

The Big Island Amateur Radio Club Newsletter

Hawai'i Island
June 2014

President's message

Makani Pahili translates into 'Winds Twisting'

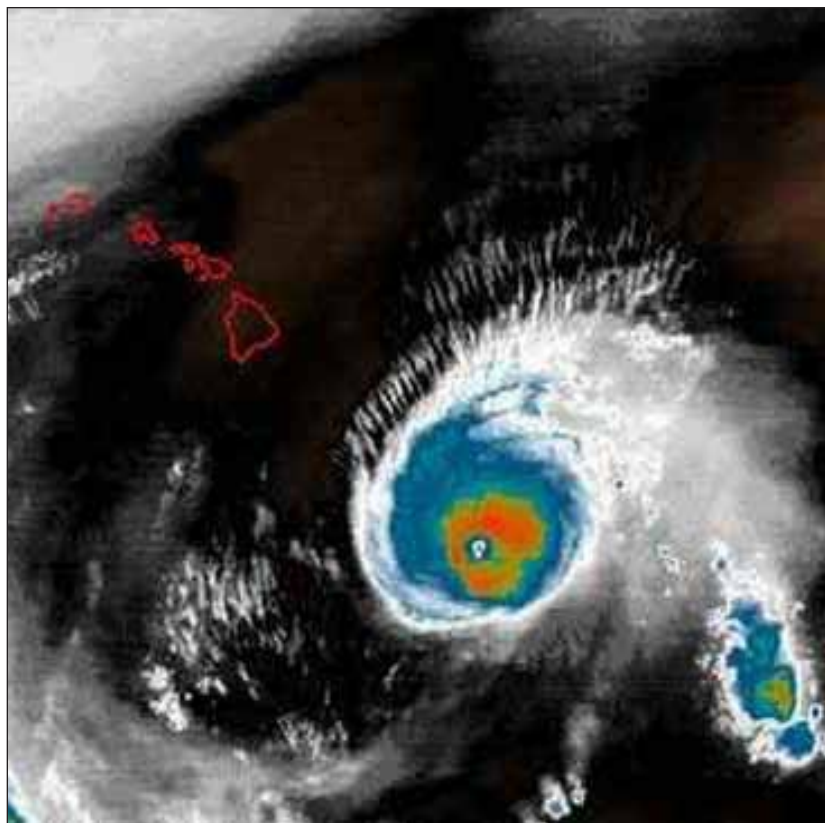
Dear BIARC members:

Makani Pahili is Hawaiian for Hurricane: "Winds Twisting." Makani Pahili is also the name given to the hurricane disaster exercise held annually in the State of Hawaii; ushering in Hurricane Season (June 1 through November 30). Each year, Hawaii State Civil Defense, in conjunction with Federal, State, and County partners pretend a Cat-4 Hurricane, as a worst case plausible scenario, impacts Hawaii and role plays each year varying aspects of emergency response and recovery. The most well-known hurricanes to visit Hawaii in recent years were Hurricane Iwa in 1982 and Hurricane Iniki in 1992. In 1871, Hawaii Island was also visited by a hurricane.



HANSON

Damage was limited to North Kohala. This event was known as Kohala Cyclone. Trees were uprooted and houses destroyed by high winds compared to the noise of 10 train locomotives. Last year (2013), Hurricane Flossie, peaked at a Cat-3 Hurricane and just days before arriving in Hawaii as a tropical storm. Although it is possible for hurricanes to impact Hawaii, history however demonstrates low probability; a welcomed relief as an encounter will most likely cause billions in property damage and upset society and the local economy for years after. In 2010, computer modeling was used in Makani Pahili for the first time. The scenario that year was a Cat-4 with Honolulu being ground zero and the results were clear that Honolulu could potential sustain damage that could revile that of Katrina. This year, Makani Pahili comes to an Island near you. Hawaii Island takes center stage in playing the role of the initial impact point for this



This photo taken in 2013 shows Hurricane Flossie bearing down on Hawaii. Flossie became a Category 3 Hurricane before it arrived on Hawaii Island as Tropical Storm Flossie.

Photo courtesy of NOAA

year's Cat-4 Hurricane. This year's script will most likely read like a Hollywood disaster movie for Hawaii Island with thousands of houses and businesses damaged or destroyed, whole populations displaced, and local limited resources pushed to their targeted testing and/or breaking points. Last year, amateur radio made its debut in Makani Pahili and that was on Hawaii Island. This year, most if not all counties will be featuring amateur radio in their scenarios. Hawaii Island will, but still in a minor role. 2015 Makani Pahili could be different. 2015 or 2016 could be a landmark year for amateur radio in Makani Pahili. I see a day when local emergency response and recovery agencies will recognize amateur radio as a formal resource. The key will be amateur radio operators and radio organizations aligning

themselves with the needs and requirements of emergency authorities. Realignment is nothing new. After 9-11, emergency authorities were asked to realign their functions to the National Incident Management System (NIMS) and to the Incident Command System (ICS). There was resistance and resentment in certain circles while in others the change was welcomed. Those organizations that moved forward and embraced change found themselves making a positive difference in emergency management. It is my desire to see BIARC members, individual operators, and other amateur clubs embrace the direction the nation, state, and county is heading in with amateur radio.

Bill Hanson
NOCAN
President

Big Island Amateur Radio Club

P.O. Box 1938, Hilo, HI 96721

www.biarc.net

Officers for Calendar Year 2014

President: Bill Hanson, N0CAN, 989-4700

Vice President: Milt Nodacker,
AH6I, 965-6471

Secretary: Leigh Critchlow, WH6DZX, 930-7330

Treasurer: George Bezilla, WH6EFN, 961-6323

Directors — 2014-2015

Toni Robert, N0INK, 937-2183

Directors — 2013-2014

Mary Brewer, WH6DYW, 985-9595

John Buck, KH7T, 885-9718

John Bush, KH6DLK/V63JB, 935-5500

(Club License Trustee:

Paul Ducasse, WH7BR, 985-9222)

Standing Committees (as of December)

Service/Awards: vacant

Education & Testing: Milt Nodacker, AH6I

Emergency: Paul Ducasse, WH7BR

Equipment: Milt Nodacker, AH6I

Health & Welfare: Barbara Darling, NH7FY

Membership: vacant

Hospitality: Jean Nodacker, WH7WT

Newsletter: Leigh Critchlow, WH6DZX

Repeater: Bob Schneider, AH6J

Webmaster: Curt Knight, AH6RE

Special Committees

Hamfest Chair: Bob Schneider, AH6J

co-Chair: Doug Wilson, KH7DQ

QSL Bureau Chair: Barbara Darling, NH7FY

Meetings and Get-Togethers

Membership meetings: Second Saturday of each month at 2 p.m. at the Keaau Community Center

Friday Lunches: A group meets for lunch every Friday at 11:30 a.m. at Kow's Chinese Restaurant in Hilo at 87 W. Kawailani St., just above Kinoole Street behind the Shell station.

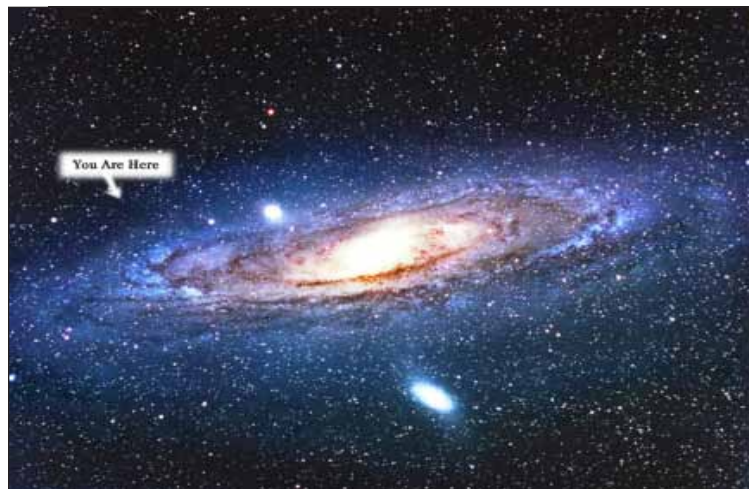
East Hawaii Net

The East Hawai'i Net meets on Monday, Wednesday and Friday mornings at 8AM HST on the 146.76 MHz repeater.

ARES Emergency Net

Meets Saturday evening at 1900 HST on the 146.76 repeater. Backup is 146.76 simplex.

All are welcome to check in.



Repeaters

* Linked to other repeaters covering the Big Island and Maui.

** Linked to the WIN system, which includes 71 repeaters in the US, Australia, Canada and Japan.

*** Linked to the XO network, Hawai'i statewide. Contact WH6FM for info.

Frequency:	Trustee:	Location:	Tone:
*145.29-	WH6FC	HOVE - Ka'u	100 Hz
146.66-	(TBS)	Ocean View	100 Hz
146.68-	KH6EJ	Kea'au (limited range)	none
*146.76-	KH6EJ	Kulani	none
*146.82-	KH6EJ	Mauna Loa ARES	none
146.88-	KH6EJ	Pepeekeo, linked for emergency only	none
*146.92-	KH6EJ	Ka'u Police Dept	none
*146.94-	KH6RS	Haleakala Maui Civil Defense	110.9 Hz
147.02+	KH6HPZ	Haleakala Maui RACES	103.5
147.04+	KH6HPZ	Mauna Loa RACES	none
*147.16+	WH6DEW	Hualalai Kona	100.0 Hz
*147.32+	NH7HI	North Hawai'i Comm. Hospital Hilo	100 Hz
*147.38+	KH7T	Waimea East (experimental)	none
*442.35+	KH6RS	Kaanapali Maui	136.5 Hz
*442.50+	KH6EJ	Kea'au	none
443.40+	KH7MS	Kona	100.0 Hz
443.40+	KH7MS	Ocean View	77.0 Hz
443.65+	(TBS)	Ocean View hub and standalone repeater	none
*444.225+	KH6RS	Haleakala Maui Civil Defense	110.9 Hz
*444.45+	KH6EJ	Parker Ranch GS Camp	88.5 Hz
***444.90+	WH6FM	Hilo - linked to WIN system	100 Hz
***444.775+	WH6FM	Hilo - linked to XO network	123 Hz



Minutes

Big Island Amateur Radio Club general membership meeting May 10, 2014

Keaau Community Center

The meeting was convened at 2 p.m. by President Bill Hanson, N0CAN. Also in attendance: Vice President Milt Nodacker, AH6I; Treasurer George Bezilla, WH6EFN; Secretary Leigh Critchlow, WH6DZX; Directors Mary Brewer, WH6DYW; Toni Robert, N0INK; John Buck, KH7T; John Bush, KH6DLK; members Paul Lakin, WH6DYX; Arlen DeLima, WH6EJZ; Sharon McCartin, WH6ELV; Bob Schneider, AH6J; Jean Nodacker, WH7WT; Ray Dustin, N5NNK; Peggy Gentle, KE6TIS; Linda Quarberg, WH6LQ; Sid Sellers, NH7OD; Sheena Sunio, WH6EJR; Scott Bosshardt, KH7SB; Andre Robert, WH6EBA; Robert Oliver, NH6AH; Doug Wilson, KH7DQ; Richard Darling, AH7G; Barbara Darling, NH7FY; Mike Last, NH7JT; Chuck Eperson, AH6SC; Sean Fendt, KH6SF; Kim Fendt, WH6KIM; Bill Carlson, KH7E.

Bob Schneider, the ARRL Pacific Section manager, offered ARRL applications to those in attendance who have not yet joined. And he noted that a new position has been established, that of Section Youth Coordinator. Anyone interested in finding out more about the volunteer assignment may contact him.

Richard noted that it is a good time to contact the ARRL station for the 100th anniversary of the organization. He said by the time of the official anniversary observance in July, he will have celebrated his own

61st anniversary in ham radio.

Milt congratulated East Hawaii's new licensees, including the very newest: Sharon McCartin, WH6ELV, who drew a round of applause from the crowd.

Milt, our program chair, said he had tried to get a speaker to come and discuss amateur radio contesting, but got no takers. So, he put together a ham-oriented takeoff on the "Wide World of Sports." He called it the "Wide World of Amateur Radio."

Milt started his presentation off, naturally, with "... in the beginning," and what followed was a fun and informative look at ham radio as science, engineering, humanitarian and hobby-promoting — all rolled into one, including "Amateur Radio as an Extreme Sport."

Text and graphics can be viewed in this edition of the newsletter.

Following Milt's program, the group took a break for another of Jean's lovely dessert buffets.

Business meeting

June meeting program: Meeting will be held at regular time and location, 2 p.m. June 14, but there will be no business meeting. Milt will coordinate activities to get the club geared up for the June 28 Field Day, including prepping and practice on contest operation and the computer logging system used in contesting. Milt noted that BIARC traditionally uses the June meeting to focus on preparation for Field Day.

Field Day: Bob Schneider is arranging for Amateur Radio Week proclamations to be done in tribute to Field Day and the 100th anniversary of ARRL from our mayor, the gover-



Photo by Bill Hanson, N0CAN

BIARC Program Committee Chair Milt Nodacker entertains the membership with his report on the "Wide World of Amateur Radio."

nor and the mayors of Kauai, Maui and Honolulu. See the proclamation from Mayor Billy Kenoi in this newsletter.

President Bill said on Field Day the club will get together for a 6 p.m. potluck at Wailoa Center. Planning sessions continue and all members are invited to participate. See Bill for more info.

June link upgrades: Bill noted that in June, the \$2,500 in carryover funding from 2013 will be used to upgrade the BIWARN system as the linkage is switched over to microwave equipment.

BIARC Family Day on July 4: Doug Wilson and Linda Quarberg have invited

BIARC members to gather for an Independence Day potluck picnic on their lovely lawn in Volcano. Parking will be at a church a short walk away in the neighborhood.

Mary Brewer, chair of the Volcano 4th of July celebration on Friday, July 4, said there will be a triple-agency booth manned by reps from the American Red Cross, Community Emergency Response Teams and BIARC. Marching in the parade also is planned, with lining up set for 8 a.m. and the parade getting underway at 9 a.m., winding up at Cooper Center on Wright Road for fun activities until 1 p.m. Mary encourages BIARC to

Minutes

march in the parade, in addition to manning the informational booth. More details on both 4th of July events will come at the June meeting.

In furtherance of emergency communications on the Big Island, said Bill, four members of the County Council recently voiced support for the CEP Community Emergency Preparedness expenditures of \$42,500 through Civil Defense — \$16,000 of which is to set up a network of two-way radio capability in island communities.

Minutes from the April 12 meeting were accepted as circulated in the newsletter. George reported that our bank balance stands at \$4,200.75, up from \$4,115.75 at the previous meeting.

QSL Bureau Chief Barbara reported receipt of 1,107 cards in April, for a year-to-date total of 4,777. Most-recent arrivals came from hams in New Zealand, Australia, Israel and Connecticut.

The new BIARC Bylaws — since the first of the year the subject of a series of drafting and then revising sessions, and member discussion, and subsequent tweaking to reflect member concerns — were adopted. Paul Lakin moved and Andre Robert seconded a motion to approve the bylaws as revised.

Then the duo agreed

to modify their motion to include corrections to typos in the document as well as the latest wording changes. The membership voted unanimously to accept the revised bylaws, which will be posted on the BIARC website, www.biarc.com.

Bill thanked Bylaws Committee Chair Doug Wilson and his hard-working committee for their many hours of efforts on behalf of the club: "It was a tough task, but somebody had to do it."

Under new business: Milt moved and Toni seconded a motion to establish special membership categories. This motion was unanimously approved by members in attendance. There will be full membership for additional licensed members of a family in which one person is already a regular member, for licensed full-time students and for folks licensed at Field Day or later in a calendar year. All of these special memberships will cost half the regular dues.

The next BIARC Board meeting will be at 5:30 p.m. May 27 at the Keaau Community Center. The next membership meeting will be at 2 p.m. June 14 at the same location.

The meeting was adjourned at 4:30 p.m.

*Respectfully
submitted,
Leigh Critchlow
Secretary*



Photo by Bill Hanson, N0CAN

KH6 Bureau Manager Barbara Darling and volunteer courier Chuck Epperson routinely make sure that thousands of QSL cards are hand-delivered to hams on Oahu each year after arriving at Hawaii QSL HQ — aka the Darling residence — which has handled more than 150,000 cards in the last five years, about 75 percent of which have been for the island of Oahu.

Update: KH6 Hawaii QSL Bureau

Five years ago BIARC agreed to take over the KH6 Bureau for the entire state of Hawaii.

Since that time, we have handled over 150,000 cards. I think about 75 percent of these cards are for the island of Oahu.

Chuck Epperson,

AH6SC, who works at Tripler Hospital and lives here in Keaau, agreed to hand deliver the cards to Oahu.

So, whenever he gets home for a weekend, he calls me to see if I have cards to be taken over. He usually delivers them to the USS Missouri. There are at least three hams over there who take care of distributing them at the different club meetings. (Kevin Bogan, AH6QO; Ned Conklin, KH7JJ, and William Ken-

dall, KH6OO).

I have a ham on Kauai, Mitch Oishi, NH6JC, who helps over there. We really appreciate all the works these men do for the Bureau.

I do need to have a ham for the island of Maui, as the man who was doing it is now a Silent Key.

We have many hams who have Hawaii call signs now living on the mainland. All of these cards are mailed.

— 73,
*Barbara, NH7FY,
Bureau Manager*



PROGRAM COMMITTEE REPORT:

Our practice for the June meeting has been to devote it to final preparation for Field Day and dispense with both a program and a business meeting.

We will follow that pattern to some extent,

except that there will be training and practice on the N1MM computer logging system and on contest operation for those planning on Field Day operation.

Yes, there will be refreshments.

July's speaker will be Joe Speroni, AH0A, from Oahu, who will present on "Sharing Amateur Radio Station Over Internet."

It is about a free service to use remote stations around the world.

— Milt Nodacker



In the Beginning . . .

In the Beginning...There were no "radio professionals."

- All radio pioneers were experimenters. Many of the basics of what would become radio communication came from investigations into the nature of electricity and magnetism.
- During the 1860s, Scottish physicist James Clerk Maxwell predicted the existence of radio waves; and in 1886, German Physicist Heinrich Rudolph Hertz demonstrated that rapid variations of electric current could be projected into space in the form of radio waves similar to those of light and heat.

- Guglielmo Marconi, an Italian inventor, proved the feasibility of radio communication. He sent and received his first radio signal in Italy in 1895. By 1899 he flashed the first wireless signal across the English Channel and two years later received the letter "S," telegraphed from England to Newfoundland. This was the first successful transatlantic radiotelegraph message in 1902.

- In addition to Marconi, two of his contemporaries Nikola Tesla and Nathan Stufflefield took out patents for wireless radio transmitters. Nikola Tesla is now credited with being the first person to patent radio technology; the Supreme Court overturned Marconi's patent in 1943 in favor of Tesla.

- Radio-telegraphy is the sending by radio waves the same dot-dash message (morse code) used in a telegraph. Transmitters at that time were called spark-gap machines. It was developed mainly for ship-to-shore and ship-to-ship communication. This was a way of communicating between two points, however, it was not radio communications as we know it today.

- Wireless signals proved effective in communication for rescue work when a sea disaster occurred. A number of ocean liners installed wireless equipment. In 1899 the United States Army established wireless communications with a lightship off Fire Island, New York. Two years later the Navy adopted a wireless system. Up to then, the Navy had been using visual signaling and homing pigeons for communication.

- In 1901, radiotelegraph service was instituted between five Hawaiian Islands.
- By 1903, a Marconi station located in Wellfleet, Massachusetts, carried an exchange of greetings between President Theodore Roosevelt and King Edward VII. In 1905 the naval battle of Port Arthur in the Russo-Japanese war was reported by wireless.

In 1906 the U.S. Weather Bureau experimented with radiotelegraphy to speed notice of weather conditions.

- In 1909, Robert E. Peary, arctic explorer, radiotelegraphed: "I found the Pole."

- In 1910 Marconi opened regular American-European radiotelegraph service, which several months later, enabled an escaped British murderer to be apprehended on the high seas.

- In 1912, the first transpacific radiotelegraph service linked San Francisco with Hawaii.

- Overseas radiotelegraph service developed slowly, Spark-gap transmitters were very inefficient and unstable and caused a high amount of interference. The Alexanderson high-frequency alternator and the De Forest tube resolved many of these early technical problems.

- Military Use and Patent Control When the United States entered the first world war in 1917, all radio development was controlled by the U.S. Navy to prevent its possible use by enemy spies. The U.S. government took over control of all patents related to radio technology.

- In 1919, after the government released its control of all patents, the Radio Corporation of America (RCA) was established with the purpose of distributing control of the radio patents that had been restricted during the war.

Too many stations:

- By 1912 there were numerous government and commercial stations and hundreds of amateurs.

- There was so much interference that laws, licenses and wavelength specifications appeared.

- What about the amateurs?

"Amateurs...We'll stick them on 200 meters and below; they'll never get out of their back yards with that." The first licenses:

- Prior to 1912, amateurs made up their own call signs. In 1911, Hiram Percy Maxim, founder of ARRL, used SNY as his self-assigned call sign.

- The first government assigned amateur license call signs consisted of a numeral indicating the region of the country and two or three letters issued sequentially.
- Maxim became 1AW.

The first challenge -- Distance:

- Remember, "We'll stick them on 200 meters and below..."?

- Despite the prediction that the amateurs would "never get out of their back yards" on 200 meters and below, communications grew in distance with two-way contacts from 500 to as much as 1,000 miles on 200 meters.

Technical innovation:

- As transmitters and receivers improved, the new DX goal was two-way communication across the Atlantic.

Moving On Up:

- Hams began experimenting with wavelengths shorter than 200 me-



ters with unexpected results:

- U.S. to Europe on 110 and 100 meters
- Australia, New Zealand, and South Africa on 40 meters
- Transcontinental daytime on 20 meters

As amateurs successfully experimented with these new wavelengths, commercial stations moved in, creating chaos. As the new frequencies were divided up, the ARRL wisely reserved bands at 80, 40, 20, and even 5 meters for amateur use. International Call signs:

- As the distance of communication became worldwide, it became necessary to create call signs that indicated the country of the licensee.

- By 1923 amateurs began using what they called "international intermediates" to indicate their country. U.S. amateurs used u, so Maxim's 1AW became u 1AW. Later modification of this included a letter for the continent so Maxim became nu 1AW. International Call signs:

- By the late 1920s it became obvious that call signs needed to be internationally assigned.

- At the 1927 Washington Conference, the U.S. was assigned K, N and W for prefixes. Initially K and W were used, with W for continental U.S. and K for offshore territories. Maxim's call became W1AW; K7ADY & K6BT were early licensees, respectively, in Alaska & Hawaii.

International Call signs:

- The block AA – AL was added for U.S. use in 1927. N calls were first issued to amateurs in 1975 and AA-AL calls in 1977.

- There have been a lot of changes in call signs over the years:

- Distinctive calls for Nov-ice licensees and repeaters

- Following WWII some 'K' callsigns were not issued by the FCC, but by military (occupation) governments: KT1 for Tangier Zone of Morocco, KG1 for Greenland, KA for US Troops in Japan. Ten Call Areas:

- Even before WWII, some call areas were running out of call signs and had to begin "recycling" old calls.

- In 1945 the FCC accepted the ARRL proposal to create another call area – zero – to provide more call signs.

Call signs now:

- Until 1978 amateurs who moved to a different call area had to be issued a new call sign.
- A major change now is that call sign is based on mailing address rather than physical location of the station. The FCC doesn't even collect station location information any more.
- The obvious use for radio communications was to send messages over distances, but the operating distances were usually shorter than the distance the messages needed to go.
- The answer was to relay messages from station to station to reach the destination.
- To meet the need for a relay organization, the American Radio Relay League was formed in 1914. Hiram Percy Maxim was one of the founders.

National Traffic System:

- The National Traffic System (NTS) is a structure that allows for rapid movement of traffic from origin to destination and training amateur operators to handle written traffic and participate in directed nets. These two objectives, which sometimes conflict with each other, are the underlying foundations of the NTS.
- The NTS handbook is at arrrl.org.
- The National Traffic System operates daily, even continuously with advanced digital links.
- The personnel consist of operators who participate for one or two periods a week, and some of whom are active daily. The National Traffic System is an organized effort to handle traffic in accordance with a plan which is easily understood, and employs modern methods of network traffic handling in general acceptance today.

Traffic Nets:

- Most nets except the most informal at least pay lip service to traffic handling.
- Net preambles call first for stations with emergency or priority traffic to be checked in before taking other stations.
- Stations are commonly asked to list traffic they have to handle when checking in. Distance as a Sport:
- DX (ham talk for operating longer distances) has always been one of the great thrills of amateur operation.
- As the hobby developed, award programs for contacting distant stations came to be offered by various organizations.
- Verification of the contact with the distant station is by exchange of QSL cards.

Worked All Continents:

Two-way contact with all six continents. (North America, South America, Europe, Asia, Africa, Oceania)
Two-way contact with all six continents on each of the five major bands.

Worked All States:

Lots of endorsements are available for additional bands and modes.
Two-way contact with all 50 states from a single location.
DX Century Club: Two-way contact with at least 100 DX "entities."

QSL Cards:

- "QSL" in Q codes means "I confirm contact."
- QSL cards are postcard-size verifications that are mailed or sent to the other station through a QSL bureau. These are used to verify DX awards.
- Information on the card includes the date and time of the contact, the call signs of both stations, signal quality, information about station equipment and operator's name.
- DXpeditions and "Amateur Radio as an Extreme Sport." Case in point: Scarborough Reef DXpedition 2007 (BS7H) and other Extreme Hamming, Mountaintopping...



More Frequencies, More modes:

- First there was Morse Code — radiotelegraphy — the original digital mode. The "straight key." Some are beautifully made. Some just get'r done.
- The semi-automatic key or "bug" makes the dots. The operator makes the dashes. Some of these are beautiful pieces of machinery.
- The electronic keyer makes the dots and dashes. Many modern HF transceivers have keyers built in and need only paddles added to operate.
- The Morse keyboard generates the code when you press the key.
- Useful phrases and call signs can also be programmed for one-button transmission.
- Radiotelephony or "phone" transmission was the next goal. This brought the possibility of radio as an entertainment medium to the public.
- Amplitude modulation (AM) imposed an audio signal on the radio carrier by varying the power output of the transmitter in step with the desired sound.
- Amplitude modulation is easy to produce and easy to demodulate.
- As technology advanced and vacuum tubes became more capable, Frequency Modulation (FM) became possible, with its advantages of wider bandwidths for modulation and better signal-to-noise ratios.

Text:

- Early text transmission used the same motorized, mechanical equipment as landline teletype stations.
- The modulation was frequency shift keying in which the carrier frequency was shifted to indicate the "mark" and "space" conditions of the signal.
- More modern text systems use all electronic coding including error correction algorithms.
- Modern text systems can be very useful in emergency operations, being able to pull a readable signal out of extreme noise conditions.
- Text systems can provide error correction, automatic acknowledgement of receipt & printed copies for both sender and receiver.

Television:

- Amateurs have been involved in image transmission from the beginning of these technologies.
- Fast-scan full-motion television can only be transmitted in the UHF range because of its wide bandwidth.
- Slow-scan television transmits its picture in a voice-bandwidth signal. About 15 seconds is required to send a complete frame.

More Adventures:

- Earth-moon-earth (EME or moon-bounce) communicates by reflecting a signal off the moon's surface back to earth.
- Space communication uses amateur radio satellites to communicate with the International Space Station
- Remember: Use the least power that will accomplish the communication. QRP operation takes that to heart, operating DX with minimum power, 5 watts or less and often mere fractions of a watt. Results can be amazing.

Homebrewing:

- In the beginning, radio amateurs built all of their own equipment, because that was the only way to get it.
- As equipment became more complex and capable, more amateurs purchased equipment ready to operate. They were derided as "appliance operators" by the oldtimers.
- An intermediate stage was equipment built from kits, such as the famous Heathkits.



Contesting:

- Contesting is a very popular amateur radio activity. There is seemingly some contest or other going on all the time, or at least every weekend.
- The object of the contest is to contact as many stations as possible during the contest period. The number of contacts is calculated by the use of "multipliers" to reach a score.

Contest operation:

- The "contest exchange" is the required information which must be exchanged between stations for a valid contact.
- Typical exchanges may include callsign, station location, signal report, operator name, serial number.
- Accurate logs of contacts must be kept and submitted in accordance with the contest instructions. Computer logs are usually used.

ARRL Field Day:

Object: To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and in doing so to learn to operate in abnormal situations in less than optimal conditions. A premium is placed on developing skills to meet the challenges of emergency preparedness as well as to acquaint the general public with the capabilities of Amateur Radio.
Come to the June meeting, to learn more.

Our readers write

Caution!

Watch out for Counterfeit Radios

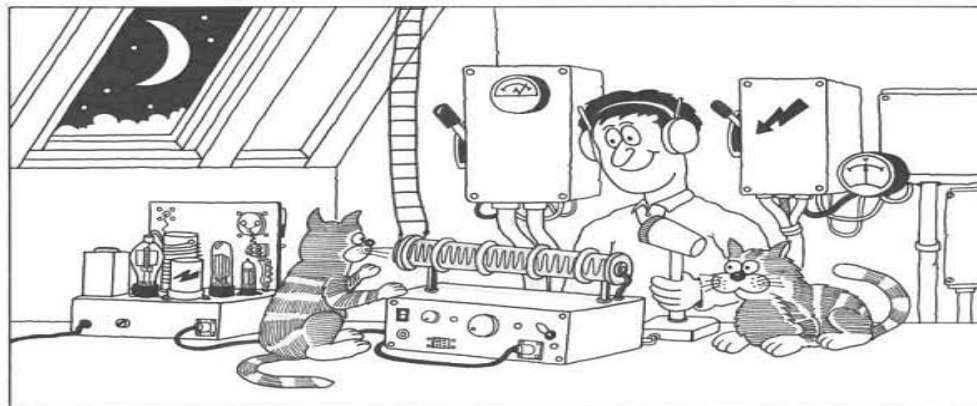
I recently had occasion to deal with Icom Tech Support and with a counterfeit Icom handheld over some programming issues. The events weren't actually related, though they happened on the same day. I called Icom Tech Support about some unsuccessful attempts to clone two new IC-V80 handhelds I had purchased for friends. They consistently gave me cloning errors, rather than completing the process. When I first told the tech rep I had just purchased two new IC-V80s his first response was, "I'm sorry."

As we talked he realized that these were genuine Icoms purchased through the Icom dealer network. Our conclusion was that the newer radios might have a different firmware version than my old one I was trying to clone from. We worked through a solution for getting the programming done and he called back later to see how things had worked out. I was impressed with the service. Another thing that impressed me was his first assumption that the radios were counterfeits. He said there are a lot of them out there.

Later that same day I had occasion to deal with one. A friend had called me to ask for some programming help with his new Icom IC-V85 that he had gotten a fantastic deal on. Brand new in the box — only \$80. And it came all the way from China in only two days! But it wasn't programming the way the manual said it should. We sat down with radio and manual and found out that wasn't the only thing that was different. We figured out a work-around on the programming problem (the offset switched direction when you stored to memory). If you buy a name brand radio other than through the dealer network it's probably as phony as the Rolex watch you buy from the guy on the street corner. This is especially true if it ships from China at a "really great price." If you have a problem with it and call for tech support, they're just going to laugh at you.

Do yourself a favor and use the authorized dealers. It's as true in ham radio as anywhere else. You get what you pay for.

— Milt Nodacker, AH6I



Lee C. Wical, S.K.

We are sad to report Lee C. Wical, KH6BZF passed away May 2 at the age of 79. He had been in declining health in recent years. He was the equivalent of Pacific Section Manager from 1962 to 1972. He was an avid DXer with DXCC honor roll at 358 countries, a propagation forecaster, ARRL Charter Life member and VE for both W5YI and ARRL.

He claims his interest in Amateur Radio started in Ohio while in the Boy Scouts and he got his Novice in 1955 in Hawaii.

He was in the service during the Korean conflict and worked at various Electrical Engineering positions for the Federal Government for 36 years. At one time he was State MARS director plus various other positions in other organizations. He wrote articles for various publications.

After the federal jobs, he worked for AT&T and Lucent Technologies and finally retired for good in 1997.

He occasionally prepared the ARRL Propagation Bulletin for W1AW. He was an ARRL Diamond Club member and also belonged to the ARRL Legacy Circle and had included the ARRL in his estate.

— Thanks to Rich Gelber, K2WR, Tetsuo Tanaka, AH7C, and ARRL for the information.

— Robert L Schneider, AH6J
ah6j@arrrl.org
ARRL Pacific Section Manager
(an excerpt from the)
Pacific SM Report for May

A call for 'basic civility'

Dear Editor,

As a BIARC member, I want to address the BIARC membership. I am very concerned about our need to return to basic civility in our radio life. The May BIARC meeting was a good example. We need to give members a chance to speak, and we need the Board and membership to listen and respond in an appropriate and respectful manner, one speaker at a time.

Also, I have some trouble with my hearing, and the constant conversation, even at a low level, makes it hard to catch everything said by the person who has the floor. Please try to be more considerate of other members.

I am floored by the hostility encountered by the members who have formed a different interest group in the form of Puna Emergency Radio Club. There are those who see good in both our groups. BIARC was not meeting the needs for a stand-alone repeater. This is especially true during times when the linked Kulani repeater system has been commandeered for any kind of emergency net purposes. We are hams, we want to find out what's going on in our local group. This is a need I saw as going unmet, and ignored. PERC wants to be more active in training and events to practice our radio skills, but, remember, we are not just some arm of Civil Defense or ARRL. We are a group of hobbyists with varied interests.

Speaking of personal issues, I think that the issues around Todd, WH6DWF, should be put out in the open. I never heard anything on the radio that would make me think he should be banned from the BIARC repeater system.

I did read one of the emails from him that was not productive to group goals. Yes, he should have been censured from the PERC group, and he was. What I fail to see is how BIARC can ban him from using the repeater without a public membership discussion of his alleged action, and the potential ways to handle this problem. Is he entitled to a personal opinion? Yes. I believe that his banishment is an excellent example of the type of issue this club needs to keep aboveboard and public, so that, as a group, we can deal with conduct issues that concern us.

— Peggy Gentle, KE6TIS



Bob Schneider, AH6J, ARRL Pacific Section manager, and Darryl Oliveira, administrator of the Hawaii County Civil Defense Agency, display the County of Hawaii proclamation from Mayor Billy Kenoi recognizing June 23-29 as "Amateur Radio Week" in Hawaii County and paying tribute to Field Day events taking place June 28-29, where amateur radio clubs and operators will set up and demonstrate emergency communications operations. BIARC's Field Day sites will be at Hilo Walmart and Wailoa Center.

Photo by Bill Hanson

Field Day is June 28



CW Challenge is on!

Here's a user-friendly way to get ready for Field Day in Hilo

Learn the Morse Code Sound Equivalents and become a CW operator for the BIARC ARRL Field Day on June 28.

Sound Equivalents

A	di-dah
B	dah-di-di-dit
C	dah-di-dah-dit
D	dah-di-dit
E	dit
F	di-di-dah-dit
G	dah-dah-dit
H	di-di-di-dit
I	di-dit
J	di-dah-dah-dah
K	dah-di-dah
L	di-dah-di-dit
M	dah-dah
N	dah-dit
O	dah-dah-dah
P	di-dah-dah-dit
Q	dah-dah-di-dah
R	di-dah-dit
S	di-di-dit
T	dah
U	di-di-dah
V	di-di-di-dah
W	di-dah-dah
X	dah-di-di-dah
Z	dah-dah-di-di
1	di-dah-dah-dah-dah
2	di-di-dah-dah-dah
3	di-di-di-dah-dah
4	di-di-di-di-dah
5	di-di-di-di-di
6	dah-di-di-di-dit
7	dah-dah-di-di-dit
8	dah-dah-dah-di-dit
9	dah-dah-dah-dah-dit
0	dah-dah-dah-dah-dah

This sound equivalent learning device was published by the Radio Society of Great Britain in London, WCIN2AE, in 1979. (By R.J. Eckersly, G4FTJ)

Those who want to learn the International Morse Code will find this a real tool. Spelling out words in your mind, you can master the code without any equipment.

Robert Schneider, KH6J, is donating some old exam material which may be a listening aid. Those interested may call my office number, 969-9993, for a CD copy of this material.

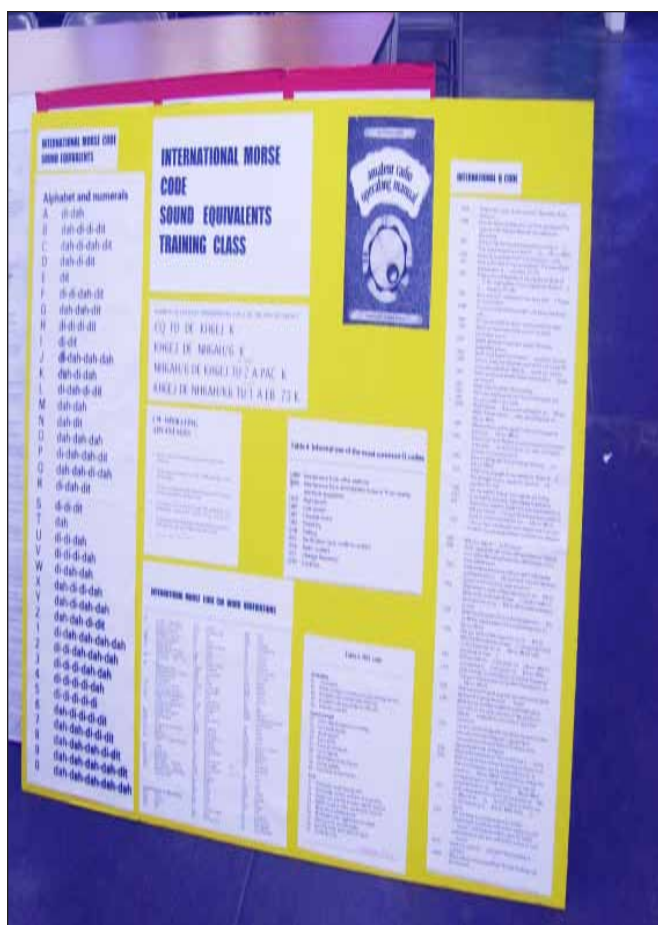
Since time is very limited to get started before the FD event, contact me right away. Find a buddy and practice together.

— 73, Robert Oliver, NH6AH



Photos by Robert Oliver, NH6AH

Volunteers attend one of the recent planning sessions for the June 28 ARRL Field Day in Hilo.



A CW instruction presentation board.

Field Day, an overview

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

Field Day is a picnic, a campout, practice for emergencies, an informal contest and, most of all, FUN!

It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, other groups use the opportunity to practice their emergency response

capabilities. It is an excellent opportunity to demonstrate Amateur Radio to the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar.

The contest part is simply to contact as many other stations as possible and to learn to operate our radio gear in abnormal situations and less than optimal conditions.

We use these same skills when we help with events such as marathons and bike-a-thons; fund-raisers such as walk-a-thons; celebrations such as parades; and exhibits at fairs, malls and museums — these are all large, preplanned, non-emergency activities.

But despite the development of very complex, modern communications systems — or maybe because they ARE so complex — ham radio has been called into action again and again to provide communications in crises when it really matters. Amateur Radio people (also called “hams”) are well known for our communications support in real disaster and post-disaster situations.

What is the ARRL?

The American Radio Relay League is the 150,000+ member national association for Amateur Radio in the USA.

ARRL is the primary source of information about what is going on in ham radio. It provides books, news, support and information for individuals and clubs, special events, continuing education classes and other benefits for its members.

The Amateur Radio frequencies are the last remaining place in the usable radio spectrum where an individual can develop and experiment with wireless communications. Hams not only can make and modify their equipment, but can create whole new ways to do things. For more info, visit: www.arrl.org.

2010 Technician Question Pool expires at end of June

The 2010 question pool for the Technician exam expires at the end of June. Beginning the first of July, all Technician tests must use the new question pool. The final BIARC testing session using the present pool will be June 28 at Field Day in Hilo. For further information, contact Milt, AH6I, 965-6471 or nodacker@gmail.com.

— Milt Nodacker, AH6I

10-meter mission in 2014

Everyone invited to get on the air



Photo by Curt Knight, AH6RE

Irene Kubica, NH7PE, is an avid member of Ten-Ten International and encourages other hams to get involved in this enriching, multifaceted hobby.

All Technician Class Licensees have 10-meter privileges, so try your hand on HF!

For further details, check out www.ten-ten.org.

The Aloha Chapter of Ten-Ten International Net, Inc. meets on 28.490 MHz, with an alternate frequency of 28.487MHz, every Monday evening at 6:30 p.m. HST. If you don't hear me, don't just listen, call “CQ!” Help keep 10 meters in amateur radio hands.

Thanks and aloha.

— Irene, NH7PE

10-10 QSO Parties offer fun chance to meet folks around world

Ten-Ten QSO Parties are events held for fun and to meet old, new and prospective members around the world. Open Season and The Spirit of 76 QSO Parties are specialty events and do have additional rules beyond those guiding regular QSO Parties.

Ten-Ten International Net's Open Season (PSK) QSO Party is held on the first full weekend in June, which falls on June 7-8 this year. Remember to remain in the digital

area of the 10-meter band, using only PSK. Open Season event logs will be accepted from ALL amateurs!

Hitch up your jeans and get ready for The Spirit of 76 QSO Party. This event will run for 7 days, and be held around the Fourth of July each year.

This year, it will be held from 0001UTC on Monday, June 30, to 23:59UTC on Sunday, July 6. Make as many contacts as you can during the week using 6 modes.

The modes to be used, and suggested frequencies to monitor, follow: 1) USB (28.345); 2) RTTY (28.086); 3) CW (28.050); 4) FM (29.600); 5) PSK (28.120), and 6) AM (29.000). It will be

possible to work the same call 6 times, once in each of the various modes, for a total of 12 points for just one call sign!

Current information about 10-10 and upcoming 10-10 QSO Parties and events always is available on the 10-10 website.

Cover sheets, logging forms and dupe sheets are available for downloading or printing at <http://www.ten-ten.org>. Any unanswered questions regarding the QSO Party rules may be forwarded to the QSO Party manager.

Looking forward to hearing your experiences on working 10 meters!

Aloha,
Irene NH7PE

June 2014						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3 Board Mtg 1700 hrs Makani Pahili	4 Makani Pahili	5 Makani Pahili	6	7
8	9	10	11	12 General Class 1830 to 2030	13	14 General Meeting 1400 hrs
15 Father's Day	16	17	18	19 General Class 1830 to 2030	20	21
22	23	24	25	26 General Class 1830 to 2030	27	28 Field Day 8AM to 6PM Walmart
29 Field Day 8AM end at Wailoa	30					

BIARC 2014

June-July

July 2014						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		1 Board Mtg 1700 hrs	2	3 General Class 1830 to 2030	4 Independence Day - Volcano BIARC Family Day	5
6	7	8	9	10 General Class 1830 to 2030	11	12 General Meeting 1400 hrs
13	14	15	16	17 General Class 1830 to 2030	18	19 Work Day Pepeekeo Repeater Site
20	21	22	23	24 VE Testing	25	26
27	28	29	30	31		