



## Fire & Aviation Management

### ASPRS - UAS Reno 2015 – Overview

## Fire & Aviation Management

Lorri Peltz-Lewis, USFS R5 FAM GIS Coordinator,





# ASPRS – UAS Reno 2015 - Overview

Conference Program on line - <http://uasreno.org/conference-program/>

YouTube Videos - [LINK](#)

UAS/UAV not drone...

## UAS MAPPING 2015 RENO

ASPRS UAS Technical Demonstration and Symposium

[Home](#) [Conference Program](#) [Speakers](#) [Conference Registration](#)

[Hotel Reservation](#) [Exhibitor Registration](#) [UAS Workshop](#)

[Sponsorships](#) [Poster Session](#) [Conference Participants](#) [ASPRS](#)

[Symposium News](#) [UAS Reno 2014](#)



# change is in the air

ASPRS UAS Technical Demonstration and Symposium  
September 29 – 30, 2015, Reno Nevada



## Fire & Aviation Management

### ASPRS – UAS Reno 2015 - Overview

#### Special Sessions:

- **Pre-Session – Beyond Visual Line of Sight (BVLOS) – connect, advance development, regulation and adoption.**
- **Field Trip – imagery, IR, LiDAR, & hyperspectral – available for analysis to ASPRS membership**
- **Panel – Looking Ahead [LINK](#)**
- **LiDAR Sidebar – new compression format being proposed by ASPRS**
- **Vendor – 16 sponsors, 66 participants, 400 + attendees**



### ASPRS – UAS Reno 2015 - Overview

- **Keynote Speakers –**

- **Jonathan Evans**, SkyWard.io - next era of aviation – historical perspective – humorous & insightful. [LINK](#)
- **Keven Gambold** – Unmanned Experts – future, niche markets, inspections (bridge, powerline, etc), Future of Employment ([book](#)), [LINK](#)

- **Opening–**

- Colin Snow, Drone Analyst – \$2B-\$92B/yr, focus hardware & software, 1800 underground operations, little less official, etc. report available: <http://droneanalyst.com/purchase-research/>
- **Stewart Baillie**, Unmanned Systems Canada – authorizations over 1700, uses mapping & surveying, 800M-4.5B/yr, authorization methods & fines, Transport Canada: <http://tc.gc.ca/safetyfirst> [LINK](#)
- Brian Murphy, Altavian – mapping issues with drones, operational limitations and abilities – good overview of the impact regulations have on results.



### ASPRS – UAS Reno 2015 - Overview

- **Educating Practitioners –**

- Max Baber, **US Geospatial Intelligence Foundation (USGIF)** – Professional membership <http://usgif.org>, conference, training, trajectory magazine [online](#) , scholarships, accreditation, credentialing, etc. [LINK](#)
- Riadh Munjy , CSU Fresno – geomatics engineering, courses, faculty, training
- Qassim Abdullah & Karen Schuckman , **Penn State** – curriculum, **GEOG892 on line study**, certificate

- **Mapping -**

- Mike Tully, Aerial Services – cameras & metrics,
- Paul Goodman, Mapbox – mapping requirements, uses in Nepal earthquake, Humanitarian UAV Network, DIY Drones, etc.
- Paul Braun, Continental Mapping – hype vs. real use – archaeologic analysis on Cahokia, Aztalan – data collection





### ASPRS – UAS Reno 2015 - Overview

- **Applications –**

- Colin Brooks, Michigan Tech – **unpaved road** assessments, manual \$8-280, UAV \$2-20, MDOT study – lighting, confined spaces, **bridge spalling**, culverts, traffic patterns, accident reconstruction, etc. [LINK](#)
- Keith Cunningham, Univ of Alaska, Fairbanks – **river ecology**, marine mammal counts, permafrost landslides, bridge inspection, etc. [LINK](#)
- **Jeremy Eastwood** , DroneDeploy – Map engine ([link](#)) **cloud processing for all** [LINK](#)
- Fabien Blanc-Paques, Airware – multi platform capabilities, safety, workflows – aircraft/operations/products
- Julie Foguene, SenseFly – range of drones, mining, damage assessments, construction, agriculture, **inspection & close mapping**, eXom quadrirotor (sensors on head), etc. [LINK](#)



### ASPRS – UAS Reno 2015 - Overview

- **Technology –**
  - Keith Fieldhouse, Kitware – open source software tools, KWIVER [tool](#) [LINK](#)
  - Antoine Martin, Pix4D – vertical structure modeling, towers (cell, smoke, etc.)
  - Walter Volkmann, Micro Aerial – personal mapping & surveying systems
  - Tom Breen, Headwall-Photonics – hyperspectral applications
  - Wolfgang Juchmann, Velodyne – 3D sensors LiDAR puck applications [LINK](#)
  - Bob Jannarone, Brainlike – image detection methods caribou, whales, [LINK](#)
  - **Bernd Lutz, Multi-Rotor Service** – purpose built UAV, moisture proof, ADS-B & SensUp BVLOS technologies, etc. [LINK](#)
  - Whitney Smelser – mobile mapping road infrastructure, aircraft vs UAS, etc. [LINK](#)
  - **Mark Contarino**, Enterprise Engineering Services – BVLOS ops, requirements, cooperative vs. non-cooperative, testing Zeus Coherent Radar, Apollo ADS-B, Hermes Tracking, “**Apollo Project**” autonomous collision avoidance between two Tiger Shark UAS & DJI Phantom II [LINK](#)



### QUESTIONS

Contact for more: [lpeltzlewis@fs.fed.us](mailto:lpeltzlewis@fs.fed.us)  
[@lapeltz](#) UAS list



Drone Defender – [LINK](#)