

Factual Report – Attachment 1
Interview Summaries

AIR TRAFFIC CONTROL

CEN16FA286

Interviewee: Curtis Endsley
Representative: None

Date / Time: August 2, 2016 / 1100
Location: SGR Air Traffic Control Tower (ATCT)
Present: Paul Suffern, Jack Clark, Eric Stormfels
Investigator: Charles Olvis

During the interview Mr. Endsley stated the following:

Mr. Curtis Endsley began working as an air traffic controller for Robinson Aviation (RVA), Inc. in November 2006, at Scholes International Airport, Galveston, Texas (GLS). In 2012, he transferred to Sugar Land Regional Airport (SGR), Sugar Land, Texas, and was qualified on all operating positions. He held no other aeronautical ratings and his medical certificate was current with a restriction to wear corrective lenses which he was wearing the day of the accident. His supervisor was Carl Robinson. Mr. Endsley was job sharing the RVA controller position with another controller. They would share a schedule and worked five days on, five days off starting on Tuesdays and ending on Saturdays.

Mr. Endsley's previous ATC experience was with the FAA. He began working for the FAA in February 1980 reporting to the FAA training facility, Oklahoma City, Ok. After completing the training facility, he reported to Waco Regional Airport (ACT), Waco, Texas. In 1982, he transferred to Austin International Airport, Austin Texas (AUS), and in 1984, transferred to George Bush Intercontinental/Houston Airport //TRACON (IAH) where he worked as a certified professional controller (CPC) and traffic management coordinator (TMC). In 1989, Mr. Endsley transferred to Kansas City International Airport(MCI), Kansas City Missouri, where he worked as a front line manager (FLM). In 1990 he was selected for a supervisor position at IAH where he worked as a FLM, remained until his retirement from the FAA in 2005. Prior to the FAA, he was an air traffic controller with the United States Air Force (USAF) stationed at various bases from 1976 until 1980.

On the date of the accident Mr. Endsley worked a 1415 to 2215 shift. It was his first day back from his regular day off, and when he reported to work, he reviewed the Daily Record of Facility Operation-FAA Form 7230-4 or "dash 4," ASOS weather, watch check list, the briefing binders, the aeronautical information system replacement (AISR)¹ and the terminal area forecast (TAF). At 1415, Mr. Endsley assumed the ground control (GC) and controller in charge (CIC) positions and was briefed by the local controller (LC) Wes Loveday on airport operations. SGR was on normal operations utilizing runway 17, however, weather was developing rapidly from the southeast of Sugar Land moving towards the northwest.

Within fifteen to twenty minutes of starting the shift, "popcorn cells"² had developed over the area. Weather in the Houston area normally moved from the northwest to the southeast, but

¹ 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 Federal Aviation Administration Air Traffic facilities.

² Popcorn cells are small individual areas of convective weather that form in an area.

this weather was moving from the east to the west which historically meant stronger storms. A level 5 to level 6 thunderstorm had developed southeast of SGR moving northwest, and light to moderate rain had begun to fall on the airport. Moderate rain was on the tower cab windows but was not interfering with operations. The wind had begun blowing from 330° at 7 knots and Mr. Endsley had not initially observed it or had been anticipating it. Due to the northwest winds, Mr. Endsley changed runways to runway 35 and the airport remained visual flight rules (VFR) on the new automatic terminal information service (ATIS). Five knots of tailwind was his threshold for initiating a runway change.

When OPT362 was inbound to SGR on a 7 mile final, Mr. Endsley told the LC that the wind was really increasing. The ASOS provided numerous special weather observations (SPECIs) and that not a minute would pass without new ASOS information being displayed; he could not keep up with the changes. The tower visibility was at least three miles, with much better visibility to the west and north. Mr. Endsley continued to concentrate on the wind, and heard the LC give the wind to OPT362 again when the aircraft was on a three mile final.

While OPT362 was on the ILS approach, a VFR Guard helicopter was arriving SGR from the north to runway 35. Mr. Endsley saw the LC take the automated handoff from Houston TRACON (I90), on the tower display workstation (TDW). Mr. Endsley said that at the time of the handoff, it looked like the helicopter from the north, and OPT362 from the south would be at the airport at the same time. Mr. Endsley heard the LC tell the helicopter pilot to report one mile north of the airport and that at the time, OPT362 was on a 3 mile final. Mr. Endsley heard LC tell the helicopter to proceed to the ramp via the parallel taxiway. He looked out the cab window and observed the helicopter over the numbers of runway 17; at a very low altitude. When OPT362 was a mile on final, the helicopter was still over the numbers. He observed the helicopter move to the right of the runway as OPT362 was rolling out and travelled past the helicopter.

As OPT362 was near taxiway Delta (approximately 2,000 from the end of the runway), Mr. Endsley heard the pilot report that his brakes were failing. He observed the aircraft was not braking and was going too fast to stop by the end of the runway. The aircraft continued toward the end of the runway and the pilot turned the aircraft to the west (left) while sliding off the end of the runway coming to rest on the other side of Oyster Creek. Mr. Endsley immediately picked up the “crash phone³” to report the accident. Initially, the crash phone did not work, and he was forced to use his cellular telephone. SGR airport was closed for some time, and eventually opened back up with the restriction of landing runway 35 and departing runway 17.

At the time of the accident, Mr. Endsley could see both ends of the runway, and believed the visibility was three miles with moderate rain. The visibility was better to the west than the north or south. When augmenting the ASOS weather observation with controller observed visibility readings, Mr. Endsley would typically adjust the visibility reading, but at the time accident, was focused solely on the wind reading. The opposite direction operation with the helicopter and OPT362 was a concern because it was going to be “ugly.” Mr. Endsley believed OPT362 was going to go around due to the wind. He had observed level one through level five

³ The crash-phone circuit is a direct-wired intercommunications system that is installed between stations involved in emergency responses. The system’s purpose is to provide an immediate means of communication to primary emergency activities, so they may notify all essential supporting activities.

weather intensities being displayed on the TDW and trusted the standard terminal automation replacement system (STARS) weather radar returns. He had not observed any lightning prior to the accident.

Mr. Endsley thought the Guard helicopter pilot was confused with the landing clearance, and that they would normally be sent directly to the terminal ramp. He did not hear the Guard helicopter pilot request special visual flight rules (SVFR), and since the airport was VFR, could not understand why he would ask for SVFR.

Mr. Endsley received very limited PIREP information from pilots and did not solicit PIREPS as often as he should; he used “real time” weather information to determine the need for a PIREP. The aeronautical information system replacement (AISR) was the system utilized to input PIREPs; and Mr. Endsley believed it was easier to submit a PIREP in the AISR, than to call Flight Service. AISR was a good system, but he did not use it enough. Mr. Endsley had not solicited a braking action report and said that runway 35 did have problems with standing water. The first 2,000 feet of runway 35 had been under water in the past but was not under water at the time of the accident. Mr. Endsley had not observed a “rooster tail” of water from OPT362 as the aircraft was rolling on the runway.

Interview concluded at 1130.

Interviewee: Wesley Loveday

Representative: None

Date / Time: August 2, 2016 / 1300

Location: SGR Air Traffic Control Tower (ATCT)

Present: Paul Suffern, Jack Clark, Eric Stormfels

Investigator: Charles Olvis

During the interview Mr. Loveday stated the following:

Mr. Brian Loveday began working for RVA in October 2007 reporting to Laredo International Airport, Laredo, Texas (LRD). In August of 2009, he transferred to SGR. Prior to working for RVA, he had served in the United States Navy as an air traffic controller from January 1990 until July of 1999 and had been stationed at San Diego Naval Air Station (NAS), and Kingsville NAS (NQI). From October of 2000 to September 2001, Mr. Loveday worked for RVA at Valley International Airport, Harlingen, Texas (HRL). From September 2001 until September 2004 he worked at Stewart International Airport, New York (SWF). Mr. Loveday worked for Midwest ATC Services from September of 2004 to September of 2005 at Bagram Air Base in Bagram, Afghanistan.

Mr. Loveday was qualified on all operating positions at SGR and was designated as a CIC. He held no other aeronautical ratings and his medical certificate was current with no restrictions. His immediate supervisor was Carl Robinson. He was LAWRS certified at SGR in September of 2009.

On the date of the accident, Mr. Loveday was working a 1200 to 2000 shift. It was a typical day and he followed his normal routine. He began the shift by checking the status board, the facility log, and then signed on the local control position. Mr. Loveday said it was a slow day with thunderstorms in the area and noted that there were not a lot of small aircraft flying. Mr. Loveday's daily routine and checklist items were to retrieve the terminal aerodrome forecast (TAF) and notices to airmen (NOTAMS) from the AISR system. This was done once in the morning via a collective screen on the AISR, printed, and placed in the daily briefing binder. Mr. Loveday signed on the local control position when he first started his shift, and then assumed the ground control and controller in charge positions. Mr. Endsley relieved Mr. Loveday from the combined GC and CIC position.

Mr. Loveday described the weather as visual flight rules (VFR), clear, with thunderstorms to the southeast Houston area. The weather began to deteriorate at about 1500, which was about a half hour before OPT362 arrived. The weather had deteriorated rapidly with light rain and thunderstorms during the OPT362 ILS approach.

Runway 17 was initially designated as the active runway before OPT362 arrived in the terminal area, but SGR changed landing directions to runway 35 due to wind from the north at about 300°. As OPT362 approached the airport, there was light to moderate rain depicted on either side of the runway 35 final approach course; they appeared to be moving west. The weather to the northwest of SGR was a little clearer, but there were dark rain clouds to the east moving west. The east was a little bit worse with rain and lower clouds. Mr. Loveday said there was not much rain on the airport prior to the accident, but that moderate rain was approaching the approach end of runway 35. Light rain was present over the departure end of runway 35 prior to the accident.

The pilot of OPT362 contacted SGR ATCT when the flight was on a 7 to 8 mile final approach. Mr. Loveday observed light to moderate rain and visibility of 3 to 4 miles to the north. He provided the pilot of OPT362 a wind check of 140° at ten knots which had been observed on the mid-field wind sensor; the ASOS had provided the same or similar wind reading. About 42 seconds later, when OPT362 was on a 3 to 4 mile final, Mr. Loveday provided OPT362 a wind check of 150° at 13, gust to 20 knots. Mr. Loveday had obtained that gust information from the ASOS. With the wind conditions changing, he felt he should have offered OPT362 an opportunity to circle to runway 17. Mr. Loveday discussed the wind with Mr. Endsley, who was in the process of changing the active runway from runway 35 to runway 17. At that time, Mr. Loveday observed the wind at 150° at 15 gust to 20 knots on the ASOS.

When G72231 reported 6 to 7 miles north of the airport, Mr. Loveday instructed the pilot to report 1 mile north of the airport. Mr. Loveday's intent was to have G72231 land on taxiway foxtrot, but there were two aircraft taxiing out to runway 17 on taxiway foxtrot. He changed his plan to have the guard helicopter proceed direct to the ramp after OPT362 landed. Mr. Loveday was looking to the north at the helicopter as OPT362 landed. The helicopter had been a little closer to the runway than he had expected it to be and noted the helicopter pilot had not reported one mile north as directed. The helicopter did not appear to be over or on the runway but could have been over Oyster Creek. It was difficult to determine the location due to the blades of the helicopter being below the tree line. Mr. Loveday and Mr. Endsley discussed the location of the helicopter and Mr. Loveday instructed the pilot to remain west of the runway. He did not perceive a danger

to the operation if the helicopter was over the perimeter road. When OPT362 departed the end of runway 35, the helicopter was west of the runway and over the access road in a hover but slowly moving toward the south.

Mr. Loveday said that G72231 had requested special VFR handling, but he did not understand why. He thought maybe G72231 was encountering weather below VFR minimums at his location, but he was not sure. Mr. Loveday believed the request could have been because the weather was getting lower to the south. Mr. Loveday had not considered having the helicopter depart class D surface area and reenter.

When OPT362 was on a one mile final, Mr. Loveday noticed that the weather was moving further north to near the airport midfield. It appeared to Mr. Loveday that it was moderate rain, but would not describe it as heavy. The visibility at this time was decreasing to 2 miles from the southeast through the south and said the prevailing visibility was 5 miles.

There had been two aircraft that had landed runway 35 before OPT362; N3ZC and N360M. Mr. Loveday had not solicited PIREPs from either aircraft. He could not recall if the runway was dry or wet, and believed at worst it was damp. During the NTSB interview, Mr. Loveday reviewed the security footage of OPT362 landing, and said it had been heavy rain, which was more than what he had perceived it to be at the time of the accident.

Mr. Loveday solicited PIREPs as a matter of routine, but he had not solicited one from OPT362. He usually requested PIREPs by saying "say flight conditions." Mr. Loveday generally only gave pilot reports to the pilots on his local frequency. He was aware how to input PIREPs into the national air space system via AISR but did not use it enough. Mr. Loveday had asked a previous arrival about the "ride" on final, and remembered the pilot response was "not bad, with cracks of lighting." He forwarded that PIREP to the I90 approach controller.

In previous years, the first 2000 feet of runway 35 had flooded. During severe thunderstorms and heavy rain, it generally accumulated quite a bit, but remained off the usable portion of the runway. This happened mainly on the southern side of the airport in the displaced threshold area. Mr. Loveday generally did not solicit braking action reports for standing water on the runway.

Opposite direction procedures were established for IFR aircraft. There were no procedures that established cut off points for VFR aircraft. Mr. Loveday generally used 1 mile as a cutoff point for VFR flights, but said it was not required. He did not consider the G72231 and OPT362 to be an opposite direction operation because G72231 was a VFR helicopter, opposite direction procedures were not required.

The STARS TDW precipitation intensity as OPT362 executed the ILS approach was observed west of the extended centerline as light to be moderate precipitation, and east of the centerline heavy to extreme. He did not observe any orange color with stippling, west of the final approach course, displayed on the TDW. The weather preference settings he had selected on his TDW included setting one through six.

Mr. Loveday considered the LAWRS training to be very difficult, but effective. The training included computer based training (CBI), book based, and on the job training. His LAWRS test was not proctored by anyone and was open book, but he stated it was very tedious and still required knowledge. They had recently made changes to the test, mainly to how the test questions were formed but that it was still very hard. He added they were taking recurrent LAWRS training right now, and it was still a bear.

OPT362 was not “sent around” due to Mr. Loveday’s lack of knowledge of the aircraft capabilities. He did not know much about the performance factors for many of the aircraft that use the airport. He could identify them on the ramp, but did not know their systems or performance. Since the accident, Mr. Loveday has learned that the E55P had a single braking system. He was only required to send an aircraft around for separation or if there was something on the runway.

Mr. Loveday had considered circling OPT362 to runway 17 after the accident but had not offered it to the pilot. He thought circling to the west would have been possible. Since the accident he realized he could have placed an “OD” in the STARS tag of OPT362 and asked him to circle indicating to I90 that the aircraft would be landing runway 17.

He had received some training both on the job and via computer based instruction (CBI) about STARS TDW equipment. Some of the information contained in the training will never be used by controllers at SGR, but it was good training. Mr. Loveday said that he had learned a lot about the equipment from Mr. Endsley.

Mr. Loveday had not observed rain or spray coming from OPT362 as the aircraft exited the runway. He observed the aircraft turn as it was going off the runway end and was unaware that the aircraft had come to rest across Oyster creek. He had attempted to locate the aircraft with binoculars, but thought it was on the south side of the creek. After the aircraft came to rest, he instructed the Guard helicopter to proceed to the ramp. Mr. Loveday did not attempt any further communications with the pilot of OPT362. Just prior to the runway excursion, Mr. Loveday recalled the pilot had stated something about losing his brakes. He stated Mr. Endsley had tried activating the crash phone, but received a busy signal. Mr. Endsley immediately used a cellular telephone to notify the emergency equipment. He stated that the crash phone was tested weekly as required. About one minute after the excursion, Mr. Loveday observed a person, who had gotten out of the airplane, walking around.

According to Mr. Loveday, the visibility from the ASOS was at times not very accurate. The ASOS would sometimes report a lower visibility than the tower had observed, or at times could report a higher visibility. He had access to tower visibility charts via the information display system (IDS) equipment in the tower cab. There were areas of the national airspace system information display system (NIDS) they could use for customized or tailored information, and he considered the response from I90, which managed the system database, as being excellent. The PIREP red and green button procedures were used when they were required to solicit PIREPS. There was no place on the SGR tower IDS page to enter the actual text of PIREPS. Generally, PIREP information from SGR was provided to approach control over the shout line.

Interview concluded at 1500.

Interviewee: Kyle Dohmen
Representative: None

Date / Time: August 3, 2016 / 0930
Location: Houston Terminal Radar Approach Control (I90)
Present: Paul Suffern, Jack Clark, Eric Stormfels
Investigator: Charles Olvis

During the interview Mr. Dohmen stated the following:

Mr. Kyle Dohmen, began working for the FAA in June 2002 when he reported to the FAA training facility in Oklahoma City, Oklahoma. After completing the training facility in August 2002, he reported to Lincoln Airport, Lincoln, Nebraska (LNK). In July of 2009, he transferred to I90 where he has remained. Mr. Dohmen was a graduate of the Beaver County Community College collegiate training initiative (CTI) program prior to joining the FAA.

Mr. Dohmen held a private pilot certificate but was not current. He maintained operational currency at I90 on West departure, South departure, and flight data (FD). While on duty, he was responsible for the safe and efficient operation for the entire TRACON. His regular days off were Saturdays and Sundays and his supervisor was Mike Richardson.

On the day of the accident, Mr. Dohmen worked a 12:30 pm to 8:30 pm shift. When he arrived at work he checked emails, and the comprehensive electronic data analysis and reporting (CEDAR)⁴ for any briefing items, and then went into the TRACON operations room to receive a briefing from the FLM on duty. He would either take the podium watch and assume the Watch Supervisor (WS) duties or become the “floor walker” supervisor. As the WS supervisor, he would handle position assignments, takes phone calls, and support the operation as needed. As the “floor walker” supervisor, he would directly supervise air traffic controllers, assigned controller positions, and support the operation as required. On the day of the accident, Mr. Dohmen was assigned the WS position.

After receiving a brief from the day shift FLM, Mr. Dohmen went to the traffic management unit (TMU) to receive a brief by the Traffic Management Coordinator (TMC); specifically, to get a picture of what air traffic was coming into IAH and William P. Hobby Airport (HOU). His focus was on where the traffic was to properly plan the watch. He also received a weather briefing from the TMC and checked the forecast. He did not remember exactly what the weather was at that time but was aware that there were “popcorn cells” all over the airspace.

Mr. Dohmen became aware of the accident involving OPT362 after the Lakeside sector approach controller was notified by SGR Tower. The controller working the Lakeside position told Mr. Dohmen that OPT362 had gone off the end of the runway. He went to the TMC and told

⁴ According to the FAA JO 7210.789, CEDAR “provides air traffic management with an electronic means of assessing air traffic employee performance, managing resources, and capturing safety-related information and metrics. The tool will provide a standard interface for collecting, retrieving, and reporting data from multiple sources.”

them to advise Houston ARTCC (ZHU) that I90 would not be taking any arrivals to SGR; assuming the runway was closed. Mr. Dohmen waited several minutes before he called SGR ATCT, because he knew they would be very busy coordinating emergency services. When Mr. Dohmen contacted SGR, he asked them if they had called the FAA regional operations center (ROC), and they replied they were doing it.

Later in the watch, the ROC called Mr. Dohmen to see if he had called the domestic events network (DEN); which he had already notified them. Additionally, the ROC wanted specific information concerning the accident. Mr. Dohmen told them that he did not have any information but would contact SGR. He called the operations manager (OM) to advise him of the accident and what was going on. At some point, SGR called Mr. Dohmen and gave him the number of “souls on board” (SOB) and advised that airport authority had closed the runway.

On a day, like the day of the accident, most controllers would solicit PIREPS. To “move the airplanes,” they generally did not pass them back to FD because they were using it for “real time” information passing to aircraft they were communicating with. Most PIREPS did not get the data input into the AISR. Mr. Dohmen said that he asked for “ride/turbulence” reports; it was a good thing to do when there was weather in the area. The normal PIREP procedure was for controllers to write down the PIREP and give it to FD controller. The FD controller disseminated the reports via the AISR, and the PIREP page on the NIDS. After FD was finished, they bring the form back to the FLM.

Mr. Dohmen thought putting every PIREP into the system would be “overload.” Maybe one PIREP an hour would be appropriate, especially with the constantly changing weather conditions experienced in the Houston area at that time of the year. A PIREP obtained at any given time may very well be useless in a very short period thereafter. When he worked the floor, he was encouraged by the arrival feeder control positions to solicit PIREPs for traffic management purposes.

Mr. Dohmen had not given the PIREP process much thought. Earlier in the year, each control position had PIREP forms and pens for controller use. He did not know why the forms were not on every position now, and could not remember if there were any formal direction or procedures set forth in the standard operating procedures (SOP) or other facility directives.

Mr. Dohmen had not noticed any differences in the displayed weather between the STARS systems and the Terminal Doppler Weather Radar (TDWR) in the past.

Interview concluded at 1030.

Interviewee: Samuel Romero

Representative: None

Date / Time: August 3, 2016 / 1300

Location: SGR Air Traffic Control Tower (ATCT)

Present: Paul Suffern, Jack Clark, Eric Stormfels

Investigator: Charles Olvis

During the interview Mr. Romero stated the following:

Mr. Samuel Romero began working for the Federal Aviation Administration in January of 1998 as part of a cooperative education program at San Juan ARTCC (ZSU), San Juan, Puerto Rico. He attended the FAA academy from January of 1999 to May of 1999 and was assigned to ZSU in May of 1999. In June of 2004, he transferred to Philadelphia Tower/TRACON (PHL), and in April 2006, he resigned from the FAA to pursue other opportunities. He moved to Texas in 2007 and was rehired by the FAA in March 2008 to work at HOU. He transferred to I90 in August 2010. He was qualified on all operating positions in I90. He held no other aeronautical ratings and his medical certificate was current with a restriction for eye glasses which he was wearing. His immediate supervisor was Tom Croteau.

On the date of the accident, Mr. Romero was working a 1500 to 2300 shift. He had arrived to work at 1430, checked the CEDAR, read the “read and initial” data, conducted weather pre-brief, and checked in at the watch supervisor’s desk for his position assignment. Traffic was light on the day of the accident with popcorn thunderstorms in the area. He was instructed to relieve the Lakeside sector controller. After he received a position relief briefing, he assumed operational control of the position. He noted that SGR was originally landing runway 17, but the wind shifted, and they started landing runway 35. There were three arrivals inbound to SGR; OPT362 was the last arrival in that string.

The first two arrivals landed SGR without incident or complaint. OPT362 asked what the proceeding aircraft had encountered on final, and Mr. Romero continued to issue precipitation around the airport, ATIS weather, and PIREPs from the previous arrival. Mr. Romero vectored OPT362 around some of the weather. Before turning final approach, the pilot of OPT362 asked for alternate missed approach instructions. Mr. Romero issued the pilot a 270° to 290° heading and to maintain 2,000 feet mean sea level (msl). This was done to give the pilot latitude to deviate from the weather should he needed to execute a missed approach. The pilot incorrectly read back 3,000 feet msl and Mr. Romero corrected the read back error.

Mr. Romero reduced the speed of OPT362 to 190 knots, to make sure the aircraft did not go through the final approach course and encounter the extreme precipitation he had observed on the east side of the final approach course. Mr. Romero asked SGR about the “ride conditions” of the previous arrivals, and forwarded the report to the pilot of OPT362. He then transferred communications with OPT362 to SGR ATCT. OPT362 was established on final approach and looked good throughout the approach. SGR called and said they were changing the runway back to runway 17.

Mr. Romero first realized there was a problem at SGR, when they called and suspended runway operations. The SGR local controller said that an aircraft had gone off the end of the runway.

Mr. Romero had called the weather to the east side of the ILS runway 35 final approach course as extreme, “because that is what he saw,” and that is what he issued. His experience with weather levels displayed on the STARS display varied. Mr. Romero issued moderate precipitation

to pilots, to which they replied that it was light to nothing with a smooth ride. He did not like to underestimate the weather or precipitation intensities.

SGR had standing water issues on the runway during periods of heavy rainfall. Mr. Romero said it had flooded once at the end of the runway in May of 2015. He was not aware of which end of the runway was impacted by the flooding, or that there was a displaced threshold on runway 35 of 2000 feet.

Mr. Romero did not remember the FLM requesting him to solicit PIREPs on the day of the accident. He said that he was very focused on the operation and the area weather. PIREPs were normally solicited when the weather was less than 5,000 feet ceilings and less than 5 mile visibility. Mr. Romero also solicited them during rapidly changing weather conditions, and when weather was impacting the operational area. He would normally write the PIREP information down on a pad of paper, and the FLM would then take the PIREP and hand it over to the FD controller for processing. The new system for entering PIREPs was used by the FD controller. They would enter the information into the AISR and the NIDS equipment. He stated he always issue center weather advisories and sigmets; they would show up on the NIDS equipment flashing red.

Mr. Romero did not “quick look” the SGR STARS general information on his radar display. He used the information from the NIDS display to issue the ATIS code and weather to pilots. Mr. Romero was unaware of a piece of equipment where he could see the SGR direct ASOS wind observation. He was aware of IAH and HOU airports direct wind readout on NIDS, but not SGR airport.

I90 did not sequence VFR arrivals for SGR airport. He did not consider the G72231 helicopter to be an opposite direction arrival from the north, and did not like to use opposite direction operations. Mr. Romero believed he had read G72231 the METAR information for SGR.

Interview concluded at 1500.