



February 2015



WRARC Prez Sez

2015 Officers:

President: Roy Haren, KD8IJF kd8ijf@wrarc.net VP: Joe Wojtowicz W0JO kd8rcc@wrarc.net Secretary: Kevin Stein, KD8NXS kd8nxs@wrarc.net Treasurer: Maureen Stein, KD8NXS kd8nxr@wrarc.net Past President: Allan Avnet AB8AA ab8aa@wrarc.net

Trustees:

Chris Monske, WF8U kd8ely@wrarc.net
Harry Harker, KD8PQK kd8pqk@wrarc.net
Russ Williams NR8W nr8w@wrarc.net

Appointed Positions:

Social: Maureen Stein, KD8NXS

kd8nxs@wrarc.net

Publicity: Joe Wojtowicz, W0JO

kd8rcc@wrarc.net

Net: Steve Fabry, KC8SOY

kc8soy@wrarc.net

Nominating Charman: Ted Filmer, KD8IJE

kd8ije@wrarc.net

Newsletter/Web: Jane Avnet K8JAA

k8jaa@wrarc.net

Facebook/Badges/logo Design:

John Fabry, KC8SPF kc8spf@wrarc.net

Officer's Meeting:

February 10, 7:00 P.M. At Eat 'n Park, 8051 Market St,, Boardman - All members welcome

Regular Meeting:

February 17, 7:00 P.M. at Davidson's, 3636 Canfield Rd. in Cornersburgh

Presentation: Ham Radio 101 by our Elmers

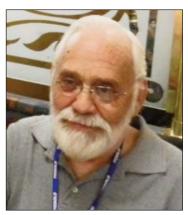
Join us for Dinner before the meeting 6:00P.M.

http://www.wrarc.net/

Hi Everyone,

The Club's after the Holidays dinner at A La Carte in Canfield was a great success. Thanks to Maureen KD8NXS for all of the time and work she put in to make it a success.

Congratulations to Russ NR8W, our new trustee.



On a different note, one of our members, Bill Wolfe KA8TZX, is in the hospital. He had open heart surgery on January 13, had some complications, and is still in at the time of this writing. Let's all keep him in our thoughts and prayers, and hope for a speedy recovery.

Now that we are starting a new year, we should be thinking of our upcoming events. There will be sign-up sheets at the meetings for all events. Please consider signing up and participating, as we want to keep them coming back each year.

On the lighter side, I and several others from our club attended MFJ day at DX Engineering. We met a lot of nice folks there. Roy KD8JMO won a nice door prize of a magnet mount dual band antenna. I got lucky and won a grand prize of an MFJ-269C antenna analyzer, which was a nice prize and something I've been wanting for awhile. So much for that!

I'll see you all at the meeting on February 17. Don't forget to bring your HTs! Our elmers will be having a power point presentation on programming your handhelds, as well as repeaters and PLs. That's it for now!

73, Roy KD8IJF President, WRARC

CHOOSING A HAM RADIO



In recalling my own experience with this topic several years ago, I know it can be very intimidating and confusing trying to figure out just exactly what radio, or radios to buy after you get your license. The normal progression is to start out with a two-band VHF-UHF handheld which, in my opinion, was the easiest part and probably the best advice.

However, when you start considering an HF transceiver, it's a different story. You'll get all kinds of different opinions from everyone you talk to, also in online and magazine reviews. One major consideration is that these radios are more costly so I think everyone gives their final choice more thought and deliberation. Bottom line . . . I think as long as you stick with a major brand, you can't go wrong if this is your first radio. In the final analysis, it comes down to the "bells and whistles" which you feel are important to you.

Personally after looking at the other brands, I settled on ICOM radios. I know a lot of HAMS complain that they're pricey, but as they say "you generally get what you pay for" and I'm not planning on buying one every month, or even every year. Therefore, my thought process was to make a one-time investment that will last me a long time as ICOM radios, in my opinion, are technologically advanced and built very well built. Only problem I've seen so far is that there is generally a steep learning curve with most of them, but I think they're improving that with their latest models.

I saw the following article online which I edited for brevity, but thought may be useful for those of you out there contemplating buying your first radio. Here it goes:

You may find it useful to start with one of our four common ham "profiles." Your operating needs could be similar to one of them.

Consult local hams to find out what bands are used most commonly. For example, in more sparsely populated areas, the 70 cm band may not be in widespread use. In other areas, another VHF or UHF band – such as 222 MHz – may be in regular use.

Emergency Communication (Emcomm) Team Member or Personal Emergency Communications.

For operation through easily accessible repeaters or over very short ranges, you'll need a VHF/UHF (dual-band) handheld radio with at least 50 memories and 3 to 5 watts of output power. A spare rechargeable battery pack, a pack that holds AA or AAA batteries, an automotive adapter, and a desktop quick-charger are must-have accessories. For operation without repeaters or through distant repeaters while mobile or in remote areas, add a VHF/UHF mobile radio with an output of 25 watts or more and a dual-band quarter-wave mobile whip antenna. Many hams have one of each type of radio.

Beginning Home HF Operation

HF transceivers with 100 watts of output and a built-in antenna tuner make an excellent entry-level radio. HF radios with VHF and even UHF coverage are available at higher cost. If the radio can't operate directly from ac power you'll need an external dc power supply. A multi-band dipole is an excellent and inexpensive antenna, connected to the radio through coaxial cable or open-wire feed line—the latter will require an external antenna tuner. With some compromise in performance, a multiband, ground-independent vertical antenna is easy to set up and requires coaxial cable to connect to the radio. To try Morse code, add a straight key or paddle (most radios have a built-in keyer). To operate using digital modes, add a sound card data interface with cables made to connect to your radio.

Casual Local or Regional Operating

Start with a VHF/UHF mobile radio with an output of 25 watts or more. For mobile operation, add a dual-band quarter-wave mobile whip antenna. At home, a mobile antenna can be used indoors or a dual-band base antenna can be mounted outside, using coaxial cable to connect the radio and antenna. For operation from ac power, a power supply capable of supplying the radio's specified current consumption is required. If you need more portability, add a VHF/UHF handheld as a second radio—it is common (and practical) to have both types of radio.

CHOOSING A RADIO - CONTINUED FROM PAGE 2

Portable or Mobile Operating – All Bands.

This type of operation is best supported with an "all-band, all-mode" mobile-sized transceiver that covers the HF and VHF bands, plus the 70 cm band in some models. You'll need two types of antenna; a dual-band quarter-wave mobile whip antenna for 2 meters and 70 cm (there are also tri-band antennas that include 6 meters), and a mobile HF antenna. A permanent or magnetic mount with one or more interchangeable single-band HF whip antenna is a good way to try operating from your vehicle.

I hope this was useful to some of you. I am by no means anywhere near an expert, but if you have questions about some ICOM radio models or D-Star, please contact me at W0JO@arrl.net. Don't forget our next club meeting which will be held Tuesday, February 17, 2015 at Davidson's Restaurant, 3636 Canfield Road, Canfield, OH 44406. Dinner is at 6:00pm EST and the meeting starts at 7:00pm EST. Your officers and board members have planned some great educational presentations on radio basics and programming handhelds and you certainly don't want to miss this meeting. Until then . . .

73, Joe, W0JO VP/WRARC

HI TO ALL WRARC MEMBERS AND FRIENDS,



This is NR8W Russ, Your new Trustee. I would like to notify everyone of my intentions to have a Spud Gun Build. Hopefully, there will be enough interest in this project, so we can all get together and have a build it class. The price for this class will be \$40 and all instructions plus materials will be provided. I will measure and cut all the pieces into kit form. So all you need to do is show up and glue it together. I know everyone can use they're very own antenna launching spud gun. Once completed this pneumatic device can be used for putting wire up. By simply pointing and firing a projectile over trees of any height. The spud gun is just over 4 feet long and weighs less than 5 pounds. Its air powered so no dangerous sprays or ignition devices. The kit comes complete with a projectile. All you have to do is buy an inexpensive fishing reel and line. The safe and simple design of this spud gun makes it

easy to build and operate so come on and join us for our Pneumatic Spud Gun Build.

"73. Russ NR8W

DO YOU KNOW WHAT THE WORD HAM MEANS?

The word HAM is often used by many as a shortcut for amateur radio "HAM RADIO." As radio operators we call ourselves "HAM" or "HAMS."

The actual meaning of HAM is taken from the three pioneers that helped to make it possible for us all to become "HAMS."

The letter H stands for Hertz (Heinrich Hertz) who helped to develop the theory of electromagnetic waves.

The letter A stands for Armstrong (Edwin Howard Armstrong) who was successful in inventing FM (*Frequency Modulation*).

The letter M as you may have guessed already stands for Marconi (Gugliemo Marconi) who was the first to transmit signals across the Atlantic.

H = HERTZ A = Armstrong M = Marconi

FROM OUR VP - WOJO

Joe, W0JO, has been hard at work fpr WRARC. He sent articles to both the Vindicator and Salem News. If you missed seeing it, here it is for your enjoyment.

HAM Radio Club Installs 2015 Officers

Youngstown, OH – January 17, 2015 – The Western Reserve Amateur Radio Club (www.wrarc.net) recently installed officers and board members for 2015 at their annual After-the-holidays banquet. Officers are Roy Haren, President; Joe Wojtowicz, Vice President; Kevin Stein, Secretary; Maureen Stein, Treasurer; Russ Williams, Trustee, Harry Harker, Trustee, Chris Monske, Trustee, Steve Fabry, Trustee, Allan Avnet, Past-President and Jane Avnet, web mistress and club newsletter.

The WRARC provides interested individuals on-going entry-level and advanced amateur radio licensing classes and examinations. In addition, members also provide voluntary communication services at various local community events throughout the year and local emergency communications in times of natural disasters. All licensed amateur radio operators, and those interested in learning more about the hobby, are welcome to attend the club's next monthly meeting on Tuesday, February 17th, 2015 at Davidson's Restaurant, 3636 Canfield Road, Canfield OH 44406. Dinner is at 6:00pm EST with the meeting starting at 7:00pm EST. A presentation on programming hand-held transceivers will be given.

For additional information, contact Roy Haren, President at (330) 717-3695, or harens@juno.com.



The Western Reserve Amateur Radio Club (www.wrarc.net) recently installed Officers and Board members for 2015 at their annual After-the-holidays banquet. First Row (L-R) Joe Wojtowicz, Vice President; Roy Haren, President; Jane Avnet, Web Mistress and Club Newsletter; Maureen Stein, Treasurer. Second Row (L-R) Kevin Stein, Secretary, Russ Williams, Trustee, Harry Harker, Trustee, Allan Avnet, Past President; and Steve Fabry, Trustee. Missing from the photo is Chris Monske, Trustee.

Click Here for Your Antidepressant https://www.facebook.com/video/embed?video_id=10200387320826253
Then click on the dog.

WHAT'S COMMING UP?

Feb. 10 Feb. 17	Board meeting at Eat 'N Park, Boardman, 6:00 P.M. Meeting at Davidson's 7:00 P.M. Dinner Before the meeting 6:00 P.M.				
Feb. 18 Feb. 25	Testing at ITT - Contact AI 330-549-3051 General class starts - Contact AI to register and/or buy a book.				
May 15 - 17 June 27 - 28	Hamvention in Dayton ARRL Field Day, Contact Steve or Chris to reserve your station.				
Sept.	Club Picnic Sat. Date TBD				
WRARC Simplex Frequency 146.565					

Amateur Radio Operator "Amateur means we're simply professional volunteers" ARRL reflector

AFFORDABLE HOBBY

A person can get into the hobby for as little as \$14, which is the cost of taking the required test to be licensed. A Ham Radio Club recently received a contribution in memory of longtime club member from his family. The money was used to update amateur radio study material at the local Library.

After sending and receiving messages around the world for more than seven decades, this Ham knows just how special his hobby is.

"When we go on the air we don't know race, creed, religion or anything about the person we're communicating with," said the Charlottesville, VA Ham, who is known far and wide by his call sign W2HD. "We only know what they tell us by voice or with dots and dashes.

"The common bond we share is our interest in amateur radio, and that helps us become instant friends. My father was a Ham and he got me into the hobby.

"I would listen to him talk with people overseas, and one of his best radio friends was named Bill Nightingale in Birmingham, England. They would talk almost every day, so I got to know Bill like he was an uncle.

"I remember thinking, 'Gee, this is wonderful.' I just marveled at what amateur radio could do."

CONTACT WRARC ELMERS WITH YOUR QUESTIONS - QUESTIONS@WRARC.NET

Avnet, Allan AB8AA Antennas, radio setup, mobile, ab8aa@arrl.net

grounding, classes, anything

Beatty, Dave KC8WY anything

Fabry, Steve KC8SOY Yaesu FT8900, FT8800, Mobile

Haren, Roy KD8IJF ???

Webster, Robert WR8RW erecting antennas

Williams, Russ NR8W Electrician, tele-data, Amateur Extra

Wojtowicz, Joe W0JO ICOM radios, D-Star

kc8wy@zoominternet.net kc8soy@yahoo.com harens@juno.com wr8rw@arrl.net rwiliams@neo.rr.com itwojo@sbcglobal.net

He who is afraid of asking, is afraid of learning

Articles from members for the Wave Bender are encouraged. They must be received by the editor one week before the end of the month. Please send your articles to: k8jaa@arrl.net, and put WRARC on the subject line of your email. You may also send your articles to the editor: Jane Avnet, 2050 E. South Range Rd., New Springfield, OH 44443

ARRL'S 100TH YEAR ANNIVERSARY CONTEST



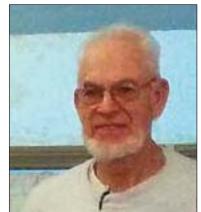
2014 was the 100th anniversary of the ARRL. To do something different, they did a year-long contest. It consisted of operating from each state and territory twice during 2014. If you were able to contact them, you could get a special WAS award. There were points for every contact. The ARRL officers as well as the district, state, appointed, and just members were worth points. There were several levels of point awards:

First Level Award = 1,000 points, Second Level Award = 3,000 points, Third Level Award = 7,500 points, Top Level Award = 15,000 points.

I was able to get 9868 with 276 contacts. On the W1AW, I was able to make 111QSO's. As an OO, I was good for 12 points

It was a lot of fun and sometimes frustrating, but all in all, it was a good time. Now I have to wait to see how to get the awards from ARRL.

73 AB8AA
Allan Avnet, AB8AA
Official Observer, Technical Specialist, Legislative Action Assistant
Official Emergency Station, Registered Licensing Instructor
Emergency Communications Field Examiner
EmComm Field Instructor
ARRL- CVE, W5YI- CVE
E-Mail ab8aa@arrl.net
"www.ab8aa.com"
Voice 330-549-3051
Cell 330-207-3296
IN GOD WE TRUST



SPECIAL FEBRUARY MEETING



Hi Evervone

W8WRC will have a training class starting at the February meeting, February 17. The class will consist of basic programing Ham Radios. Chris, WF8U, will be your teacher for this program. He will help you understand how to program your two-meter radios, and will start with: what is PL; the off set of repeaters; and how to enter the frequencies into your radios.

Please remember to bring your radio and your user manual for the radios you have. Also, bring a hi-lighter and a note book to take notes. W8WRC has a wealth of Elmers that will be at this meeting. They are willing to help you to understand your radio. Elmers, brush up on programming your two meter HTs to be a good Elmer and help teach others

Please ask all of your questions during this class so you will understand and be able to program your radio. If we don't get to everything in programing your radio, we will continue at the March meeting. We will have some hand out of the repeaters in the area. We will tell you the way we would like you to program your radios with all of the local repeater and simplex frequencies. All Ham radio operators are welcome to our club meetings so if you know of a Ham that may need a class like this, invite them to your club meeting in February

We are looking for volunteers that do know the ins and outs of the Baofeng radios programing

73, Everyone, see you at the February Meeting KC8SOY Steve

Join us for the WRARC Friday night Net 9:00 P.M. 145.270, PL -110.9

Upcoming Net Control Operators

Feb. 6 Dave, KC8WY

Feb. 13 Darrin, N8DMC

Feb. 20 Dave, KD8YMJ

Feb. 27 Joe, W0JO

March 6 AI, AB8AA

March 13 Jane, K8JAA

Contact Steve, KC8SOY to take a turn at Net Control 330-774-6346

Ask The Elmer Net Right after the Friday Night Net KC8SOY Moderator

WRARC Simplex Frequency

Mahoning County ARES® Nets

1st Monday 8.30 PM ET W8QLY Repeater - 146.745 (PL 110.9)

3rd Monday 8.30 PM ET W8QLY Repeater - 146.745 (PL 110.9) We thank MVARA for the use of their repeater

W8SGT is facilitating The Ohio HF net every Tuesday - 7:00 PM
The net is run from the State of Ohio EOC on the
Ohio ARES Admin frequency 3875 kHz LSB
moves to 7240 Khz after 20-min.
All are welcome to check in.

The Ohio ARES/OES Digital Emergency Net held every Tuesday at 8:00PM. held on 3585 kHz USB.

Please note all digital communications are Upper Side Band. http://www.http://ohden.org/ for net details. Net Manager Gary NJ8BB

COLUMBIANA COUNTY DIGITAL NET

Wednesdays 8:30 pm - 9:30 pm 145.510 MHZ SIMPLEX

NBEMS/FLDIGI is being used training on message handling capabilities of FLDIGI/FLMSG. Start with BPSK-125 other modes may be used for testing

First Wednesday of the Month Mahoning County Skywarn Net is held on the W8QLY repeater 146.745 (-) at 8:30P.M.

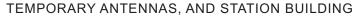


All of our members (and others) look forward (hopefully) to getting this newsletter every month, so keep sending those articles, jokes, and suggestions!

Thanks goes out to this month's contributors; KC8NZF, KC8SOY, W0JO, NR8W, KC8UNR, AB8AA, KD8IJF, KD8PQK, W6UMH, KD8SNA, MVAS, N8SY, W5YI, the ARRL and the World-Wide Web.



MY SHACK





From the shack desk of KC8UNR - Well it's been just over two months since I moved from Newton Falls to Niles. Not a big distance, but a big change in the house, garage and lot size. The house is bigger, just nowhere near the storage my old house had. So most of my gear had to be placed into the garages. The rooms in this house are larger, but not any built in shelves like the old QTH.

So I started the usual Ham priorities with the help of family. First the kitchen, and bathrooms stocked and functional, except for the dishwasher fire, and very mislabeled breaker panel. You know when your dishwasher is on fire, you go and throw the breaker, then find the wires are still hot by the sparks when you move the washer, after the fire was out !!!! Oh boy here we go! So I will worry about breakers later, just throw the master for now.

Anyway over the last two months I managed to get a 80-meter and 20-meter dipole up. Only about 30' high give or take. I have lots and lots of trees but they are really overgrown, and some are rotted. I lost a lot of sinkers as I use my fishing gear to get the rope and wires where I want. There was just always another tree limb in the way of where I wanted my wire antennas and just like fishing, caught a bunch of snags! I also managed to use a 7' A frame ladder as my 2-meter antenna mast support. For now, the antenna is only 30' to the tip, but I have plans for another 10 feet, plus getting my HF beam up in the spring.

I have not decided about the tower as I will have to spend a lot of money to have some trees taken down, and the stumps taken out. I will definitely need help with HF beam, raising my 2-meter antenna, and possible tower install. Here are some pics of my current "storage" Any and all thoughts both good and bad are welcome regarding station building, and cable runs in the yard. As this will be a very different set up than what I had. My old tower was next to my house so the cables ran up next to the house. These cables will need to be buried.

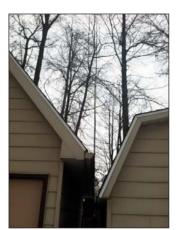
Thanks 73, Klondike Mike, KC8UNR



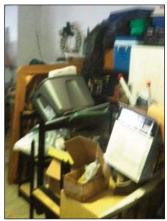












P.S. The cat's name is Xena. She loves sitting on my K3 radio!!!!!

She thinks the "K" stands for kat, she can't spell.

PAGE 8

FAR SCHOLARSHIP INVITES APPLICATIONS



The non-profit Foundation for Amateur Radio (FAR) invites applications for the Amateur Radio-related scholarships it administers. These academic awards are sponsored by individuals and by Amateur Radio clubs across the US. The FAR scholarship application process is open to Amateur Radio licensees worldwide. For 2015 FAR is administering 67 scholarships worth an aggregate \$125,500. The list includes 36 Quarter Century Wireless Association scholarships worth a total of \$77,000 for 2015 (these require a recommendation from a QCWA member). Individual awards range from \$500 to \$5000. Applications are due by March 30, 2015.

The preferred method to apply is to enter the required information into the electronic form on the FAR website. Information entered on the form goes directly into an encrypted, password-protected PDF file that is available only to the review committee. Raw data are not stored online. Applicants will have an opportunity to print their applications and to edit them.

The application cannot be downloaded and completed, however. Applicants who are unable or unwilling to use the online application should contact Dave Prestel, W8AJR. FAR may be able to provide an alternate form of the application.

Official or unofficial transcripts may be submitted but are not required; it is preferred that these documents be scanned into PDF files, if they are to be submitted via e-mail. Schools that prefer to mail paper copies should send them to FAR Scholarships, PO Box 911, Columbia, MD 21044. Visit the FAR Scholarship Information page or contact FAR, if you have questions about the 2015 scholarship application process.

HELLO FELLOW ARES MEMBERS

We have a new year and it's time to make sure that our member information is correct. We have over 130 listed ARES members in Mahoning County. It's highly probable that things have changed for at least a few of you. If you have moved (physical address), changed your home or cell phone number(s), changed your email, upgraded your Amateur License or changed your station capabilities in the last 12 to 18 months please email us the change(s) so we can keep our records current. This is vital information in time of an emergency.



Simply email your changes along with your name and call sign and we'll update our records. If you haven't had any changes, please continue reading.

We will be conducting some testing of text based notification over the next couple of weeks.

Just a bit of background as to why we are testing. We had previously asked for your assistance in setting up a text alert system and over 30 members volunteered their cell phone information for that system. A small scale test proved the system worked perfectly. A full scale text notification used for the Oct. 4, 2014 Simulated Emergency Test (SET) did not work at all. A backup call up by voice was used to activate for that SET and the drill was conducted successfully. The backup voice system did take a lot of time and resources that a text system should eliminate if it operates correctly.

If you've already provided your cell information to ARES for this use you will be receiving text test messages over the next few weeks. They will be identified as tests and you will be given information on how to respond. We'd appreciate your help on this project.

If you haven't provided your cell info and would like to be involved in the tests, email here at this address and we'll contact you with information. It's really a very simple process.

It's a new year and Mahoning County ARES has interesting training and exercises coming up to increase and test our readiness to respond in times of emergency. We hope the New Year sees us just testing our response and not responding to an actual emergency.

73, Frank, WB8YHD

ARLBO04 FCC "Paperless" Amateur Radio License Policy Goes into Effect on February 17

ARRL Bulletin 4 ARLB004 From ARRL Headquarters Newington CT January 29, 2015 To all radio amateurs

Starting February 17, the FCC no longer will routinely issue paper license documents to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS), although the FCC has continued to print and mail hard copy licenses. In mid-December the FCC adopted final procedures to provide access to official electronic authorizations, as it had proposed in WT Docket 14-161 as part of its "process reform" initiatives.



Under the new procedures, licensees will access their current official authorization ("Active" status only) via the ULS License Manager. The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one. Licensees also will be able to print out an official authorization - as well as an unofficial "reference copy" - from the ULS License Manager.

"We find this electronic process will improve efficiency by simplifying access to official authorizations in ULS, shortening the time period between grant of an application and access to the official authorization, and reducing regulatory costs," the FCC Wireless Telecommunications Bureau (WTB) said. According to the WTB, the new procedures will save at least \$304,000 a year, including the cost of staff resources.

In comments filed November 5, the ARRL had strongly recommended that the FCC "give serious consideration to continuing a default provision for sending an initial paper license document to new licensees in the Amateur Radio Service, along with detailed, simple instructions for how to make the elections set forth in the notice relative to future modified or renewed licenses."

The FCC said that applicants or licensees who include a valid e-mail address under "Applicant Information" in the ULS will receive an official electronic authorization via e-mail. New license applicants who do not provide a FCC Registration Number at the examination point will receive a printed license as well as an FRN and a temporary password to access the Commission Registration System (CORES).

The ARRL and other Amateur Radio commenters also worried that unless a license document is printed on distinctive paper stock, its authenticity could be questioned in such situations as obtaining vanity call sign license plates. To address this, the FCC said the watermark "Official Copy" will be printed on each page of an official authorization that a licensee prints out from the ULS. The WTB recently stopped using distinctive paper stock to produce hard copy licenses and has been printing these on "standard, white recycled paper." The Bureau noted that the distinctive paper stock it had used was six times more expensive than the plain recycled paper it now uses.

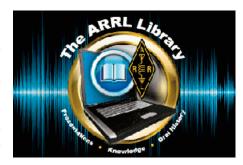
The ULS License Manager now includes settings that allow licensees to notify the WTB that they prefer to receive official authorizations on paper. Once the final procedures go into effect designating electronic access as the default, licensees can change the ULS License Manager setting so that the Bureau will print and mail a license document. Licensees also may contact FCC Support via the web at, http://esupport.fcc.gov/index.htm?job=contact_fcc_support, or via telephone or mail to request paper lienses.

The FCC rejected as "outside the scope of this proceeding" an ARRL argument that Section 97.23 of the Amateur Service rules be amended to replace "licensee mailing address" with other alternatives, including e-mail, for use in Commission correspondence. The rule, which requires that any licensee mailing address be in an area where the licensee has US Postal Service access, has precluded FCC issuance of location-specific call signs in such areas as Navassa Island (KP1) and some Pacific islands.

ARRL LIBRARY GOING LIVE

After several months of planning, the ARRL Library will be going live in early January 2015, probably as early as January 6. This long-term project will be home to what I hope will eventually become one of the largest repositories of Amateur Radio-related papers and presentations, created by and for the Amateur Radio community. This is your opportunity to submit material for the betterment and education of all radio amateurs.

The Library will initially consist of three major areas. First, PowerPoint presentations that may be used at club meetings, outreach efforts to the general public or other public presentations, PDFs of material for general



education about Amateur Radio, and lastly, the oral histories of radio amateurs describing their personal experiences with Amateur Radio.

You will note, upon your first visit, that the material available is sparse. That's where you come in. Any radio amateur may submit material for consideration in the ARRL Library, on topics as wide-ranging as imaginable. As long as it relates to Amateur Radio, it will be considered. The PR Committee was tasked with being the vetting group. If a submission is approved, it will be entered in the ARRL Library.

Common questions, information on how to upload content, and how to conduct an oral history interview can all be found in the Library's Frequently Asked questions area.

Sharing expertise is one of the best things we can do for Amateur Radio. I hope you will consider submitting material for the Library and help give back to the entire community.

Want More Technical Content?

Don't forget to check the ARRL Technicial Information Service (TIS) http://www.arrl.org/technical-information-service for information, as well!

What is the ARRL Library?-

The ARRL Library is a repository of information provided free of charge by the amateur community to the amateur community. PowerPoint presentations for club use, PDF's of educational content and personal memories, and oral histories of Amateur Radio operators telling their stories can be found here.

The ARRL Online Library

New in 2015, The ARRL Online Library is a free repository of educational presentations and oral history, to better preserve Amateur Radio's history and help educate clubs and individuals.

Who Can Contribute Material?

Any radio amateur may submit content for consideration. If approved, it will be included in the ARRL Library.

What Material Can I Contribute?

You may contribute anything related to Amateur Radio: technical "how-to" guides, operating techniques, memories of vintage equipment...the list is limited only by your imagination.

Are There Special Guidelines I Should Follow?

Please visit our Library Guidelines page http://www.arrl.org/Library-Guidelines for complete information.

How Do I Upload Material for the Library?

Go to the Upload page https://www.arrl.org/arrl-library/upload.php and fill out the Submission Form. All fields are required.

Argus

What A Drone Can See From 17,000'
THIS IS OVER 3 MILES ABOVE THE EARTH.
https://youtube.googleapis.com/v/AHrZgS-Gvi4

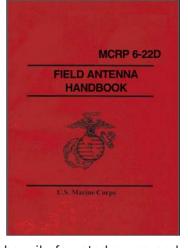
MARINE CORPS ANTENNA HANDBOOK.

Are you familiar with the Bent Bamboo Antenna? Did you know the signal from a vertically polarized antenna is less affected by aircraft than a horizontally polarized? Which is better for short range (500 mile) communications, a half wave dipole or a Vertical Half Rhombic antenna? These and many more questions can be answered in the Marine Corps Antenna Handbook which is free to download on the internet.

The handbook provides coverage of the basics such as radiation and propagation through advanced topics such as reducing antenna coupling between antennas in an Antenna Farm. It discusses all the basic antenna types for HF, VHF, and UHF operation and does it in an easy to understand style that does not dip heavily into math.

The handbook is written with a focus on field operations so you will find advice on improvising such as making insulators from glass bottles, plastic spoons, and but-

tons from clothing. You will also find recommendations for setting up antennas in heavily forested areas and improvising repairs in the field.



There are several versions of the manual on the internet, the latest I found was from 2001, but it was relevant to what we do today and even included sections on satellite antennas.

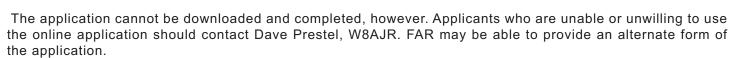
You can find the manual as a pdf by just googling Marine Corps Antenna Handbook. (193 pages) www.zerobeat.net/r3403c.pdf

FAR SCHOLARSHIP INVITES APPLICATIONS

The non-profit Foundation for Amateur Radio (FAR) invites applications for the Amateur Radio-related scholarships it administers. These academic awards are sponsored by individuals and by Amateur Radio clubs across the US. The FAR scholarship application process is open to Amateur Radio licensees worldwide. For 2015 FAR is administering 67 scholarships worth an aggregate \$125,500. The list includes 36 Quarter Century Wireless Association scholarships worth a total of \$77,000 for 2015 (these require a recommendation from a QCWA member). Individual awards range from \$500 to \$5000. Applications are due by March 30, 2015.

The preferred method to apply is to enter the required information into the electronic form on the FAR website. Information entered on the form goes directly into

an encrypted, password-protected PDF file that is available only to the review committee. Raw data are not stored online. Applicants will have an opportunity to print their applications and to edit them.



Official or unofficial transcripts may be submitted but are not required; it is preferred that these documents be scanned into PDF files, if they are to be submitted via e-mail. Schools that prefer to mail paper copies should send them to FAR Scholarships, PO Box 911, Columbia, MD 21044.

Visit the FAR Scholarship Information page or contact FAR, if you have questions about the 2015 scholarship application process. http://www.farweb.org/>

FAR

Old Time MGM Ham Radio Film
I enjoyed watching this, thought I'd share with the club.
https://www.youtube.com/watch?x-yt-cl=84503534&v=SyWIJPNLPf8&x-yt-ts=1421914688
KD8PQK

ARES VOLUNTEERS IN OHIO ACTIVATE FOLLOWING LOSS OF 911, TELEPHONE SERVICES

Reprinted from ARRL News feed - 01/15/2015 - ARES volunteers in northeast Ohio activated on January 13 after 911 and other telephone services went down in six counties due to a power failure at a major AT&T center in Akron. The outage was blamed on a burst steam pipe. Cell telephones and the 800-900 MHz digital Multi-Agency Radio Communication System (MARCS) remained functioning.

The Medina County Emergency Management Agency requested ARES communication support with surrounding counties and with the Ohio Emergency Operations Center (EOC) in Columbus as a backup. At the same time, EMA Directors in Stark, Summit, Portage, Mahoning (?), and Columbiana counties alerted their ARES organizations.

Ohio ARRL Section Emergency Coordinator Stan Broadway, N8BHL, also requested activation of RACES station W8SGT at the Ohio EOC. Communication was established on 75 meters with several county Emergency Coordinators. The EOC also was able to link up with the Stark County 2 meter repeater, some 135 miles away.

Amateur Radio tactical communication regarding the status of systems and repairs confirmed what was being reported via MARCS. The Amateur Radio activation terminated after 4 hours, once the 911 system was brought back online.

"The Ohio EOC staff was extremely cordial as we coordinated with them, and the various county EMA directors were quick to activate Amateur Radio during the event," Broadway said.

Broadway said Ohio volunteers already had practiced for such an event, since the emergency scenario during the Ohio Simulated Emergency Test (SET) last fall involved a statewide communication breakdown.

As occasionally happens, Broadway said, such events occur at inconvenient times. One EMA director was away on a honeymoon, and the Stark County EOC had no antennas in place while the roof of their building was being replaced. "Summit County (Akron) had an additional challenge," Broadway noted. "It was decided to move their EOC, because all phone service was down. ARES members had to grab a 'go bag' and quickly set up operations at an alternate site."

"My thanks to all who were involved!" Broadway said. "Our response was quick and professional, and was a great opportunity to show the value of Amateur Radio."

Way to go Stan and all the ARES groups involved..!! Funny, our last year's S.E.T. was based on just such an event. Do you suppose Stan knew something back then??

PARF DAYTON BUS TRIP to DAYTON

We are pleased to announce that PARF, Pioneer Amateur Radio Fellowship,
Inc., is once again chartering a bus to the Dayton Hamvention for Saturday, May
16. On their website, http://www.qsl.net/w8ctt/> you will find fliers and applications (in 2 formats) with all the details. We are pleased that the cost has remained the same as last year.

Please note: April 15 is the deadline for the "Early Bird" discount, but don't wait. Last year we were at 92% capacity. Several folks who couldn't make it then indicated they would be riding this year! Seats are available on a first come, first serve basis.

If you have any questions, don't hesitate to give me a call at 330-745-5115.

73, Joy Spencer-DeZordo, KA8TDF

2015 SKYWARN TRAINING HAS CHANGED ...

NEW SKYWARN TRAINING FOR 2015 FROM THE CLEVELAND NWS

Reprinted from the Cleveland National Weather Service Office website http://www.weather.gov/cle/SKYWARN_schedule

Spotter Training

SKYWARN spotter training sessions for Spring 2015 will be held through Webinar (online) training conducted by National Weather Service employees. Groups organized by county Emergency Management agencies will host the online training sessions. Please contact your local emergency management agency to determine which dates they will host training sessions.



Webinar based training will be held on the following dates:

March 4, Wednesday

March 9, Monday

March 18, Wednesday

March 23, Monday

March 26. Thursday

April 1, Wednesday

April 7, Tuesday

April 13. Monday

Being a storm spotter not only means dedication, but also training. Each spring the Cleveland office of the National Weather Service trains members of police & fire departments, emergency management officials and amateur radio operators on spotting techniques. Typically the training is coordinated by a local group (such as an emergency management agency), and a NWS meteorologist serves as the guest instructor. The goal of the training is not just to recognize tornadoes, but to have some understanding of storm structure, which in turn better prepares the spotter for the extreme and unusual circumstances.

SKYWARN™ Training is FREE and open to the public. Please attend any of the training sessions listed above. You will be trained and enrolled in the program. You do not need to pre-register.

For additional information contact:
Gary Garnet
(Warning Coordination Meteorologist)
National Weather Service
5301 West Hangar Rd.
Cleveland, OH 44135
216-265-2382 EXT 223
e-mail:gary.garnet@noaa.gov

Mystery radio bursts blamed on black hole 'blitzars'

A gigantic but fleeting burst of radio waves has been caught in the act for the first time, helping to narrow down the vast array of things that might cause them. Figuring out what these fast radio bursts - sometimes called blitzars - Figuring out what these fast radio bursts are or where they come from could help answer some of the biggest cosmological questions.

Blitzars last about a millisecond but give off as much energy as the sun does in a million years, all seemingly in a tight band of radio-frequency waves.

http://www.newscientist.com/article/dn23817-mystery-radio-bursts-blamed-on-black-hole-blitzars.html#.VMPviE3wvcs

PCARS - K8BF - Tenth Annual "Freeze Your Acorns Off"

(FYAO) QRP Special Event Station

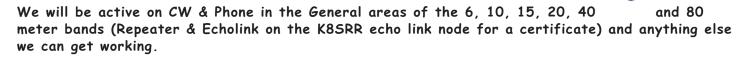
Where: Fred Fuller Park - 497 Middlebury Rd., Kent, Oh

at the Roy Smith Shelter House When: Saturday - Feb. 14, 2015

What better way to to spend Valentine's Day than to get out of the house and have some fun on the Ham bands with other Amateurs.

Set up: 9:00 A.M.

Operating Time: 10:00 A.M. - 4:00 P.M. EST



Club Call Sign K8BF for a certificate. Other participating stations will be using their own call sign/FYAO, or calling "CQ FYAO" (only stations at the Freeze Your Acorns Off event should use the /FYAO designator).

Yes, we'll be braving the cold snowy weather of North Eastern Ohio to set up QRP stations using portable power and antennas. I have been informed by a few PCARS members that they will be operating and also bringing some delicious food to share. But we still need more. So please let me know if you will be coming to operate and/or bringing a dish to pass. So for now....

73 - Chuck Patellis W8PT

ARRL SUBMITS COMMENTS TO FCC ON WRC-15 DRAFT RECOMMENDATIONS

The ARRL has commented on two draft recommendations of the FCC's 2015 World Radiocommunication Conference (WRC-15) Advisory Committee (WAC) as well as on a draft proposal provided to the FCC by the National Telecommunications and Information Administration (NTIA).

The ARRL expressed support for the status quo regarding an allocation to the Mobile Service for broadband applications at 3400-4200 MHz and 4500-4800 MHz, which is under consideration as part of Agenda Item 1.1 at WRC-15. The 3400-3500 MHz segment is allocated on a secondary basis to the Amateur Service in ITU Regions 2 and 3, with a secondary allocation by footnote in some countries in ITU Region 1. The League said advocates for the allocation have failed to account for the protection of existing services.

"[The] failure to even superficially address the protection of all existing services -- including the Amateur and Amateur-Satellite services -- is glaring," the ARRL said. The WAC's so-called "View A" -- to make no change in the allocation -- in part said, "The secondary nature of the Amateur Service allocation requires flexibility in frequency selection to permit an Amateur Service licensee to use the allocation and fulfill his or her obligation not to cause harmful interference to the numerous primary services, including the FSS [Fixed-Satellite Service]."

ITU-R Resolution 233, adopted at WRC-12, spelled out explicit requirements for the studies of the candidate bands, including sharing and compatibility studies with services already having allocations. As the League noted in its comments, a relevant ITU-R Recommendation stated that additional sharing with the Amateur and Amateur-Satellite services should not introduce high signal density services in the spectrum at issue, and that sharing studies should consider the Amateur and Amateur-Satellite services' needs for "weak-signal" reception.

ARRL - CONTINUED FROM PAGE 15

The ARRL supported the FCC WAC view on Agenda Item 1.12 that the US not be added to international footnote 5.480 -- basically an exception -- to the Table of Allocations that could make part of the 10.0-10.5 GHz segment vulnerable to additional allocation for Fixed Service applications. The Amateur and Amateur-Satellite services have a secondary allocation in the band, and the Federal Radiolocation Service is primary. The proposed "footnote amendment," the League argued, "plainly, clearly, and indisputably contradicts existing United States regulations." The League's comments accused Mimosa Networks, which has argued in favor of having the US sign on to the international footnote, of advancing an "illogical construction to obtain the result it desires."

Mimosa Networks has petitioned the FCC to permit unlicensed Part 15 wireless broadband services in the 10.0-10.5 GHz band. In comments last year, the ARRL called Mimosa's Petition "fatally flawed" and said it should be dismissed. Among other things, the League told the FCC last year that Mimosa's Petition was inconsistent with a US footnote in the domestic Table of Allocations, and that alone was sufficient reason for the Commission to quash Mimosa's request.

In its comments on WRC-15 Agenda Item 1.12, the League said that Mimosa did not raise an objection to the WAC's initially adopted position until months after the comment deadline. The ARRL said the FCC should use its original position -- and not a later one that includes Mimosa's arguments -- as the baseline for any discussions with federal agencies to reconcile the agenda item.

The League also said the NTIA was correct in proposing that regulatory changes for nanosatellites and picosatellites be addressed under standing Agenda Item 7 at WRC-19. Read more.

http://www.arrl.org/news/arrl-comments-to-fcc-on-wrc-15-draft-recommendations

HARA ARENA

Hamvention Chair: "The Show Will Go on" at Aging Hara

Arena - Despite financial struggles dogging the owners of Hara Arena, site of the Dayton Hamvention® since the 1960s, the 2015 Hamvention General Chairman Jim Tiderman, N8IDS, has told ARRL that he expects the world's largest Amateur Radio show to continue there -- this May and in the years ahead. Tiderman was reacting to recent media accounts detailing the fiscal woes of the aging Hara complex in Trotwood, Ohio. He said Hamvention's sponsoring Dayton Amateur Radio Association (DARA) and Hamvention officials have been in conversation with Hara's owners, the Wampler family, regarding the future of the 165,000 square foot, six-building complex. Hara Arena, the home of Dayton Hamvention.



[Rick Lindquist, WW1ME, photo

"Both Hamvention and DARA have absolute confidence in [the Wampler family's] guiding their corporation through the

steps in the plans in place to keep Hara operating for years to come," Tiderman said. "Given the time frame they are working with right now, we simply stand by them and repeat, 'the show will go on.'" Last year, Dayton Hamvention attracted nearly 25,000 visitors.

Dayton TV station WDTN-TV reported last month that the 50-year-old Hara Arena was facing financial problems and had cut back on its full-time staff to save money. Karen Wampler, Hara's Director of Marketing, has told the media that it's become difficult for Hara Arena to compete with other Miami Valley venues, such as the Nutter Center at Wright State University and the downtown Dayton Convention Center. The Hara complex needs money for renovations and deferred maintenance, she said, and "the ownership model needs to be changed." Wampler told the Dayton Daily News in December that while the family cares about the facility, it is limited in what it can afford.

Dayton Hamvention takes place May 15-17. Read more.

http://www.arrl.org/news/hamvention-chair-the-show-will-go-on-at-aging-hara-arena

Dale's Tales . . .

Happy New Year Everyone! - And, it was a Happy Old Year as well. 2014 brought the 100th Anniversary of the ARRL and along with it THE outstanding operating event of the past century. Now the individual logs are uploading to Logbook of the World and scores will all be recalculated for the Centennial QSO Party. Remember, the log deadline is January 15 at 2359 Z.

There were several key events that bear mentioning from our historic 2014:

We experienced a change in the guard at the Division level in July as long time Director, Jim Weaver, K8JE retired and Vice Director Dale Williams assumed that role. Tom Delaney W8WTD moved up to fill Dale's unexpired term. Ton was then elected to the Vice Director position in the fall election cycle.

Michigan secured the passage through the State House and Senate of PRB-1 that includes establishment of an advisory committee to provide accurate information concerning amateur antenna needs to local governmental regulating bodies as required. It now awaits the Governor's signature.

2014 also saw the Ohio PRB-1 Law standing its own ground and winning an appeal at the 6th Appellate District Court. The town of Swanton once again loses its case.

Michigan also created a five-person Technical Specialist HF Digital team from around the state to collectively create a common PowerPoint® program to provide programs and instruction for club meetings, hamfests, and other activities to encourage the use of HF sound card modes for pleasure and EmComm purposes.

2014 also marked the return of the Greater Louisville Hamfest as the Kentucky State Convention (Sept. 6, 2014). The convention featured a visit by Great Lakes Division Vice Director Tom Delaney, W8WTD, and an awards luncheon after the hamfest. Kudos to the hamfest organization for their hard work to make the return of the ARRL state convention a reality!

In Ohio, Section Manager Frank Piper retired and Scott Yonally N8SY became the new SM. A new Affiliated Clubs Coordinator, Sandy Mackey, N8YS and a new Official Observer Coordinator, John Perone, W8RXX stepped in as well. Complimenting these changes was a course change in the Ohio ARES program with the appointment of a new Section Emergency Coordinator, Stan Broadway N8BHL.

Michigan SM Larry Camp WB8R appointed Gordon Baldwin, W8CT as the Section Youth Coordinator.

Kentucky has also shown continued support for the ARRL, with a seven percent increase in League membership from April 2007 to Nov. 2014. Thanks to all the many volunteers who donate their time and talents, for they are the reason for the continued success of ARRL programs in the Kentucky section. Ohio also said hello to a newly appointed Affiliated Clubs Coordinator - John Myers, KD8MQ

Michigan hams conducted another very successful annual Section Family Outing in the woods of northern Michigan.

Kentucky Hamfest attendance in 2014 stayed steady, with several section hamfests seeing an uptick in attendance. In 2014, we welcomed a brand-new hamfest -- the Letcher County Amateur Radio Club in Whitesburg held their first hamfest.

After a multi-year experiment with one individual serving as SEC and STM, Michigan returned to a conventional format with the appointment of Mark Shaw, K8ED as STM.

In August, the Ohio Section had its conference along with the always-successful Columbus Hamfest where the top newsletters in Ohio were acknowledged in the ARRL Ohio Section Newsletter Contest. They also celebrated the newest inductee of the Allan Severson Award Frank Piper, KI8GW. Jackie Piper, KC8ESO received the Section Manager's "Special Appreciation" award.

Continued page 18

Dale's Tales . . . - CONTINUED FROM PAGE 17

Much work has been done on building a D-Star repeater network with grant funding in the SW corner of Michigan.

Ohio got to cheer as one of its own, Jay Slough, K4ZLE was the winner of the April QST® Cover Plaque award or his article "A 10 Meter Moxon Antenna."

Vice Director Tom Delaney W8WTD and your Director were able to attend a number of the Division's hamfests throughout the past year. Our sincere thanks to all of these hamfest teams who extended such warm hospitality to us during our visits. We hope to include visits to even more swaps in 2015.

Adrian, MI

Bowling Green, KY

Chelsea, MI

Cleveland, OH

Columbus, OH

Dayton, OH

Elyria, OH

Findlay, OH

Grand Rapids, MI

Hazel Park, MI

Louisville, KY

Mansfield, OH

MI Crossroads, MI

Monroe, MI

OKYIN. OH

Portage, OH

Richmond, KY

Toledo, OH

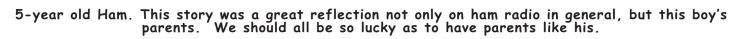
Now as we move into 2015, Vice Director Delaney and I prepare for the Annual ARRL Board meeting in mid January. Our visits to club meetings and conversations with many of you at hamfests around the Division have provided us with suggestions for consideration at committee meetings and the Board itself. It is always a pleas-

ure to hear from you with your thoughts and ideas to improve all that we do in Amateur Radio.

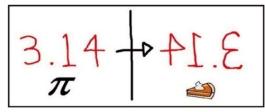
Radio.

To all: Thanks for your contribution to ARRL and ham radio during 2014. Now let us go on and make this New Year even better and strive to show the great works of ham radio to the world.

73,
Dale Williams WA8EFK
Director
Great Lakes Division
wa8efk@arrl.org



http://www.9news.com/story/news/local/2015/01/23/5-year-old-passes-ham-radio-exam/22247015/



PAGE 18

MYSTERIOUS RADIO SIGNAL FROM SPACE CAUGHT LIVE FOR FIRST TIME

By Walt Bonner, Published January 26, 2015

Astronomers in Australia have picked up an "alien" radio signal from space for the first time as it occurred. The signal, or radio "burst", was discovered on May 15, 2014, though it's just being reported by the Monthly Notices of the Royal Astronomical Society. "The burst was identified within 10 seconds of its occurrence," said Emily Petroff, a doctoral student from Melbourne's Swinburne University of Technology. "The importance of the discovery was recognized very quickly and we were all working very



excitedly to contact other astronomers and telescopes around the world to look at the location of the burst."

Emerging from an unknown source, these bursts are bright flashes of radio waves that emit as much energy in a few milliseconds as the sun does in 24 hours. "The first fast radio burst was discovered in 2007," Petroff tells FoxNews.com, "and up until our discovery there were 8 more found in old or archival data." While researchers use telescopes in Hawaii, India, Germany, Chile, California, and the California Islands to search for bursts, it is the CSIRO Parkes radio telescope in Eastern Australia that is the first to catch one as its happening.

The cause of these mysterious signals remains unknown, with possible theories ranging from black holes to alien communication. However, UFO hunters shouldn't get too excited. According to Petroff, "We're confident that they're coming from natural sources, that is to say it's probably not aliens, but we haven't solved the case completely. The two most promising theories at the moment are that these bursts could be produced either by a star producing a highly energetic flare, or from a neutron star collapsing to make a black hole. Both of these things would be from sources in far-away galaxies just reaching us from billions of light years away."

Catching the bursts as they happen is key to finding the source, and though Petroff's team scrambled upon making their discovery, they didn't move fast enough to find the afterglow and pin down the cause. "Finding one in real-time has been the goal for a while because we would then be able to act on it and mobilize other telescopes to look that way," Petroff says. "We did this in the case of this real-time discovery, but we didn't get on the target until about eight hours later with other telescopes, at which time nothing was found." However, they were able to eliminate a few possible causes, such as gamma-ray bursts from exploding stars and supernovae. Also, the team was able to determine that the source had been near an object with a sizeable magnetic field from the way the wavelengths were polarized.

While the source of the fast radio burst remains a mystery, the team remains hopeful that they can learn from their mistakes and one day solve the case. "All we can do is learn from our experience with this discovery and create a more efficient system for next time," Petroff says. "We still spend a large amount of time looking for fast radio bursts with the Parkes telescope and the next time we are in the right place at just the right time, we'll be able to act faster than ever before and hopefully solve the mystery once and for all!"

"Your Honour, I want to bring to your attention how unfair it is for my client to be accused of theft. He arrived in New York City a week ago and barely knows his way around.

What's more, he only speaks a few words of English."

The Judge looked at the defendant and asked, "How much English can you speak?"

The defendant looked up and said, "Give me your wallet!"

ISS ASTRONAUTS CELEBRATE NEW YEAR'S EVE 16 TIMES

IANS - The crew of Expedition 42 orbiting the Earth in the International Space Station (ISS) celebrated New Year's eve as many as 16 times as it circles the globe at 28,163 km per hour.

Commander Barry "Butch" Wilmore and his crew spent the New Year's eve working on a variety of experiments, ranging from those directed at better understanding changes that occur in the human eye during long-duration spaceflights, and with the Earth observations aimed at helping with disaster aid on the Earth's surface.



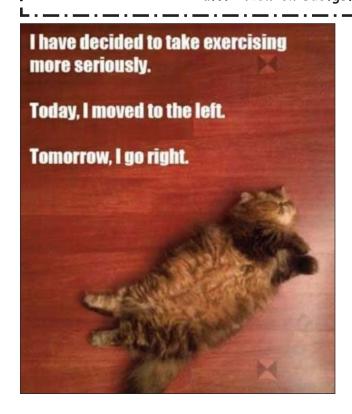
The crew also continued preparations for the arrival of the next cargo supply ship, the commercial resupply mission of SpaceX-5 and the Dragon spacecraft.

Dragon is loaded with more than 3,700 pounds of scientific experiments, technology demonstrations and supplies, including critical materials to support 256 science and research investigations that will take place on the space station during ISS Expeditions 42 and 43.

http://www.thehindu.com/sci-tech/science/iss-astronauts-celebrate-new-years-eve-16-times/article6744722.ece

5DO | Solar Dynamics Observatory http://sdo.gsfc.nasa.gov/>

SDO | Solar Dynamics ObservatorySDO is designed to help us understand the Sun's influence on Earth and Near-Earth space by studying the solar atmosphere on small scales of space and time a... View on sdo.gsfc.nasa.gov Preview by Yahoo





PAGE 20



HAMRADIONOW.tv

Television programs all about Amateur Radio... on the web a Pearce10 Inc. production http://arvideonews.com/hrn/

Here's link I found interesting: http://radiodustcovers.com/

- . I tried to catch some fog. I mist.
- . When chemists die, they barium.
- . Jokes about German sausage are the wurst.
- . A soldier who survived mustard gas and pepper spray is now a seasoned veteran.
- . I know a guy who's addicted to brake fluid. He says he can stop any time.
- . How does Moses make his tea? Hebrews it.
- . I stayed up all night to see where the sun went. Then it dawned on me.
- . This girl said she recognized me from the vegetarian club, but I'd never met herbivore.
- . I'm reading a book about anti-gravity. I can't put it down.
- . I did a theatrical performance about puns. It was a play on words.
- . They told me I had type A blood, but it was a type-O.



Gardening Rule: When weeding, the best way to make sure you are removing weed and not a valuable plant is to pull on it. If it comes out of the ground easily, it is a valuable plant.



BIRTHDAYS THIS MONTH

KD8KEDPhilip Murphy2/1KD8XXRocco Dominick2/1N8DMCDarrinCannon2/25



AFTER THE OLIDAYS ANNUAL MEETING



February 2015



PREPAREDNESS LEADS TO READINESS - MATT W8DEC

_		_				
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	Groundhog Day ARES Net 8:30 PM 146.745 .PL 110.9	3	4 Skywrn Net 8:30 P.M. 146.745 Tech. Class @ ITT	5 Extra Class @ ITT	6 WRARC Net 9:00PM 145.270 Elmers Net right after	7
8	9	10 Ham Breakfast Eat'n Park Boardman 8:30 A.M.	Tech. Class @ ITT	Extra Class @ ITT	13 WRARC Net 9:00PM 145.270	Valentines dzay
		Board Meeting Eat'n Park Boardman 7:00 P.M.			Elmers Net right after	
15	16 President's Day ARES Net 8:30 PM 146.745 PL 110.9	WRARC Meeting 7:00P.M Mardi Gras	Testing (a) ITT-Tech Amateur Radio Exam	Extra Class @ ITT	WRARC Net 9:00PM 145.270 Elmers Net right after	WaveBender Articles Due
Be Humble Day	23	Eat'n Park Boardman 8:30 A.M. Ham Community Breakfast	General Class @ ITT	26 Extra Class @ ITT	WRARC Net 9:00PM 145.270 Elmers Net right after	28
3/1	3/2 ARES Net 8:30 PM 146.745 PL 110.9 prior to the Monday Night Net.	3/3	3/4 General Class @ ITT	3/5 Extra Class @ ITT	3/6 WRARC Net 9:00PM 145.270 Elmers Net right after	3/7

Page 23