Drones, UAS and Emerging Tech

Bill Schrier, Senior Adviser, First Responder Network Authority
Exploring Drones Workshop – PNWER, WsDoT, CRDR – 28 June 2018
Bill Schrier
Senior Adviser, FirstNet
But also, formerly:
• Chair Washington State Interoperability Executive Committee
• Chief Information Officer, Seattle Police
• Chief Technology Officer, City of Seattle
• A long, long time ago, in a City Far Away ….
FirstNet

- September 11, 2001: Lack of communications interoperability for first responders
- Other events: no priority on cell networks for responders
- Needed: A Nationwide Wireless Network with First Responder Priority
- Congress: 2012 Law
- First Responder Network Authority
- $ 7 Billion, Spectrum License for 20 Mhz
- January, 2016: Firstnet RFP
- March, 2017: Award to AT&T
- January, 2018: Network deployed and available
Components

Network

Dedicated Responder Care Center

Dedicated Security Operations Center

Devices

Open Standards to meet First Responder Needs

Local Control, Management

72 Deployable Cell Sites

Apps

FirstNet
Built with AT&T
What’s FirstNet’s Role in Drones / UAS?

Inspection of Towers and Remote Facilities

UAS Cell Site
What’s FirstNet’s Role in UAS?

Getting UAS-gathered Data to Responders with Priority, Encryption
Emerging Technology – Some Considerations
Ideas to Consider: Storage, Indexing, Tagging, Disclosing
Ideas to Consider: Artificial Intelligence, Object Recognition

+ Beyond Line-of-Sight Navigation
Ideas to Consider: Groups and Swarms
Ideas to Consider: Others
Consider and Discuss

What other technologies would you want to integrate into a UAV/UAS program?

• Indexing and tagging of video
• Cloud service at a fixed price
• Full disclosure of video to the public
• Augmented reality
• Object recognition, Facial Recognition
• Swarms of drones
• Anti-drone tech and security of wireless links to drones
• Alexa/Siri/Cortana or something similar – voice control

Report Out