



THE AERO AERIAL

THE NEWSLETTER OF THE AERO AMATEUR RADIO CLUB

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Ham News

New Aero Club Roster

In your email on April 16, you should have received an updated Aero Club Roster. Be sure to confirm your information and send any updates to Joe Miko, WB3FMT.

The ROTA Journey

From ROTA-Radio

The amateur radio world is usually about "portable" or "mobile" operations. However, one operator describes how ROTA (Recliners on the Air) connects him to the world when life keeps him at home. [Read about his journey](#)

Meetings

MAY
6 AND 20

Events

The Great Hagerstown Hamfest

Date: 5/2/2026

Location: Maugansville, MD

Sponsor: Antietam Radio Association

Dayton Hamvention

Date: 5/15/2026

Location: Xenia, OH

Sponsor: Dayton ARA

Maryland F.M. Association Hamfest

Date: 5/24/2026

Location: West Friendship, MD

Sponsor: Maryland F.M. Association Inc.

Manassas Hamfest

Date: 6/20/2026

Location: Manassas, VA

Sponsor: Ole Virginia Hams

Baltimore Amateur Radio Club Father's Day Hamfest/Expo

Date: 6/21/2026

Location: Upper, MD

Sponsor: Baltimore Amateur Radio Club BARC

W3PGA Middle River, MD

Before You Go to Dayton 2026...Watch This

From Q5 Worldwide Ham Radio

This conversation lays out the sheer scale and evolution of Contest University, presentations, global livestreaming, and emphasis on youth. [Watch the video](#)

Gathering "Ground Truth": Ham Radio Plays Critical Role in Skywarn Storm Spotting Program

From Daily Journal

Their reports play an integral role in emergencies, though the public often isn't aware of them. [Read more](#)

Ham Radio History: How RTTY Became the First Mainstream Digital Data Mode

From On All Bands

Radio Teletype (RTTY) became a popular digital mode in amateur radio through a mix of postwar circumstances, technical curiosity, and a group of operators who looked at a 180-pound machine and thought, "This would look cool in my radio room." [Learn more](#)

B.C. amateur astronomer using a 'whole lot of math' as he tracks Artemis II for NASA

From Vancouver Sun

"It's like a test of non-NASA systems, to see how well they can keep track," said Scott Tilley. [Read more](#)

Additional Links

The complete study platform for FCC Technician, General, and Extra class amateur radio licenses. [Open HamStudyHub](#)

Real-time amateur radio data. [Discover the KJ4WLC Ham Dashboard](#)

Free and open source ham radio dashboard. [Check out HamDash](#)

More Events

Firecracker HamFest

Date: 7/4/2026

Location: Harrisburg, PA

Sponsor: Harrisburg RAC

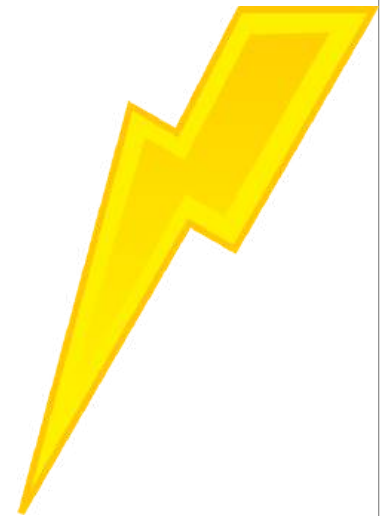
Valley Forge Hamfest

Date: 8/9/2026

Location: Phoenixville, PA

Sponsor: Mid-Atlantic ARC

SKYWARN, ARES, RACES



SKYWARN® is a national network of volunteer severe weather spotters. The spotters are trained by local National Weather Service Forecast Offices on how to spot severe thunderstorms, tornadoes, hail and flooding. In some parts of the country, spotters also report snowfall and ice accumulation.

To learn more about SKYWARN® and how to become a spotter, [click here](#).

Harford County ARES/RACES Group meets at the Harford County Emergency Operations Center in Forest Hill, MD, the first Thursday of each month, 7:00-9:00 p.m. Let them know in advance if you would like to attend, via email to Steven Fook (K2EJ), Harford County Emergency Coordinator.

To learn more about Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES), [click here](#).

Training

SKYWARN® Classes

Flood, May 6, 6-8 pm, [Alexandria, VA](#)

Basics, May 7, 7-9 pm, [Forest Hill, MD](#)

In case you missed it,



check out the April issue.



VE Corner

Maryland Test Sites **Confirm in Advance**

- 5/2/26, 2:30 pm: Catonsville, walk-ins allowed
- 5/5/26, 5:45 pm: Severna Park, register or call ahead
- 5/16/26, 9:00 am: Laurel, walk-ins allowed
- 6/2/26, 5:45 pm: Severna Park, register or call ahead
- 6/6/26, 2:30 pm: Catonsville, walk-ins allowed
- 6/20/26, 8:45 am: Forest Hill, walk-ins allowed
- 6/20/26, 9:00 am: Laurel, walk-ins allowed
- 7/11/26, 2:30 pm: Catonsville, walk-ins allowed
- 7/18/26, 9:00 am: Laurel, walk-ins allowed
- 8/1/26, 2:30 pm: Catonsville, walk-ins allowed
- 8/15/26, 9:00 am: Laurel, walk-ins allowed
- 8/22/26, 8:45 am: Forest Hill, walk-ins allowed
- 9/12/26, 2:30 pm: Catonsville, walk-ins allowed
- 9/19/26, 9:00 am: Laurel, walk-ins allowed
- 10/10/26, 2:30 pm: Catonsville, walk-ins allowed
- 10/10/26, 8:45 am: Forest Hill, walk-ins allowed
- 10/17/26, 9:00 am: Laurel, walk-ins allowed
- 11/7/26, 2:30 pm: Catonsville, walk-ins allowed
- 11/21/26, 9:00 am: Laurel, walk-ins allowed
- 12/5/26, 2:30 pm: Catonsville, walk-ins allowed
- 12/5/26, 8:45 am: Forest Hill, walk-ins allowed

Radio License Exams

Examination sessions are offered throughout the year at various locations. Visit our new licensing page to prepare:

<https://w3pga.net/getting-your-license/>

[ARRL](#) and many other online sources have resources to help you study.

Contest Corral

May 2026

Check for updates and a downloadable PDF version online at www.arrl.org/contest-calendar. Check <https://contests.arrl.org> for recent results. Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start - Finish		Bands	Contest Name	Mode	Exchange	Sponsor's Website		
Date-Time	Date-Time							
1	1300	1	1900	3.5-28	AGCW QRP/QRP Party	CW	RST, serial, class (A/B)	www.agcw.de/contest/qrp-qrp
2	0300	2	0859	3.5-28	RCC Cup	CW Ph	RS(T), mbr or ITU zone	www.contest.ru/rcc-cup-rules
2	0600	3	2359	2.3 GHz and up	SBMS 2.3 GHz and Up Contest and Club Challenge	CW Ph Dig	6-char grid	w6ife.com
2	0800	2	1400	All above 902	Microwave Spring Sprint	CW Ph Dig	6-char grid	sites.google.com/site/springvhfupsprints/home/2026-information
2	1200	3	1159	3.5-28	ARI International DX Contest	CW Ph Dig	RS(T), 2-letter province or serial	www.ari.it
2	1200	3	1200	3.5-28,144	F9AA Cup, PSK	Dig	RST, serial	www.site.urb.asso.fr
2	1300	3	0700	1.8-28	7th Call Area QSO Party	CW Ph Dig (no FT8)	RS(T), 5-letter state/county code or SPC	7qp.org
2	1500	3	0259	1.8-28	Indiana QSO Party	CW Ph	RS(T), IN county or SPC	www.hdxcc.org
2	1700	3	2359	1.8-28,VHF	Delaware QSO Party	CW Ph Dig	RS(T), DE county or SPC	www.fsarc.org
2	2000	3	2359	3.5-28	New England QSO Party	CW Ph Dig	RS(T), New England county/state or SPC	neqp.org/rules
3	1000	3	1400	7	WAB 7 MHz Phone	Ph	RS, serial, WAB square or SPC	wab.intermip.net/Contests.php
4	2300	5	0300	All, no WARC	MIE 33 Contest	CW Ph	RS(T), age, "ME" or "MEJ" or none	www.ztv.ne.jp
5	0000	5	0200	3.5-28	ARS Spartan Sprint	CW	RST, SPC, pwr	ars-qrp.com
7	0000	7	0500	144	VHF-UHF FT8 Activity Contest-NA	Dig	4-char grid	ft8activity-na.net
7	0000	8	0300	7	Walk for the Bacon QRP Contest	CW	Max 13 WPM; RST, SPC, name, mbr or pwr	qrptest.com/pigwalk40
7	1700	7	2100	28	NRAU 10m Activity Contest	CW Ph Dig	RS(T), 6-char grid	nrau.net/nrau-contests-in-general
7	2000	7	2200	1.8-28,50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
9	1200	10	1159	1.8-28	CQ-M International DX Contest	CW Ph	RS(T), serial	cqm.srr.ru/en/rules
9	1200	10	1200	3.5-28	VOLTA WW RTTY Contest	Dig	RST, serial, CQ zone	www.contestvolta.it/rules.pdf
9	1200	10	2359	1.8-28,50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
9	1700	10	0300	7,14,21,28	Canadian Prairies QSO Party	CW Ph	RS(T), VE4/5/6 district code or SPC	cpqp.ve6hams.ca
9	2300	10	0300	50	50 MHz Spring Sprint	CW Ph Dig	4-char grid	sites.google.com/site/springvhfupsprints/home/2026-information
11	0000	11	0200	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or pwr	www.4sqrp.com
12	1900	12	2029	3.5,7	DARC FT4 Contest	Dig	RST, 4-char grid	www.darc.de
14	0000	14	0500	432	VHF-UHF FT8 Activity Contest-NA	Dig	4-char grid	ft8activity-na.net
14	1400	14	2200	3.5,7	QRP Minimal Art Session	CW	RST, class, number of components	qrpsc.de/contestrules/mas/index.html
16	0600	16	2100	3.5-28	UN DX Contest	CW Ph	RS(T), Kazakhstan district code or serial	undxc.kz/rules-eng
16	0800	16	1100	3.5	NZART Sangster Shield Contest	CW	RST, serial, branch number (if ZL)	www.nzart.org.nz
16	1200	17	1159	1.8-28	His Maj. King of Spain Contest, CW	CW	RST, EA province or serial	concurso.ure.es
16	1200	17	1200	3.5-28	EU PSK DX Contest	Dig	RST, EU area or serial	eupsk.club
16	1400	17	0200	1.8-28,50,144	Arkansas QSO Party	CW Ph Dig	RS(T), AR county or SPC	www.arkqp.com
16	2000	16	2359	1.8-28,50	Feld Hell Sprint	Dig	See rules	sites.google.com/site/feldhellclub
17	2300	18	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or pwr	qrptest.com/pigrun
18	1900	18	2100	3.5-28	RSGB FT4 Contest	Dig	Signal report	www.rsgbcc.org
21	0000	21	0500	1296	VHF-UHF FT8 Activity Contest-NA	Dig	4-char grid	ft8activity-na.net
21	0000	22	0300	14	Walk for the Bacon QRP Contest	CW	Max 13 WPM; RST, SPC, name, mbr or pwr	qrptest.com/pigwalk20
21	0030	21	0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or pwr	naqcc.info/sprint_rules.html
21	1900	21	2000	3.5-14	NTC QSO Party	CW	Max 25 WPM; RST, mbr or "NM"	pi4ntc.nl/ntcqp
24	1600	24	2000	7,14,21,28	Real Time Contest	CW Ph	Serial, 4-char grid	blog.contestonlinescore.com
25	0000	25	0100	1.8-28	QRP ARCI Hootowl Sprint	CW	RST, SPC, mbr or pwr	qrparci.org
27	0000	27	0200	1.8-28,50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
30	0000	31	2359	1.8-28	CQ WW WPX Contest, CW	CW	RST, serial	www.cqwp.com/rules.htm
31	0500	31	1700	7,14,21,28	Romanian Diaspora SSB Contest	Ph	RS, YO/ER county/district or "DX"	concurdiaspora.ro/en/regulament

There are a number of weekly contests not included in the table above. For more info, visit: www.qrpfoxhunt.org, www.nccsprint.com, and www.cwops.org. All dates and times refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.contestcalendar.com and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.

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Special Event Stations

Working special event stations is an enjoyable way to help commemorate history. Many provide a special QSL card or certificate!

Apr. 26 – May 9, 0000Z – 2300Z, KC1YL, Seminole, FL. W4PRK. **POTA in the Bahamas**. 3.905 7.268 14.320 28.500. QSL. Lisa Neuscheler, 11282 Oakridge Trl., Seminole, FL 33772.

Apr. 30 – May 1, 1600Z – 0000Z, KAGOES, Eureka, CA. Humboldt County Sheriff's Office of Emergency Services. **BEACON Exercise**. 3.9920 7.1920 14.2205. Certificate. Greg Waters, ATT: OES, 826 4th St., Eureka, CA 95501. www.beaconexercise.org

May 8 – May 18, 0000Z – 2359Z, NJ2KC, Bridgeton, NJ. New Jersey Knights of Columbus Amateur Radio Club. **130th New Jersey State Knights of Columbus Convention**. 7.250 14.250 21.350 28.350. QSL. Thomas M. Perrotti, 785 Vineland Ave., Bridgeton, NJ 08302-4822. www.nj2kc.org

May 9, 1400Z – 1900Z, W4LX, Fort Myers, FL. Fort Myers Amateur Radio Club. **National Train Day**. 7.044 7.244 14.044 14.244. Certificate. Fort Myers ARC Train Day, P.O. Box 061183, Fort Myers, FL 33906-1183. trainday@fmarc.net

May 9, 1400Z – 2000Z, K4RC, Williamsburg, VA. Williamsburg Area Amateur Radio Club. **Jamestown Landing Day Event**. 7.265 14.265. Certificate. Williamsburg Area Amateur Radio Club, P.O. Box 1470, Williamsburg, VA 23187. www.k4rc.net

May 9, 1500Z – 2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club. **Golden Spike**. 7.040 7.235 14.040 14.255. QSL. Ogden Amateur Radio Club, P.O. Box 3353, Ogden, UT 84409. www.ogdenarc.org

May 9 – May 10, 0000Z – 2359Z, United Kingdom. Nunsfield House Amateur Radio Group. **Mills on the Air**. All bands/modes. Certificate. *See the URL for active call signs.* <https://nharg.org.uk/mota>

May 13 – May 30, 0000Z – 0000Z, VE2SPEED, Saint-Jérôme, QC. **Grand Prix du Canada**. 14.011. QSL. Jean Charron, 17 Rue Elisabeth, Saint-Jérôme, QC J7Z 2S9, Canada.

May 14, 1400Z – 1900Z, KA4TAL, Conway, SC. American Legion Amateur Radio Club. **Honoring the Serving Members and Veterans of Our Armed Forces**. 7.185 7.264 14.255 14.275. Certificate & QSL. American Legion Amateur Radio Club, Horry Post 111, 2830 Oak St., Conway, SC 29526. talarcpst111sc@gmail.com

May 16, 1300Z – 2030Z, W2GSB, Babylon, NY. Great South Bay Amateur Radio Club. **American Airpower Museum Armed Forces Day**. 7.275 14.245 21.325 28.500. Certificate. GSBARC Air Power, 200 E. Sunrise Hwy., Lindenhurst, NY 11757. www.GSBARC.org

May 16 – May 17, 1330Z – 2100Z, K3S, Port of Baltimore, MD. Nuclear Ship *Savannah* Amateur Radio Club. **National Maritime Day**. 7, 14, 18, 21, 28. QSL. Ulis Fleming, 980 Patuxent Rd., Odenton, MD 21113. www.qrz.com/db/k3s

May 16 – May 18, 0000Z – 0000Z, W6SFM, Fair Oaks, CA. Samuel F. Morse Amateur Radio Club. **W6SFM Bug Roundup**. 3.533 7.033 14.033 28.033. QSL. Samuel F. Morse Amateur Radio Club, 4901 Minnesota Ave., Fair Oaks, CA 95628. <https://w6sfm.org/bug-roundup>

May 23, 1200Z – 2359Z, KD3KA, Wexford, PA. Allegheny Valley Radio Association. **Amateur Radio Origins of KDKA**. 3.840 7.240 14.240 21.340. QSL. AVRA, P.O. Box 24, Wexford, PA 15090. www.qrz.com/db/kd3ka

May 27 – May 31, 0000Z – 1500Z, W0R, Sedalia, MO. Sedalia Pettis Amateur Radio Klub (SPARK). **Scott Joplin Ragtime International Music Festival**. 14.250 28.4. QSL. Bret Kuhns, 1880 Quisenberry Rd., Sedalia, MO 65301. <https://wa0sdo.org>

May 30, 1400Z – 1900Z, W2A, Christiansburg, VA. New River Valley Amateur Radio Club. **Audie Murphy Commemoration**. 14.262. QSL. Danny Wylam, 710 McDaniel Dr. SE, Christiansburg, VA 24073-3848. dannywylam@gmail.com

Certificates and QSL cards: To obtain a certificate from any of the special event stations offering them, send your QSO information along with a 9 × 12-inch self-addressed, stamped envelope (3 units of postage) to the address listed in the announcement. To receive a special event QSL card (when offered), be sure to include a self-addressed, stamped business envelope along with your QSL card and QSO information.

Special Events Announcements: For items to be listed in this column, use the ARRL Special Events Listing Form at www.arrl.org/special-events-application, or email information to events@arrl.org.

Submissions must be received by ARRL HQ no later than the 1st of the second month preceding the publication date; a special event listing for **August QST** would have to be received by **June 1**. In addition to being listed in *QST*, your event will be listed on the ARRL Web Special Event page. Note: All received events are acknowledged. If you do not receive an acknowledgment within a few days, please contact us. ARRL reserves the right to exclude events of a commercial or political nature.

You can view all received Special Events at www.arrl.org/special-event-stations.



How's DX?

NIDXA Through the Years; Various Island Activations



The following section on the Northern Illinois DX Association (NIDXA) is provided by NIDXA President Mike Kelly, W9MK.

NIDXA is a DX-focused amateur radio club that currently has 75 members. Founded in 1967, we have a long history of supporting DXing by sponsoring W9DXCC, the premier annual Midwest DX convention.

W9DXCC has donated more than \$50,000 to the Northern California DX Foundation. NIDXA also donates to the International DX Association and directly supports DXpeditions through its own DXpedition Funding Committee. The Committee has sent various DXpeditions almost \$10,000 over the last couple of years.

NIDXA has always been an ARRL Affiliated Club. Members currently serve on both the ARRL Contest Advisory Committee and the DX Advisory Committee. In past years, our members have served on the ARRL Board of Directors as well. NIDXA members have participated in many DXpeditions, including many to top 10 most-wanted entities. Additionally, the club operates the W9 QSL Bureau.

In an effort to look to the future, NIDXA recently amended the club's bylaws to add Associate Members who have not yet confirmed 100 DX entities. Each Associate Member will have an experienced club member as a mentor, teaching them how to DX and ultimately making them full NIDXA members. We are a welcoming club that is always looking for like-minded DXers.

FO/M – Marquesas Islands

A six-member team, including four amateur operators from the Oklahoma DX Association, one from New

Mexico, and one from France (Jeff, K5WE; Craig, W5CCP; Jeremy, N5TEA; Bob, K4VBM; David, WD5COV, and Didier, F6BCW), will be active as TX9W from Atuona, Hiva Oa, of the Marquesas Islands (Islands on the Air; IOTA reference OC-027, grid C100le), on April 19 – 30, 2026. They will use all bands from 160 to 6 meters and operate on CW, FT8, FT4, SSB, and RTTY. The TX9W team will focus their attention on Europe as propagation allows.



They plan to establish six fully equipped stations. The equipment will include two Elecraft K3S transceivers, a K3, a K4D, a KX3, and a Yaesu FT-710. They will also bring an Elecraft KPA500 and KPA1500, an Acom 600S and 700S, an SPE Expert 1.3K-FA, an RF Power HVLA1K3, and a 500 W amplifier. The antenna configuration will comprise two hexbeams (covering 10 – 20 meters), a BuddiHEX, a Crank1R (10 – 80 meters), a three-element Yagi (6 meters), a vertical (40 meters), a two-element quad (10 – 20 meters), an inverted L (80 meters), a Top Band Express (160, 80, and 60 meters), and Beverages.

Their targeted transmit frequencies will be as follows:

- CW: 7007, 10107, 14007, 18077, 21007, 24903, and 28007 KHz
- SSB: 14170, 18130, 21270, 24945, and 28485 KHz
- FT8: 1835, 3563, 5357, 7056, 10144, 14091, 18091, 21091, 24920, 28091, and 50313 KHz
- FT4: 7051, 10144, 14091, 18091, 21091, 24920, and 28091 KHz
- RTTY: 7051, 10135, 14088, 18091, 21088, 24910, and 28088 KHz

They might occasionally use the frequency allocations for US General-class operators. Jari, OH6BG, has launched VOACAP DX Charts with a propagation prediction page for the DXpedition at www.voacap.com/dx/tx9w.

Logs will be uploaded daily to Club Log and streamed live as long as the internet connection is stable. After the team returns home, logs will also be sent to Logbook of The World® (LoTW®). The Marquesas Islands rank 63 globally and 43 in Europe on Club Log's DX Century Club Most Wanted List. Club Log OQRS is preferred, but QSL requests for TX9W should go through K5WE. Those who donate \$10 or more qualify for free direct OQRS after the DXpedition. Direct QSLs will be accepted with a self-addressed stamped envelope/self-addressed envelope and sufficient postage (no international reply coupons). Bureau requests will be only allowed via OQRS — please do not send bureau cards directly. Direct cards ordered via Club Log OQRS will cost \$5, and bureau cards requested through OQRS will be free, but they incur significant costs for the DXpedition team. All QSL requests will be processed promptly. For more information and updates about the TX9W DXpedition to the Marquesas Islands, keep an eye on their website (www.k5we.com/tx9w) and your favorite DX news outlet.

3D2 — Fiji

Jacek, SP5APW, is scheduled to operate as 3D2JK from Lakeba Island (IOTA reference OC-095; grid AH01os) between April 17 and 22, 2026. Lakeba is recognized as one of Fiji's rarest IOTA references, ranking among the top 10% most wanted worldwide.



The last OC-095 activation occurred more than 20 years ago in 2004. Currently, this reference is sought by 87% of IOTA chasers. Jacek's equipment will include an Icom IC-7300 and a Yaesu FT-857D operating at 100 W, as well as a BuddiHEX and a 6-meter Yagi covering 20 – 6-meter SSB and FT8. QSLs will be available via Club Log OQRS. Logs will be uploaded to Club Log post-DXpedition and to LoTW 6 months thereafter. VOACAP propagation charts for 3D2JK have been prepared by OH6BG and are available at www.voacap.com/dx/3d2jk. Further information and updates regarding this IOTA operation can be found on Jacek's blog at www.3d2jk.blogspot.com.

IOTA AS-169 — Arnala Island

Sarath Rayaprollu, VU2RS, announced that the DX India Foundation will return to Arnala Island (AS-169) and will operate as AU2M on May 1 – 3, 2026. This update comes after the team postponed their November



2025 trip due to unexpected heavy rain and storms. Further details are pending and will be shared on their website at www.vu2rs.com/au2m.

IOTA SA-093 — Tutumate Islands

Renato, PY8WW, will put the Tutumate Islands (SA-093) of Colombia's Chocó region on the air as HK4/PY8WW on May 9 – 15, 2026. He will travel through Brazil, followed by Bogotá, Montería, and Apartadó, and then he will take a boat to the islands. As with his previous SA-084 operation, Renato will use solar panels and an EcoFlow power system, and he'll operate out of a tent. For more information, visit www.qrz.com/db/hk4/py8ww.



Wrap-Up

That's it for this month, with thanks to K5WE, OH6BG, SP5APW, VU2RS, W9MK, and *The Daily DX* for helping to make this month's column possible. If you have any DX, IOTA, or contest DXpedition news, photos, or newsletters, please send them to bernie@dailydx.com. Until next month, see you in the pileups! — *Bernie, W3UR*

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Ask Dave

Get more information from the “QST: Ask Dave” YouTube playlist at <https://bit.ly/3z2MBMI>.

FSK vs AFSK, Old Coax, and Fence-Mounted Antennas

Audio FSK and Audio CW

Q Peter Stanford, M3TNW, asks: Are RTTY and CW produced as audio by *fldigi* as good as “real” frequency-shift keying (FSK) and CW produced by keying the transmitter directly?

A This question has been debated for years, and no single answer will satisfy everybody. Let’s start by explaining the difference between FSK and audio FSK (AFSK), using RTTY signals as an example. Classically, a RTTY machine’s terminal unit (TU) provided digitally keyed signals to a transmitter. The transmitter would then create a “mark” frequency or a “space” frequency directly from the transmitter’s oscillator, depending on the instructions from the TU. This is “true” FSK. The classic TU only produced two possible tones — a mark at 2125 Hz and a space at 2295 Hz — in the lower sideband (LSB). It should be noted that both *fldigi* and many modern transceivers still offer this capability, including my Icom IC-7300. Similarly, CW can be keyed directly from *fldigi*.

Audio FSK works a bit differently. With the introduction of PSK31 and similar modes, the *fldigi* software creates an audio signal that is fed to the transceiver’s audio input, and the transmitter uses this audio to modulate a signal. For RTTY, the important thing is maintaining the 170 Hz separation between tones — *fldigi* and other digital software can create tones at the right spacing, but at frequencies other than 2125 and 2295 Hz, as illustrated in Figure 1. Also, note that classic TUs work with the radio in LSB, while modern software creates audio tones intended for upper sideband (USB). All modern software allows for tone inversion in the event a received signal is accidentally sent “upside down.”

There are a few caveats to consider with AFSK. For example, the transmitter’s power is usually dropped to reduce the distortion that can creep in by running the rig’s final amplifier at its maximum output. This also helps prevent the final output circuits from overheating during the long duty cycle of some digital codes. The transmitter’s automatic level control (ALC)

is turned way down, or turned off entirely, because the ALC process can slightly distort the signal. The goal is maximum linearity. Hundreds of thousands — maybe millions — of successful contacts have been completed in this manner.

So yes, RTTY and CW can be created as audio tones and then sent with USB, but the audio signal and subsequent USB signal must be completely linear, with no distortion introduced in the audio and transmit process. Obviously, “zero” distortion is impossible, so audio-created RTTY and CW technically cannot be as perfect as direct keying. The question, then, is how much distortion is tolerable.

In practice, a careful operator can produce AFSK that sounds nearly identical to FSK, given that normal band noise tends to mask small audio defects. Because creating AFSK is often easier than trying to use the transmitter’s direct-key FSK approach, I’m not the only one who uses this method — you can, too. The RTTY operator on the other end is completely capable of reading your signal and can’t tell if it’s FSK or AFSK. The same goes for keyed CW versus audio CW.

On the other hand, many hams prefer to let *fldigi* or similar software key the transmitter using the traditional FSK and CW techniques. If you set up your system carefully, no noise from the audio sound card will

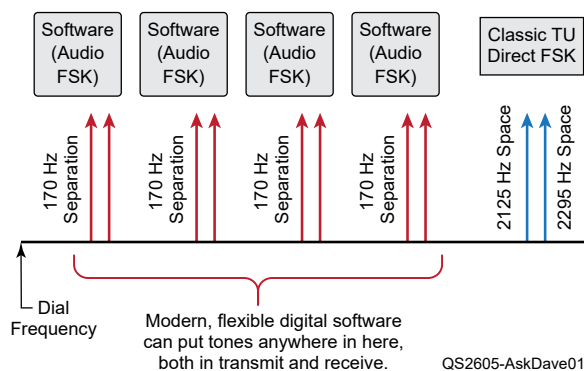


Figure 1 — Classic RTTY direct FSK is compatible with AFSK by changing the dial frequency.

pollute the signal, no matter how minutely. That's fine, and it can confer bragging rights for having successfully completed all the steps in the process.

The bottom line is that well-sent AFSK is interoperable with FSK, and audio CW is interoperable with CW — ultimately, it comes down to user preference.

Using Old Coax

Q Gene Johnson, KI4MSU, asks: I am a Technician operator. A friend passed and left me his Yaesu FTDX-1200 radio. I am about to install it, and I plan to use a ZS6BKW antenna. I have a spool of RG-8U coaxial cable — it's about 35 years old, but it seems to be okay. Is this acceptable coax for feeding the ZS6BKW antenna?

A The enemy of any coax is water intrusion. If your spool of RG-8U sat outdoors for any length of time, it may have ingested water at the coax ends — the metal shielding is especially susceptible to this.

To check for water damage, cut and peel back the rubber cover by several inches. If this is discolored in any way, that part of the coax should be discarded. Similarly, the center conductor should be bright copper; if it's discolored, the coax is not suitable for use.

That doesn't mean you should toss the whole spool at the first sign of damage. Instead, cut off a few feet and repeat this process — it is possible the water only penetrated a small portion of the cable, and you may be able to salvage some of it. That said, don't be surprised if the coax is bad over its entire length, because the braided shield will wick water into the coax.

If you find that the RG-8U is unusable, I recommend new RG-213 or LMR-400 as an alternative. If the entire coax run is less than 50 feet or so, new RG-8X can be used for 6 and 10 meters.

The ZS6BKW antenna is a good HF antenna all around, and it would certainly work well with your new radio — I recently built a ZS6BKW antenna myself, as you can see in my YouTube video at <https://youtube.com/watch?v=YMwZcskeJEk>. Note that there are multiple opinions on how to construct this antenna. I went with a wire length of 93.6 feet, fed in the middle with a matching stub of 39.1 feet of 450 Ω window line. I used the LDG Electronics RBA-1:1 balun to connect the window line to the coax feed. My Icom IC-7300's internal tuner brought the standing wave ratio to 1:1 on all bands from 80 to 10 meters. Assuming you've run a 450 Ω window line from your ZS6BKW to a 1:1 balun as described, the RG-8U is perfectly acceptable to run from the balun to your FTDX-1200.

With your Technician privileges, you can use your FTDX-1200 and ZS6BKW antenna for CW in limited portions of the 80-, 40-, and 15-meter bands. You have more privileges on 10 meters — CW and digital from 28 to 28.3 MHz and CW and single sideband from 28.3 to 28.5 MHz — and the entire 6-meter band is available to you. Much more HF spectrum is available to you if you upgrade to a General license.

HOA Long-Wire Antenna

Q Bruce Daggett, WD4DSV, asks: I am in an HOA environment, and with no trees, my antenna options are limited. My yard is surrounded by a white wooden fence. Has anyone had luck with an end-fed wire antenna mounted on a fence 6 feet off the ground?

A Yes, this can be done, but results will vary. Rather than treat this as a standard end-fed half-wave antenna, think of it as a long-wire antenna. Given that the long wire's input impedance varies dramatically with frequency, it's a good idea to use a remote antenna tuner so it can feed the wire directly, thus avoiding coax losses at high SWR. The input to these tuners is 50 Ω , so you can run ordinary coax from your station to the start of the antenna. All such tuners have a ground terminal, and you may improve antenna performance by connecting it to a ground rod directly beneath the tuner. These tuners are wide range and will likely tune the long wire to any frequency you want to use. Be sure to give the tuner time to re-tune after changing bands. The tuner will need a small but steady signal (such as low-power CW) in order to tune. You can monitor tuning progress by observing the SWR meter built into your radio.

Be careful how you mount the antenna wire. I'd suggest using insulated wire to keep cats and birds safe. Also, you mentioned that your fence is white, and white paint often contains titanium, which can act as a semiconductor and cause loss. Also, be aware of and observe RF safety standards, and do not transmit when neighbors are near your antenna.

An antenna this low is very much a compromise antenna, but that doesn't mean it won't work. Give it a try and experiment with different configurations.

Send your questions to askdave@arrrl.org. I answer some questions here, and some via videos on my YouTube channel (www.youtube.com/davecasler), or during my weekly livestream on Thursdays at 6:45 to 8:15 PM Mountain Time on my channel.



Club Nets

Second Wednesday Net

70 Centimeters (449.575 MHz Repeater) @ 8 p.m. Local Time

Fourth Wednesday Net

2 Meters (147.24 MHz Repeater) @ 8 p.m. Local Time

Fifth Wednesday Net

10 Meters (28.445 MHz) @ 8 p.m. Local Time

CW Sunday Net

2 Meters (146.550 MHz simplex) @ 8 p.m. Local Time

Net Reports

440 Net Report, From Joe Miko, WB3FMT

On April 8, the club's 440 net had seven participants and ran from 20:000 to 20:25 local:

WB3FMT NCS	Joe	Essex
KB3QWC	Larry	Middle River
KB3YTP	Dave	Parkville
KB3VAE	Richard	Essex
WA3QLY	Tom	Middle River
K3DON	Don	Joppatowne
KB3JVP	Ken	Middle River

2-Meter Net Report, From Joe Miko, WB3FMT

On April 22, from 20:00 to 20:26 local, the club ran a 2-meter net. There were six participants:

WB3FMT NCS	Joe	Essex
K3DON	Don	Joppatowne
KB3QWC	Larry	Middle River
KB3VAE	Richard	Essex
WF3Y	Brian	Dundalk
WA3QLY	Tom	Middle River

10-Meter Net Report, From Joe Miko, WB3FMT

On April 29, the 10-meter net was cancelled due to not having an NCS.

Local Area Nets

Day	Time	Freq. (MHz)	Net Name
Daily	9 - 10 am	146.670	Oriole Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 - 7 pm	146.670 PL 107.2	Baltimore Traffic Net
Daily	7 pm & 10 pm	3.557 CW	MD/DC/DE Traffic Net
2nd Tue	7:30 pm	146.670	Baltimore County RACES Net
2nd & 4th Tue	7 pm	146.775, (-) PL 146.2	Harford County, MD, ARES
3rd Fri	8 pm	WASH_DC Node 6154	MDC Section EchoLink
When activated by NOAA		147.030	SkyWarn (primary)

From the Skies Over Mt. Essex

SKY Events for May 2026

Date	EDT (h:m)	Event
May 01	12:23	FULL Flower MOON
03	21:20	Antares 0.5°N of Moon
04	17:30	Moon at Apogee: 405839 km
05	03	Eta-Aquarid Meteor Shower 60/HR
09	16:10	LAST QUARTER MOON
10	23:36	Moon at Ascending Node
14	09	Mercury at Superior Conjunction
14	23	Venus at Perihelion
15	23:20	Double Shadows om Jupiter
16	15:01	NEW MOON
17	08:48	Moon at Perigee: 358075 km
18	05	Mercury at Perihelion
18	20:50	Venus 2.9°S of Moon
20	07:39	Jupiter 3.1°S of Moon
20	11:30	Pollux 3.4°N of Moon
22	11	Uranus in Conjunction with Sun
23	01:41	Regulus 0.1°N of Moon
23	01:55	Double Shadows on Jupiter
23	06:11	FIRST QUARTER MOON
23	10:26	Moon at Descending Node
27	09:09	Spica 1.9°N of Moon
29	05:56	Double Shadows on Jupiter
31	03:32	Antares 0.4°N of Moon
31	03:45	FULL BLUE MOON (smallest in 2026) 2 nd full Mon in a month
31	23:32	Moon at Apogee: 406369 km

Planet Lookout at Mid-Month

Sunrise 05:51 EST and Sunset 20:13 EDT

Mercury Evening Rises 05:57 Sets 20:28, Mag -2.2 Size 5.1 arc seconds

Venus Evening Rises 07:42, Sets 22:49, Mag -4.0 size 12.4 arc seconds

Mars Morning Rises 04:38 Sets 17:51, Mag +1.2 size 4.2 arc seconds

Jupiter Evening Rises 09:38, Sets 00:23, Mag -1.9 size 34.2 arc seconds

Saturn Morning, Rises 04:02, Sets 16:21, Mag+0.9 size 16.4 arc seconds

Uranus Evening Rises 006:11 Sets 20:36, Mag +5.8 size 3.3 arc seconds

Neptune Morning Rises 003:41 Sets 15:47, Mag +7.9 size 2.4 arc seconds

Once in a Blue Moon!

"Once in a **Blue Moon**": A phrase meaning a rare occurrence, acknowledging that these moons are relatively infrequent (seven times every 19 years).

A Blue Moon occurs under two main definitions: the **Monthly rule**, which defines it as the second full moon in a single calendar month, and the **Seasonal rule**, defining it as the third full moon in a season containing four (rather than three) full moons. Both types appear roughly every 2-3 years. Wikipedia

Can the Moon really be "Blue" yes in some cases.

Actual **Blue-Colored Moon**: A very rare, completely different phenomenon where the moon actually appears blue due to atmospheric dust, smoke, or volcanic ash.

Is there a Blue Moon in May 2026?

Yes, there is a "monthly" blue Moon in May 2026. Because full Moons occur on May 1 and May 31, the second full Moon on May 31, 2026, is considered a Blue Moon. The first full Moon, often called a Flower Moon occurs on the 1st. The Blue Moon on May 31 is also the smallest Full Moon in 2026 (micro-moon), meaning it appears slightly smaller and dimmer than average.

The next double full moon in a month will occur in December 31, 2028 and September 30, 2031.

There are no **Seasonal Blue Moons** in 2026. The next Seasonal Blue will occur on May 20, 2027. And August 23, 2029.

This is other definition of a blue moon where it is the third full moon in a season with four, the following years will have a seasonal blue moon.

About the Aero Amateur Radio Club

Officers		Committees	
<i>President</i>	Joe Miko, WB3FMT	<i>Repeater</i>	Phil Hock, W3VRD Ken Erisman, NE3A Dave Brunner, AC3EO
<i>Vice President</i>	Rob Ballou, AE3B	<i>VE Testing</i>	Pat Stone, AC3F
<i>Recording Secretary</i>	Larry Hill, KB3QWC	<i>Public Service</i>	Bob Landis, WA3SWA
<i>Corresponding Secretary</i>	Pat Stone, AC3F	<i>Webmaster, Facebook</i>	Rob Ballou, AE3B
<i>Treasurer</i>	Tom Hawkins, WA3QLY	<i>Trustee</i>	Dave Frederick, KB3KRV (W3PGA) Jim Marshall, KC3FBL (AE3RO)
<i>Resource Coordinator</i>	Ron Distler, W3JEH	<i>Club Nets</i>	Joe Miko, WB3FMT
		<i>Contests</i>	Harry Rundall, AC3EK
	<i>Newsletter Editor</i>	Cathy Feinman, W3CLF	
Aerial archives dating to 2004 are available at https://w3pga.net/the-aerial-newsletter-library/			
Website: http://w3pga.net			
Facebook: https://www.facebook.com/W3PGAClub			
Email: w3pgaclub@gmail.com			

Meetings

The Aero Amateur Radio Club meets on the first and third Wednesdays of the month at Essex SkyPark, 1401 Diffendall Road, Essex. Meetings begin at 7 p.m. local time, but folks typically start showing up around 6 pm. Meetings are canceled if Baltimore County Public Schools are closed or dismiss early. Zoom link is <https://w3pga.net/>. Contact the club email for the code.

W3PGA 2 M INPUT: 147.84 MHz, OUTPUT: 147.24 MHz, PL 123.0

W3PGA 70 Cm INPUT: 444.575 MHz, OUTPUT: 449.575 MHz, PL123.0

W3JEH 1.25 M INPUT: 222.24 MHz, OUTPUT: 223.84 MHz