



NOAA UAS "TAISRR" Schematic
**4**JAN
2016

Targeted Autonomous In-situ Sensing and Rapid Response

The NOAA UAS Program Presents at the American Geophysical Union Fall Meeting

For almost 50 years, the American Geophysical Union Fall Meeting has served as a platform for scientists to present cutting-edge research. The NOAA Unmanned Aircraft System (UAS) Program was invited to present and provide a poster at this year's fall meeting, and asked to highlight unmanned systems potential to efficiently, effectively, economically, and safely bridge critical observation requirements in an environmentally friendly manner.

As the United States' Atmospheric, Maritime and Polar areas of interest expand and include hard-to-reach regions of the Earth (such as Polar and remote oceanic areas) optimizing unmanned capabilities will be needed to advance the United States' science, technology and security efforts. The AGU presentation examined NOAA's Atmospheric, Marine and Polar Monitoring UAS strategies which included developing a coordinated effort to maximize the efficiency and capabilities of unmanned systems across the federal government and research partners. Numerous intra- and inter-agency operational assessments have been made to verify and validated these strategies. The brief included the introduction of the Targeted Autonomous In-situ Sensing and Rapid Response (TAISRR) with UAS concept of operations.

Additionally, John "JC" Coffey briefed the conference on NOAA UAS Program Office's advancement in applying mature unmanned systems and sensors to critical NOAA scientific mission areas including: hazardous weather, maritime and polar monitoring. This year's Global Hawk, ScanEagle and Puma successes were highlighted, and of interest to the mainly science crowd. "Through disciplined data management, we have been able to provide real-time environmental intelligence from the most remote places to end-users in support of several missions. This is in direct support of unmanned systems (UXS) Research to Application (R2X) which will greatly reduced cost and risk to NOAA," JC observed.

At an opening keynote address during the meeting Dr. Peter H. Diamandis, chairman and CEO of XPRIZE, announced the launch of the \$7M Shell Ocean Discovery XPRIZE, a three-year global competition challenging teams to advance ocean technologies for rapid and unmanned ocean exploration. As part of the total \$7M prize purse, the National Oceanic and Atmospheric Administration (NOAA) is offering a \$1M bonus prize to teams that demonstrate their technology can "sniff out" a specified object in the ocean through biological and chemical signals. David Schewitz, Shell vice president of geophysics for the Americas, and Richard Spinrad, chief scientist at NOAA, joined Diamandis on stage to launch the new competition.

Is this is an issue of potential concern?

This item has high visibility

Geographic Location (Relevant region, city location) San Francisco, CA

Partnering offices OAR, NOAA UAS Program, OMAO, AOC

Contact's email address john.j.coffey@noaa.gov

Contact's phone number (904) 923-1709