

Carolina Unmanned Vehicles Receives Navy Contract

Carolina Unmanned Vehicles, Inc. (CUV), Raleigh North Carolina, announces award of a Navy Phase I Small Business Innovative Research (SBIR) contract to develop a new version of their Lightweight Aerostat System (LAS). The new LAS, to carry a Deployable Communications Network payload, and called LAS-DCN, is to be designed for deployment from the new Navy small combatant, the Littoral Combat Ship (LCS). The LCS is a revolutionary warship designed to operate close to shore by use of a variety of unmanned underwater, (water) surface, ground, and air vehicles (respectively, UUVs, USVs, UGVs, and UAVs). CUV’s development of LAS-DCN will provide an inexpensive, long endurance reliable communications relay capability among these various unmanned platforms, dispersed over many miles of ocean and land.

The LAS-DCN consists of a communications relay payload attached under a small specially designed tethered blimp, called a Helikite, and a Carrier that stores the Helikite and the required winch, sensors and helium tanks. The LAS-DCN blimp can fly at several thousand feet altitude for low cost, long term test communications relay coverage of large areas. LAS-DCN can provide relay coverage for 24 hours a day for a week or more without maintenance or downtime.

Ordinary aerostats cannot operate in high winds unless made quite large, which would not make them suitable for the LCS or its unmanned platforms. LAS uses the patented Helikite lifting aerostat, produced by Allsopp Helikites Ltd. of Great Britain, that has lifting surfaces that generate aerodynamic lift to support the blimp in winds which drive traditional designs into the ground. The LAS-DCN will be able to be launched in 30 mph winds and to continue operations in 50 mph wind. With the Helikite, LAS can be made smaller and more mobile than traditional aerostat systems yet still operate in much higher winds, improving mobility, mission utility and capability in adverse weather.

Versions of LAS are suitable for surveillance / security, communications relay and research missions for Defense and Homeland Security missions. It operates for weeks at a time at a fraction of the cost of comparable aircraft or Unmanned Air Vehicles (UAV). CUV has previously developed versions of LAS for the USAF, Sandia National Laboratories, and a large defense contractor.

Carolina Unmanned Vehicles is a small woman-owned company focused on small autonomous and remotely operated sensor platforms, such as aerostats and UAVs. Contact: Glenda Rogers, (919) 851-9898, glrogers@carolinaunmanned.com

