

The WIRELESS DISPATCH

The Bi-Monthly Newsletter of the Emergency Amateur Radio Club

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May/June 2003

FREE

APRS tracking combines satellite, ham technologies

by Kevin Bogan

The April General Membership meeting had quite a treat for the technically inclined members. Rick Ching, KH7O, presented on the Automatic Position Reporting System. This is a system that uses your packet radio and TNC to keep track of anything moving.

One of the drawbacks of the traditional packet system is that messages need to have a specific path. This is not the case with APRS tactical messaging. All you need to do is plug in the APRS station's callsign and the system does the rest. Rick had his computer set up and was tracking his wife. He had installed a small GPS, encoder, and radio in the family car. He created wave files -- sound files -- of his daughter's voice. During the presentation, you could hear a little voice saying, "Mommy is mobile." and similar announcements.



Rick Ching demonstrates the tracking aspect of APRS to a captivated audience at the April general membership meeting.
photo by Kevin Bogan

He also demonstrated how you can track someone on street maps on the computer. It lays out the path with tags at certain points.

Todd Kawamoto, KH7UK, demonstrated his "Tinytrak III" encoding unit. This technology is a boon to Search and Rescue units, parade monitors, hikers, sailors, and anybody who needs to keep track of moving objects. Kenwood has come out with a HT that has the TNC built in, the Dual

Bander, TH-D7A(G). With this radio, all you need is the GPS.

Rick gave a copy of his PowerPoint presentation to the club. We will probably show it again sometime this summer. For more information, you can go online to <<http://www.aprs.net/>> or <<http://web.usna.navy.mil/~bruninga/aprs.html>>, or talk to Rick or Todd at up coming meetings.

Skywarn training, Field Day 2004 planning straight ahead

The President's Corner

Kevin Bogan
AH6QO



Greetings and welcome to another edition of the Wireless Dispatch. It is May already, and hurricane season is right around the corner, starting June 1.

Now is the time to check your stored potable water and that stash of extra food. Check the batteries in your equipment, especially old flashlights. Batteries can corrode and contacts become dirty.

To help us identify severe weather, which may trigger an emergency, we will have the May General Membership meeting at the National Weather Service (NWS). We will have a short tour

followed by Skywarn training. Look for more info about this event elsewhere in this edition.

This year, the EARC will not sponsor an official Field Day event; however, we will be providing information regarding Field Day events being coordinated/sponsored by other clubs and groups. Let us know if you have information to disseminate, and we will get that out for you, too! Come to a club meeting, learn with us and help us start planning a club-sponsored Field Day event for 2004.

If you haven't checked the website (<http://www.qsl.net/earc/>) recently, you are in for a surprise! It has a new, clean, professional look. Give your thanks to David Cabatu, AH7E, who redesigned it.

And finally, please give your thanks to Crissy Kawamoto, KH7CHI, and Todd Kawamoto, KH7UK, for editing and publishing this great looking newsletter. Please read it and give us your comments.

... about ...

The WIRELESS DISPATCH

The WIRELESS DISPATCH (WD) is the official newsletter of the Emergency Amateur Radio Club and is published bi-monthly and is available online at <<http://www.qsl.net/earc/>>. Special editions may be published if the club sees fit. Expenses for printing and postage are covered by the club, and receipt of the WD is free for all members who are in good standing.

Editor Crissy T. Kawamoto, KH7CHI
Asst. Editor Todd Kawamoto, KH7UK

Questions and comments regarding the WD, as well as submissions or corrections, may be sent to the editor via e-mail at teriyaki@mac.com, or via the EARC, P.O. Box 30315, Honolulu, HI 96820-0315.

Message from the Editor

There are events in our lives that make us look around and say, "This is why I decided to go into [insert career choice here]." Similarly, there are times like Hurricane Season that remind those of us in this club why we're not just amateur radio operators, but also emergency responders. Is it the adrenaline rush? That warm feeling you get from helping others in a time of crisis? The opportunity to put your technical skills to use? Whatever the reason, the anticipation of an emergency kicks us into high gear, but we can only be of service if we're up-to-date on the proper terminology and procedures, which is why it's so important for us to, say, *attend EARC general membership meetings*.

General membership meetings are held on the fourth Thursday of every month. Now, I'm a "C.S.I." fan, too, so I know the season finale aired last week, which means your Thursday nights are now *free*. So come join us! If you don't learn something *during* the meeting, you'll certainly do so ^{73,} in chatting with a fellow ham before or afterward. So I'll see you at the next meeting!

Crissy

EARC Member Profile: Edward Dung, NH6WI

by Crissy Kawamoto

If you've ever listened to one of the nightly nets, you've heard our periodic weather report, courtesy of committed EARC member and meteorological enthusiast Edward Dung, NH6WI.

Dung has also designed and maintained a comprehensive weather-related website for a number of years.

"I have been interested in weather (since) I was a kid," says Dung, who has been a licensed ham for 11 years. "When Hurricane Iwa and Iniki came by, that gave me the idea to make a home page."

Where does Dung get all his information? Other hams, he says, as well as various TV news reports and Internet sites. He adds that the Internet is particularly useful in tracking hurricanes and typhoons across the globe.

To prepare for the 7:30 nightly nets alone, Dung watches the 6:00 news weather report several times, which allows him to memorize the weather and surf reports for his own reporting duty on the net. In addition to providing an audible update, Dung maintains his own weather-related website, viewable at <http://home.hawaii.rr.com/wi000>.

Dung transmits using a Radio Shack HTX-



The friendly front page to Edward Dung's weather-related website, located at <http://home.hawaii.rr.com/wi000>.

240 two-meter handheld transceiver on a three-amp power supply. His microphone is part of a headset that includes a push-to-talk button, and his motorized wheelchair, he says, is "fit just right" to allow him access to his ham station.

We'll certainly be hearing more of Dung on the air in coming months, with Hurricane Season just around the corner! If you would like to contact him in the mean time, you may do so on the radio, or via e-mail at edung@hawaii.rr.com.



What's Ahead for your EARC

May 22: General Membership Meeting

*** CHANGE OF VENUE! ***

SkyWarn training at the National Weather Service, 2525 Correa Road, in the Hawai'i Institute for Geophysics building on the UH Manoa campus.

* Please note: On-campus parking is available at both the East-West Road visitor lot or the campus parking structure, for a \$3 fee.

June 26: General Membership Meeting

. . . at the American Red Cross building
The club will provide soda and chips for this pre-Field Day meeting. Bring some food and join us for stories, courtesy of those who made the trek to Dayton this year.

Stay tuned to the nightly nets for details!

The Mauna Kapu repeaters: a virtual tour

by Kevin Bogan

Out past the Waialeale Shopping Center, the Mauna Kapu repeaters, 146.80- and 444.100+ MHz, are nestled in a wooded area just below the summit of Mauna Kapu at Palehua, elevation about 2,600 feet. The site looks west out over the valley that contains Nanakuli High School and east over the Waipahu area.

Our repeaters are housed inside the cabin used by Iolani School and the Campbell Estate as a retreat. Access is gained from H-1 and a long winding ride past two locked gates and up the slopes. On April 19, 2003, when Jim Connell, KH6JKG, took me along on one of his maintenance runs, we found the pine forested area breezy and chilly.

In the accompanying photographs, you can see the antennas attached to the back of the cabin. The repeaters are housed in a cabinet inside the rear room of the cabin. Jim was there to check on the operations of the repeaters and to take measurements for installing screening to keep mice out. The little



Clockwise, from left: The view from Mauna Kapu. The back of the 146.80/444.100 MHz repeater rack, and the front of the repeater rack, shown off by club technician and VP, Jim Connell.

photos by Kevin Bogan

Congratulations!

This year's Katashi Nose scholarship awards went to the following students for their work in the Hawai'i State Science & Engineering Fair:

Stacey K. Takekawa

'Constructive and Destructive Interference of Radio Waves'

Serena W. Oh

'Do Solar Flares Affect Radio Transmissions?'

Stacey received \$75 for her work, and Serena, \$25. Congratulations to both awardees!

rodents had brought in material and nested in amongst the components, probably for warmth. Jim also checked the link to the 146.98- MHz repeater at the Honolulu Municipal Building. From its high location, the Mauna Kapu repeaters serve parts of the Leeward coast and much of the central part of the island.

On our way down, we stopped at the radio station transmitter building that also houses the 144.91 MHz packet cluster.

The next time you are in central O'ahu or on the Leeward side, check out the repeaters – and be sure to thank our tech guys for their hard work.

For news you can use,
visit the EARC website today!
<http://www.qsl.net/earc/>

Membership Application Form

Time to renew your membership, or to become a new member? Here's the perfect opportunity to do either. Just fill out this form and turn it in, along with your annual dues (see form for amount due) at the next general membership meeting OR mail it in to us at the address shown at the bottom of the form.

Membership has its privileges! Here are just a few:

- ... free subscription to the Wireless Dispatch
- ... free EARC-sponsored test sessions for first-time hams and upgraders alike
- ... prize at the end of the year for the member that recruits the most new members
- ... an opportunity to do community service through club-sponsored events (i.e., the Great Aloha Run)
- ... a network of incredibly helpful, friendly, knowledgeable people who share your enthusiasm for amateur radio

And that's just the beginning. As a member, you'll have opportunities to present your ideas, as well. So fill out the form below, and get started!



NEW MEMBERS JOINING IN: JAN-MAR \$20.00, APR-JUN \$15.00, JUL-SEP \$10.00, OCT-DEC \$5.00.

Renewals: \$20.00 for the calendar year.

☐ New Member ☐ Renewal ☐ Address Change (if this only, do not include payment)

CALL SIGN _____ LICENSE CLASS _____ LICENSE EXP DATE _____

NAME _____
Last, First MI

(Family: Name _____ Call _____ Name _____ Call _____)

ADDRESS _____

CITY _____ STATE _____ ZIP _____ - _____

HOME PHONE: () _____ . WORK: () _____ . PAGER: () _____ .

E-MAIL ADDRESS _____ FAX: () _____ .

- ☐ I DO NOT want my e-mail address listed on the EARC website.
- ☐ I would like to subscribe to the EARC e-mail listserv (no spam, just news!).
- ☐ I am willing to read the Wireless Dispatch online instead of receiving a paper copy (saves the club \$\$).

If you wish to submit this form by mail, please remit it, as well as a check for the amount specified to the EARC to the following address:

Emergency Amateur Radio Club
P.O. Box 30315
Honolulu, HI 96820-0315

EARC Vital Statistics

Are you willing and able to run a net
once a week?

Contact AH6E (David) if the answer is yes!

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March Nets:

83 check-ins
197 minutes

April Nets:

136 check-ins
233 minutes

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R
S

Kenneth Brandt (KC7YXO)
Edgar Clark (AH6MD)



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