Investigations: Final Practical Exam

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On November 5, 2018, at approximately 14:00 hours, neighbors reported hearing gunshots near a residence in Phoenix, Arizona. Upon arrival, law enforcement discovered the deceased victim, later identified as Haley Duff, inside the residence. Witnesses reported seeing a male suspect with "gray skin" fleeing the scene and entering an Uber vehicle at approximately 14:05 hours. Conflicting witness statements provided varying descriptions of the vehicle. Uber has not yet responded to the subpoena for driver records.

Crime Scene Evidence: Investigators recovered the following items at the scene:

- Black Smith & Wesson Handgun
- Toshiba Laptop
- IBM ThinkPad Laptop
- 1GB SanDisk Cruzer Thumb Drive
- Locked iPhone
- Sticky Note
- **500GB USB Hard Drive**: Forensic analysis revealed that the media was wiped; fingerprints of both the victim and Upton O'Goude were found.

Following further investigation, search warrants were executed, leading to the collection of additional digital evidence:

- Upton O'Goude's Laptop
- Haley Duff's Instagram Account
- Upton O'Goude's Instagram Account

Digital Evidence Analysis: Upon examining Upton O'Goude's laptop, multiple files of interest were discovered:

- Photographs of Haley Duff: Numerous saved images of the victim were found on Upton's device. While not inherently suspicious, they establish a prior connection between the two individuals.
- Instagram Interactions: Analysis of Upton's Instagram account revealed direct communication with Haley Duff. On October 15, 2019, Upton commented on one of Haley's posts, stating:
 - "Hey Haley! I did not know you were a photographer! I am also a photographer.
 We should get together and do some poses. What do you think?"
- **Geolocation Data:** On October 19, 2019, Upton posted on social media, stating:
 - "Leaving Las Vegas," and tagged Haley Duff, indicating they were in communication shortly before the incident.
- Additional Conversations: Further exchanges between Haley and Upton were retrieved, though they mostly consisted of casual banter.

Beyond the digital evidence, additional items at the crime scene suggest Upton's involvement, including the handgun and a sticky note containing his Instagram login credentials. Additionally, two storage devices were recovered: one with unknown contents and another that had been wiped.

Chain of Custody: To maintain the integrity of the evidence, the following individuals handled specific items:

• **Detective Derf:** Processed all physical evidence except for Upton's laptop and user files.

- Detective Doofus: Collected Upton's laptop after obtaining a search warrant and created an image of the user files using FTK (Forensic Toolkit) Imager.
- Ramon Lopez: Conducted forensic analysis of Upton's device and documented findings.

Each individual is included in the chain of custody log to ensure accountability and traceability of evidence handling.

Evidence Collection & Preservation Procedures: Proper forensic procedures were followed for collecting and preserving the digital and physical evidence:

Firearm & Physical Storage Devices:

- o Collected using gloves to avoid contamination.
- o Placed in evidence envelopes or boxes for secure storage.

Laptops & Mobile Devices:

- o Collected with gloves to preserve potential DNA evidence.
- o Stored in anti-static evidence bags.

Digital Data (User Files & Instagram Accounts):

- o Upton's laptop user files were imaged for forensic analysis.
- o Instagram accounts were documented, with login credentials securely stored.

Search Warrant Recommendation: Based on the existing evidence, a search warrant should be obtained for Upton O'Goude's personal phone. Accessing his phone may provide critical insights into:

- Potential premeditation of the crime.
- Communications regarding his plans or motives.

 Additional forensic artifacts, such as location history, call logs, and messages related to the incident.

The collected evidence, including forensic analysis of digital devices and social media interactions, establishes a connection between Haley Duff and Upton O'Goude before the incident. Further investigation of Upton's mobile device may provide additional details regarding his involvement. Maintaining proper chain of custody and evidence preservation remains critical to ensuring forensic integrity in this case.