When Drones Strike....
In Civil Engineering!!
The Mother of all Drones

• In 1935, The Royal Navy perfected a new remote-control aircraft for target practice, the DH 82B, also known as “Queen Bee”.

• The name ‘drone’ was adopted to refer to these aircraft in homage to the Queen Bee. The term fit, as a drone could only function when controlled by an operator on the ground or in a "mother" plane.

• Since Old English, "drone" has referred to a male honeybee whose only role is to mate with the queen.

de Havilland DH-82B Queen Bee
Regulations for Commercial Operations

FAA Part 107
- sUAS < 55 lbs.
- VLOS
- max alt 400ft
- Remote Pilot Certificate

NCDOT Aviation Division Permit
UAS Hardware

Fixed Wing or Multi-rotor

Quick Facts
Aircraft
Controller
Payload
Fixed Wing UAS

Take off & Landing route
UAS Payloads

Cameras
• Fisheye
• Rectilinear

Sensors
• LiDAR
• Thermal
Data Creation

Android or iOS

Field procedures
Pipe Inspection

RGB

Thermal (IR)
3D Modeling

- Exact Dimensions
- Geo-Referenced
- Display Basic Colors
- Export .DAE
QUESTIONS?
CLEARED FOR TAKE OFF
LET'S GO FLY!

YouTube Link: WithersRavenel Channel
Sketchfab: 3D UAS Models