

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division
Washington, DC 20594

August 13, 2021

Video Files

Specialist's Factual Report By W. Deven Chen

1. EVENT SUMMARY

Location: Lihue, Hawaii
Date: December 26, 2019
Aircraft: Airbus AS350 B2 helicopter
Registration: N985SA
Operator: Safari Helicopters
NTSB Number: ANC20MA010

On December 26, 2019, about 1657 Hawaii standard time, an Airbus AS350 B2 helicopter, N985SA, was destroyed by impact forces and a post-crash fire when it collided with terrain about 24 miles northwest of Lihue, Hawaii. The commercial pilot and six passengers were fatally injured. The helicopter was registered to SAF LTD and operated by Safari Aviation Inc., doing business as Safari Helicopters, as a Title 14 *Code of Federal Regulations (CFR)* Part 135 on-demand commercial air tour flight. Company flight following procedures were in effect for the visual flight rules flight, which departed Lihue Airport (PHLI), Lihue, Hawaii at 1631.

2. GROUP

A video files group was not convened.

3. DETAILS OF INVESTIGATION

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received following three videos electronically:

Video #1: **Tourist Video Files**
Video File Type: **MP4**

Video #2: **Helicopter Tour Company-1 Video Files**
Video File Type: **MP4**

Video #3: **Helicopter Tour Company-2 Video Files**
Video File Type: **MP4**

All three videos were recorded along a route similar to the accident flight. The Tourist video was recorded about a month prior to the accident, and the videos from Helicopter Tour Company-1 and Company-2 were recorded around the same time of the accident. None of the three videos captured the accident.

3.1. Tourist Video Files Description

The video was recorded on one of the local helicopter tour flights on Kauai, Hawaii by a tourist on November 21, 2019. It was recorded with a hand-held video recording device inside the helicopter cockpit. The original video consisted of two MP4 files; one was 13 seconds in length and the other one was 12 seconds.

The video files are included as Attachment 1 and Attachment 2. The portions of the video where the pilot or passengers were visible were either clipped or blurred. The audio of the video was removed.

3.1.1. Tourist Video Files Transcription

File name: Attachment-1_Tourist_20191121_095030_redacted_Not-From-Accident-Aircraft.mp4

A short video showed views of the instrument panel of the helicopter and the front windows which were mostly covered by rain drops.

File name: Attachment-2_Tourist_20191121_095048_redacted_Not-From-Accident-Aircraft.mp4

A short video showed views of the instrument panel, side windows and front windows of the helicopter. The windows were mostly covered by rain drops. The helicopter appeared to be flying in low visibility conditions.

3.2. Helicopter Tour Company-1 Video Files Description

The video was recorded on a helicopter tour company-1 tour flight. Based on the file names, the video was recorded from 16:07:11 to 16:43:54, on December 26, 2019. The accident occurred on the same day around 16:57. The video consisted of alternated image frames recorded from two different cameras. Most of the image frames were from a forward-facing camera mounted outside of the helicopter; some image frames were from a camera inside the cockpit facing the pilot and passengers. The video consisted of four MP4 files; the first three were about 10 minutes in length each and the last one was about 7 minutes.

These video files are included as Attachments 3-6. The portions of the video of which the pilot or passengers were visible were blurred. The logo of the helicopter tour company-1 on the top left corner of the video was redacted. The audio of the video was removed. Timestamps were added on the bottom center to show the local time when the video was recording. The format of the timestamps shown is **hour;minute;second;frame**. The frame rate of the video was 30 frames per second.

3.2.1. Helicopter Tour Company-1 Video Files Transcription

The timestamps of the transcription were based on the local time when the video was recording.

File name: Attachment-3_Company-1_191226_160711_161733_redacted_Not-From-Accident-Aircraft.mp4

16:10:51 Helicopter took off from Lihue Airport. The weather was clear.
16:12:22 Nāwiliwili Harbor came into view.
16:12:49 The helicopter flew above mountains.
16:17:31 End of this video.

File name: Attachment-4_Company-1_191226_161733_162714_redacted_Not-From-Accident-Aircraft.mp4 – This file is a continuation of the above file.

16:19:35 The pilot identified location of waterfalls.
16:20:16 The pilot identified the waterfall again as the helicopter got closer to the waterfall.
16:22:14 The pilot identified Waimea Canyon.
16:23:32 The pilot identified town of Waimea.
16:26:49 A helicopter (not the accident helicopter) came into view in distance. The helicopter appeared as a white dot.
16:27:08 Both the recording helicopter and the observed helicopter were tracking toward an area of visible moisture. The visible moisture appeared to be fog.
16:27:11 End of this video.

File name: Attachment-5_Company-1_191226_162714_163655_redacted_Not-From-Accident-Aircraft.mp4 – This file is a continuation of the above file.

16:27:21 A non-accident helicopter came into view. Visible moisture covered mountains in the background.
16:27:30 The helicopter headed into area covered by visible moisture.
16:27:54 The camera view showed low visibility with mountains covered by visible moisture.
16:28:37 Water dew formed and flowed on the camera's lens.

16:28:59 More water dew formed and flowed on the camera's lens. Water droplets covered the majority of the camera's lens.

16:29:28 A layer of cloud was visible above mountains.

16:30:19 A non-accident helicopter came into view again. There were water droplets on the camera's lens.

16:30:53 A non-accident helicopter came into view while the pilot stated, "Gonna be going down little bit further. We'll come back to it a bit. It's pretty rainy over here. It'll be clear up here."

16:31:31 The pilot stated they were heading toward Waimea valley and Na Pali coast.

16:31:46 A non-accident helicopter came into front view, and clouds were visible in the direction the helicopter was heading.

16:32:24 The pilot identified Hanalei Bay.

16:34:02 Camera view showed low visibility with visible moisture.

16:34:20 The pilot identified Ke'e Beach. Camera view showed low visibility with visible moisture and dark clouds above in the sky.

16:34:42 A non-accident helicopter came into view. There was visible moisture present.

16:34:59 Water droplets ran down on camera's lens.

16:35:06 The pilot stated they were descending down to the shoreline.

16:35:48 The pilot stated there was a helicopter (non-accident) ahead and there was another (non-accident helicopter) going by, as the helicopter moved forward with the shoreline on its left.

16:36:08 The shoreline was covered by visible moisture.

16:36:21 The pilot stated, "let's go a little clear up here."

16:36:25 The pilot stated, "the rain is good...makes waterfalls...everything green...washes my window. Every once I got a free window wash. Let's clear up here."

16:36:55 End of this video.

File name: Attachment-6_Company-1_191226_163655_164354_redacted_Not-From-Accident-Aircraft.mp4 – This file is a continuation of the above file.

16:36:59 The pilot identified Kalalau Beach.
16:37:07 Layers of dark clouds were visible ahead and above shoreline.
16:37:28 The pilot identified Kalalau Valley.
16:38:14 The pilot identified Honopu Valley.
16:38:34 A non-accident helicopter was visible.
16:39:20 A non-accident helicopter was visible. Water droplets formed and flowed on camera's lens.
16:39:41 The pilot identified an area called Cathedrals.
16:40:19 The pilot identified a land called Razorback.
16:40:31 The pilot identified Redhill.
16:42:05 The pilot identified Ke'e Beach.
16:42:43 The pilot identified Haena Town.
16:43:02 Camera view showed low visibility. Water droplets formed and flowed on camera's lens.
16:43:18 The pilot identified an area called Tunnels.
16:43:53 End of this video.

3.3. Helicopter Tour Company-2 Video Files Description

The video was recorded on a helicopter tour company-2 tour flight. Based on the file names, the video started recording at 16:39, December 26, 2019, lasting about 52 minutes. The accident occurred on the same day around 16:57. The video consisted of combined image frames recorded from two different cameras. The base of the image frames was from the image recordings of a forward-facing camera mounted outside of the helicopter; the top right corner of the base image frames was covered by image recordings from a camera facing the passengers inside the cockpit. The video consisted of four MP4 files; the first three were about 15 minutes in length each and the last one was about 7 minutes.

These video files are included as Attachments 7-10. The beginning and the end of the video were blurred, where the staff of the helicopter company at the airport were visible. The image of the passengers on the top right corner and the logo of the helicopter tour company-2 on the bottom right corner of the video were redacted. The audio of the video was removed. Timestamps were added on the bottom center to show the local time when the video was recording. The format of the timestamps is **hour;minute;second;frame**. The frame rate of the video was 30 frames per second.

3.3.1. Helicopter Tour Company-2 Video Files Transcription

The timestamps of the transcription were based on the local time when the video was recording.

File name: Attachment-7_Company-2_201912261639_02_1_redacted_Not-From-Accident-Aircraft.mp4

16:39:54 Helicopter took off from Lihue Airport. The weather was clear.
16:41:10 The pilot identified Kalapaki Beach.
16:44:21 The pilot stated they were heading toward mountain side now and would come back to the ocean later.
16:45:11 The pilot identified Highway 50.
16:47:46 The pilot identified waterfalls.
16:54:12 The pilot stated the next landmark was Waimea Canyon.
16:54:23 End of this video.

File name: Attachment-8_Company-2_201912261639_02_2_redacted_Not-From-Accident-Aircraft.mp4 – This is a continuation of the above file.

16:55:19 The pilot identified Waimea Canyon.
16:56:39 Camera view showed the helicopter was flying in visible moisture. The visible moisture appeared to be fog.
16:57:07 Water dew was visible on camera's lens.
16:58:10 As more water droplets flowed on camera's lens, the pilot and a passenger discussed local rainy weather. The pilot stated that he heard another helicopter made a position report in that area. The pilot then stated he didn't know whether it was possible for him to take this route.
16:58:30 The pilot stated, "if it's still rainy and cloudy - we can't - you know - kinda see what's going on - then we'll pick up a different route - but I can still - check it out little further here. Yeh - the other helicopter couldn't make it through... and a few...when it's later. You see the difference...[laughed]...but."
16:59:01 Camera view showed low visibility with visible moisture.

16:59:22 Camera view showed low visibility with clouds and rain. The pilot stated, "Yeh - I don't know that's gonna work."

16:59:28 The pilot stated, "So I can fly through the clouds - got the instruments to do that - but...let's not do that on a tour. I'll see where we are going."

17:00:14 The pilot stated, "Let's try find a way back to the canyon and take a different route... that's all good. We deal with a lot of weather here in Kauai so...it's kind of normal stuff."

17:00:55 The camera showed low visibility with visible moisture.

17:02:48 The pilot identified Mōhihi Falls.

17:03:21 The pilot identified Kōke'e State Park.

17:04:08 The pilot stated, "Nā Pali Coast is over there. Wanna try get that way...yeh... that's more towards north side...and we'll see if we can...we can track back."

17:04:38 Dark clouds came into view ahead.

17:06:09 The pilot stated, "As we come back to the north side - you can see the Hanalei Bay."

17:07:28 The pilot identified Hanalei Town.

17:08:18 A non-accident helicopter came into view.

17:08:39 The pilot identified Nā Pali Coast.

17:08:47 Camera showed a view along coastline.

17:09:08 Camera showed the coastline was covered by clouds ahead.

17:09:47 End of this video.

File name: Attachment-9_Company-2_201912261639_02_3_redacted_Not-From-Accident-Aircraft.mp4 – This file is a continuation of the above file.

17:09:49 The camera showed a view along coastline on the left side. The view was with low visibility caused by visible moisture and clouds.

17:11:46 The pilot identified Kalalau. The camera view showed visible moisture.

17:11:57 The pilot identified Honopu Beach.

17:12:14 The helicopter turned left towards the coast.

17:12:38 The helicopter was circling above the mountains.

17:12:49 Water droplets formed and flowed on the camera's lens.

17:13:37 The pilot identified Honopu Arch. More water dew formed and flowed on the camera's lens.

17:13:58 The helicopter turned back along the coastline. The coastline was on the right side as the helicopter continued forward.

17:15:19 The camera showed views with low visibility caused by visible moisture. Water droplets formed and flowed on the camera's lens.

17:15:44 The pilot identified Waiahuakua Sea Cave.

17:16:28 The pilot identified HanakāpīʻAi Beach.

17:17:03 The pilot stated, "So now we're gonna...kind of like...try to get in front of weather so..."

17:17:32 The pilot identified Tunnels Beach. The camera showed views without visible moisture and the visibility increased.

17:18:33 The helicopter turned right towards the coast as the pilot described a local landscape that resembled a dragon.

17:19:13 The helicopter reached the coast and flew above mountains.

17:19:50 The camera view showed visible moisture among mountains.

17:20:51 The pilot identified Mt. Namolokama.

17:21:50 The pilot identified Hanalei Valley.

17:22:03 Dark clouds were visible on the top of mountains.

17:22:24 A non-accident helicopter came into view.

17:22:28 Another non-accident helicopter came into view.

17:24:48 The pilot identified a volcano.

17:25:11 End of this video.

File name: Attachment-10_Company-2_201912261639_02_4_redacted_Not-From-Accident-Aircraft.mp4 – This file is a continuation of the above file.

17:25:17 The camera showed views along a valley.

17:25:27 The pilot identified the highest peak of Kauai.

17:26:48 The camera showed a flat and wide landscape. The horizon was visible.

17:26:59 The pilot identified Sleeping Giant.

17:29:18 The coastline came into view.
17:30:38 The pilot identified Hanamaulu Bay.
17:31:32 The helicopter approached an airport for landing.
17:32:25 End of this video.

3.4. List of Video Attachments to This Report

- 1) Attachment-1_Tourist_20191121_095030_redacted_Not-From-Accident-Aircraft.mp4
- 2) Attachment-2_Tourist_20191121_095048_redacted_Not-From-Accident-Aircraft.mp4
- 3) Attachment-3_Company-1_191226_160711_161733_redacted_Not-From-Accident-Aircraft.mp4
- 4) Attachment-4_Company-1_191226_161733_162714_redacted_Not-From-Accident-Aircraft.mp4
- 5) Attachment-5_Company-1_191226_162714_163655_redacted_Not-From-Accident-Aircraft.mp4
- 6) Attachment-6_Company-1_191226_163655_164354_redacted_Not-From-Accident-Aircraft.mp4
- 7) Attachment-7_Company-2_201912261639_02_1_redacted_Not-From-Accident-Aircraft.mp4
- 8) Attachment-8_Company-2_201912261639_02_2_redacted_Not-From-Accident-Aircraft.mp4
- 9) Attachment-9_Company-2_201912261639_02_3_redacted_Not-From-Accident-Aircraft.mp4
- 10) Attachment-10_Company-2_201912261639_02_4_redacted_Not-From-Accident-Aircraft.mp4