

Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Matt Vassel

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

The following is a email from Mr. Vassel:

I ARRIVED AT H-44 ABOUT 1600-1630. WEFLEW INTO THE LZ OVER A OPEN MEADOW THAT WAS LOCATED NORTHWEST OF THE LANDING SITE . WITH NO HELITECH PERSONS ON THE GROUND AT THAT TIME .THE PILOT DID APEDEL TURN JUST BEFOR LANDING. MYSELF AND ULF PETERS DEPARTED THE AIRCRAFT . AFTER THE HELICOPTER DEPARTED I COULD FEEL A LITE BREZ , ABOUT 3-5 FROM THE NORTHWEST ,I REMEMBER THAT IT FELT GOOD.

I WENT TO WORK PRERARING SEVERAL LOAD MANIFIST. THE S-61 ARRIVED OVERHEAD DID A FEW ORBITS. AT THAT TIME HE HAD A FULL LOAD OF THE 506 CREW HE DID A POWER CHECK OVER TH MEADOW THAT WAS ABOUT 1700 HRS. ON HIS RETURN ABOUT 1800 HRS IGAVE HIMTHE WINDS, THE WINDS HAD SHIFTED TO THE SOUTHEST, TAIR WAS FLAGING TIED TO TREES IN A FEW LOCATIONS THAT I USED FOR DIRECTION AND SPEED, I'V BEEN A HELICOPTER CREW MEMBER FOR 8 FIRE SEASONS TRAINING 12-15 NEW CREW MEMBERS IN HELICOPTER OP'S EVERY YEAR, BEING ABEL TO IDENTIFY WIND SPEED W/ THE COMPANY OF WIND SPEED DIVICES THAT WE USE, WIND SOCKS, FLAGING, THROWING DIRT IN THE AIR LOOKING AT THE LEAVES AND CONFIRMING WITH THE REAL DIVCES, AS THE S-61 CAME IN TH WINDS WERE VERY CALM AND I RELAYD THT TO THE PILOT.....,



Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Robert (Bob) Boyd

Date: November 19, 2008; December 07 and 08, 2008

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

The following is a summary of conversations and emails with Mr. Boyd:

Mr. Boyd, the Chief Pilot for CHI, stated that he was an experienced S-61 pilot and had been with CHI for a long time. He was please with the operations in the company's early years. He remembered that when Steve Metheny became the Vice President that company began to change. He became aware the Mr. Metheny was granted in excess of a 400,000\$ bonus for getting the USFS contracts.

Mr. Boyd shared with investigators emails that were sent by CHSI Chief Pilot, John Harris, to the CHSI/CHI pilots with the performance charts modified to better represent the helicopters' performance capabilities. He thought this was done by Mr. Metheny to get the contracts with the USFS. He recalled that in late June the accident helicopter, N612AZ, was in Perkasie for light maintenance and was weighed. At that time he believed the helicopter's weight was what the Chart C indicated it was.



Zoë Keliher – NTSB, Air Safety Investigator

Person Contacted: Nicholas Mirales

Date: May 12, 2009

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

The following is a summary of conversations and emails with Mr. Mirales:

Mr. Mirales was the Designated Airworthiness Representative (DART) for the Airworthiness Conformity Inspection of N612AZ performed from August 09 through August 10, 2007. He retained a copy of the Chart B that he was provided at the time. The signed weighing was dated August 06, 2007. The document indicated the weighing was performed in Perkasie on the jackpoint type scales and displayed an empty weight of 12,491 lbs. There was no Chart A provided to him that he could recall. Additionally, he could not recall the exact configuration of the helicopter at the time of the inspection, but did state that the main rotor blades were not installed.



Zoë Keliher – NTSB, Air Safety Investigator **John Clark** – NTSB, Chief Scientist

Person Contacted: Levi Phillips

Date: June 10, 2009 Phone: ------

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

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

Mr. Phillips, the Carson Helicopter Services Inc. (CHSI) Director of Maintenance (DOM), stated that he had been employed in that capacity since the inception of the company 3 years prior. Before that position, he was employed as the General Maintenance Manager and Maintenance Supervisor for Carson Helicopters Inc. (CHI).

When queried about helicopter weights, Mr. Phillips stated that as a practice (up until the accident), he would require CHSI employed maintenance personnel (assigned to a certain helicopter) to send him the current Chart B and C forms that their respective helicopter was using as the current empty weight; this was done for the purposes of obtaining the weight information for contract submittal. This would be done by him contacting the maintenance personnel and in response, he/she would fax him the Chart C that was in the helicopter at the time (as well as the most recent Chart B). After CHSI received their FAR 135 operating certificate, as a normal routine, he would transfer the Chart B weights onto the CHSI Chart B form, in an effort to keep the weight recordation on the required standardized forms in the Operations Specifications.

Mr. Phillips additionally stated that usually he would also communicate with Rod Manogue in Perkasie to obtain the most recent Chart B information. He recalled that he never weighed the accident helicopter, as it had only recently been added to the CHSI certificate.

Mr. Phillips could not explain why eight Charts Bs (that had his name typed in as the preparer) all showed weights that were in tenths (a precision not possible by the scales weighed on) and all had exactly 80 pounds difference between the right and left main weights. He explained that the documents did not contain his signature and he did not prepare all of them. He thought he may have prepared some of them, but that he merely transferred the numbers on Chart B forms that were sent to him (from either the helicopters' manager or Mr. Manogue). He further reported that the weights must have been contrived, although did not know who was involved with such an activity.

Mr. Phillips added that he did not think he completed the January 04, 2008 Chart B (totaling12,013 lbs) for the accident helicopter, as he would have known the weight was contrived from it being listed in tenths. He further stated that he did not carefully look at the

January 04, 2008 weighing in the earlier meeting on October 27, 2008. He stated that if he had closely looked at the Chart B he would have recognized that it was incorrect due to the weights being in tenths, which he knew was not a possible weight from the scales.

Mr. Phillips noted that since the accident he has witnessed how the Chart C forms and weight recordation has been erroneous. He stated that due to the helicopter locations being so varied, it is difficult to monitor each maintenance crew assigned to the helicopters.



Zoë Keliher – NTSB, Air Safety Investigator Steve Metheny- CHSI Sean Moretz- CHSI Jim Morrison- USFS Rob VanHorn- USFS

Person Contacted: Levi Phillips Person Contacted: Mark Watson

Date: ----- 08 Phone: -----

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

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

The weight and balance is derived on the Chart B form and placed in the flight manual. When CHSI brought the accident helicopter onto their Part 135 certificate they did not have the current Chart B on file. They requested a copy and received it, at which time Mr. Phillips stated that he transferred the information onto the CHSI Chart B form. When asked specifically about the January 04, 2008 Chart B (totaling12,013 lbs), Mr. Phillips stated that Perkasie provided those numbers to him and he in turn transferred them onto the CHSI Chart B form. He stated that was the last time the helicopter was weighed. He stated that at that time the helicopter was weighed on the roll-on scales and the liquid aerial tank was affixed.

Mr. Phillips stated the hoist was not installed on the January 04 weighing. The hoist was removed after it was taken off its experimental certificate on December 20, 2007.

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

Mr. Watson stated that regarding the accident helicopter's documentation "everything that we have on that aircraft has been made available"... "everything." He additionally stated the difference in weight of the CHC weight compared to the weight recorded on the August 11, 2007 weighing was reasonable and expected, as the helicopter was completely modified upon its arrival.

Mr. Watson noted that the helicopter was not configured in reflection of the most recent Chart C. He stated that the seats were installed in Perkasie before the helicopter went to Grants Pass and were reconfigured in July 2008. The liquid tank and the AgAir was installed on the January 04 weighing.

Keliher Zoe

From: Levi Phillips ------

Sent: Friday, June 26, 2009 1:57 PM

To: Keliher Zoe

Subject: Ogden comments

Zoe,

I have a few comments on the Ogden notes and the ROC so I will start with the notes.

- --Is there supposed to be a section C in this document? It goes from B to D and because B is a description of the accident and D is related to the weighing in Ogden it implies that 612AZ was weighed as per the NAVAIR manuals when in fact it was performed as per the Sikorsky S-61 N maintenance manual.
- --When we weighed the S-61A it was not done I/A/W the NAVAIR manual as we did not have the correct procedures which paragraph D implies. If we did receive the correct procedures I would like to review them to determine if the process was in accordance to them before I state that it was. Because the leveling plate did not appear to be located correctly (which we point out in page 4, paragraph 3) how can we state the aircraft was weighed in accordance with the approved procedures. Could you send me a copy of the weighing procedure? Also I believe the approved procedures will indicate that the weighing should be performed on scales within thier calibration period which the USFS owned scales were not as noted on page 8.
- --Page 4 paragraph 3 may also need clarified in that the leveling system installed was not located correctly which would explain why the plumb bob alignment could not reach 0 degrees.
- --It needs to be clarified for all the weighing notes that the "floating jack stands" means that the vertical shaft is able to move in a radial direction approximately 3/8" in its housing which reduces the side loading on the load cell.

In regards to the ROC:

Paragraph 2 -- "as a practice (up until the accident) he would routinely require helicopter managers"

--"routinely" is not the optimum word here as we would only request this info when it was needed for a contract submittal which in this case was in

the spring of 2008.

--managers implies that the info is requested from a USFS helicopter manager when it is actually maintenance personnel, this is in several places

--this would be more in line with what I said if it read "for the purpose of providing aircraft weights to contracting for USFS contract bids he

would request maintenance personnel to send him the current Chart B and C....."

Paragraph 4-- 1st sentence--why eight chart Bs "submitted for 2008 USFS contract bid"....

Paragraph 6-- needs added to the end--"and that CHSI has made extensive changes to their aircraft weight and balance procedures to mitigate these issues"

Thank you, Levi