# Unmanned Aircraft Support of the Nome Winter 2012 Fuel Delivery





- 1. Identify potential safety concerns for those working on the ice
- 2. Document the site for mission response activity
- 3. Collect imagery for the USCG Public Affairs Officer (PAO) to disseminate
  - to help satisfy the press's interest in the activity
  - to alleviate the potential for independent activities on the ice

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Project Leads: Unmanned Aircraft Gregory Walker - Sea Ice Andy Mahoney

### **International Press Attention**

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UAF leased the aircraft from BP Exploration (Alaska) Inc.

## Nome 2012 Imagery Products



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### MOSAIC and DEM Development Processing From Image Only Data Structure from Motion (SfM) Algorithm



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## We were not the "The Drone That Saved Nome"

It was a pleasure working with you. Thanks for your contributions to FOB Nome; the UAV piece of this mission was a key component to the overall success.

Commander Scott Johnson Chief, Prevention Department Coast Guard Sector Anchorage

This was a fantastic workout for the drone and provide some great site intel. Appreciate your joining us in Nome!

Mark L. Smith CEO Vitus Marine LLC Anchorage, AK

This is fantastic. Thank you for the superb effort. It certainly indicates the importance and high level of usefulness of UAVs for Arctic endeavors including within the response partnership that UAF and NOAA have entered.

John Whitney NOAA Science Support Coordinator for Alaska Anchorage, AK The stills for that first mosaic attempt are amazing...

This still looks great and is very useful...

Great working with you and your team, hope to do it again soon.

John W. Engles Environmental Program Specialist III State of Alaska Dept. of Environmental Conservation Prevention and Emergency Response Program Valdez AK

#### Other positive comments from FAA leadership

Les Smith Division Manager, AFS-400 Federal Aviation Administration

Dennis E. Roberts, Director ATO Airspace Services, AJV-1

### 2012 FAA Authorization Unmanned Aircraft Language

- 1. Develop a Comprehensive Integration Plan within 9 months of passage
- 2. Sets a 9/30/2015 deadline for integration
- 3. Requires a 5-year roadmap (updated annually)
- Requires a small UAS Final rule within approximately two years
- \* 5. Requires 6 UAS test sites (the test site language is identical to the already-passed defense bill language)
- \* 6. Requires within one year, a process for flying in the U.S. Arctic, 24 hours a day, and beyond line-of-sight (to at least 2,000 feet AGL)
  - 7. Expedited access for public UAS use
  - Requires with 90 days, public users of aircraft weighing less than 4.4 Ibs to get a one-time COA approval of similar operations.
  - Includes an exemption for Model Aircraft. It prohibits the FAA from promulgating a rule on modelers if they fly for recreation and use community-based set of safety standards, and fly models less than 55lbs.
  - 10. Requires to FAA to study UAS human factors.

