ALASKA UAS INTEREST GROUP

2015 Annual Meeting

Westmark Conference Center
813 Noble Street, Fairbanks, AK 99701

Arctic Theme – Tuesday, September 1

With the U.S. assuming chairmanship of the Arctic Council from April 2015 to April 2017, an Arctic theme is featured the first day with presentations by Alaska corporations on commercialization of the industry and by the university on recent unmanned aircraft missions such as oil spill research, and sea ice, sea grass, and otter surveys. Likewise, several of the university's global partners will be speaking on this day as well.

07:45 – 08:30 **Networking Breakfast**

08:30 – 09:00 **Welcome and Introduction – Overview of UAS Program: Past, Present, and Future**
Pat Gamble, former President, University of Alaska
Jim Johnsen, President, University of Alaska
Dr. Bob McCoy, Director, Geophysical Institute, University of Alaska Fairbanks (UAF)
Marty Rogers, Director, Alaska Center for UAS Integration (ACUASI)

09:00 – 09:15 **Keynote Speaker**
Senator Pete Kelly, Co-Chair Senate Finance, Alaska State Legislature

09:15 – 09:45 **Arctic Slope Regional Corporation (ASRC) - Federal**
Bill "Sweet" Tart, Senior Director, Unmanned Systems and Robotics
Kevin "Stenny" Stenstrom, Senior Director, Business Development
- *One Alaskan Native Corporation's perspective on the UAS industry*

9:45 – 10:30 **Pogo Mine**
David Larimer, Chief Geologist, Sumitomo Metal Mining Pogo LLC
- *Unmanned Reconnaissance Systems in Underground Mine Rescue Actions*

Dr. Mike Hatfield, Assistant Professor, University of Alaska Fairbanks
- *Unmanned Vehicles for Mine Safety Rescue & Training*

10:30 – 11:00 **Morning Networking Break**

11:00 – 11:45 **University of Alaska Fairbanks and Alaska Center for UAS Integration**
Jessica Garron, Senior Science Consultant at Alaska Satellite Facility, UAF
Greg Foscue, General Manager & Operations Manager, ACUASI
- *Aerial Operations for Arctic Oil Spill Response*

11:45 – 12:15 **University of Alaska Fairbanks and Alaska Center for UAS Integration**
Dyre "Oliver" Dammann, graduate student in geophysics, University of Alaska Fairbanks
Eyal Saiet, Remote Sensing Specialist, ACUASI
- *Sea Ice Survey Using Unmanned Aircraft Near Barrow, Alaska*

12:00 – 13:00 **Working Lunch** - Enjoy the buffet lunch while the meeting continues

13:00 – 13:30 **Alaska Center for UAS Integration**
Sam Vanderwaal, Systems Integration & Engineering, ACUASI
- *Testing the use of Unmanned Aircraft Systems for Intertidal Surveys - Proof of Concept*

13:30 – 14:00 **National Oceanic Atmospheric Administration (NOAA)**
John "JC" Coffey, Executive Director of Unmanned Systems, Cherokee Nation Technologies supporting the NOAA UAS Program Office
- *NOAA Atmospheric, Marine and Arctic Monitoring Using UASs (including Rapid Response)*

14:00 – 14:30 **URS/AECOM Australia**
Dr. Catherine Ball, Regional Unmanned Aerial Systems Lead
- *World first UAS based environmental and engineering surveys*
- *The antipodean appetite for UAS*
- *The good, the bad, and the not so ugly*

14:30 – 15:00 **Afternoon Networking Break**

15:00 – 15:45 **National Oceanic Atmospheric Administration (NOAA)/National Marine Fisheries Sciences (NMFS)**
Ms. Erin Moreland, Research Zoologist, Polar Echosystems Program, NOAA/NMFS
- *UAS as a Tool for Marine Mammal Research*

15:45 – 16:30 **Transport Canada & National Research Council Canada**
Fernando Mojica, Project Director UAS, Transport Canada / Aircraft Services Directorate (AAF)
Paul Truant, Project Manager, UAS Project, Transport Canada
Iraj Mantegh, Program Leader, Civil Unmanned Aerial Systems, NRC Canada-Aerospace
- *Unmanned Aerial Systems in Canada - Transport Canada, National Research Council Canada, and Canadian Coast Guard are Exploring Exciting New Opportunities for the Use of UAS for Civilian Government Applications*

16:30 – 17:00 **University of Hawaii**
Ted Ralston, Consultant (Retired aerospace executive)
Dilmurat Azimov, PhD, Assistant Professor of Mechanical Engineering
- *Integrated Sensor Fusion, Targeting, Guidance and Control Framework and Algorithms for Autonomous Unmanned Aerial Systems*

17:00 – 17:05 **Meeting Conclusion and Announcements**
Marty Rogers, Director, ACUASI

18:30 – 21:30 **Networking Reception at Fountainhead Antique Auto Museum**
212 Wedgewood Drive, Fairbanks, Alaska 99701. Phone: 907-450-2100

Business networking at its best. Enjoy an evening surrounded by a collection of over 80 vehicles, including horseless carriages, steamers, electric cars, speedsters, cyclecars, midget racers and 30s classics. Featuring rarities such as an 1898 Hay Motor Vehicle, 1906 Compound, 1920 Argonne and 1921 Heine-Velox Victoria.

Technical Theme – Wednesday, September 2

Technical presentations on emerging technologies will be provided by the military, government, industry, and private participants on a wide variety of unmanned systems on topics including UAS traffic management (UTM), environmental science, emergency response in firefighting, precision integrated programs, and image processing from UAS sensor data.

07:45 – 08:30 **Networking Breakfast**

08:30 – 08:45 **Fort Wainwright, U.S. Army Garrison and U.S. Army Alaska**
COL Sean Williams, Garrison Commander
- *Arctic Security and Gray Eagles in Alaska*

08:45 – 09:15 **Keynote Speaker**
Senator John Coghill, Majority Leader, Alaska State Legislature

09:15 – 10:00 **Lockheed Martin**
Mike Glasgow, Lockheed Martin Fellow, Chief Architect for Aviation Services
- *UAS Traffic Management (UTM): Enabling UAS Operations*

10:00 – 10:30 **Morning Networking Break**

10:30 - 11:30 **Northrop Grumman Aerospace Systems**
Bill Walker, Business Development, HALE Unmanned Systems
- *Global Hawk in Environmental Science*

11:30 – 12:00 **Bureau of Ocean Energy Management (BOEM)**
Rick Raymond, Wildlife Biologist
- *BOEM Alaska Environmental Studies Program*

11:45 – 13:15 **Lunch** - Enjoy the buffet

13:00 – 14:00 **3D Robotics**
Dr. Gregory Crutsinger, Academic Program Director
- *From Ecology to Enterprise—Flying Solo in the Field*

14:00 – 15:00 **PEDMAS Technologies & Innovations**
John Shepley, Chief Technology Officer
- *Improving Environmental Situational Awareness for UAV Operations*

15:00 – 15:30 **Afternoon Networking Break**

15:30 – 16:15 **Precision Aviation**
Matt Parker, UAS Operations Director
- *Diversified Operations - An Operator's Perspective*

16:15 – 16:45 **Brainlike – Smart Sensing Solutions**
Dr. Robert "Bob" Jannarone, CEO, Brainlike
- *Image Processing from UAS Sensor Data: Wildlife Survey Prospects*

16:45 – 17:00 **Meeting Conclusion and Announcements**
Marty Rogers, Director, ACUASI

17:30 – 18:30 **Networking Reception – Westmark**

Policy Theme – Thursday, September 3

With the dynamic changes over the past year, lead representatives from the Federal Aviation Administration (FAA), the UAS Center of Excellence for Unmanned Aircraft Systems, the FAA's six unmanned aircraft test sites, and others will describe how the unmanned aircraft industry is being shaped. In the afternoon, technical presentations will be provided on miniature surveillance avionics, oil spill response, meeting the needs of enterprises, improving environmental situational awareness, applying complexity leadership theory to drone airspace integration, and developing payloads for climate research in Alaska. *At 1:00 p.m., Alaska's Unmanned Aircraft Systems Legislative Task Force will convene a meeting adjacent to the conference that will be open to the public*.

07:45 – 08:30 **Networking Breakfast**

08:30 – 08:40 **University of Alaska Fairbanks**
Dr. Bob McCoy, Director, Geophysical Institute
- *Opening and Introductions*

08:40 – 09:00 **Keynote Speaker**
Representative Steve Thompson, Co-Chair House Finance, Alaska State Legislature

09:00 – 09:30 **Federal Aviation Administration (FAA)**
Unmanned Aircraft Systems (UAS) Integration Office, Washington, DC
Bill Crozier, Assistant Manager for Flight Standards
- *Major Strides Forward for Research and Commercialization in 2015*

09:30 – 10:00 **FAA's Center of Excellence on UAS**
Marty Rogers, Vice Director of ASSURE (FAA COE)
- *Universities and Corporations Collaborating for Success for Integration of UAS into the National Airspace System (NAS)*

10:00 – 10:30 **Morning Networking Break**

10:30 - 11:30 **FAA – Technical Panel of the Six Test Sites – Integration of UAS into the NAS**
Elizabeth Soltys, Engineer and Manager Unmanned Aircraft Systems Test Sites
- *Panel discussion of achievements and path forward*

11:30 – 12:30 **Federal Aviation Administration**
JoAnn Ford, Manager, FAA Navigation Services Systems Engineer
- *GPS vs Wide Area Augmentation System (WAAS) and UAS Navigation Challenges*

11:45 – 13:15 **Working Lunch** - Enjoy the buffet lunch while the meeting continues

12:30 - 13:00 **Alaska State Legislature**
Unmanned Aircraft Systems Legislative Task Force
Senator Peter Micciche, Co-Chair
Representative Shelley Hughes, Co-Chair,
- *Update on task force efforts from 2014 to 2015*

13:00 – 17:00 **Unmanned Aircraft Systems Legislative Task Force Meeting**
(Adjacent to main conference room directly following the lunch hour)

13:00 – 13:45 **Trumbull Unmanned**
Dyan Gibbens, Founder & CEO
- *UAVs for Oil Spill Response & Flying Indoors*

13:45 – 14:30 **Sagetech Corporation**
Jim Davis, Engineering Director
- *Miniature Surveillance Avionics for sUAS*

14:30 – 15:00 **State of Alaska Department of Transportation**
Jeff Roach, Northern Region Planning Manager, Aviation and Highways
- *UAS from an Airport Perspective*

15:00 – 15:30 **Afternoon Networking Break**

15:30 – 16:15 **University of Alaska Fairbanks, International Arctic Research Center**
Dr. Jessica Cherry, Research Associate Professor
- *Developing payloads for climate research in Alaska*

16:15 – 16:45 **Department of the Interior (DOI)**
Harry Kieling, Alaska Regional Director, Office of Aviation Services (OAS)
- *The Evolution of the Unmanned Aircraft Industry: Then and Now*

16:45 – 17:00 **Meeting Conclusion and Announcements**
Marty Rogers, Director, ACUASI

18:30 – 21:30 **Alaska Riverboat Discovery – Dinner Cruise**
975 Discovery Drive, Fairbanks, Alaska 99709
(907) 479-6673

Enjoy a relaxing dinner cruising into the heart of Alaska introducing you to the culture and way of life in the "Last Frontier". The narration covers the gambit of anthropology, culture, geology, glaciology, history, with even a little hydrology and engineering thrown in for good measure!