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## Introducing the ISOpwr+



See our website for Details!  
[www.westmountainradio.com](http://www.westmountainradio.com)

## Digital Mode Happenings By: Sholto Fisher



### FreeDV

If you haven't looked into FreeDV before you're missing an area of real technical advancement in the hobby. The FreeDV software is mainly used for digital voice contacts on HF. The heart of this technology is CODEC2 which is digital voice codec designed by David Rowe VK5DGR. Unlike other voice codecs used previously by amateurs, CODEC2 is free and open-source.

The desktop software available for Windows, Linux and OS-X can be found at <https://freedv.org>

There are a variety of sub-modes in the software with bit rates between 700 and 1600 bit/s. In May, David announced a new mode called '700D'. This is proving to be a remarkable improvement on the other modes and even ssb during difficult HF conditions.

There are some amazing sound samples on David's personal website which show how effective it is compared with regular ssb. Visit <http://www.rowetel.com/?p=6103> to listen to a transmission over a 2,000 mile path in poor conditions. The sample switches between ssb and 700D for comparison.

Another bonus is 700D uses less than half the bandwidth of regular ssb!

Once you've downloaded the software and set it up you can use the 'FreeDV QSO Finder' to coordinate skeds located at <http://qso.freedv.org>

Most activity is on 20m on 14.236 MHz (usb)

### VARA Update

In my last article I mentioned the high speed OFDM VARA modem. It has now reached a stable version (v2.2.1) and is being widely adopted on the Winlink 2000 network. As of

August 1st there are now 65 Winlink RMS stations running VARA on 189 different HF frequencies.

Real-world tests continue to show this software modem is comparable to Pactor-III in terms of speed and robustness.

More information from <https://rosmodem.wordpress.com> and <https://www.winlink.org/RMSChannels>

### AMRRON

While monitoring the amateur bands recently I noticed a digital net underway who were exchanging FLamp messages with FLdigi. Doing a little digging it appears the group responsible is called AMRRON which stands for "The American Redoubt Radio Operators Network."

American Redoubt was a term I hadn't come across before but a quick bit of Googling showed it's a network of "Preppers & Patriots" based on the idea of 'American Redoubt' which apparently centers around the idea that the Pacific Northwest will be the place to be should the apocalypse happen.

Politics and beliefs aside, the net seems to be very well organized and a variety of modes and frequencies are in use. Some of the easier ones to monitor are 14.110 usb and 7.110 usb with Contestia 4/250. A unique feature of the net seems to be a friend/foe Q&A validation.

Don't forget to run FLamp as well as FLdigi (with RX RSID enabled) in order to copy the complete data transfer. Custom FLmsg forms can be downloaded at: <https://amrron.com/amrron-forms/>

## What's New



### USB GPS Module

Sku #58141-1681

USB GPS dongle with magnetic base and 6' cord. Use with the West Mountain Radio diagnostic software for accurate timekeeping without the need of an internet connection. The software also calculates your Maidenhead Grid locator automatically. Ideal companion for your RIGblaster when working JT-65 and FT8 modes.

See page 4 to understand how this helps with JT65/FT8

## An Amazing Recovery: ARISS Packet System Revives

Article from: [http://www.arrl.org/news/view/an-amazing-recovery-ariss-packet-system-revives?utm\\_source=divr.it&utm\\_medium=twitter](http://www.arrl.org/news/view/an-amazing-recovery-ariss-packet-system-revives?utm_source=divr.it&utm_medium=twitter)



08/27/2018

Similar to the AO-7 satellite resurrection several years ago, the Amateur Radio on the International Space Station (ARISS) packet radio system on the International Space Station (ISS) has begun working again. NASA ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, said over the weekend that reports he'd received indicated that the NAISS packet signal returned in mid-August.

"It appears it indeed has started working as of about 11 days ago," Ransom said. "No idea how long it will last, given the degrading state of the current hardware. The longer it lasts, the better." Ransom said the revived system will fill the gap until a replacement packet module goes up later this year on a Progress supply vehicle and is installed by the crew on a time-available basis. Satellite enthusiast

Patrick Stoddard, WD9EWK, in Arizona reported via the ISS Fan Club site that the ISS packet system was operating on August 25 at 1915 UTC during an 8° pass over the continental US. "I got my position packet through once, no QSOs this pass," he said in a post.

The packet signal on 145.825 MHz has been copied in Europe, South America, India, and elsewhere. In another August 25 post, Mark Pisani, KK6OTJ, reported copying the packet system during an 18° pass over southern California and said he worked KB6LTY through the system. "Heard over Patagonia Argentina!" Francisco Rodriguez, LU2WBA, enthused in a post on August 24 at 2323 UTC. "Welcome back!" An August 17 post from Marco Antonio, PU2MUS, in Brazil indicated that the system was not active at that time.

Earlier this summer, ARISS hardware team members on the ground reported that they were able to locate a functional duplicate of the ISS packet module that had been in use on the ISS for 17 years before it failed more than a year ago. The packet module has been manifest on the Progress 71P spacecraft launch now set for October 31, with docking on November 2.

ARISS said the subsequent installation will depend on the crew's busy schedule, but expressed hope that the new packet system hardware could be online again by the end of November.



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Available now!

Off-Air Bulletin from K7IFG  
by Sholto Fisher



QST QST QST DE K7IFG K7IFG

These bulletins are sent weekly on Monday at 10:30 AM on 60 meters Ch#2 and Friday evenings AT 7:00 PM on 80 meters +/- 3582.5 khz. Signal reports can be sent to K7IFG@ARRL.NET or K7IFG@WINLINK.ORG

“Software update 06/12/2018”

FLdigi ver 4.0.17 now available at:

[sourceforge.net/projects/fldigi/files/](http://sourceforge.net/projects/fldigi/files/) or [W1HKJ.com](http://W1HKJ.com)

“Software update 7/10/2018”

FLmsg ver 4.0.7 now available at: <http://www.w1hkj.com> or <https://sourceforge.net/projects/fldigi/files/flmsg/>

Several videos by K4REF, Rick Frost, are very helpful in setting up FLDigi Suite of software go to: <https://www.youtube.com/user/K4REF>

FLdigi for Android Devices

The popular FLDIGI application is available for android devices.

With this, you can operate digital modes using your cell phone and HT, tablet and mobile, or whatever android device and rig you have!

For a good article by AB8SV on how to get and use the Android app. Go to following website: <http://idigit4u.com/ccara/files/ares/The%20popular%20FLDIGI%20application%20is%20available%20for%20android%20devices.pdf>

There is a new version of this app as of December 17, 2017.

\*\*\*\*\*

July 2018 issue of QNI Newsletter is available at: <https://qni-newsletter.net/>

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“The Ratts Net has changed modes from RTTY 60 wpm to Olivia 16/1000. Net meets on 3598.0 khz USB offset at 1500hz Monday through Friday at 2000 PDST”

Humboldt County Digital Net

18:45 pm Monday 3581.0 USB +1500 Hz MFSK-32 NCS KE6SLS  
Puget Sound Digital Hams NET on

the WW7SEA Columbia Repeater at 444.550, tone 141.3, +5MHz. Digital Radio with FLDIGI, FLMSG, FLAMP and EasyPal, Lately we’ve added ARDOP. Monday nights 8pm to 8:30pm.

Oregon California Digital net (ORCA) Tuesdays 3581.0 khz using MFSK-32 at 1930 PST. Info at <http://orcadigitalnet.com>

THE AMRRON PTZ/CSRG DIGITAL NET

THIS NET MEETS THE FIRST AND THIRD TUESDAY AT 1930L on 3588 khz 1200 hz on WF. Ctstia-4-250 NCS Varies.  
- THE PURPOSE OF THIS NET IS TO PRACTICE DIGITAL EMERGENCY COMMUNICATIONS,

- PARTICIPATION IN TRAFFIC, NEWS AND MESSAGE HANDLING IS ENCOURAGED.

- Go to Amrron.com for list of digital nets both national and local.

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FEMA REGION 10 CONDUCTS

If you would like to submit an article for consideration in future newsletters please contact [marketing@westmountainradio.com](mailto:marketing@westmountainradio.com)

Off-Air Bulletin from K7IFG  
by Sholto Fisher



CROSSBAND TEST EVERY  
THIRD WEDNESDAY  
STARTING AT 1730 UTC ON  
60 METERS CHANNEL ONE  
(voice) AND TWO (digital). NCS  
IS WGY910 IN BOTHELL, WA.  
\*\*\*\*\*

Idaho ERC Net. Wednesday  
3581.0 khz 1500hz at 1815 PST.  
NCS K7DV or W7RUG

Oregon Digital net meets Fridays  
at 2000 PST on 3579 Khz at  
1500hz PSK-31.

INTERNATIONAL SATERN  
DIGITAL NET

Saturday at 10am PST. Early  
checkins start around 0900.

Freq is 14.065 khz at 1500hz using  
Olivia 8-500 for callup.

Using Netlogger. Info about Satern  
at satern.org

=====  
SW Radiogram

Please send reception reports to  
radiogram@verizon.net

And visit <http://swradiogram.net>

for times and frequencies.

Twitter: @SWRadiogram

Facebook group: <https://www.facebook.com/groups/567099476753304>

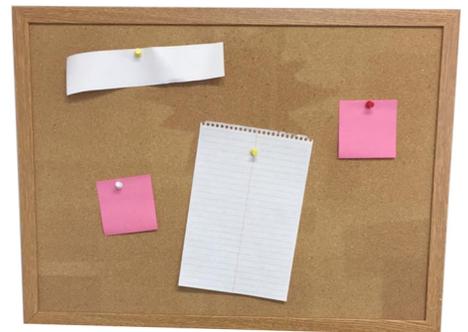
=====  
KBC BROADCASTS

The Mighty KBC transmits to  
Europe Saturdays at 1500-1600  
UTC on 9400 kHz (via Bulgaria),  
with the minute of MFSK at about  
1530 UTC (if you are outside of  
Europe, listen via websdr.ewi.  
utwente.nl:8901/ ). And to North  
America Sundays at 0000-0200  
UTC (Saturday 8-10 pm EDT)  
on new 9925 kHz, via Germany.  
The minute of MFSK is at about  
0130 UTC. Reports to Eric:  
themightykbc@gmail.com . See  
also <http://www.kbcradio.eu/>  
and <https://www.facebook.com/TheMightyKbc/>.

=====  
Italian Broadcasting Corporation  
(IBC) Five minutes of MFSK32  
is at the end of the 30-minute  
English-language “Shortwave  
Panorama”. For the complete IBC

transmission schedule visit  
<http://ibcradio.webs.com/>

=====  
Broad Spectrum Radio is  
transmitted by WRMI Florida  
Mondays at 0700-0800 UTC on  
5850 and 7730 kHz. MFSK32 is  
broadcast during the second half  
hour of the show.



**WEST MOUNTAIN  
RADIO**



## Off-Air Bulletin from K7IFG by Sholto Fisher



== HFLINK NEWS == HF  
Interoperability Exercise 2018 ==

WHAT? the Ham Radio “HF  
Interoperability Exercise” (HFIE)

WHEN? 12-22 October 2018  
(0001UTC 12 October to  
2359UTC 22 October)

WHO? All ham radio operators are  
invited to participate in 10 days  
of free and informal ALE and  
SELCALL operation on all  
amateur radio bands.

WHERE? This is a free open  
international worldwide event on  
amateur radio,  
for all countries, oceans, air, and  
space.

WEB? The HFLINK.NET website  
provides a connectivity map and  
real time  
chat room for coordination of  
HFIE operating activity.  
Freely discuss, learn, share  
experiences, and find solutions.

<http://hflink.net>

WHY? Operators get real-world  
experience and become proficient

in  
HF interoperability  
communications and SELCALL  
selective calling.  
They initiate and respond to ALE  
calls and soundings, link up with  
fellow operators for text or SSB  
voice QSOs on HF, and share  
helpful  
information about setting up ALE  
and SELCALL stations.  
The experience gained by operator  
participation in this readiness  
exercise is also useful for HF  
Emergency/Disaster Relief  
communications.

HOW? Operators can use a  
software ALE or SELCALL  
controller with their  
HF amateur transceiver, or else use  
an HF radio with built-in ALE or  
SELCALL.  
Operation is primarily on the  
HFLINK channel frequencies  
(HFL-HFN-HFS) .  
Ham operators use the same  
standards as non-governmental and  
government  
organizations worldwide for  
interoperable HF communications.  
This readiness exercise covers  
standard ALE (Automatic Link  
Establishment)

and SELCALL (HF Selective  
Calling).

Join the growing thousands of  
amateur radio operators worldwide  
with ALE-capable and SELCALL-  
capable stations.

LINKS?

ALE Channel Frequencies (HFL-  
HFN)  
<http://hflink.com/channels/>

SELCALL Channel Frequencies  
(HFS)  
<http://hflink.com/selcall/channels/>

HFLINK  
<http://hflink.com>

HFLINK NETWORK MAP and  
CHAT ROOM  
<http://hflink.net>

== END HFLINK NEWS ==

Bonnie Crystal KQ6XA  
HFLINK Founder  
Posted by: [expeditionradio@  
yahoo.com](mailto:expeditionradio@yahoo.com)



## Upcoming Events



### Visit Our Booth

Peoria Superfest  
September 15-16, 2018

Spokane Hamfest  
September 22, 2018

HRO Superfest - Milwaukee  
September 28-29, 2018  
In-store demonstrations!

Fort Wayne Hamfest  
November 17-18, 2018



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