



INDIAN RIVER ARC

P.O. BOX 237285, COCOA
FLORIDA 32923-7285

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SPURIOUS EMISSIONS

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CLUB MINUTES

Traditionally, the club holds its Christmas party each year in lieu of a meeting. This year was no exception. On December 1st members gathered at the Merritt Island Red Lobster restaurant for an evening of good comradeship, conversation, laughter, and food.



HAPPENINGS

The Radio Club of Redmond's (Washington) November club newsletter had in informative article on squeeze keying, including the differences between various modes, and how keying has evolved over time. The author, Karl Fischer, DJ5IL, has made the article available on his website (PDF).http://cq-cq.eu/DJ5IL_rt007.pdf

NOAA has made available some tools to help with regional prediction of space weather events. The intent is to be able to warn utilities and space satellite companies ahead of events having the potential to disrupt their operations. The footprint of the regional forecasts is approximately 350 square miles, with a lead time of up to 45 minutes. Researchers from the University of Michigan and Rice University

developed the tools necessary to make this possible.

<http://www.accuweather.com/en/weather-news/noaa-issues-regional-forecasts-for-solar-storms-for-first-time-with-new-geospacial-model/60788980>

Molybdenum disulfide was used recently by researchers to create a transistor with a gate

size of one nanometer. The gate was formed out of a single carbon nanotube, and another unconventional material, zirconium dioxide, was used for the channel material. The size reduction reflects a 5 to 1 advantage over what is presumed to be a five nanometer lower limit for silicon transistors, but to be commercially successful, manufacturing process optimization will have to occur, according to an article in EE Times.

HAPPENINGS

From the ARRL:

New Russian Arctic Over-the-Horizon Radars Set for 2017 Startup.

According to media accounts, more long-range, new over-the-horizon (OTH) radars that can identify aerial and sea targets hundreds of miles away are scheduled to begin operation next year in the Russian Arctic. Over the past couple of years, OTH radars, sans woodpecker, have become increasingly commonplace intruders on Amateur Radio bands, according to the International Amateur Radio

Union Region 1 (IARU R1) Monitoring System (IARUMS), which has noted OTH radars in Russia, China, Cyprus, Iran, and Turkey. Sputnik, a Russian government-controlled radio service, cited a Rossiiskaya Gazeta newspaper report that six OTH radar installations will operate in the region.

OTH radars employ widely separated transmitting and receiving sites and can "see" beyond the horizon, the typical limit for ordinary radar. The systems employ antenna arrays of up to 5 kilometers long and 5 meters tall.

Anderson Powerpole Connectors, and Antenna Polarization" are the topics of the latest (November 3) episode of the "ARRL The Doctor is In" podcast. <http://www.arrl.org/doctor>

The Northern California DX Foundation is renewing the design of its well-utilized beacon network. As detailed in the [Winter 2016 NCDXF Newsletter](#), if everything goes to plan, most users will not notice any difference. One popular way to use the network is [in conjunction with the Reverse Beacon Network](#). By checking the historical data of reception

reports from a monitoring station near you, it can help to identify the right time and frequency to be on a particular band to maximize your chances of working a particular multiplier. It pays to check the ["Using the RBN"](#) web page.

ARRL Southern Florida Assistant Section Manager Ray Kassis, N4LEM, of Cocoa, Florida, died unexpectedly on November 9. He was 69. Licensed as WB4CTZ in 1966, he served the ARRL Southern Florida Section for many years in various capacities, most recently as Space Coast District Emergency Coordinator (DEC) and Assistant Section Manager (ASM). A good friend to Brevard hams, he will be missed.

ON THE AIR

Look for call signs containing "YOTA" (Youngsters on the Air) during the month of December. During the entire month, activity will take place with younger hams at the radio.

<http://www.ham-yota.com/december-yota-month/>

Yath Yoshikawa, JG2MLI, will head back to the Japanese Polar Research Syowa Station on East Ongul Island to operate with the commemorative call sign 8J60JARE, marking the 60th anniversary of the Japanese

Antarctic Research Expedition (JARE) from January 2017 until January 2018. He will operate SSB, CW, RTTY, and digital modes on 40 through 10 meters and will post his logs to Club Log.

ANTARCTICA. Felix, DL5XL is QRV as DP1POL from the German Neumayer Station III, IOTA AN-016, until February 2017. Activity is on all HF bands using mainly CW and possibly some SSB and digital modes.

QSL via DL1ZB0.

GREECE, SV. Members of the Radio Amateur Union of North Aegean are QRV with special event call sign SX25LSV from Lesbos Island, IOTA EU-049, until the end of 2016 to celebrate the club's 25th anniversary. Activity is on the HF bands using SSB and various digital modes. QSL direct to SZ8LSV.

MALI, TZ. Laurent, F5IXR is QRV as TZ5ZR until February 2017. He may be active on 160 to 6 meters. QSL via F5MXH.

Straight Key Night

This 24-hour event is not a contest; rather it is a day dedicated to celebrating our CW heritage. Participants are encouraged to get on the air and simply make enjoyable, conversational CW QSOs. The use of straight keys or bugs to send CW is preferred. There are no points scored and all who participate are winners. Straight Key Night is held every **January 1** from 0000 UTC through 2359 UTC.

Antarctic Radio by Armando Delgado, KN4JN

Antarctica was the last continent to be discovered. It was not until 1820 that the Russian Fabian Gottlieb von Bellingshausen became the first person to see the Antarctic mainland (January 27), and almost 100 years later, on 1911, that the Norwegian explorer Amundsen reached the South Pole. This achievement was part of a piecemeal exploration of that continent that is still ongoing.

Because of its remote location and its harsh weather, Antarctica is not a land favorable to colonization. Per-

haps for this reason no country claimed territory in Antarctica during the earlier years of exploration. In 1959 an international treaty guaranteed that Antarctica remained open to the entire world as a place to do research only. The treaty banned military bases, mining, or the dumping of nuclear waste. Today, Antarctica hosts many research bases in different areas, all controlled by different countries. Most of the scientific activities occur in

the Antarctic summer (our winter) when the climate is less rigorous.

Due to the barrenness and isolation of this land, radio became the primary method of communications from the time the technology became available, and amateur radio became a big part of that radio activity. During Richard Byrd's first Antarctic expedition in 1928, he utilized radio

extensively and had regular contact with amateur operators.

Hams are quite active during the months they reside there. Since the advent of the Internet, Antarctic amateurs created their own web sites that provide information on their activities. Among others, they have an annual contest called the Antarctic Activity Week during which time multiple stations try to contact as many hams as possible throughout the world.

Low Frequency Amateur Communications

They even offer awards for those contacting the largest number of Antarctic stations. There are plenty of QSL cards. Just about every country and every research station has a QSL card.

The web site www.waponline.it, hosted by Italian amateurs, has a wealth of information regarding Antarctica, including listing of the multiple amateur stations active there. Antarctic summer time (our winter) is the time to contact Antarctica. Stations are active on most bands and modes, although their operating windows are rather limited due to the strong magnetic storms prone to occur at those latitudes. The Antarctic Activity Week normally occurs in February. This coming year, it will be between February 20-26, 2017.

They even have a net:

Antarctic Net :23.00z random on Saturdays 7.078MHz by LU4DXU Also check 14.160MHz, 14.188MHz, 14.203MHz, 14.243MHz from 17:00z and ahead.

Plus there are many other web sites that cater to Antarctic hams:

<http://f4egx.homelinux.net/DDU2008/index.php>
<http://www.vk0bp.org/>
<http://3y0e.com/>

<http://www.gm0hcq.com>
<http://www.qsl.net/4k1f/index.html>

<http://www.qsl.net/em1u/index.html>
<http://www.dl5xl.de/?DP1POL>
<http://k2arb.blogspot.com>
<http://www.alfaradio.ca/r1anf.php>
<http://www.feerc.obninsk.org/rw3xa/>
<http://www.dt8a.com/main.html>

<http://www.kkn.net/~k5tr/vp8/husvik.html>
<http://www.lars-boehme.de/vp8dif/index.html>
<http://www.kkn.net/~k5tr/vp8/husvik.html>

<http://www.geocities.com/vk0ld/home.html>
<http://zs8t.net/>
http://www.radioclubs.net/aa_vp8yl/

<http://zs8t.net/>
http://www.radioclubs.net/aa_vp8yl/

And not to forget, American stations operating from Antarctica use the call sign group KC4AAA-KC4AAZ for stations affiliated with the National Science Foundation and KC4USA-KC4USV for stations with the US Navy.

SANTA HUNT – OF9X ACTIVE FROM DECEMBER 01 THRU DECEMBER 31, 2016

SANTA RADIO, OF9X IS INTRODUCING THE HARD WORKING TWELVE (12) ELVES

As for many years Santa is now setting up for his world tour – including Amateur Radio – and will provide your family an added pleasure for this Christmas. The exciting news is that for the first time in the history of OF9X, Old-Father-Nine-Christmas, the elves will step forward so that you can get to know them and their part in the Christmas scene. And better yet, you can make an effort to find them together with your young ones whether within your family or in your immediate neighborhood. There are twelve elves operating OF9X and they indicate themselves with the 3-letter identity thus your maximum elf-multiplier can be twelve (12). You should try to work them on all amateur bands and modes (CW/SSB/DIGI from 630m to 70 cm) and each QSO would give you a one-point (1). If you are outside of Europe your points are doubled (2). Summing up the QSO points and multiplying them with contacted number of elves

W1AW Qualifying Run for December, 2016

| Date | Time | Day | Notes |
|-------------------|-------|---------|-------------|
| December 2, 2016 | 10 PM | Friday | 10 - 40 WPM |
| December 13, 2016 | 9 AM | Tuesday | 10 - 35 WPM |



W1AW CW PRACTICE TRANSMISSIONS

7 PM EST Slow CW : 5-15 WPM
Mon, Wed, Fri

7 PM EST Fast CW: 35-10 WPM
Tue, Thu

makes your Frozen Santa Bag, the final score. Only 2016 QSOs are valid for the Bag. If you miss the elf identity for whatever reason no problem as you can send your QSO listing to Santa HQ and these elves would count them for you. (santapoints@sral.fi); you can also look for your QSOs at the Club Log and each slot may illustrate the elf you had contacted.

Here is your list of elves: Arto, OH2KW (ART); Arttu, OH2FB (ATU); Jyri, OH2KM (JYR); Martti, OH2BH (MAR); Niko, OH2GEK (NIK); Pauli, OH5BQ (PAU); Pekka, OH2TA (PEK); Pertti, OH2BEE (PER); Raimo, OH2BCI (RAI); Tom, OH6VDA (TOM); Pertti, OH2PM (SIM) and Erik, OH2LAK (LAK)

FREQUENCIES:

1.8025, 3.5815, 7.0475,
14.0475, 18.0975, 21.0675,
28.0675, 147.555

Editor's Note:

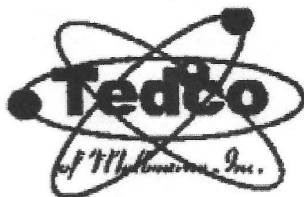
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olardelga@aol.com.



437 S. BABCOCK ST.
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WEB PAGE:
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