Squelch Tales

Newsletter from the Merrymeeting Amateur Radio Association for August 2010

FCC rules that Amateurs may participate in non-government sponsored drills by employers

FCC RM 10-124 Report and Order

The FCC has adopted new rules regarding employee participation in drills.

Employees are now allowed to participate in drills (SETs). Government-sponsored drills are unlimited. Non-government sponsored drills are limited to one hour per week and two 72 hours drills per year.

A new exemption was also granted for schoolteachers using ham radio in the classroom, and rules for stations like W1AW were clarified.

If you have served agency employees that are hams, please pass this on to them.

Appendix B of the Report and Order containing the new rules (97.113) printed on the last page of this newsletter

73, Bryce, K1GAX, Maine ARES SEC

MARA members get front row gallery view at golf tournament

Brunswick: In the early morning of Tuesday June the 13th several members of Association gathered at the Brunswick Golf Course club house to provide communications for the 2010 Parkview Adventist Hospital Golf Tournament. The MARA folks were asked to be judges on the three PAR-3 holes in the event one of the golfers made a "Hole-in-One." If someone made that very difficult shot they had the chance to win a new car, a motorcycle of a new farm tractor. The funds received from the event would go for worthwhile projects at the hospital.

There were a large group of folks from the mid coast community that paid the entry fee to play the 18 hole course for a good cause.

Marjorie, KX1I and Dwight, KA1PTT from Parkview Hospital team up for communications duties at hole 4

Unfortunately none of the golfers made a hole in one and went home with a big prize, but there were several birdies made at the money holes with one chap making a shot that came 1 foot short of a money shot on hole 15. Maybe there will be one next year.

The ham volunteers were treated to breakfast before the tournament and a very big lunch at the finish.

Thanks go out to Lee, N1HOC; Marjorie; KX1I, Jim, N1IPA; Steve, AA4AK; Harry, N1TTT; Bruce, W1ZE; John N1OIG, Don, KA1WAL and Dwight, KA1PTT for their volunteer efforts in making the event a success.

Way to go MARA team.

Mara members assist in L. L. Bean 5k

Freeport: In the early morning of Independence Day ham radio operators from the PAWA with several members of the MARA started arriving in the parking lot to get marching orders from event coordinator Bryce Rumery, K1GAX for the 2010 L. L. Bean 5K run.

The race went well with hundreds of participant runners on a very warn holiday morning. As in many past years the winning female runner was Olympic Gold Metal winner Joan Bonoit Samuelson sporting the race number "1" on her back.

Thanks to John, K1JJS, Jim, N1IPA and Bruce, W1ZE for assisting the PAWA folks.

News from Newington

Vanity Call Sign Fees to Decrease August 17th

On July 19, the Federal Communications Commission announced via the Federal Register that the cost of an Amateur Radio vanity call sign will decrease 10 cents, from $13.40 to $13.30. The new fees take effect 30 days after publication, making August 17, 2010, the first day the new fee is in effect.

In FY2010, the FCC expects to grant 14,800 vanity call signs, bringing in $196,840 from the vanity call sign program. Earlier this year, the FCC released a Notice of Proposed Rulemaking and Order (NPRM), seeking to lower the fee for Amateur Radio vanity call signs.

The notice in the July 19, 2010 edition of the Federal Register-- entitled "Assessment and Collection of Regulatory Fees for Fiscal Year 2010; Final Rule" -- includes all FCC regulatory fees; these fees are expected to recover a total of $336,712,213 during FY2010, encompassing all the Services the FCC regulates.

The FCC is authorized by the Communications Act of 1934, As Amended, to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new 10 year term.

New GMRS repeater going up on Oak Hill!

Oak Hill, Brunswick: Bill Messier, K1MNW is building and will soon have a GMRS UHF repeater up and running on Oak Hill as soon as the duplexer he ordered arrives.

The repeater will operate on GMRS Channel "1" 462.55 Mhz with an input frequency 5 MHz above at 467.55 Mhz.

For more inform on GMRS and FRS radio service check out the following FCC web site:
http://wireless.fcc.gov/services/index.htm?job=service_home&id=general_mobile
Best Buy Company has a good short description of what the services can do at:
http://www.bestbuy.com/site/olspage.jsp?guideID=1072288099473&type=page&id=cat12077
You may already have a pair of FRS/GMRS radios that you purchased from Best buy, Wal-Mart, L.L. Bean, etc. Most of these radios will work through a GMRS repeater.

GMRS radio service does require a license to legally operate on those channels. At the moment the license fee is about $75.00. However, if you listen to the folks operating on GMRS frequencies (channels) you rarely if ever hear anyone identifying with a FCC issued call sign.

We know most of our readers have Ham tickets but other family members do not. A GMRS repeater would come in handy during emergencies and SET exercises when you need to communicate via radio to other non-hams. A GMRS repeater would enhance that communications ability.

Bill will let us all know when the repeater is up and running and advise us of the appropriate PL tones, etc.

This Doesn't Happen When You Run QRP

By Steve Kercel, AA4AK

I made a recent foray into high power operating and it led to the most bizarre experience I've ever run into while operating an amateur radio station. A bit of background is necessary to fully appreciate the story.

First, as most MARA members know, Nancy AA4AK-XYL, has a heart condition known as "sick sinus syndrome." To keep her heart from stopping, she had a pacemaker implanted about a year and a half ago. For several years prior to having the pacemaker implanted, she would have mysterious fainting spells, or odd hallucinations such as "alien hand syndrome," in which she perceived that her shoulder was being grabbed by a disembodied "alien hand" that was not actually present. Although it took a number of years reach a correct diagnosis (the neurologist insisted it was a heart problem, and the cardiologist insisted it was a nerve problem), it turns out that all these problems stemmed from the fact that her heart would stop and leave her brain deprived of oxygen. Pretty scary, right? She thought so. In any case, all these odd events stopped after she got the pacemaker.

Second, when we built the house in 2001, we installed a very 21st century version of "structured wiring." This is commonly known as a "smart house" and one of the features is a monitored security system. Anyway, the house is bristling with electronic sensors detecting fire, break-ins, CO levels, and assorted other disasters, and automatically notifying the security company if it detects anything wrong. One of the reasons that my ham station is so heavily armored against electromagnetic

interference (EMI) is to prevent my ham transmissions from triggering false security alarms.

Third, when we knew Nancy was having a problem with fainting spells and we did not know what was causing them, we added a feature to the security system that would automatically send out an “I’ve fallen and I can’t get up” alarm to the security system. The monitor takes the form of a wrist band with a little push-button activated transmitter that sends an alarm to the security panel, which in turn passes the alarm on to the security monitor, which in turn passes it on to the EMTs. After she got the pacemaker, and the fainting spells stopped, she stopped wearing the wrist band. It ended up on the bedroom bureau, where it remained “untouched by human hands” for about a year and a half.

Fourth, after Nancy got the pacemaker, I became very concerned that my ham transmissions would interfere with is. That is when I took up my sudden interest in the human effects of RF, and I actually did the evaluation of my station for the effects of RF exposure to humans that all FCC-licensed have promised the government that they have done. Among other things, John Briggs, KC6TVF, and I went all over the house with a relative field strength monitor, looking for RF hot spots, and determined that the master bedroom was not one. Significantly, we did the survey on all HF bands with my K2 running 100 Watts out, its normal QRO power level.

I’ve run the K2 at 100 Watts on all bands for quite a few years, and never had any EMI problems. Yes, back when there was such a thing as sunspots, I preferred QRP. If the sunspots ever come back, I’ll probably go back to preferring QRP. Right now, propagation conditions just do not make it practical.

It is worth mentioning that one of my antennas is a 40 meter dipole that runs over the middle of the house. The center of the dipole (where the radiation actually comes from) is (guess where?) right over the master bedroom, and about 15 feet above the bedroom floor. Recall that the “near field” of an antenna extends for about 1/6-wavelength, or about 20 feet at 7 MHz. As already noted, at 100 Watts, even in the near field, the 40 meter antenna never gave any trouble.

The final bit of background is that I have been restoring my old Dentron GLA-1000B amplifier. I finally got it up and running on July 8, and found that it would generate about 450 Watts into a dummy load on 80, 40, and 20 meters. That following weekend was the IARU contest, one of the bigger DX contests of the summer, and one of my favorites. I thought it would be a fitting test of the amplifier to give it a go during the contest. I ran the amplifier on 20 meters for over 12 hours with no bad effects, and some very good ones, such as getting stations in China and Mongolia to answer me on the first call. It is also worth mentioning that all this operation took place on a 20-meter dipole well away from the house.

As 20 meters began to fade on Saturday night, I decided to fire up the rig on the wide open 40 meter band. That is when all Hell broke loose. As soon as I fired up the rig on 40, I heard a weak but high pitched whistle, which I assumed was some odd effect of the amplifier fan. Just a few minutes later, things went crazy. The dog started to bark madly, and someone was banging on the entry door. In addition, Nancy saw blue and flashing lights in the driveway. She opened the entry door just as the EMTs were getting ready to bash it in with a battering ram that they already had in hand.

The EMTs wanted to know who was dying. The whistle that I was hearing turned out to be the Medic Alert alarm from the security panel. Nancy could not hear it because, she is hard of hearing, and does not perceive steady tones no matter how loud. In any case, the EMTs had received an alarm from the security monitoring company. They came immediately, and when nobody answered the door assumed that whoever was in the house must by dying.

As soon as that happened, I located the wrist monitor, still reposing in its spot on the bedroom bureau. To my profound embarrassment (seeing as how I was an EMI engineer in a former life), I knew immediately what had happened. The wrist monitor was in the near field of the 40 meter antenna. Since it is well outside the near field of my other four antennas I could (as I did) run high power all day long on those antennas with no bad effect. Anyway, as soon as I ran the full 450 Watts into the 40 meter antenna, it completely overloaded the wrist monitor which set off the security panel and summoned the EMTs.

I have no idea what the effect the 40-meter 450-Watt near field would have on Nancy's pacemaker, but I have stopped running the 40 meter dipole when she's sleeping. Fortunately, I have a 40 meter half square well away from the house and now use that for night time 40 meter activity. I am intending to relocate the 40 meter dipole as soon as practicable.

The take-home lesson: if you go from QRP to QRO, expect odd things to happen. Those exposure surveys that the FCC insists on are not just bureaucratic silliness. You really need to know what your station will do at the maximum power levels that you actually use**.** **73, Steve**

FIND THE NAME

In the below matrix, find the name of ham gear companies, past and present. They may appear horizontally, vertically, diagonally and backward. Good luck!

O H E N R Y K N I G H T
C A E X Y Z Y U S E A Y
N M E A B O C H A R R Y
I M X L T M N B R U C E
L E B S M H E X N A W S
A R B N O G G S T E V M
Z L U I C F E K A R D A
H A L L I C R A F T E R
B N O L W Z E A M E C O
D D O O W N E K J O H N
G L O C M A R A A R R L

The names you are looking for are:

- AMECO
- COLLINS
- DRAKE
- HAMMERLAND
- HALLICRAFTER
- HEATH
- HENRY
- ICOM
- KENWOOD
- KNIGHT
- SWAN
- YAESU

APPENDIX B

Final Rules

Part 97 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

The authority citation for part 97 continues to read as follows:

AUTHORITY: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, unless otherwise noted.

1. Section 97.113 is amended by revising paragraph (a)(3), adding new paragraphs (a)(3)(i) and (a)(3)(ii), redesignating paragraphs (c) and (d) as new paragraphs (a)(3)(iii) and (a)(3)(iv) respectively, and redesignating paragraphs (e) and (f) as (c) and (d) respectively, to read as follows:

§ 97.113 Prohibited transmissions.

(a) * * *

(3) Communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer, with the following exceptions:

(i) A station licensee or control station operator may participate on behalf of an employer in an emergency preparedness or disaster readiness test or drill, limited to the duration and scope of such test or drill, and operational testing immediately prior to such test or drill. Tests or drills that are not government-sponsored are limited to a total time of one hour per week; except that no more than twice in any calendar year, they may be conducted for a period not to exceed 72 hours.

(ii) An amateur operator may notify other amateur operators of the availability for sale or trade of apparatus normally used in an amateur station, provided that such activity is not conducted on a regular basis.

(iii) A control operator may accept compensation as an incident of a teaching position during periods of time when an amateur station is used by that teacher as a part of classroom instruction at an educational institution.

(iv) The control operator of a club station may accept compensation for the periods of time when the station is transmitting telegraphy practice or information bulletins, provided that the station transmits such telegraphy practice and bulletins for at least 40 hours per week; schedules operations on at least six amateur service MF and HF bands using reasonable measures to maximize coverage; where the schedule of normal operating times and frequencies is published at least 30 days in advance of the actual transmissions; and where the control operator does not accept any direct or indirect compensation for any other service as a control operator.

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