



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Persons Contacted:

Frank Gomez

Vince Welbaum

Chuck Taylor

Date: November 18, 2008

Time: 1000

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Gomez, Mr. Welbaum, and Mr. Taylor:

With regards to helicopter contracting, the USFS National Contracting Office in Boise, Idaho, is comprised of a Branch Chief, who works under the Director of Operations of Fire and Aviation. As part of the Branch Chief's management duties, he oversees two operations officers identified as National Helicopter Program Managers. These managers provide technical evaluations of the helicopter program, and typically act as the technical chairs during the contract proposal review period. The National managers are supported by Regional Helicopter Program Managers. Additionally, the National Contracting Officer works with the managers in reviewing and compiling the contracting packages, and is the individual that actually does the procuring. It should be of note that the National Contracting Officer does not have aviation background.

The USFS performs studies on determining the most efficient level of equipment and personnel needed to support the upcoming fire season. This information is then compiled into a K2 Chart, which is helicopter specific (Type 1 and Type 2 operations only). This is constructed based on the past 10 years experience with aircraft usage and time of the season. The national office will query the regional managers as to how many helicopters they think they will need for the season, and then calculate the amount of funds needed to support that request. As the US fire season varies among the different regions, they plan on using the same equipment, which will move with the burn activity.

At the beginning of the fiscal year, the USFS contracting office will receive specifications of helicopter demand which is called the "contract action." It is an authorization for the contracting office to put out a solicitation (comprised of a multitude of specifications), and allow the officers to award potential contractors (vendors) with bids. The office will initially review the contract

action, making subtle changes specific to the bid. The solicitations will then be dispersed for public bidding and will typically be active for 30 to 60 days.¹

During this active solicitation, a pre-proposal conference will occur where the vendors and the USFS meet to discuss all the specifications of the contracts. A question and answer period is offered, at which point the vendors are encouraged to address specific questions on specific clauses in the contract. Two to 3 weeks after the conference, the solicitation period ends, at which time the contracting office gathers all the bid proposals.

An evaluation period will begin, which is another 3 to 4 week process. The contracting officers review each proposal and the material submitted, which is based on the criteria in the solicitation. Most will require the submission of the technical capability of an aircraft, which includes load calculations, performance charts, etc. The vendors will additionally submit a safety risk management plan, which encompasses past performance history and an organizational experience evaluation. The number of vendors that submit bids range from one to 90.

After the evaluation period is over, the team will once again convene to review the proposals, with a technical chair to oversee the process. This person will coordinate the technical reviewing team and provide instructions on the evaluation, as well as a master sheet, which is a checklist of all the areas of the contract to be evaluated. Each member of the team (usually comprised of about 10 people) will conduct their own independent evaluation. After the evaluations are completed, an independent rating is established with a consensus reached for the team (the primary factor for recommending awards). The technical chair will compose the recommendations in a write-up, identifying weaknesses and strengths of each proposal, factoring in the cost of the aircraft, and duration needed.

Using the write-up, the contracting office will perform a trade-off analysis (evaluation score evaluation versus price). Normally the higher rated vendors will have a higher price, which is primarily due to the "level of professionalism," which can "justify the higher price." The contracting officer will attempt to quantify the evaluation parameters, and then write a technical recommendation highlighting the different aspects of the helicopter performance and price, along with company variations. The contracting office stated that typically 65-percent of the award decision is based on the technical capability factors, safety, technical capability, past performance, and organizational experience. The price makes up the remaining 35-percent, meaning that price will never be a driving force in the determination of which company is awarded a contract.

The USFS specifically attempts to attract vendors that already operate helicopters in various environments (such as logging, heli-lift, heli-skiing, high-rise, etc.), and specifically in a fire environment. Some operators will have the desired operational experience, for example those that fly in Australia or a rural county, due to the more rugged conditions associated with their operating environment, as opposed to those that operate in a city environment. The management team of a vendor is also particularly important. The USFS will usually start with a new vendor by awarding a short contract period of only one helicopter. If there are no issues and the vendor operates within the terms identified in the contract, during the next season, the contract will be expanded to include additional helicopters.

¹ Dispersed via a website: <https://www.fbo.gov> (Federal Business Opportunities; FedBizOpps)

New vendors have more difficulty obtaining contracts as they are competing with companies such as CHSI, who have ample firefighting experience. On occasions, the more experienced vendors will be used on other contracts, leaving available only inexperienced vendors. In these cases, the contracting office will decide to give the inexperienced vendor a chance, or reevaluate the solicitation requirements to change them to allow the expansion of the vendor supply (e.g. changing the Type requirement).

The recommendations for awards are sent to the USFS headquarters in Washington, D.C., where the source selecting officials make the final decision. They will either approve the recommendations or ask the office for further information. Once a vendor is listed they are able to remain as viable vendors for 4 years.

The contracting office will notify the vendors of the awards, and brief them in individual conferences as to why they were or were not awarded the bid. If no protests have been filed by the vendors, then the contracting office will proceed with pre-work meetings. The pre-work meetings are where the vendor, contracting officer, and helicopter managers will discuss the terms and conditions of the contract, operating plans, safety protocols, base operating protocols, etc. The contracting office will inspect the aircraft during this process, confirming that they are appropriately carded to meet contract compliance.

Since 2007, the national office added 34 helicopters. In 2008, they had 130 helicopters contracted as "exclusive use," and 195 as "contract when needed."² Typically the water hauling contracts encompass a 150-day period, and passenger transport is 120-days. The longer contracts are frequently in California and wind-driven fires, where the need is first for water hauling helicopters and then passenger transport.

In 2008, the USFS had one solicitation for 34 helicopters for water dropping; two solicitations for a total of 25 helicopters for passenger transport; a total of three solicitations for 59 helicopters. Of the 59 items, two were not awarded, equating to 57 helicopter awarded contracts; nine regional contracts were awarded, totaling 66 helicopters that season:

Number of Exclusive Use Type I Passenger Transport Helicopters (IA)	6
Number of Exclusive Use Type II Passenger Transport Helicopters (IA)2008	17
Number of Exclusive Use Type II Passenger Transport Helicopters (IA)2007	9
Number of Exclusive Use Type I Water Delivery Helicopters (LFS)	26
Number of Exclusive Use Type II Water Delivery Helicopters (LFS)	8

The USFS bid out their normal passenger transport, which specified Type 2 utility helicopters. After referencing the K2 chart to assess the helicopter demand, the contracting office thought there were enough vendors available to satisfy the numbers found in their market analysis. They

² "Exclusive use" means that the helicopters are contracted to be paid on a daily basis and a certain funding allocation is associated for their 120 to 180 day contract. "Call when needed" means that the helicopters are not committed to the USFS and used on an intermittent basis pending demand. The vendors are only paid if the assets are utilized.

believed that they would have enough helicopters to fulfill 25 items on the initial attack contract or solicitation for passenger hauling. The language in the solicitation specified Type 2 helicopters. At the end of the evaluations for the contract, they had only awarded nine items (with 12 to 13 proposals received), leaving 16 helicopters needed.

The USFS opined that the lack of submissions was a result of higher oil prices, and more competitive prices in Canada. Additionally, they concluded that helicopter supply is cyclical; when the economy is good, helicopters are difficult to find and vice versa when the economy is not doing well. As a result, many vendors will contract out for geothermal work, oil exploration, and construction rather than wait for USFS solicitations. When the economy is not doing well, the USFS receives more bids. The USFS reported that the USFS pays well compared to industry. Their demand for helicopters (based on the K2 chart) has been skyrocketing. The exclusive use helicopters demand is six times more than it was in the previous 5 years, meaning the demand for helicopters has increased dramatically. They opined that the supply would eventually decrease to meet the USFS demand, but to date it had increased too quickly as a result of increased fire activity.

With the lack of qualified bidders, the USFS decided to relax the requirements and put out an additional solicitation for 16 items, but this time incorporated to include large business³ and Type 1, and Type 3 helicopters. The performance specifications changed to accommodate the Type 1 helicopters. This number is determined by calculating how many passengers can be carried, with an assumed weight of 200 lbs, to find an optimum weight and allowable payload during a typical fire scenario at a typical elevation. The contracting officers determine these weights, with the assistance from the regional managers.

The original solicitation was dispersed in January 2008, with the evaluation process concluding in March. After receiving so few bids, the USFS immediately issued the newly expanded solicitation. This decision was passed by the Assistant Chief, as opening up the solicitation to the Type 1 operators increases fund demands.⁴

The contracting officers knew that CHSI had a large fleet of helicopters that were successfully used for water hauling contracts (call when needed). The USFS personnel classified the CHSI personnel as good to work with, and actively requesting the USFS to use their helicopters for passenger transport. In 2002, the contracting officers and top CHSI executives convened in Washington, D.C., to discuss a solicitation that CHSI had not been awarded, but which they thought should have been awarded to them. At the time of the meeting, CHSI began to try to sell the idea of the new main rotor blade performance capabilities, and that their helicopters were going to be certified under Part 135 operations.

Originally, CHSI came to the USFS informing them of their use of composite main rotor blades which were marketed as performance enhancing equipment on a helicopter. The USFS stated that if they were supported by the "right charts" and by the manufacturer then the USFS would greatly benefit from the added payload. When that concept first came up, CHSI talked to the

³ The original solicitation required a small business designation which is defined by the USFS as 1,500 people or less.

⁴ Type 2 helicopters average cost of \$3,000 per day vs. The Type 1 helicopters average cost of about \$15,000 per day.

USFS in terms of the added rotor blade performance and the USFS has happy with the notion, assuming that all the paperwork supported it.

CHSI submitted 6 bids for the passenger transport solicitation, of which 5 were awarded; 6 Type 1 helicopters were awarded contracts under this solicitation. There were some Type 2's that were initially too heavy and didn't make the specifications, but on the second solicitation the helicopters were lightened to meet the requirement (e.g. CHSI removed additional wiring and additional internal seats).

When setting the parameters for a solicitation, such as a minimum performance payload, the contracting officers know which helicopter types will be capable of meeting the specifications based on their years of practical experience working with the different types of helicopters. The USFS stated, rather than arbitrarily creating predetermined performance numbers; they converse with vendors to obtain the technical intelligence from them. In the USFS analysis, the parameters would be based on price per pound (PPP), or monetary figure of how much it costs to lift a pound of product. This helps them to make a quantitative comparison of different capabilities of the various helicopters.

The contracting officers will periodically meet with industry 2 to 3 times a year, enabling a government committee to receive feedback from the vendors. They are consistently conversing with vendors, and developing and maintaining a partnership that allows them to keep abreast of the industry. The contracting officers stated that they attempt to balance the needs of the field with the type of equipment that needs to be on the helicopters. They are cognizant that equipment added equates to a decreased payload, but the required equipment is seen by the USFS as a necessity for either performance or safety considerations.

After the contracts are awarded, the officers actively keep in contact with the vendors. CHSI would call the officers about 2 to 3 times per week, on any area that they thought required the attention of the USFS. CHSI never expressed any concerns about the contract. The USFS never performs a random check of weights, nor do personnel visit the facilities after the initial awarding of the contract.

The USFS contracting office does not have written procedure, but every contract follows the same format from start to finish.

In effort to keep abreast of new technologies available and industry changes, the USFS personnel routinely attend vendor seminars and meetings either sponsored by the agency or sponsored by the industry. Additionally, vendors will send representatives to visit the contracting officers informing them of specific innovative ideas or concepts to discuss the possible USFS need.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Christine Schwanenberg

Date: - 8

Phone: - -

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mrs. Schwanenberg:

Mrs. Schwanenberg, spouse of the accident pilot, Roark Schwanenberg, stated that he left several days prior to the accident and was expected to return on August 14, 2008. She recalled that when he was gone on trips, she spoke with him every night when he would call her on the telephone; usually occurred between 2100 and 2130. In the last several conversations he conveyed that he wasn't flying the helicopter a great deal, only a couple of hours every other day. He wanted to fly more and felt as though he was waiting around much of the day. He did express his delight in flying with the co-pilot, Bill Coultas, who he really liked and respected, both as a person and a pilot. She recalled speaking to him in the afternoon of the accident. He seemed in good spirits and was excited to finally get to fly, specifically with Mr. Coultas on a passenger relocation mission.

Mrs. Schwanenberg added that her husband was at a very good point in his life and seemed very satisfied both personally and at work. He enjoyed being employed at Carson Helicopter Services, Inc., (CHS) and was pleased with both the new Chief Pilot and Director of Operations. He additionally took pleasure in operating the S-61 helicopter and felt very confident in his ability to fly it.

Mrs. Schwanenberg stated that her husband did not take any medications and was not ill prior to the accident. After being questioned if he had ever had a substance abuse problem, she reported that he went to a rehabilitation facility for alcohol around November 2007, on his own account. He was at the facility for about 1.5 months and had been sober for 9 months. He had notified CHS, with regards to his problem, which they were very supportive of the time he needed off.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Joseph Rice

Date: ----- 2008

Phone: -----

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Joseph Rice:

Mr. Rice was the Director of Operations (DO) for Carson Helicopter Services, Inc. (CHSI) based in Grants Pass, Oregon. He stated he was employed in that capacity for about 3.5 years. During his employment, he authored CHSI's FAR part 135, 137, and 133 programs and navigated CHSI through the FAA certification process thereof. He recalled that he prepared Department of Defense (DOD) and United States Forest Service (USFS) contracts for bid, as well as participating in pilot hiring and training.

Mr. Rice recalled in great detail several events that transpired while he was employed with CHSI that reflected unfavorably on the company. One of which was a contract that Steve Metheny, the vice president, was bidding on in Hawaii for the US Navy (PMRF – Barking Sands). The contract required a FAR part 135 certificate, which CHSI had yet to obtain. They were not awarded the contract, and lodged GAO protests even though they did not meet the contract qualifications. An additional incident Mr. Rice remembered was the process of bidding an Army Contract at Yakama WA that required a 1,000 gallon S-61 water (belly) tank capacity. The Director of Maintenance (DOM), Levi Phillips, had relayed to him that CHSI S-61 tank in actuality carried only 880 gallons, rather than the capacity they were bidding of 1,000 gallons. Upon a number of GAO protest CHSI was awarded the Yakama contract fraudulently, with GAO rescinding the original award to Croman Corp. that had rightfully been awarded it.

A further instance of fraudulent activity that Mr. Rice recalled was on another contract that CHSI bid in Hawaii for the US Army (Schofield Barracks). The contract required a certain payload capacity, litter and hoist capability, which CHSI could not meet, as they did not have a FAA approved hoist or litter kit installation. They continued with submitting a bid. When this was lost to Evergreen International Aviation, CHSI lodged protest after protest with GAO. This resulted in a bridge contract being put in place at considerable expense to the US Army while CHSI protests were dealt with, even though CHSI could not fulfill the contract requirements.

Mr. Rice stated several unethical behaviors were committed by Mr. Metheny. At one point CHSI received-----dollars in economic stimulus grant money from Josephine County and SOREDI for improvements to CHSI Grants Pass facilities, which----- was later embezzled

by Mr. Metheny. He additionally used company funds to rent a storage unit to buy and sell helicopter parts out of. Mr. Metheny would submit the helicopters' weights for bidding USFS contracts. When the USFS changed the way the contracts were to be bid (e.g. weight must include the tank, long-line, or bucket, etc.), Mr. Metheny would falsify the weights on the contracts, making the empty weight 400 to 600 pounds less than the helicopters actual weight. He would tell Mr. Phillips what he wanted the helicopter to weigh and Mr. Phillips would comply with the request, reflecting that desired weight on the Chart C submitted in the contracts.

Eventually Mr. Rice and Mr. Metheny had a confrontation with regards to falsifying the Army bid's and the ----- of embezzled company money. Mr. Rice subsequently resigned (around mid October 2007). Mr. Rice opined that Mr. Metheny hired Sean Moretz as his predecessor because he was very new and barely met the FAR part 135 requirements (i.e. easy to continue falsifying the documents without him noticing).

Mr. Rice commented that Frank Carson was continually putting pressure on Mr. Metheny to get awarded exclusive use contracts for his aircraft. In response, CHSI heavily lobbied the USFS in Washington D.C to get contracts, making the case that heavy helicopters were safer than air-tankers and more cost effective. There was a one-year test period the USFS instilled, starting predominately with call-when-needed contracts and subsequent CHSI was awarded exclusive-use contracts. Mr. Carson didn't involve himself in the West Coast operations, allowing free reign to Mr. Metheny, with no oversight or accountability. Although Mr. Metheny was the communication source to Mr. Carson, he would not provide the entire "Big Picture" of their West Coast operations to the East Coast corporate office.

Mr. Rice classified the relationship between Mr. Metheny and CHSI's FAA Principal Operations Inspector (POI), Tim Moon, as a friendly one. He recalled that Mr. Moon had given a gift to Mr. Metheny on one occasion. Mr. Moon would additionally walk CHSI through getting out of complaints filed against the company. He opined that they had little to no operational oversight [an exception was made for the Airworthiness inspector, Mr. McKibbion, who he thought did superb oversight].

Mr. Rice noted that contracting to the USFS was problematic. The contracting office would have a series of equipment requirements added to the contract (e.g. AFF, pulse lights, etc.) that they wanted the helicopter to be equipped with, yet would not change the helicopter's payload requirement or performance requirements. This situation essentially has created a culture that has forced operators to misrepresent the weights of their helicopters to be competitive in the USFS bidding process. The issues created is a lack of communication with industry and the true capability of aircraft being contracted, USFS contracting practices and lack of economic understanding of company operational needs. Mr. Rice telephoned both Pat Norbury and Chuck Taylor from the national office (around May 2008) detailing the fraudulence of weights within the industry, though there was no reaction to his concerns except for Mr. Taylor's refusal to card him based on a rumor of his qualifications. Mr. Rice has been continuously interagency carded by the USFS for the past fourteen years on seven different models of helicopters.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Sean Moretz

Date: August 15, 2008

Phone: -----

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Moretz:

Mr. Moretz is the Director of Operations (DO) for Carson Helicopter Services, Inc. (CHSI) based in Grants Pass, Oregon. CHSI currently leases 12 Sikorsky S-61 helicopters (excluding the accident helicopter, N612AZ) from Carson Helicopters, Inc., in Perkasio, Pennsylvania; they share no other facilities, nor do they operate under the same certificate. With the exception of one S-61R, the entire fleet is comprised of S-61N models. CHSI employs just over 200 people, of which there are 50 pilots (32 are qualified to operate under FAR part 135) and 51 maintenance personnel. CHSI's primary operations during the summer consist of performing contracts for the US Forest Service (USFS), consisting of water dropping missions as well as Type 1 passenger transport missions (troop shuttles); about 3 years prior, CHSI were almost exclusively performed logging operations. In the winter, their operations range from relocating helicopters to Australia and performing a variety of logging and construction missions. N612AZ was purchased about one year prior to the accident from the Canadian based CHC Helicopter Corporation.

Normal summer operations for CHSI start in the March time frame where they will start bids with the USFS for upcoming contracts. N612AZ was to be based at the Trinity Helibase during the summer, and pilots would relocate to the helicopter for a 12 day duty period and then have 12 days off (personal time). CHSI pilots are paid a predetermined salary for the year; however if they fly in excess of 130 days, they will receive a daily rate for each day thereafter.

Mr. Moretz stated that the accident pilot, Roark Schwanenberg, was hired December 01, 1994 and before then was a pilot at Columbia Helicopters, Inc. He described Mr. Schwanenberg as an active participant in ground training. He recalled that his brother had passed away in July, so he had to take time off; aside from those several weeks, he regularly flew. The accident co-pilot, Mr. Coultas, was hired on July 17, 2002, and in character, was a serious pilot, with a military flying background. He diligently utilized checklists and made a good match with Mr. Schwanenberg. There were no complaints filed against either pilot. CHSI has no official means for pilots to make comments and/or complaints (either anonymous or not).

The pilots receive annual training that ensues over a 7 to 10 day duration. Mr. Metheny organizes most of the training, which consists of regulation review, company policy, and actual flight

training. Mr. Moretz reviews the pilot's logbooks annually to record hours flown and ensure currency.

Under the contract with the USFS, it is dictated the CHSI helicopters are to be maintained and operated in accordance with Federal Aviation Regulation (FAR) part 135, which includes pilots, maintenance, and aircraft. When the helicopter is under government contract it is regulated under Public Law AC 00-1.1, rather than the FARs and the following is not controlled by CHSI:

- Dispatch
- Flight following
- Manifests (crew and cargo) including weight and balance
- Safety briefings
- Operation control (CHSI management does not have knowledge of flights, nor do they give approval to pilots prior to departure, rather, the Helibase manager assumes this duty)

Part of USFS contract dictates that the helicopters, "Will carry HAZMAT," in accordance with the USFS HAZMAT Exemption. When operating under FAR part 135, CHSI will follow their Operations Specifications with regards to transporting cargo, where the helicopters carry loads in approved cargo bins under the floor. When operating as a Public Use flight with the USFS, the USFS personnel handle cargo and loading. Load calculations are performed on three occasions during the day and the helicopter is loaded to those specified weights.

Mr. Moretz stated that he has conversed with Tim Moon, the Federal Aviation Administration (FAA) Principal Operations Inspector for CHSI, on numerous occasions, calling him about twice a week. Mr. Moon conducted his type ride in an S-61, and regularly provides type rides for the CHSI pilots. Mr. Moretz estimated that he will see either Mr. Moon or his assistant, Gary Burns about one time per month. On the last FAA visit he recalled that Mr. Burns audited files and conveyed his satisfaction with both the organization and completeness of the paperwork. He described the relationship between CHSI and the FAA as open, where he can call either inspector to make requests and voice concerns.

Mr. Moretz was hired by CHSI as the DO on March 15, 2008. Mr. Moretz's plethora of duties and responsibilities in the capacity of DO encompass organization of pilot logs, files, Federal Aviation Administration (FAA) manuals, pilot training records, flight operations, and FAR part 135 operation control. Prior to his employment, the Vice President, Steve Metheny functioned as both the DO and the Chief Pilot, a position now filled by John Harris. Mr. Moretz's position is comprised primarily of a 5 day work week, ranging from 40 to 50 hours per week. Prior to his current employment, he was the Vice President of Commercial Ops and FAR part 135 Chief Pilot for Silver State Helicopters, Inc. He is additionally a FAA certified Designated Pilot Examiner. After being hired by CHSI, his immediate impressions were that the employees were professional and had a wide area and vast amount of industry experience. He classifies the company culture as progressive and conducive to letting employees have the rein to implement changes that in turn benefit the company. He has amassed about 23 to 30 hours in the Sikorsky S-61.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Rob Van Horn – Forest Service, Aviation Safety Investigator, Airworthiness

Charles Taylor – Forest Service, National Helicopter Program Manager

Person Contacted: Tim Moon

Date: August 14, 2008

Phone: -----

Subject: --- X08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Moon:

Mr. Moon has been the Federal Aviation Administration (FAA) Principal Operations Inspector for Carson Helicopter Services, Inc. (CHS), for numerous years, though could not recall the exact duration. He is currently based out of the Portland Flight Standards District Office (FSDO), Hillsboro, Oregon. He and his assistant, Gary Burns, currently oversee 29 operators that encompass FAR part 133, 135, and 135 operations; many of which contract out their aircraft to the US Forest Service. His largest operator is Erickson Air-Crane Inc., followed by Columbia Helicopters, Inc. and then CHS.

Throughout the interview Mr. Moon responded to questions with short answers, normally consisting of one word. The following account of his interactions with CHS is compiled from those brief responses. Mr. Moon visits the operator regularly about every 1 to 1.5 months; on numerous occasions he, or Mr. Burns, will arrive unannounced. While at the operator he will typically give type-rides, "review records," and audit their flight locating system. After pressed by this author to further to recall his activities while at the operator, he responded that he reviews the base, pilot and dispatch operations, as well as performing an occasional ramp inspection. Normally his visits comprise the entire day. He could not recall his last visits, nor when they occurred; he has ensured the author that he will send the paperwork of his past visits at a later time (was in his office).

Mr. Moon recalled giving the co-pilot, Bill Coultas his initial certification in the Sikorsky S-61, and noted his flying skills to be average. Mr. Moon added that he gives about 1/3 of the type-rides in the S-61. He does not remember meeting the pilot, Roark Schwanenberg.

Mr. Moon's flying career has encompassed flying both civilian and military airplanes and helicopters over the last 50 years; with his start in 1958. During 1964 he piloted heavy-category helicopters in Vietnam. He currently has amassed about 6,000 hours total flight experience in fixed-wing and about 8,000 hours in rotorcraft, of which 3,000 hours is in the S-61 and 4,000 in the Skycrane. He was employed by the FAA in 1988 at the St. Luis, Missouri FSDO. Nine years

thereafter, he moved to Portland, as the FSDO was actively looking for an inspector with heavy-category helicopter experience. Mr. Moon described his current position at the FSDO as overworked, with 50% of his time being tasked with superfluous activities (e.g., paperwork, training). He stated that the FSDO is understaffed and he is always out in the field trying to complete all of his vast oversight duties.

Mr. Moon would not speak with me regarding his relationship with CHS. He merely stated, after the author strongly requested on a response, that he never has to persuade CHS to make changes, rather, any suggestions he makes get accomplished. He qualified the communications between himself and CHS as being open. He stated that both John Harris, the Chief Pilot, and Sean Moretz, the Director of Operations, had recently started, which was a positive change for the ever-growing company.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Steve Metheny

Date: November 06, 2008

Phone: --

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Metheny:

Mr. Metheny is the Vice President (VP) for Carson Helicopter Services, Inc. (CHSI) based in Grants Pass, Oregon. He stated that he did not know the origin of the erroneous supplement performance charts. He believed that it was a strong possibility that the prior Director of Operations, Joe Rice, may have sabotaged CHSI and altered the charts. He thought this may be a plausible scenario, as Mr. Rice left on a negative note and had a history of fraudulent activity. He believed that Mr. Rice either hacked into the CHSI computer system or had a pilot/relative plant the charts while temporarily employed.

Mr. Metheny stated that normally the new supplements and revisions are sent from CHI in Perkasi, PA via FedEx and additionally scanned to the server. Upon Safety Board investigators discovering the anomalies with the performance charts, Mr. Metheny reviewed the CHSI copies and noted that the paper-copies in the office were erroneous, while the correct charts were on their server. He thought that a erroneous paper-copy may have been introduced from a single binder, which was used as the master.

Mr. Metheny further stated that the charts only calculate performance using minimum specification engines, where the engines usually perform in great excess of that torque, giving a higher margin. He reported that the USFS used to allow S-61 operators to bid using actual engine performance (based on power checks), but recently changed to using the minimum specification.

Mr. Metheny remarked that after being awarded for the 2008 passenger hauling contracts, CHSI had only 2 weeks to prepare the helicopters to the specifications/expectations of the USFS. This was difficult due to the added requirements that the USFS imposed at the last minute (e.g. sound proofing, specific shoulder harness, etc.). He opined that this was primarily a result of the contracting officers not communicating with the personnel in the field.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Bret James

Date: August 07, 2008

Time: -----

Phone: -----

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. James:

Mr. James, employed by Carson Helicopters, Inc. as a fuel truck driver, stated that he was working exclusively at the Trinity Helispot. He noted that he woke up at 0730 and sumped the fuel immediately thereafter. After having breakfast with the Trinity base crew, including the accident pilots, he waited around the base for further instruction about potential missions. He recalled that the accident helicopter, Helitanker 766 (HT 766), was set up to be used for mock-repelling training. As part of the training, the Trinity Helitack crew rigged the helicopter with repelling equipment and the pilots were actively a part of the training.

Mr. James further stated that around 1430 the base received a call requesting a water-dropping mission be executed by HT 766. The flight crew departed for the water dropping mission and came back for fuel. The helicopter landed and the pilots were briefed for a relocation mission of hand crews. The helicopter departed and returned several hours later, at which point the pilots requested full fuel, which was to be the last fueling. He fueled both the forward and aft tanks with full fuel, totaling 546 gallons for the entire day. He noted that the middle tank is never fueled. He recalled that it was around 1900 when he added fuel.



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: John Harris

Date: November 06, 2008

Subject: LAX08GA259 ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Harris:

Mr. Harris is the Chief Pilot for Carson Helicopter Services, Inc. (CHSI) based in Grants Pass, Oregon. He stated that he did not know the origin of the erroneous supplement performance charts. He believed that it was a strong possibility that the prior Director of Operations, Joe Rice, may have sabotaged CHSI and altered the charts. He thought this may be a plausible scenario, as Mr. Rice left on a negative note and had a history of fraudulent activity.

Mr. Harris stated that CHSI received a copy of the new Supplement 8 (and its respective performance charts) in mid-April. He was teaching the pilots in reference to those charts. There were no other charts that were introduced thereafter that he was aware of. CHSI received the passenger hauling contract in June and the following supplements were used to calculate performance (for non-jettisonable loads 550 pounds was subtracted):

-Supplement 7 (Limitations)

-Supplement 8 (gives single and twin engine capability and performance)



RECORD OF CONVERSATION

Zoë Keliher – NTSB, Air Safety Investigator
Sean Moretz – Carson Helicopters, Inc., Director of Operations
Jim Morrison – Forest Service, Air Safety Investigator
Gary Morgan – Forest Service, Natural Resource Specialist

Person Contacted: Shawn Walters
Date: August 08, 2008
Phone: -----
Subject: ----- ; Sikorsky S61N, N612AZ, Weaverville, CA

The following is a summary of conversation with Mr. Walters:

Mr. Walters, a manager of the Trinity Helibase, stated that he had been with the Trinity Helibase for two weeks prior to the accident. The helibase based two helicopters, one of which was the accident helicopter, Helitanker 766 (HT 766) and the other was Helitanker 506, a Sikorsky S58. HT 766 had been at that location since July 01, 2008. The Trinity Helibase had 35 people based there. The managers of the helicopters were Josiah Obts, Aaron Utterback, and Billy Gardinea.

Mr. Walters was notified that the Trinity Helitack was requested to perform a troop transport mission of both the Grayback and Ferguson hand crews from Helispots H-44 to H-36. Mr. Obts and Matt Lingenfelter began planning the mission by performing a weather evaluation and looking over terrain. Mr. Walters received a telephone call additionally informing him that Jim Ramage wanted to perform a checkride of the pilot, Roark Schwanenberg, starting around 1615.

Mr. Ramage arrived at the helibase around 1630 and a discussion regarding the days planned activities transpired between both pilots, Mr. Ramage, Mr. Obts, Mr. Lingenfelter, and himself. The mission was to start around 1700 and Mr. Ramage confirmed that they could complete the checkride in conjunction with the transport mission. Mr. Walters was slotted to be the on-board safety attendant, but Mr. Ramage would fill that position as he was more than qualified. The S61 helicopters were recently introduced as being an option for utilization as passenger transport aircraft, which in turn meant that long and thorough briefings were given before each flight.

Helitanker 766 (HT 766) departed Trinity Helibase about 1700 to helispot H-44 and Mr. Walters noted that the departure was slow, with little altitude gain at the beginning. The outside air temperature (OAT) at 1730 was report 32 degrees [during the accident it was reported to be 28]. The helicopter came back to the helibase later that day to refuel. Mr. Ramage got out of the helicopter to get water. Shortly thereafter, the helicopter lifted off and again a slow departure ensued toward H-44.

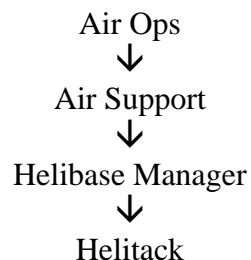
Mr. Walters and Mr. Utterback were in the helibase when they heard a radio transmission about a helicopter that had crashed at H-44. After initial transmissions, it was reported by people on the ground at H-44, that HT 766 was on its side and on fire; there were additional transmissions about four people outside of the wreckage and the need for Medivac helicopters.

The standard operating procedures (SOP) for management of a helibase states that the supervisor of the helicopter [in the accident scenario this was Mr. Obst] is to make notifications of a mishap. Mr. Walters made these notifications, as Mr. Obst was at H-36, the helispot that the crews were to be transported to. Mr. Walters made a notification of the mishap around 1945 to 1950 to the Regional Aviation Safety Officer, Dennis Brown, and the Helicopter Operations Specialist, Jeff Powers.

The Willow Creek Helibase manager the night of the accident was Ty Miller, who had established positive communication with Trinity Helibase. Mr. Walters was listening to the radio in hopes to obtain more information.

The Trinity Helibase was a satellite base of Willow Creek Helibase; both Helispots H-44 to H-36 were in direct communication with Willow Creek Helibase. Helicopters only contacted Trinity Helibase if they were making an inbound or outboard radio transmission. Willow Creek Helibase will call Trinity Helibase (via telephone) to task out missions. There is crash response protocol for each individual helibase.

He additionally contacted the Iron Complex Incident Management Team, Incident Command Post (ICP). Within the ICP there is an Aviation Division, which is comprised of the following positions in order of command:



The main helibase manager, in the accident scenario it would be Willow Creek Helibase's manager Ty Miller, is responsible for notifying the ICP. The ICP is then responsible for organizing Medivac and performing dispatch. That night, both Dennis Kuster and Jeff Currier served as Air Support for the ICP.

Mr. Lingenfelter was on the ground at H-44 communicating with Air Attack on the command frequency. After some time in the early morning, around 0100, Mr. Lingenfelter transmitted the names of the 26 people on the ground that could be accounted for (excluding the 4 people that were taken by Medivac. Mr. Obst was transported from H-36 to the Trinity Helibase, at which point Air Support was again called in an effort to obtain the list of 26 names. Shortly thereafter, they received a facsimile with the names. Upon receipt, they noted the list did not include Mr. Schwanenberg or Mr. Ramage and knew that neither of them were part of the Medivac.

Mr. Walters called Mr. Currier at Air Support around 0130 to 0200, informing him of the two people he knew were not accounted for on the list of people at the H-44. In response, Mr. Currier

stated that they could not, and would not, confirm that at least two people were not on the list due to how late it was.

Air Attack was receiving all their information from Mr. Lingenfelter. They attempted to query him as to if the accident resulted in any fatalities, but it was never reported that people were unaccounted for.