

**RECORD OF CONVERSATION**

All persons listed were interviewed by Zoë Keliher

The following is a summary of conversation:

Adam Elias Attalla- Eyeworks; Safety Consultant

Mr. Attalla stated that the movie ranch in Acton was a very commonly used location to shoot. He recalled that six days prior to the shoot, on February 05, 2013, he scouted the location with the pilot, director, producer, assistant director. They discussed where the aerial shoot would take place and the pilot was satisfied with the location and flight to be conducted (e.g., nighttime, etc). The pilot decided on a landing zone (LZ) and they all planned for the shoot on the night of February 10th.

On the day of the accident, the call time was 1700 and when Mr. Attalla arrived the pilot was already at the LZ and appeared to have been there for a bit. A water truck and a representative from fire safety were all present. Shortly thereafter, the pilot gave a safety briefing which included: environmental safety (e.g., would cease operations if conditions posed a safety risk), helicopter safety (e.g., not to approach the helicopter), and communication structure. The pilot would be in communication with the ground coordinator until airborne at which time he was in sole communication with the assistant director until in the landing phase of flight.

The director communicated the locations of the shoots again and the pilot flew the first shoot (about 200 yards from the LZ) during which time he dropped the bag about six times returning back to the LZ to reload it. Everyone took a meal break at 2300 and the pilot socialized and ate with the crew. For the accident shoot, the film crew on the ground consisted of two cameras on the ground and the director of photography was in the helicopter with a camera. The pilot had downtime while the lighting crew setup and coordinated to prepare the helicopter shoot. The scene was for the actor inside the helicopter to drop a bag (backpack size) to a person on the ground.

The entire plateau was lit for the purpose of completing the shoot. The intent was for the helicopter cover about 10 to 20 feet above ground level (agl) in the lit area and the actor would drop the bag in the dirt area. The assistant director made the pilot aware that they were ready for the shoot and the helicopter lifted off about 3:30. The first flight was to be a reconnaissance at about 80-100 feet agl. He recalled him making one pass and then saw the helicopter crash into terrain. They staggered the lighting on the top of the plateau. The pilot had walked the area of the plateau prior to the accident.

Sean Kaveney- FAA Inspector

Mr. Kaveney stated that he did the on-sight approval of the shoot. The process of setting up a shoot is the helicopter will submit a movie manual and the manual states how they're going to operate while filming and meet the conditions of the waiver. The waiver is good for a two-year period and ongoing/active. The terms of the waiver is based on the operator submitting a Plan of Activities (POA) which is a detailed list of the activities they plan on doing which include the dates of the filming, the time of the filming, the pilot who will be flying the helicopter, the registration number of the aircraft to be used, the pilot certificate number, permission from the property owner of where the filming is occurring, security keeping nonparticipating personnel out of the area, maps and

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geographic descriptions of the location showing how and where the shooting will occur. That information will be submitted to the local Flight Standard District Office (FSDO), where an operations inspector will review the plan. From there the inspector will accept (not an approval) that POA.

The FAA Operation inspector that will be assigned to do the acceptance of the POA is trained to handle such activities by on-the-job training. The terms of the waiver is that the operator will be in compliance with their manual. The actual movie manual is accepted by the operator's Principal Operations Inspector. When an FAA inspector gets a POA they will review the application which can simply be done by a Google Earth viewing. They are mainly looking at the distance from non-participating people around the filming. There needs to be a plan to address non-participants being a safe distance from the aircraft.

David Child- Orbic Air, LLC

Mostly what the pilot did for income was all camera related flying productions. Orbic was approached for the accident filming job about 2 months prior to the accident. He would work with the pilot and the pilot would run the production from there by filing the POA. The company has 7 employees, 5 of which are pilots. Orbic mainly does flight instruction, tours, charter, and production flight. Production is only about 10% of their business. The pilot is not an employee, rather, he was contracted and comes with his movie manual from crossbow. They contract out about 4 other pilots. The pilot was the approved pilot to fly the job, but the job is Orbics and they take care of all the legalities that are not FAA related. The pilot mainly did reality shows and non-screen actor's guild (SAG) productions.

The pilot arrived in Van Nuys to pick up the helicopter about 1530 the day of the accident and departed around 1645. Had about 55 gallons onboard (after adding 28 gallons; he took an additional 10 gallons in the back). The cast member was on the front left seat and to have the gopro capture the actor, the production crew had their own lights. The spotlight and the led light were not Orbics. There was a map light installed on the helicopter, but the rest were not with the helicopter. The left side collective and cyclic were removed from the left side.

Dale Comstock- Actor

Dale stated he was an actor with the production. There were 4 military personnel that would be the part of the reality show and analyze what the candidates were doing. The plan was for helicopters to drop a bag onto the ground with instructions of what the candidates would do next. During the accident sequence, he was in a vehicle looking at the helicopter approaching the ridgeline. The helicopter was about 200 feet AGL from the canyon floor and about 50 feet from the floor of the plateau approaching about 80 knots. As he approached the ridgeline, the helicopter began a 45° dive facing the canyon. He could only discern the helicopter from the red and green lights and was not aware of any lights in the cockpit. He estimated the temperature was about 26° with frost in the wind was about 3 to 6 knots.

Sean Galvin- Assistant Director

he stated that the pilot was in radio communication on the ground to air channel. He stated there was a crane on top of the plateau that had a light affixed to the top in an effort to illuminate the plateau. There was a Joker light on the hill in glow sticks on the ridgeline. The plan was for the helicopter to ascend from below the ridgeline to above the plateau. They were originally just

going to circle over the ridge but agreed that would look more dramatic to have the helicopter ascend above the ridgeline. He noted prior to the accident departure, there was ice on the windshield and the pilot requested warm water and a towel to remove the frost. He was getting a feel for the air and landscape around him.

Sean noted on the prior flight the helicopter did about four rounds of attempting to drop the backpack. Only two of those times were actual true takes. He assumed that the accident flight was going to be a practice run in the helicopter would come back a few times to drop the backpack just like the previous flight had done.

Michael Olivia- Production Manager

Michael was in charge of the landing zone and takeoff video. The pilot arrived about 1700 and there was a safety meeting about 1730. The pilot was on air to ground radio communication. The first flight the pilot had defrosted the windows and had a heater by the helicopter prior to departure. Both the first and the accident flight locations were scouted. For the accident flight, the pilot wanted glow sticks in the top of the plateau to be lit. After the first flight, the pilot went to the RV and slept about two hours. After he woke up, he had the windows defrosted again and brushed the rotor blades free of frost. The pilot warmed up the engine for about 10 to 20 minutes and told the water truck to keep the lights on. The actor had a backpack, flashlight, and a map. There was a small LED light on the center of the helicopter window to help illuminate the actors face for the go Pro.

Robert Buchta- Show Runner

the production was limited to three hours of helicopter time. For the first flight the pilot circled a dozen times and took a lot longer than they had predicted. They were worried about going into "lunch penalty" which required different pay for the workers. During the couple takes, they had to keep reloading the bag onto the helicopter and were running out of time. For the accident flight, the plan was for the helicopter to circle the plateau and a vehicle located on top would signal the helicopter with glow sticks to get the pilot's attention. The helicopter would then circle over the valley and then send above the plateau.

Ian Kaufman- Director

Ian stated there were two helicopter scenes planned. The first scene was in a wooded area. After the first takeoff helicopter made several laps overhead then landed to talk specifics about how the maneuver went. They took off again in films to backdrops. They landed again and performed another bag drop were both the camera operator and the pilot stated the flight went well. A meal break occurred at 2300. The film crew moved up on top of the plateau. The pilot came up to the plateau to discuss what maneuvers he would be doing again. The plan was for him to take off and hover on the far side of the valley. The candidate would then signal the helicopter to come to his location and drop the bag. The pilot said that he could additionally land on top of the plateau.

They placed glow sticks where they wanted the bag to be dropped. There was a slight delay on the helicopter due to frost on the windshield. The helicopter finally departed and someone remarked that it looked low. Shortly thereafter, the helicopter crashed. He had thought that the first lap the pilot made would be like the prior flight, and they would land and discuss the maneuver after trying at first.

Kevin Stewart- Gaffer

Kevin stated that they set up to lights of the takeoff area so the pilot could see where he was going. On the ridgeline there was a Condor light set up, which illuminated 45 feet (1200 watts HMI). The flight was approximately 15 feet down the ridgeline and placed in an effort to eliminate the hill.