

Aug 13th, 1:45 PM - 3:00 PM

## The Use of Simulation to Train Complex Unmanned Aircraft Systems Command and Control Tasks

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Haritos, Tom and Hale, Jon, "The Use of Simulation to Train Complex Unmanned Aircraft Systems Command and Control Tasks" (2018). *National Training Aircraft Symposium (NTAS)*. 11.  
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# The Use of Simulation to Train Complex Unmanned Aircraft Systems Command and Control Tasks

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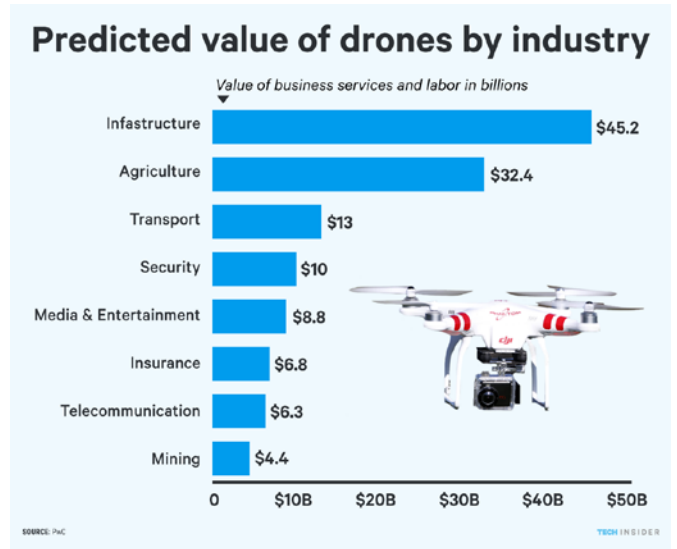
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# Presentation Agenda

- Brief overview of Training Unmanned Aerial vehicles (UAVs)
- Training Conflicts Associated with UAVs
- Hazards and Safety Threats
- Potential Solutions
- Closing Remarks

# Overview of UAVs

- Increasing demand in various sectors
- New technologies outpacing regulations
- Current methods for training UAV operators is highly variable



# Training Issues Associated with UAVs

- Operator and aircraft are separated
- Standardization guidelines are absent
- Complex UAS require system specific training
  - High-Altitude long endurance (HALE) and Medium-Altitude Long Endurance (MALE) UAS are Expensive Vehicles



# Hazard and Safety Threats

- Loss of Sensory Cues
- Lag and Latency
- Communications
- Situational Awareness
- Variations between Platforms



# Potential Solutions

- Integrate simulation into training UAV operators
- Ensure Transfer of training with simulators is effective
- Simulate different situations and environments
- Manned aircraft uses simulation for FAA certificates



# Closing Remarks

- Realistic training without real world risk
- More in depth training and operators will be able to get more flight time through simulators





# Questions?