Task Force on Unmanned Systems Update

Co-Chairs:
Kim Curry (Oceanographer of the Navy)
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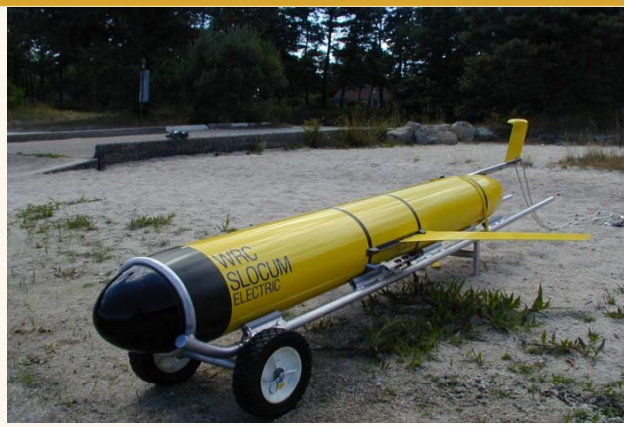


2010-2011 Activities:

- **Inventory on Unmanned Systems Assets**
- **Letter Identifying Challenges and Opportunities to Full Utilization of UAS – Submitted to SOST**
- **March 29-31, 2011 Unmanned Systems Common Lifecycle Infrastructure Workshop**

Functions of the TFUS

- Review the operations, management methods, and capabilities of the growing federal usage of unmanned systems and, when appropriate, recommend common standards and approaches to assist federal oceanographic sponsors and facility managers;
- Improve planning, coordination, and communication among federal sponsors and facility managers of unmanned systems;
- Address interagency programmatic and operation questions of unmanned systems;
- Provide a forum for the exchange of information on long-range plans regarding the construction, deactivation or usage of unmanned systems;
- Monitor international oceanographic unmanned system activities for potential application to the federal facility mix.

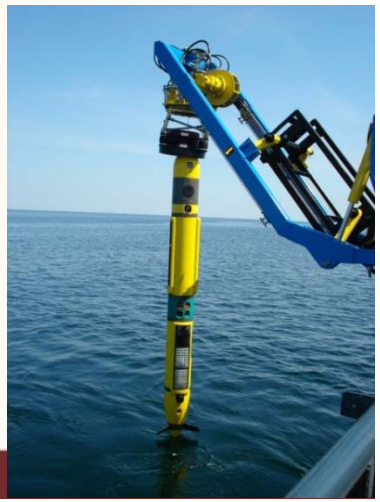
Challenges to Full Utilization of UAS

Letter to IWG-FI

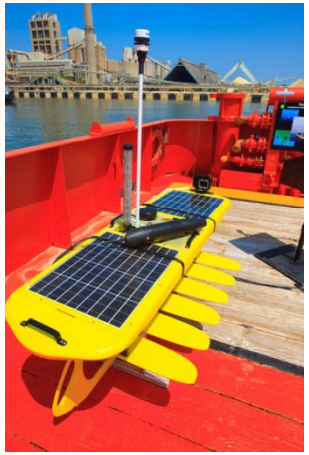
- **FAA Resources**
  - Increased funding for the FAA Unmanned Aircraft Program Office recommended
  - Streamlined COA process
  - National database on UAS flight operations to expedite data analysis
- **Airspace Access**
  - Further dialogue with FAA on potential interim approval policies
- **UAS Infrastructure and Personnel Training**
  - Increased federal funding for training and equipment
  - Incorporation of DoD UAS command and control technology for civil uses to lower cost
- **Interagency Coordination**
  - Intergovernmental UAS annual report recommended
  - Coordination needed between the diverse efforts of UAS programs

Unmanned Systems Common Lifecycle Infrastructure Workshop

- Discussion of possible interagency joint demonstrations partnerships and facilities
- Attended by seven agencies (NOAA, NASA, Navy, Army, FAA, EPA, BOEMRE)
- Toured NAVO Glider Operation Center and AUV facilities and NDBC facilities at Stennis Space Center
- Briefings by the Naval Oceanographic Office, National Data Buoy Center, Georgia Tech Research Institute, Naval Special Warfare Center, US Army and the National Oceanic and Atmospheric Administration
- Began discussion of utilization rates of existing vehicles and asset pools.
- Roadmap on unmanned systems to be developed by the TFUS



Unmanned Systems Common Lifecycle Infrastructure Workshop



Highlights from the discussion:

- One-third of the costs of Unmanned Systems is in Command and Control.
- Data standards and parameters should be agreed upon to ensure interoperability and should flow in RT to national data facilities to be available the widest number of potential users, forecast centers and managers.
- Several asset pools (fee for use) of unmanned systems already exist (NASA, NAVY), but overall, do not have large numbers of vehicles.
- Utilization rates of academically owned assets appears low (from informal poll), with low numbers of vehicles in each (1-2, <10). CLI required for each.
- A virtual asset pool could be created (ownership retained by the institution, but the asset physically provided for use and maintenance in the pool) with day-rates established for asset usage, common lifecycle infrastructure and insurance. Solves CC, data flow, maximizes utilization rates, creates fleets.
- An interagency roadmap on unmanned systems should address vision/mission, Operations, Tests, Prototyping and Certification.

We Will Continue with these Functions

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Specific 2011 TFUS Activities

- Develop Interagency Unmanned Systems Roadmap
- Increase dialogue with the FAA representative
- Comment on FAA rulemaking proposal on 55 lb. UASs to be released this summer
- Update inventory, investigate utilization rates, discuss national unmanned system asset pools and how they might be established.
- Consider visiting a UAS facility such as Pax River, Dryden or Dahlgren to further operational insight and discussion.