

# RCA AMATEUR RADIO CLUB

APRIL, 2007      MONTHLY NEWSLETTER      INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, APRIL 3rd, AT 6:30 PM AT DOOKZ SPORTS GRILL,  
3800 E. 96<sup>th</sup> STREET, INDIANAPOLIS, IN

## RCA ARC NEWS

**SUMMARY OF THE MARCH MEETING** – At the March meeting the recent enhancements to the Echolink system on W9RCA were discussed. Bud, W9EEJ, gave a status report. A motion was approved to reimburse N9KT and W9EEJ for expenses incurred for Echolink. Our club will again this year provide prizes at the Indianapolis Hamfest for the home brew contest and the QSL card contest. A gift certificate from R&L Electronics will be the prize for the best homebrew entry. Other prizes will be acquired for the QSL cards. At the Dayton Hamvention this year, the lunch and dinner get-togethers will be the same as in the past several years everyone is welcome to attend. (Details in our May Newsletter.) Our Club has for sale an Yaesu 2M FM mobile transceiver and a 440 MHz FM mobile transceiver that were used in the shack at Thomson. Dave Brown expressed an interest in the 440 MHz radio which has an intermittent shaft encoder. Several others have expressed interest in the 2M FT-2500M. It was decided to auction the radio with a "two bid" email auction. K9RU will provide the details. Dave, N9KZJ, announced the upcoming Indianapolis Radio Club hilltop contest.

**INDY RADIO CLUB "EXPRESS GENERAL CLASS" STARTS MARCH 31** -- The Express General Class will meet for a total of 4 sessions, starting on Friday, March 30, then the following Monday, Wednesday, and Friday, April 2, 4, and 6. Each session will go from 6:30-9:00 pm. (4 DAYS), in the first floor Board Room at the Indianapolis Training Center, 2820 N. Meridian St., Indianapolis. This is the same building that the Indianapolis Radio Club Meetings are held in. The class will be using the ARRL General Class License Manual. The plan is for the class to all take the exam on Saturday, April 7th. Hopefully, we can introduce some new General Class hams at the next IRC meeting.

If you enjoy ham radio now, once you upgrade to General, you will really enjoy the thrill of talking to someone hundreds or thousands of miles away using just your HF rig and a piece of wire strung between some trees! If you or someone you know are interested in upgrading from Technician, now is the time to do it! Contact Tom Price at [pricetr@comcast.net](mailto:pricetr@comcast.net) if you want more information.

**BIDDING FOR THE RCA ARC YAESU FT2500M 2 METER RADIO** -- At the March meeting the club decided to sell the 2 meter radio that was used in the club station at Thomson. Since there was more than one person interested in buying it, it was decided to sell by taking bids. This is to be a two round bidding process with the highest bid of the first round to be published to the email list allowing for a second round of bidding if anyone wants to bid higher. Minimum bid is \$35 and bids can be e-mailed to: [k9ru@arrl.net](mailto:k9ru@arrl.net).

First bids will be accepted starting on April 1<sup>st</sup> and bidding will close on April 8<sup>th</sup>. The high bid will be announced by RCA ARC mailing list on April 11<sup>th</sup> and the second round of bidding will start on April 15<sup>th</sup> and close on April 22<sup>nd</sup>. All bidders in the second round will be notified of the winning bid and arrangements will be made to pickup the radio.

The radio is in good shape, the back light lamps need replaced. It will be at the April meeting for anyone interested. –K9RU

**RIDE THE IRC DAYTON HAMVENTION BUS, HAVE FUN AND SAVE MONEY --** Looking for a ride to the Dayton Hamvention on Saturday May 19<sup>th</sup>? The Indianapolis Radio Club has chartered a bus again this year. Seating is available to all Indianapolis area hams, you don't have to be a member of the Indianapolis Radio Club.

Cost per person is \$25.00 per person, roundtrip, no refunds and the bus goes rain or shine. First come, first served. Pickup will be at the designated locations in the Indianapolis area and the bus will drop you off at the door of Hara Arena.

It will return to Hara at noon for those who have items to secure or store for the return trip. At 4PM the bus will return to pick up everyone for the return trip and should arrive back in Indy at about 7 PM. The bus will stop on the trip to Dayton for a quick breakfast and on the return trip for a quick dinner.

Departure pickup will be at 6:30 AM at Southern Plaza just north of I-465 & South US31 exit, or on the east side at 7:00 AM, just East of I-465 & US40 (East Washington street), at Franklin Rd. Indy talk-in or lost navigation will be on the 146.67 repeater.

To sign up for the bus trip contact IRC Treasurer, Judy, AA9GW. E-mail: [AA9GW](mailto:AA9GW) or tickets can be purchased at the April IRC monthly meeting. <http://www.indyradioclub.org/bustripdayton07.htm>

**RCA ARC SHIRTS ARE AVILABLE --** We have several of the new RCA ARC shirts in L and XLT (extra large-tall) sizes. The shirt color is tan. Your first shirt is \$15. Additional shirts are \$20 each. Contact Jim Keeth at [af9a at arrl.net](mailto:af9a@arrl.net).

**RCA ARC NEWSLETTER BY EMAIL –** Look around at work, and at other club meetings, etc. for other hams who may not be on our email list and should be. Anyone can subscribe. Check the bottom of our home page on the web at <http://www.w9rca.org/> for the link to the automated subscription service.

## HAMFESTS; EVENTS

15 Apr	Peru, IN
18-20 May	Dayton Hamvention
23-24 June	Field Day
7 July	Indy Hamfest, Camp Sertoma

## ARRL OFFERS ALTERNATE APPROACH TO "REGULATION BY BANDWIDTH"

In the wake of recent changes in the Part 97 Amateur Radio rules, the ARRL has revised its "regulation by bandwidth" proposals to match the new reality, avoid some unintended consequences and temper some of the controversy the original petition had aroused. In a November 2005 Petition for Rule Making (RM-11306 <http://www.arrl.org/announce/regulatory/rm-11306/RM-11306-asFiled.pdf>), the League asked the FCC to establish a regulatory regime that would segment bands by necessary bandwidths ranging from 200 Hz to 100 kHz rather than by emission mode. The ARRL now is urging the

FCC to adopt a "subset" of the rules <http://www.arrl.org/announce/regulatory/rm-11306/appendixA.html> contained in its original petition that largely affects only the amateur bands at 28 MHz and above.

“Because the proposals affecting the bands above 28 MHz had not aroused much controversy, they were retained in the shortened list,” ARRL CEO David Sumner, K1ZZ, explained this week. “Regulation by bandwidth rather than by mode of emission remains controversial below 28 MHz because of its perceived potential impact on established operating patterns, so these proposals were removed from the list with one narrow exception.”

That exception addresses the fact that current rules impose no effective bandwidth limit on HF digital operation. “Digital emissions using multiple carriers, such as OFDM [orthogonal frequency division multiplexing], can be designed for any bandwidth while staying within the existing rules,” Sumner points out, “so, the subset of proposed rule changes includes a bandwidth limit of 3 kHz on RTTY and data emissions below 28 MHz.”

The proposed 3 kHz RTTY/data bandwidth limit aims to avoid the possibility existing under the present rules that a single digital station could monopolize large MF and HF band segments. In an Erratum this week the ARRL also asked the FCC to retain the existing 500 Hz bandwidth limit that applies to certain automatically controlled RTTY/data stations under §97.221.

The ARRL proposal would amend the definition of “bandwidth” in §97.3(a)(8) to read: “For a given class of emission, the width of the frequency band which is sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.” The rule references the definition of “necessary bandwidth” appearing in Parts 2 and 97 of the FCC rules.

If the FCC adopts the League’s revised proposals, the 10, 6 and 2 meter amateur bands would be segmented into subbands allowing maximum emission bandwidths of 200 Hz, 500 Hz, 3.0 kHz (with an exception for double-sideband, full-carrier AM phone), 16 kHz or 100 kHz. Above 222 MHz, the entire emission must be within the allocated Amateur Radio band to comply with §97.307(d).

Sumner concedes that the subset of proposed rule changes in RM-11306 would provide less protection to CW, RTTY and other narrowband modes than the League’s original proposals afforded, but not less than the existing rules provide. “In fact, protection against interference from wideband digital modes would be increased, not decreased, even by adoption of the subset,” he contended.

Some confusion arose because of an inadvertent omission in the initial notice of a meeting on this subject between ARRL officials and FCC staff. This week's Erratum addressed that issue.

Additional consternation followed in the wake of a widely circulated, but erroneous, comment alleging "the complete absence of CW as a mode in the table of HF modes" the ARRL submitted. The ARRL has proposed no change to §97.305(a) of the rules, which authorizes CW on all amateur frequencies except on 60 meters.

The League has petitioned the FCC to permit CW and other modes on 60 meters, in addition to the presently permitted upper-sideband SSB.

After studying the topic several years, the ARRL Board of Directors continues to support the principles of regulation by bandwidth contained in the original RM-11306 petition.

“Regulation by bandwidth provides a better regulatory framework, not only for the introduction of future digital emissions but for the protection of traditional narrowband modes

as well," Sumner asserted this week. He expressed the hope that the subset of RM-11306 modifications offers an alternative that "will make it easier for the FCC to move at least part of the way in that direction." --ARRL Letter

## **KNOW YOUR PRIVILEGES! MISCONCEPTIONS ABOUND REGARDING TECH HF PRIVILEGES**

Some Technician licensees who gained new privileges February 23 remain unaware or uninformed as to what they may and may not do on the HF bands, says ARRL Regulatory Information Specialist Dan Henderson, N1ND. In addition to all Amateur Radio operating privileges above 50 MHz, Technicians who never passed a Morse code test now have CW privileges on certain segments of 80, 40 and 15 meters plus CW, RTTY, data and SSB privileges on certain segments of 10 meters. And that's it. "Know your privileges <http://www.arrl.org/FandES/field/regulations/bands.html>," Henderson advises all Amateur Radio licensees. He says some Technicians apparently believe their new HF phone privileges go far beyond what they really have.

"Technicians have no phone privileges on any HF band other than 10 meters, period!" Henderson emphasizes. "That's the bottom line. If you want to operate phone on the other HF bands, you'll have to upgrade to General or Amateur Extra class."

A lot of Technician licensees appear to have done just that, according to statistics compiled by Joe Speroni, AH0A <http://ah0a.org/FCC/Licenses.html>. So far in March, the number of General class licensees is up by more than 2700 over the February figure to 134,173, after hitting a 5-year low of just under 131,000 in January. The number of Technicians dropped by 4655 in the same period to 318,838. Speroni notes, however, that his mid-month figures tend to underestimate actual totals.

Most Technician license holders face a learning curve to take advantage of their new CW privileges on HF, but they no longer have to pass a Morse code examination. Technicians also may use their new HF privileges without having to apply for them first. No other license class automatically acquired additional privileges February 23. The "omnibus" rule changes effective last December 15 did not give Technician licensees without Morse code credit any additional privileges either.

Henderson further warns new Techs not to extrapolate additional phone privileges by misconstruing the FCC Part 97 rules to mean something they don't.

"Calls I've been getting lately indicate that some misinformed individuals believe Technicians may operate 'digital voice' on 80, 40 and 15, where they have only CW privileges," he says. "Not true. Digital voice is really digitized voice, and it's not permitted in non-phone band segments."

Henderson reiterates that Technicians do not have FM voice privileges on 10 meters -- or on any other HF band, for that matter.

The HF privileges all Technicians now have are equivalent to those that Novice licensees enjoy, Henderson notes. "This also means the 200 W maximum power limit still applies, regardless of where you operate in the HF bands," he says. Technicians may operate at up to the legal limit on VHF and UHF, however.

On 10 meters, Technician and Novice licensees have CW, RTTY and data privileges from 28.000 to 28.300 MHz, and CW and SSB privileges from 28.300 to 28.500 MHz. "We're sorry that the sunspots aren't favoring 10 meters at this point in the sunspot cycle, but they

will in a few years," Henderson allowed.

In addition, Technicians and Novices have CW -- and only CW -- privileges on from 3.525 to 3.600 MHz on 80 meters, from 7.025 to 7.125 MHz on 40 meters and 21.025 to 21.200 MHz on 15 meters.

Henderson believes at least some of the confusion may have originated with a few brand-new or inexperienced Technician licensees who heard that the FCC deleted the Morse code requirement to obtain an Amateur Radio license, but paid little attention to the fine print.

"And we all know the devil's in the details," Henderson says. "Remember, the FCC requires you to know where you may and may not operate and with what modes. Stick to the privileges your license allows or risk hearing from the FCC." --ARRL Letter

## HAMVENTION ANNOUNCES 2007 AWARDS

Dayton Hamvention® <http://www.hamvention.org/> has named ARRL President Emeritus Jim Haynie, W5JBP, as its 2007 Amateur of the Year. Hamvention says Haynie's League leadership "helped define Amateur Radio's role in emergency communication." Hamvention also announced this week that ARRL Laboratory Manager Ed Hare, W1RFI, will receive Hamvention's Special Achievement Award to recognize his technical expertise in documenting the threat of interference from broadband over power line (BPL) systems. Internet Radio Linking Project (IRLP) <http://www.irlp.net/> David Cameron, VE7LTD, was named the recipient of the Technical Excellence Award.

A ham for 34 years, Haynie, who lives in Dallas, was West Gulf Division Director for eight years and an ARRL vice president for two years. He then served three terms as the League's volunteer president, from 2000 until 2006, when he was succeeded by current ARRL President Joel Harrison, W5ZN. Haynie's award nomination cited his "energy, tenacity and attention to detail that has transformed the American Radio Relay League from the service organization it was prior to 9/11 into the proactive, vital emergency service clearing house and educational operation that it is today."

Special Achievement Award: Ed Hare, W1RFI

Dayton Hamvention will honor Hare for his extensive work calling attention to the potential threat of BPL interference to licensed radio communication services and in documenting it. A member of the ARRL HQ staff for more than 20 years, Hare said he's honored but feels the award really is one for Amateur Radio.

"What I did would have had no meaning without the work of hundreds of hams across the country working on BPL issues locally," he said. "They have put in countless hours as volunteers, making a difference when a difference was really needed."

Hamvention said Hare's modeling of BPL interference "made a convincing argument" about the threat. "Hare even outfitted his own automobile so he could travel the Northeast and conclusively document BPL interference," the announcement added.

Technical Excellence Award: David Cameron, VE7LTD

In announcing the recipient of its Technical Excellence Award, Hamvention cited Cameron's instrumental role in developing IRLP to permit worldwide radio and repeater linking.

"His work literally transformed FM repeater communication from a local entity into a worldwide communication network that has been of immense value in emergencies and has helped unite the world's radio amateurs over the Internet and radio," the announcement said. "IRLP and its derivatives have opened up a whole new world of communications in VHF/UHF repeaters with the power of the Internet."

Dayton Hamvention 2007 takes place Friday through Sunday, May 18-20, at Hara Arena near Dayton, Ohio. The theme of the 56th Hamvention is "Local Clubs: The Heart of Ham Radio."  
--ARRL Letter

## SUITSAT-2 HARDWARE TAKES SHAPE

Bob McGwier, N4HY, AMSAT's VP of Engineering provided the following update on the development of hardware for Suitsat-2.

"We had a complete breakthrough on the Odyssey Siren in the past two weeks. It will be used in Suitsat 2, in a terrestrial linear repeater experiment by Viktor Kudielka OE1VKW and friends, who supported its development, and we are already leaping all over the place to applications.

Frank Brickle and I will be doing our SDR code on it over the next several days. The board as shown in the schematic needs some modifications to fix the 3 - ish volt power supply for the Codec and a modified oscillator circuit but we are certain it will all work now.

On the 10.7 MHz IF, I measured 0 dBm max into a 50 ohm load and less than -120 dBm MDS and >80 dB dynamic range. This is with a BOM of <\$50 in parts and about a \$20 dsp pic chip!

Yesterday in Rick's, W2GPS, lab, with Tom, K3IO, we made the above measurements, hacked on code and turned the thing into a bent pipe transponder. I also did the hilbert transform to make it an inverting transponder. It all worked perfectly.

Detected audio in an SDR-IQ SDR as well as captured IF from the SDR-IQ of the transponder. Can be downloaded and heard from:  
[http://www.cnssys.com/~w2gps/amsat\\_files/suitsat/](http://www.cnssys.com/~w2gps/amsat_files/suitsat/)

We have to balanced for image and do DC offset correction but the thing works and sounds great as you can hear for yourself!

Additional details and pictures of the hardware can be found at  
<http://hpsdr.org/wiki/index.php?title=ODYSSEY> -- ANS thanks Bob, N4HY, for the above information.

## FIELD DAY 2007 OFFERS A LEARNING OPPORTUNITY FOR HF NEWCOMERS

Although Field Day 2007 is still more than three months away, many ham radio clubs and groups already have begun making plans for this year's event, Saturday and Sunday, June 23-24. Field Day has always been an ideal time for new hams to become more proficient operators and for prospective licensees to get "bitten by the Amateur Radio bug." That may be even more the case during Field Day 2007, as many radio amateurs gain new HF operating

privileges because of the rule changes that went into effect February 23.

"This is an opportunity to get new or upgraded licensees on the air for some active mentoring and active learning," says ARRL Regulatory Information Specialist Dan Henderson, N1ND. "Field Day 2007 will be a chance to learn and grow, but above all, it will be a lot of fun -- and for many there is perhaps nothing more fun in ham radio than ARRL Field Day."

The numbers support that claim. Last June, more than 32,500 operators took part in ARRL Field Day -- some as individuals but many more as part of a club or group. The League saw some 2200 Field Day log submissions for the 2006 event, during which nearly 1.24 million completed contacts went into the log -- not a record but up a little from the previous year.

While no longer a licensing requirement, Morse code (CW) remains a very popular Field Day operating mode, perhaps because CW QSOs are worth twice as much as phone contacts. Last year some 56 percent of Field Day contacts took place on SSB, while nearly 42 percent were on CW (the rest were digital contacts).

Henderson points out two small changes in the Field Day rules starting this year. First, participating stations may only complete one satellite contact for bonus points via a single-channel FM-mode spacecraft (Rule 7.3.7.1), and it must be an Earth-satellite-Earth contact. "This will allow more stations to access this very limited resource," he says.

Second, an individual Get-On-The-Air (GOTA) station operators will earn 20 points for each 20 contacts, up to a maximum of 100 per GOTA operator. Henderson notes that no partial point credit is available, and GOTA operators may not "pool" contacts toward any 20-QSO GOTA station bonus.

"Amateur Radio stands at a juncture where we can embrace both the old and new," Henderson says. He notes, too, that the variety of available operating modes -- traditional and experimental -- contributes toward Field Day's status as the most popular annual operating event.

"Field Day is truly the time where we bring Amateur Radio to Main Street USA -- a great time for 'the Bug' to bite as many people as it can," Henderson says. "Use Field Day 2007 to open up Amateur Radio to the next generation of radio amateurs on your Main Street! It's up to us to make it happen."

Complete information on Field Day 2007 packet is available on the ARRL Web site <http://www.arrl.org/contests/announcements/fd/>. --ARRL Letter

## AMATEUR RADIO ACTIVITY SHUT DOWN IN IRAQ

Iraq Amateur Radio Society (IARS) President Diya Sayah, YI1DZ, has informed ARRL that all Amateur Radio activity in Iraq has been suspended until the security situation there improves. The ham radio blackout began this week.

Sayah says the suspension affects both Iraqi citizens as well as any foreigners, including military personnel and contractors -- who have been on the air from Iraq identifying with YI9- prefix call signs. It does not affect the operation of Military Affiliate Radio System (MARS) stations, however, since they operate on military frequencies, not amateur frequencies. The IARS is informing its member to stay off the air, although some Voice over Internet Protocol (VoIP) modes like IRLP and EchoLink still are okay to use, as long as they don't involve transmitting a signal over the air.

The request to halt all ham radio activity and the issuance of licenses in Iraq originated with a letter from the Iraqi Ministry of Defense to Iraqi Prime Minister Nouri al-Maliki as part of the new Baghdad security plan, Sayah said. He received subsequent confirmation via the Ministry of Higher Education and Scientific Research to shut down ham radio activity, although he allows for a possible misunderstanding on the part of government officials as to the nature and purpose of Amateur Radio. --ARRL Letter

## FCC NOW POSTING AMATEUR RADIO ENFORCEMENT ACTIONS

Amateur Radio enforcement correspondence -- with some exceptions -- now is available to the public on the FCC's "Amateur Radio Service Enforcement Actions" Web site <http://www.fcc.gov/eb/AmateurActions/Welcome.html>. The listing will be cumulative, and Special Counsel in the FCC Spectrum Enforcement Division Riley Hollingsworth anticipates updating it every 7 to 10 days.

The site will not be a comprehensive listing of enforcement correspondence. For example, it will not include letters requiring retesting pursuant to §97.519(d) of the FCC's rules, letters regarding radio frequency interference to amateur licensees and letters requesting an initial response to a complaint.

As a result of irregularities detected by ARRL VEC in examination sessions in Clinton, South Carolina, in June and July 2006, Hollingsworth has issued retest orders to Technician licensees in Simpsonville, Greenwood, and Clinton, South Carolina, to an Amateur Extra licensee in Joanna, South Carolina (Elements 3 and 4), and to a General licensee in Laurens, South Carolina (Element 3).

He also wrote to Tri-County Electric Cooperative, Azle, Texas; Northfork Electric Cooperative, Sayre, Oklahoma; Bit-by-Bit Horse Farms, Wind Gap, Pennsylvania, and to a resident of Gallipolis, Ohio, requesting they work with Amateur Radio licensees regarding RF interference generated by power line hardware and other devices.

Direct all questions concerning the Amateur Radio Service Enforcement Actions Web postings via e-mail only to Riley Hollingsworth in the FCC Spectrum Enforcement Division <mailto:fccham@fcc.gov>. --ARRL Letter

## SHORTS

**FCC FINES SHOP FOR SELLING NON-CERTIFIED CBS AS HAM GEAR** -- In a Forfeiture Order [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-07-881A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-07-881A1.pdf) released March 2, the FCC has affirmed a \$7000 fine it levied on Ben Metzger of Titusville, Florida, doing business as 1 Stop Communications / 1 Stop CB Shop, for marketing non-certified Citizens Band transceivers. The FCC's Tampa Office issued Metzger a Citation in March 2006 for marketing certain Galaxy and Connex transceivers. Metzger has asserted that the units are Amateur Radio transceivers, which do not require FCC certification, not CB transceivers, which do. The FCC says the units are intended for use on CB as well as on amateur frequencies through a simple modification, and it has determined that such dual-use transceivers are CB transceivers under its rules. Metzger told the Commission last May that he'd removed the radios mentioned in the Citation from his store. In June 2006, the FCC declined to withdraw the citation on the basis that the transceivers were marketed as ham gear. Agents from the Tampa FCC office later revisited the shop and were able to buy a Connex CX 3300HP, which they say Metzger modified to operate on part of 10 meters as



well as on CB and other frequencies (25.615 to 28.305 MHz). Metzger still maintains that the Connex CX 3300HP is a ham transceiver and that he did not violate any FCC rules, the FCC said. –ARRL Letter

**REVISED ARRL BAND CHART AVAILABLE:** A new ARRL band chart reflecting all recent changes to the FCC Amateur Radio Service rules as of February 23, 2007, now is available for downloading on the ARRL Web site in either black and white or color versions <http://www.arrl.org/FandES/field/regulations/bands.html> Created by ARRL Senior Technical Illustrator, Dave Pingree, N1NAS, the attractive new chart represents a major change from earlier designs. This is the same chart featured in the eight-page "Welcome" tear-out section in March QST (following page 48). The entire QST tearout also is available for downloading in PDF format <http://www.arrl.org/HFWelcome/Welcome.pdf>.

**AMSAT AND TAPR TO HOLD JOINT DAYTON HAMVENTION BANQUET:** TAPR and AMSAT are teaming up to sponsor a joint banquet in conjunction with Dayton Hamvention 2007. "Dinner Under the Wings" will take place Friday, May 18, at the National Museum of the United States Air Force. Doors open at 6 PM in the Air Power Gallery (World War II). A buffet dinner will be served at 7 PM in the Cold War area. Attendees will have the opportunity to browse the museum. Reservations ARE required. Tickets are \$35 per person and will be available until May 14. Tickets will NOT be sold at the TAPR booth at Hamvention. To order tickets and for additional information, visit the AMSAT Web site <http://www.amsat-na.com/item.php?id=100133>.

**CQ INTRODUCES HF OPERATOR'S SURVIVAL GUIDE:** In response to recent changes in licensing rules and operating privileges for all hams, the editors of CQ Amateur Radio magazine have prepared an HF Operator's Survival Guide, a 16-page getting-started guide for newcomers to high-frequency (shortwave) Amateur Radio communications. Written by CQ Contesting Editor John Dorr, K1AR, Contributing Editor Gordon West, WB6NOA, and CQ Editor Rich Moseson, W2VU, the booklet is a practical, hands-on guide to success in HF ham radio. "Starting out on HF can be pretty intimidating, especially now, at the bottom of the sunspot cycle, when DX opportunities are harder to find," said Moseson, who also oversaw the guide's overall production. "This practical guide will help the new HF operator, regardless of license class, hit the air running." Among other topics, the book discusses the characteristics of each HF ham band and explains which is best and when, basic HF operating practices, choosing your first HF transceiver, antenna basics, and various HF modes and operating activities. There's also an HF band chart. The HF Operator's Survival Guide is \$2 (plus shipping), with discounts available for bulk purchases. To order, or for more information, contact CQ Communications Inc, 800-853-9797 (toll-free) weekdays 9 AM to 5 PM Eastern Time.

---

THE *RCA ARC MONTHLY NEWSLETTER* IS COMPILED AND EDITED BY JIM RINEHART, AND JIM KEETH. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO <mailto:WebMaster@w9rca.org>. Check our web site at <http://www.w9rca.org/>