

INDIAN RIVER ARC

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K N 4 J N

The Amateur Radio on the International Space Station (ARISS) packet system is back on the air with new equipment. Crew members installed the new module on February 2; the RF gear remains the same. The packet system operates on 145.825 MHz. ARISS is an official back-up system for astronauts to talk with Mission Control in the unlikely failure of the station's primary communica-

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SPURIOUS EMISSIONS

MARCH, 2019

CLUB MINUTES

President Dave KUOR began the meeting at 7:31 PM with the Pledge of Allegiance led by Greg AB4GO. New member Jeff Stewart KX4NM was recognized.

Dave announced the passing of club member and former IRARC President Ernie Baldini K4RBD. Dave had found a lot of good information about Ernie in the club history page. Ira K8HRR shared with us some memories of the early BEARS days when he, Jim Bayless and Ernie had started BEARS and acquired COM1. A service for Ernie will be held March 23rd.

The February meeting minutes were published in the February newsletter. A motion was heard to approve the February meeting minutes. A second was heard and the February meeting minutes were approved by acclamation.

The Treasurer's report showed \$1963.82 in checking and \$1777.92 in the Equipment

HAPPENINGS

tion systems.

"Are We Entering a Maunder Minimum?" is the topic of the February 14 episode of the "<u>ARRL The Doctor is In</u>" podcast and "Meet the Raspberry Pi" is the topic of the February 28 episode.

Jeanne Socrates, VEOJS/ KC2IOV, a 76-year-old yachtswoman is trying to circumnavigate the world in her 38-foot Treasurer's report was heard, a second was heard and the Treasurer's report was approved by acclamation. Dave reported for the Tech

Fund. A motion to approve the

Committee and said that nothing has changed with the repeaters and everything is up and running. There is no status change for the go kits. The Red Cross station upgrade is in progress and we did a lot of tree trimming the previous weekend. Antennas are scheduled to go up this weekend. We have a new TV in the shack to view local broadcasts and also the LISATS amateur TV repeater. Greg AB4GO discussed low loss cable and mismatch at the feed point and how that affects efficiency. The next acquisitions for the shack are the AGM batteries we need for backup power.

The MS walk is March 16th at the Church of Viera. We need 8 to 10 volunteers spread out at various locations. We also need someone to shadow the event organizer. Contact Dave KUOR if you can participate. Viron N4VEP mentioned the JDRF walk May 4th at Wickham park.

Emergency Coordinator Les W9BCH reported that nothing much is new and he is recuperating at the moment. Dave added that we will be testing the capabilities of the upgraded radio shack as a mini emergency exercise.

New Business: Ernie K1CPO told the group that the Sheriff's department is sponsoring a picnic for veterans at the Merritt Island Airport on March 16th from 10 AM to 2PM.

The 50-50 drawing went to Les W9BCH.

A motion to adjourn occurred at 7:59 PM and was moved and approved.

Respectfully Submitted

Steve N4UTQ

Secretary

sailing vessel *Nereida*. While underway, Socrates keeps in touch with a community of friends via Amateur Radio. She's sticking to a schedule of 7.160 MHz at 0230 UTC daily. Socrates reported making contact with some ham radio friends on the US west coast on February 17. She's been <u>blogging</u> her progress. More info <u>here</u>. ATMOSPHERIC COSMIC RAYS ARE INCREASING: Cosmic rays in the stratosphere are intensifying for the 4th year in a row. This finding comes from a campaign of almost weekly high-altitude balloon launches conducted by the students of Earth to Sky Calculus. Since March 2015, there has been a ~13% increase in X-rays and gamma-rays over central California, where the students have launched hun-

HAPPENINGS

dreds of balloons. Full report at http://spaceweather.com/

The January issue of the IARU Region 1 Monitoring System (IARUMS) <u>newsletter</u>reports the Russian "Sunflower" coastal radar, located east **of** Vladivostok, is being heard at nights on 3,716 kHz and 6,860 – 7,005 kHz, as well as on several 60-meter frequencies.

Alex Schwarz, VE7DXW, in British Columbia, Canada, is exploring the possibility that "RF signatures" detected by

ON THE AIR

PHILIPPINES, DU. Christian, F4EBK is QRV as DU3/F4EBK from Luzon Island, IOTA OC-042, until March 31. Activity is on 80 to 10 meters using CW, SSB and various digital modes. QSL direct to home call.

IRELAND, EI. Members of the Kerry Amateur Radio Group are QRV as EI100YXQ during 2019 to mark the hundred years since the first transatlantic voice transmissions from Ballybunion, Ireland to Louisbourg on Cape Breton Island, Canada. QSL via EI9FVB. the <u>RF Seismograph</u> propagation tool could also be indicating earthquakes, and may even be able to predict them shortly before they occur. More information <u>here.</u>

St. Patrick's Day Special Event Offering New Award this Year

The St. Patrick's Day Award a 48 -hour annual event will run from 1200 UTC on March 16 until 1200 UTC on March 18. A new award will be available to those operating modes requiring software or a computer. To register as a station or to learn more, visit the <u>St. Patrick's Day Award</u> website.

Justin McAllister's simple, postapocalypse-friendly antennas is an excellent primer on antennas. View the 25 minutes presentation here.

The Mosquito Net meets each Wednesday night at 1900 on 28.333. The **Mosquito Net Tailgate** will take place at Fox Lake Park in Titusville on March 30th at 8am. Fox Lake Park is located at 4400 Fox Lake Road. Talk In frequency is 146.970 tone 107.2 Tailgating is free. Beef hotdogs, chips & sodas will be

avaiabile,Contact <u>KU4ZO@cfl.rr.c</u> om or <u>W4REN@aol.com</u> Info 321-269-2796.

ARRL Field Day 2019 is less than 110 days away. The Field Day exchange can now occur using FT8. Make sure the software you are using (e.g. WSJT-X, MSHV) can support the Field Day exchange, and is set up to do so.

PANAMA, HP. Special event station H31A is QRV until August 15 to commemorate the 500th anniversary of the founding of Panama City. Activity is on 80 to 10 meters using SSB, RTTY, PSK31 and FT8. QSL via HP1AVS.

THAILAND, HS. Special event station HS55RAST is QRV until March 31 to commemorate the 55th anniversary of the Radio Amateur Society of Thailand. QSL via HS5NMF.

JAPAN, JA. Special event stations 8JOM, 8J2M and 8J9M are QRV until April 30 to mark the 30th General Assembly of the Japan Medical Congress in Chubu. QSL direct to JP7FSO.

The Battleship Texas 105th Birthday Mar 1-Mar 14, 0000Z-0000Z, W5T, Cleburne, TX. Club KC5NX. 14.225 14.045 7.225 7.045. QSL. CLUB KC5NX, 9200 Summit Court West, Cleburne, TX 76033. Club KC5NX is back on the air this year to help celebrate the 105th birthday of our Grand Lady, The Battleship Texas...really neat QSL card, special freq / time request honored, whatever... We'll be on the air !! SASE requested. 73. club.kc5nx@gmail.com <u>https://</u> www.qrz.com/db/kc5nx

Cezar, VE3LYC will be active as VE3LYC/KL7 from Little Diomede Island, IOTA NA - 150, Alaska, 18 - 26 March 2019. He will operate on 40 - 17m CW, SSB. QSL via VE3LYC direct, ClubLog OQRS.

9G2DX Team will be active from **Ghana**, 9 - 20 March 2019. They will operate on HF Bands. QSL via LOTW, eQSL.

Attic Antennas by Steve Luchuck, N4UTQ

I was living in a two story town house condominium when my general ticket arrived. These units had their own attic space and I did not have to think very hard where my first antenna was going to go. My good friend and coworker WB4ZUY loaned me his backup radio, a Kenwood 520S and on my way home from work picked up 35 feet of thick house wire and a 50 foot piece of coax with connectors. I cut the PL259 off one end of the coax and soldered the two legs of the antenna directly onto the RG58 and hung the feed point at the apex of the attic using twine. Using more twine I stretched the two legs of the dipole alongside the rafters in an inverted V. I made slight adjustments to the length using a CB radio type SWR meter and the radio's tune feature and thus my first 20 meter dipole was fabricated. In 1988, the 20 meter band was thick with guys that only wanted to QSO with strong stations and my first few conversations centered around suggestions of erecting a tower with a beam antenna. The tower being out of the question, my mentor suggested that I try 15 and 10 meters instead. Back then those two bands were alive so I fabricated two more antennas in identical fashion. I was now finding the other stations much friendlier and became a regular on one 15 meter net. Shortly after receiving my license I rode with my mentor and his wife down to the Miami hamfest in early 1989 and came back with a Swan 500C and this was the radio I used mostly on 15 meters, but I did a lot of listening on 10, 15 and 20. Also somewhere in this time frame I got a 5 position coax selector switch to direct my signal to the desired antenna. With the 20 meter dipole in the attic I could hear a little on 40 and 75. I was not interested in the 40 meter band since it was saturated with broadcast stations, but 75 was a lot more interesting. On 75 I heard groups of guys just sitting

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around like a fireside chat. They all called each other by their first names and they had this amazing way of passing the conversation around without doubling and when one would give his call sign, all the others did likewise in the established rotation order. So I thought it would be really cool to join one of these groups but a dipole in the attic for 75 meters was out of the question. One day I noticed an add in QST for Isotron antennas, so I asked some other hams that I knew on the 147.37 repeater what they thought of the Isotron HF antennas and nobody would recommend them. At the time, these Isotron antennas presented the only option to get on 40 and 75 meters so I took a chance and bought them both. Once I had two more runs of coax coming out of the attic I was living in a condominium with HF capability for 80, 40, 20, 15 and 10 meters, all the bands my Swan 500 could offer.

I was scoping out the groups on 75 meters and I heard a station call for a radio check and they went around: "Mine's here", "Nothing wrong with my radio", "Mine's OK", "QSY Lid". This was the first time I heard someone being called a "Lid". Boy am I glad I did a little listening before transmitting. Over the years I have heard a lot of rude operators, mostly with thick hillbilly accents on 75 meters and still today I don't go there often. It's a great nighttime band and I go there once in a while if my 40 meter group all QSY there, but my point about attic antennas is there are options for attic antennas for 75 and 40 meters.

When I moved to my new location I built a new antenna for 20 meters and located it in my now one story attic. I had also stepped up to an loom 746, which had a built-in antenna tuner and it would tune the 20 meter dipole just fine on 17, 15, 12 and 10 so for many years that was all I needed. Once I was tuning around on 20 meters and there was a weak but readable station calling CQ, so I went back to him. It turned out that he had just gotten his general and he was making his first contact. When I asked him what he was using for an antenna, he told me he only had a 20 meter dipole in his attic. Well then, that makes us the 20 meter dipole in the attic club! On another occasion I was monitoring the Maritime Mobile Service net about the time they were having that crisis in Haiti and the only communications in and out of that island was a ham called Father John. A representative of the SATERN net was asking listeners to go down to 14.265 to assist, so I tuned down there. What I heard was net control calling for a station in Florida to come up on the net for a propagation check. No one responded, so I called net control and told him where in Florida I was located. He told me to read something out of a magazine or something so that other stations could see how propagation was into and out of Florida. After reading a couple of paragraphs out of a OST article. I heard stations all over North America tell net control how well they were hearing me and I was pleasantly surprised to find my attic antenna working well. A station in Toronto said I was weak but he could understand me. That was the only time I have ever attributed a null off the tip of a dipole. After using that dipole for years as my only antenna, I replaced it with a slinky antenna that stretched the 50 foot length of that part of the attic and used it on all bands with an antenna tuner. I logged several contacts with that antenna on the contact board. I relocated the 20 meter dipole to another part of the attic now with the tips going east and west so now I have two attic antennas. I have since replaced the slinky with an alpha delta 40 through 10 meter antenna which I carefully tuned the 40 meter leg for 7220. So

that's my current attic inventory. a 40 through 10 meter fan dipole and a 20 meter dipole. The 20 meter dipole is located close to a Mylar covered air conditioning duct and does not seem to have any affect. I have ambitions to put the 40 and 75 meter Isotron up in the attic and feed them with a single feed line. During hurricane Irma I monitored the hurricane net on 14.325 using the multiband antenna and when the power went out all my radios continued on battery power until the power came back three days later.

I have had people tell me their attic is too cramped with air conditioning ducts to effectively locate antennas there, but I am not convinced. Living here in Florida where we frequently have to take down our outside antennas when a storm gets close, it makes sense to have some sort of antenna protected by the attic or other interior space. In a dire situation to have an HF antenna and radio system backed up by batteries is a great comfort.

W1AW QUALIFYING RUN

Mar 1 10 PM Fri 10-40 WPM Mar 13 7 PM Wed 10-35 WPM

W1AW Qualifying Runs are sent on the same frequencies as the Morse code transmissions. Underline one minute of the highest speed you copied, certify that your copy was made without aid, and send it to ARRL for grading. Please include your name, call sign (if any) and complete mailing address. The initial certificate is available for a \$10 fee. Subsequent endorsement stickers are available for a \$7.50 fee.



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

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

FREQUENCIES: 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 50.350, 147.555



Editor's Note:

Send comments about the Newsletter or to contribute information or articles to the Editor's email address:

olardelga@aol.com.

ACTIVE REPEATERS AND SIMPLEX FREQUENCIES (FM ANALOG) REV 5/25/2018

OUTPUT FREQ.	OFFSET	TONE	CALL	LOCATION	OWNER
145.130	-600	107.2	AB4AZ	VERO BEACH, INDIAN RIVER	AB4AZ
145.350	-600	103.5	K4OSC	St. CLOUD, OSCEOLA	K1XC
145.370	-600	156.7	W2SDC	COCOA	IRARC
145.470	-600	107.2	K4HRS	MELBOURNE	HIRAC
145.490	-600	100	WN3DHI	TITUSVILLE	NORTH NET
146.610	-600	None	W4MLB	MELBOURNE	PCARS
146.775	-600	100	K4KSC	MIMS	TARC
146.850	-600	107.2	W4MLB	PALM BAY	PCARS
146.880	-600	107.2	W4NLX	ROCKLEDGE	IRARC
146.895	-600	107.2/107.2	K4EOC	PALM BAY	EOC
146.910	-600	107.2	K4KSC	TITUSVILLE	TARC
146.940	-600	None	K4GCC	ROCKLEDGE	LISATS
146.970	-600	107.2	K4KSC	TITUSVILLE	TARC
147.075	+600	107.2/107.2	K4EOC	TITUSVILLE	EOC
147.135	+600	107.2/107.2	K4EOC	ROCKLEDGE	EOC
147.240	+600	123	KV4EOC	VOLUSIA	VARES
147.255	+600	107.2	K4DCS	PALM BAY	DCS
147.330	+600	107.2	K4NBR	TITUSVILLE	NBARC
147.360	+600	107.2	N4TDX	TITUSVILLE	NBARC
444.325	+5000	107.2	K4DCS	PALM BAY	DCS
444.375	+5000	107.2		SEBASTIAN	SARNET
444.425	+5000	107.2	W4MLB	Melbourne	PCARS
444.525	+5000	103.5/103.5	K4EOC	ROCKLEDGE	EOC
444.650	+5000	107.2	W4NLX	COCOA	IRARC
444.925	+5000		N1KSC	KENNEDY SP. CTR.	KSCARC
442.850	+5000	107.2/107/2	N4TDX	TITUSVILLE	NBARC
444.750	+5000	107.2/107.2	N4TDX	TITUSVILLE	NBARC
224.520	-1.600	107.2	N4TDX	Titusville	NBARC
PACKET STATIONS	5				
145.010	WINLINK		W2PH-10	PALM BAY	DCS
145.090	PCARS		W4MLB-2	MELBOURNE	PCARS
145.770	SEDAN		K4EOC-7	PALM BAY	N2DB
145.770	SEDAN		KD4MWO-4	TITUSVILLE	N2DB
146.550	SIMPLEX		K4DCS	SOUTH REGION	DCS
147.540	SIMPLEX		K4EOC	RACES Bay	EOC
146.520	SIMPLEX			GENERAL CALL	
146.580	SIMPLEX		W4MLB	MELBOURNE	PCARS
146.480	SIMPLEX		W4NLX	CENTRAL REG	IRARC
146.595	SIMPLEX		K4KSC	NORTH REGION	TARC
146.560	SIMPLEX		NBARC	NBARC General Simplex	NBARC

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