


UAS Missions Capturing NOAA Observational Requirements

Strengthening International Cooperation



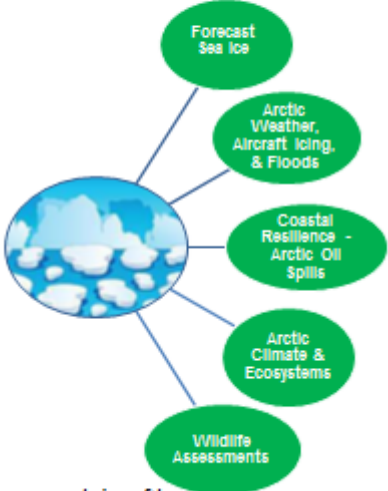
- ✓ NIC - International Sea Ice and Arctic Mapping Project
 - Multi-Platform CONOPS
- ✓ Arctic Shield 2013-15 UAS Multi-Mission Operations
- ✓ Deep Freeze 2016 – Antarctic operations
- ✓ Satellite CAL/VAL (2015-Ongoing)

- ✓ Aircraft Ice Prediction Assessment (2015-ongoing)
- ✓ UAFG/NWS Yukon River Breakout 2016
- ✓ Global Hawk in-situ measurements/satellite gap mitigation (2014 – Ongoing)

- ✓ Arctic Shield 2013-15 USCG Collaboration Oil Spill Response, Marine Debris, Search & Rescue
- ✓ UAS Grav-D Surveys 2016
- ✓ Expanded Shipboard UAS Operational Assessments

- ✓ Global Hawk Ozone Sampling 2016
- ✓ Black Carbon/Aerosol Arctic Climate Impacts (Ongoing)

- ✓ Marine Mammal NMFS Collaboration 2015 Estimating Wildlife Counts (Ongoing)



24 **NOV** **2016**

*hazardous and remote regions – extremely difficult for manned aircraft!
 poor weather and comms – extremely difficult to conduct land-based operations!*

NOAA UAS Program Briefs at Alaska UAS Interest Group Conference

The NOAA UAS Program briefed the 2016 Alaska UAS Interest Group Conference in Anchorage, AK, November 7th-10th.

The Alaska UAS Interest Group Meeting is the premier event for keeping up with developments in the UAS industry in Alaska and beyond. With the Arctic playing a more important role in international trade, search and rescue logistics, and natural resource extraction than ever before, the program is coordinating an Arctic UAS Workshop in January 2017 in support of the Year of Polar Prediction (YOPP).

The UAS Program's Justyna Nicinska, John "JC" Coffey and Phil Kenul shared the program's strategic vision and execution from requirements capture to "transition to operations". NOAA's recent successes in the Alaska and Polar environments focusing on hazardous weather, maritime and Polar surveys included:

- Black carbon missions using Manta in Norway.
- Deployment of three different UAS during Marginal Ice Zone Experiment in partnership with NASA.
- Puma UAS deploys onboard from US Coast Guard Cutter's (Icebreaker) Healy and Polar Star for marine monitoring, search & rescue and oil spill detection with ONR, AeroVironment.
- Development of partnership with UAF, US Navy, USCG, Conoco Philips for ScanEagle flights in the Arctic.
- NWS' River Forecasting Center Rapid Response with UAS for Yukon River Watch.
- UAS use for satellite calibration and validation.
- SBIR Phase III "Transition to Operation" of Aurora Flight Science's Centaur for Grav-D survey.
- Other platform coordination including Global Hawk, Aerosonde, and Flexrotor.

Is this is an issue of potential concern?

This item has high visibility

Geographic Location (Relevant region, city location) Anchorage, AK

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