

Upper Air Game Changer

My second tour as an LDO was to the Systems Command. During the mid-1980's, I led a team to validate the Contractor Demonstration Tests for the AN/UMQ-12 MiniRawin System. The tests were conducted at the manufacturer's plant near Helsinki, Finland. The company was Vaisala Oy.

The team: LT Robert Josephs USN, Upper Air Projects Officer for Space and Naval Warfare Systems Command; Mr. John Sniscak (GS12 Engineer), Sensors and Avionics Technology Directorate for Naval Air Development Center Warminster; and LT William Geitz USN, Meteorological Oceanographic Equipment Technical Liaison Officer for Naval Oceanography Command Facility Bay St. Louis.

Vaisala Oy was awarded the competitive bid contract for a portable, commercial, upper air sensing system in 1987. The Contractor Demonstration Tests were required to verify accuracy, reliability, and maintainability of the system in accordance with the CNO operational requirement and per the Systems Command test evaluation master plan. I authored the test evaluation master plan.

In August 1987 we flew, commercially to Finland to validate the tests. We spent a highly intensive ten-day work schedule validating the equipment and its operation. There were several days of multiple sonde launches— about four to six per day, and several nights of multiple sonde launches— about four to six per night. LT Geitz, also a fellow 646X LDO, plotted all soundings and compared his assessed mandatory and significant levels viz a viz the Vaisala Oy ground unit. In every instance his manual upper air coded soundings matched the automated/computer produced upper air coded soundings by the Vaisala Oy ground unit! Mr. Sniscak evaluated the equipment and its operation from an engineering nuts and bolts prospectus. At the completion of the tests, which were highly successful, and based on significant input from LT Geitz and Mr. Sniscak, I wrote the post Contractor Demonstration Tests Report to the Systems Command that recommended full production of the AN/UMQ-12 for Navy use.

During the tests we quickly realized the AN/UMQ-12 was going to be a game changer for the fleet because of its ease of use, its ability to determine upper-level winds via Loran C, and its many automated features. Gone would be the extensive ground/base line calibrations prior to a launch, the need for a separate training course for upper air equipment, and an AG NEC for upper air operator.

Shortly after these tests concluded, Mr. Charles Stotler took over the AN/UMQ-12 program— managing its introduction to the fleet and USMC aviation units.



RS80 Radiosonde. AG3 Giacometti programming information into the AN/UMQ-12 MRS Receiver before balloon launch. (U.S. Air Force photo by Staff Sgt. Jocelyn Rich taken in the British Indian Ocean Territory (June 21, 2005))

Submitted by LCDR Robert M. Josephs, USN RET