Drone Forensics: The Right Drone For The Job

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BACKGROUND

Drones today are used by the military, law enforcement agencies, as well as criminals. The importance of selecting the right drone for the job could be a matter of life and death. Therefore, the comparison of the data extracted and analyzed from both drones is job one.

PURPOSE

The research attempted to compare and contrast the data extracted and analyzed from the DJI Spark Drone and the Protocol Director Foldable Drone With Live Streaming Camera.

INSTRUMENTATION

⇒ DJI Spark Drone
⇒ Protocol Director Foldable Drone With Live Streaming Camera
⇒ Samsung Galaxy S8 Active (DJI Go 4 application and Protocol Director application)
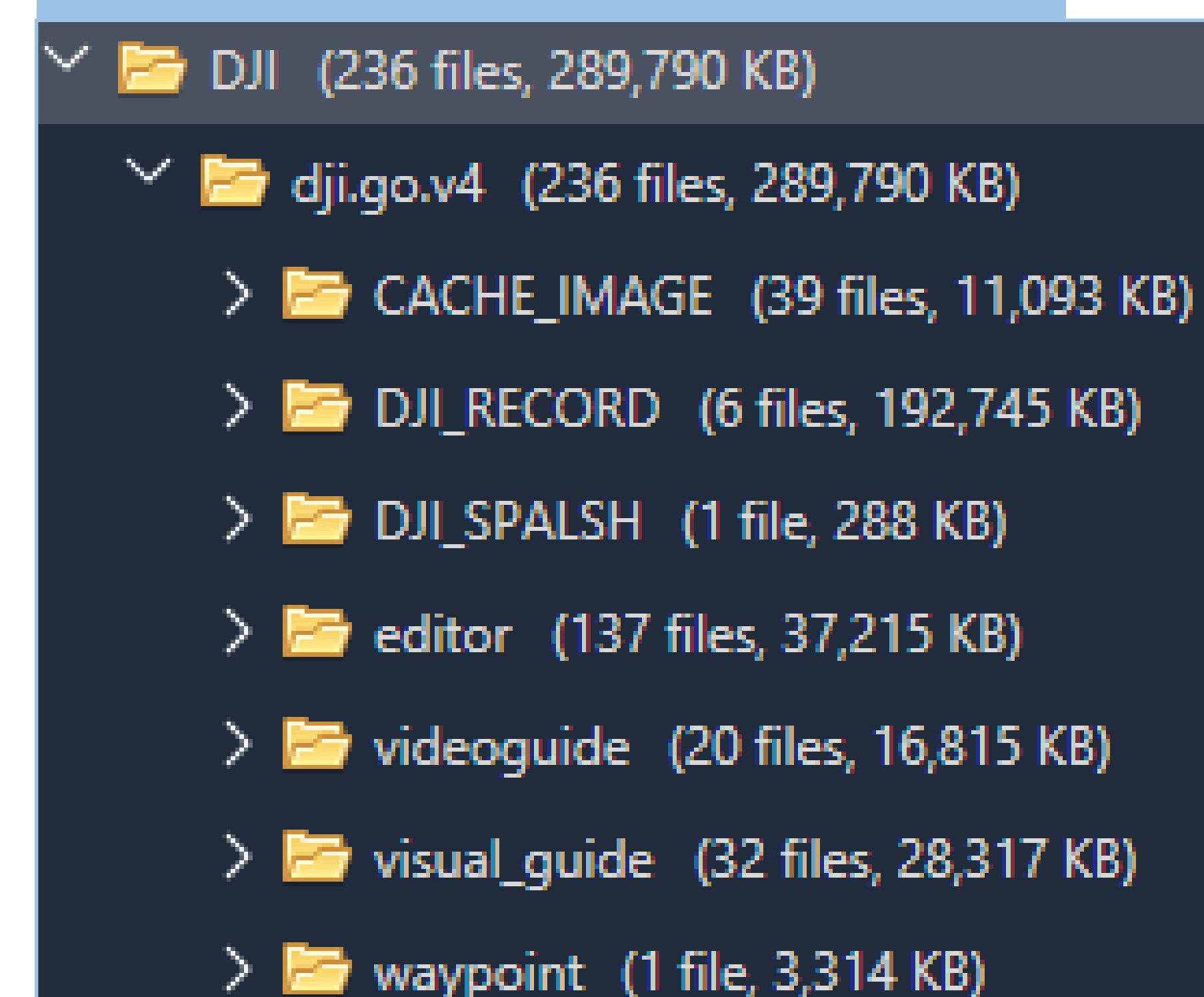⇒ Cellebrite Software (UFED 4PC and Physical Analyzer)
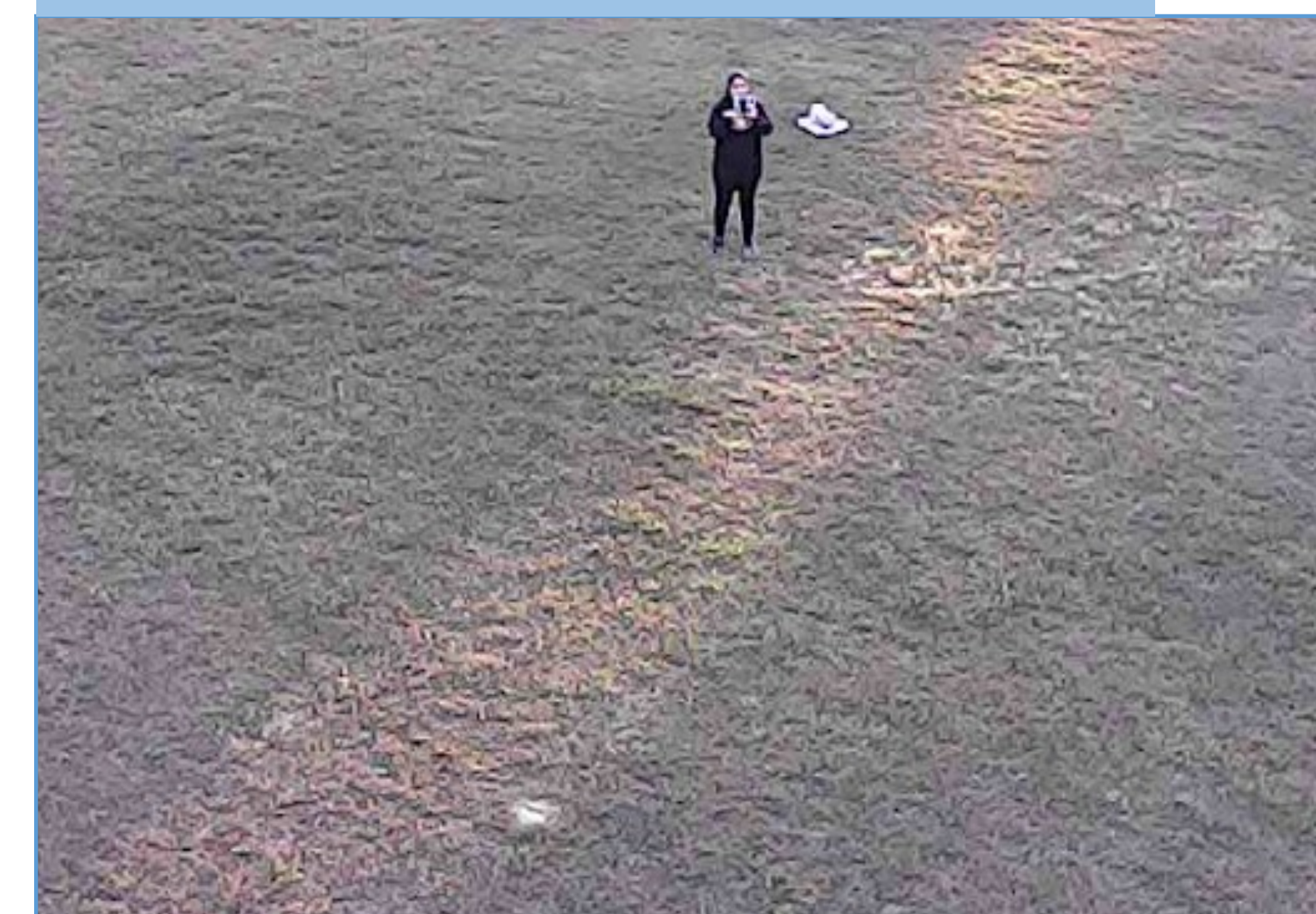
DJI SPARK DRONE
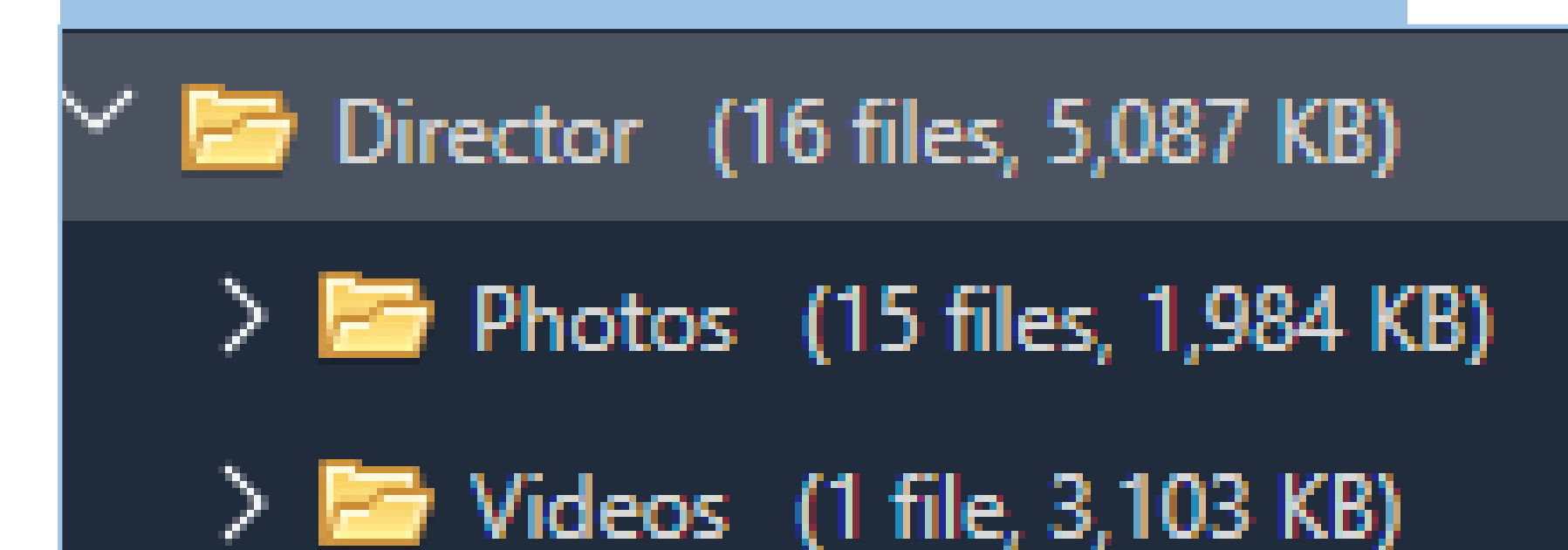

DJI Spark Image

DJI Spark Files in Cellebrite

PROTOCOL DIRECTOR

Protocol Director Image

Protocol Director Files in Cellebrite

PROCEDURE

1. Chose two drones
2. Registered drones with the FAA
3. Chose phone
4. Downloaded both drone applications onto the phone
5. Generated data
6. Extracted and analyzed the data with Cellebrite

RESULTS

DJI Spark Drone

⇒ Photos
⇒ Videos
⇒ Home Point and Waypoints
⇒ Flight Records
⇒ Log Entries and .DAT Files
⇒ Start Time, End Time, and Timestamp
⇒ DJI Spark photos and videos were clear and easy to see

Protocol Director Foldable Drone With Live Streaming Camera

⇒ Photos
⇒ Video
⇒ Protocol Director photos and video were not clear and were hard to see