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This year's **IRARC Memorial Joseph P. Rubino, WA4MMD, Scholarship**, \$1,500 each, goes to John Light, KM4ICZ, Melbourne, FL and Christopher L. Timperio, KM4ITZ, Pooler, GA.

The FCC and OSHA have announced the release of a free publication, **Communications Tower Best Practices Guide**. While aimed more at those who

tend commercial communication towers, the guide offers guidance applicable to the Amateur Radio community and contractors working on Amateur Radio antenna support structures. The FCC said the guide was a result of two tower safety workshops.

Registration now is open for the 2017 **W4DXCC DX and Contest Convention**, the Southeast's largest and most popular DX and

CLUB MINUTES

The meeting began at 7:35 PM with the Pledge of Allegiance. Next, visitors were recognized and Del, AK4EY's daughter, Wendy, was present. Running the meeting was President Dave, KUOR.

Special Needs: Greg spoke about Sheila, KJ4ERI, who passed away in June. Her obit should be in the next issue of QST. She participated in testing of our Satellite Terminal for at least 2 of the four years we performed that task.

The June meeting minutes appeared in the June newsletter. Members offered a motion to approve the minutes, there was a second and the June meeting minutes were approved by acclamation.

Larry KK4WDD gave the Treasurer's report: \$1277.17 in the equipment fund and \$923.08 in checking. We heard a motion to approve the Treasurer's report; following a second, the motion was approved by acclamation. Viron, N4VEP, then came to the

podium and reported that his students' ham radio instruction slowed down because of insurance issues. Also, he traveled from one end of the county to the other checking the amateur radio repeaters that are active and compiled a list. He added that a SET is coming in July and the only club repeater in the emergency plan that is operational is the 145.37 repeater. Dave K4UZM corrected Viron in that the 146.88 is still the back-up for the 37repeater. Following, Dave, KUOR, reported for the Technical Committee saying that all our repeaters are up and running and performing well. Some repeater south of Jupiter is getting into the 88 repeater on Fusion, but is only heard in the input frequency and is not activating the repeater.

Then Dave, KUOR, talked a little about Field Day: 20m and 40m were the money bands, plus we had 30 digital contacts this year. QRP Saturday will be at... not sure. Del, AK4EY, spoke about the Dave Norton antenna that is in his garage and he needs to get rid of it along with a bunch of cable.

Dave, K4UZM, reported that the generator test on the 145.37 repeater was successful. They cycled the power from battery to AC to battery and back to AC

contesting event, September 22-23, at the MainStay Suites in Pigeon Forge, Tennessee.

"The Mystery of Sporadic E" is the topic of the (June 8) episode of the ["ARRL The Doctor is In"](#) "Generators" is the topic of the new (June 22) episode

without a problem. The president then turned the podium over to Les, W9BCH, our Central EC. Les talked about his career and then brought up the SET.

Larry, KK4WDD, asked about BEARS' financial status. Dwaine, KM4HCN, answered for BEARS and stated that they have received some hefty donations for BEARS1. Greg added that Stephanie Phillips donated \$1100 to BEARS. Dwaine parted with a recital of the BEARS officers.

Old Business: None.

New Business: None.

Next came the 50-50 drawing and the winning ticket was found to be in the hands of John Steffes, KEOGG, who was tasked with bringing the donuts after commenting about the donuts. The regular donuts guy just simply forgot to pick up the donuts for this meeting.

A video about a massive Chinese radio telescope project followed the 50-50 drawing. After the video

a motion to adjourn occurred at 8:27 PM: moved and approved.

Respectfully Submitted

Steve N4UTQ

To commemorate its 20th anniversary, [ARRL](#) is planning to transmit a set of 12 slow-scan television (SSTV) images that capture the accomplishments of ARISS over the years. SSTV transmissions from the International Space Station will take place on 145.800 MHz FM around the July 15-16 weekend.

SPURIOUS EMISSIONS

JULY, 2017

VOLUME XLIII, NUMBER 7

HAPPENINGS

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The ARRL will sponsor a 2017 Atlantic Hurricane Season Webinar on Monday, July 17, at 8 PM ET (0000 UTC on Tuesday, July 18). The approximately 90-minute session will address the role of Amateur Radio during the 2017 Hurricane Season. Anyone interested in hurricane preparedness and response is invited to take part in this online presentation. [Webinar registration](#) is free and open to all.

On June 24 and 25 club members participated in Field Day at the club house on North Courtenay Parkway. After a relaxed operating

schedule, the group achieved a total of 83 CW, 61 phone, and 31 digital contacts.

International Amateur Radio Union Region 1 Monitoring System (IARUMS) volunteers continue to document many of the same signals intruding on Amateur Radio bands — some of them audible in other parts of the world, according to the latest editions of the IARUMS Region 1 [newsletter](#) that lists many of the intruders.

Texas radio amateur and pilot Brian Lloyd, WB6RQN, is right on schedule on his commemorative Amelia Earhart [round-the-world flight](#). He has been operating SSB on 17, 20, and 40 meters (18.117, 14.210, 14.346, and 7.130 MHz).

The next QRP event will possibly be at Manatee Cove Park on Saturday July 15. For updates check the group's web site https://groups.yahoo.com/neo/groups/Space_Coast_QRP_Group/info

The Boy Scouts of America station K2BSA will be on the air during the 2017 National Scout Jamboree, July 18 to July 28, from the Summit Bechtel Scout Reserve in West Virginia. [All information](#) for making a contact with K2BSA during the Jamboree is on the K2BSA website.

The organizers of the January 2018 [3Y0Z DXpedition to Bouvet Island](#) — the second most-wanted DXCC entity, according to Club Log's [DXCC Most Wanted List](#) — said the team continues to refine its plans and, "depending on weather and other factors," hopes to be on the air for 14 to 16 days. The team will depart the South Shetlands Islands on January 13, 2018, the 3Y0Z organizers said

ON THE AIR

07/19/2017 | 2017 National Scout Jamboree
Jul 19-Jul 27, 0000Z-2300Z, K2BSA, Glen Jean, WV. K2BSA Amateur Radio Association. 18.140 14.290 7.190. QSL. Jim Wilson, 2065 Valleywood Dr, Grapevine, TX 76051. We will be on the Scout calling frequencies and posting our operations to Facebook and Twitter. www.k2bsa.net/jamboree
Jul 23-Jul 30, 1700Z-1700Z, W9W, Oshkosh, WI. EAA Warbirds of America. 28.450 1.350 14.250 7.250. QSL. Ed Finnegan, K9ECF, 69 Mohawk Ct, Cary, IL 60013. www.warbirds-eaa.org

Aug 4-Aug 5, 1400Z-0400Z, K1CG, Port Angeles, WA. Coast Guard CW Operators Association. 21.052-21.327 14.052-14.327 7.052-7.227 3.552-3.827. QSL. CGCWOA/CW or CG Club/voice. See website for QSL info www.grz.com/db/k1cg

UKRAINE, UR. Special event station E025P is QRV [until December 31](#) to celebrate the 25 years of the Volyn Amateur Radio League. QSL via operators' instructions.

ANTIGUA AND BARBUDA, V2. Tim, VE6SH will be QRV from

July 23 to August 7 as V29SH. Listen for his vacation style operation mostly on 30 and 17 meters. QSL via VE6SH and LoTW.

FRANZ JOSEF LAND, RI1. Eugene, UA4RX will be active as RI1FJ from Heiss Island (EU-019) starting sometime in July until August 2017. Activity will be on 160 to 10 meters using CW, SSB and digital modes. QSL via UA2FM, direct, ClubLog's OQRS or LoTW.

Aug 5-Aug 6, 1400Z-2359Z, various, Pikes Peak, CO. Color-

ado 14er Event Task Force. 147.42 14.345 14.060. QSL to station worked. Radio amateurs operate from the Colorado 14,000 foot mountains plus Summits On The Air peaks. See web site for details. Lots of SOTA action across North America this weekend. www.ham14er.org

The commemorative call sign OF100HQ will be on the air during the [IARU HF World Championship](#) event July 8-9 to mark Finland's 100th anniversary.

SSTV by Armando Delgado, KN4JN

Amateur radio utilizes many modes of transmission, some more popular than others, some more available or costlier than others, and over the years, the usefulness and popularity of different modes change. One mode that waxed and waned in popularity with time is slow scan television, or SSTV.

SSTV one might say is the stepchild of electronic facsimile transmission. Facsimile, used for the transmission of images, first over wire, then on the air, originated in the 1800's,

with the on air radio transmission first occurring in the 1920's. Facsimile devices scan the image and then transmit it in sequential lines, a technique very similar to television transmission.

After the advent of broadcast television technology in the 1950's, amateurs wanted to incorporate that medium into the hobby. One problem with analog broadcast television is that it requires at least

6 MHz wide channels, because it transmits 25 or 30 picture frames per second (in the NTSC, PAL or SECAM color systems), which makes it impractical for the narrow amateur HF bands. Then in 1957-58 the concept of SSTV was introduced by Copthorne MacDonald, VE1BFL. He developed the first SSTV system using an electrostatic monitor and a vidicon tube. In those days it seemed sufficient to use 120 lines and about 120

pixels per line to transmit a black-and-white still picture within a 3 kHz phone channel, using audio tones between 1200 and 2300 Hz. It is a much slower method of still picture transmission, usually taking from about eight seconds to a couple of minutes, depending on the mode used to transmit one image frame. First live tests were performed on the 11m ham band — which was later given to the CB service in the US. The ham community first heard about the sys-

SSTV

tem in articles that appeared in the August and September 1958 issues of QST magazine. Later, in the 1970s, two forms of paper printout receivers were invented by hams.

SSTV originally required quite a bit of specialized equipment. Usually there was a scanner or camera, a modem to create and receive the characteristic audio, and a cathode ray tube with P7 phosphor, generally from a surplus radar set. The special cathode ray tube would have "long persistence" phosphor that would keep a picture visible for about ten seconds. This complexity and expense caused few hams to embrace the mode, which over time enjoyed very limited popularity.

Then in the 1990's, with the advent of computers, programs appeared using the computer sound card to detect and create the SSTV signals, making it possible for any ham with a computer and a simple link-up to the radio to transmit and receive SSTV images, and eliminating all the extra hardware previously required. Now this once-esoteric aspect of the hobby is easily available to any ham, and most of the software required is available as freeware in the internet.

As computers and the Internet evolved, the capacity to acquire high resolution images and send them through the Internet makes the transmission of grainy and at times unobtainable pictures through radio a dying art. Today in spite of the ease of operating SSTV few hams take advantage of that medium. Users are primarily a core cadre of hams dedicated to that format.

Usual SSTV frequencies in the HF bands:

1.843-2.000 MHz LSB

3.845 MHz LSB

7.171 MHz LSB
14.230 MHz USB
21.340 MHz USB
28.680 MHz USB



SILENT KEYS

It is with sadness and regret that we hear that

Doug Farnsworth N4MPD became a Silent Key last April.

Doug, a former club member and avid CW and QRP operator, was living in Sun City, AZ.



ON THE LIGHTER SIDE

A gynecologist tired of his profession, and wanting less responsibility, decided a career change was in order. After some serious thought, he decided that being an engine mechanic, something he had once enjoyed prior to college, would be a good choice. However, it had been a long time since he had tinkered with an engine and he knew that in order to compete with the younger workforce, he would

have to go to school.

He enrolled in a technical institute that specialized in teaching auto mechanics. He aced the course, but the final exam required each student to completely strip and reassemble an engine. It was with some trepidation that he took the test. At completion, he turned the engine over to his instructors for evaluation and awaited his final grade.

When they were handed out, he did a double take at the 150% grade he received. Rather confused, he asked his instructors how it was possible to have a grade like this. "It is really quite simple," they said. "We gave you 50% for correctly disassembling the engine, 50% for correctly reassembling it, and an additional 50% for doing it all through the muffler."



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

FREQUENCIES:

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

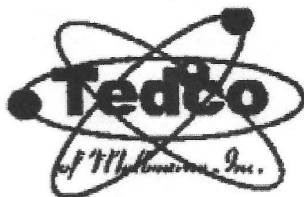


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