



# UAS in the NAS

## Operations – Today and Tomorrow



Date: April 19, 2016



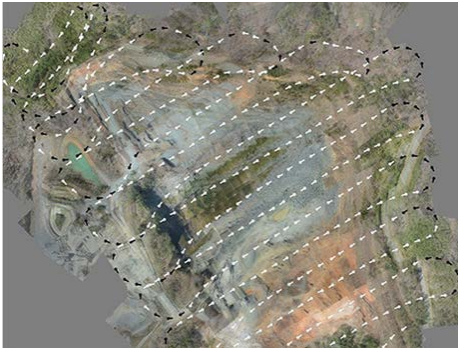
Federal Aviation  
Administration

**EMBRY-RIDDLE**  
Aeronautical University.

# Today's Operations

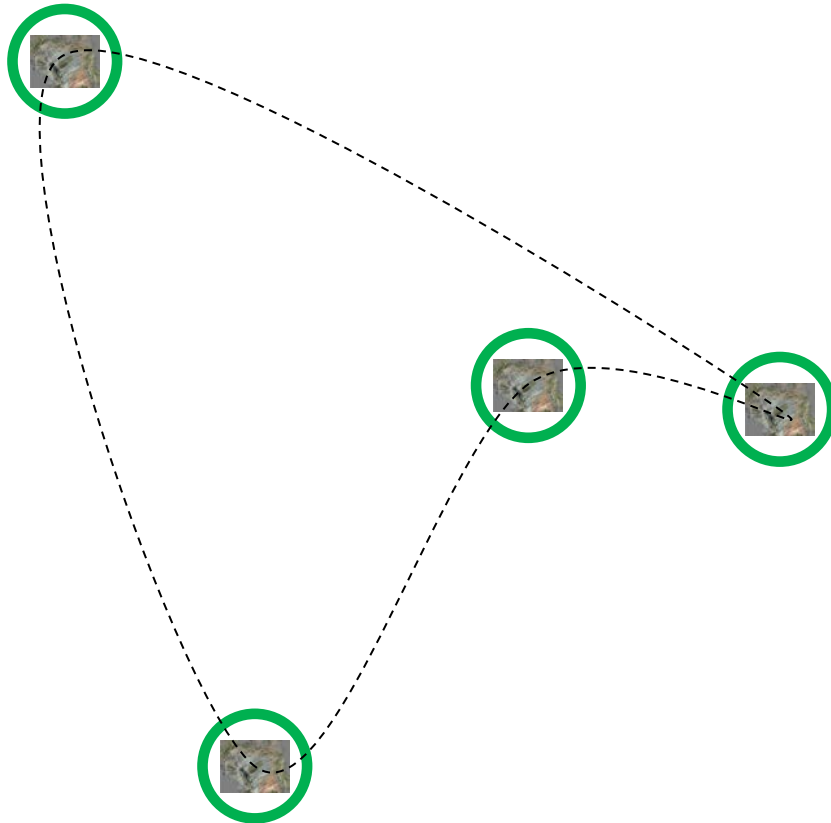


## *“Monitoring A Farm Field To Detect Change and Identify Risks”*



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

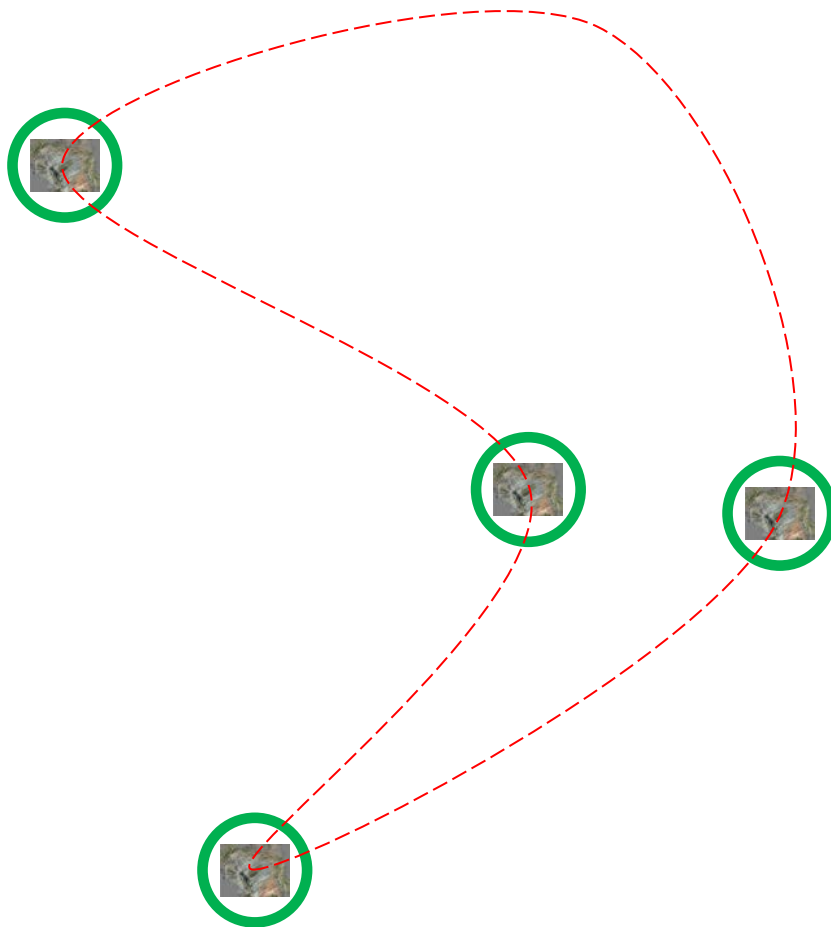
# Tomorrow's Operations



## *“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?**