

DCA11MA076

Human Performance Factual Report

Attachment 1

Interviews with On-Board Crew Next of Kin

(14 pages)

## Interview Summary

Interview: Wife of the Pilot in Command (PIC)  
Representatives: Andrew Scherffius, Tony Center  
Time/Date: May 31, 2011, 1415  
Location: Offices of Tony Center, Savannah, Georgia  
Present: William Bramble (NTSB), Mitchell Gallo (NTSB), Tom Latson (NTSB)

During the interview, Ms. XXXX stated the following information.

She had worked as an operating room and trauma nurse. She was not a pilot. She had been married to the PIC for 41 years at the time of the accident. They had one adult child who did not live with them.

The PIC's only employer at the time of the accident was Gulfstream Aerospace. Ms. XXXX did not know if the PIC had received any awards or commendations for his performance in aviation. He had not received any disciplinary action for his professional performance.

The PIC had not had any prior accidents or incidents in aviation, nor had he recently experienced any unusual or emergency situations in aviation. Ms. XXXX said that her husband had once landed a plane gear-up on a lake bed when the landing gear would not deploy normally in flight. The PIC had not recently experienced any accidents or incidents outside of aviation.

In the 12 months preceding the accident, the PIC had not experienced any significant changes in his finances. He had experienced a change in his personal life. His mother had died almost a year before the accident (April 4, 2010), but she had been very ill and the PIC had adjusted normally to her passing.

The PIC typically woke at 0600 and went to bed by 2200, "lights out". He liked to sleep 8 hours per night, and needed 8 hours to feel rested. He did not snore much. The PIC normally ate three meals per day. The PIC's leisure activities included working on his airplane, a Bonanza F-33a, built in 1976, N1872L. Ms. XXXX said that he flew this airplane frequently, and he probably flew it within a week of the accident. Ms. XXXX said there had been no significant changes in her husband's personal habits, such as sleeping, eating, or leisure activities, in the year before the accident.

Ms. XXXX said her husband's normal work schedule in Savannah made for a "long day". He normally left the house by 0700 and he returned home between 1730 and 1930, depending on workload. His normal days off were Saturday and Sunday, but he worked many weekends. She could not recall his most recent weekend off. His last vacation was an 11-day trip the couple took together at the end of February/beginning of March. It was a nice, restful vacation.

The PIC was in Roswell the week before the accident. During that time, her husband spoke with her on the phone in the evening each day after he was done flying. Early in the week, he mentioned that he was feeling rested and that he was maintaining his usual exercise routine (he ran three miles four times per week and did 50 pushups and 50 sit-ups each day). Their last

telephone conversation took place about 1900 to 1930 the evening before the accident. The PIC was in a good mood. He mentioned that the team was “switching over,” that a pilot named Chip had returned to Savannah, and that the SIC had arrived to take Chip’s place. Aside from this, Ms. XXXX could not recall anything her husband might have mentioned about his sleep or activities in the 72 hours before the accident.

Ms. XXXX stated that her husband was in excellent health; he was very physically fit; and he did not report any symptoms of illness in the days before the accident. The PIC’s personal physician’s name was Dr. XXXX. The PIC did not have sleep apnea or other sleep disorders. There was no history of heart disease or stroke in his immediate family. The PIC had not experienced any significant changes in his health or physical fitness in the last year.

The PIC was taking two prescription medications. He had begun taking Coltracine when he experienced some problems with gout in his toe, and he was taking Lipitor every day because high cholesterol ran in his family. Ms. XXXX said that, to her knowledge, the PIC did not, in the 72 hours before the accident, take any medication, either prescription or non-prescription, that could have affected his performance. The PIC drank alcohol infrequently, approximately one beer per week, and he did not use tobacco products.

Ms. XXXX said her husband loved flying and he loved airplanes. She did not know if there was anything he disliked about his job.

Ms. XXXX did not know how familiar the PIC was with the other crewmembers on the accident flight. He had told her the SIC was coming out to fly with them in New Mexico the week of the accident. He said the SIC was new to the program and he was a good man and an extremely qualified pilot. Ms. XXXX was not sure whether they had flown together before. The PIC had not discussed FTE1 or FTE2 with her.

Ms. XXXX said her husband was happy at Gulfstream. He felt “fine” about the training he had received and “fine” about Gulfstream’s management. He had not complained to her about any problems at work.

Ms. XXXX did not know if her husband maintained a personal aviation logbook or any other journals related to his professional activities. He maintained good logbooks on his personal airplane.

Ms. XXXX was asked if there was any other information she could provide that could help investigators understand the circumstances of the accident, about which she had not been specifically asked, and she said no. When asked if there was anyone else she believed it was especially important for investigators to speak with, she said no.

Ms. XXXX was asked if the PIC had been assigned a command position at Edwards. She said yes, he had been chief of academics at the test pilot school and he had been a squadron commander before his retirement in 1989. Asked whether it was an active squadron, Ms. XXXX said she was not sure. She thought they had large aircraft, such as B-52s, and possibly other types.

Asked why the PIC did not pursue a civilian flying career, Ms. XXXX said he had flown for Northwest Airlines, but he left because he did not like being a “bus driver.” He was offered a position working on the B-2 stealth program just after he accepted the job with Northwest, but followed through on his commitment to Northwest. Later, he was given another offer to work on the B-2 program, and he decided to leave Northwest Airlines to work on the B-2 at Northrop Grumman.

Ms. XXXX thought her husband had maintained contact with some of the other pilots he had worked with at Edwards Air Force Base, but she did not know who they were.

The PIC had been planning to retire in about five years.

This concluded the interview.

On August 17, 2011, Ms. XXXX was asked two additional questions via her attorney. These questions, and the associated answers relayed by her attorney, are listed below.

[Question] To Ms. XXXX’s knowledge, had the PIC recently been taking any over-the-counter antihistamines? If so, what were they and why was he taking them? [Answer] No. He had not been taking any antihistamines.

[Question] Was the PIC carrying a personal cell phone (or phones) in addition to his company cell phone the week of the accident? [Answer] No. He only had his company Blackberry.

## Interview Summary

Interview: Wife of the Second in Command (SIC)  
Representatives: Andrew Scherffius, Wade Gustin, and Michael Keene (via phone)  
Time/Date: May 31, 2011, 1515  
Location: Offices of Tony Center, Savannah, Georgia  
Present: William Bramble (NTSB), Mitchell Gallo (NTSB), Tom Latson (NTSB)

During the interview, Ms. XXXX stated the following information.

Her professional background was elementary education, but she was not currently working. She was a private pilot but she was not current. She had about 102 hours of flight experience in single-engine airplanes.

Ms. XXXX had been married to the SIC for 16 years. They had three children, ages 7, 9 and 11, and all three children lived at home with them.

The SIC did not hold any other forms of employment outside of Gulfstream at the time of the accident. Asked whether the SIC had received awards or commendations for his performance in aviation, Ms. XXXX said he had received routine awards for good work performance. He had not been subject to any disciplinary action for his professional performance.

The SIC did not own his own airplane. He had not experienced prior incidents or accident in aviation. Asked whether he had experienced any prior unusual, abnormal or emergency situations, Ms. XXXX said that the SIC had told her about an incident when they were doing some flight testing on the G650 and they had a close call because the yaw damper wasn't working correctly. This had occurred in Roswell. It was not the week of the accident.

The SIC had not experienced any recent accidents or incidents outside of aviation.

In the 12 months preceding the accident, the SIC had not experienced any significant changes in his finances, aside from starting his job at Gulfstream, which had been a positive change. He had not experienced any significant changes in his personal life.

The SIC got 6 to 8 hours of sleep per night. His sleeping was very regular. He typically went to sleep between 2100 and 2200 and woke about 0600. He snored occasionally.

The SIC normally ate three meals per day. His leisure activities included spending time with his children and exercising. He ran for exercise, a distance of a mile and half or so, a few times per week. He did not have any close friends at his workplace that he socialized with regularly outside of work, but he was friendly with the other pilots.

There had been no recent changes in the SIC's sleeping, eating or leisure activities. Everything was very normal.

On a workday in Savannah, the SIC normally left for work between 0730 and 0800 and came home between 1730 and 1800, but it could depend on the flight schedule. Sometimes he worked weekends, but his normally scheduled days off were Saturday and Sunday. Asked whether the company paid overtime when the pilots worked weekends, Ms. XXXX said yes.

Ms. XXXX was asked if the SIC's recent work schedule had been different than usual. She said that the SIC had been gone for two weeks at the beginning of March, then was home for two weeks between flight test trips, and then he left home again on Friday, April 1, to travel to Roswell.

The SIC had asked not to be assigned any flights the weekend prior to the accident, and he had taken a vacation day the Monday before the accident. He had then worked Tuesday through Thursday in Savannah before leaving for Roswell on Friday.

Ms. XXXX was not certain about the SIC's last vacation or extended time off. She said that he took a day off in February, but he had not had a long week off since the previous Christmas holiday.

Thursday before the accident, the SIC went to work. He went out to dinner with his family at 1700. Afterward, he engaged in routine activities with his family and went to bed a little after 2200. He fell asleep pretty quickly, when his "head hit the pillow". He woke about 0600 Friday and left about 0840 to go to work. Although Ms. XXXX left home before he did, she knew when he left for work because he told her on the phone.

Ms. XXXX next spoke with the SIC Friday afternoon. He called to tell her that he had arrived safely in Roswell. Their conversation was routine. It was a travel day for him. She spoke with him again on Friday at 1930 her time. This conversation was also routine. Ms. XXXX did not know what time the SIC went to sleep Friday night. She did not have any more communications with him before the accident.

Asked about his mood in the days before the accident, Ms. XXXX said it was fine; typical for him. Asked about his alertness in the days before the accident, Ms. XXXX said the SIC was fine. He was engaging in normal activities and there was nothing unusual.

The SIC's health was good. He was very active and healthy. He ate well.

When asked whether the SIC had had any significant medical conditions, Ms. XXXX said that he had experienced a blood clot in 2008 and he was still taking Coumadin. This medical event and the SIC's continuing use of medication was documented in his FAA medical records. He visited a hematologist every month to have his Coumadin level checked, and he visited his aviation medical examiner every six months.

The SIC had not exhibited any signs of illness in the days before the accident. Ms. XXXX did not think that her husband had any sleep disorders, and there was no history of serious medical conditions, such as heart disease or stroke in his immediate family. There had been no significant changes in the SIC's health in the year before the accident.

In addition to Coumadin, the pilot took prescription Nexium, on an as-needed basis. Ms. XXXX said that, in the 72 hours before the accident, the pilot did not, to her knowledge, take any medications, prescription or nonprescription, that could have affected his performance. In addition, he did not normally drink alcohol, at least not around Ms. XXXX, and he did not use tobacco products.

With respect to his work environment, Ms. XXXX said the SIC enjoyed flying and enjoyed the people with whom he worked. Ms. XXXX could not think of anything her husband disliked about his job.

Ms. XXXX was asked how well the SIC knew the other crewmembers on the accident flight. She said that the SIC had worked with FTE1 two weeks before the accident, during an earlier trip to Roswell. The SIC also knew the PIC very well. Asked whether her husband had expressed any opinions about the proficiency or competency of FTE1 or the PIC, Ms. XXXX said her husband felt comfortable flying with the PIC. He was excellent.

Asked whether the SIC had expressed any concerns about the flight testing process, Ms. XXXX said that her husband was a professional test pilot and very well trained and ready for the task at hand. He had some concerns about the fact that there wasn't any safety margin in these flying tasks, but that was about it, and he had not mentioned any specific flying tasks.

Asked whether the SIC had liked working for Gulfstream, Ms. XXXX said yes. Asked how he felt about the training he had received, she said she did not know. Asked how he felt about management, she said he had some concerns about the pace of what they were doing. She could not remember any specifics regarding these concerns. Asked whether he had discussed any other problems at work, Ms. XXXX said no.

Ms. XXXX was asked if the SIC maintained a pilot logbook, she said the company kept those records. Asked if he kept any other journals related to his professional activities, she said she did not know.

Ms. XXXX was asked if there was anything she had not been specifically asked about that might help investigators understand the circumstances of the accident. She said she could not think of anything to add. Asked if there was anyone else she thought it was important for investigators to speak with, she said she did not know.

The SIC was a graduate of the U.S. Merchant Marine Academy, but did not serve as a merchant marine. He went straight into the U.S. Navy and eventually retired as a Commander.

The SIC did not engage in flying activities outside of work.

Asked why he did not pursue a career in commercial flying, Ms. XXXX said that the SIC loved test flying. That was what he had loved about the Navy. Gulfstream was the first company to offer him a test pilot position.

Asked if there was anything else she thought the SIC would want investigators to know, Ms. XXXX said that her husband had acknowledged to her that the tests he was performing were very high risk with little margin, and he had expressed some concern to her about that. Asked how he dealt with that concern, Ms. XXXX said that he relied on his Gulfstream training. He had studied the whole week and was very prepared for the test flights. He just wanted her to know.

This concluded the interview.



## Interview Summary

Interview: Wife of Flight Test Engineer 1 (FTE1)  
Representatives: Paul Donovan, Andrew Scherffius  
Time/Date: May 31, 2011, 1615  
Location: Offices of Tony Center, Savannah, Georgia  
Present: William Bramble, Mitchell Gallo, Tom Latson

During the interview, Mrs. XXXX stated the following information.

She was a flight test engineer by profession, specializing in data management, but she had not worked for 11 years. She had been married to FTE1 for 16 years. They had three children, ages 7, 10 and 12, and all three lived at home with them.

Mrs. XXXX's husband had worked on various flight test programs at various companies prior to Gulfstream. He was working only for Gulfstream at the time of the accident and did not hold any other forms of employment. Mrs. XXXX did not know if her husband had received any awards or commendations for his work performance, but she said that he had not been subject to any disciplinary action. He was not an aircraft pilot.

Asked whether her husband had been involved in any prior aviation incidents or accidents, Mrs. XXXX said that during his previous two-week rotation at Roswell, before the accident trip, he told her on the phone that the flight test team had experienced a "close call." He did not say what happened. He just said he was going to be meeting in his room that night with one of the pilots to review the data from the incident.

Mrs. XXXX said she was not aware of any other aviation-related unusual, abnormal or emergency situations FTE1 might have encountered. Her husband had been working at Bombardier when that company experienced a crash involving its Challenger airplane, and he had begun working for Lockheed Martin in Marietta, Georgia right after Lockheed experienced an accident involving its High Technology Test Bed.

Mrs. XXXX said that her husband had not experienced any recent incidents or accidents outside of aviation.

Mrs. XXXX did not know what specific tasks her husband was performing during the Roswell flight tests.

In the 12 months before the accident, FTE1 had experienced no significant changes in his financial situation or personal life.

He needed 7 hours of sleep to feel well rested and comfortable. When he did not have to work, he typically woke at 0500 and went to sleep at 2200. He felt well rested on 7 hours of sleep. On a workday, he typically woke at 0445 and went to sleep by 2130 or 2200. He only snored occasionally.

FTE1 normally ate three meals per day, with snacks in between. He had always been very fit.

FTE1's leisure activities included working on the house and in the yard, maintaining the family's vehicles, playing with his kids, going to church, participating in school activities, and spending time with Mrs. XXXX. He brewed beer with FTE2 as a hobby. He socialized with some colleagues outside of work, and was close personal friends with FTE2 and Paul Donovan. Asked whether there had been any recent changes in FTE1's personal habits, Mrs. XXXX said no, they were consistent.

On a normal workday FTE1 left the house around 0615 because there was a morning meeting at Gulfstream that he attended and it took him half an hour to drive to work. He worked 10-hour days, so he'd usually be home around 1800, but lately he had been working even later than 1800. When FTE1 first started working at Gulfstream, he was working four 10-hour days in a row, followed by 3 days off. His normal days off were Friday, Saturday and Sunday. With the G650 flight test certification program underway, however, he had been working 5 or 6 ten-hour days per week. He often worked partial days on Friday and Saturday.

FTE1 had crew duty limitations because he was participating in test flights at Roswell, so he could only work so many consecutive days before he had to have time off. He could not just keep working like he had before the flight test program. He had to have down time to be able to fly. He was following duty time regulations as a flight crewmember. FTE1's last day off was supposed to be the Thursday before the accident. He was not at work that day, but people at work kept calling him with questions and he ended up having a conference call that afternoon. Mrs. XXXX could not recall what the call was about.

FTE1's last vacation was around Christmas time. The family went on a ten-day trip together.

Mrs. XXXX described her husband's recent activities. On Wednesday, March 30, FTE1 spent the day at work and went to sleep at his normal time. On Thursday, March 31, he woke at 0500, made his kids' lunches, took them to school, ran some errands and worked on the yard. After that, he picked the kids up early from school and ran some more errands. While he was out he received a call from work and had to go home and have a conference call in his home office. He went to sleep at his normal time on Thursday night. On Friday April 1, he woke at 0445. His morning schedule was routine. He and Mrs. XXXX took the kids to school, and then Mrs. XXXX dropped him off at work because he was going to be departing for Roswell that day and staying there for two weeks. FTE1 called her from work before he left and texted her the tail number of the aircraft he would be flying in so that she would be able to see when he landed. FTE1 traveled to Roswell and they spoke on the phone that evening before he went to dinner, about 2000 eastern daylight time. He said the team had briefed and they would be flying the airplane the next day. He did not say what tests they were going to perform. On Saturday, April 2, they spoke in the morning, perhaps 0800 eastern daylight time, but she was not sure of the time. FTE1 was eating an early breakfast in Roswell. He said they were going to go fly the airplane and he would call her when they got down. FTE1 used his personal cell phone to speak with Mrs. XXXX on these occasions, not the cell phone issued to him by Gulfstream.

Mrs. XXXX added that on Wednesday, March 30, FTE1 had called her from work and said that he might not be going to Roswell on April 1. He said he thought the FAA would shut them down because the schedules they were sending to FAA were unrealistic and there was “no way any test program could do all that in the amount of time they had.” Mrs. XXXX said FTE1 agreed with the FAA’s assessment. Asked whether this was a source of concern for FTE1, Mrs. XXXX said, “No. He wasn’t really concerned. It was just kind of a fact.” Asked whether he thought it was just a matter of logistics, that it would be difficult to hit all of the milestones, Mrs. XXXX said, “Yeah, he and [FTE2] would talk at our house all the time about how they thought the plane wasn’t ready for the certification part of it.” Mrs. XXXX stated that when attempting to certify an airplane, all the hardware and software had to be in its final configuration, and until all the flight test data became available it was not possible to see how everything was working and establish a final configuration. Mrs. XXXX was asked if the timeframe for certifying the G650 was more ambitious than the timeframe for previous programs FTE1 had worked on, and she said that her husband had worked on other programs that had also been very ambitious, but the companies involved had provided more support to meet the deadlines they wanted to meet. It was a question of what resources or “manpower” were required to make it happen. Asked whether FTE1 had said what additional staffing or resources he believed was necessary to meet the established deadlines for certifying the G650, Mrs. XXXX said no. Asked if there was a particular part of the G650 flight test program that he thought was especially challenging to complete within the prescribed timeframe, Mrs. XXXX said it was “the program as a whole.”

FTE1’s general health and fitness were great. He had no history of significant medical conditions. He had not displayed signs of illness in the days before the accident. He did not have any sleep disorders. When asked if there was a history of serious medical conditions among FTE1’s immediate family, Mrs. XXXX said the only thing that came to mind was that FTE1’s father had experienced a heart attack at age 33, but he was still alive and 86 years old. There had been no changes in FTE1’s health or fitness over the last year. He was not taking any prescription medications. To Mrs. XXXX’s knowledge, FTE1 had not, in the 72 hours before the incident, taken any medications, either prescription or non-prescription, that could have affected his performance. FTE1 did drink some alcohol. He normally had one beer per in the evening. He did not use tobacco products.

Mrs. XXXX was asked what her husband liked about his job. She said that he liked being close to the airplanes, being able to go out, climb aboard them and touch them, and he loved the data aspect of flight test. As far as she knew, there was nothing that he disliked about his job. It was his dream.

Asked how familiar he was with the other crewmembers aboard the accident flight, Mrs. XXXX said he had lived with FTE2 for two months when he first moved to Savannah to begin working for Gulfstream, before she and the rest of the family came out to join him. Mrs. XXXX and her husband had known FTE2 for 16 years. Mrs. XXXX said that her husband had told her that the PIC was the “safest pilot you could fly with at Gulfstream”. FTE1 had said that he was just getting to know the SIC, but he really liked him and he “couldn’t wait until the program was over so he could get the families together.” He had not expressed any opinions to her about the SIC’s proficiency as a flight test pilot.

Asked whether FTE1 had liked working for Gulfstream, Mrs. XXXX said yes, as far as she knew. Asked how he felt about the training he had received, Mrs. XXXX said that he was very happy about it. He had received safety training and egress training, and he had been certified as an FAA designated engineering representative (DER).

Asked how he felt about management and the way the test program was managed, Mrs. XXXX said that he felt that upper management was pushing the schedule, and that it was filled with “yes men” instead of managers who would listen to what the flight test engineers were saying. Asked whether there were any managers in particular that he felt were not listening to the flight test engineers, she said she did not know the managers until recently. She was not sure who the manager of flight test was, or the manager who was pushing that manager. Asked whether FTE1 had complained about any other problems at the company, Mrs. XXXX said she did not think so.

Mrs. XXXX was asked if her husband maintained a personal log of his flights. She said not that she knew. Asked if he maintained any journals related to his professional activities, she said no.

Mrs. XXXX was asked if there was any additional information she could provide that might help investigators better understand the circumstances of the accident. She said she could not think of anything. Asked whether there was anyone else she felt it was important for investigators to interview, she said that someone had told her about a friend of FTE2's in Marietta, Georgia that Dave had just talked to, someone Dave would visit.

Asked whether FTE1's assignment to flying duties had been his own choice or a part of his position, Mrs. XXXX said it could have been both. Asked whether FTE1 had discussed his future schedule with her, she said no. She did not even know whether they were doing takeoffs or landings.

Mrs. XXXX said that FTE1 knew there were risks associated with flight testing, but he loved doing it.

This concluded the interview.

## Interview Summary

Interview: Father of Flight Test Engineer 2 (FTE2)  
Time/Date: June 2, 2011, 1530  
Location: Telephone  
Present: William Bramble (NTSB)

During the interview, Mr. XXXX stated the following information. He resided in Highland, Maryland. He was retired, but had previously owned a company that did airport construction work. He was a student pilot and had done some flying, but he had not completed a private pilot certificate.

Mr. XXXX's son FTE2 joined the U.S. Army Reserves in 1983 and was commissioned as a second lieutenant. He completed helicopter training at Fort Rucker in 1991 or 1992, finishing number one in his class, and flew Chinook helicopters. He eventually retired from the Reserves as a major.

Flying was all he wanted to do. He took up fixed-wing flying on his own time, and he once quit a job as an engineering contractor with Lockheed that paid \$100,000 per year so that he could pay \$10,000 and undergo training to qualify as a copilot at Atlantic Southeast Airlines (ASA). Mr. XXXX told his son that this move did not make sense from a financial standpoint, but it was what his son wanted to do.

FTE2 was paid about \$137,000 per year as a Gulfstream flight test engineer. During their last conversation, David said he was going to take a new job with Boeing. Boeing was offering a slightly smaller salary, and he would have to give up the four and a half years he had invested in Gulfstream's retirement system, but Boeing was offering him a test pilot position, and he wanted to fly. Although Gulfstream had promised to keep him current as a pilot, he had been doing mostly engineering work in Savannah.

FTE2 had earned a B.S. in engineering science and mechanics from Georgia Tech. His coursework had involved mechanical and electrical engineering. After graduating from college, he had worked as a consultant in Washington, DC on an FAA project involving an approach control system. After that he went to work for Douglas Aircraft at Patuxent River Naval Air Station. Douglas transferred him to Long Beach, California. Then, the reserves called him to active duty and he was stationed in Central America for a while. When he returned from active duty, Douglas had eliminated his job, so he went to work for Lockheed, and then briefly worked for Gulfstream. After a few months at Gulfstream, he went back to Lockheed and then decided to stop working as an engineer and become an airline pilot.

He flew for ASA until about 2006, and became tired of working as an "aerial bus driver." When Gulfstream offered him a test pilot job in Dallas for more money than he was making at ASA, he accepted the offer. He performed post-production test flights and sometimes delivered aircraft. Eventually, however, Gulfstream stopped selling as many of its smaller airplanes, and he was transferred to an engineering position in Savannah, Georgia.

FTE2 had complained to his father that Gulfstream was “burning the candle at both ends.” For example, in December 2010, the company was pushing him to do some work and they said that anyone who had more than 60 hours of leave was going to lose it, but they would not allow him to take his leave because they were too busy with the G650 certification flight test program. He told his father that he wished they would slow down a little bit. Mr. XXXX did not think his son meant that they were skipping anything or shortchanging any procedures. Mr. XXXX just had the impression that the work was “coming at [his son] pretty fast.”

Asked whether FTE2 had expressed any safety concerns about the flight test program, Mr. XXXX said no, not about the adequacy of the tests, it was just “wearing him out.” Asked whether FTE2 was concerned that Gulfstream was pushing the test program too fast, Mr. XXXX said, “Not as far as I know. He just wished they would slow down and let him catch his breath. As far as I know, he never had any doubts about the plane or the test program. If he had any, he never expressed them to me.” Asked whether FTE2 was able to get adequate sleep, given the demands on him at work, Mr. XXXX said, “He always got enough sleep.”

FTE2 did not work anywhere but Gulfstream at the time of the accident. He got along well with his colleagues and others. He was known as being a very helpful person. He socialized with Carla Wentler, a good friend he had known for 15 years. He was also good friends with FTE1 and Tom Horne, who worked with him at Gulfstream, Mark Jagabowski, who had worked with him at Lockheed, and Dale Coulter and Tom Dilbeck. Mr. XXXX was not sure how well his son knew the other crewmembers on the accident flight. He had not mentioned who was going to fly the airplane in Roswell with him. He just said they were “Going out to New Mexico to check out the G650.” That was it.

Asked whether FTE2 had received any awards or disciplinary action as a result of his activities at work, Mr. XXXX said he did not know. He did not think his son had been involved in any prior incidents or accidents in aviation, or any recent incidents or accidents in his personal life. He was a “pretty careful driver.” He had not mentioned any prior unusual, abnormal, or emergency situations that he might have encountered during flight tests.

FTE2 had never been married. In the 12 months before the accident, there had been no significant change in his financial situation or personal life, aside from his accepting the new position at Boeing.

Mr. XXXX did not know how many hours per night his son normally slept at home, or how many hours of sleep per night he needed to feel rested. When his son came to visit him in Maryland, he would sleep “13 hours.” He did not seem to have difficulty falling asleep or remaining awake during the day. He was an evening person. His leisure activities included working on cars, hang gliding, woodworking, and hunting. There had been no significant change in his recent activities.

FTE2’s normal work schedule involved being at work “at least 10 hours per day.” His last vacation was a weekend hunting trip in late December.

Mr. XXXX had only one communication with his son in the days before the accident. It was a phone conversation on the evening of Thursday, March 24, 2011. This conversation was almost entirely about his son's new job at Boeing. FTE2 said he was going to stop working at Gulfstream after the company had enough time to get his replacement up to speed and then he was going to spend a month or two with his father in Maryland. After that, Boeing was going to have him in Seattle for a year, and then he was going to be a B-787 production test pilot in Charleston, South Carolina. Mr. XXXX did not know whether his son's brother Shivers, who lived in Marietta, Georgia, might have spoken with him in the days before the accident.

FTE2's general health and fitness were good. He underwent an FAA physical every 6 months. He did not have a history of any significant medical conditions, but he had a history of high cholesterol. He had not shown any signs of illness in the days before the accident. He did not have any sleep disorders, as far as Mr. XXXX knew. Mr. XXXX did not know if his son was taking any prescription medications. He did not know whether his son took any medications, prescription or nonprescription, in the 72 hours before the accident. He said that his son did drink alcohol, but he was not a heavy drinker and he did not use tobacco products.

Asked whether FTE2 liked working for Gulfstream, Mr. XXXX said yes, he was "very fond of it." John O'Meara at Gulfstream was a good friend of his son. He had brought his son over from Dallas to Savannah and increased his pay. They had made a deal that his son would be able to fly enough in Savannah to stay qualified as a pilot.

Mr. XXXX was asked how his son felt about Gulfstream's management. Mr. XXXX said he had never heard his son express an opinion about it. He had never heard his son complain about anything related to his job at Gulfstream, other than to say that he would like to have more time off.

Asked whether there was any other information he could provide that might help investigators understand the cause of the accident, Mr. XXXX said he could not think of anything, but he wondered if water could be used as ballast during test flights so the pilots would not have to carry so much fuel.

This concluded the interview.