

# CAARA Newsletter



AN ARRL AFFILIATED CLUB

JUNE ISSUE- 2010



# President's Corner

by Curtis AA3JE

It is with great regret that I mention the loss of our former president, Charles Anderson, who died last month after a sudden illness. Charlie did so much to keep CAARA going during the last "dry spell" for the club and was so faithful on Sunday mornings that I still expect him to be in that end chair, and cannot believe that he is gone.

Like all organizations, CAARA is changing. We have a great group of younger, newer members whose response to challenge is "Why Not?". I find it stimulating, and I literally do not know what will be next when I go to the club. It is hard to remember that each new ham has to learn it all over again, and that the older hams, (I am now past 60 and consider myself "comfortably mature"), become dependent on the new hams for help with the new technology.

June is Field Day month, and this month is going to be a whiz-bang event. Sign up, show up, operate and celebrate amateur radio with us. This is our last month of meetings before the summer recess (July and August) and the September Annual Meeting. Please consider service to the club. We have a few openings for BOD members and officers. Serving is a really good way to get involved, and I have found it greatly rewarding.

CUAGN-73, Curt

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## CAARA ANNUAL MEETING ANNOUNCEMENT

Greetings to all CAARA Members, The Board of Directors would like to announce that CAARA's Annual meeting will be held on Wednesday, September 15th at 8 PM at the CAARA Clubhouse on 6 Stanwood Street in Gloucester. This year we are also going to hold a Constitutional Convention on the same evening. During this years Annual meeting we also have the added responsibility of holding a Constitutional Convention where the members will have the opportunity to discuss and vote on possibly changing some sections of our clubs Constitution if they feel the need to do so. So mark your calendars for Wednesday, September 15th and we hope to see you all at the Annual meeting as we catch up after the summer and start off another season of CAARA Wednesday night meetings. This is also a reminder that as per usual CAARA will not be holding any scheduled Wednesday night regular member, Board of Director, or Emergency Communication Group meetings during the month's

If you have any questions please feel free to contact me at <a href="mailto:dburg101@aol.com">dburg101@aol.com</a>

of July and August as we take our summer break. All

73's , Dean Burgess KB1PGH CAARA Clerk

other activites will go on as planned.



CAARA Newsletter
Cape Ann Amateur Radio Association
6 Stanwood Street
Gloucester, MA 01930

CAARA Newsletter is a monthly publication of the Cape Ann Amateur Radio Association (CAARA). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to CAARA members, and space is available. Material is accepted on a first come, first serve basis. Articles and other materials may be submitted by internet to Jon at k1tp@arrl.net. If possible, material should be in Word format.Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

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Jon Cunningham-Editor K1TP

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#### Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the Cingular tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations. CAARA also operates the W1GLO repeater on 224.900. The W1RK 443.700 repeater with antennas located in Magnolia is owned and operated by club member Ralph Karcher and it too is available for club use.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, it includes a permanent HF station with rotating beam and vertical antenna along with a 2 meter packet station and 2 meter voice and 220 MHz transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. There is no pre-registration necessary. Contact the head of our VE team Bob Quinn if you have any questions about monthly testing.

Monthly member meetings are held on the first wednesday of each month at 7:30 PM except for July and August.

Each Sunday evening at 9:00pm, the club operates a 2 meter net on 145.130. This is an open and informal net which disseminates club news and prepares operators for emergency communications work. All are invited to check into the net as club membership is not a requirement.

#### Gonsett, Born to RF Engineering

**FALLBROOK, Calif.** You see it in the neat rows of cherimoya fruit trees in the orchard of his summit home in Fallbrook, north of San Diego. You see it in his tidy laboratory. His clients can attest to his relentless discipline. Bob Gonsett knows exactly how he likes things done.

Bob Gonsett, consulting radio engineer, started life in Los Angeles, and there is no way you can understand him without knowing a thing or two about his father.

Faust Gonsett invented the two-way radio for police motorcycles and was chief engineer of the Beverly Hills, Calif., Police Department at an early age. He then founded the Gonsett Company, which manufactured a variety of amateur radio products including the VHF Communicators affectionately known as "Gooney Birds." The firm also manufactured TV antennas that were sold nationwide by Sears Roebuck as well as some of the earliest FM broadcast converters for cars.

Fascinated with the electronics at his father's plant, Robert Gonsett took up amateur radio, passed his Novice exam at age 13 and soon advanced to General as WA6QQQ.

"Even the kings of old couldn't cast their voices around the world, but we could as amateur operators, and

there were so many interesting people to meet," he recalls. When ham vanity call signs became available, he got his father's old call, W6VR.

After moving to San Diego County as a teenager, the young Gonsett found his way onto Mt. Soledad and became fascinated with the high-powered transmitters at KOGO(TV), which is now KGTV. He also became hooked on FM when the transmitter serving KJLH (now KIFM) needed serious repair.

His father died about the time the teenager graduated from high school. Bob met his future wife and office partner Judy at the University of Southern California; she later joined him near Boston when Bob was studying by day for his electrical engineering degree at the Massachusetts Institute of Technology while teaching scuba diving for the school at night and on weekends. He was MIT's first underwater instructor.

Gonsett enjoyed listening to classical music on WBCN(FM) Boston, though the station (which is now WBMX) had some serious technical problems.

"One day I went over and asked if I could fix their transmitter since I liked the music but they had this little problem," Gonsett said, who was 20 years old at the time. "They had been off the air for days, and said, 'Have at it!' Next thing I knew, they made me chief engineer — all while carrying a full course load at MIT and teaching scuba in the evenings."

#### **FCC** experience



"WBCN was a lot of fun because there were so many problems to fix, from a poorly designed new transmitter to a near-prototype Shively antenna where portions of the bays exploded each winter due to an unstable RTV compound. The work was sort of like amateur radio carried to an extreme, but the work was easy because I had been doing that kind of stuff all my life."

Gonsett got his first taste of consulting when he engineered the WBCN transmitter move to the Prudential Tower, with all its attendant challenges.

Gonsett, now 63, fondly remembers his first serious encounter with the Federal Communications Commission. He had to work out a short-spacing deal with the local engineer-in-charge in order to make the WBCN move. The EIC agreed to the plan — and

that's all there was to it. The process was "much simpler than getting a waiver today."

He graduated with a Bachelor of Science degree in electrical engineering from MIT in 1970 and took off to the Caribbean, where he quickly became chief engineer of the Caribbean division of Cable and Wireless/Western Union International. He used his pilot's license to visit outlying offices — and of course

taught scuba on weekends. "The work was fun but not a career."

Soon Bob and Judy returned to southern California and he became chief engineer for KOWN(AM/ FM), Escondido, and KFSD(FM), San Diego. He almost immediately branched out into consulting with his own firm, Communications General Corp.

CGC is known for frequency and spectral measurements as well as its California-centric

e-mailed newsletter, but the vast majority of its business is in consultant radio engineering that often progresses out of sight.

He's shown great stamina in his career. Gonsett fought for years with incumbent land-mobile users and the custodian USDA Forest Service to install a heavily filtered 530 watt ERP FM transmitter for KWVE on prominent Santiago Peak in Orange County, Calif. The Forest Service insisted the station would cripple incumbent land-mobile communications. It took a court proceeding and exhaustive field measurements

to prove no harm, and "K-WAVE" prevailed.

For a small Class A FM station in Carlsbad, he orchestrated a monumental move, shuffling adjacent and co-channel stations on both sides of the U.S.-Mexico border until KKOS could move to 95.7 MHz and obtain a Class B license at the desirable Mt. Soledad site in San Diego, in essence moving the station to the big city. He convinced the FCC to use

> his Longley-Rice calculations to prove sufficient coverage of the city of license — a showing Gonsett feels would have been rejected with the traditional F(50,50) propagation

# methodology.

#### HD too soon?

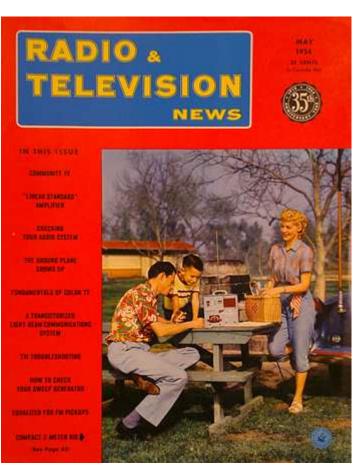
Perhaps his biggest accomplishment to date involved designing and overseeing the construction of a major new radio and television transmission site in the Tucson Mountains in Tucson, Ariz. That location gave broadcasters a site close to the metropolitan population with far better winter access and maximum-facility RF plants.

Close attention was paid to site construction so that high-power broadcasting could live harmoniously with sensitive landmobile and cable TV receivers. According to Gonsett, the project took years to complete and involved numerous

environmental issues, one of the first uses of Longley-Rice calculations in an FCC hearing and some envious TV broadcasters who opposed the project.

"That project was much more contentious than, say, the development of Mt. Harvard in Los Angeles." Regarding trends at the commission, Gonsett said, "On AM we have a lot of drop-ins and a lot of manmade noise, now exacerbated by HD sideband interference.

"A classic example of AM HD Radio interference



Gonsett appeared on the cover of Radio & Television News in May, 1954, published by Ziff Davis, along with a man who worked at his father's radio manufacturing plant and the man's wife.

would be KNX at 1070 kHz and KDIS at 1110 kHz, each in Los Angeles, causing interference to 50 kW XEPRS at 1090 kHz that transmits from a point near Tijuana, Mexico. Specifically, XEPRS' analog signal had been regularly received in the Los Angeles basin and Orange County until HD transmissions were initiated in L.A."

Gonsett feels that HD Radio was introduced "way before its time — the bugs weren't worked out." His FM clients, he said, may self-inflict damage to their analog signals with the granted 6 to 10 dB IBOC power increase, and he already sees interference from "HD intermodulation regrowth," which he describes as a "widespread, nationwide problem."

"Over the years, radio has devolved from a highquality service with fringe area coverage to a 'sorta sounds okay' media where fringe service is being destroyed by noise."

#### Communicator

From the launching of his business, Gonsett has kept in touch with clients through a newsletter informing them about FCC statements and spectrum changes that could affect them, as well as other items of interest.

The CGC Communicator began more than 35 years ago as a hand-written sheet; later it was typed. In 1996 it evolved into an e-mail bulletin and now has more than 1,000 subscribers, according to Gonsett.

Last fall, when the Station Fire in Los Angeles threatened broadcast transmitters on Mt. Wilson and Mt. Harvard, Gonsett felt special urgency in his mission to inform regional engineers, and he became an ad hoc message center for those sites. Gonsett said broadcast engineering managers became deeply concerned when Mt. Wilson and their facilities appeared to be threatened by a burn-over and firefighters were being pulled off the mountain.

Gonsett donated his time to keep communications flowing between the Forest Service, site users and patrol officers. His sometimes multiple daily posts gave important insights for stakeholders. Newsletter subscribers in other parts of the country followed the Mt. Wilson broadcast-related communications with fascination. Ultimately, the burn-over didn't happen.

San Diego's SBE Chapter 36 in December honored Bob Gonsett with a Lifetime Achievement plaque as part of a holiday banquet. In giving the award, the chapter cited his work in the service of Southern California broadcasters over the past four decades, and in particular, during the fires this past fall.

#### Will he retire?

"I bill myself as being semi-retired, but I love the work — and the people in this business are terrific."

#### The Last Tech-Plus License to Expire in June

In February 1991, the FCC dropped the 5 WPM Morse code requirement for new Technician licensees, and in 1994, it created a new class of Amateur Radio license: the Technician-Plus, also called Tech-Plus. This new license differed from the Technician license in that Tech-Plus licensees had passed the code test and had more operating privileges on HF. Patricia Phillips, N3IGI, of Pittsburgh, Pennsylvania, received her Technician licensee on June 12, 1990. On March 21, 2000, she upgraded her...

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In 2000, the FCC restructured the license classes, and where there were six classes -- Novice, Technician, Tech-Plus, General, Advanced and Amateur Extra -- only the Technician, General and Amateur Extra survived. Novice and Advanced class licenses could still be renewed and modified, but Tech-Plus licensees would be classified as Technicians upon renewal, but still retain their code credit and HF operating privileges.

According to the FCC's Bill Cross, W3TN, the Tech-

Plus licenses came about when those who had earned their Technician licenses when the Morse code requirement was still in effect wanted a way to distinguish themselves from the new Technician licensees (who did not have a Morse code requirement). In 1994 -- and effective December 20, 1994 -- the FCC issued and Order called Amendment to Amateur Service Rules to Change Procedures for Filing an Amateur Service License Application and to Make Other Procedural Changes that instituted the Tech-Plus license class: "Technician Plus means that a Technician class licensee has also passed a telegraphy examination. We believe that showing this information in our licensee data base and license document as a separate class rather than continue to treat it as a category of the Technician class is consistent with current licensing procedures."

Just a note to report that W1GLO was on the air Saturday afternoon participating in the ANNUAL ARMED FORCES DAY CROSSBAND MILITARY/AMATEUR RADIO

**COMMUNICATIONS TEST.** Jen Cormier,

KC2THF, was there with Briggs Longbothum, AB2NJ and worked several military station on 20m. "We never able to hear Ft. Monmouth (NJ) but we did work "AAZ" (Ft. Huachuca, Az). "WUG-231" was operating from a pumping station in Marian, Arkansas and "AAC" was active from Lexington, Ky. It was nice to give our military friends a supportive hello for Armed Forces Day.

The military operators were very comfortable talking with us and were grateful for the chance to chat and I learned one of them was also a ham! They transmitted on mil frequencies outside the regular ham bands but listened for ham responders on an announced frequency in the respective part of the band for mode in use. We were using USB on 20m but CW and digimodes were also available at times. It was an interesting activity and we easily worked all the statons we could hear. Always something cool to do at the clubhouse on a weekend.

It was good to see Jen again after (how long?). She said we might see her again on the Saturday of Field Day.

Good DX,

Briggs, ab2nj

#### Beltronics ending ham radio repairs

HOLLIS – It's not lack of business that has led the region's only ham-radio repair shop to stop taking new customers; in fact, it's the opposite.

"It became overwhelming," said Dorothy Peabody, who owns Beltronics on Proctor Hill Road with her husband, Bernie.

The 10-person company installs and repairs radio systems for emergency services.

Until last month, it had two employees who did parttime repair work on amateur, or ham, radios. When one of those employees retired, Peabody said, the decision was made to get out of that business because there were more requests for repairs than the one remaining worker could handle.

"We couldn't provide the service in a timely manner," she said. "It just wasn't fitting into with what we could provide."

"We're focusing more on commercial radios, municipalities, ambulance and the like."

The decision was hard because the Peabodys and many Beltronics employees are licensed "hams" themselves, enjoying the pastime of making over-theair contact with others, for fun or as a public service.

And they know getting the radios repaired can be tough. Beltronics lists two other ham-radio repair services on its Web site: one is in Bow and one is in Maine.

The desire for repair work is so great, Peabody said, that over the past decade Beltronics has repaired radios mailed from as far away as Saudi Arabia, Puerto Rico and South America.

"We've had people drive here from New York state and bring their radios," she said.

All this business has come from word of mouth among the fairly small and well-connected ham community, she said.

Beltronics only repaired large ham radios, the "big rigs" as Peabody calls them, not mobiles or handhelds. Part of the issue, she said, is that ham radios are complicated compared to most emergency service radios.

"They're very intricate to work on. ... Repair is much more difficult, and they take a longer time to work on, too," she said.

Ham radio, which involves signals that can be bounced off the ionosphere and sent enormous distances, grew because of its role as an emergency communications service, when telephone or other systems are disrupted by storms or other disasters. It has been used in this capacity locally during floods in recent years.

New Hampshire hams have formed a chapter of the American Radio Relay League, and hold annual exercises in which participants erect antennas and try to make contact with as many parts of the world as possible.

"I'm sure the repair business is there for anybody who is interested in picking it up," Peabody said.

#### 2010 Public service events list

- #1 Saturday May 22<sup>nd</sup>, ADA Tour de Cure Bike Ride starting in Gloucester and going thru North Shore
- #2 Saturday June 5<sup>t</sup>, Lou Marcel Canoe Race to benefit Special Olympics in Haverhill
- #3 Saturday June 1, Coast of Hope Bike Ride starting in Ipswich and going thru North Shore area.
- #4 Saturday June 26<sup>th</sup> and Sunday June 27<sup>th</sup>, ARRL Field Day at Babson Field Rockport
- #5 Saturday July 3<sup>rd</sup> at 6 PM, Horribles Parade in Gloucester
- #6 Sunday July 4th at 12 Noon Manchester Parade
- #7 Saturday July 17<sup>th</sup>, Blackburn Challenge Rowing Race around Cape Ann
- #8 Sunday July 18th, Reid's Bike Ride for Cancer Charity from Lynn to Gloucester
- #9 Sunday July 25th, Cycle 4 Shelter Bike ride
- # 10 Saturday August 7<sup>th</sup> at 9:30 AM, Essex Youth Triathlon at Centennial Grove

- #11 Sunday August 8<sup>th</sup> at 7:30 AM, Gloucester Triathlon
- # 12 Monday September 6<sup>th</sup>, YMCA Cape Ann Run in Gloucester
- # 13 Saturday September 11th, Cycle 4 life Cancer Hospital Bike Ride from Marble # head to Ipswich
- #14 October 22<sup>nd</sup> Weekend, Head of the Charles Regatta-Contact Heather at LG1hocr@gmail.com
- #15 Sunday November 28th, Santa Claus Parade in Gloucester

If you wish to sign up to volunteer for these events (except for the Essex Triathalon) please got to the www.nsradio.org website and you can click on the sign up link. Eric Horwitz KA1NCF is handling the sign up.

CAARA held it's monthly Amateur Radio License Volunteer Examiner session on Sunday, May 9th and this month we had two test takers.

We would like to congradulate club member Robert Chadbourne on passing his technician exam and earning his KB1UFZ callsign and club member Charlie Symonds, W1HRA, on earning his General class upgrade.



New Kenwood TS-590S radio....finally but no price....introduced at Dayton Hamfest....

TX: 10-160 m + WARC / 50-54 MHz RX: 0.5-30 MHz / 50-54 MHz Here are a couple of pictures of CAARA's May member meeting held on Wednesday, May 5th. This month we had club President Curtis Wright, AA3JE, continue his elmering sessions for the newly licensed hams by mentoring them on all the facts on mobile ham radio installations.

The other pic is Curtis with his portable emcomm kit with a 2 mtr mobile rig with a battery and battery booster inside the red case. On the seond half of the meeting we had a DVD showing of the 3YOZ 2006 DXepedition to an island off of Antartica. *submitted by Dean KB1PGH* 







Here are a couple of pictures from the NE QSO party. Above is Rick Maybury, WZ1B, making CW contacts and Ruth Hodsdon, WW1N, making phone contacts upstairs in the CAARA clubhouse.

Below is Dick Macphereson, WB1W, working PSK-31 and racking up the points. *submitted by Dean KB1PGH* 





The long awaited new Kenwood HF rig.



This is a real serious tower and rotator.



High End TenTec Receiver used by govt agencies, etc.



The new Kenwood Walkie.



CW keys everywhere!

Photos from Dayton Hamvention held this month. This is the largest event ham radio has to offer and it is said every ham should make the pilgrimage at least once in their lifetime.

Don't forget we have the Boxboro Hamvention coming up this year and it is the largest of it's kind in New England



New Flex QRP radio above and AMSAT display below.



#### You Already Have H.F. Privileges

Eric P. Nichols, KL7AJ

I can't count the number of times I've heard some Technician Class licensee say something like "I want to get my General so I can have H.F. privileges."

#### **NEWS FLASH #1**

If you are a licensed radio amateur, you already HAVE H.F. privileges. Some doggone good ones, too. You have prime real estate on 80, 40, 15, and 10 meters. Despite the conspiracy of silence to the contrary, there is more to Technician Class life than 2-meter repeaters.

Most of us relative old timers started out our ham "careers" as Novices. The old Novice privileges still exist, with little change from the ancient of days. Most of us worked the world with these H.F. allocations long before we got our Generals.

#### "Only" CW

Oh, did I neglect to mention that the privileges on 80, 40, and 15 meters are CW? This leads us to:

#### **NEWS FLASH #2**

This is NOT a handicap! Well, it MAY be one, if you don't happen to know CW, but nobody has EVER prevented ANYONE from learning the code. What's your excuse? A few hours of practice and you'll have WORLD WIDE communications, with none of the repeater politics. Why operate with a self-imposed straight jacket?

CW is no longer a stick to beat you with; it's a carrot. You don't even have to have the thing memorized to operate CW legally. You can look up the letters as you go along, if you have to! Granted, this doesn't make for real FLUENT CW operation, but it DOES give you the world at your fingertips, RIGHT NOW. And, if worse come to worst, (and trust, me, this IS the worst) you can even use computer generated and copied CW, if you want to. However CW readers are still pretty lame; nobody's really perfected a CW reader that will reliably copy hand-sent code...which is probably a good thing in the long run.

#### NEWS FLASH #3

HF. is CHEAP!

The next time I hear anyone complain about how "expensive" H.F. is, I think I'll hang him from the

rafters with an RG-8 noose. You can get a ROCKMITE transceiver, which, by the way, has an absolute KILLER front end, for about \$50, INCLUDING a really nice cabinet AND a set of paddles.

Your first car probably wasn't a Maserati; it was probably something like a Yugo. Why should your first ham rig be any different? And the fact of the matter is, in almost ANY community, you can probably find someone to GIVE you an H.F. rig...or at least LOAN you one indefinitely. It may not be pretty, but it will get you on the air. And if you can get by with a CW rig, it will get you on the air even cheaper.

Think your 2-meter handheld is "economical?" Do you have a CLUE what it takes to get, or keep, a repeater operating, both in equipment, electricity, rent, and Man Hours? Most repeaters are a HUGE drain on club resources. I have seen more clubs go belly up because of the repeater burden than I care to mention. This is why the bylaws of the Hutchison Amateur Radio Experimenters' Society (HARES) *explicitly* state that no club dues will EVER be used to support any repeaters. (On the other hand, we *do* actively support any efforts to build, modify, and develop equipment for any of the 12 unoccupied Amateur microwave bands).

One result of this is that we have the YOUNGEST (to the best of our knowledge) average member age of any club in the state. It would be even younger if *I* wasn't in it! Our ultimate goal is to have the youngest average age club member in the COUNTRY.

We have a LOT of privileges as radio amateurs...even No-Code Techs. We need to use ALL our privileges. If we don't, someone else will.

#### **UNITEC-1 signal received!**

Signals have been received from the Amateur Radio satellite **UNITEC-1** which is on its way to Venus.

CW and FSK signals was received from UNITEC-1 at a distance of 300,000 km, no other Amateur Radio satellite has traveled this far before. It has some 50 million km to go before it reaches its destination.

Japanese ground stations worked together to receive the UNITEC-1 signal on the first pass over Japan on May 21 and they report:

- Measured Frequency 5839.91 MHz (Original UNITEC-1 downlink frequency 5840.000MHz)
- Problem: big frequency variation QRH is measured during major and minor downlink (wide-range recorder may be needed)
- Orbital determination downlink is easier to receive

The latest news on UNITEC-1 is available at the Operation Center website along with free software and a Ham Radio forum, see <a href="http://sites.google.com/site/unitec1ops/">http://sites.google.com/site/unitec1ops/</a>

Amateur Radio call for assistance for UNITEC-1 Venus-bound satellite <a href="http://www.southgatearc.org/news/may2010/">http://www.southgatearc.org/news/may2010/</a> unitec 1.htm

#### June WorldRadio Online Mag

The June 2010 edition of the free **WorldRadio Online** magazine is now available

In this issue:

- \* Flying Solo: Operating 'Alone Together' On ARRL Field Day
- \* A Humorous Look At Certain DXers by Franciso Grunberg, YO4PX
- \* WA6UDR's Remarkable Crystal Set More Than 40-years in the Making
- \* Up Over to Down Under: W6 to ZL on 6 Meters
- \* Meet the Newest Golden Megaphone Winners
- \* Treasures in a Shoebox: DXers' Most Coveted QSL Cards
- \* Which Digital Modes Are A-OK?
- \* Kurt Examines A Fan Dipole in the Attic With No Sparks

In addition, you'll find regular columns including: Amateur Satellites, EmComm And You, FISTS CW Club, Hamfests and Special Events, Contest Calendar and DX Predictions.

You can join in a live online chat with WRO Editor Richard Fisher, KI6SN, on Sunday, June 6 at 8 p.m. Eastern time.

It's at: http://www.WorldRadioOnline.blogspot.com

The entire June edition can be downloaded by clicking on the photo of the cover (left) on the WRO Welcome page:



If you'd like to download the magazine in smaller sections, click on the Table of Contents page (on the right - recommended for users with slower Internet connections).

WorldRadio Online <a href="http://www.worldradiomagazine.com/">http://www.worldradiomagazine.com/</a>

# FCC Again Denies Amateur's *Petition* Regarding Station Identification

On May 18, the FCC denied a <u>Petition for Reconsideration</u> filed by Glen Zook, K9STH, that asked for changes in Part 97 regarding how often amateurs must identify themselves on the air. This action follows the Commission's denial of Zook's <u>April 2009 Petition for Rulemaking</u> requesting that the Commission amend <u>Section 97.119(a)</u> to change how often amateur stations must identify themselves, specifically "to require that an amateur station transmit its call sign during the first transmission of any communication or series of transmissions, and to allow an amateur station to not transmit its call sign at the end of a communication when the communication or series of transmissions lasts less than three minutes."

In denying Zook's 2009 Petition, the FCC noted that in May 2006, Zook had filed another Petition requesting that the Commission amend Section 97.119(a) to require that call signs be transmitted at the beginning of each transmission or series of transmissions: "In response, the Commission received approximately one hundred comments, generally opposing the petition. In 2007, the Wireless Telecommunications Bureau's Mobility Division dismissed this petition, concluding that the requested rule changes were not necessary and were not supported by the Amateur Radio community, and noting that the commenters believed that the current station identification rule properly balances the burden of requiring the station to transmit its call sign with the convenience of those receiving the transmissions to determine the identity of the station making the transmissions."

The FCC said that Zook's 2009 request "does not assert or demonstrate that circumstances have changed



since 2007 with respect to the adequacy of the current station identification rule," and the FCC concluded that it does not present grounds for the Commission to propose amending Section 97.119(a): "Your current proposal, like your previous petition, does not demonstrate that revising the station identification requirement as requested would address the concern that many Amateur Radio operators do not identify their station timely or at all, or that the problem of station operators not complying with the present rule cannot be addressed by enforcement of the present rule rather than a rule change."

After the FCC denied Zook's Petition, he filed a Petition for Reconsideration two days later. The Commission noted in its May 2010 action that it had dismissed Zook's 2009 Petition "on the grounds that it did not present evidence meriting a rule change, because it did not assert or demonstrate that circumstances had changed since the Division dismissed a previous petition that you filed proposing to amend Section 97.119(a) to incorporate certain portions of the Commission's former station identification rule." but that in his Petition for Reconsideration, Zook "disagree[d] that circumstances have not changed since 2007, arguing that your 2009 petition proposed narrower changes than your 2006 petition, and again expressing the concern that many amateur operators do not properly identify their communications."

The FCC Denied Zook's *Petition for Reconsideration*, concluding that it, "like your previous petitions, does not demonstrate that the current station identification rule is inadequate or that revising the station identification requirement as requested would address the concern that many amateur radio operators do not identify their station timely or at all. We also note that, in response to your 2006 petition, commenters believed that the current station identification rule properly balances the burden of requiring the station to transmit its call sign with the convenience of those receiving the transmissions to determine the identity of the station making the transmissions."

### IMPROVE YOUR RX PERFORMANCE FOR FREE

Running with high RF Gain is not the best way to use the receiver.

Many SWLs and hams think they are getting the most signal from the rig

if they shoot RF gain all the way up. True... BUT... and a big BUT...

you also get as much noise as possible that way.

The better (and I dare say correct way) is to run RF gain all the way

down and bring it up until you hear signals... or once you get a signal,

then run it down to as low as you can go to hear the station, and you

will be hugely, and pleasantly, surprised to find the noise drops out considerably.

Think about it... it is all about Signal-to-Noise. Usually signal is

over noise or you would her noise and not signal.

OK... that is the

easy part,... but now consider that if noise is lower than signal, then

if you dropped RF Gain to where you can only hear the signal, then the

noise will have dropped out entirely.

RF Gain can be used on any signal and all the time and cut noise down

considerably. It may take you some time to get on to it... if you are

not careful, then the signal is lost and you hear only noise or nothing,

but if you find the sweet spot, you will hear the signal pop up out of

the noise and be more clear. Sometimes it seems like the signal

strength is diminished, but that is either a false indication (as

because the noise has dropped out and the overall volume is lower

therefore) or because you have dipped both noise and signal - but the

whole deal is to improve signal-to-noise - if your signal drops ten

percent and the noise drops 50 percent, then you have

an audible advantage. S/N is the mantra at all times.

Beverage antennas - long wire antennas from several hundred feet to a

couple thousand feet, and set maybe ten feet over ground, are VERY quiet

antennas. Signals are weak... but noise is really weak. They make

great receiving antennas for this reason. But they work on the same

principle. Reduce noise and the signal seems louder in relation to it.

It is a comparison... a relative thing... Signal - compared - to -

noise... S/N. Don't magnify the signal and the noise... as that

seems to increase them at the same relative rate. Instead, reduce both

until one is relative louder than the other.

Ham operators who know how this works, will sometimes set RF Gain as low

as 30%, and then set the AF Gain (volume knob) up to as high as 60% —

## YEAH THIS SEEMS BACKWARDS DOESN'T IT ?? — but it works. And it works

way better than running RF Gain up high and dropping AF Gain low.

TenTec receivers and transceivers have some of the best receiver

specifications around. Check this on Bob Sherwood's site at

Sherwood Engineering.com . . . and they all work this way. Read the

instructions to the Kenwood R5000 and you will see it also works this way.

It will take practice, but this is absolutely the best way to improve

reception and it won't cost you any money — better than a pre-amp,

better than a pre-selector, and way better than any DSP filter. It

gets the most out of the rig, period. At no extra cost.

So... do not be afraid to lower RF Gain - there is nothing to be gained

by being macho and cranking it up - not like a guitar amp where you want

it loud so you gotta turn it up loud... remember it is the radio of  $\boldsymbol{S}$ 

to N that counts.

James -K8JHR

#### **ARRL Field Day Overview**

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. Each year over 35,000 amateurs gather with their clubs, friends or simply by themselves to operate.

ARRL Field Day is not a fully adjudicated contest, which explains much of its popularity. 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, most groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to local elected community leaders, key individuals with 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.

#### **NE QSO PARTY RESULTS**

Our final unofficial results gave us a total of 44,957 points. This was accomplished with a total of 480 QSO's during the party. Contact was made with 46 of the 50 states in addition to 4 Canadian Provinces and 21 DXCC countries. These included contact with Guam, Haiti, Montenegro, Iran plus United Arab Emirates to name a few. This contest was fun for all operators that participated and was unique in that had four other contests were running during various times of the party. The QSO Party coincided with other QSO parties on Saturday and ending up on Sunday with the Italian DX contest on Sunday. There were lots of stations to contact and many of them looking to contact a New England Station. Operators during this contest were: N1PSF, N1QEH, W1MAW, W4RIG, WB1W, WW1N, WZ1B. Wish to thank all those that participated in the NE QSO Party in addition to those that just showed up to see what was going on.

Check out the NE QSO Party website ( <a href="http://www.neqp.org">http://www.neqp.org</a>), next year's dates are set.

#### **Tuning the Imaginary Radio**

#### **Curtis-AA3JE**

I have to come clean. I must confess. I can't go on living a lie. Here it is: "I sometimes have trouble with computers and Microsoft Software".

There now, I feel better. I needed to say that. If I did not say it, what follows makes no sense at all.

Like most of us, I look forward to the tax refund season. After I pay the bills and get the checking account caught up, it's the time of year I consider a new HF rig. There's nothing wrong with the old one, I just get an itch to try something new.

This year it involved buying an imaginary radio. I had been looking at the Flex Radios, but was not sure that I was up to the challenge (see "I sometimes have trouble…", above). Even after all the demonstrations at the club, I was anxious about it. I dillied and dallied, and finally I sent off an order for a Flex Radio 3000, billed as the "ideal radio for someone just getting into Software Defined Radio". That was me! There were

clear directions that I might need some computer stuff as well, so I ordered that too.



Step 1- **Clean up old computer**. I had a \$90 Hamfest special P4 computer, so I dug it out, cleaned off the pigeon dung,

and ordered a Firewire adapter. This was not simple, and I ended up ordering about 3 of the things till I found one that both fit in the slot and booted up without the computer having some kind of fit. I put some extra memory in it, (512 MB, all it would hold) and cleaned off some of the old junk software.

Step 2- **Open the Box.** The box came and it caused a discussion with the XYL. The conclusion was that I was not putting "another" radio on our shared desk, but had to set it up in my personal office. This led to a few day's delay as I ran HF antenna cabling back to the office, cleaned the dead mice out of the rack, got enough antique radios off my desk to see the surface, and sorted out the power line spaghetti behind the desk so I could put the new radio and computer in there.

Then I got to open the box. It contained a blue chassis 12 by 2 by 24, a firewire cable, a power cord, a 4 page manual and a disc. I was excited by the 4 page manual, till I found it referred me to the 295 page Adobe Acrobat "e-manual" on the disc. The physical connections and power supply were very easy. This was encouraging, sort of.

Step 3- **Install lots of software**. Now I started following the directions. The disc went in all right, but the installer program came back with compuspeak for "You appear to have a really old and tired computer. You need to install all these updates before I can install the good software. Are you SURE you want to do this?" I was, so I went to the indicated websites and downloaded all kinds of Microsoft updates. It all came with a warning that I should restore my system before downloading just in case the new software lobotomized my computer (it didn't). Three hours later it was all installed and I tried again.

The message this time was "Good boy, now install this other stuff and re-boot the system 5 times". So I did that. Then I go the message that my virus software had expired. So I freshened that up for the next hour. (It is not clear to me that the viruses are any worse than the anti-virus software, at this point).

Now I had completed the preliminary work to get my computer ready to install the real software (it had taken 5 hours). My wife called down to me and asked rather pointedly if I was going to work the next day. I checked, and it was midnight, so I stopped and planned to try again the next day.

Step 4- **Try Again.** So the next day I tried again. I had to install two different programs. The first was the "drivers" (whatever they are) and the second was the "radio"). So I did. It all went very well, though I got muddled, got the two programs mixed up, tried to follow the instructions for one program when setting up the other (which does NOT work). Finally I was done, though there were some set-up parameters I had to guess at (the instructions were very complete, but just unintelligible to me). So I guessed, followed the pictures and did my best.

Step 5- **Power ON**. I next tried to power on the radio. This did not work. It turned out that you have to turn ON the interface (the blue box) and THEN start the computer. This took a few tries, as



you also have to WAIT for the computer to FINISH startup before trying to start the radio program. I got it all by the 10<sup>th</sup> try and after some meditation exercises (available on request).

Step 6- What the HECK!- The program started, the screen filled, lovely CW started to come from the speakers, but I was paralyzed as a rabbit in the headlights. There were so MANY buttons. Dozens, scores, hundreds of the little metaphysical push button things on the screen. So with a sigh I opened up the 295 page "virtual" manual and started to read. The radio promptly stopped working. I was baffled, I was enraged. I cursed, I cried out against an unjust world, (then I read the manual). It pointed me to a small box on the screen labeled "CPU USAGE". I was at 100%. (Actually I was trying for 120%, but failing). My computer could not open the instruction manual and run the radio at the same time.

NO PROBLEM!. I just printed the manual. All 295 pages. Punched and put in a binder. It only took a few hours, then it was time for bed.

Step 7- **Try Again The Next Night-** The manual made a few suggestions about turning off some of the less needed features of the program, offered very helpful hints on what the buttons did, and I tried again. WOW, what a rig this thing was. The radio has a built in waterfall display that shows any desired band segment, and the signals on the band as colored streams. You just click on the stream, and out comes the sound. AM, FM, CW, Digital, RTTY, SSB, everything. Need a sharper filter? Click the box. Need the antenna tuned? Click the box. Need more amplification? Click the box. Need anything? Click the box.

The radio outperformed any radio I ever had, and it did so without any tweaking. The only problem was that if I opened up QRZ, the virus checker burped, or in fact anything else tried to run on the computer, even in background, it stopped receiving. I had proved that a decade old, tired 1.7 GB Pentium 4 XP machine with 512 MB of RAM could run the program, but not well.

I needed a new computer. Fortunately they are so cheap now that I could buy one for the price of an MFJ antenna tuner, so I did. Four days later it came.....

(Please tune in next time for "Curt meets Microsoft System 7, or How bad can it get?")

INFO FROM FLEX WEBSITE: A Fully Software Defined Radio (SDR) Like all SDRs from FlexRadio Systems the FLEX-3000 is a fully software defined radio. The accepted definition of a real software defined radio is one "where components that have typically been implemented in hardware (e.g. mixers, filters, amplifiers, oscillators, modulators/demodulators, detectors. etc.) are instead implemented using software running on a personal computer or other embedded computing devices". The advantages of a SDR over a traditional analog radio, a hybrid DSP/analog radio or "firmware defined radio" are many. Versatility, flexibility and immunity to obsolescence are just a few of the inherent characteristics of fully software defined radios. Don't be mislead by other manufacturer's claims that their radios or accessories are "software defined" when they are just really software controlled or have software defined "like" features. If you are looking for the real deal, a genuine software defined radio, then look no further than FlexRadio Systems and the FLEX-3000.

FOR SALE BY K1TP: FT817ND I bought it at HRO 6 months ago and I have used it a total of 10 hours.

#### FT-817 The Ultimate Backpacker! Multi-mode Portable Transceiver

The world's first self-contained, battery-powered, Multi-mode Portable Transceiver covering the HF, VHF, and UHF bands! Providing up to five watts of power output, the FT-817 is designed for operation on the 160-10 meter HF bands, plus the 6 meter, 2 meter, and 70 cm bands. Whether your preferred operating mode is SSB, CW, AM, FM, Packet, or SSB-based Digital modes like PSK31, the FT-817 is ready to join you on your next hiking, camping, or search-and-rescue adventure! Now the 817 legacy is even better with the introduction of the FT-817ND, which includes coverage of the U.S. 60-meter (5 MHz) band, and it also includes a 1400 mAh NiMH Battery pack (FNB-85) and NC-72B Charger!

I paid over \$600 for the radio, optional feet, spinner knob, carrying case, portable keyer, MFJ switching supply to run it with 120vac and save the battery.

\$500 cash and you will have a solid portable rig!

I also have an Astron 35 amp supply for \$75.00

Email me at k1tp@arrl.net if interested or have any questions.

#### Order Your IRCs Online at USPS Web Site

Many hams have long complained about difficulties they have encountered when purchasing International Reply Coupons (IRCs) from their local post offices. Now the US Postal Service (USPS) has made it easier to get those IRCs to send with your direct QSL cards—order them online from the USPS Web site. The USPS ships all in-stock domestic orders for stamps and retail items within 1 business day via Priority Mail with Delivery Confirmation or First Class Mail. Shipments should arrive within 3-5 business days. All stamp orders are charged a \$1 handling fee, regardless of the order amount. IRCs purchased from the USPS, whether online or in person at a post office, cost \$2.10 each.

International reply coupons (IRCs) provide foreign addressees with a prepaid means of responding to inquiries, solicitations, or other types of communications that are initiated by US senders. IRCs are exchangeable for postage stamps by postal administrations in member countries of the Universal Postal Union (<u>UPU</u>). Each IRC is equivalent in value to the destination country's minimum postage price for an unregistered airmail letter.

More than a century after it first appeared in 1907, the IRC remains a useful item. Aside from its traditional use for correspondence, according to the UPU, two particular groups of users have emerged: Students who use them as a means of exchanging correspondence with academic institutions, and Amateur Radio enthusiasts, who use coupons when exchanging their QSL cards.

As of October 11, 2007, only those IRCs that have been printed by the UPU may be redeemed at US post offices. The valid version of the international reply coupons printed by the UPU is approximately 3.75 inches by 6 inches, has a bar code on the back and an expiration date of December 31, 2013. This policy is for those IRCs issued by the United States, as well as for those issued by foreign postal administrations.

#### Saturday is Ham Radio Cruise Night at



Home Made Ice Cream 131 Gorham Street - Rt 3A -East Chelmsford, MA 01824

Are you an amateur radio operator (ham) or interested in ham radio?

Then come join us any Saturday between 5 and 8pm in the Gary's parking lot.

Show off your mobile install.

Ask questions from Technicians, General, and Amateur Extras.

On site hook-ups for an HF sloper antenna and a 2m/440 antenna.

Current, former and potential future ham operators welcome!

Your Host - W1GFF

The trip was made to Thacher Island to install the first stage of the island Wi-Fi link. The landside station had already been installed and tested a few weeks before and today install the island side to see if the link could be made. Installation had to be made indoors as any outside antennae just becomes a perch for the local residents of the island. Initial setup was installed on a tripod in the window of an upper dormer in the Assistant Lighthouse Keeper's House.

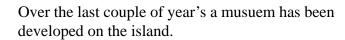
This window provides the best view back to the landside station.

Overall testing proved the link to be weak but sufficient for

distance involved between the two stations. The speed of the link was fair, but limited mainly by the landside link to the internet. Would have some drop-out of both link and local Wi-Fi. This may be due to interaction between the



two as drops appeared during heavier traffic periods or when getting at the weaker areas of the local Wi-Fi.



At the end of the day this first stage was a success. It is always sad to leave the island as the view's are in all directions are spectacular.

Until next time we say good bye to the island.

Submitted by Dick-WB1W







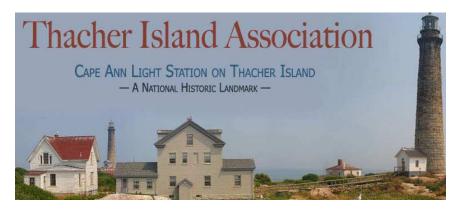


More pictures from the Thatcher Island main house during the recent testing of the wireless link being setup by Dick-WB1W and Stan-W4HIX.



It looks great out on the island and maybe the photos will give you the incentive to enoy the annual "Island Activation" by CAARA this summer. Come out to the island and enjoy the natural beauty and get the chance to play a little ham radio from a "rare island".





#### **COMING EVENT: FIELD DAY 2010**

The Cape Ann Amateur Radio Association will once again be participating in the ARRL Field Day event which are always held on the last full weekend in June. This year the Field Day weekend will be on Saturday, June 26 and Sunday, June 27.

This year the CAARA Field day event will once again be held at the Babson Cooperage Museum Field which is located on RT 127 on the Rockport/Gloucester line. Field Day will start at 2 PM local time on Saturday and run 24 hours until 2 PM local time on Sunday. We will begin setting up camp for Field Day early on Saturday

morning and we have already begun having planning meetings to organize all the Field Day activities. If you want to help us out, the planning committee will be holding organizational meetings on Sunday- June 6, Sunday- June 13, and Sunday- June 20, all starting at 10:30 AM at the the CAARA Clubhouse on 6 Stanwood Street in Gloucester.

We plan to have several stations running such as CW, phone, PSK 31, QRP, 6 Meter SSB, Satellite and the GOTA station. The Field Day Committee would like to encourage all CAARA members to come down and help out Saturday morning as well as to spend some time operating.



As you know CAARA will be inviting the

public as well as local officials to this operating event and emergency communications exercise so we kindly ask that all our members spread the word to help us promote our amateur radio hobby. Please take the time and this opportunity to invite your family members and friends down and remember that they will also have the chance to talk on the air without a license at the "Get on the Air" GOTA station. We hope to see you there.

73's

The CAARA Field Day Committee

#### **Loose Ends:**

CAARA would like to welcome Mike Dibella- N1GCT to our club.

The Sunday morning coffee hour at the club is open to all! Stop by and meet some of the club members, operate the club station, melt some solder! It's your club...

Don't forget the 2 meter net every Sunday evening at 9AM- don't be bashful, check in and say hello.

If you have not paid your dues, please send them in soon.