

# SQUAKBOX

Issaquah Amateur Radio Club

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October 2010

## United States Supports Secondary Amateur Radio Allocation at 461-469 and 471- 478 kHz

The Federal Communications Commission and the National Telecommunications and Information Administration (NTIA) -- the spectrum regulators for United States private sector and government users, respectively -- have agreed to support a secondary MF allocation to the Amateur Radio Service at 461-469 kHz and 471-478 kHz at the 2012 World Radio-communication Conference (WRC-12), to be held in Geneva, Swit-

zerland from January 23-February 17, 2012. FCC and NTIA officials formally presented the proposal at a meeting of the Second Permanent Consultative Committee (PCC.II) of the Inter-American Telecommunication Commission (CITEL), held August 30-

*(Continued on page 2)*

## ARRL Goes Another Round with ReconRobotics

As reported earlier, on August 16, ReconRobotics -- manufacturers and marketers of the Recon Scout, a remote-controlled, maneuverable surveillance robot designed for use in areas that may be too hazardous for human entry -- filed with the FCC an opposition to the ARRL's Petition to Deny Applications. The ARRL petition asked the FCC to deny dozens of pending Public Safety Pool license applications for the Recon Scout device, which operates in the 430-448 MHz band. On September 1, the ARRL filed its reply (see below).

Calling ReconRobotics' Opposition to Petition to Deny "rather strident," the ARRL countered the firm's claim that the ARRL's petition was "frivolous" and "filed solely to cause delay." "Every one of the [84] pending applications contains serious technical errors and none is grantable," the ARRL maintained. Nor was the filing aimed at causing a delay: "Delay in adjudication of the pending ap-

*(Continued on page 3)*

### October Program

**I guess you will  
have to come  
down and see.**

Future programs are as follows:  
Nov- Auction  
Dec - Holiday Party

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

#### Also . . .

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## At the last meeting . . .

Sept 1, 2010

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

\*After introductions, there were 25 members and guests present.

We were specially honored to have Susan (Lorentzen) Black, daughter of Howard Lorentzen (W7BI SK) and some family members present.

\*The minutes of the previous meeting were approved as printed.

\*The treasurer reported a balance of \$1957.06 with about \$60 in checks outstanding.

\*There was some discussion of having the club roster included on the web site.

\*Rod WE7X invited any interested members to come up to the SunTop lookout on the Sept 10 weekend, during the ARRL VHF contest. Rod and Phyllis will be manning the lookout as the fire watch volunteers for the weekend, and have obtained permission for others to set up stations and operate if desired.

\* The annual APRS meet at Valley Camp (North Bend area) is also the same Sept 10 weekend.

\* Sept. 18-MicroHams digital conference

\*TAPR Conference in Portland

\*HRSG – Regular Meeting on Sept. 27<sup>th</sup>.

\*HRSG – Training Drill on Sept 27 at 9am??

\*The business meeting was adjourned at 7:57 pm

The program for the evening was a very interesting photo and video presentation, by Susan Black and her family, about the technical background and contributions of Howard Lorentzen, who was employed by the National Research Labs, and the June 26th christening of a new navy ship in his name.

Rod, WE7U, Secretary

## E-Mail Elmer

Got a HAM radio question and can't find an Elmer to talk to? Just send your question by E-Mail to our E-Mail Elmer at:

[IarcElmer@dhuibh.net](mailto:IarcElmer@dhuibh.net) - Ed. - S

### 2010 IARC Officers

#### President

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)

## 460 MHz Cont.

September 3 in Fortaleza, Brazil.

According to ARRL Chief Technology Officer Brennan Price, N4QX, the proposal reconciles two widely divergent proposals for WRC-12 Agenda Item 1.23, adopted by consensus of the private sector and government users. Agenda Item 1.23 calls on WRC-12 “to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the amateur service on a secondary basis, taking into account the need to protect existing services.” The FCC’s WRC-12 Advisory Committee (WAC) had adopted a proposal for a secondary amateur allocation at 495-510 kHz, but the NTIA, acting on the advice of government maritime interests, initially supported no change from the status quo.

“I am pleased that the United States is taking an affirmative position on Agenda Item 1.23,” Price said “While the proposed frequency bands differ from both what the ARRL proposed and the private sector supported by consensus during WAC deliberations, it is gratifying that government interests have backed off a no change position.”

Some maritime interests, both domestically and internationally, have expressed opposition to any amateur allocation in the range 415-526.5 kHz, citing existing narrowband direct printing applications at 490 and 518 kHz, as well as future plans for the band that have yet to be fully character-

*(Continued on page 4)*

## ReconRobotics Cont.

plications is of no value to the hundreds of thousands of licensed Amateur Radio operators who regularly utilize the 420-450 MHz band at all hours of the day and night and who stand to suffer serious interference from, and perhaps cause interference to, these devices. The relief necessary is for these applications to be denied in their present form, and refiled, if at all, following a full and fair adjudication of the pending Petition for Reconsideration filed by ARRL in WP Docket No 08-63 of the waiver granted to ReconRobotics for the marketing of its device, and subject to any additional or modified rules adopted in that proceeding.”

In its Opposition, ReconRobotics acknowledged that ARRL members have a frequency allocation in the 420-450 MHz band, but then suggests (without actually asserting) that the ARRL lacks standing (or “party in interest” status) to file its Petition to Deny. “This suggestion is not seriously advocated however, and indeed it cannot be; the vast majority of ARRL’s members are licensed Amateur Radio operators, who are authorized to use, on either a fixed or mobile basis anywhere in the United States and its possessions and territories, the entirety of the 420-450 MHz band,” the ARRL explained. “Each of the subject applications, therefore, is a potential interference source to (and from) every licensed Amateur Radio operator. It is readily apparent that ARRL is a ‘party in interest’ within the scope of Section 1.939

(a) of the Commission’s rules. Additionally, ARRL has a pending Petition for Reconsideration of the ReconRobotics delegated authority waiver order. These applications, if granted, prejudice the outcome of that Petition for Reconsideration in numerous respects. There is no doubt whatsoever that ARRL is an interested party and is entitled to file its Petition for Reconsideration.”



ReconRobotics goes on to erroneously claim that ARRL’s Petition to Deny challenges not the applications, but the ReconRobotics waiver itself. For the purpose of challenging the waiver, ARRL is content to rely on its pending Petition for Reconsideration in Docket 08-63. That Petition is sufficient to demonstrate that the waiver, issued under delegated authority, was ill-conceived and necessitates at least substantial modification prior to authorizing the operation of any licensed facilities pursuant to it.”

The applications are, however, another matter, the ARRL stresses. “They and the Technical

Coordination Body (TCB) grant of equipment authorization for the ReconRobotics device actually raise more questions about the ReconRobotics device than existed before the applications were filed and the TCB grant issued,” the ARRL said. “The ARRL is not attempting to ‘create a stay’ as ReconRobotics misleadingly asserts. The ARRL’s Petition for Reconsideration in Docket 08-63, citing Section 1.102(b)(2) of the Commission’s rules, simply asked that, during the pendency of the Petition for Reconsideration, the Wireless Bureau and the Public Safety and the Homeland Security Bureau stay the effectiveness of the waiver.”

The ARRL believes that authorizing the sale, marketing and use of the ReconRobotics device in these applications based on the faulty waiver “directly brings about the harm complained of in ARRL’s Petition for Reconsideration, including seriously erroneous warning labels and user instructions in the manuals, which ReconRobotics itself conceded (in its opposition to ARRL’s Petition for Reconsideration) should be changed.”

In its Reply, the ARRL pointed out three problems with each of the applications filed to use the Recon Scout:

Each application is at variance with the ReconRobotics waiver. Each application is not grantable based on the waiver requests contained in each application, which does not waive all rules necessary

*(Continued on page 4)*

## 460 MHz Cont.

ized, Price explained. To the extent future maritime uses of the band have been discussed, the focus has been on the 495-505 kHz segment. Despite the lack of plans for the remainder of the range under consideration, the International Maritime Organization (IMO) has adopted a draft position of “no change” and has communicated this position to the ITU. IARU President Tim Ellam, VE6SH, has met with IMO officials in efforts to soften this position.

“The road to a favorable outcome for Agenda Item 1.23 at WRC-12 remains treacherous,” Price said. “The IMO is a respected organization, and their opinion carries weight. It’s up to us to continue to make the case that a secondary allocation can be made while protecting existing services, both to the IMO and to the ITU Member States who will make the decisions at WRC-12.”

Technical Relations Specialist Jon Siverling, WB3ERA, represented the ARRL on the United States delegation to the CITEL PCC.II meeting. From that meeting, he notes other matters of concern to the Amateur Radio Service:

\* Regarding Agenda Item 1.14, considering an allocation to the radiolocation service between 30-300 MHz, the United States proposed that no change be made in ITU Region 2 and suggested that changes in other regions should be addressed by country-by-country footnotes to the ITU Radio Regulations. Proponents appear to be

focusing on 154-156 MHz.

\* Regarding Agenda Item 1.19, considering regulatory provisions for software defined radio (SDR) and cognitive radio systems (CRS), sufficient support for a United States proposal of “no change” was garnered to have the proposal deemed a region-wide Inter-American proposal. The status quo reduces the risk of provisions in the Radio Regulations that could curtail experimentation in SDR and CRS by the Amateur Service and reduce the portability of equipment across international boundaries. - ARRL Netter, Sept 23, 2010 - S

## QST Article Sparks New University Program

It all started with the June 2009 issue of QST. Larry Barr, K5WLF -- Planetarium Manager at Tarleton State University (TSU) in Stephenville, Texas -- was reading QST when he came across an article about exploring the basics of radio astronomy through a homebrew, easy-to-construct radio telescope. The article -- written by ARRL Education and Technology Program Coordinator Mark Spencer, WA8SME -- showed how to turn an everyday satellite TV dish antenna into an instrument that can be used to not only

*(Continued on page 5)*

## ReconRobotics Cont.

to permit a grant.

Each application contains technical specifications that are simply wrong.

“Aside from the wisdom of the Bureaus in issuing the ReconRobotics waivers, and despite ReconRobotics’ misrepresentation or misunderstanding of ARRL’s argument, the applications are each defective on their face and they must each be dismissed,” the ARRL contends. “They cannot be granted as filed.”

What ReconRobotics did not address in its Opposition is of critical importance, the ARRL pointed out. None of the subject applications requested a waiver of Section 2.106 of the Commission’s Rules -- the waiver order did not include a waiver of the table of allocations. “There is no domestic allocation for Public Safety land mobile services anywhere in the 420-450 MHz band,” the ARRL emphasized. “Because the ReconRobotics waiver, which was limited to Part 90 service rules, is insufficient by itself to support the grant of an application by Part 90 mobile eligibles to operate the device in a band that is not allocated or available to those eligibles and because none of the subject applications requested or justified a waiver of Section 2.106 of the Commission’s Rules, the subject applications are all defective and should be dismissed.”

Attached to the ARRL’s Reply was an exhibit entitled Errors and Issues in the Testing and Certifica-

*(Continued on page 7)*

## University Program Cont.

broaden horizons and expand the understanding of our universe, but to marry the magic of Amateur Radio and astronomy.

Barr quickly got to thinking. He showed the article to his supervisor, Dr Shaukat Goderya, the Director of the Program for Astronomy Education and Research at TSU. Barr and Goderya began brainstorming on how they could do something like that in the department. And thus began the latest research program in radio astronomy for the Tarleton Observatory.



Barr told the ARRL he was initially intrigued by the idea of building a small radio telescope using a cast-off satellite TV antenna and a commercially available satellite signal monitor. "We modified the monitor by adding a small circuit, allowing it to drive a laptop computer's soundcard to gather data and for signal processing. I thought this would be an interesting way to provide hands-on experience for the students here at TSU with tangible results."

Barr said that he contacted ARRL Education and Technology Program Coordinator Mark Spencer, WA8SME, to inquire

about how he could bring such a program to TSU. "I told Mark that we wanted to purchase two kits, but he told me that since we were an educational institution, we were eligible for one kit at no charge. So we ended up getting three kits."

Barr and Goderya selected three students from TSU's Engineering Physics department to work in the program: Courtney Sullivan, Jake Rhodes and James Boshart. Under Barr's direction and guidance, the three students did all the construction and fabrication work for the project. "In the process of building the add-in circuits for the signal monitor, they learned to solder," Barr said. "While fabricating the antenna mounts, all of them learned the art of welding." And while working on the project, both Sullivan and Rhodes earned their Technician license. Sullivan's call is KF5HYE and Rhodes' is KF5HYD. "I'm really proud of their accomplishments," Barr said.

The group has since constructed three systems that all have now been calibrated and are gathering data. Barr said that the next step is to use the three systems together in a triangular array as an interferometer, allowing the three dishes to be used as one big dish. "In this mode," he explained, "the signals from the systems are combined and the sensitivity of the complete system is equivalent to that of a single dish of a diameter equal to the distance between the individual dishes." Barr said that even though the dishes are gathering

*(Continued on page 7)*

## USA to Host 2014 World Radiosport Team Championship

In 1986, Ted Turner -- in reaction to the political troubles surrounding the Olympic Games of the 1980s -- created an international sports competition that he called the Goodwill Games. The first Games were held in Moscow with more than 3000 athletes from 79 countries competing. Four years later, the Games moved to Seattle, Washington and it was at those Games that the first-ever World Radiosport Team Championship (WRTC) happened.

Besides athletics, the Goodwill Games focused on areas of cultural exchange, arts and other unique subjects, one of these being Amateur Radio -- and WRTC was born. Radio amateurs from around the world gathered in Seattle for an Olympic-style event, joining in competition and camaraderie. In 1996, WRTC moved to San Francisco, then Slovenia in 2000, Finland in 2002, Brazil in 2006 and Russia in 2010. Now 18 years later, WRTC returns to the USA.

After the success of the 2010 WRTC in Russia, two groups -- one from the New England in the US and one from Bulgaria -- put forward their proposals to host the next WRTC in 2014. In a letter sent to both groups in early September, WRTC Sanctioning Com-

*(Continued on page 6)*

## WRTC Cont.

mittee Chairman Tine Brajnik, S50A, proclaimed that the US had won the bid to host the next WRTC: "All members of the WRTC Sanctioning Committee were convinced that either of your groups would provide competent and trustworthy sponsorship. Making the decision to award the organization of WRTC 2014 was very difficult. After studying and discussing your proposals, and with all members of the Committee expressing their concerns and opinions, the decision was made to grant the organization of WRTC 2014 to New England, USA."

Unlike in previous WRTCs -- where established clubs or IARU Member-Societies were the sponsoring organization -- the 2014 event is led by two individuals: Doug Grant, K1DG, and Randy Thompson, K5ZD; a group of 10 directors and approximately 50 volunteers are also on the organizing committee.

Grant and Thompson are no strangers to WRTC: Grant has competed in every WRTC (except for 2010), winning the 1990 event and placing third in 2000, 19th in 2002 and third in 2006 -- all with his partner John Dorr, K1AR (except for 2006 when Grant partnered with Andy Blank, N2NT). Thompson, who has had a different partner for each of the WRTCs in which he has competed -- placed 6th in 1996, 12th in 2000, 7th in 2002, 10th in 2006 and 5th in 2010.

Calling it "a great honor" to host the 2014 event, Grant said thanked the WRTC Sanctioning Commit-

tee for awarding the hosting rights to the New England USA team: "We will work hard to make the event enjoyable and memorable for everyone involved. The Russian group that hosted WRTC 2010 this year set a new standard for competition fairness and we hope to follow in their path of continuous improvement." He told the ARRL that the WRTC 2014 Organizing Committee is currently working on finalizing the criteria for team selection and is in the process of completing the incorporation process. A Web site has been launched and an e-mail reflector is also on the way.

"One issue that has been raised by several people is whether the upcoming 2010 CQ World Wide SSB and CW contests will count as qualifying events," Grant said. "The answer is YES! CQ WW is the biggest contest with the most participation and the most competition. It will carry the same level of importance in team selection as it did for WRTC 2010. Category factors will be similar to those used for WRTC 2010 (such as single-operator scores being weighted higher than multi-op scores). The full team selection details, including point values for each contest, category factors, number of teams per continent and such, are still in development but will probably end up very similar to the WRTC 2010 rules -- which were very similar to the WRTC 2006 rules." Grant promised that the rules will be announced as soon as they are finalized.

*(Continued on page 7)*

## New York Judge Declares Amateur Radio Is Not a Cell Phone

In many states and localities, it is illegal to talk on a cell phone (without a hands-free device) while behind the wheel -- doing so can result in a ticket and possibly a large fine. But on May 30, 2010, when a New York ham was talking on his mobile rig, he didn't think he was doing anything wrong. Except that the officer who pulled him over and cited him with a \$100 fine didn't quite see it that way.

Steve Bozak, WB2IQU, of Clifton Park, told the ARRL that when he was pulled over while driving to Troy -- about 16 miles away -- he assured the officer that he was not speaking on a cell phone, but on his handheld transceiver. But according to Bozak, the officer said "it was all the same to him." So Bozak decided to fight the ticket in court.

"Honestly, it's not the fine or the ticket, but that all the other hams who use mobile radios have to hide the fact we are mobile in Troy," he told the ARRL just days after he was cited. "I will do my best to settle this politely and correctly, for all of the ham community. So I will follow the course and have my day in court, to 'tell it to the judge.' This matter affects 38,000 hams in New York State."

*(Continued on page 8)*

## ReconRobotics Cont.

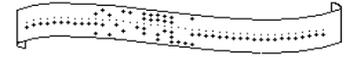
tion of the ReconRobotics Recon Scout by ARRL Laboratory Manager Ed Hare, W1RFI. This exhibit documented the several problems in the test methods and test results used by American TCB to issue the FCC certification for the ReconRobotics Recon Scout transmitter: "These problems and errors led to an incorrect grant of equipment authorization for this device, and the filing of applications for licenses that are each defective and which cannot be granted as the result." The exhibit also explained that an emission designator that shows a 100 kHz bandwidth for a full NTSC video signal cannot be correct because the FCC rules base emissions designators on the necessary bandwidth of an emission, not a measurement made under a single set of test circumstances.

Hare listed the following problems with the test methods and results:

- Specification of the emission designator for the Recon Scout.
  - Measurement of the bandwidth of the Recon Scout.
  - Measurement of the power level of the Recon Scout.
- Frequency range specified for operation of the Recon Scout.

The omission in the certification of the Recon Scout of the 75 MHz Part 95 Subpart C transmitter used to control the device. – ARRL Letter, Sept. 9, 2010 – S

# RYRYRYRY...



DE KA7TTY

Ugg, Another issue in the rack.

Are you sure no one else wants to do this for a while?

Wow, its Salmon Days already. Where did Summer go? I think I counted 4 days of Summer this year. So much for Global Warming. Guess we better make sure our antennas are ready for winter. Does this mean we will have a long one? Hope not. Maybe just wet. We are used to that.

We got elections coming up this Fall. And here too. We need to be thinking about that too. Hopefully our current slate will agree to one more year. How about it guys?

And one more thing. Gerard has been working as a one man band for programs. We all need to pitch in and put on a program too. Or at least let someone know what you would like to see as a program. In a lot of cases we can find someone who will put one on if we only have an idea and ask around. Please think about it. Remember, they don't have to be all that serious either (I have a feeling we are going to have another QLF Contest this year.)

Enough for now. 73, John KA7TTY

## WRTC Cont.

"The New England WRTC 2014 Organizing Committee is a newly formed independent organization, and not part of any existing organization, national society or club," Grant explained. "We are counting on a lot of volunteers to help us with their talents and resources, primarily in the New England region (W1 call area, including Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont). We welcome financial support from contesters and clubs worldwide, and have some interesting sponsorship programs planned. Stay tuned!" – ARRL Letter Sept, 16, 2010 - S

## University Cont.

data, it will be some time before that data is reduced and usable.

Barr told the ARRL that each of the students will then complete an individual research program under Goderya's supervision: "The students will each prepare presentations describing their research for conventions such as Tarleton Symposium, Texas A&M Pathways conference and American Association of Physics Teachers/ American Physical Society and others. They have been invited to present the details of the project to the Stephenville Lions Club, Stephenville Kiwanis Club and the Tarleton Area Amateur Radio Club." – ARRL Letter Sept. 16, 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:

**SQUAKBOX Editor**  
**John MacDuff, KA7TTY**  
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 Issaquah, WA 98027-3909

Material may also be sent via E-Mail at w7bi@qsl.net.

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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## Not a Cell Phone Cont.

He took his case to City Court where, on September 8, where at the request of Bozak's attorney -- ARRL Volunteer Counsel (VC) Jeremy, Rase, KC2JRD -- the judge dismissed the case in Bo-

zak's favor. Bozak argued that his mobile telephone, -- ARRL Letter use "of a handheld Amateur Radio Sept. 16, 2010 - S does not fit the definition of a mo-

## – Coming Events –

- **October 1-3, 2010** - Pacific Northwest VHF Society Conference. Embassy Suites, Tukwila WA. <http://www.pnwvhfs.org/>  
 Note: The Embassy Suites lists their address as 'Seattle', but the facility is south of I-405 just east of Sea-Tac airport. [http://embassysuites1.hilton.com/en\\_US/es/hotel/SEATUES-Embassy-Suites-Seattle-Tacoma-International-Airport-Washington/index.do](http://embassysuites1.hilton.com/en_US/es/hotel/SEATUES-Embassy-Suites-Seattle-Tacoma-International-Airport-Washington/index.do)
- **October 2-3, 2010** - Third annual communications fair and swap meet. Delta, BC. Delta Amateur Radio Society. [comfest@deltaamateurradio.com](mailto:comfest@deltaamateurradio.com)  
<http://www.deltaamateurradio.com/festival.htm> .
- **October 6, 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.
- **October 23, 2010** - Swaptoberfest. Mid-Valley ARES. Polk County Fairgrounds, Rickreall, OR. Contact: Chris Portal, W7CLP (503)559-7837. [w7clp@arrl.net](mailto:w7clp@arrl.net) 520 South Pacific Highway. <http://www.swaptoberfest.net>
- **October 25, 2010** - Issaquah Ham Radio Support Group meeting, Police Station, Issaquah, talk-in 146.56 MHz at 7:00 PM, Meeting at 7:30 PM.
- **November 3, 2010** - Monthly Issaquah ARC meeting. See Oct. 6th for time and location.

NEXT MEETING: Wednesday, October 6, 2010 - 7:30 PM

Talk-in frequency: 146.56 MHz

TIME SENSITIVE MATERIAL  
 --- FIRST CLASS POSTAGE

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 P. O. Box 2171  
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