

OSCAR Newsletter September 2012

OSCAR Meeting

The next OSCAR meeting is 8-September @ 9:00 AM, the second Saturday of the month. Meetings are held in the meeting room at the Owatonna HyVee, 18th Street @ Oak Avenue.

SKYWARN Meeting

The next SKYWARN meeting is 17-September @ 7:00 PM, the third Tuesday of the month. Meetings are held at the Owatonna Fire Station.

Brownsdale Red Cross Drill

The Freeborn-Mower County Chapter of the American Red Cross will be running a full-scale disaster drill Saturday, Sept. 8th.

The operation will be run out of the school in Brownsdale from 8:30 a.m. to 1:30 p.m. Trained Red Cross volunteers will be working to respond to a natural disaster in Brownsdale community to test the chapter's readiness.

Ham radio operators are needed, bring your hand held radio and spare battery.

To become a Red Cross disaster volunteer, please call the chapter at 507-437-4589 and talk with Chris Avery, emergency services coordinator. Advance registration is needed for meal planning.

Viking Amateur Radio Society HF & VHF training class

Being held at the Waseca EOC building on the 7th and 24th of September.

For more information please contact Jon Mynnemer, WA0ZFH at vars.activites@gmail.com

FCC report on Ham radio and Disaster response...

(Amateur Radio Newline)

The FCC has released its long awaited report to Congress into the uses and capabilities of Amateur Radio Service communications in emergencies and disaster relief operations. It also delves into the existence of impediments to this aspect of personal communications.

Don't look for Congressional action to override private land use restrictions more commonly known as Conditions Covenants and Restrictions or CC&R's even if hams believe that these restrictions hamper them in times of emergencies. This is because in its report to the legislative body, the FCC says that, in its view, such restrictions do not constitute a significant impediment to ham radio or those in the United States amateur radio service.

In its report, the FCC noted that some of what it calls "commenters" recommend that CC&Rs be preempted if they prohibit antennas that are within certain limits. Others suggest that private land use restrictions on amateur antennas should be permitted only for safety considerations, and not for aesthetic reasons.

However, another group believes that it is not necessary to preempt private land use restrictions in order to promote amateur emergency communications. This, given the ways that even amateurs subject to CC&Rs can communicate effectively and the nature of amateur emergency communications.

Moreover, while commenters suggest that private land use restrictions have become more common, the FCC's says that its own review of the record does not indicate that amateur operators are unable to find homes that are not subject to such restrictions. Therefore, at this time, the Commission does not see a compelling reason for it to revisit its previous determinations that preemption should not be expanded to CC&Rs.

In relation to other impediments, the Commission says that it has already preempted state and local regulations that do not reasonably accommodate amateur radio communications and do not represent the minimum practicable regulations to accomplish the local authority's legitimate purpose. The Commission says that it has also addressed regulations regarding possession and operation of amateur radio equipment while driving. These are state and local laws that prohibit cellular telephone and texting devices and are many times very broadly written as to catch hams, CB operators and even commercial radio users into a confusing maze of legal webs.

And as to any FCC rules that may be an impediment to the various technical aspects of enhanced - read that as digital amateur service emergency communications, the FCC believes that these matters can be considered through the Commission's rulemaking process. Consequently, it does not believe that Congressional action is necessary to address that issue either.

On the other side of the coin, the FCC notes that the ham radio community and the emergency response and disaster communications communities all agree that amateur radio can be of great value in emergency response situations. The regulatory agency notes that amateur radio carries with it a wide range of advantages that allow it to supplement other emergency communications activities during disasters. This says the FCC, has been demonstrated time and again in a wide variety of emergency and disaster situations including Hurricane Katrina.

But at this point the regulatory agency sort of contradicts itself regarding CC&R's, albeit it may not have noticed its own mistake.

Here, the FCC notes that amateur radio emergency communications require not only stations in a position to originate the emergency message, but also as an alternative to the commercial communications infrastructure impacted by the emergency. This alternative infrastructure is the network of amateur radio operators and their stations that relay messages, build and maintain repeater stations and repeater networks, operate High Frequency message networks to send messages greater distances than are practical with mobile or transportable transmitters, and develop new technologies to improve the reliability of these networks. As such, the FCC contends that this value could potentially be increased, through cooperation among Department of Homeland Security, public safety, emergency management, and amateur radio emergency communications associations and groups to develop future training protocols.

But what the FCC fails or refuses to address is how radio amateurs living with CC&R's that restrict or outright forbid antennas can possibly pass along emergency traffic using the High Frequency bands. It's not likely that a long wire or dipole hidden in a hams attic is going to break through to any emergency net or pass traffic under adverse conditions. Operating effectively on the High Frequency bands requires decent outdoor antennas hung in the clear and this is something that the FCC fails to address in this section of its report.

Finally, the FCC recommends that the Department of Homeland Security work with state, local, and tribal authorities to develop disaster area access policies and qualifications for trained amateur operators who provide emergency communications support. The only question here is how you get the attention of these agencies, many of whom consider themselves autonomous and are not interested in assistance from the public at large.

You can download and read the entire 15 page FCC accounting to Congress at www.tinyurl.com/FCC-To-Congress-Report. It's written pretty much in plain language and might well make an excellent program for radio clubs and on-air discussion nets. This is because it could easily set precedent in regulation of the United States Amateur Service for decades to come.

HAM Radio News:

Radio Business: New China built dual band mobile for under \$225...

(Amateur Radio Newline)

Get ready for the first 2 meter and 70 centimeter dual band mobile selling for under \$225 including shipping. At least that's the price being quoted in an on-line advertisement from the Hong Kong-based 409 Shop for the new Baojie model BJ-UV55 dual band mobile radio.

Like its Japan built counterparts, the BJ-UV55 has most of the features one expects from a basic dual band mobile. The radio features a large blue back lit LCD display that shows both frequencies programmed in at the same time. The transmitter runs 35 watts out on 70 centimeters and 45 watts on 2 meters. The manufacturer claims a receiver sensitivity of between .18 to .22 microvolts depending on selected bandwidth, 128 memory channels, both CTCSS and Digital CTCSS tone encoding, a DTMF microphone and even a built-in FM broadcast band receiver.

The negative on this radio is that nowhere in the advertisement is there any mention of the Baojie BJ-UV55 being FCC certified either under Part 15 or Part 90 possibly making it illegal to import to the United States. Nor is there any service or repair station in the United States. That means returning a radio to the China-based manufacturer should it require maintenance. And as with any product purchased from a non-United States dealer, this can be more expensive than the price of the radio itself. You can see this new dual bander on-line at www.tinyurl.com/Baojie-dual-band-mobile

Radio through space: Mars rover gets software update...

(Venturebeat.com)

NASA's Mars Science Laboratory at JPL team has sent a software update to the Curiosity Rover on Mars, more than 160 million miles away. According to Venturebeat dot com, the software had to be updated because Curiosity needed different directions to drive around on Mars than it did to land on the planet's surface.

The computer hardware in the Curiosity Rover is powered by a pair of computers built by BAE Systems. These RAD750 computers use a 10-year-old IBM PowerPC microprocessor running at a relatively slow 132 megahertz. These machines also have only 120 megabytes of random access memory, but are built to withstand wild temperature swings, radiation, and physical shaking.

The drawback is that the computers on the robot vehicle did not have enough memory for both the landing and its surface missions. So NASA had to swap out the software over four days of communication through the void of space. It took so long because it takes about 14 minutes to send the signal to the rover and another 14 minutes to get a response back.

Another interesting item on Curiosity...

When the Mars rover Curiosity moves around the red planet it leaves a series of dots and dashes on the surface. These dots and dashes are a part of Curiosity's wheels and are made by square and rectangular imprints on the rovers treads.

According to Jet Propulsion Laboratory's Mars Rover Mechanical Engineering Team, these holes or imprints actually have a purpose as odometer markers. JPL Engineers are looking at the tread marks to verify that Curiosity has traversed the distance it expects.

So what pattern did JPL choose to put on Curiosity's wheels? The holes are in a pattern of short squares and longer rectangles as in the ancient and honorable Morse code. And what does it spell out in C-W? Simply the three letters JPL.

You can follow Curiosity on Facebook at www.facebook.com/MarsCuriosity

Ham Radio Software: Ham Radio Deluxe gets an update

(HRD)

HRD Software announces an updated release of Ham Radio Deluxe version 5.24.36. This update includes fixes for cross band contacts in Logbook and some PTT issues hams have run into with DM780.

Meanwhile the Ham Radio Deluxe development team continues work on HRD Version 6.0. The specific date release date will be announced in a future press release.

For those who are unfamiliar with it, Ham Radio Deluxe or HRD is an integrated suite of software products for amateur radio. The five modules provide rig control, logging, digital communications, satellite tracking, and rotator control.

More about it is on-line at www.ham-radio-deluxe.com

Rescue Radio: E-mail from net saves a sailor in distress...

(Amateur Radio Newsline)

The Coast Guard with the aid of amateur radio coordinated the rescue of a mariner in distress approximately 287 miles northeast of Hilo, Hawaii on Friday, August 10th.

Duty officers at Joint Rescue Coordination Center in Honolulu received an e-mail report from a member of the Amigo Net. It said that a mariner aboard the Australian flagged sailing vessel the Q-Wave was disabled and requesting assistance.

According to news reports, the sailor reportedly had less than one liter of water and no food. The vessel's motor was disabled, it had lost its dingy, its communications equipment was unreliable and it had sustained a tear in its mainsail.

A Coast Guard HC-130 Hercules aircraft from Coast Guard Air Station Barbers Point was launched and located the disabled vessel. The crew dropped emergency supplies, including food, water and a VHF radio to the disabled sailboat. The Good Samaritan vessel Fifth Wife was in the area, overheard communications with the disabled vessel and responded to escort it back to Hilo.

HF Radio interference: New radio burst heard on the HF bands

(IARU-R1)

The IARU Monitoring System Region 1 newsletter reports on a new burst radio system that is affecting the amateur radio operations in the 80, 40, 20 and 15 meter bands.

Writing in the newsletter Wolfgang Hadel, DK2OM, says that he discovered a new burst system operating on 3.5, 7, 14 and 21 MHz, daily.

Hadel who is the IARU Region 1 Monitoring System Coordinator says that the system is active every full hour at plus 1, plus 2 and plus 3 minutes with 10.4 sec. bursts of 20 kHz width. Also, that the signals appear to come from France.

DK2OM adds that audio frequency analysis seems to pin this as being similar to CODAR signals. Their real purpose is unknown but DK2OM says that perhaps this is a new kind of over the horizon radar or Ionosonde. Germany's Department of Post and Telecommunications has filed a complaint with its French counterpart.