



UAS in the NAS

Operations – Today and Tomorrow



Date: April 19, 2016



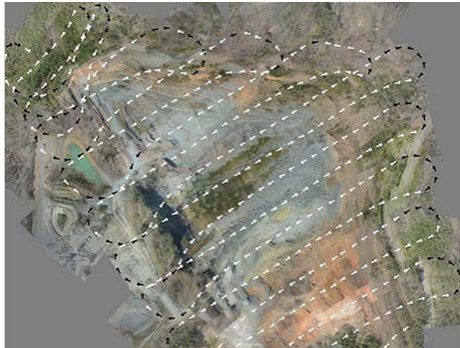
Federal Aviation
Administration

EMBRY-RIDDLE
Aeronautical University.

Today's Operations



“Monitoring A Farm Field To Detect Change and Identify Risks”



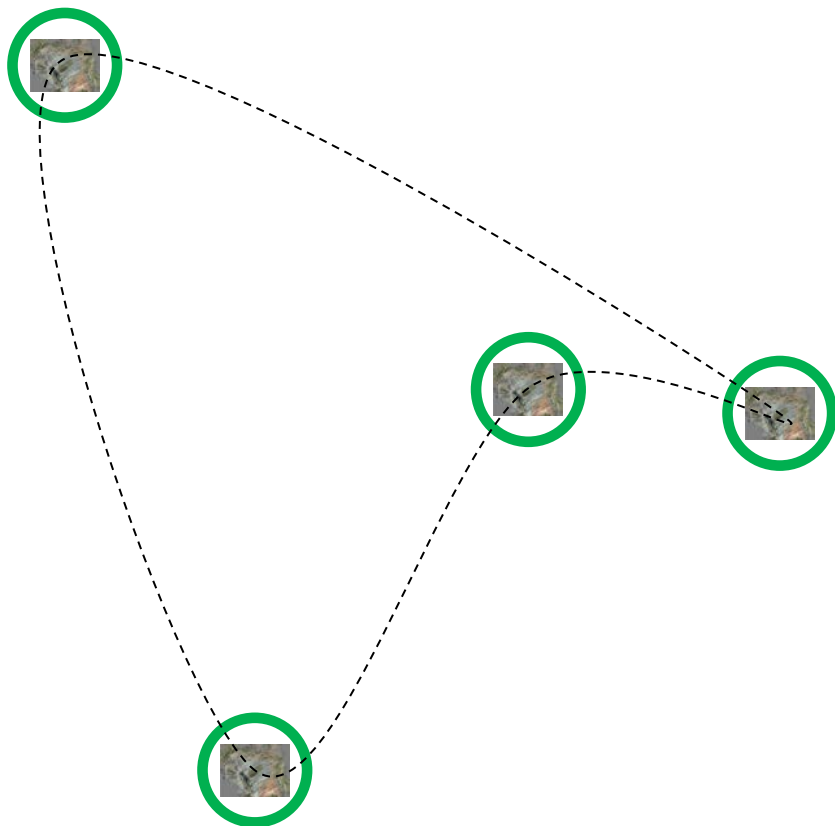
- **Single Site / VLOS**
- **Small UAS**
- **NOTAM – Block of Airspace**
- **Rural Area**
- **Class G**
- **Below 400 ft.**
- **Pilot Certificate**

Tomorrow's Operations

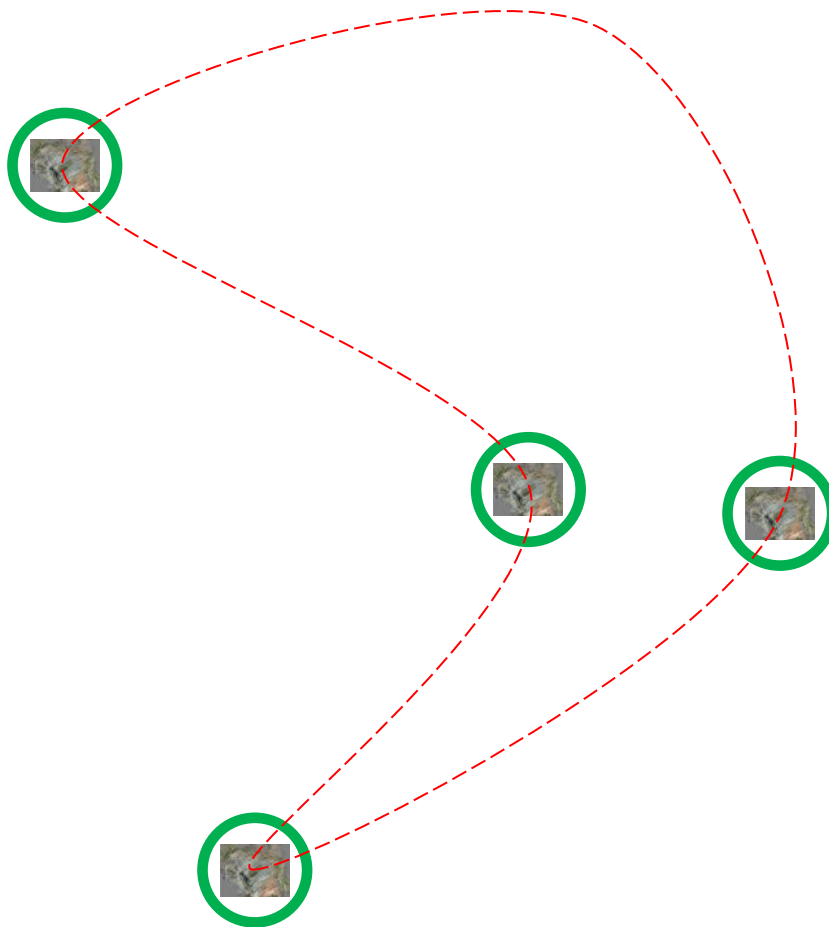


“Monitoring A Farm To Detect Change and Identify Risks”

- **Multi Site – EVLOS / BVLOS**
- **Small UAS**
- **Dynamic Flight Plan**
- **Rural & Suburban Areas**
- **Multiple Airspace Classes**
- **AGL Varies**
- **Trained Operator**



Tomorrow's Operations



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Many Differences



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Focused Efforts



Example Challenges

- UAS Data
- Environmental Data
- Connectivity & Comms
- Location Accuracy

Existing Research

- NASA UTM
- Pathfinder
- ASSURE
- Test Sites

Discussion Questions



Can the complexity of future low-altitude UAS CONOPS be managed by existing systems / structures?

If we had to choose, which should be trusted – the technology or the operator?