The Greensboro Amateur Radio Association

Feed Line

Providing Amateur Radio news for the Triad

Volume 16, No 1 | January, 2007

Editor: Tom Forrest, N4GVK | Web Site: www.w4gso.org | E-mail: info@w4gso.org

CHU Canada could move from 7.335 MHz.

NEWINGTON, CT, (ARRL) -- Changes in international frequency allocations could force Canada's CHU time-standard signal on 7.335 kHz to go off the air, change frequency or get another license by next spring. The International Telecommunication Union (ITU) has reallocated the 7300-7350 kHz band from "fixed service" to "broadcasting," effective April 2007. CHU now operates there as a fixed service facility. The other CHU frequencies on 3.330 and 14.670 MHz are not affected. The station has been including messages in English and French in its 7.335 MHz transmissions to solicit information from CHU listeners and to help shape recommendations regarding which direction to go.

"On April 1, 2007, CHU needs to stop operating, change frequencies, or re-license. Contact radio.chu@nrc.gc.ca or mail CHU Canada K1A 0R6," the English version says.

The Institute for National Measurement Standards at the National Research Council of Canada operates CHU. The Institute's Raymond Pelletier explains on the INMS Web site's CHU page that while shutting down the 7.335 MHz facility -- "the most useful of the three we use" -- is the easiest solution, that option "could create problems for some clients who are counting on this particular signal."

The other possibilities are that CHU relicense as a broadcasting facility, change frequency to a nearby fixed service channel, which would require an investment in hardware and manpower, or shut down operations completely, Pelletier says.

"To be seriously considered, any of the above alternatives will need to have a zero-based budgeting justification prepared, comparing it against the least expensive alternative of closing CHU entirely," he goes on to say. "CHU is entering a phase where major investment in new transmitters will be required if it is to be kept operating."

Pelletier says that lacking input from CHU's user community citing the importance of the service's contribution, shutting down CHU altogether "is an inescapable recommendation."

CHU's transmitters in Canada

Photos courtesy Raymond Pelletier, Frequency and Time, Institute for National Measurement Standards, National Research Council Canada, Ottawa, Canada

The CHU code is also used as a radio clock, which can be used as a reference clock for an NTP time server. Software drivers have been written that can obtain the date and time from the code and that tune a digitally tuned radio to one of CHU's three frequencies to get the best signal.

"Be assured that we will try our best to maintain the CHU service as it is, keeping the three frequencies as they are," Pelletier's plea concludes.

Canadian time transmissions using the CHU call letters commenced in 1938 on the current frequency, but the service itself dates back to the early 1920s. The facility changed to cesium atomic clocks in 1967. In 1970 the responsibility of operating CHU shifted from Dominion Observatory to the National Research Council.

CHU invites reception report and will respond with a QSL card. Send reception reports to Radio Station CHU, National Research Council of Canada, 1200 Montreal Rd, Bldg M-36, Ottawa, Ontario, Canada K1A 0R6 or via e-mail.

Entrance to CHU Canada facility and the transmitter building.

Ham Happenings
NEWS briefs

Sympathy

Our prayers and thoughts are with Ann Gibson, N4AIG and her family. Ann, who was president of the GARA club a few years ago, recently lost her nephew, Jay Irwin, son of Roy Irwin, KD4IRM (Ann's brother). He died suddenly from unknown causes Jan 1, 2007.

GOT NEWS? Send info, photos and stories to Tom Forrest, N4GVK, via e-mail to n4gvk@bellsouth.net. Get "Radio Active"

Special Feature on GARA Web Site

Check the GARA web site at www.w4gso.org for your free 2007 "Old Tyme Radio Calendar." The calendar was designed by Carl Nord, WA1KPD, of Killingworth, CT. The calendar has old photos of antique radio. It is a downloadabe MS Word document.

WA1KPD has a really nice web site if you interest in antique radios. <http://home.comcast.net/~chnord/wa1kpd.html>

Time to Renew!

Get Turned On!
Get Powered Up!

JOIN GARA 2007

Join the Greensboro Amateur Radio Assoc.

We are a diverse group of Amateur Radio operators providing public service for the Triad area.

If you want to be part of an organization that "Gets It Done" join GARA. We are planning an exciting year for Amateur Radio in thye Triad area.

Get in on the fun! Come visit a meeting and if you decide to join, it's only $24 per year. Our yearly membership period begins January 1. Your membership supports two top-notch repeaters, a area news-packed monthly news letter, and a frequently updated web site.
Radio broken? As a GARA member, you have access to a loaner radio free of charge whenever yous need to go to the shop!

If you are a renewing member, we appreciate your continued support!

By joining you help support two repeaters 145.150 and 442.875. GARA is also the support repeaters for Guilford County ARES and one of the back-up repeaters for Triad SkyWarn.

145.150 left, 100 Hz. tone
442.875 right, 88.5 Hz. tone

Visit us on the web at: www.w4gso.org
If you have any questions, please e-mail us at info@w4gso.org

Greensboro Amateur Radio Assc. • P.O. Box 7054 • Greensboro, NC 27417

FCC cites Pennsylvania radio amateur for failure to ID

FCC cites Pennsylvania radio amateur for failure to ID (Jan 3, 2007) -- The FCC's Philadelphia Field Office has issued a formal Notice of Violation (NoV) to a Pennsylvania radio amateur for failure to identify in a timely manner.

The Commission released the NoV to Andrew Ban, KB3GRK, of Feasterville, on December 20. The notice says that on September 12 and 13, 2006, an agent of the FCC's Philadelphia office monitored KB3GRK's transmissions on 439.850 MHz and observed that the operator failed to identify for nearly one hour in one instance and for more than 20 minutes in the second. §97.119(a) of the Amateur Radio Service rules requires stations to identify "at the end of each communication, and at least every 10 minutes during a communication."

The FCC has advised Ban that he must submit within 20 days a written statement addressing the alleged violations and action taken to preclude recurrence. The issuance of an NoV appears to be a departure from the FCC Enforcement Bureau's typical practice of addressing such alleged infractions with an advisory letter rather than a formal notice. *From ARRL*

The Greensboro Amateur Radio Association

President: John Doggett, KI4BMS
Vice-President: Chris Thompson, K4HC
Treasurer: Ernie Wall, NC4EW
Secretary: Greg Spencer, KG4UQV
Financial: Al Allred, K4ZKQ
Engineering Chairman: Carlton O"Rork, N4DFA
Operations:Roy Smith, N4BYU
Members at Large: Clark Doggett, KG4HOM
Tom Forrest, N4GVK
Appointed Positions:
News letter editor and Webmaster:
Tom Forrest, N4GVK

Meet our Members: Charles Lyons, NT1J

Charles Lyons, NT1J, was born in Boston. He was graduated from Harvard (BA and MA) and Columbia (PhD), and was for many years a university professor and administrator, an academic association executive, and the head of a Fulbright foundation. He has lived and worked in several states; and (beginning with Peace Corps service in the mid-1960s), half-a-dozen countries in Africa and Europe.

Charles came to Greensboro in 1991 to become Associate Provost for International Programs at UNCG. Retiring from there in 2003, he was called back into service as head of international affairs at East Carolina University from 2003 to 2005. A citizen of Ireland as well as the USA, he splits his time between homes in Greensboro and Country of Tipperary. He is married, has three grown children, and two grandsons.

Charles Lyons, NT1J, in his shack.

Contributed Photo | NT1J

Continuously licensed since 1955 (and Extra Class since 1985), Charles has held several calls over the years (he is ex-W1HHC, W2GZB, W3IWC, KV3R, NF9E, 5N2CL, and EL2AM; and currently EI7JV). Although he has rigs to get on almost every ham band from 80 meters to 1.2 GHz, you're most likely to find him on 20 meter SSB where he runs an ICOM 718 and Dentron GLA 1000 linear to either a ground-mounted vertical or an inverted-Vee (alas no space for a beam). He derives his keenest pleasure in trying (sometimes successfully) to repair broken-down equipment he finds at hamfests.

Since joining GARA in January, 2006 Charles has served on the Nominating Committee and has just become a member of the Engineering Committee. He is also a member of GAS, the ARRL, and the Irish Radio Transmitters Society.

He looks forward to talking with GARA members on the repeaters, on HF ground wave, or by skip from EI7JV.

FCC Gives Pro-Coders Opportunity

by Martin Fouts, AE6IP
Mountain View, CA
Via E-ham.net

Supporters of Morse code should thank the FCC for giving them this opportunity to demonstrate that they stand behind both the tradition of Morse code and that they really believe in hard work.

With the complete elimination of Element 1, the FCC has removed a crutch from the Morse Code tradition: requiring all US amateurs who wish HF access to experience it.

With the removal of this crutch, the FCC places the burden of enticing amateurs to experience the code precisely on those amateurs who feel strongly that they should work for what they wish to achieve.

Now, if you wish to maintain the proud tradition of Morse Code among hams, you may no longer rely on the FCC, you must work yourself to make it so, by introducing the code to other amateurs and showing them the advantages of using it.

I am certain that this will appeal strongly to the work ethic so frequently invoked by the pro-Morse camp.

NEXT MEETING

The next meeting of the Greensboro Amateur Radio Assoc. will be January 22, 2007 at the Golden Corral Steak House off Wendover Ave, near Sam's Club. The program for the evening will be presented by Chris Thompson, K4HC, on "Stealth Operation." Please come and bring a friend.

Don't forget your 2007 membership dues.

GARA Meeting Minutes

REGULAR MEETING
November 27, 2006

The regular meeting of the Greensboro Amateur Radio Association was held Monday evening November 27, 2006, at 7:15 PM at the Golden Corral Steak House off Wendover Avenue.

President John Doggett, KI4BMS called the meeting to order. The minutes of the previous meeting were approved as printed in the "Feed Line". Noted were those sick in the amateur community and family members: Chris Thompson's mother, Gloria, K4GWT; Weldon Fields, W4AJT and his wife; Al Allred's wife Marion; and Pegi Mauldin, N4JBM, wife of Bill, WG4R.

Vice President Rudy Langley had no report. Treasurer Ernie Wall, NC4EW, provided his financial report advising that all is well..

Al Allred, K4ZKQ, reported that Income and Expenditures came in well in line with the forecast for the year. He said finances for the year had tracked as expected for the year.

Tom Forrest, N4GVK, webmaster/secretary/newsletter editor, reported all was fine with the web site. He said he still needs input for the newsletter maybe stories from some members.

The president announced the annual Christmas party for GARA and GAS will be held December 14 at 7:00 p.m. at Bonnie Kay's Seafood Restaurant, 222 Spur Road, Greensboro. Those planning to attend were asked to contact Jim Hightower, W4JLH so he can get a head count to let the restaurant know.

Allen Bradley, KD4IUN. thanked the members who participated in the Challenge Clash. He thanked the club for the use of the repeaters and Arch, KT4AT for his talented work on the machines.

Charles Lyons, NT1J, spokesperson for the nominating committee, presented the slate of officers/ballots for the coming year. Elections were held with the following persons elected to office for 2007: President, John Doggett, KI4BMS; Vice-President, Chris Thompson, K4HC; Treasurer, Ernie Wall, NC4EW; Secretary, Greg Spencer, KG4UQV; Financial, Al Allred, K4ZKQ; Engineering Chairman, Carlton O"Rork, N4DFA; Operations, Roy Smith, N4BYU; Members at Large, Clark Doggett, KG4HOM and Tom Forrest, N4GVK. John thanked the nominating committee for their efforts.

The program was presented by Tim Slay, N4IB, ARRL Section manager. Tim gave a Power Point presentation about the activities of the ARRL and present actions. He gave stats about the amateur radio population and suggested ways clubs might be able to increase membership. He then took questions from the floor. The group thanked Tim for a great program.The meeting adjourned 8:25 p.m.

Board of Directors Meeting
December 19, 2006

The following Board members were present: John Doggett, KI4BMS; Clark Doggett, KG4HOM; Roy Smith, N4BYU; Chris Thompson; K4HC; Ernie Wall, NC4EW; Tom Forrest, N4GVK and Carlton O'Rork, N4DFA.

Reports:

John welcomed everyone to the meeting.

Engineering Chairman Carlton, O'Rork, N4DFA, reported a letter to Greensboro city officials stating a change had been made in the GARA board and Carlton was now engineering chairman. Calrton also said the SERA update and renewal had been sent. Carlton reported Arch is continuing to assist the engineering committee by giving information sessions to the committee members. Arch chose not to run again as engineering chairman, citing his busy schedule with research on the D-Star digital repeater. Carlton also said Arch commented that the duplexers we now have on two meteres will have to be replaced sometime in the future. In a final comment Carlton said that Charles Lyons, NT1J, has accepted an invitation to serve on the engineering committee. The board approved the addition to the committee mermber.

Tom Forrest, N4GVK, member at large, no report

Tom Forrest, N4GVK | GARA

Tim Slay, N4IB, ARRL Section manager at Nov. GARA meeting.

Ernie Wall, NC4EW, gave the treasurer report and pointed out the renewals are now due for 2007.

Roy Smith, N4BYU, repeater trustee and operations chairman, made a suggestion the board to review the policy for sending flowers to members and family members during a time of sickness and grief. A short discussion was held and no action taken.

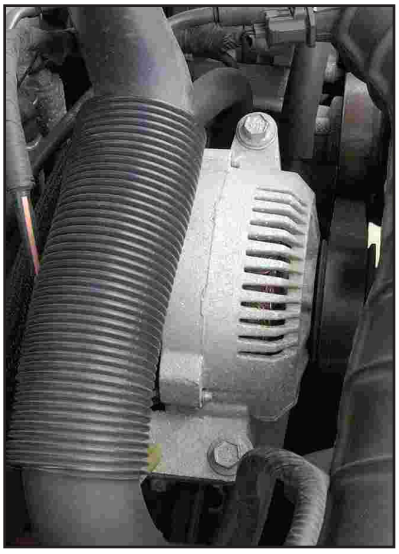
Chris Thompson, K4HC, vice president, made a suggestion that the by-laws need to be more specific regarding when the terms of officers begin once elected. This has not been clarified in the by-laws previoulsy. Chris made a motion that the terms of officers will begin immediately on the completition of the "annual meeting" and the election of officers for the coming year. The motion was seconded by Roy and there was no discussion. Motion carried.

Chris also pointed out and questioned about the need for classes for upgrades of General and Extra class. Some discussion followed and no specific action taken. The meeting adjourned at 8:45pm

Alternator Whine Revisited

by Alan Applegate, K0BG
Roswell, NM
Via E-ham.net

I want to revisit this problem, because there seems to be a lot of poor advice floating around on these pages. Let's start out with a few basic facts, but keep in mind this is NOT an alternator primer. If you need or want more data, the internet is your best friend.



Tom Forrest, N4GVK | GARA

Anoying alternators can be a problem.

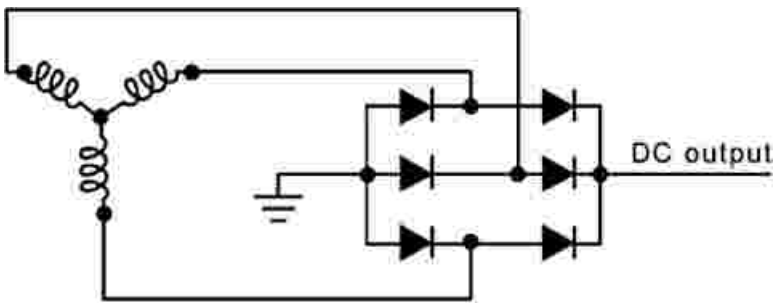
The average alternator's output is between 13.9 and 14.2 VDC. It might be less if there is a problem with the alternator. In some cases it may be a little higher, but voltages over 14.6 VDC should be considered abnormal.

Continuous output and peak current ratings vary quite a bit. The requisite amperage ratings selected by OEMs are largely based on content. That is to say, how many features like rear window defrosters, premium sound systems, electric windows, and heated seats any given vehicle is equipped with. Heavy duty and high-end vehicles usually have larger ones as do those with extra-cost trailer towing packages.

Nowadays, the smallest OEM ones are rated about 90 amps peak, and the larger OEM ones about 150 amps peak. There are a few exceptions, but the highest rated OEM units are about 225 amps peak. The reason I use the term peak is this; very few OEM alternators will deliver their rated output continuously, and contrary to popular belief, there isn't any standard rule for peak versus average.

Almost all alternator stators (the non-rotating part) are wired in a wye configuration (as shown), and the rest are wired in a delta configuration (primarily Ford products). Rotating within the stator is the field. The field current and/or voltage is varied by the regulator so the output voltage is constant, regardless of the load, up to their peak amperage rating. There are several different regulation strategies employed. Some simply use a pass transistor, others use pulse width modulation, and some almost defy definition.

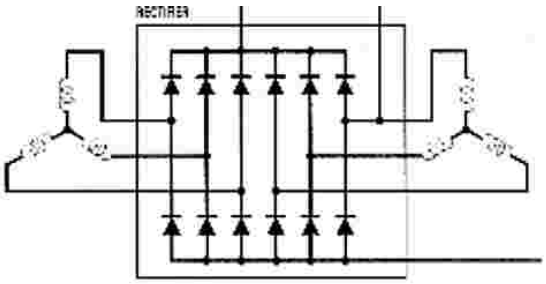
Depending on the engine type (diesel or gas), alternators are driven from two to five times engine speed, up to a maximum of about 16,000 rpm. As a general rule, the output frequency of an OEM alternator is equal to the engine rpm. That is to say, 1,000 rpm equals 1KHz. Their efficiency is about 90%. Thus, an alternator rated at 130 amps, with an output of 14 vdc, will have an input of around 2 KW, and will require about 3 HP to drive.



In a never-ending quest to reduce weight, and improve efficiency, most new-generation OEM alternators are double wound, and use twelve diodes instead of six. This not only reduces size and weight, the lower mass of the rotating field allows the alternator to be driven faster, which improves low rpm power output. It also doubles the ripple frequency.

As long as the diodes are doing their job, the output ripple is nearly nonexistent, as the battery is acting like a very large capacitor. When they don't do their job, the result is what we commonly call alternator whine. To be sure, there are other causes which will be discussed later.

While alternator whine can be a bane for us amateurs, as long as the alternator delivers its rated output, dealers don't care, and typically will not replace noisy ones under warranty. So this leads those who are plagued to seek other avenues of relief. For example, using RG8 as a power cord, or twisting the factory power cords of



their transceivers. Doing so is junk science. Let's visit this in more depth.

First, any technique we use to shunt alternator whine to ground must present a low impedance at the frequency we're trying to suppress (less than 8 kilohertz typically). Further, it must be of lower impedance than the circuit it is attached to. In the case of vehicle DC wiring, that's seldom higher than a few tenths of an ohm.

An average power cord is ten foot long. A ten foot piece of RG8 has 250 pF of capacitance. At 8 kHz, 250 pF has a reactance of about 1,500 ohms. In terms

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The Greensboro Amateur Radio Association
P.O. Box 7054
Greensboro, NC 27417
www.w4gso.org

Membership Application - Renewal / New

$24 per year

($2 per month)

Please fill out the following information and mail the address above or hand deliver to the GARA treasurer. You membership is appreciated!

Call:_____ Renewal? Yes ( ) No ( )

Name:_____Spouse:_____

Address: _____

City: _____ Zip: _____

E-mail Address: _____

News Letter requested by: Mail _____ E-mail _____

Phone number: _____
(please advise if this is unlisted and it will not be published on the club roster)

Note: Family memberships are available for persons living under the same roof or if a family member is a school student living away from home - no extra charge.

Is this a family membership? Yes ( ) No ( )

If ,Yes, family member name:_____

Call: _____

Feed Line 0107

...alternator whine from Page 5

of suppression, this amount is insignificant.

Twisted or not, a 10 foot power cord made from two number 10 conductors will have about 2 pF of capacitance per foot. Ten feet of it is an insignificant reactance even at 80 kHz! What's more, those who support twisting the power cord as a fix for alternator whine, and a host of other maladies, ignore some basic facts. Twisting works to reduce noise pickup only if both inputs and outputs are balanced, and neither end is grounded. That's not the case here.

Brute force filters offer some help, but there is a big downside too, and that's voltage drop. Radio Shack used to sell one that was rated at 20 amps. Inside its tubular construction is 20 feet of what appears to be number 16 Thermalese wire wound around a laminated steel core about 3/8 of an inch square, and and 2 inches long. A 1 uF coaxial capacitor completes the package. The input and output are size 10. The voltage drop at 20 amps is almost 2 volts. At 8 kHz, the suppression is less than 2 dB.

In some cases, a 1 Farad cap, like those used in mobile sound systems will suppress alternator whine if they're placed near the radio end of the power cord. However, they have a lot of drawbacks, not the least of which is their propensity to explode if dead shorted.

The best place to cure alternator whine is at the source. If you think it is a leaky diode causing your problem, use an O scope to look at the alternator output directly at the output terminal. If it is a diode, you'll easily see it. The fix is obvious.

As alluded to above, there are another situations which can cause what ripple there is to invade the circuitry of your transceiver. One of those is a ground loop. Ground loops occur when there is a differential in current flow between the positive and negative power leads feeding the radio. This is typically caused by incorrect wiring techniques. Poor bonding of body on frame vehicles, and poor coax connections can also cause the problem.

Another problem altogether, which is often incorrectly identified as alternator whine, is the switching transients from the alternator's regulator. While diode induced whine directly varies with engine speed, regulator whine normally does not.

It will appear louder at low rpms, and when there is a high amperage load. Since it is radiated RF energy, removing the antenna will cause it to go away. The only fix is to replace the regulator.

Distractors will surely point out that they fixed their alternator whine with one of the aforementioned anecdotal remedies. If that is indeed the case, then the original wiring was amiss. Alan, KØBG www.k0bg.com

GARA Board Meeting

January 08, 2007

The following Board members were present: John Doggett , KI4BMS President; Chris Thompson, K4HCVice President, "Al"Allred Finance Chairman, K4ZKQ; Roy Smith , N4BYU Operations chairman; Carlton O'Rork, N4DFA Engineering chairman; Ernie Walls, NC4EW Treasurer; Greg Spencer, KG4UQV Secretary: No visitors.

Reports:

John KI4BMS welcomed everyone and wished everybody a happy new year. John opened a discussion about the meeting date for the February board meeting due to availability of the room and it was decided to move the meeting to Thursday 2/15/07. This was seconded by Roy. John also suggested having a food drive at the barbecue which will be discussed in more detail at a later date.

Chris Thompson K4HC Spoke about sending an article to the Feedline about "stealth antennas" and also having a program at the regular meeting on "stealth antennas" to encourage people who reside in restricted areas to put up an antenna and get on the air.

Chris also said that he would check into the possibility of doing the newsline program locally.

Carlton N4DFA spoke about putting an information sheet about repeater operation in the feedline. There was some discussion about putting the same information on the website under a member's only link so that it will only be available to current club members.

Al K4ZKQ gave the financial report stating that all is well.

Roy Suggested the club should do all it can to help hams that are not physically able with repairs or upgrades to their equipment.

Greg KG4UQV will make a press release about volunteer work that the club is doing.

The meeting adjourned at 8:30 p.m.

Respectfully submitted,
Greg Spencer, KG4UQV, Secretary

"145.25" - W4GG Repeater Repaired

The Guilford Amateur Society repeater, the W4GG, 145.250 machine, has been repaired and a new equipment recently installed.

According to chief engineer Danny Hampton, K4ITL of Raleigh, the repeater, is a Kenwood TKR750 repeater just like the one that was installed about two years ago. Danny said the prior repeater had problems. He believed the problems may have been coming from the PCRN custom control audio and logic board, possibly a defective component. Problems like this are very difficult to trouble shoot from the ground.

The new repeater does have a outgoing PL tone of 88.5 Hz.so useres can program their radios for both encode and decode tones of 88.5 Hz.

Danny says he can monitor the forward and reflected power remotely along with the cabinet and outside temperature at the platform, as well as the power supply DC voltage.

In addition to the new machine, a new a receiver antenna is on order. The machine is part of the Piedmont Coastal Repeater Network.

FCC Drops Morse Testing for All Amateur Classes

NEWINGTON, CT, -- In an historic move, the FCC has acted to drop the Morse code requirement for all Amateur Radio license classes. The Commission adopted the long-awaited Report and Order (R&O) in WT Docket 05-235, the "Morse code" proceeding, and released it December 19. The FCC R&O also includes an Order on Reconsideration in WT Docket 04-140 -- the "omnibus" proceeding. It will modify the Amateur Service rules in response to ARRL's request to accommodate automatically controlled narrowband digital stations on 80 meters in the wake of rule changes that became effective December 15. The Commission designated the 3585 to 3600 kHz frequency segment for such operations, although the segment will remain available for CW, RTTY and data. The effective date of the FCC's R&O will be 30 days after publication in the Federal Register -- most likely in February. Currently, Amateur Radio applicants must pass a 5 WPM Morse code test to operate on HF. The FCC's action will eliminate that requirement all around.

"This change eliminates an unnecessary regulatory burden that may discourage current Amateur Radio operators from advancing their skills and participating more fully in the benefits of Amateur Radio," the FCC said. The ARRL had asked the FCC to retain the 5 WPM for Amateur Extra class applicants only. The FCC proposed earlier to drop the requirement across the board, however, and it held to that decision.

The ARRL has been posting all relevant information on these important Part 97 rule revisions on its "FCC's Morse Code Report and Order WT Docket 05-235" Web page.

The FCC's action in WT Docket 05-235 will grant limited HF privileges to all Technician licensees, whether or not they've passed a Morse code examination. Once the R&O goes into effect next year, all Technician class license holders will be able to enjoy current "Tech Plus" HF privileges in addition to their current VHF/UHF privileges. The FCC R&O in the Morse code docket eliminates a disparity in the operating privileges for Technician and Technician Plus class licensees -- something the ARRL has asked the Commission to address following the release of the FCC's July 2005 Notice of Proposed Rule Making (NPRM) in WT Docket 05-235.

"With today's elimination of the Morse code exam requirements, the FCC concluded that the disparity between the operating privileges of Technician class licensees and Technician Plus class licensees should not be retained," the FCC public notice said. "Therefore, the FCC, in today's action, afforded Technician and Technician Plus licensees identical operating privileges."

Technician licensees without Element 1 Morse code credit currently have operating privileges on all amateur frequencies above 30 MHz. Technicians with Element 1 credit (ie, "Tech Plus" licensees) have limited HF privileges on 80, 40, 15 and 10 meters. Under the Part 97 rules the Commission proposed last year in its NPRM in WT Docket 05-235, current Technicians lacking Morse credit after the new rules went into effect would have had to upgrade to General to earn any HF privileges.

Privileges will remain the same for Novice, General, Advanced and Amateur Extra class licensees.

The FCC has clarified that there will be no changes in the administration of Amateur Radio examination elements and in granting a Certificate for Successful Completion of Examination (CSCE) for General and Extra class until the new rules go into effect. CSCEs are only valid for examination credit for 365 days from date of issuance; applicants cannot use CSCEs older than that to upgrade. Volunteer Examiner Coordinators (VECs) will handle all upgrades through volunteer examiner teams.

Candidates for General or Amateur Extra testing between now and the effective date of the new rules will still have to pass Element 1 (5 WPM Morse code) to obtain new privileges. Those earning Element 3 or Element 4 credit between now and the effective date of the new rules will receive a CSCE from the VE team. Once the new rules are in place, anyone holding a valid CSCE may apply for an upgrade at a VE examination session and will have to pay the applicable fee, if any.

The wholesale elimination of a Morse code requirement for all license classes ends a longstanding national and international regulatory tradition in the requirements to gain access to Amateur Radio frequencies below 30 MHz. The first no-code license in the US was the Technician ticket, instituted in 1991. The question of whether or not to drop the Morse requirement altogether has been the subject of often-heated debate over the past several years, but the handwriting has been on the wall -- especially since the FCC instituted an across-the-board 5 WPM Morse requirement effective April 15, 2000, in the most-recent major Amateur Radio licensing restructuring (WT Docket 98-143).

The FCC said the R&O in WT Docket 05-235 comports with revisions to the international Radio Regulations resulting from World Radiocommunication Conference 2003 (WRC-03). At that gathering, delegates agreed to authorize each country to determine whether or not to require that applicants demonstrate Morse code proficiency in order to qualify for an Amateur Radio license with privileges on frequencies below 30 MHz.

The list of countries dropping the Morse requirement has been growing steadily since WRC-03. A number of countries, including Canada, the UK and several European nations, now no longer require applicants for an Amateur Radio license to pass a Morse code test to gain HF operating privileges. Following WRC-03, the FCC received several petitions for rule making asking it to eliminate the Morse requirement in the US.

Comments ..... from the Vice President

Changes over the years came with loud opposition

by Chris Thompson, K4HC
Vice President, GARA

As I write this, shortly before Christmas, I'm reminded about several aspects of amateur radio that have changed over the years, and how they were received when they were first announced. I'm thinking in particular of 1951, and the introduction of the Novice, Technician and Amateur Extra class licenses; 1967 and the introduction of "incentive licensing"; 1987 and "Novice enhancement" with Novice and Technician class licensees getting 10 meter voice privileges; 1991 with the advent of the "No Code Technician" license; and 2000, with the reduction to 5 wpm of the morse requirement for all license classes. In every single case cited above, there was loud opposition within the amateur ranks, and proclamations that the death of amateur radio was just around the corner. Well, guess what? Amateur radio is still alive, vibrant, and exciting.


Chris, K4HC

Well here we are, at the beginning of 2007. Another significant change to the amateur rules will take effect sometime in the near future (the R&O has not been published in the Federal Register as I write this, so the implementation date is unknown). I'm of course speaking about the removal of element 1, or CW requirement from all classes of license as a testing requirement. In this age of instant communications, much has already been written on internet forums about the death of amateur radio, and the impending degradation of the HF bands as these new operators gain access to them without having to jump through the same hoops as the "old timers".

I will not rehash any of the arguments for keeping or removing the CW requirement for licensing. The time for doing that was during the comment period and the reply period when the FCC first circulated their Notice of Proposed Rulemaking. No doubt, many people will continue to voice their opinions for the foreseeable future; after all, some of these same people are still complaining about incentive licensing 40 years after it came into existence. For those of you who don't know, before 1967, General, Advanced and Amateur Extra class operators enjoyed full access to the entire amateur HF spectrum. "Incentive Licensing", or restricting privileges based on license class was the FCC's way of "encouraging" amateurs to upgrade, hence the term.

> "Amateur radio is still alive, vibrant, and exciting."

The point I'm trying to make here is that amateur radio is in a constant state of change and growth. And like most growth, there are some pains involved. I, for one, will welcome the operators that take advantage of the rule change and upgrade to get on HF. I will encourage them to become first-class operators, whatever modes or bands they choose to use. I will help them to lose their "Novice Accent" by example and direction. I will continue to serve as a VE on our local examination team. And I will encourage them (and you, if it applies), to learn and use CW, as I think it's a lot of fun!

I hope you will join me in welcoming the new upgrades and the new hams to their new spectrum, or to the hobby. Many of these hams will contribute significantly to amateur radio and their communities, and become our friends. And if we're not careful, they might teach us a thing or two along the way.

Because CW has been part of the amateur fraternity since the beginning, it's difficult to acknowledge that this common bond will no longer be a common bond. However, the rules have changed, and we as a group should take it upon ourselves to not take out any frustrations with a governmental agency upon the individuals who have the interest and meet the requirements for a license. There are certain to be instances where disgruntled old hands will demean and discourage these new licensees. Let's all make the effort to ensure that doesn't happen in our town, on our repeaters, or in our club.

I don't know who first said it, but I think it's important to remember……

IT'S NOT THE CLASS OF THE LICENSE, IT'S THE CLASS OF THE AMATEUR THAT'S IMPORTANT.

Engineering Report

by Engineering Chairman Carlton, O'Rork, N4DFA

Charles Lyons has accepted a position on the Engineering Committee for 2007. The Committee is doing some review with Arch regarding all the club's equipment at the site, both VHF and UHF. Our repeaters, though not perfect, are working very well and we should be proud of their performance and the hard work and expertise that Arch has put into them. The club is very forunate to have such a good site provided by the City and four (4) completely ovehauled machines with practically new antennas and hard line. Carlton O'Rork N4DFA

Area Activities

FOURTH MONDAY – at 6:30 PM, the **Greensboro Amateur Radio Association** have their regular monthly meeting at the Golden Corral on Landview Dr., off W. Wendover Ave. Please plan to gather at 6:30 PM for dinner. The meeting is scheduled to start at 7:15 PM

CLUB NETS:

SUNDAYS – weekly at 9 PM, the **GARA News and Information Net.** This net features NewsLine and is on the 145.150, W4GSO repeater. Roy Smith, N4BYU is always looking for net controls. Contact him if you would like to help.

THURSDAYS – The **Guilford County ARES Net** meets on the 145.150 repeater (100 Hz. tone) at 9 PM.

TUESDAYS – at 8 PM, the **2 Meter SSB Net** meets on 144.225 Mhz. USB. Chris Thompson, K4HC is the net control station.

WEDNESDAYS – **The Guilford Amateur Society** holds their weekly net on the 145.250, W4GG repeater with an 88.5 Hz. tone. Jim Hightower, W4JLH is the net control.

TUESDAYS – at 8:30 PM **The Triad SkyWarn Net** meets on the 147.225, K4ITL repeater, no tone required.

OTHER ACTIVITIES :

FIRST MONDAY – **The Guilford County A.R.E.S.** monthly meeting is held at 1002 Meadowood St. off W. Wendover Ave, in the EMS building, beginning at 7 PM.

THIRD MONDAY – at 6:30 PM **The Guilford Amateur Society** holds their monthly meeting at the Greensboro Police Western Sub Station at 300 Swing Rd in the community room. Refreshments at 6:30 PM and the business meeting begins at 7 PM.

SATURDAYS – at the K&W Cafeteria on Big Tree Way, hams get together for **Saturday Breakfast** at 7:30 AM. Talk-in is on the 145.150, W4GSO repeater, with 100 Hz. tone.

MONDAYS & FRIDAYS – at 11 AM, Greensboro Hams get together for lunch. On Monday they meet at Jake's Diner at Wendover and Big Tree Way and on Friday lunch is at the K&W Cafeteria off South Holden Road. Talk-in is on the 145. 150, W4GSO repeater with a 100 Hz. tone.

EVERY FRIDAY – at 8 PM (approximately) Greensboro Hams get together for coffee at Starbucks on Battleground (summer location till Daylight Savings time changes)

Greensboro Amateur Radio Association
P.O. Box 7054
Greensboro, NC 27417

Web:
www.w4gso.org

Time to Renew Your Membership For 2007!

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