

ARDC Grants to Fund Amateur Radio Project Expansions

Two recent Amateur Radio Digital Communications (ARDC) grants will benefit the Santa Barbara Amateur Radio Club (SBARC), K6TZ, and Oregon HamWAN.

A \$35,550 grant will enable SBARC to construct an amateur radio station at the new Chrisman California Islands Center (CCIC) in downtown Carpinteria, California, at the invitation of the Santa Cruz Island Foundation (SCIF). According to Levi Maaia, K6LCM, who is the K6TZ club call sign trustee, the station is scheduled to open in 2022. SBARC promotes education and training programs for anyone interested in ham radio. It also encourages and sponsors experiments in electronics and promotes the highest standards of practice and ethics in the conduct of communications.

The station will be prominently located near the CCIC main entrance. An interactive display will provide an overview of amateur radio communications and the role that it's played in the history of the islands.

When the station is not staffed, visitors can interact with it using a custom touchscreen that controls an



interactive presentation on amateur radio and wireless technologies and their importance to mariners, aviators, scientists, and explorers who visit the rugged islands off the California coast. Webcams connected to the station via SBARC's microwave data network will offer visitors a view of the island's terrain in real time.

An ARRL-Affiliated club, SBARC already maintains open repeaters, data systems, and a club station in Santa Barbara County.

Oregon HamWAN has received an ARDC grant of \$88,000 to expand its digital communications network. The project aims to enhance amateur radio digital and emergency communications capabilities between Portland and Salem, Oregon.

The nonprofit plans to expand its digital communications network by deploying 12 network backbone

distribution sites between the two cities. Eventually, the sites will connect to the Puget Sound Data Ring, which currently extends from Seattle to Vancouver, Washington. The network would allow emergency management personnel to communicate in the event of a disaster that disrupts telecommunications systems. In such cases, amateur radio operators will be able to quickly set up network nodes where they are needed to provide emergency communication via the Oregon HamWAN digital network. "This will be a game changer for emergency communications in the Portland area," said Oregon HamWAN Project Leader Herb Weiner, AA7HW.

"Deciding to fund [the] Oregon HamWAN project was an easy decision," said ARDC Grants Advisory Committee Chair John Hays, K7VE. "It is a well-organized and well-staffed project that uses multiple amateur radio technologies, such as the 44Net IP address space, 5 GHz radios, and proven software methodologies. It will provide a strong backbone network in Oregon and help preserve our microwave bands."

AMSAT-NA Elects Officers, Discusses Ongoing and Future Satellite Projects

AMSAT-NA President Robert Bankston, KE4AL, told attendees of the 2021 AMSAT Dr. Tom Clark, K3IO, Memorial Space Symposium on October 30, that the organization is looking ahead to future satellite missions, but will "go commercial" in order to keep enough satellites in space. Bankston, who was re-elected at a virtual Board meeting on October 29, said AMSAT is in a solid financial position and donations are "healthy." He said membership numbers are holding strong, with more than 4,000 members in 76 countries, and that recent administrative modernization has reduced overhead costs by more than 30%.

Vice President-Development Frank Karnauskas, N1UW, noted that, despite AMSAT's solid financial standing, additional funds are needed



to design, build, and launch satellites. Consequently, AMSAT is ramping up its grant-writing efforts, applying for grants from philanthropic organizations and corporate sponsors.

Bankston said AMSAT's strategic plan prioritizes putting satellites into high-Earth orbits. He also summarized the GOLF (Greater Orbit, Larger Footprint) initiative as part of its plan to reach higher orbits. However, AMSAT will not be giving up on low-Earth satellites (FM CubeSats). "FM satellites are very important and can serve as a stepping-stone to more sophisticated spacecraft," Bankston said. AO-91 and

AO-92 are "living on borrowed time," so new initiatives are in order.

Bankston said that going with commercial satellites could shorten development time. AMSAT plans to purchase a v/U 1U FM CubeSat, powered by four lithium-ion cells, but the Board said that 90% of funding would have to be obtained from outside sources. This would not be a permanent approach, however.

The organization will be seeking additional volunteers to put its plans into action. "Any expansion of the strategic plan will need more volunteers," Bankston said, adding that current volunteers "are pretty much at full bandwidth."

Vice President-Engineering Jerry Buxton, N0JY, reviewed satellite proj-