

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



CEN22FA086

VIDEO FILES

Specialist's Factual Report

January 8, 2024

A. ACCIDENT

Location: Livingston, Texas
Date: December 30, 2021
Time: 1141 central standard time (CST)
Helicopter: Bell 206B, 206B LLC, N8AU

B. VIDEO FILES SPECIALIST

Specialist: Steven Smith
Mechanical Engineer (Recorder Specialist)
National Transportation Safety Board (NTSB)

C. DETAILS OF THE INVESTIGATION

In agreement with the Investigator-In-Charge (IIC), a Video Files group was not convened, and a summary was prepared. The NTSB Vehicle Recorder Division received the following video files:

Video File #1: IMG_3226.MOV

Video File #2: IMG_3227.MOV

Video File #3: IMG_3228.MOV

1.0 Device Recording Description

The video files were generated from a point of view (POV) cell phone camera. The exact model of the cell phone was not noted by the IIC.

2.0 Video Files Information

All 3 video files were made at a resolution of 1920 x 1080 pixels at a frame rate of 30.00 frames per second (fps). The length of the recordings are 11 seconds, 21 seconds, and 46 seconds for video files 1, 2, and 3, respectively. Each video contained an integrated audio track recorded from the cell phone microphone. The audio track included sounds from the engine in all 3 videos. The camera was held in the hand of the individual who was sitting in the left seat. The first video showed a rear-facing view of the individual in the left seat, while the second and third videos were forward-facing field of views. The third video captured the instrument panel on a couple of pans with the cell phone.

3.0 Timing and Correlation

Timing of the transcript is expressed as Video Elapsed Time, which is time from the beginning of each recording.

4.0 Summary of Recording Contents

4.1.1 Summary of Video File #1

The first video recording began with an inward field of view showing the individual who was holding the phone. Sunlight peered in through the helicopter and was in the face of the individual recording the video. The recording panned from the port side of the helicopter to the starboard and captured two passengers in the rear. The video captured the helicopter on the ground and other parked aircraft were visible, as the helicopter was taxiing at that time. The engine was powered on and moving, and no abnormal sounds were heard from the engine.

4.1.2 Summary of Video File #2

The second recording began with an outward field of view. The camera faced forward the entire length of the video. The recording showed the helicopter taking off and climbing, adjacent to the left side of the runway. Approximately 10 seconds into the video, the helicopter turned left and climbed over some trees before flying over a field towards a water tower. At the altitude the helicopter was flying, the visibility was clear, and the view was unobstructed by any weather conditions. No abnormal engine noises were heard.

4.1.3 Summary of Video File #3

The third video was recorded shortly before the accident occurred. The video is recorded in a forward-facing point of view. The camera panned a few times, capturing the instrument panel. Table 1 describes observations made from Video File #3. At the altitude the helicopter was flying, the visibility was clear, and the view was unobstructed by any weather conditions. No abnormal engine noises were heard.

D. SUMMARY OF EVENTS

Table 1. Video File #3 Summary of Events

Video Elapsed Time (m:ss)	Observation
0:02	The camera was pointed to the port side of the helicopter at the ground. A parking lot with utility vehicles was observed.
0:05	The camera panned to a forward-facing point of view. The helicopter was flying at a low altitude above the tree line.

Video Elapsed Time (m:ss)	Observation
0:12	Some conversation is heard, followed by, "I see him in the backyard." The helicopter was following a road and flying at an altitude just above the tree line (see figure 1).
0:18	The camera panned to the starboard side of the aircraft and captured a portion of the instrument panel. The airspeed was between 40 and 45 knots (kts). The attitude indicator showed no pitch but a slight left roll. The altitude was approximately 400 feet (ft). The heading was approximately 230 degrees (deg). A status bar displayed an illuminated "GPS" in green and "MSG" in orange. The annunciator panel was not illuminated with any warnings or cautions (see figure 2).
0:22	The helicopter began a right turn. The dual tachometer was visible and captured the power turbine between 97% and 100% and the rotor between 90% and 100%. Airspeed was slightly below 40 kts. The attitude indicator displayed that the aircraft was in a right roll. The altimeter displayed approximately 400 ft (see figure 3).
0:26	The helicopter continued the right turn. Torque was approximately 60%. The turbine outlet temperature (TOT) was approximately 650 degrees Celsius (degC). The airspeed was approximately 35 kts (see figure 4).
0:27	The oil temperature was between 60 and 70 degC and the transmission oil temperature was between 70 and 80 degC (see figure 5).
0:31	The helicopter had circled around the house on the southwestern side. The helicopter began to hover and an ensuing left drift occurred as the helicopter yawed to face the backside of the house.
0:38	As the helicopter was behind the home, the torque indicator displayed approximately 82%. The TOT gauge was approximately 690 degC. The airspeed was approximately 0 kts (see figure 6).
0:39	The torque indicator displayed approximately 89%. The TOT gauge was approximately 700 degC. The airspeed was approximately 0 kts (see figure 7)
0:46	The recording ended.

Submitted by:

Steven Smith
Mechanical Engineer (Recorder Specialist)



Figure 1. View captured at 0:12 Video Elapsed Time.



Figure 2. Instrument panel view captured at 0:18 Video Elapsed Time.

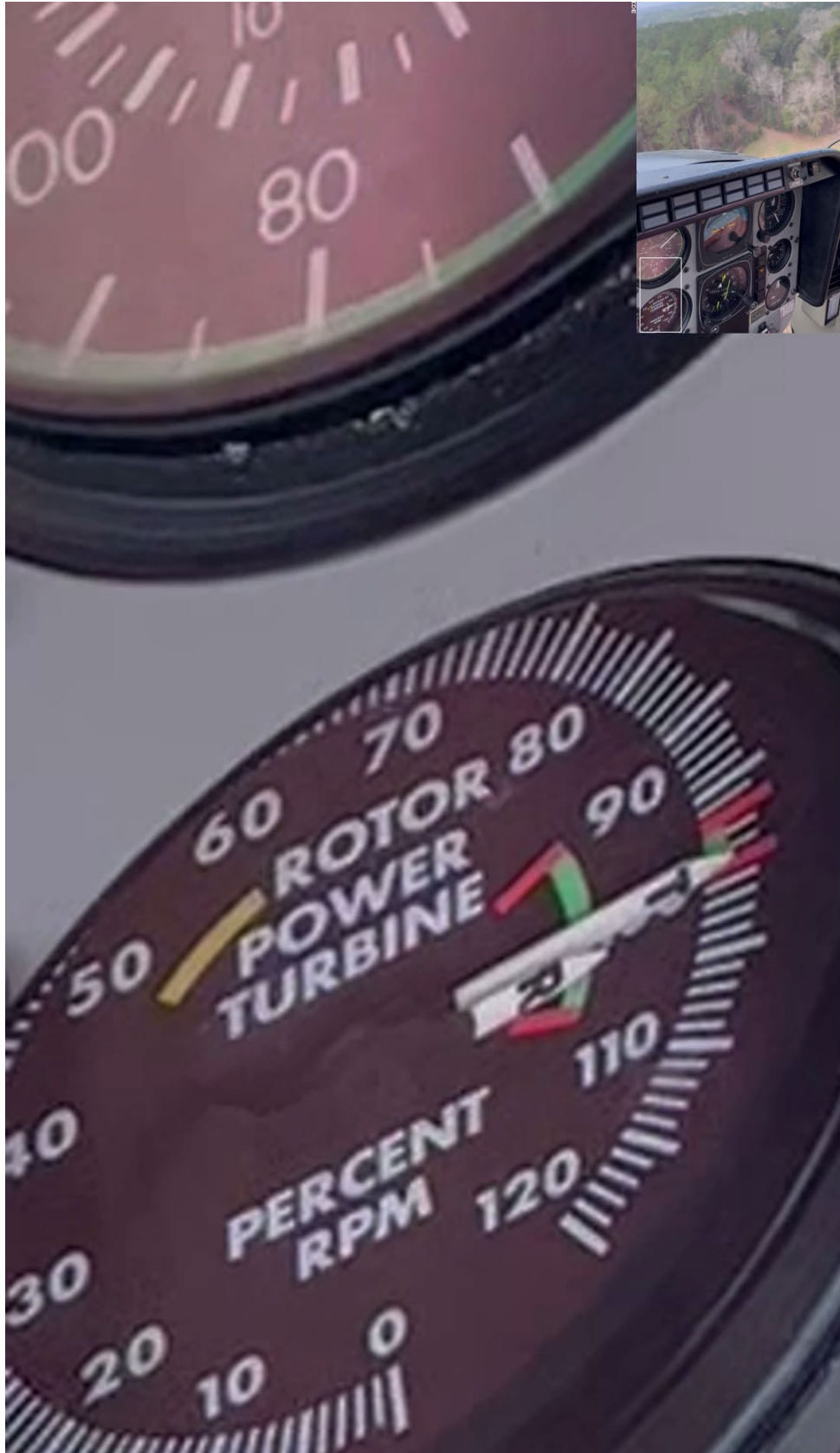


Figure 3. Zoomed in portion of the Dual Tachometer, taken at 0:22 Video Elapsed Time.



Figure 4. Zoomed in portion of the Torque and Turbine Outlet Temperature gauges captured at 0:26 Video Elapsed Time.



Figure 5. Instrument panel view captured at 0:27 Video Elapsed Time.



Figure 6. Zoomed in portion of the Torque and Turbine Outlet Temperature gauges captured at 0:38 Video Elapsed Time.



Figure 7. Zoomed in portion of the Torque and Turbine Outlet Temperature gauges captured at 0:39 Video Elapsed Time.