

## Route-Operable Unmanned Navigation of Drones (ROUNDS)

October 2020

Ahmad Y Al Rashdan





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# Idaho National Laboratory

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October 13, 2020

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Instrumentation, Control, and Data
Science
Idaho National Laboratory
UAS for Electric Utilities 2020
Virtual Workshop

# Idaho National Laboratory

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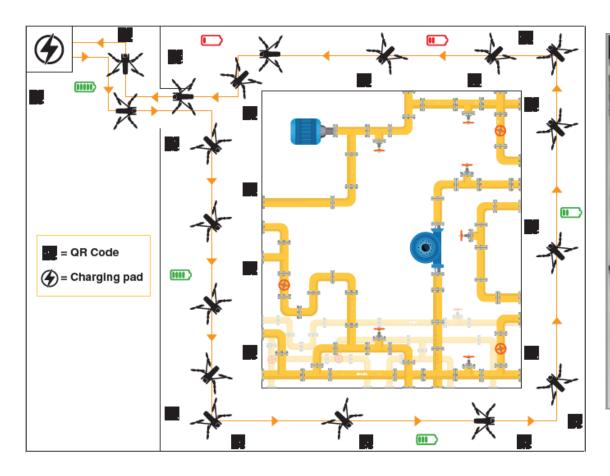
### **Overview**

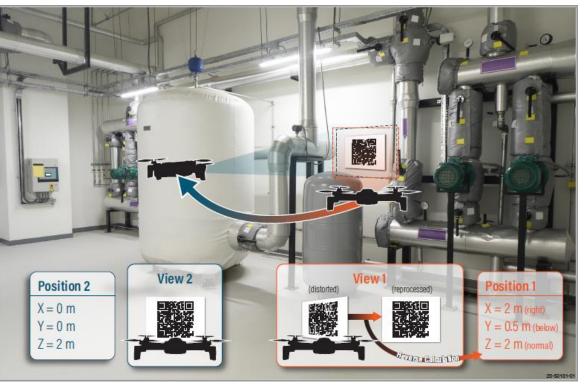






# Concept

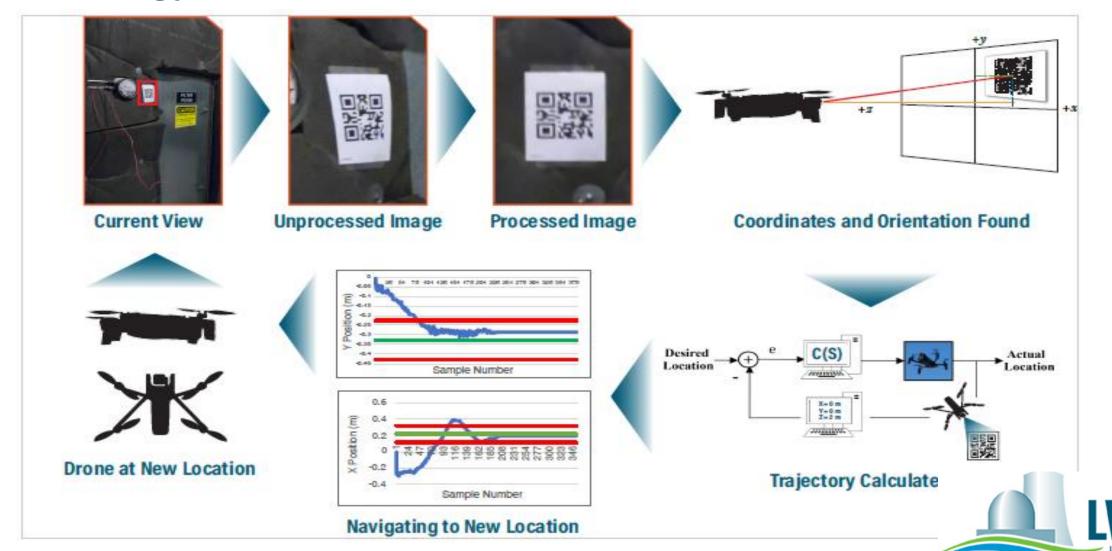








### Methodology





#### **Current Status**







#### **Benefits**

- Drone agnostic- Currently using OTS drone (low cost).
- No additional hardware needed for the drone
- QR codes are printed on A4 sheets- QR codes can be easily added for change of conditions
- Way points are fed through a mapping table or imbedded into the QR codes
- Very accurate (few inches accuracy)
- Utilize external computational resource for analysis
- We do not sell products!



#### **Questions?**

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