

DRONES IN CONSTRUCTION

Jason Preston

Commercial Helicopter, Instrument UAV

- ▶ Compliance, Regulation
- ▶ Operations
- ▶ Equipment

AREAS OF FOCUS



- ▶ 2011, Raphael Pirker
- ▶ NTSB/FAA Ruling stands defining aircraft
- ▶ Regulated by 14CFR

AIRCRAFT/DRONE/UAV



- ▶ Typical FAA Fine is \$10,000
- ▶ FAA Motto
- ▶ FAA FAR vs Part 107
- ▶ Part 107 Licensing
- ▶ Part 107 Operations



COMPLIANCE/REGULATION

- ▶ What can you do with a drone....

OPERATIONS



- ▶ Daily
- ▶ Weekly
- ▶ Yearly
- ▶ Track changes to near property

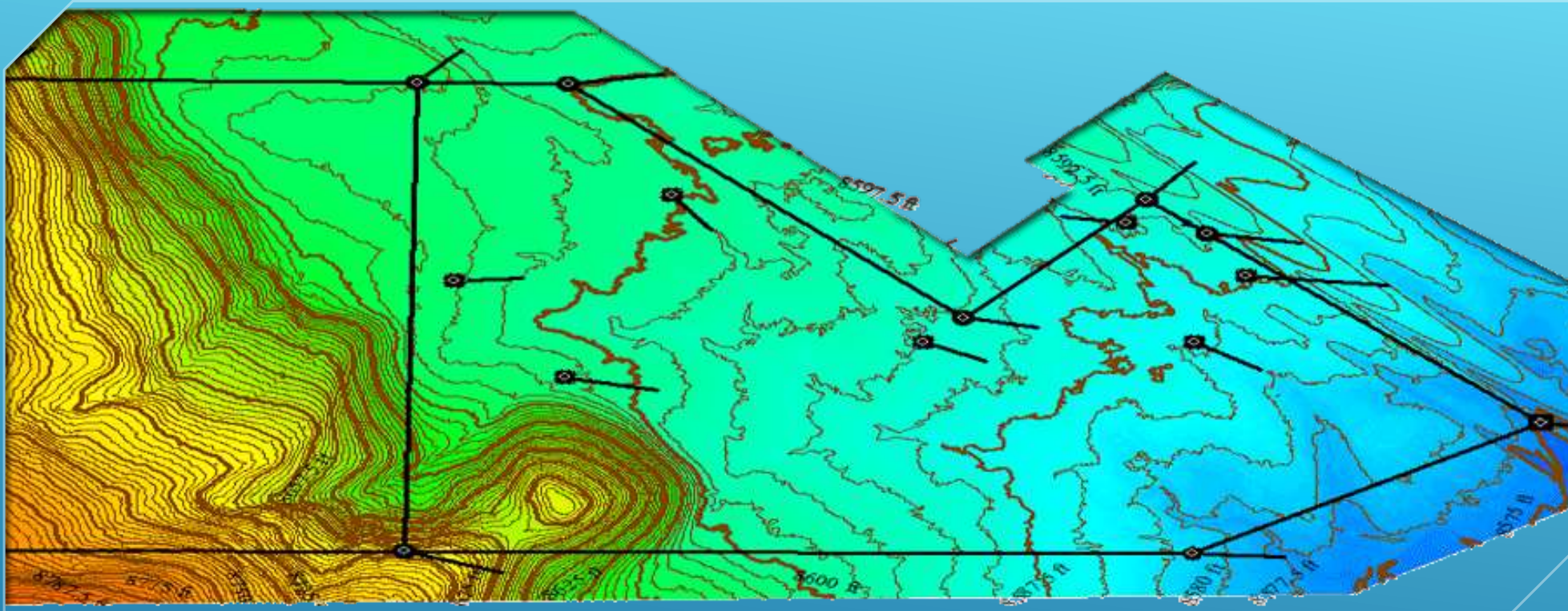
SITE PROGRESSION





- ▶ Photogrammetry
- ▶ Lidar

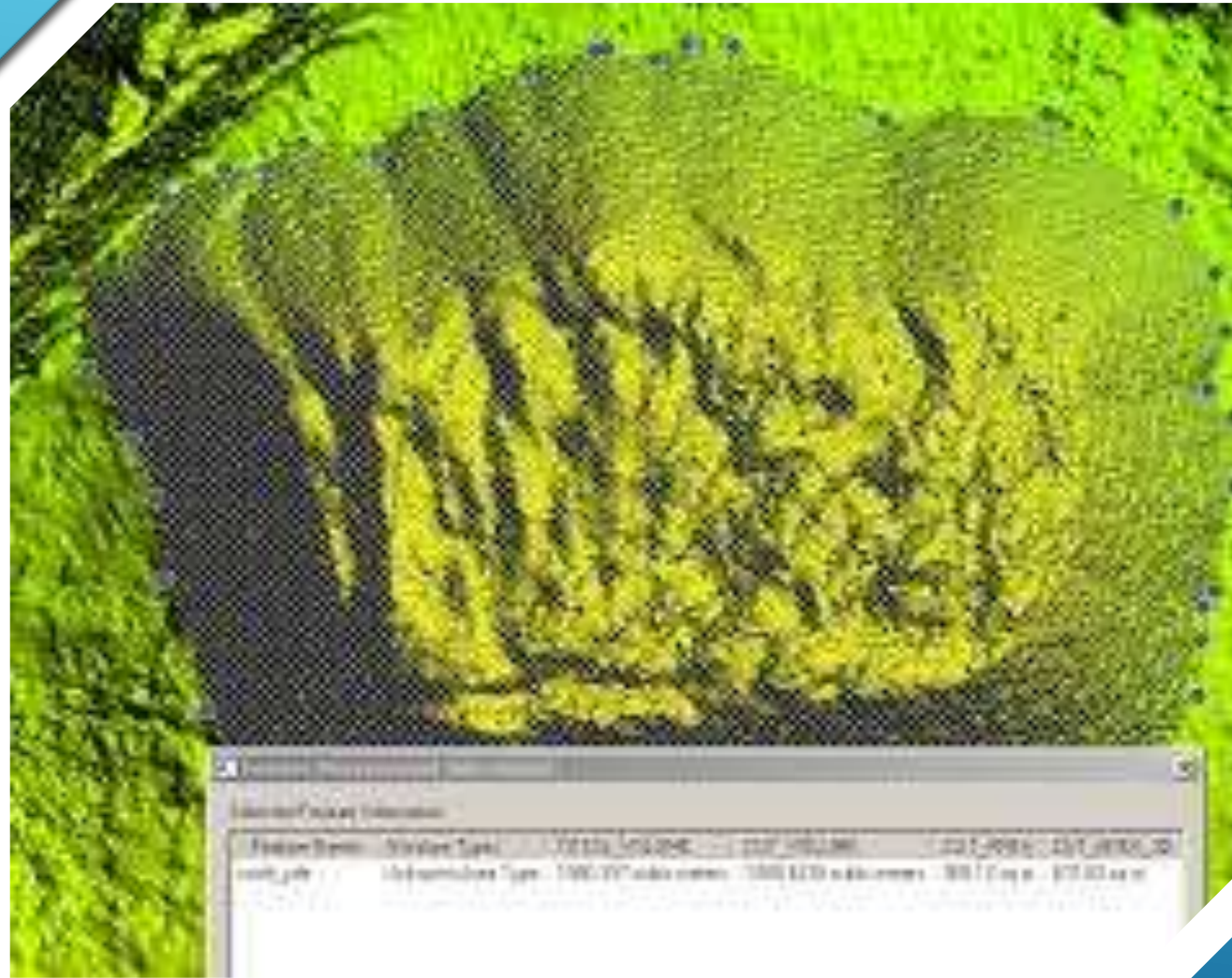
CAD/3D MODELING



CONTOUR MAPPING

Basic Contour Mapping

VOLUMETRIC CALCULATIONS





EQUIPMENT HEALTH INSPECTION

- ▶ Cost versus use
- ▶ Right tool for the job
- ▶ Expected time in service
- ▶ Payloads available
- ▶ Hazardous environment

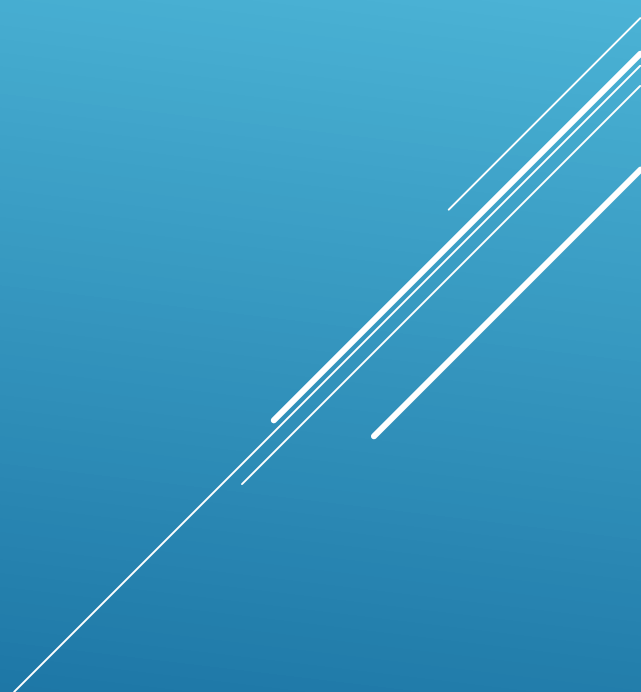
EQUIPMENT



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