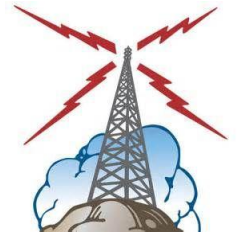




SLATS

St. Louis Amateur Television Society



November 2022 | ISSUE NO.10

SLATS Wednesday Nite Net

Time: Every Wednesday at 19:00 hours
Frequency: 146.730 WØKE Repeater

IN THIS ISSUE

ON THE NEWS FRONT.....	01
HiDes UPDATES.....	02
DIGITALTV GROUPS.....	02
SOLDERING 101.....	03
ITEMS FOR SALE.....	04
ARRL HANDBOOK.....	04
EXPLOSIVE PLOSIVES.....	05
HAM RADIO QUICK LINKS.....	05

ON THE NEWS FRONT



Winterfest 2023 Winterfest 2023 is once again the ARRL Midwest Conference. There will be lots of interesting things going on that weekend.

To start, the W9DYV's Amateur Radio Symposium (Wes Schum Symposium) will once again be held at the Gateway Center in Collinsville, Illinois on January 27, 2023. This is a full day of forums. Friday evening will be the Winterfest Banquet at the Royale Orleans Banquet Hall in St. Louis. Our keynote speaker is Glenn Johnson, WØGJ. Check out his QRZ page, <https://www.qrz.com/db/WØGJ>. He has been on several DXpeditions and will be exciting to hear (*about them*). Tickets are limited so get yours early. Saturday January 28, 2023 will be our sale and forums. This is where you come in. The SLSRC needs you to come be a vendor. Tables are available now at winterfest.slsrc.org for \$30.00. Each table comes with 1 admittance and 1 chair.

Rebecca Carroll KC9CIJ





Firmware updates are coming for HiDes Receivers!

Firmware has (finally!) been changed to add scanning for our repeater frequencies. Once updated to version ending in .161, the **HV-110/120/122** receiver will automatically scan for 426MHz and 440MHz.

These frequencies will then be automatically added in the Channel Manager and selectable from the front panel Channel buttons or your OSD Remote. Auto-scan will be handy when the receiver needs a Factory Reset (Menu-Tools) or future firmware updates which remove all previously scanned frequencies.

HiDes also released more updates and the current version is -165. In checking out this latest update, I found the Display Reference option *Keep Last Video* could not be turned OFF. Normally, we want the screen to go blank (OFF) when the transmitted carrier is off otherwise the last video frame remains on the screen. I've told HiDes about this issue and I am sure they will restore the option to turn it off.

Info for updating your receiver will be found under the "Resources and Projects" tab at slatsatn.net. Check slatsatn.net web site for the instructions around Nov 15th.

Mel, KOPFX

DigitalTV@groups.io

– Are you a member?

If you haven't already... visit or better yet "join" DigitalATV@groups.io. "The purpose of this group is to share knowledge & experiences using and developing DATV technology for amateur radio (ham radio) use". Currently, there are 473 members with 1,102 topics. This group has been around since 2011. Here you may find a number of topics of interest to you especially the ones on HiDes receivers, transmitters and the DVB-T standards. Since there are members from all over the world, you will read about what others are doing with digital ATV. Europe ATV-ers are experimenting with very narrow BWs allowing use of frequencies below 70cm for working "DX" stations up to hundreds of miles apart! Although the US hams do not have access to the QO-100 satellite, (it is not visible here) EU hams are working this sat with narrow BW Digital ATV. Darko told me it has had a negative impact on terrestrial DATV because it works well. More about it may be found here <https://batc.org.uk/>. In the future, we may see a satellite from AMSAT for digital ATV.

Mel, KOPFX

PL259 Soldering 101

For my HF antennas, I needed some RG213 or equivalent coax. Having none, I ordered the coax which included crimped (braid only) PL259 connectors. I rarely order coax with connectors since I can install them myself but the price was right and I knew the J&K Antenna installer of my new HF Yagi would prefer professionally installed connectors. If there was a problem with the antenna and "I" installed the connectors then "I" could become suspect.

After receiving the assemblies (one for 40 Yagi and one for 20m Yagi), I was disappointed in the soldering of the stranded center conductor to their PL259. The center conductor lead was not visible in the solder. Without being visible, I could not tell if there had been good wetting action between the lead and the connector. Rather, it looked more like a ball/bead was formed on the end of the center conductor contact to make it look pretty. "An acceptable solder connection must indicate wetting and adherence when the solder blends to the soldered surface..." This could not be seen. This is a soldering "non-conforming defect" and fails to meet a basic standard for acceptability of a solder joint.

If you are not aware, international industry standards exist for soldering. The IPC (<https://www.ipc.org/ipc-standards>) is the organization providing these standards. In my former years, I was specifically trained in this area and received three certifications (IPC-610, J-Std-001, IPC-7711/21).

Figure A was typical of the soldering on the purchased cable assemblies. **Figure B** is one I soldered exhibiting good wetting action. Which one would you trust to provide a reliable connection over time? The take-away here is, visually inspect the solder joint on any purchased coax cable assemblies. You should see the wire (stranded or solid) with good wetting action forming an intermetallic bond between it and the connector's center contact. There are more criteria for defining a "good solder joint" but this one described here is often missing on PL259s.



ITEMS FOR SALE or GIVE AWAY:

Find items for sale is on our website here:
Click: https://slatsatn.net/?page_id=713



FLEX RADIO 3000

I want to:

Sell an item

Name

Vincent Swoboda

Call Sign

KE0VYE

Phone (optional)

+13145631760

Email

kayakvince@icloud.com

Brief Description of item

Flex Radio 3000 with configured HP Desktop Package \$650

Details, price, condition, etc.

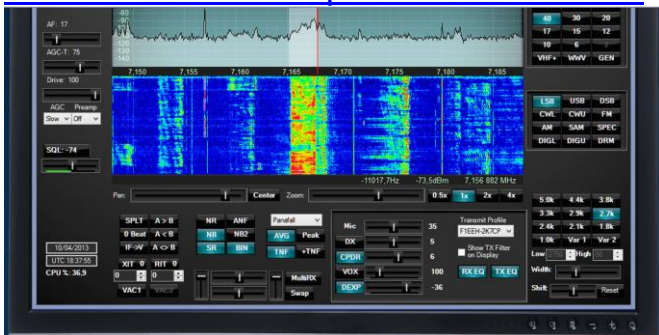
Flex Radio 3000 with internal ATU, HP desktop Windows 10 Enterprise PC, 24 inch ViewSonic monitor, Heil Pro Headset, original manual and, DC power cable, USB keyboard and mouse, firewire cable and 3 firewire cards (one installed). The HP Desktop is 4 core intel i7 , 256 GB SSD, 16 GB ram and an installed and configured firewire card. Current PowerSDR software installed and configured to work with WSJT-X, FLDigi, and MMSSTV. Does not include a hand mike or power supply.

13156 Fourposter Ct

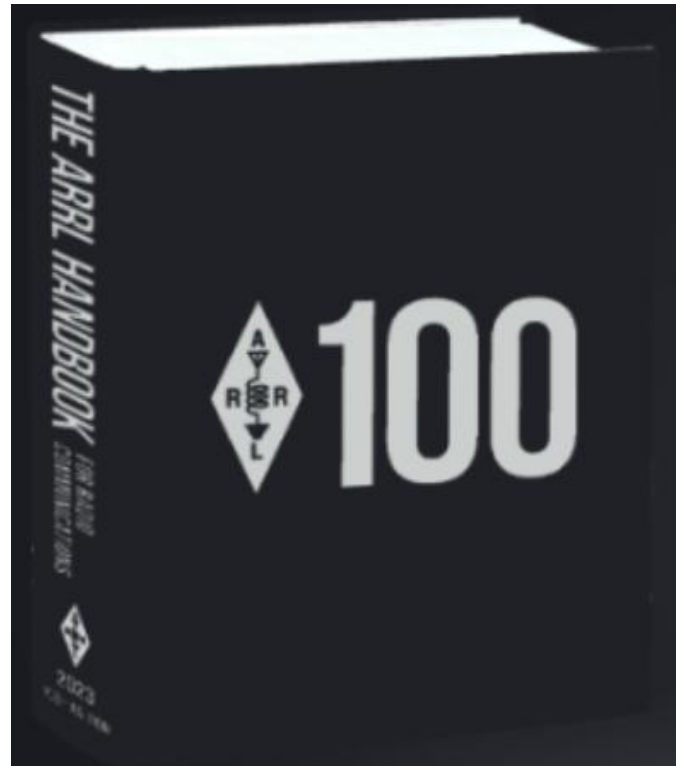
St Louis, MO 63146

USA

<https://www.flexradio.com/category/products/discontinued-products/flex-3000/>



ARRL 2023 Handbook



I just received my hardcover copy of the 2023 *ARRL Handbook for Radio Communication*. Wow! It is great! The 100th Anniversary edition has many changes and additions including new projects and technology. The ARRL Handbook is the “...most widely used one-stop reference and guide to radio technology principles and practices.” It is the first book I grab off the shelf when starting a new project. For ATV, Jim, KH6HTV provided DATV updates in Chapter 11.7 Image Modulation. My contribution may be found under Digital Protocols and Modes in Chapter 15.4.5 “HF Digital Voice” with an update on *FREEDV*’s features and architecture. The handbook is available in three formats including hardcover, paper back and an E-edition. Check them all out at www.arrl.org website.

Mel, KOPFX



Explosive Plosives

Microphones can be sensitive to what is referred to in the audio world as “plosives.” I hear these plosives frequently over the air. They cause the “pops” (noise bursts) that can become very annoying to the listener. I am sure you have heard them too. Plosives can be noticeably loud on FM and DMR from p and b sounds. Others including k, d, g and t will also cause these static-like sound bursts. Some types of laughter will too. To minimize producing them, especially with a hand mic, try *speaking across-the-mic*. Like Broderick Crawford did with his highway patrol radio mic. There are other ways to minimize them too. If you find your speech is still creating these noise bursts then put a sock over the mic (wash it first), use windscreen foam or add a pop filter. Mic designs differ in how and where the element is physically placed inside which may make them more or less susceptible to plosives.

A recording further describing “Plosive Constant Sounds” may be found here:

<https://thesoundofenglish.org/plosives/>

Any noise bursts in your audio? Ask your listeners.

Mel, KOPFX

Ham Radio Quick Links:

Southgate amateur news

<http://www.southgatearc.org>

Amateur Television Network

<https://www.atn-tv.com/>

ATN Repeater video streaming

<https://www.atn-tv.com/events/streaming>

ATN on YouTube

<https://www.youtube.com/AmateurTelevisionNetwork>

ATN on Whereby.com

<https://whereby.com/atn1>

TAPR - Tomorrow's Ham Radio

<https://tapr.org>

DIGITAL ATV

Digital Amateur Television D-ATV

https://www.dxzone.com/catalog/Operating_Modes/Digital_ATV/

YouTube Videos

Dave Casler KEØOG - YouTube Videos

<https://www.youtube.com/channel/UCaBtYooQdmNzq63eID8RaLQ>

Solar Index & Propagation Made Easy

<https://www.youtube.com/watch?v=SyXLARX1dns>