



**INDIAN
RIVER ARC**

P.O. BOX 237285, COCOA
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VOLUME XLIV, NUMBER 5

SPURIOUS EMISSIONS

MAY, 2018

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CLUB MINUTES

President Dave KU0R began the meeting at 1935 with the Pledge of Allegiance..

Following the Pledge, visitor Danny KN4KKH was introduced.

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

Larry KK4WDD, our Treasurer, reported we have \$2033.86 in checking and \$1777.46 in the equipment fund. A motion was heard to accept the Treasurer report for audit, a second was heard and the Treasurer's report was approved by acclamation.

Vice President Viron N4VEP then spoke about going solar for Field Day and then listed his solar equipment. Larry pointed out the Solar Symposium on

May 24 at the Solar Energy Center. Dave continued the discussion with his experiences operating solar on Field Day.

Dave followed up with his technical report. All the repeaters are working but they do not have the ability to go analog only anymore. Dave went on to explain that we are getting Bridgecom repeaters. Larry interjected that we have committed to spending \$5000 on the central net emergency stations and Dave explained that he already has the Bridgecom repeaters and the club will incur no further expense. Repeater controllers are also in abundant supply: we have one for each repeater and a third backup unit. Also the 88 repeater at Wuesthoff Hospital has redundant backup power.

The JDRF walk is at Wickham Park this Saturday and volunteers need to be there by 7am. They will be operating 147.42 simplex.

It looks more and more like Field Day will be going solar and Dave K4U2M offered a solar panel for Field Day.

We need someone to manage the food for Field Day and we agreed that whoever did the food last year would do the food again this year.

Jerry KJ4IMP reported that on June 2nd we will have another RACES training at Fox Lake Park. Dwaine KM4HCN reported that all the EOC's VHF repeaters are now have the 107.2 tone but the 70cm repeater uses 103.5 tone.

Les W9BCH offered a huge generator for Field Day and he plans to use it here at the Red Cross station.

A motion to adjourn occurred at 2009 and was moved and approved.

Respectfully Submitted

Steve Luchuk Secretary

HAPPENINGS

"Microphones" is the topic for the April 12 episode of the [ARRL The Doctor is In](#) podcast.

Radio Amateurs in Canada to Get New 100 W 5 MHz Allocation
Radio Amateurs in Canada are poised to join those in several other nations around the world who have access to a new 60-meter band, 5351.5 – 5366.5 kHz, as agreed upon at World

Radiocommunication Conference 2015 (WRC-15), but with a maximum power of 100 W effective radiated power (ERP). The updated [Canadian Table of Frequency Allocations](#) includes the new allocation, although radio amateurs have not yet been authorized to use it.

Special Canadian call sign VB18FIFA will be among those active around the world from

June 1 to July 15 for a World Cup 2018 football Amateur Radio "marathon." The event will be held during the [2018 FIFA World Cup in Russia](#). Russia's IARU member-society SRR is encouraging Amateur Radio organizations to field World-Cup-related call signs, preferably with "FIFA" (or "FWC" for finalist countries) as a suffix. An award for working FIFA stations is available from SRR [online](#).

Russia will have 32 call signs on the air for the event, with R18 prefixes suffixes spotlighting participating countries or cities where matches are held. For example, R18ARG honors Argentina, and R18SWE honors Sweden.

Eleven call signs will represent cities where the matches are held, such as RC18KA for Kaliningrad and RC18SO for Sochi. Two headquarters call

HAPPENINGS

R18FWC. Organizers say that as of April 15, 76 FIFA member countries have indicated plans to participate in the event.

"Amateur Radio Roundtable"
Host Tom Medlin, W5KUB, will once again [livestream](#) selected activities from the 2018 [Hamvention®](#) in Xenia, Ohio, during what he calls the "Hamvention Marathon Webcam" — more than 40 hours of live video from the annual show. This will mark Medlin's 17th year covering the show for those unable to attend Hamvention.

On April 3, FEMA announced that the agency is conducting its [2018 National Level Exercise](#) for the whole community and invites other government agencies, representatives and organizations in the private sector, communities, and individuals to participate in this historic exercise. The 2018 National Level Exercise (NLE), based on a mid-Atlantic hurricane scenario, represents one key step towards implementing FEMA's recently released [2018-2022 Strategic Plan](#).

The 2018 National Level Exercise, which takes place April 30-

May 11. The exercise will test lessons learned from the 2017 hurricane season. To learn more, see <http://www.fema.gov/nle>.

To celebrate the marriage of Great Britain's Prince Harry to American actress Meghan Markle, special event call sign **GR9RW** will be on the air May 19 – 23. It's believed that this will mark the first use of a GR9 call sign prefix in the UK.

In May 2018 the First Class CW Operators Club (FOC) will

celebrate with the [FOC 80th Anniversary Challenge](#). During the entire month, FOC members from around the world will be active on CW, using special call signs, many of them containing the number "80" or having an "FOC" suffix.

The Military Auxiliary Radio System (MARS) will sponsor the traditional military/amateur radio communication tests to mark the 67th annual Armed Forces Day (AFD) on Saturday, **May 12**. Complete information, including military stations, modes, and frequencies, is available on the [US Army MARS website](#). QSL cards will be available for stations successfully contacting participating military stations.

ON THE AIR

05/01/2018 | UBA 70 Hits The Airwaves
May 1-May 31, 0000Z-2359Z, OT70 calls, Brussels, BELGIUM. Royal Union of Belgian Ham Radio. All bands, all modes. QSL. QSL will be, available via OARS on, Club Log, BELGIUM. See website for a complete list of participating OT70 stations. www.uba.be

05/06/2018 | Grand Prix of Indianapolis
May 6-May 13, 2200Z-0400Z, W9IMS, Indianapolis, IN. Indianapolis Motor Speedway ARC. 21.350 14.245 7.245 3.840. Certificate & QSL. Indianapolis Motor Speedway Amateur Radio Club, P.O. Box 30954, Indianapolis, IN 46230. See website for information on getting QSLs and certificates. <https://www.qrz.com/db/w9ims>

05/08/2018 | USS Ward Commemoration
May 8, 1400Z-2200Z, W2W, Cottage Grove, MN. South East Metro Amateur Radio Club, WOCGM. 14.260 14.040 7.260 7.040. Certificate. Certificate can be downloaded from website. Certificate can be downloaded from the SE-

MARC website two weeks after the special event. semarc.org

05/20/2018 | Lindbergh Flight Across the Atlantic
May 20, 1330Z-2000Z, K2CAM, Garden City, NY. Long Island Mobile Amateur Radio Club. 21.340 14.240 7.240. QSL. LIMARC, P.O. Box 392, Levittown, NY 11756. The Long Island Mobile Amateur Radio Club will operate K2CAM, the call sign of the Cradle of Aviation Museum as it commemorated the solo flight of Charles Lindbergh across the Atlantic Ocean in 1927. www.limarc.org

05/24/2018 | Memorial Day K1A
May 24-May 30, 0000Z-0000Z, K1A, Cleburne, TX. Club KC5NX. 14.224 14.045 7.255 7.045. QSL. Jay Stanfield, 9200 Summit Court West, Cleburne, TX 76033. Club KC5NX will be on the air again this year as K1A to honor those who have sacrificed themselves to secure and protect our freedom. It is a day we encourage every individual, young and old, to pause, to give thanks and to remember. kc5nx.radio.club@gmail.com or www.qrz.com/db/kc5nx

05/24/2018 | Strange Antenna Challenge
May 24-May 27, 0400Z-0659Z, K0S, Springfield, MO. NOEW. 14.300; all modes, all bands. This special event is open to all legal amateur radio operators; individual amateur radio operators and clubs are invited to participate as a special event station. QSL requests must be sent to the amateur radio operator or club with whom contact is made; not NOEW, unless that is the station with whom you have made contact. All legal frequencies may be used. The Strange Antenna Challenge is a special event in which amateur radio operators employ found or makeshift antennas to simulate emergency operating conditions following a storm or other natural disaster. It is also an educational outreach opportunity for clubs to stir interest in antenna theory, and as an interesting special event to draw the interest and potentially new amateur radio operators from the public. The call sign K0S is an affirmation of the unique public service given to all of us over the years. erikeweaver@gmail.com

06/02/2018 | First Nuclear Submarine USS NAUTILUS
Jun 2-Jun 3, 1300Z-2100Z, N1S, Groton, CT. Generations Amateur Radio Club. 21.324 14.264 7.264 3.924. QSL. via bureau c/o K3LBD or or direct to GARC, Harrison Solt, N1FAM, 110 Vinegar Hill Road, Gales Ferry, CT 06335. Museum Ships Weekend participant. Nautilus info: ussnautilus.org. <https://www.qrz.com/db/n1s>

ITALY, I. The UN Global Service Center ARC, 4U1GSC, in Brindisi, Italy, will change its call to 4U29MAY from May 1 to June 30. This promotes the International Day of UN Peacekeepers, which is May 29. Despite the UN call sign, it will count as Italy. QSL to 9A2AA

INDIA, VU. Special event call VU8FOC will be QRV from May 1 to 31 to celebrate the FOC's 80th anniversary. QSL via operators' instructions.

SEYCHELLES, S7. Michael, VK4EF is QRV as S79LD from Mahe Island and La Digue Island, both IOTA AF-024, until May 31.

ARTICLE FROM QST, JULY, 1995

A Low-Profile 10-Meter Antenna

Put this simple whip antenna on your roof and have fun!

By Brian Smithson, N8WRL
1670 Edgewood Lane
Milford, MI 48381
E-mail: smithson@acm.org

Because I recently upgraded to a Technician Plus license, I wanted to take advantage of my new HF privileges. I already have an 80-meter dipole and I really enjoy CW on that band. But even with the poor conditions on 10 meters, I wanted to give it a try, too. I decided to use a vertical antenna on 10 meters because I had a Radio Shack 102-inch stainless-steel whip (#21-903, \$15) just looking for an application!

Construction

The construction is very simple and took all of an hour to complete. I purchased a Radio Shack mirror/luggage rack bracket (#21-937, \$10) and removed the bolts and the back plate. I bolted the bracket to the fascia board on one end of my roof peak with 3-inch lag bolts to make sure I tapped into the roof truss (see Figure 1). I was concerned about strength, but the antenna survived some recent 40-mph winds (gusting to 50 mph)!

This vertical requires a ground plane, and it's best if it angles down to bring the feed-

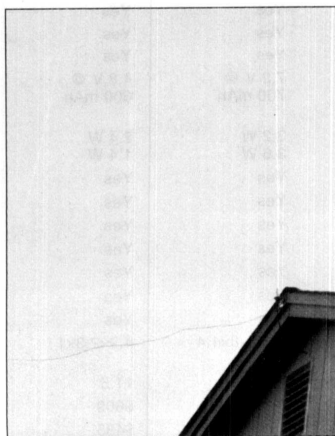


Figure 1—The sleek, low-profile whip antenna is hardly visible against the daylight sky. One radial wire can be seen sloping away from the bracket at roughly a 45° angle.

point impedance close to 50 Ω . I used three radials made of 8-foot pieces of scrap wire I had in my junk box. I crimped a spade connector to one end of each wire and connected these under the lag bolts (Figure 2). My roof line has a couple of levels and this makes radial installation easy. Two of the wires follow the roof line away from the peak at a 45° angle. I shoved the wires under the shingles in a few places to hold them down. The third wire angles toward the lower roof peak and is fastened with a screw eye and some string.

If you don't have a roof line like mine,

it's very simple to mount the bracket along the peak of your roof and run four radials down along the shingles. This might even perform better than my setup!

Connect your coax to the bracket with a PL-259 connector. I sealed my PL-259 against the weather with some Coax-Seal putty wrapped tightly around the mating connectors and the cable. The bracket has a 3/8-inch threaded stud to accept a whip antenna, so that it accepts the 38-inch threaded stud of the 102-inch whip. So, the last step is to screw the stainless whip into the stud. Don't tighten it down yet, because you'll be removing it for tuning later.

Tuning

The Radio Shack 102-inch whip is cut for 11-meter CB, so we'll have to shorten it a bit for use on the 10-meter amateur band. Since I planned to use this antenna for the 10-meter Novice/Technician phone subband, I decided to aim for a resonant frequency of 28.4 MHz, right in the middle of the subband.

Check the SWR at 28.4 MHz. You'll find it is a bit high, so unscrew the whip and cut off about half an inch. Screw the whip back on the mount and check the SWR again. Repeat this until the SWR gets down to where you want it. Don't cut off too much at a time. You'll have a hard time adding to the whip if you cut too much! If you're fortunate enough to own an SWR analyzer, this process will be much quicker; I had to climb up and down the ladder and basement stairs a few times to take these measurements!

I cut off a total of 2 inches to get the SWR down to 1:1. (Anything below 2:1 is acceptable for most rigs.) At this length, I found that my SWR ranged from 1:1 at 28.1 MHz to about 1.1:1 at 28.5 MHz. Not bad! This tells me the whip probably will have sufficient bandwidth to operate well on the rest of the 10-meter band when I upgrade.

Performance

Luckily for me, there was a good 10-meter opening the day I put up the antenna. I received 59 signal reports all along the East Coast, and 57 to 59 reports in California and the rest of the West Coast. In about two weeks' time I worked 20 states and 15 countries (mostly South Americans)! A DX contest in progress certainly helped!

In all, I'm very pleased with the performance of my whip antenna. It has a low enough profile to pass the marital bliss test, and it is also fairly inexpensive. You might give it a try!

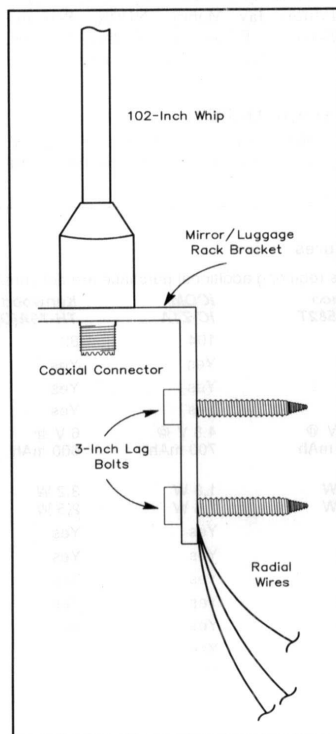
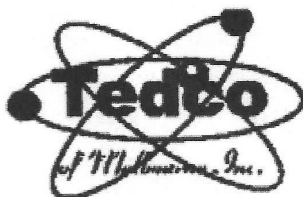


Figure 2—There isn't much to this design. Just remove the back plate from a Radio Shack mirror/luggage mount and thread your lag bolts through the holes. The radial wires make contact with the bracket at one of the lag bolts. The whip screws onto the top of the mount.



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