

RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER

CEDAR CITY, UTAH



Club Websites: www.rcarc.info OR www.rainbowcanyons.com Number 2 – Vol. 3 – March 2020

Club Meeting Information

The RCARC meets at 7:00 p.m. on the 2nd Tuesday of each month at the Cedar City Senior Center, 489 E. 200 South.

2020 Club Officer's

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Remember Daylight Savings Time

President's Message



Dear Fellow Amateur Radio Operators,

Winter field day was a great success! Thank you everyone who participated. Our last meeting dealing with closed PODs was interesting particularly with the COVID-19 spreading. At our next monthly (March) meeting we will have a builder/Elmer night for our meeting! Bring a soldering iron and project that you want to work on! April we will be learning more about 2-meter SSB and in May we will have a presentation on how to "Stop the Bleed."

Everyone has strengths and weaknesses and we are all in this because we love some aspect of radio communications.

Continued on page 2

RCARC Club Nets:

7:00 a.m. Breakfast Net - Monday – Saturday – 146.760.

12:30 p.m. Daily – Utah Beehive Net On 7.272.

7:00 p.m. Tuesday's Southwestern Utah Digital Net. Using FLDIGI, FLMSG AND FLAMP – 146.680, 1500/MT63-2KL

8:30 p.m. Tuesday's - ORCA Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.

8:00 p.m. Wednesday – Panguitch Net – 147.160.

8: p.m. Saturdays – SSTV – 449.925.

9:00 p.m. Daily – Friendship Net – 146.760.

11: a.m. Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter, 12: p.m. Freq. 7.272.

7:00 p.m. Thursdays – RCARC CW Net on 146.980.

Local Repeaters:

146.980 MHz – Tone 100.0 Hz

146.940 MHz – Tone 100.0 Hz

146.760 MHz – Tone 123.0 Hz

147.160 MHz + Tone 100.0 Hz.

448.800 MHz – Tone 100.0 Hz

New Repeater in New Harmony

146.680 MHz – Tone 100.0 Hz

Remote Bases:

449.500 MHz – Tone 100.0 Hz

449.925 MHz – Tone 100.0 Hz

ILRP/Echolink

449.900 MHz – Tone 100.0 Hz

Save The Date

February 11, 2020

RCARC Club Meeting

Program: PODS (Point of Dispensing). Presented by Paulette Valentine, Director of Emergency Preparedness and Response Division of the Southwest Utah Public Health Department. (SWUPH).

March 10, 2020

RCARC Club Meeting

Program: Basic Electronics and Builders Night. Need some help with your kit? Bring it to the meeting.

April 14, 2020

RCARC Club Meeting

Program: 2-meter single side band. Presented by: Kelly Anderson (KV7V)

May, 12, 2020

RCARC Club Meeting

Program: CERT Curriculum "Stop the Bleed." Instructor John Higley

Presidents Message Continued from page 1.

If you are interested in how radios, antennas, or other equipment works then please explore the topic, experiment, and share what you have done with the group! We have members who have been doing this for less than a year up to those who have been doing this for decades. That is what makes this such a fun hobby! Don't be shy, we are all friends here! Even though we are currently experiencing a solar minimum, we still have opportunities to make contacts worldwide. Just be patient and keep trying with CW, Digital, satellite, or other interesting modes!

Inn service,

Fred Govedich (KI7TPD)

RCARC Club Breakfast

Come join us the first Saturday of every month at 9:00 a.m. for breakfast at the Pastry Pub located at 86 W. Center Street, Cedar City. Check out their website at:

www.cedarcitypastrypub.com

Contact Us.

Mailing Address:

195 E. Fiddler's Canyon Road #3.
Cedar City, Utah 84721

E-mail:

cedarcity.rcarc@gmail.com

Newsletter E-mail:

rcarcnewsletter@gmail.com

Please send your dues etc. to the above address or should you have any questions or concerns please e-mail us.

Thank you



**Happy Birthday and
Anniversary to those
celebrating in March**



Spring is almost here!

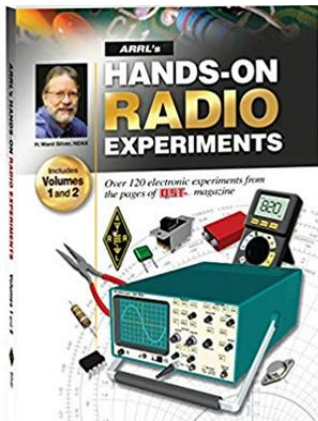
WooHoo!!

Breakfast & Friendship Net Awards

Breakfast Net	Friendship Net
First Place	First Place
KE6ZIM - Johnny	KI7LUM - Bruce
KG7PBX - Linda	KI7TPD - Fred
KI7WEX - Bonnie	KI7WEZ - Darlene
KK7ZL - Ed	K7HDX - Ron
Second Place	KI7WEX - Bonnie
KI7SDA - Jerel	W6DLW - Dennis
KI7TPD - Fred	Second Place
Third Place	N7NKH - Lee
KF7WIY - Denice	K7ZI - Dick
	KA7J - Lance
	Third Place
	N7TCE - Merlin

RCARC March Meeting Book Give Away

The book shown below will be awarded to one of our RCARC members at our club meeting on March 10, 2020.



This book is being donated by Linda Shokrian (KG7PBX).

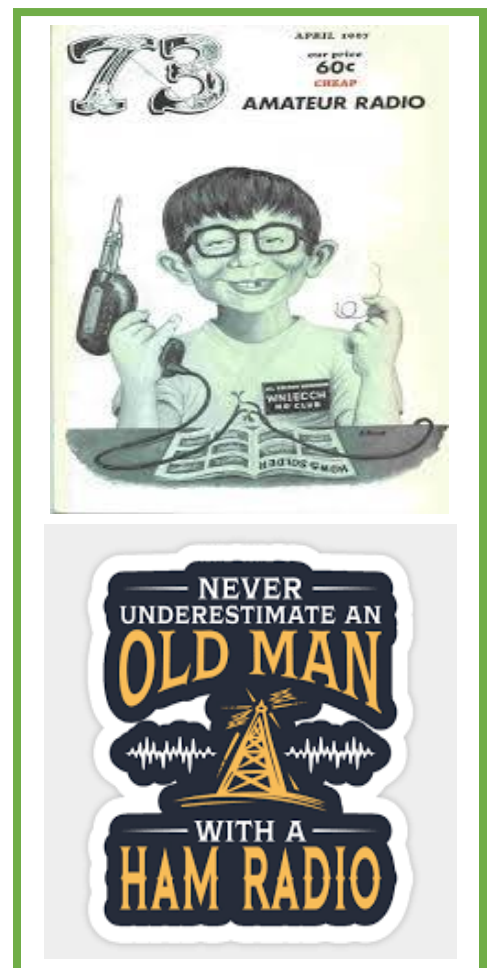
The meeting start time is 7:00 PM. You have to be there to win. See you there.

Please note:

ARRL - The Utah State Legislature has introduced and amendment to the Distracted Driving Law that would prohibit the use of all handheld wireless communications devices in a moving vehicle.

We are working to oppose this proposed bill and Jay Brummett, W7WJB our ARRL State Legislative Liaison is aggressively working to defeat this proposal or ensure adequate wording is added to exempt Amateur Radio Operators.

We will keep you posted as to the progress of this bill. I appreciate the efforts Jay is making to represent our Amateur Radio Community.



New Amateur Extra Question Pool Released

The new Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the National Conference of Volunteer Coordinators (NCVEC) website at, <http://www.ncvec.org/> .

The 2020-2024 Extra-class pool incorporates significant changes compared to the current 2016-2020 question pool, which expires on June 30. The number of questions in the pool was reduced from 712 to 622. The result was 239 modified questions, 49 new questions, and 139 questions removed due to changes in what was felt to be an abundance of outdated questions, while areas of new technology and subjects were added.

In addition, an effort was made to balance the difficulty level, removing or replacing some questions deemed too easy or too difficult compared to the rest of the pool. The 2020 pool has 10 diagrams, which have been renumbered because the new question pool has two fewer than the 2016 question pool.

Information from ARRL



UTAH VALLEY HAMFEST & DISASTER COMMUNICATION 2020

Friday May 8 and Saturday May 9
Utah Valley University Sorensen Center
Orem, Utah 9 am to 5 pm

utahvalleyhamfest.com

Keynote speakers

Dave Casler	Steve Ewald	Bob Craven
KEØOG	WV1X	N7GTE
Fri 9 am	Sat 9 am	Sat 1 pm

Presentations, activities, SES, swag, door prizes (grand prize is an Icom IC-7300)
\$30 per person / \$40 per family

Register on the website or by PayPal
info@utahvalleyhamfest.com

Daylight Savings Time



Daylight Saving Time is here again.
Sunday March 8, 2020 at 2:00 am. It will be time to set your clock's 1 hour ahead to 3:00 am.

Riki Kline (KN7J) was named new CWops Board Member for North America



Riki Kline

Riki Kline (K7NJ) was recently elected as the new CWops Board Member for North America. Riki is a member of the Cedar City Rainbow Canyons Amateur Radio Club (RCARC).

CWops bring together Amateur Radio operators who enjoy communicating by Morse Code (CW). CWops encourages the use of CW in Amateur communications, and it supports CW activity through planned events. CWops promotes goodwill among Amateurs throughout the world, and it fosters the education of young people and others in matters related to Amateur Radio.

CWops is International in scope, membership and management. Its focus is the use of CW, whether for contesting, DXing or rag chewing. Moreover, it supports every form of sending — if it's CW, CWops supports it! If you would like to learn more about CWops or read their newsletter check out their Website at <https://cwops.org>



Vintage Ham Radio Pic's



RCARC Monthly Breakfast Pictures



RCARC Club members enjoying conversation and breakfast at the Pastry Pub.

Diving deep for 'the world's most famous radio'

What extremes would YOU go to get your hands on an old radio?

If that radio is the wireless transmitter that operator **Jack Phillips** used April 15, 1912 to summon help for the doomed **RMS Titanic**, those extremes likely include ocean depths. The United States company that has salvage rights to the wreckage is ready to make that trip - and soon.

It's asking a U.S. District Court judge in Eastern Virginia to approve an undersea expedition to the ship's interior to retrieve the Marconi transmitter that summoned the RMS Carpathia. It sent the message: "Come at once. We have struck a berg. It's a CQD, old man."

Continued next column

In an agreement reached recently between two countries, Britain and the United States, both have the authority to grant or refuse permission for such missions.

RMS Titanic Inc., the U.S. company hoping to make the trip, noted in its court papers that while the radio room itself has stayed somewhat unscathed, holes are forming in the deckhouse directly above it, placing the Marconi set in peril.

The Washington Post said that Parks Stephenson, a Titanic expert, called the transmitter "the world's most famous radio."

AR Newline

Reminder

This month meeting Program:

Basic Electronics and Builders Night.

Need some help with your kit? Bring it to the meeting.

March 10, 2020 @ 7:00 pm.

Cedar City Senior Center

489 East. 200 South

HuskySat-1 With VHF/UHF Linear Transponder Set to Deploy Soon



University of Washington graduate student Paige Northway with HuskySat-1. She has been involved in the project since its inception.

The University of Washington's [HuskySat-1](#) 3U CubeSat, launched November 2, 2019, is set to deploy on January 31 after the vehicle that carried it to the International Space Station undocks. HuskySat-1 has remained stowed aboard a Northrop Grumman Cygnus supply vehicle. Within 24 hours after Cygnus' departure from the ISS, HuskySat-1 and [Swamp Sat 2](#) will be deployed into orbit.

After deployment, HuskySat-1's 1,200 bps BPSK beacon on 435.800 MHz should be active and decodable with the latest release of AMSAT's [FoxTelem](#) software. HuskySat-1 is expected to carry out its primary mission before being turned over to AMSAT for amateur radio operation.

HuskySat-1 features a 30 kHz wide V/U linear transponder for SSB and CW. The uplink passband will be 145.910 - 145.940 MHz LSB/CW. The downlink passband will be 435.840 - 435.810 MHz USB/CW (inverting). Telemetry will be transmitted on 435.800 MHz, 1k2 bps BPSK with an experimental downlink at 24.049 GHz. The "Fox-in-a-Box" *FoxTelem* software has been updated for HuskySat-1 operation at its [download website](#). The new release now contains the SD card image, FIAB-distro8-V1.08w.zip.

Continued next column

HuskySat-1 With VHF/UHF Linear Transponder Set to Deploy Soon. Continued from page 7.

This file, when unzipped and written to a 16 GB SD card, will provide the latest software for *FoxTelem* and will run on a Raspberry Pi 4. The 1.08 versions can switch bands between listening on VHF and UHF, based on which Fox and Husky satellites are overhead at the time. The linear transponder and telemetry system carried aboard AMSAT's Fox-1E was designed for use in different CubeSats merely by adding an interface adapter for connection to the host bus. Noting the prevalence of CubeSats built and launched by universities and other organizations, AMSAT adopted a goal of "amateur radio in every CubeSat." [Info from ARRL](#).

President Signs PIRATE Act to Combat Illegal Broadcasting

On January 24, President Donald Trump signed into law the "Preventing Illegal Radio Abuse Through Enforcement Act," or the PIRATE Act.

The measure, which amends the Communications Act of 1934, authorizes enhanced penalties for violators. Under the new law, pirate radio broadcasters would be subject to a fine of not more than \$2 million, and violators could be fined up to \$100,000 for each day during which an offense occurs. The new law stipulates that the FCC "shall not decrease or diminish the regular enforcement efforts targeted to pirate radio broadcast stations for other times of the year."

The FCC is to submit to the House Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation a report summarizing the implementation of this section and associated enforcement activities for the previous fiscal year.

The new law also requires "annual sweeps," during which FCC personnel will be assigned to "focus specific and sustained attention on the elimination of pirate radio broadcasting within the top five radio markets identified as prevalent for such broadcasts."

Continued on page 14

SpaceX's license to launch hundreds of internet satellites may have violated the law, experts say.

Greg Williams

2020-01-27

FCC, Legal, newsreel, Offbeat, Space

Astronomers could sue the FCC.

A federal agency may have violated the law when it licensed SpaceX to launch thousands of satellites, according to a forthcoming paper. That raises the possibility that disgruntled astronomers could sue.

The Federal Communications Commission (FCC) approved SpaceX's request to launch thousands of satellites in March 2018 — part of the rocket company's plan to blanket the Earth in high-speed satellite internet.

SpaceX has [already launched](#) 180 of those satellites and plans to send up additional batches every two weeks throughout 2020, for a total of 1,400 by the end of the year. The company hopes to finish the entire project, called [Starlink](#), in 2027. By then, the network could include [up to 42,000 satellites](#) — nearly [20 times](#) the number of operational satellites in orbit today.

But according to Ramon Ryan, a second-year law student at Vanderbilt University, the FCC might have violated a federal environmental law when it licensed the SpaceX project. Two legal experts agree, though the FCC rejects the idea.

Read more – Business

Insider: <http://bit.ly/2GtTP2Z>

Amateur Radio Technology Portal

Welcome to the ARRL's portal for Amateur Radio technology!

This article provides links to some of the technical facets of Amateur or "Ham" Radio. Hams use a lot of wireless technology that is of interest well beyond the amateur bands - antennas, feed lines, towers, receivers, transmitters, digital protocols and networks. Along with the topics of radio, you'll also find the hams-eye view of microprocessors, power supplies, audio, instrumentation, and electronics of all stripes. Hams are into the science of solar and space phenomena, geophysics, and satellites, among other things. We hope you'll find something interesting and useful to you in the world of Amateur Radio.

What You'll Find Here

The list of topics below presents sets of links deeper into the ARRL website and others around the world of ham radio. You'll find that ham websites and other information are organized according to how hams view the world. Go ahead and explore a bit - you will learn a lot about hams and ham radio.

What Are Hams Doing Right Now?

Why not take a look for yourself? The [DXMaps website](#) shows the contacts hams are reporting on any band and between any two locations - click the "LF-HF" tab or the "VHF & Up" tab, then "All Bands" to check out the ham radio activity!

Tell Us What Else You Are Looking For

We're starting small so that you can tell us about your interests - have a look around. Did you have something specific in mind when you opened this page? If you didn't see it or couldn't find a link to it here, let us know by sending an email to tech-portal@arrrl.org.

Radio Technology Topics-

The ARRL technical staff have compiled a comprehensive set of material on [Radio Technology Topics](#) that has many applications beyond Amateur Radio. You'll find articles and resources on everything from signal propagation to electrical safety and construction techniques.

The following are some samples of interesting ham radio tech:

Continued on page 9

Amateur Radio Technology Portal

Amateur Digital Networking and Protocols

Automatic Packet Reporting System - the worldwide system of location and weather reporting and ham-to-ham messaging.

Broadband-Hamnet - a microwave band wireless network for hams.

WSJT - the package of sophisticated digital comm software written by one of Amateur Radio's Nobel Prize winners, Joe Taylor K1JT, for "moonbounce," meteor scatter, and super-low-power communications

Fldigi - the popular free software that supports numerous digital modes from Morse to PSK31 to packet-based messaging.

Antennas and Electronics

ELSIE - free software for passive LC filter design

Kent Electronics - WA5VJB's collection of "cheap Yagi" designs and other antenna-related material

SDR Antennas - if you got one of those SDR "dongles", this "discone" antenna will help it hear better and will work for scanners, too.

W1GHZ - Paul Wade is one of ham radio's most prolific microwave designers and writers.

Software-Defined Radio (SDR)

HPSDR - an open-source SDR transceiver project for HF and VHF.

ARRL SDR - the ARRL's compilation of resources on SDR topics.

RTL-SDR - a compilation of software that supports SDR operating.

Technical References and Web Resources

ARRL Handbook - the comprehensive reference for amateurs.

ARRL Antenna Book - a compendium of useful techniques and projects for anyone interested in antennas and transmission lines.

K9YC Tutorials - a collection of papers, PowerPoint slide shows, and other documents by Jim Brown, K9YC, on a variety of technical topics.

Radio-Reference - a huge database of spectrum users and other technical resources for scanner and SDR users.

Repeater-Builders - collection of information about repeaters and technology associated with repeaters

Soldersmoke - an audio podcast by Bill Meara, MØHBR, on various electronic and ham radio topics
YouTube video channel of Randy Hall, K7AGE, on various electronic and operating topics.

Have fun no matter what your interest. End.

RCARC Book Give Away

The winner of the February Book give-away is **Brody Johnson** (K7VXV) and was awarded the below pictured book *The ARRL Operating Manual for Amateur Radio Operators*, 12th Edition.



March Safety Tip

Ready Tips: Earthquakes Can Happen Any Time – Prepare Now

This year marks the ninth anniversary of the 2011 East Coast earthquake. While earthquakes may be more common in some areas, they can happen anywhere and are unpredictable.

Reduce the chance of injury or loss of life during an earthquake by taking steps ahead of time to protect yourself and others. For example, consider taking FEMA's free training, [You Are the Help Until Help Arrives](#). This training shares five simple steps that you can take in the event of an emergency, such as an earthquake, that may save a life.

You can also stay safe with these tips from the [Ready Campaign](#):

- Secure all the items in your home that could fall and cause injuries (such as bookshelves, mirrors, and light fixtures).
- If you are in a vehicle, pull over and stop. Set your parking brake.
- If you are in bed, turn face down and cover your head and neck with a pillow.
- If you are outdoors, stay outdoors away from buildings.
- Do not get in a doorway.
- Do not run outside.

The Rainbow Canyons Amateur Radio Club (RCARC)
is Sponsoring an Amateur Radio

Technician Class

Beginner Level for Ham Radio

Dates: Thursdays - March 5, 12, 19, 26 and April 2, 2020
with the test, Thursday April 9, 2020

Time: 6:00 pm - 9:00 pm

Where: Cedar City Senior Center
489 E 200 South, Cedar City, UT 84720

Class Cost: Free

Study Manual: Free Download
Please bring to class

<http://www.ad7fo.com/media/TechLic2018.pdf>

Contact to register:

Linda Shokrian KG7PBX
435-867-5914 or
email: Lgshokrian@gmail.com



There is a \$15 ARRL Test Fee

The RST Reporting System

THE RST REPORTING SYSTEM IN A NUTSHELL!

RST Reports: An RST report is a report from a receiving station on the quality and strength of the transmitted signal. Using shorthand in the form of numbers to represent the tone of a CW signal or voice transmission of a transmitting station's signal at the receiving station's location (QTH).

Here is what it means:

R - Readability - Understanding what is said and how well. On a scale of 1 to 5, the readability of your signal with a "5" being perfect with no difficulty. In other words, the ability of the other operator to understand what you are saying. A "1" is unreadable.... a "5" is perfectly readable.

S - Strength - On a scale of 1 to 9, indicates how strong your stations signal is. A "1" is a very faint signal. A "9" is an extremely strong signal.

T - Used for Morse code signal reports. Indicates on a scale of 1 to 9 the quality of the tone of the Morse code "dits and dahs". From a "60 cycle harsh tone" a (1) To a "very pure tone", a (9).

NOTE:

The RST System of Signal Reporting was established roughly in 1934 as a quick method of reporting Readability, Signal Strength and the Tone of CW. For voice contacts only the "R" and "S" are used. The "S" component is usually not the same as your S-Meter reading as most S-Meters aren't calibrated to track the RST System. The RST is also reported on QSL Cards and must be filled in correctly. For example, a "569" report for a *voice contact* is NOT valid. Remember that the 3rd number from the left is for "Tone" in CW. Note that many DX operations and contest stations merely report "599" as a convenience to avoid having to log each of the real reports. This is a questionable practice but is used most of the time in DXing/Contesting. Would you give a 599 for a station you could barely hear? Would you appreciate it if this was your report from someone that could barely hear you? Be honest with your reports!

The RST report system works well, can be used for troubleshooting problems with your station and has been used by Hams worldwide for many years and also is used by the military with slight modifications in their reporting of transmissions.

R = READABILITY

- 1 -- Unreadable
- 2 -- Barely readable, occasional words distinguishable
- 3 -- Readable with considerable difficulty
- 4 -- Readable with practically no difficulty
- 5 -- Perfectly readable

S = SIGNAL STRENGTH

- 1 -- Faint signals, barely perceptible
- 2 -- Very weak signals
- 3 -- Weak signals
- 4 -- Fair signals
- 5 -- Fairly good signals
- 6 -- Good signals

Continued on page 12

The RST Reporting System

7 -- Moderately strong signals

8 -- Strong signals

9 -- Extremely strong signals

T = TONE

1 -- Sixty cycle a.c. or less, very rough and broad

2 -- Very rough a.c. , very harsh and broad

3 -- Rough a.c. tone, rectified but not filtered

4 -- Rough note, some trace of filtering

5 -- Filtered rectified a.c. but strongly ripple-modulated

6 -- Filtered tone, definite trace of ripple modulation

7 -- Near pure tone, trace of ripple modulation

8 -- Near perfect tone, slight trace of modulation

9 -- Perfect tone, no trace of ripple or modulation of any kind

Hope this helps some of you!

RCARC February Meeting Pictures



Fred (KI7TPD) conducting the Pledge of allegiance.



Fred (KI7TPD) conducting meeting business.



Larry (N7SND) giving Treasurer's Report



Don (WA7GTU) providing a repeater update.

Continued on page 15

ARRL HF Band Planning Committee Seeks Comments on Recommendations

QST de W1AW
ARRL Bulletin 5 ARLB005
From ARRL Headquarters
Newington CT February 5, 2020
To all radio amateurs

ARRL HF Band Planning Committee Seeks Comments on Recommendations

The ARRL HF Band Planning Committee is seeking comments and suggestions from the Amateur Radio community on its report to the ARRL Board. At the Board's January meeting, the committee presented its specific recommendations in graphical form for each HF band and each US license class, with the goal of increasing harmony on the HF bands, particularly between CW and digital users.

The recommendations can be found online in PDF format on the arrl.org web site. "In general, the committee is of the opinion that there is justification for additional space to become available for digital modes, as well as for the operation of digital stations under automatic control," the committee told the Board.

"The very changes in spectrum usage that have required our committee's resurgence indicate that digital modes of communication are already increasing in popularity, and the trend is expected to continue or even accelerate. To this end, we have tried to ensure that digital allocations are sufficient for at least a modicum of growth."

The committee also anticipates an increase in automatically controlled digital stations (ACDS). The report further points to "significant use" of modern data modes in emergency communication and said its recommendations provide significant support for the evolution and continued relevance of amateur radio.

Continued on next column

"Our failure to adapt to these needs could consign amateur radio to the technological scrap heap," the report said.

The committee was revived last summer to consider conflicts between FT and JT modes and other modes. The panel's approach has been to designate distinct assignments for CW, narrowband (NB) data 500 Hz, wideband (WB) data 2800 Hz, and ACDS. For its work, the committee presumed approval of three ARRL petitions to the FCC: RM-11708 (WT Docket WT 16-239-"symbol rate" proceeding), RM-11759 (80/75-meter allocations), and RM-11828 (enhanced Technician privileges).

The committee also assumed that users can agree to sharing arrangements within a given allocation-narrowband vs wideband sharing within the ACDS allocation, for example. It also took into consideration how mode usage is regulated or planned elsewhere in the world.

In terms of mode classes, the committee agreed on CW, NB data, WB data, NB with ACDS, and WB with ACDS. The committee said it considered these mode classes incompatible and that they should not have overlapping allocations, with the exception of CW, which is authorized within any amateur radio allocation. The committee's approach would maintain the existing low-end 25-kHz CW-only sub-bands for exclusive use by Amateur Extra class licensees.

The panel encouraged CW identification and a listen-before-transmitting protocol for ACDS, if feasible. It also decided that a single allocation for ACDS without regard to bandwidth would be the best approach. "We note that this will put responsibility on the digital community to hold an effective dialog on the issue and to then self-regulate the users of this segment to adhere to the eventual agreement."

A need for flexibility in allocations is desirable, the committee said, and considered whether allocations might be time-of-day or time-of-week dependent, for example.

Continued on page 14

The panel encouraged CW identification and a listen-before-transmitting protocol for ACDS, if feasible. It also decided that a single allocation for ACDS without regard to bandwidth would be the best approach. "We note that this will put responsibility on the digital community to hold an effective dialog on the issue and to then self-regulate the users of this segment to adhere to the eventual agreement." A need for flexibility in allocations is desirable, the committee said, and considered whether allocations might be time-of-day or time-of-week dependent, for example. "Modern amateurs must expect to adapt to this kind of fluid assignment of spectrum to incompatible uses, using time-based sharing, rather than only a single assignment," the committee said, expressing the hope that as band plan/sharing agreements are reached that they consider the advantage of non-simultaneous sharing possibilities. Reiterating the position ARRL has taken in recent FCC filings, the committee said it sees encryption and open-source as enforcement matters as being outside the scope of the Band Planning Committee. The Committee would like comments by February 19. Comments may be filed online at, <http://www.arrl.org/bandplan>.

Continued from page 7

President Signs PIRATE Act to Combat Illegal Broadcasting

The Commission also "shall conduct monitoring sweeps to ascertain whether the pirate radio broadcasting identified by enforcement sweeps is continuing and whether additional pirate radio broadcasting is occurring."

Under the new law, the FCC will change its rules so that it proceeds directly to issuance of a *Notice of Apparent Liability* (NAL) without first issuing a *Notice of Unlicensed Operation* (NOUO). Continued next column.

The FCC will develop and publish a database of all licensed AM and FM broadcasters, accessible directly from the FCC home page. The FCC is also required to publish a list of "all entities that have received a *Notice of Unlicensed Operation*, *Notice of Apparent Liability*, or forfeiture order," as well as "each entity...operating without a Commission license or authorization."

The law defines pirate radio broadcasting as transmitting within the AM and FM bands without an FCC license, but excluding unlicensed operations in compliance with Part 15. From ARRL.



RCARC February Meeting Pictures



Members listening to Don's repeater update.



Dick (K7ZI) discussing Filters to be used next FD.



Brody (K7VXV) showing the book he just won.



SWUPH POD presentation Screen.



Paulette Valentine (SWUPHD) Disaster Manager Presenting the Point of Dispensing presentation.



Linda discussing the POD Exercise about to start.

Fitting 19th Century technology into 21st Century warfighting.



Photo By [Lance Cpl. Larisa Chavez](#) | U.S. Marines with 2nd Radio Battalion and 8th Communication Battalion, II Marine Expeditionary Force Information Group, set up an antenna during a HAM Amateur Radio Licensing Course at Camp Lejeune, N.C., Jan. 10, 2020. The objective of the course was to increase knowledge on amateur radios and radio operating procedures in order to develop and enhance the Marines' capabilities. (U.S. Marine Corps photo by Lance Cpl. Larisa Chavez).

CAMP LEJEUNE, NC, UNITED STATES
02.07.2020

Story by [Cpl. Stephen Campbell](#)
II MEF Information Group

CAMP LEJEUNE, N.C. (Feb. 7, 2020)— U.S. Marines with Information Group, II Marine Expeditionary Force (II MIG) participated in a HAM Amateur Radio General Licensing Course as part of the group's High Frequency Auxiliary Initiative on base, Jan. 27-31, 2020.

The course, taught by members of the Bright leaf amateur Radio Club, out of Greenville, N.C., helps Marines learn the principles of high frequency radio operations as a contingency against a peer-to-peer adversary in real-world operations.

Continued on next column

Throughout the duration of the course, Marines learned HAM radio frequency and propagation theory, frequency band allocation, conventional and field-expedient antenna theory in addition to HAM radio operations and control.

U.S. Marine Corps Col. Jordan Walzer, commanding officer of II MIG, created the High Frequency Auxiliary Initiative after recognizing the need for utilizing more options in a combat environment. He wanted the Marines to familiarize themselves with older technology to ensure their lethality in any situation.

"Embracing technology is great but overreliance leaves us vulnerable," Walzer said. "In a peer-to-peer conflict, our space-based capabilities will be attacked. The next war will look less like 'Saving Private Ryan' and a lot more like 'Ghost Fleet'."

Contrary to Saving Private Ryan, which was fought utilizing traditional land-based maneuver warfare, Ghost Fleet is a book set in the near future and includes the addition of space and cyber warfare.

So wars of the past were fought in the air, on land and at sea, whereas future wars will likely include the addition of space warfare, explained Walzer. U.S. forces need to create a cohesion of modern technology and analog throwbacks to mitigate hackers and drones.

HAM radios make effective alternate communication because they do not rely on satellites or internet, but instead, radio waves. They can travel directly or indirectly, along the ground or by bouncing the radio waves off of the ionosphere or troposphere layers of the atmosphere to communicate.

"Right now, our adversaries are aggressively pursuing counter-space weapons to target our satellites and ground stations," Walzer said. "If our satellites get knocked out, what do we do then? [High Frequency] radio has been around for well over a century and is still used today. Why? Because it's a reliable, low-cost alternative to satellite communications. With the right training and education, a Marine with a radio and some slash wire can communicate over-the-horizon for long distances, even between continents."

Continued on page 17

Continued from Page 16

Fitting 19th Century technology into 21st Century warfighting.

HAM radios, also known as amateur radios, are communication devices created in the late 1800s. Depending how much an individual is willing to spend on equipment, someone can talk to others across town or across the world, all without the need for an internet connection. Although most people use HAM radios as a hobby, II MIG views them as potential lifelines in a highly contested environment.

There are three courses taught on HAM radios by the Bright leaf Amateur Radio Club. The entry level class is called the technicians course, which gives people frequency privileges in very high frequency (VHF) and ultra-high frequency (UHF) bands and some privileges in the high frequency range. A frequency privilege is just another meaning for permission to use a specific frequency. The HAM Amateur Radio General Licensing Course is the intermediate level course, which allows spectrum privileges on almost all spectrums that the government gives amateur radio operators. The expert class license, also called Extra Class, gives users full privilege on any frequencies allocated to HAM radios.

"I think the course was very informative," said Sgt. Matthew Griffith, an intelligence surveillance reconnaissance system engineer with 2nd Radio Battalion, II MIG. "It's good to learn the things that make our equipment work. In my area of this field we use the equipment but don't [always] know how the equipment works on the inside, which sometimes makes it harder to troubleshoot if a problem arises. Leaving the course with this knowledge will be invaluable for my Marines and me in the future."

Dave Wood, the president of the Bright leaf Amateur Radio Club and instructor of the course, plans to conduct the first expert level course in the future after enough Marines have graduated from the intermediate course. The club plans to host the next entry level course during the summer of 2020 and train more Marines.

Continued on next column

"The volunteers who make up our High Frequency Auxiliary are absolutely vital to us building a world-class capability," Walzer said. "We're drastically improving our skill by pairing experts with Marines who have a passion for HAM radio. They may not wear the uniform, but they're American patriots serving our country in a different way."

Whether the next conflict is fought in air, on land, at sea, or in space, one thing is clear; Marines will adapt to face those threats whether it is with the technology of today or equipment of the past.

[UtahVHFS] Important Club Communication: UPDATE on HB 101 – Distracted Driving Amendment

Club: Utah VHF Society
To: All Active Club Members
From: Melvin T Parkes (NM7P)
Date: Mon, 10 Feb 2020 16:02:04 MST
Subj: [UtahVHFS] Important Club Communication: UPDATE on HB 101 – Distracted Driving Amendments

2/10/2020 10:00MST UPDATE on HB 101 – Distracted Driving Amendments.

Great News! Representative Carol Spackman-Moss to amend HB101 to exclude 2-way Radio

Many Utah HAM radio operators have been closely following with concern HB 101 a bill targeting Utah's Distracted Drivers. The ARRL and two-way radio community are deeply about the problems caused by distracted drivers; however, the initial wording of H.B. 101 would have "outlawed" the use of hand-held held two-way radio microphones. The ARRL proposed an amendment to HB 101 to exclude two-way radio operations. Many of you have been actively contacting your legislators in support of this amendment.

As of 9:30 this morning the ARRL is reliably informed that the bill's sponsor, Representative Carol Spackman-Moss has heard our concerns, chosen to work with us, and will be amending her bill to accept the ARRL's suggested amendment, which exempts wireless devices operating under FCC parts 97, 95, and 90, prior to the bill reaching the House floor.

Continued on page 18

Continued from page 17

**[UtahVHFS] Important Club Communication:
UPDATE on HB 101 – Distracted Driving
Amendment.**

The ARRL wants to thank and commend Representative Carol Spackman-Moss for her prompt attention to and accommodation our concerns. We all need to actively encourage this type of positive response on the part of all legislators.

Those that may have already contacted their legislator are encouraged to follow-up to thank their representative for their attention and support, and to let them know that we all can” now support HB 101 as amended to exempt two-way radio”.

The ARRL would also like to thanks its members and affiliated clubs, UT VHF Society members, and the entire Utah HAM radio and two-way radio community that have contacted legislators and otherwise help out on this issue.

For more information contact:
Mel Parkes, NM7P -- Utah Section Manager,
ARRL (nm7p@msn.com)
Jay Brummett, W7WJB – SGL –UT Section, ARRL
(w7wjb@arrl.net)

RCARC meeting pictures continued



Members filling out paperwork during exercise.



Ron (K7HDX) and Fred KI7TPD Interviewing



Linda (KG7PBX) going over paperwork



Members waiting in line to be interviewed

Please see the Point of Dispensing (POD) Fact Sheet below that was passed out at our February RCARC Meeting. Paulette Valentine, Emergency Services Manager for the Southwest Utah Public Health Department (SWUPHD) presented the POD program to the attendees.



POINT OF DISPENSING (POD) FACT SHEET



What is a POD?

A POD (Point of Dispensing) site is a temporary clinic where medication or vaccine can be given out to large numbers of people in the event of a disease outbreak or a bioterrorism event. Each county in Southwest Utah has several pre-designated POD sites. The number of sites used would depend on the severity of the event.



Who would come to a POD?

In a disease outbreak, individuals who were exposed to the disease (or had contact with an exposed person) *but who are not sick*, would be instructed to come to the POD to receive their preventive medication or vaccine.



What happens in a POD?

Preventive medication or vaccine (depending on the actual disease agent) would be given to eligible people *who are not yet sick*. Pre-packaged medications would be dispensed along with instructions for use at home. Doses for both adults and children will be available. Vaccines would be administered at the POD.

Sick individuals should go to the hospital immediately.



How will people know about PODS?

Once a mass-dispensing of medication or vaccine is deemed necessary by state and local officials, information about POD locations, dates and times will be made available through media outlets (radio, TV, newspapers, and websites). Flyers may also be posted in public locations including libraries, post offices, health departments, etc. The health department website (www.swuhealth.org) and Facebook (www.facebook.com/swuhealth) will be primary information sources.



Who can I contact for further information?

For further information, please call the Southwest Utah Public Health Department Hotline at 435-673-3528, or visit our website at www.swuhealth.org.

*Photos from POD exercises
held in June 2011*

Iron County Office of Emergency Management (OEM) E-Comm Meeting Picture



Don Blanchard (WA7GTU) talking with the E-Comm meeting attendees.

Items discussed:

Intermountain Intertie – Don (WA7GTU)

Calling Tree update – Don (WA7GTU)

Status of current and new members – Don (WA7GTU)

Review status of the E-Comm Trailer Brad (WA7HHE)

Status of the new E-Comm Building – George Colson

E-Comm Vests (George Colson)

Upcoming E-Comm Exercises – Don (WA7GTU)

Status of Digital capability – Brad (WA7HHE)

DSTAR Repeater moving to the hospital still pending – Don (WA7GTU)

ARES Status – Don (WA7GTU)

Utah VHF Society use of “HabClubOnline.com – Don (WA7GTU)

Use of Remote Bases for E-Comm – Training (WA7GTU)