**2014 AGU Fall Meeting**

**Session Selection:** Airborne Systems in Support of Oceanographic and Atmospheric Research

**Title:** NOAA Marine and Arctic Monitoring Using UASs

**NOAA Marine and Arctic Monitoring Using UASs**

**John “JC” Coffey 1, Robbie Hood 2, Todd Jacobs 3, CAPT Phil Hall, NOAA 4**

**(1) Cherokee Nation Technologies, Fort Collins, CO, (2) NOAA Office of Oceanic and Atmospheric Research, Silver Spring, MD (3) NOAA Office of Oceanic and Atmospheric Research, Santa Barbara, CA (4) NOAA Office of Marine and Air Operations, Silver Spring, MD**

**Abstract:** Unmanned systems have the potential to efficiently, effectively, economically and safely bridging critical observation requirements in an environmentally friendly manner. As the United States’ Marine and Arctic areas of interest expand and include hard-to-reach regions of the Earth (such as the Arctic and remote oceanic areas) optimizing unmanned capabilities will be needed to advance the United States’ science, technology and security efforts. Through increased multi-mission and multi-agency operations using improved inter-operable and autonomous unmanned systems, the research and operations communities will better collect environmental intelligence and better protect our Country against hazardous weather, environmental, marine and polar hazards. This presentation will examine NOAA’s Marine and Arctic Monitoring UAS strategies which includes 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 demonstrations and assessments have been made to verify and validated these strategies. The presentation will also discuss the requisite sUAS capabilities and our experience in using them.