January/February 2017
ISSUE: 2017-1

26th Annual
Lou Withrow Skywarn Class

February 11, 8:15am - 4:15p
Location:
ACC Eastview Campus, Bild. 8500
3401 Webberville Rd,
Austin, TX 78702

National Weather Sercive Basic/Advanced SkyWarn
Training Instructor:
Paul Yura
Warning Coordination Meteorologist
Hosted by Troy Kimmel KE5BCK
tkimmel@mail.utexas.edu
NWS Austin San Antonio tweeting live during the session - #ATXSKYWARN
http://www.la.utexas.edu/users/kimmel/skywarn.html

WCARC Georgetown Swapfest
February 13
Georgetown Community Center in San Gabriel Park
455 East Morrow St.
Admission $2, tables are $8
7AM sellers setup, open our doors to buyers/everyone at 8:00
Rick W5NR@arrl.net or w5nr@sud-denlink.net www.wcarc.com

Belton Spring Ham Expo
March 10-11
Bell County Expo Center
Belton, Texas
http://www.hamexpo.org

ARRL, why should I join?

Summary of ARRL Benefits

Long-Standing

QST — magazine, including trusted news, columns, and Product Reviews

E-newsletters, E-mail forwarding service ([YourCallSign]@arrl.net)

Advocacy to maintain meaningful access to the radio spectrum. Representation on regulatory issues at the international, federal, and state levels.

Technical Information Service and other ARRL Laboratory support services

Volunteer Examiner Coordinator Program, VE

Ham Radio Equipment Insurance Plan, check it out, it may be better than the home owner policy you have now.

Outreach — Public Relations, awareness in the media, and resources to promote

Amateur Radio

Volunteer opportunities through the ARRL Field Organization

Radiosport: ARRL Contest and Awards programs, and QSL Service

Benefits Added Since 2001

Membership

Digital edition of QST and apps for viewing on iOS and Android devices

continued on page 2

NEWHAMS.info

Are you a new ham who wants to practice radio communication?

Just getting started in amateur radio and want to learn about emergency communications (EmComm)?

Are you a ham who wants to make better use of your hobby?

If you answered yes to any of these, consider helping with a local public service event (PSE). Public Service Events provide an excellent chance to practice your EmComm radio skills. Not only is it fun and interesting, but you will gain valuable experience in radio communications similar to a real disaster scenario, without the stress and urgency of a life and death situation.

Ham radio operators are often invited to assist with PSEs to provide primary or supplementary communication. PSEs typically involve parades, races or large

continued on page 2

continued from page 1

newham.info

gatherings. They normally use VHF/UHF radios so you don't need any fancy equipment or big antennas.

Participants may be stationary or mobile, depending on the nature of the event. You may be sitting or standing or walking around.

Because hams supporting a PSE will often use a handheld transceiver (HT) it's a good idea to have a few recommended HT accessories. First would be a quality 1/4-wave antenna in place of the poorly-performing factory "rubber duck". Second is a spare battery pack for your radio. Third would be headphone(s).

A must-read for new hams is the article, Getting Started in Public Service in the ARRL's magazine QST.

A PSE should always have an Event Action Plan (EAP) prepared and distributed to ham participants beforehand. The EAP includes basic event info along with communication details and position/role assignments for the hams involved. The EAP tries to anticipate and address issues as much as practical but things almost always go sideways, requiring you to be flexible and adaptive. In this sense it's really good training for actual EmComm work where things are truly out of control.

Good practice for the real deal. You will always learn something and improve your skills working a PSE, plus you will be giving back to your community.

To find a PSE you can participate in, check with your local EmComm group or a nearby amateur radio club/society. These organizations are likely to be invited to spread the word and provide the help for event communications.

A good overview and information on what to expect in typical PSE can be found at this faq link.

General info and resources on public service can be found on the ARRL website here.

The ARRL Public Service Handbook is also available to provide a more comprehensive look at radio communications in public service.

What do you have to sell?

continued from page 1

ARRL

Searchable QST and ARRL Periodicals Archive and Index

Expanded Product Reviews in QST and video product reviews

ARRL publications for Kindle

Improved member interaction through social media

Online Exam Review:

www.arrl.org/examreview

Logbook of The World (LoTW®)

ARRL Centennial Celebration in 2014 (national and regional conventions, Centennial QSO Party, W1AW portable operations)

Preservation of ARRL and Amateur Radio history

Free license renewal assistance

Volunteer Examiner Honor Roll

New Affinity Benefits: group discount Home and Auto Insurance, ARRL Visa®

Rewards Card

Public Service — Two full-time staff — Liaison with national-level — disaster organizations

Ham Aid program

Emergency communications training courses (discounts for members)

ARES®

E-Newsletter

Education

Support for license instruction

Outreach to students through Amateur Radio on the International Space Station (ARISS), and opportunities for radio amateurs to contact the ISS

Advocacy — Responding to Antenna Restrictions — Amateur Radio Parity Act, Zoning

Regulations

Relentless defense of our spectrum from commercial — interests and against spectrum pollution

Improved awareness for Amateur Radio by increasing our liaison with Congress and Capitol Hill

Representation on national and international standards bodies

Technology

Improved ARRL Lab test procedures and test equipment that contribute to unbiased

Product Reviews and advances in Amateur Radio equipment performance

Why Is D-STAR Callsign Registration Necessary

Jim Moen, K6JM

Within D-Star, there continue to be objections to the whole idea of having to register your callsign.

If they want to use ICOM G2 callsign routing (as opposed to ircDDB-assisted callsign routing), or if they want to use REF reflectors, they have no choice but to register at an ICOM gateway registration page.

Since mid-2015, if they want to use DCS reflectors, they have no choice but to get a DMR/CCS7 id.

Note: Many of us, for callsign routing, moved on from G2 to using the ircDDB system. But some people did not like, when using ircDDB for callsign routing etc., to have to also register at ircddb.net. These people believe each country's FCC equivalents have regulations about being licensed, and that is enough, and in any case, there is no way to stop people from breaking the law and using someone else's registered callsign.

So some of them took the open source code for creating an ircDDB server and created the rr.openquad.net server. This is now an option when configuring a homebrew gateway using either G4KLX's ircDDBGateway (ircDDB tab), or FREE STAR*s gateway. It does not require any registration and you can leave the password field blank.

So some people who choose not to talk via REF and DCS reflectors do not register their callsign at all. They use XRF reflectors and rr.openquad.net for their ircDDB callsign routing.

I understand these people's unhappiness with registration systems – my callsign is registered 3 times:

- At an ICOM US Trust-connected gateway's registration page
- At the DMR/CCS7 id request page register.ham-digital.org/
- At the ircDDB registration page regsrv.ircddb.net/index.htm

What's interesting is that for years, people complained about DPlus/REF requiring registration with US Trust. They were unaware of an incident in the fairly early days of D-Star, when a major country contacted ICOM to notify them all D-Star repeaters in that country were going to be shut down, or the ability to have links over the internet would have to be stopped. The problem was, this country did not trust there were reasonable processes in place to prevent a non-licensed ham to link into their country and transmit over RF.

(D-STAR G2 callsign routing only works if the callsign is registered in a Trust database, and ICOM could show there were reasonable processes in place to ensure registration approval only went to valid holders of a callsign. As a Gateway Admin, I have personally had a registration request from a non-Ham who made up a callsign. I discovered this, denied his request but convinced him to study and get a license. He did, and he is now licensed and registered.)

But most internet-enabled QSOs were being done using REF reflectors, hence the problem. ICOM contacted Robin Cutshaw AA4RC, according to this account, and Robin agreed to require callsigns be registered in a Trust database. Said country then relented, and D-Star was allowed to continue to grow.

(I am not allowed to reveal how I learned the above, but I am quite certain it is accurate.)

In 2015, the creators of DCS reflector technology ran into a similar issue and came to the same conclusion – for legal reasons, they were forced to require registration if you wanted to link to and talk through a DCS reflector. They chose the DMR/CCS7 system for registration, which also has reasonable processes to ensure the callsign is valid.

There is no centralized XRF standards group. There are at least 2 open source sets of code, and various branches within each. So far, the countries with concerns about non-Hams going out over RF in their countries have not taken any action against XRF usage. I hope they never will.

In any case, the above may help to explain why D-STAR G2 callsign routing, DPlus and DCS require callsign registration.

Repeated here with author's permission.

LSARA meeting Dates

February 14, Valentines Day

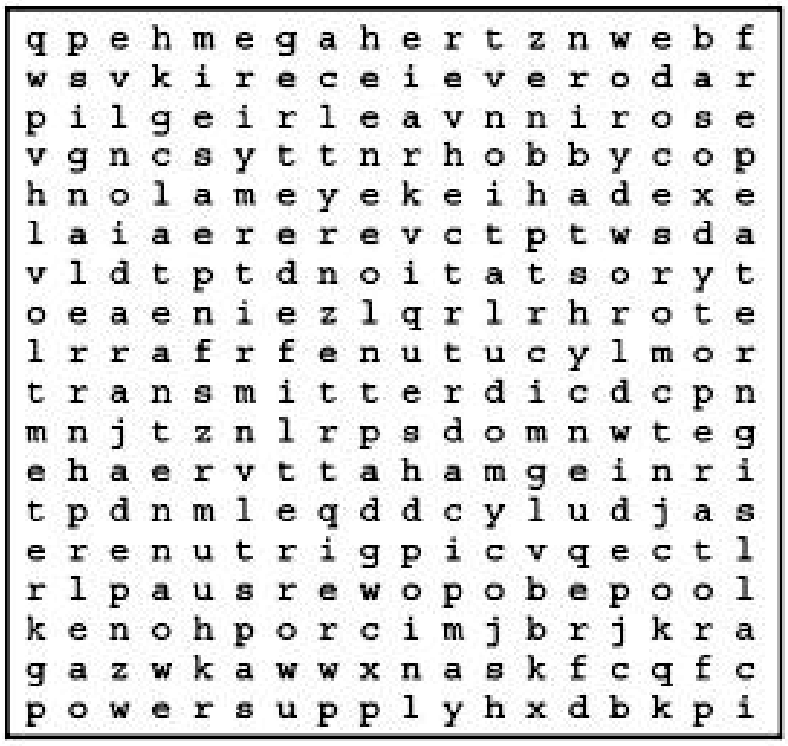
March 14 Spring Break Week

April 11 Passover Begins

May 9 Nothing but LSARA

Word Search

freuency	call sign
radio	worldwide
antenna	keyer
repeater	microphone
station	ham voltmeter
megahertz	transmitter
hobby	power supply
morse code	signal
modulation	receiver
tuner	operator



First-Ever D-STAR Satellite to Launch in April

http://www.arrl.org/news/view/first-ever-d-star-satellite-to-launch-in-april

04/12/2016

The first-ever satellite to carry a D-STAR (Digital Smart Technologies for Amateur Radio) Amateur Radio payload into space is expected to launch on April 22 from Guiana. The OUFTI-1(Orbital Utility For Telecommunication Innovations) CubeSat is one of three CubeSats developed by student teams under the European Space Agency (ESA) Education Office "Fly Your Satellite!" program, which is aimed at training the next generation of aerospace professionals. The satellites arrived in South America on March 25, followed by the student teams a few days later.

On March 30 the students pulled the so-called "Remove Before Flight" pins and successfully verified that their CubeSats were ready for launch before replacing the access ports on the P-POD, which will secure the CubeSats prior to and during launch and then will release them into orbit. The next time the students will have contact with their respective CubeSats will be through their spacecraft's communication link, once the CubeSats have been deployed into orbit. Once thermal-optical tape has been applied to the P-POD to shield the CubeSats from extreme thermal radiation during the launch phase, the P-POD will be integrated with theSoyuz launch vehicle.

Constructed by students at the University of Liege in Belgium (ULg), OUFTI-1 will be the first satellite to carry an Amateur Radio D-STAR transponder. Developed by the Japan Amateur Radio League, D-STAR enables the simultaneous transmission of voice and digital data as well as call sign-based roaming via the Internet. "The OUFTI-1 D-STAR repeater will be available either as a direct communication repeater between two users, and as an extension of the ULg D-STAR repeater," explains the article "D-STAR digital amateur communications in space with OUFTI-1 CubeSat" by Jonathan Pisane, ON7JPD; Amandine Denis, ON4EYA, and Jacques Verly, ON9CWD, all of ULg. The CubeSat's frequencies are 145.950 MHz (FSK AX.25 and D-STAR down, with an uplink at 435.045 MHz. OUFTI-1 will carry a CW beacon transmitting on 145.980 MHz.

The other two CubeSats are from Italy and Denmark. The CubeSat e-st@r-II from the Polytechnic of Turin, Italy, will demonstrate an attitude control system using measurements of Earth's magnetic field. It will transmit CW and 1.2 k AFSK on 437.485 MHz. AAUSAT4 from the University of Aalborg, Denmark, will operate an automated ocean vessel identification system. It will transmit on 437.425 MHz.