Idaho UAS Situational Awareness Workshop
Hosts: ID Transportation Department and ID Office of Emergency Management
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June 5, 2019 (Wednesday)
The Riverside Hotel
2900 Chinden Boulevard
Boise, Idaho

Objectives and Goals
• Coordinate the first statewide event to connect Idaho’s UAS users from public and private sectors.
• Create an interactive conference for situational awareness of the status of critical infrastructure, status of business, university research and workforce development.
• Share the current Idaho Threat and Hazard Identification and Risk Assessment (THIRA)
• Create a database for called-upon resources and expertise sharing.

Draft Agenda:

8:00am Registration, Vendor Displays and Networking

9:00am Welcome, Administrative Announcements and Introductions

9:15am The Objectives and Goals of Today’s Symposium
Mike Pape (ID Transportation Department, Aeronautics Division Administrator)
Brad Richy (ID Office of Emergency Management, Director)
• Attendees introduce themselves: name and business or agency affiliation
• Developing a statewide UAS users’ group and inventory of services and equipment
• Overview of existing State policies and programs to be discussed today
• Overview of UAS capabilities to be discussed today
• Overview of inspecting/accessing critical infrastructure during emergency management

9:30am Public Sector UAS Operational Concepts and Uses
Moderator: Ross Engle- ID Transportation Department, Aeronautics, Flight Operations Director
• David Barker- ID Public Safety UAS Council, Idaho Falls Police Department
• Ed Gygli- ID State Police Fusion Center. ID Criminal Intelligence Center
• Mark Bathrick- US Department of Interior

10:15am Private Sector UAS Operational Concepts and Uses
Moderator: Douglas Spotted Eagle, Sundance Media Group
• Matthew Harris- Idaho Power, IT Business System Development Leader
10:45am Break and Networking

11:00am Current Federal Regulatory Overview and Updates on Future Possibilities of Drone/UAS Policy. Idaho-specific regulations: Idaho Code 21-213 and Needs for Improvements. County and local examples. UAS public safety guidelines in disaster areas: Who and how are authorizations granted to enter restricted areas to fly? Who coordinates information about and permissions for UAS use in a restricted area?

Moderators: Mike Pape and Ross Engel
- Ken Kelley- FAA, Airworthiness FPM/POC and UAS Educational Outreach
- Bryan Norton, City of Boise Attorney on state and local regulations
- Chris Corwin- Blaine County Disaster Services Coordinator

12:00 Break and Lunch

12:15 Keynote Speaker: Robert Blair- Three Canyon Consulting
Overview of how UAS technology and privacy issues have developed, the intersections of public and private sector needs and uses, and futurist perspectives for UAS opportunities.

1:15pm Concept of Operations (CONOPS) and Common Operating Procedures: Identifying Gaps and Challenges and listing Suggestions for Improvements
Discussion facilitator: Ross Engle- ID Transportation Department, Aeronautics, Flight Operations Director

- Describe the business reentry system that is conceptualized for Idaho
- It may be a very distributed system with the State not playing a direct role in permissions or credentialing, etc.
- Broad based concepts and guidelines may provide the basis for access to disaster zones that are controlled by counties.
- Describe various methods of obtaining situational awareness on the status of infrastructure.
- Drones or other remote sensing technologies
- Company reports based on outages detected by their operating systems, e.g. an automatic shutdown of a pipeline that loses pressure.
- Specify format for the transmission of any data that contributes to a state-wide situational awareness
- Determine points of notification for incident information/routing of information
- Determine if a dashboard or other display of damages is appropriate

1:45pm Systems for facilitating information recording, storage and sharing.
- How is information on the status of infrastructure shared today?
- What forms of common operational picture exist today for public and private sectors?
- What types of information are needed, and in what format/detail?
- Other topics? (demonstration, privacy issues, resources for organizations, cooperative training programs for sharing agencies’ units, etc.)

2:15pm Next Steps and Timeline: Mike Pape (ITD) Brad Richy (IOEM)
- Building a User’s Group: Participant responsibilities and benefits
- Distribute inventory survey link via email to all. Please complete the online database survey to correct and better understand participant’s available levels of services, expertise and available equipment and capabilities.
- Suggestions from the audience for future collaborative processes, best practices and expertise sharing

3:00-5:00pm UAS Demonstrations at Quinn’s Pond parking lot. We will walk 10 minutes from the hotel north of the Boise River. Please bring your own rain gear in case of wet weather.

- Sundance Media Group - Douglas Spotted Eagle
  - Aerial Vehicle Operation Center A.V.O.C.
- Rapid Aerial LLC and Empire Unmanned - Matt Roderick
- RapidXC – Quito Saez and Charles McNeel, Department of Defense and ID State University.
  - Modular Ground Control Station (MGCS)*: Demonstrate command and control of various UAS platforms
  - GeoFOCIS software*: Moving map software that can support various public safety use cases. It is currently used by USFS for firefighting C2 and aerial mapping of fires. Would also serve well for law enforcement and search & rescue applications. We would likely have this displayed in the MGCS.
  - MX-15 Ball-in-a-Box (BIAB)*: Carry-on/self-contained MX-15 sensor
    - Intent would be to either:
      - a) Have the BIAB as a static display tied into MGCS in their operations center
      - b) Rent a C206, Twin Otter, or other Cessna with roll-up door and demo the BIAB airborne and feed into MGCS in operations center if practical.
  - MartinUAV: VTOL UAS that transitions to traditional fixed wing flight. Not likely a near-term procurement for state and local, but there may be a longer-term strategy with various end customers.
  - L3 FVR: Hybrid VTOL UAS - same category as MartinUAV as far as near-term requirement/procurement, but we can invite and coordinate.
  - Alpha Unmanned*: 14kg gas-powered helicopter with 3 hours endurance and 3kg payload capacity
- AT&T Tethered Vapor 55 w/ 4G LTE base station: AT&T has a tethered/electric power helicopter that has a base station on board to provide scalable communications infrastructure for emergency response.
- CyPhy: Tethered multi-rotor to provide persistent overwatch for various public safety applications
- MIMO Radios: Can demonstrate connectivity with various assets leveraging MPU-5 and Silvus radios - further coordination required.