



High Performance Wireless Research and Education Network is Extended to Cabrillo National Monument



On May 4, 2007, the long anticipated extension of the High Performance Wireless Research and Education Network to Cabrillo National Monument was completed. This new HPWREN wireless link from Hillcrest Hospital to the USCG T- 17 tower, at Point Loma, enables connectivity to the tidepool areas which are managed by the National Park Service. Representatives from HPWREN, Cabrillo National Monument, California Mediterranean Research Learning Center, San Diego State University Field Stations Program, California Science Center, Southern California Coastal Ocean Observing System, US Coast Guard, and the US Navy worked together to implement the project and install wireless radios on the T- 17 tower. The National Park Service looks forward to expanding this partnership to include more National Park Service (NPS) units and new projects.



Ron Serabia, HPWREN, climbed the tower and installed wireless radios.



Physical Security Specialist Matthew Crews, Navy Base Point Loma provided access to the T- 17 area and guided the team through the maze of military security clearance processes.



Tom Cook, Scripps Institute of Oceanography aligned radios and prepared Ethernet cables (left).

Chuck Kopczak, Curator of Ecology California Science Center, assisted with ground level logistics (right).



The first project objective is to install web cameras to facilitate social science research and provide extended access to visitors with physical limitations. Two solar powered camera arrays will provide 180 degree views of all three tidepool zones managed by NPS. The images will be available on the Internet and at the Visitors Center and are to be paired with graphical depictions of the National Oceanic and Atmospheric Administration (NOAA) predicted and observed tidal data.

HPWREN Technician and Programmer Jim Hale wired the power box, installed radios, antennas, and configured radios.

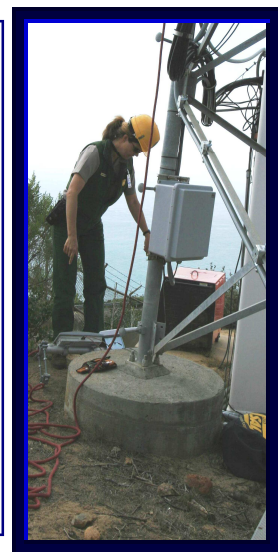


The second project objective is to upgrade the distance education video conferencing system to enable Live Interactive Virtual Explorations (LIVE) programs. The Live Interactive Virtual Exploration (LIVE) system, developed by HPWREN, will be used to establish real-time video and audio communication between scientists and interpreters at the park and audiences via the Internet.



Bill Redmond (left), USCG Sector San Diego Technical Support Leader, provided project planning support and logistical assistance for multiple equipment tests.

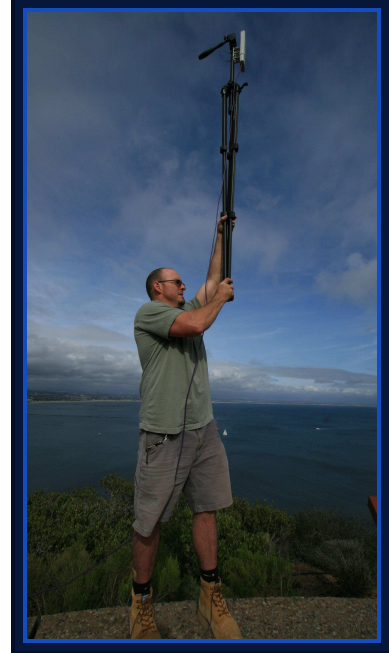
Cabrillo NM Chief of Natural Resources Andrea Compton (right), managed the movement of equipment from the ground.



Both objectives were successfully achieved thanks to strong support from HPWREN and our other partners.



Pablo Bryant, Research Technology Manager for SDSU Field Stations Program spent the majority of the day on the top portion of the T-17 tower installing radios at a height of 70 feet (left). After installing the radios on the tower, Pablo suggests system refinements to improve connections to the Visitor's Center (right).



Partners are important to the National Park Service and help our staff accomplish our core mission. Partnerships assist in developing an appreciation for the NPS mission, values, resources and people and are a sound investment of NPS efforts.



Hans-Werner Braun, HPWREN Principal Investigator, installs the 2 foot dish antenna with Jim Hale (left) and assists NPS Rangers with electrical wiring (right).



We thank all of our partners who helped make this project a success.



Photographs courtesy of HPWREN at <http://hpwren.ucsd.edu/>

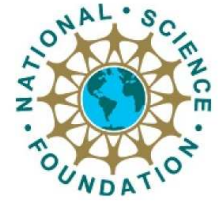


<http://nps.gov>



California Mediterranean
Research Learning Center

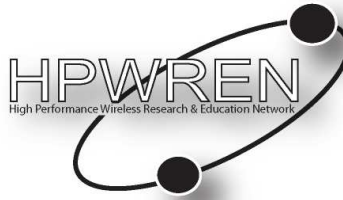
<http://researchlearningcenter.org>



<http://nsf.gov>



<http://ucsd.edu>



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