Interviewee: Lisa Caruso, Wife of accident pilot
Date/Time: July 3, 2019, 1000 edt
Location: via telephone
Present: Katherine Wilson – NTSB
Representative – Bradley J. Stoll, attorney at Katzman, Lampert & Stoll

During the interview, Mrs. Caruso stated the following:

They were in Florida on vacation for a week the week before the accident flight. Her husband had no problems falling asleep or staying asleep. On vacation, he would go to sleep about 2200 and wake up about 0700. The day before the accident, they flew from Florida to Milwaukee, had lunch and then drove home, about a 4 hour drive. She did not recall when he woke up the day before the accident but thought their flight was early, about 0800 or 0900 departure time. The night before the accident, she thought they went to bed about 2100-2130. He had no problems falling asleep or staying asleep. She was not sure what time he woke up the day of the accident because she was working, but they usually took their daughters to daycare about 0800.

The morning of the accident she had flying duties. She had worked for Air Methods for about 10 years and had no concerns about the schedules. Pilots in general were not fans of the trading program but they did not have that issue at their base. The company moved to flight simulators that she did not think were realistic and did not handle like the aircraft; she was not a fan. This occurred the first year they went to the AStar simulator; recurrent training included time in the simulator then a line flight in the aircraft. She did not like the simulator for practicing emergency procedures during recurrent training. She was no longer flying since the accident.

The day of the accident, her husband went in early; he was working the night shift. She was asked to take the flight but could not take it because of her duty day. She thought her husband went in 45 minutes early. Prior to going on duty, he would drop off their kids and then rest during the day; he would also sleep during the day. She saw him the day of the accident, but they did not talk about his rest.

She and her husband did the shift change together; it was a normal briefing. She helped him get the aircraft out and ready. He did not say anything about being tired or not rested; he seemed fine.

They worked 7 days on and 7 days off, then 7 nights on and 7 nights off. They would adjust fine to the schedule shift and they would not do anything different to prepare when switching from the day to night shift. They did this schedule for a decade so “you adjust”.

He never had a discussion with his doctors about any sleep issues and did not take any medications; he intermittently took vitamins. For exercise, he would go hiking and take walks but did nothing rigorous. He did not have any illnesses in the days preceding the accident.

They had a company cell phone for the program that stayed at the base. The hangar had a pilot quarters which consisted of an office and room with a TV and bed. There was a dispatcher on duty who was located in Weston. Pilots would get weather on their own; they would use a computer at the base to look at METARs, TAFs, radar, and forecast. They would pull the weather for the whole

trip; it was a 5-hour trip to Madison and back. Pilots would get weather between legs using their cell phones. They mostly looked a lot at METARs.

She had flown the route of the accident flight; it was not too common but maybe flew it a few times a month.

The helicopter handled turbulence “pretty well”, but she thought it was pretty calm the night of the accident. There was no SAS (stability augmentation system) or autopilot on the accident helicopter but it handled fine with regards to maintaining altitude and heading.

Company dispatch would flight follow the flights; they did not do flight following with the FAA.

It was pretty typical to fly about 1000-1500 feet agl.

She was no longer flying with Air Methods so was not sure if there was any information shared about the accident with pilots.

Pilots could call a “time out” if they were exhausted. Their current base was a slower base and they did less time outs than when at their previous base. There were no repercussions if a pilot called in fatigued. She could not remember if her husband had ever called a “time out” but she was sure at some point over a 10-year career that he had. Pilots were never pressured to take a flight when they were tired or fatigued, or if there was marginal or questionable weather. If a pilot said they could not take the flight, it would depend on the situation but normally they would call the next closest aircraft which; sometimes it was at a different company. There was no patient information shared with pilots during a request to take a flight but sometimes pilots would hear some stuff.

During a flight she would sometimes have a conversation with the flight medics. One of the flight medics on the accident flight enjoyed hunting and she thought he would talk about that during flights.

She did not know of any pilot safety concerns; it was just standard disgruntled work stuff like wanting more/better equipment on the aircraft like autopilot or a second engine.

Neither she nor her husband had concerns about working the night shift; it was only 7 nights a month. She thought a pilot would call a time out before they felt tired in flight. Her husband never mentioned falling asleep or difficulty staying awake when flying. There was no guidance from Air Methods about what to do if a pilot became tired during a flight.

She thought the flight from base to Milwaukee, which was a little past Madison, was the longest leg they flew but they did not do that often. The flight to Madison was probably the most standard long route they flew.

She had nothing else to add to the interview.

Interviewee: Chad VerBerkmoes, Former Regional Aviation Manager for North Central Region
Date/Time: September 6, 2019, 1613 EDT
Location: via telephone
Present: Katherine Wilson – NTSB, Scott Tyrrell – FAA

Mr. VerBerkmoes declined representation.

During the interview, Mr. VerBerkmoes stated the following:

His title was EC-145 check airman at Air Methods, but he had just moved to the training department in June 2019 and was currently working as a training captain because he had not yet completed his "339 ride"[1] with the FAA; the ride was scheduled for October 2019. Prior to this position and at the time of the accident, he was the regional aviation manager for the North Central Region starting in May 2017, and prior to that he was a line pilot. His date of hire was November 2005.

As the regional aviation manager, his duties and responsibilities included certification compliance issues at bases and a few other items at the base, specifically, pilot functions; the duties were broad and could cover anything from scheduling to disciplinary action, basic paperwork, and keeping aircraft databases current and compliant. In the manager role, he remained current in the EC-145 aircraft and would ferry aircraft or pull shifts occasionally. When he was line pilot he flew out of Marshfield, Wisconsin, which was the sister base to the Woodruff, Wisconsin, base; the regional aviation manager position was home based and covered the eastern part of the North Central Region – Wisconsin, Minnesota, Iowa and Nebraska.

He had about 4200-4300 hours total time of which about 1100 hours were in the EC-145. He held a commercial rotorcraft/helicopter, instrument rotorcraft/helicopter, CFI and CFII ratings.

As the regional aviation manager, he reported to the regional aviation director. There were roughly 60 bases in the North Central Region with 1 director and 2 regional managers. The managers split the bases west and east so they each roughly oversaw 30 each.

He tried to visit the bases twice a year, but sometimes more often depending on different things that might be going on at the base.

Each base had a base lead who was primarily tasked (at the time of the accident) with maintaining the schedule, conducting minor base audits for aircraft and passing them to the records department. The base lead was also the go between for pilots and managers, and the point of contact for customer, such as the hospital base. Asked who the lead pilots reported to, he said it was a bit complicated at the time of the accident. Air Methods had just gone through a management restructure; aviation managers were tasked with compliance issues and area managers who worked the business side. The base leads reported to both managers depending on the issue.

He knew the accident pilot "pretty well". He never flew with him as they did not have an opportunity to fly with pilots at the company and Mr. VerBerkmoes was not qualified in the AS-

[1] FAR 135.339 check airman check ride

350. He had never heard any complaints about him. The accident pilot was very likable and other pilots had a lot of trust in him in terms of judgement and decision making.

The accident pilot came to the Woodruff base from another base. As the regional aviation manager, Mr. VerBerkmoes worked with counterparts from the region the accident pilot transferred from and they had good things to say about the accident pilot. Now that he was working with the check airmen, they always had good things say about the accident pilot.

The regional aviation managers would audit training records twice a year in Denver, but they would not audit their own region. If there was a training issue in his region, such as a pilot failing a check ride, he would be notified. He did not recall any issues with the accident pilot while he was the regional aviation manager.

There were 4 pilots at the Woodruff base and that was considered fully staffed. There was always 1 pilot on duty, day and night, working 12 hours shifts. Most pilots worked 7 days or nights on and 7 days off but some bases scheduled pilots for 3 days then 4 nights on; Woodruff did 7 days on/off. The base was run by the lead pilot who managed it day to day but the choice of pilot schedules was left up to the base. The shift change day was Thursday for the 7 on/off or for the 3/4 shift, the shift change days were Friday and Monday.

Vacations were scheduled through the area manager not the aviation manager. Pilots would request it through the online system and it would be approved by the area manager. The accident pilot and his wife worked opposite schedules and special consideration was given when they took vacation together to make sure the shifts were covered. After the couple would return from vacation, they would normally fall back into their rotation. A schedule would not be typically be adjusted based on someone coming back from vacation but that did not mean that it could not be. Pilots could do trades and make schedule adjustments with each other.

Some pilots preferred to work night shifts and some preferred day shifts. What shift a pilot worked was not necessarily related to vacations. A pilot might have to work harder to transition back to a night shift after being on vacation. There was no specific guidance as to how to handle off duty time outside the requirement that a pilot could not be scheduled for duty when they were off duty. It was the pilot's responsibility to show up rested for their shift.

It was not very often that a pilot would be called to come in early for a shift. That was usually handled at the local level. If the base felt that the pilot was up, someone might call ask if they could come in early if able. A pilot must have 10 hours off duty before they can log back in for duty via the 411 system. If a pilot needed to stay late, they might need to call in management but not for coming in early for a duty period.

Pilots completed a digital risk assessment on the iPad which was reviewed and approved by the OCC in Denver. If a pilot declined a flight, there was no pushback from the company but depending on the reason like various tracking requirements or duty time restrictions, upper levels might get involved to see if someone else could take the flight.

As a line pilot, Mr. VerBerkmoes never felt pressure from the company to take a flight but he thought there might be some self-induced pressure. Regarding fatigue, ultimately it was up to the pilot to know if he was fatigued or not fatigued. There were no repercussions if a pilot was fatigued. The pilot would be told to go home and get rest and let the company know when they could return. He had never called in fatigued personally but he was aware of a few instances where a pilot had done that. They were so few and far between he could not recall a story about a pilot calling in fatigued. The company would not want to force a pilot to fly if they were fatigued. If a pilot was calling in fatigued on a regular basis, the company might talk with the pilot to see what can be done to help that pilot.

If a pilot was fatigued during a flight, he would call the aviation manager, let them know where he was, that the flight was finished, and he felt tired. The company would make arrangements to stay the night and get another pilot to relocate the aircraft. He never had a conversation with a pilot about fatigue midshift, only if there was a delay that would extend the pilot's duty day.

He never felt tired enough as a pilot where he needed to tap out. If he knew he was tired he would do things to mitigate the risk like slow down his process, think things through knowing he was tired, discuss with his crew members to make sure they were watching him and talking to each other; this would be discussed in the briefing.

There was no real guidance from the company about fatigue but there was a bed in the office if a pilot felt tired or the pilot should step up and say something and stop that flight from coming forward.

He had been sick before and after a flight the crew told him he was not 100% and to go home. That was example of the crew looking out for each other. They would brief with the whole crew and if anyone saw that someone was not 100% then to speak up.

He did not have any flight time in the AS-350.

He was not aware of the accident pilot, as the base lead, having to get involved with the operational side of the base prior to his nightshift. The company made it a policy to not contact pilots during their off-duty time. That did not mean that a pilot might not accidentally get a call from someone thinking they were on duty when they were not, but he was not aware of anything on the day of the accident.

Short term coverage needed at the base would try to be done using other pilots at the base and other pilots might need to work an extra shift or two to cover for a pilot that was out. If necessary, they could get another pilot from outside the local area. When two pilots from the same base were on vacation at the same time, the company might look outside the base to help cover the shifts.

The company did a variety of things regarding crew resource management and crew attentional issues. From a training perspective, the training department had a current list of hot topics that was maintained by safety department. When pilots come in for recurrent, they would go through those items which could be safety concerns either within the company or heard about at another company. Area managers might have calls ins with each of their bases, for example they might

have 3-5 bases call in each day, run through operational items and discuss any concerns that pilots might have seen. The company letters that came out weekly, Safety Connect which came out quarterly, and the like that would be pushed to the line level to remind pilots that when doing their daily briefings to discuss these items to keep discussions current.

If the risk level when doing a preflight risk assessment needed to be elevated, the base lead would not be involved unless he was the pilot on duty. The risk assessment process was contained between the pilots and the OCC, or at least a high percentage of them. There might be a risk level that required discussion with a manager but that happened rarely.

He did not think there was anything in the preflight risk assessment that consider a flight for a pilot that was coming on shift after being on vacation but there was consideration given if a pilot had been on shift for several days in a row; he thought that would move them up to the next level. There was consideration given if a pilot had been off duty for 60 days or more.

Asked if he thought lead pilots had more self-induced pressure to take a flight than line pilots, he thought it was possible but came down to the individual. It was possible that the lead pilot would feel the pressure to want to make the base more successful, but the lead pilots were also more mature pilots. There would still be that feeling of pressure, but a more mature pilot could overcome it. He could argue both sides.

He did not think Air Methods had a written fatigue policy outside of what they had already discussed, but if they did, he did not know the reference off the top of his head.

The company did have an ASAP program and he had submitted a report in the past. He felt comfortable doing that. It was an easy process. He did not think that pilots at the company had any concern about self-reporting.

Asked if a pilot feeling fatigued in flight or nodding off would be considered a reportable event, he thought it could be. The company had an internal reporting system that had a broad scope of anything that happened in the company called AIDMOR[2]. When submitting an ASAP, a pilot could check a box to also submit an AIDMOR.

The company had not put out any information since the accident related to fitness for duty. Pilots at the company had heard that the investigation had moved towards human factors, but nothing was being discussed because it was speculation.

The training requirements were mostly fulfilled during the day. Simulators were typically scheduled between 0800 and 2000. There were outliers where they would do later training. Training was also done when pilots were off shift.

He did not recall that the accident pilot only worked night shifts. He and his wife would work opposite shifts, but Mr. VerBerkmoes was not sure of how they worked it out. He did not think a pilot was assigned straight day or straight night shifts.

[2] Accident Incident Damage Malfunction Operations Reports.

He thought 4 pilots at a base was good, 5 would probably be better in a perfect world. He knew some bases might have more than 4 pilots but he thought their lead pilot might be assigned more administrative tasks. Regarding fatigue, the base still had to cover the 24 hours.

Medical crew members were not allowed to sleep during a flight as they were a part of the crew and had to be aware of what was happening whether there was a patient on board or not.

He did not have anything else to add to the interview.