



F22 Disasters at the Grand Canyon

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After attending this presentation, attendees will understand the difficulties of identification of American and foreign visitors in remote areas of the Grand Canyon and the problems resulting from these man made and natural disasters.

This presentation will impact help the forensic community to understand how the Grand Canyon, being one of the Seven Natural Wonders of the World, can also be responsible for many tragedies by accident or by suicide and how the investigation of these tragedies requires a multidisciplinary approach.

The authors will present case studies of identification of victims of accidents over the Grand Canyon. The problems that result from these accidents consist of trying to recover the victims in these very remote areas, identifying them, and returning the victims to their hometowns, nationally and internationally.

Since the Grand Canyon has many foreign visitors, victims of these accidents require a major role in communication with foreign countries and also understanding different antemortem dental records as compared to our universal system of dental charting.

Suicides are also seen at the Grand Canyon and must be analyzed by medicolegal death investigators to establish that the death was a suicide, homicide, natural or accidental. Many victims succumb to natural disasters such as flooding or other weather related accidents. Some victims are found in the spring after the snow has melted and must be fully investigated.

One case study in 2001 required patience and understanding because of religious beliefs. In August of that year, a Papillion helicopter was boarded by six tourists in Las Vegas for a sightseeing expedition over the Grand Canyon. The helicopter crashed near the lip of the canyon in very rugged territory killing five tourists and the pilot and critically injuring the sixth tourist. Since the Grand Canyon is in Mohave and Coconino County, the local authorities asked for assistance from the Maricopa County Medical Examiner's Office in Phoenix, Arizona. The bodies were transported to the larger facility in Phoenix and the task was to identify those victims and return them to their hometown. With cooperation from the families of the victims, some of the antemortem records were at the Medical Examiner's office before the victims arrived from the Grand Canyon. With the help of many of the staff at the Maricopa County Medical Examiner's Office, the task was completed and the bodies were transported back to their hometown for funerals the next morning.

We must realize that the pressure to identify these victims must not interfere with the proper course of identification because of religious beliefs or family involvement. Religious issues also in the recovery effort were discussed and the proper respect and protocol in handling of the bodies was observed. After a thorough investigation by the National Transportation Board, pilot error was the cause of the crash.

Another case study was also a helicopter accident in the Grand Canyon in September of 2003, killing seven people. The cause of this accident was a rotor blade striking the vertical wall of the canyon upon descent and these victims were also brought to Phoenix, Arizona. Two victims were from Germany, two victims were from Japan and two victims were from the United States. The victims from foreign countries require an understanding of a different dental nomenclature and translating hand written treatment plans in German and Japanese proved to be interesting and challenging.

An interesting case study that will be discussed was a suicide that occurred in June of 2004. A distraught young man requested a front passenger seat on a helicopter for a better view of the Grand Canyon. He boarded the helicopter with an elderly couple in the rear seats and a female pilot. Over the canyon he unbuckled his seat belt and opened the door and as the female pilot tried to restrain him with her right hand, she began losing control of the helicopter. The passenger finally jumped only to hang on to the rungs of the aircraft momentarily and finally letting go. The pilot gained control of her aircraft and landed safely and eventually determined that this passenger tried previous suicide attempts, this time successfully. Ironically he was still viewable after jumping from 7500 feet.

One must realize the Grand Canyon averages 5 million visitors annually, with 800,000 people hiking into the canyon and 700,000 tourists fly over the Grand Canyon. Many search and rescues are performed mostly for unprepared hikers, who suffer from dehydration and heat exhaustion. Over 250 people are rescued annually from the depths of the canyon.

In this presentation, the author will also show why the Grand Canyon is one of the Seven Natural Wonders of the World.

Disaster, Identification, Investigation