped prevent this accident or others in the future, he did not feel there was much more they could have done. They had advised the pilot of the depicted precipitation and there was no way to tell he was going to get into the system they had told him about. If a pilot indicated that he wanted to go into an area that no other aircraft had flown through, he ensured the pilot was aware of that fact. Even if the pilot stated that he had weather radar or weather information, he still informed them of the precipitation that he had displayed on the radar display.

He did not have much direct interaction with the CWSU. He said that the CWSU forwarded PIREPs to the controllers and that he rarely called them to request information. He said that PIREPs were input by the controller into ERIDS and believed that they then went to the CWSU who would then forward them to the appropriate sectors. He did not know if all PIREPs made it back into the EDST after they were submitted. He agreed that some PIREPs had not made it into

the system because the ERIDS was so cumbersome. He stated that if he had a way to input PIREPs directly on the radar display, he would likely submit more.

Interview concluded at 1300 EDT.