

Statement by:

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NTSB Accident Number: LAX08PA259

Date of Accident: August 05, 2008

Aircraft: Sikorsky S-61N Helicopter

Registration Number: N612AZ

Observations made on: August 07, 2008

Fueling sight observations

Fueling was done at the U.S. Forest Service Trinity Helicopter Base. Fueling is done from a company fuel truck. The truck has two compartments, each holding approximately 2,500 gallons. Fuel is pumped via a power take off (PTO) shaft from the truck engine. Fuel is filtered using a Velcon VP-61EP1/2 filter. Records indicate the fuel filter was last changed on 5/12/2008. 2,000 gallons of Jet A was added to the truck on 8/1/2008. On 8/2/2008, 671 gallons were pumped from the truck. On 8/5/2008 the aircraft was fueled twice, once at the conclusion of the water drop flight operation and again prior to the accident flight. Total fuel pumped that day was 546 gallons. Three fuel samples were taken by an employ of the company after the accident occurred. The fuel samples look clean and clear with no suspended particulates. One sample is from the filter drain and one each from the low point drain of the two compartments on the truck. On 8/7/2008 a water paste test of both compartments on the truck was observed. There was no indication of water in the truck. The fuel samples were taken into custody by a U.S. Forest Service employee for safe keeping.

Observation at the Trinity helicopter base

During a visit to the helicopter base to recover aircraft records it was noted that some aircraft panels from the transmission cowling and the foam tank for the Fire King Fire tank were there at the base and not installed on the aircraft. Also, there was a black poly box about 4ft by 4ft and 4 ft high. This box was similar in construction to the one installed in the aircraft to haul tools for the fire crews. The one in the aircraft was about 4ft wide by 5 ft long and 4ft high as described by Carson employees.

The panels observed not installed on the aircraft are from main transmission faring. The panels p/n S6120-62610-33 L/H, R/H and p/n S6120-62611-44 are access to the auxiliary hydraulic tank and are held in place with contained quick release fastener, p/n S6120-62620-5 L/H and R/H are access panels held in place with screws. During review of the aircraft records, approval to operate with these panels removed was not found and removal of the panels was not documented aircraft record reviewed. Maintenance personnel indicated that the purpose for the removal of the panels was increased MGB cooling during hover operations. The aircraft may not meet its type design with these panels removed.

The black plastic 4x5x4 box in the aircraft was used to contain firefighting equipment. The crew chief for Carson described the box as being retained by threading a two inch wide cargo strap through handles attached to the box on all the sides. There was a spider web bungee then stretched over the top to retain items in the box. A review of the aircraft records did not document this box installation or its capacity limit. Company personnel stated it was not listed in the equipment list or basic weight and balance because they considered it as cargo. During review of the aircraft records there was no engineering data located describing its capability to contain what passengers and crew to carry in it or that the retention system used is adequate to attach it to the floor of the aircraft. Having this cargo box in the passenger compartment may be contrary to CFR 14 Part 135

The Fire King Fire tank was installed using a properly executed major repair and alteration form 337. Installation data is provided in Supplemental Type Certificate (STC) SR01552SE. It was noted that the foam tank was at the helicopter base and not installed on the helicopter. The maintenance crew chief stated it was removed to allow the fire fighters to use the air stair door for loading and unloading of passengers. He stated with the tank installed the door could not be used. The STC needs to be reviewed to determine operation with the foam tank removed. Additionally, no log book entry, equipment list or weight and balance update could be located when reviewing aircraft records.