

SQUAKBOX

Issaquah Amateur Radio Club

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August 2010

FCC Modifies Rules to Allow Limited Employee Participation in Disaster and Emergency Drills

In a Report and Order (R&O) released Wednesday, July 14, the FCC amended Part 97.113 to allow amateurs to participate without an FCC waiver in government-sponsored disaster preparedness drills on behalf of their employers participating in the exercise. The FCC also has amended the rules to allow employees to participate in non-government drills and exercises up to one hour per week and up to two 72-hour periods during

the year.

“Experience has shown that amateur operations can and have played an essential role in protecting the safety of life and property during emergency situations and disaster situations,” the FCC noted in the R&O. “Moreover, the cur-

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Vanity Call Sign Fees to Decrease August 17

On July 19, the FCC announced via the Federal Register that the cost of a 10 year 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 anticipates granting 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 Rule Making 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 pro-

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August Program

Well, we will just have to come out and see.

Future programs are as follows:
Sept - Open
Oct - Open

There are openings for future programs. Contact Gerard WT0F, 425-395-4554 to volunteer.

Also . . .

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At the last meeting . . .

*The meeting was called to order promptly at 7:30pm, by President Bruce Helbert KG7OI.

*Thirteen members were present.

*Minutes of the previous meeting were approved as published

*Treasurer reported \$2112.96 in the bank account, with Field Day bills (about \$200) and liability insurance premium (\$250) due.

*There was some discussion of the club having an archivist and an equipment manager. Presently many items relating to club history and equipment are in various scattered locations, and many members do not know what is available.

Rod mentioned that he has accumulated several items of equipment, such as antennas and coax, and that he would try to list the items we have available, but no time line was set. Johns McDuff noted that the newsletters are still available as electronic files. No one volunteered to accept a position as club historian.

*There was some discussion of the recent Field Day operation. A rough count indicates that about 180 QSO's were completed and although Murphy visited Buuce's digital station, and pretty well shut him down; overall QSO counts were not significantly below the previous year. It was generally agreed that the club effort was over extended for the manpower present, and that deciding to run something other than a 2A class did alter our normal setup in the beginning, but it did allow us some extra flexibility and even with the GOTA station in close proximity, interference was minimal.

(secretaries added note-but not discussed at the meeting) The more or less centralized power distribution scheme worked well, with no indications of low batteries. Both the digital station and the HF station were running battery voltage boosters to provide full voltage to the respective rigs.

Food was good, mostly provided by BruceKG7OI and Doug W7RDP

In addition to the two regular antennas, and stations;

Gabe AJ4AD arrived with a lot of equipment and made a big effort to set up an independent GOTA station. He made several contacts both on HF and VHF.

Gerard WT0F set up a T2FD (wide spaced folded dipole) and had some success with it on the digital modes Sunday morning.

The W7BI effort received Bonus points in seven categories.

*Rod mentioned the QRP group campout at North Bend the weekend of July 9, and invited any interested club members to come visit the site and partake of the activities and lectures.

The meeting was adjourned at 8:15

Drills Cont.

rent Amateur Radio Service rules, which permit participation in such drills and tests by volunteers (ie, non-employees of participating entities), reflect the critical role Amateur Radio serves in such situations. However, as evidenced by recent waiver requests, state and local government public safety agencies, hospitals and other entities concerned with the health and safety of citizens appear to be limited in their ability to conduct disaster and emergency preparedness drills, because of the employee status of Amateur Radio licensees involved in the training exercises. We therefore amend our rules to permit amateur radio operators to participate in government-sponsored emergency and disaster preparedness drills and tests, regardless of whether the operators are employees of the entities participating in the drill or test. We find that extending authority to operate amateur stations during such drills will enhance emergency preparedness and response and thus serve the public interest."

In order to allow participation in non-governmental disaster drills -- such as those sponsored by ARES® or private hospitals -- the FCC will now allow amateurs employed by an agency participating in such a drill to participate up to one hour per week. In addition, they may also participate in up to two exercises in any calendar year, each for a time period not to exceed 72 hours. "This time limita-

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2010 IARC Officers

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Bruce Helbert (KG7OI) - (425) 391-6828 (Sammamish)

Vice President

Gerard Hickey (WT0F) - (425) 395-4554 (Issaquah)

Secretary-Treasurer

Rod Johnson (WE7X) - (425) 392-8497 (Issaquah)

W7BI Trustee

Rod Johnson (WE7X) - (425) 392-8497 (Issaquah)

First Half of 2010 Sees Upswing in New Amateur Radio Licensees

With more than 18,000 new Amateur Radio licenses issued in the first half of this year -- 18,270 to be exact -- 2010 is shaping up to be a banner year for Amateur Radio. So far, the number of new licenses issued by the FCC in 2010 is outpacing the January-June 2009 totals by almost 8.5 percent; at this time last year, the FCC had issued 16,844 new licenses.

In 2009, a total of 30,144 new licenses were granted, an increase of almost 7.5 percent from 2008. In 2005, 16,368 new hams joined Amateur Radio's ranks -- just five years later, that number had increased by almost 14,000, a whopping 84 percent! The ARRL VEC is one of 14 VECs who administer Amateur Radio license exams.

Comparing 2010 to 2009, the only month that had higher li-

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Vanity Call Cont.

gram. 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.- ARRL Newsletter, July 22, 2010 - S

From the Shack in the Corner

Bruce has been busy this summer. Look for him here in September.

ARRL's 500 kHz Experiment Shows Slight Growth

In the quarterly report for the ARRL's 500 kHz Experimental Station for the period ending May 2010 (see link to PDF below), Experiment Coordinator Fritz Raab, W1FR, reported that since the experiment began in late 2006, 20 of the 32 participating stations are currently active. The FCC's Office of Engineering and Technology granted the WD2XSH experimental license to the ARRL in September of that year. "Our present license grant expires on August 1," Raab said. "We are planning to do an 'as-is' renewal this month."

Raab said that during the quarter, one additional QSO was made, bringing the total number of WD2XSH contacts to 405. The WD2XSH Web site has received 511 reports since the end of February, bringing the total number of reports to 11,234 since the beginning of the issuance of the experimental license. Raab said more than 60,000 hours of activity has been logged on the Web site since September 2006. Stations do not have to be members of the experimental team to post reception reports.

"As usual, the decrease in night time hours, coupled with the increase in static, meant the spring

results showed reduced operations," Raab explained.

"Nonetheless, a number of stations have remained active. A good deal of recent activity has been WSPR transmissions. We will be conducting several ground-wave tests during the summer months. The most extensive is being coordinated by Ralph Wallio, W0RPK, and involves several Midwest stations and several other clusters who produced useful results in the 2008 tests. A number of the new stations are continuing to ready their stations."

According to Raab, several WD2XSH stations are subject to a "QRT Order" for not being current in submitting their logs. "These stations are required to remain QRT until they have rectified the situation," Raab told the ARRL. "Generally, these stations have an equipment problem or some other problem that keeps them from operating. Two stations moved from the location specified on our original license, but are now authorized to operate at their new locations."

On the international front, Raab said that German amateur Horst Stöcker, DO1KHS, has been issued experimental license DI2AN.

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S Cont.

The Radioclub YO2KAB Beacons in Romania, using call sign YO2X, is reported to be operating a beacon on 505.110; this is the second Romanian station to operate on 500 kHz. The Fort Pearch Rock special event station, GB4FPR, operated on 502 kHz from Fort Perch Rock to celebrate Marconi Day in April.

Raab said that the International Maritime Organization (IMO) continues to oppose an amateur allocation on 600 meters. The IMO's subcommittee on Radio-communications and Search and Rescue (COMSAR) noted in its March meeting that "a secondary allocation [in the 415-526.5 kHz band] for the Amateur Service would increase the probability of harmful interference." -ARRL Newsletter, July 8, 2010 - S

Licensees Cont.

cense totals in 2009 was January: 1960 licenses were issued in January 2009, compared with 1726 in January 2010. Beginning in February, 2010 showed higher new license numbers: 2263 in February 2010 versus 2749 in February 2010; 3463 in March 2009 compared with 3734 in March 2010; 3430 in April 2009 compared with 3508 in April 2010; 2717 in May 2009 compared with 3136 in May 2010, and 3011 in June 2009 versus 3417 in June 2010.

As of June 30, 2010, there are 694,346 licensed Amateur Radio

**D-STAR,
Antennas and Amplifiers**

Tom Copley, K4YAZ, finds that he needs to use more power to consistently reach my local D-STAR repeaters in the Tampa Bay area. I live in a condo and my VHF/UHF antenna is on a second floor porch. Moving it higher or into the clear is out of the question, due to my condo association. I am using a dual band transceiver with 50 W output on high power. This is not enough to consistently reach the local repeaters.

Since I am mainly using the 70 cm band, I have purchased an amplifier that has an output of 100 W with 30 W drive on 70 cm. The amplifier also has a useful receive preamp. To obtain the full 100 W output from the linear, one must input 30 W. My 50 W radio would be over the input rating of my linear, and the approximately 15 W output from the radio on medium power will not drive the linear to the full 100 W output. Is there an easy solution to this issue, or do I have to get a different amplifier?

Here's what the Doctor had to say:

If you are right on the edge of the coverage area, the 3 dB increase in power may make the difference. Also consider any other losses, such as in the coax run to your antenna -- at 70 cm, coax loss can be a big factor, and if the length is more than a few feet, better coax may reduce loss by almost as much as the amplifier gain -- get every decibel you can.

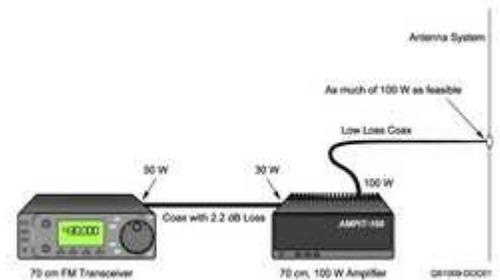


Figure 1

Your amplifier drive problem turns out to have an incredibly simple solution. If you have 2.2 dB loss between the radio and the amplifier, your 50 W radio output will be just 30 W at the amplifier. This only makes sense because of the preamp in the amplifier; otherwise, the loss would also reduce receiver sensitivity. With a preamp that has a reasonable gain, the noise figure and thus signal to noise ratio is determined largely by the noise figure of the preamp. On HF, making a reasonably accurate attenuator using power resistors can be easy. At UHF, component, lead and wiring inductance can make it a very difficult job -- but all is not lost!

Now for the really simple part. You need coax cable between the radio and amplifier anyway (see Figure 1). If you use coax with a loss of 2.2 dB, you're done. On 440 MHz, it takes just 16 feet of Belden 8259 RG-58 coax to get the loss -- hopefully emphasizing my earlier point! If you select a different cable, make sure you

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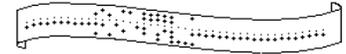
Drills Cont.

tion, which is consistent with the timeframes contained in the waiver requests filed with the Commission, should serve to further ensure the use of Amateur Radio for bona fide emergency testing," the R&O stated. "We emphasize that the purpose for any drills we authorize herein must be related to emergency and disaster preparedness. By limiting the purpose in this manner, we further ensure that such drills will be appropriately limited."

In amending the Amateur Radio rules, the FCC reiterated that it does not intend to disturb the core principle of the Amateur Radio Service "as a voluntary, non-commercial communication service carried out by duly authorized persons interested in radio technique with a personal aim and without pecuniary interest. Rather, we believe that the public interest will be served by establishing a narrow exception to the prohibition on transmitting amateur communications in which the station control operator has a pecuniary interest or employment relationship, and that such an exception is consistent with the intent of the Amateur Radio Service rules."

The effective date of the R&O is to be determined and will be at some time after its publication in the Federal Register. A more detailed story will be forthcoming from the ARRL. - ARRL Newsletter, July 22, 2010 - S

RYRYRYRY...



DE KA7TTY

Ugg. It is already August. Where did my summer go? At least the grass has stopped growing so fast. We had another great Field Day even though we didn't get to call out "73A". We did operate "5A" and gathered a bunch of bonus points this year. Thanks to K7LED we even got our 100 points for relaying messages!! Many thanks to Bruce and the gang for another great event. If you didn't get out, you missed some good operation and great camaraderie, and great BBQ. You will just have to wait until next year now.

See you at the meeting, John KA7TTY

Licensees Cont.

operators in the US, an almost 1 percent rise over all of 2009. In 2009, there were 682,500 licensed Amateur Radio operators in the US, an almost 3 percent rise over 2008. In 2008, there were 663,500 licensed amateurs; there were 655,800 in 2007. Broken down by license class at the end of June 2010, there were 16,299 Novices, 342,064 Technicians, 154,284 Generals, 60,059 Advanced and 121,640 Amateur Extra licensees.

"The ARRL VEC has been busy meeting the needs of the Amateur Radio community by helping people to become radio amateurs or upgrade their existing licenses," said ARRL VEC Manager Maria Somma, AB1FM. "So far in 2010, ARRL VEs have administered 20,929 exam elements at 3600 ARRL VEC-sponsored exam sessions. The number of amateurs who want to be Volunteer Examiners and who want to teach Amateur Radio classes is also going up -- we've seen a spike in the number of applications from General

and Extra class radio amateurs who want to give back to their community by serving as ARRL examiners and instructors." - ARRL Newsletter, July 15, 2010 - S

D-Star Cont.

have the cable attenuation specs available. The extra coax can be neatly coiled out of the way, or better yet, move the amplifier closer to the antenna to reduce the coax length and attenuation between the amplifier and antenna. Note that this all assumes that the amplifier input is a good match to 50 ohms; if not, the coax loss will be higher. If you have a wattmeter, it will be a good idea to confirm all the power levels when you're done -- and life being what it is -- plan to do a little trimming. - "The Doctor Is In", ARRL Newsletter, July 1, 2010 - S

SQUAKBOX

This newsletter is published monthly for the members of the Issaquah ARC W7BI. Items for publication must be received by the 15th day of the month preceding publication. Send items to:

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The IARC is a nonprofit organization registered in the State of Washington and is affiliated with the American Radio Relay League (ARRL). Visit our WEB page at: <http://www.qsl.net/w7bi/>

Membership is open to anyone regardless of age, sex, race, national origin, religion, or amateur radio license status. Dues are \$20 per year for a family membership, free for those under 19 years of age.

A two-month courtesy mailing of this newsletter will be made to meeting visitors and others upon request.

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ARRL Now on Facebook!

With more than 400 million active users, Facebook is the most popular social network site on the Internet. And since radio amateurs are generally a social bunch, many hams are active on Facebook. Thanks to Herman May, KE5HYW, the ARRL has its own Facebook page. Check out the

page to see a lot of features you won't find anywhere else, such as pictures from ARRL events and interactive status updates. We invite hams to "like" the ARRL Facebook page and

leave productive comments. Joining Facebook is free, and you just might be surprised at who you'll find on the site. - ARRL Newsletter, July 8, 2010 - S

- Coming Events -

- **Aug. 4, 2010** - Monthly Issaquah ARC meeting at the Issaquah Valley Senior Citizens Center, 75 NE Creek Way, Issaquah. Doors open at 7:00 PM, the meeting begins promptly at 7:30 PM and the program begins at 8:00 PM. Refreshments are provided.
- **Aug. 14, 2010** - Radio Club of Tacoma Hamfest. Bethel Jr. High in Spanaway, WA. <http://www.w7dk.org/>
- **August 15, 2010** - Antique Radio Swap Meet. Puget Sound Antique Radio Association. 9 AM to 1 PM. Shoreline museum parking lot. N. 175th & Linden, Avenue, North Seattle. One block west of Aurora Avenue - one mile west of I-5, exit 176. Free admission. <http://www.eskimo.com/~hhagen/psara/swap.html>
- **August 22, 2010** - Open Air Amateur Radio Fleamarket, Langley, BC. Langley ARA and Surrey ARC. Info, Stan Brown VE7YSB: sabcostan@shaw.ca . (604)534-8256 or (604)574-5060. <http://www.langleyamateurradio.com/> or <http://ve7sar.net> . http://rac.eton.ca/events/detail.php?event_ID=1428
- **September 1, 2010** - Monthly Issaquah ARC meeting. See Aug 4th for time and location.
- **September 10-12, 2010** -Northwest Automatic Position Reporting System (NWAPRS) Summer Gathering. Contact Dave/K7GPS at k7gps@arrl.net or (509)244-8484.
- **September 11, 2010**. The 4th Annual Clark County ARC Tail-Gate Swapmeet. Vancouver, WA. <http://www.w7aia.org/> Rob, K7JAO at k7jao@arrl.net

NEXT MEETING: Wednesday, August 4, 2010 - 7:30 PM

Talk-in frequency: 146.56 MHz

FIRST CLASS POSTAGE
 --- TIME SENSITIVE MATERIAL

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