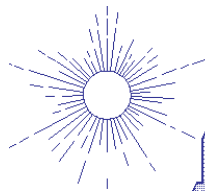


ADAW

10498 Monserrate St
Elk Grove, CA 95757-1765



ADAW

Arizona Desert Aire Waves

Vol 48 No 4

April 2023

CLUB MEETING SCHEDULE

SARC

Apr 5th - 7:00 PM
Via Zoom

AARC

Apr 13th - 7:00 PM
American Red Cross/Echolink

AzRCCC

Apr 11th - 7:00 PM
American Red Cross/MS Teams

AMO

Apr 13th - 7:00 PM
Via Zoom

SuperstitionARC

Apr 18th - 7:00 PM
Charles K Luster Bldg

CHRC

Apr 8th - 9:00 AM
Tri-City Baptist Church

ANSR

Apr 20th - 7:30 PM
via GoToMeeting

KARC

Apr 11th - 6:30 PM
New Hope Christian Fellowship

OVARC

Apr 21st - 7:00 PM
Pima Comm. College, NW Campus

SunLifeARC

Every Monday - 10:00 AM
Via Zoom

YARC

Apr 6th - 7:00 PM
Prescott Rodeo Grounds

TBARC

Apr 20th - 7:00 PM
Arizona Christian University

ATN (VOAR)

Postponed
www.whereby.com/atn1

QCWA-AZ Chapter

TBD
Various

CADXA

Apr 6th - 7:00 PM
Bethany Luthern Church

ARA

Apr 27th - 7:30 PM
Denny's - Tempe & Zoom

CARL

TBD
Arizona Science Center

MMRG

See Web Site

MARCA

Apr 18th - 6:30 PM
Via Zoom

MARA

Apr 1st - 9:00 AM
Maricopa Public Library

WVARC

Apr 3rd - 7:00 PM
Shepherd of the Desert Lutheran Church/Zoom

ADAW Member Clubs

ARIZONA AMATEUR RADIO CLUB

The Arizona Amateur Radio Club meets on the **SECOND THURSDAY** of each month at 7:00 p.m. at the American Red Cross Building at 4747 N 22nd St. in Phoenix. Visit web site at www.W7IO.org for map. Visitors are welcome.

President	Gary Hamman	K7GH	602.996.8148
Vice President	Steve Tolnai	W7WSV	480.390.4446
Secretary	Randy Gault	KJ7RCN	
Treasurer	Bob Hodges	K7JJT	602.375.9982
Activities Mgr	Lori Cripps	WA7EDI	602.955.7517
Membership	Bob Hodges	K7JJT	602.375.9982

AARC c/o Bob Hodges, K7JJT, 15214 N 7th Place, Phoenix, AZ 85022. DUES: \$15.00/YR, Prorated (\$18.00 Family, \$9.00 Student), MEMBERSHIP YEAR BEGINS FEB. 1.

SCOTTSDALE AMATEUR RADIO CLUB, INC.

The Scottsdale Amateur Radio Club meets the **FIRST WEDNESDAY** of each month at 6:00 p.m. in Room 8 at the Granite Reef Senior Center located at 1700 N Granite Reef Road (west side of Granite Reef Rd., 50 yards north of McDowell Rd. Parking on site) in Scottsdale. The club also holds a net every Tuesday night at 7:00 p.m. on the 147.78/.18 repeater.

President	James Wasson	N7ELL	n7ell@scottsdalearc.org
Vice President	Rick Aldom	W7STS	natecf@gmail.com
Secretary	Bruce Harmsen	KA9EYX	ka9eyx@scottsdalearc.org
Treasurer	Douglas Mitchell	W7ADD	w7add@scottsdalearc.org
Past President	Paul Finell	W7EFQ	w7efq@scottsdalearc.org
Board Members	Jim Dye	AG7AU	
At-Large	Scott Gillins	W2KP	
	Bill Kouchis	N9EIV	
	Ed Nickerson	WU7S	
	Gene Geller	K0VN	

SARC, P. O. Box 10878, Scottsdale, AZ 85271-0878. Phone: 602.735.3988. DUES: \$20.00/YR, (\$10.00/Add'l Family Member). Web Site: www.scottsdalearc.org

ARIZONA NEAR SPACE RESEARCH

The Arizona Near Space Research group meets the **THIRD THURSDAY** of the month at 7:30 p.m. via GoToMeeting. Technical meetings are held the first Monday of the month at 7:30 p.m. on GoToMeeting. Please contact an officer about joining our meetings.

President	Stephen Thomas	KE7TLS	iamgadget1@yahoo.com
Vice President	Clayton Jacobs	KJ6QJS	
Secretary	Steve Miller	W6SDM	
Treasurer	Bill McLean	K7WWM	bmclean@gmail.com

ANSR, PO Box 31003, Mesa, AZ 85275-1003. DUES: \$10.00/YR. Web Site: www.ansr.org

Please be sure your club has your current email and/or mailing address.

THUNDERBIRD AMATEUR RADIO CLUB

The Thunderbird Amateur Radio Club meets the **THIRD THURSDAY** of each month at 7:00 p.m. at Arizona Christian University, 59th Avenue and Greenway Road in Glendale. Meeting is in building 3600, Auditorium #1. See the website (<http://w7tbc.org>) for a map and more details.

President	Susan Gray	KK7FYB	president@w7tbc.org
Vice President	Aric Gray	AG7WR	vicepresident@w7tbc.org
Secretary	Andrew Cornwall	KF7CCC	secretary@w7tbc.org
Treasurer	Mike Willmoth	KJ7OPD	treasurer@w7tbc.org
Directors	Bruce Kabana	WB7SRC	wb7src@w7tbc.org
	Robert Lutes	N7NO	n7n0@w7tbc.org
	Gary McGriff	KK7DCR	kk7dcre@w7tbc.org
	Rick Tejera	K7TEJ	k7tej@w7tbc.org
Past President	Charles Loftus	KG7KRN	kg7kmf@w7tbc.org
Station Trustee	Gary Duffield	WK7B	wk7b@w7tbc.org

For further information about the ThunderBird Amateur Radio Club, visit our website at <http://w7tbc.org>, send an e-mail to: info@w7tbc.org or call 602.938.8219. The Thunderbird Amateur Radio Club is a 501(c)(3) non-profit organization. Mailing address: PO Box 11394, Phoenix, AZ 85318-1394.

MARICOPA AMATEUR RADIO ASSOCIATION

The Maricopa Amateur Radio Association (MARA) meets the **FIRST SATURDAY** of each month at 9:00 a.m. at the Maricopa Public Library - Redwood Room, 18160 N Maya Angelou Drive in Maricopa.

President	Cary Gielniak	K7CFG	president@copahams.org
Vice President	Dave Hagan	KK7FWJ	vicepresident@copahams.org
Secretary	TBD		secretary@copahams.org
Treasurer	George Hogan	K7TGH	treasurer@copahams.org
PIO:	Steve Miller	W6SDM	pio@copahams.org

The Maricopa Amateur Radio Association is a 501(c)(3) non-profit organization. DUES: \$25.00/year individual, \$30.00/year family. Apply on-line at www.copahams.org. Mailing address: P O Box 951, Maricopa, AZ 85139

CHANDLER HAM RADIO CLUB

The Chandler HAM Radio Club (call sign N7CHN) meets the **SECOND SATURDAY** of each month at 9:00 AM at the Tri-City Baptist Church, Room 140, on the SW corner of Germann & Dobson Roads in Chandler. Our monthly club meetings are held in person. Visitors are welcome. Check the web site at chandlerhams.org for dates and presentation topics of club meeting. Weekly net is held every Thursday at 8:00 PM on 443.050+ PL100.

President	Dave Hoffman	KJ4RS	pres@chandlerhams.org
Vice President	Debbi Smith	KJ7MIQ	vp@chandlerhams.org
Secretary	Cary Geilniak	K7CFG	sec@chandlerhams.org
Treasurer	Byon Garrabrant	N6BG	treas@chandlerhams.org

Web Page: <http://chandlerhams.org>. DUES: \$25/year primary member; \$10/year family member.



ADAW Member Clubs

BARRY M GOLDWATER, ARIZONA CHAPTER QUARTER CENTURY WIRELESS ASSOCIATION

The Barry M Goldwater Arizona Chapter of the QCWA includes amateurs from all over Arizona who have been licensed for 25 or more years. Meetings are currently held in Phoenix, Prescott, and Tucson. The Arizona Chapter meets on the air every Sunday morning. Please check the website <http://www.azqcwa.org/> for the time and frequency.

President	Tom Fagan	K7DF	president@azqcwa.org
Vice President	Open		
Secretary	Carl Foster	KB7AZ	secretary@azqcwa.org
Treasurer	Carl Foster	KB7AZ	treasurer@azqcwa.org

Web Site: <http://www.azqcwa.org> Email: info@gmail.com
 DUES: \$7.00/year and current national QCWA membership.

MINGUS MOUNTAIN REPEATER GROUP

Meetings are held twice a year, an annual board meeting in Phoenix and a picnic meeting in Chino Valley. Dates, times, and locations are announced in the newsletter.

President	Bob Sitterley	K7POF	928.636.2146
Vice President	Tom Griswold	WN7E	
Secretary	Lori Cripps	WA7EDI	602.955.7517
Treasurer	Bob Sitterley	K7POF	928.636.2146
Board Members:	Gary Hamman	K7GH	
	Butch Merrill	K7JOG	
	Jerry Roberts	KB7CN	
	Ken Rasback	KK7KEN	
	Tom Raczykowski	N7MMC	
	Sonja Hazlett	WB7CWW	
	Larry Dorrell	KG7TTD	

Web Site: <http://www.k7mrg.org> DUES: \$20.00 per year, due prior to July 1. MEMBERSHIP YEAR - July 1 - June 30.

KACHINA AMATEUR RADIO CLUB

The Kachina Amateur Radio Club meets the **SECOND TUESDAY** of each month at 6:30 PM at New Hope Christian Fellowship, 989 Cheney Ranch Loop (US260 & Cheney Ranch) in Show Low.

President	Kevin Parmenter	KG5Q	480.748.8182
Vice President	Bill Turley	KJ7GYH	923.536.2293
Secretary	Marie Mortensen	N7SKS	928.358.8748
Treasurer	Dennis Wilkes	W7DRW	928.739.4700

Mailing Address: Kachina Amateur Radio Club, P O Box 2996, Show Low, AZ 85902. Email: kachinainfo@drwilx.com Testing Info: White Mountain V.E. Team: VETesting@cablone.net. Dues are \$15/yr for individual; \$25/yr for family. Membership is January 1 - December 31. Website: www.kachinaarc.org

ARIZONA REPEATER ASSOCIATION, INC

The Arizona Repeater Association general meeting is held the **FOURTH THURSDAY** of each month at 7:30 p.m. There are no meetings in July and December. The November meeting is held the Monday before Thanksgiving. Meetings are held at Denny's Restaurant, 1343 W Broadway in Tempe (Southeast corner of Priest Dr and Broadway Rd - <https://www.w7ara.org/mtg/Meetings.aspx>). Visitors are welcome. Come early for food and social time before the meeting starts. For further information about the ARA, including repeaters, site status, and the tech/board meeting, please visit our web site at www.w7ara.org.

President	Dennis Bietry, KE7EJF	ke7ejf@w7ara.net
Vice-President	Brian McCarthy, AK7F	ak7f@w7ara.net
Treasurer	Cole Cunningham, AA7RD	aa7rd@w7ara.net
Secretary	Jim Hoff, N7XXX	n7xxx@w7ara.net

Board Members:

Dennis Campbell, AE7WU	ae7wu@w7ara.net
Mike Montalvo, KF7MBK	kf7mbk@w7ara.net
Marty Dusenberry, KE7DGP	ke7dgp@w7ara.net
Lance Halle, KW7LH	kw7lh@w7ara.net
Joe Godfrey, AE7JG	ae7jg@w7ara.net
Joe Bakas, KE7WHE	ke7whe@w7ara.net
James Wasson, N7ELL	n7ell@w7ara.net
Bill Jackson, N9VJW	n9vjw@w7ara.net

For Membership Information, contact (Joe Godfrey, AE7JG membership@w7ara.net) Arizona Repeater Association, Inc, P. O. Box 35758, Phoenix, Arizona 85069-5758. To join or renew, please visit <http://w7ara.org/mbr/Membership.aspx>. DUES: \$20.00/yr. (Jan. 1 through Dec. 31) with a one-time initiation fee of \$10.00. Life and family memberships are available.

SUPERSTITION AMATEUR RADIO CLUB

The Superstition Amateur Radio Club meets the **THIRD TUESDAY** each month at 7:00 PM: January through November at the Charles K Luster Building, 640 N Mesa Drive, Mesa. VISITORS are Encouraged to attend. Zoom is no longer available.

President	Steve Estes	KB7KWK	kb7kwk@superstitionarc.org
Vice President	Matt Churchill	K7YEG	k7yegt@superstitionarc.org
Secretary	Scott Simeon	KI7KIM	ki7kim@superstitionarc.org
Treasurer	Bryan Hubbard	KF7DPC	kf7dpc@superstitionarc.org
Directors:	Brent Butler	W7FK	w7fk@superstitionarc.org
	Jeff Harris	K2DFE	k2dfc@superstitionarc.org
	Jeff Heinze	N7CCW	n7ccw@superstitionarc.org
	JD Smaylis	KF7VOX	kf7vox@superstitionarc.org
	Doug Brown	AG7KU	ag7ku@superstitionarc.org
	John Jacques	KD8PC	kd8pcu@superstitionarc.org
	John Wolven	KG7NSP	kg7nsp@superstitionarc.org

Superstition ARC, 5155 E Eagle Dr #21522, Mesa, AZ 85277.
 Web Sites: SuperstitionARC.org and SuperstitionSuperFest.org.
 For more information, send email to: info@superstitionarc.org.
 The Superstition Amateur Radio Club, Inc. is a 501(c)(3) non-profit corporation.

ADAW Member Clubs

MARCA, Inc. / W7MOT

MARCA is an Arizona 501(c)(3) Non-Profit organization. The club call sign in W7MOT. Membership is open to all amateur radio enthusiasts. Meetings are held the **THIRD TUESDAY** of each month at 6:30 p.m. via Zoom - login info on W7MOT.org. Monthly presentations cover a broad spectrum of interesting subjects. Visitors are welcome to attend. Come early (6:00 p.m.) socializing. Repeater Problem Reports are encouraged. A Repeater Problem or Comment Reporting is available at <http://www.w7mot.org/index.php/repeaters/report-a-repeater-problem>. Site Managers and officers will take reports for any W7MOT repeater. Contacts are found on website. Club activities include providing voice, aprs, packet, DStar, and Fusion repeaters Central Arizona; ARRL Field Day, special interest groups in SDR, APRS, antennas, digital modes, and SBC applications.

President	Ray Vasquez	K4RMV	
Vice President	Tom Morrissey	KE7TM	
Treasurer	Norm Johnson	AA7OO	480.278.2886
Secretary	Paul Bennett	KD7KDO	
Board Member	David Yee	N7AJR	
Trustee:	Norm Johnson	AA7OO	480.278.2886
Webmaster:	Norm Johnson	AA7OO	480.278.2886

MARCA, Inc., c/o Norm Johnson, 5756 S Wildrose, PO Box 85140, Mesa, Arizona 85212. Membership dues \$25 annually. See our website (<http://w7mot.org>) for more information about meeting schedules, membership, repeaters, library, and club activities.

CENTRAL ARIZONA DX ASSOCIATION

We are finally back to in-person meetings! And we have a new location! The Central Arizona DX Association meets the **FIRST THURSDAY** each month at 7:00 p.m. at Bethany Lutheran Church, 4300 North 82nd Street in Scottsdale. and we'll try to also share the meeting on Zoom. Most months we have a pretty interesting program or presentation. Visitors always welcome. See www.cadxa.org/meetings.html for more information. Contact club president for zoom link.

President	John Jolly	N7NWL	wa7nwl@gmail.com
Vice President	Virgil Silhanek	K7VZ	k7vz@arrl.net
Secretary	Temporarily Vacant		
Treasurer	Mike Wright	N7MW	n7mw@aol.com
Immed. Past Pres.	Bill Poole	AA4Q	aa4q@arrl.net
Directors	Ron Smith	N7RD	n7rd@cox.net
At-Large	Steve Protas	K7SP	sprotas@juno.com

CADXA, P.O. Box 24616, Tempe, AZ 85285-4646. Email: aa4q@arrl.net. Dues are \$25 per year (\$12.50 per additional family member). For more information, DXing resources, and a membership application, visit our website: www.cadxa.org.

YAVAPAI AMATEUR RADIO CLUB

The Yavapai Amateur Radio Club meets the **FIRST THURSDAY** of every month at 7:00 PM in the Freeman Building at the Prescott Rodeo Grounds located at 840 Rodeo Drive in Prescott (visit web site at www.w7yrc.org for directions and map). YARC is an ARRL Special Service Club dedicated to public service and emergency preparedness. The club serves the quad cities area of Prescott, Prescott Valley, Chino Valley/Paulden, and Dewey/Humboldt.

President	Ray Kolman	KI7COM	president@w7yrc.org
Vice-President	Mike Reid	WU7V	vice_president@w7yrc.org
Secretary	Tim Norton	K7PVY	secretary@w7yrc.org
Treasurer	Jane Lerette	K7ZHF	treasurer@w7yrc.org
Past President	Bill Noe	WG7W	
Board Members	Ron Levine		
	Debbie Kolman	KD7COM	
	Mike Schnell	NC7X	ka9cid@gmail.com
	Ron Shimek	W7WWB	
Past President	John Snedden	KT7P	

Yavapai Amateur Radio Club, P O Box 11994, Prescott, AZ 86304-1994. DUES: \$20.00/yr. Visit the website at www.w7yrc.org

K7ARC AZ RED CROSS COMMUNICATIONS CLUB

The Arizona Red Cross Communications Club meets the **SECOND TUESDAY** of each month at 7:00 PM at the Red Cross Building located at 4747 N 22nd Street in Phoenix. The group meets at emergency drills and at the call of the officers.

President	Charlie Zurenko	N2TFS
Vice President	Mark Steele	KI7RB
Secretary	Jerry Quenneville	K1GJQ
Treasurer	Saroj Gilber	KM6BQD
Past President	Frank Engstrom	KB7IQ

Arizona Red Cross Communications Club - K7ARC, 4747 N 22nd Street, Phoenix, AZ 85016. Web Site: K7ARC.org Email: info@k7arc.org

NORTHERN ARIZONA DX ASSOCIATION

The Northern Arizona DX Association is a small, but very active club in Flagstaff. We hold our monthly meetings the **FIRST TUESDAY** of each month via ZOOM at 6:00 p.m. MST (01:00 UTC). A ZOOM ragchew is held every Wednesday at 9:00 a.m. Visitors are welcome. Please e-mail President Mike at michael-hanks@hotmail.com to receive the ZOOM invite and password.

President	Mike Hanks, W7QS	michael-hanks@hotmail.com
Vice-President	Larry Gilbert, WB7EUJ	
Secretary	David Schaubert, NJ0W	
Treasurer	Ken Held, W7SS	

Website: www.nadxz.com. If you are interested in joining us, please read through our Bylaws (available on the website) and attend a club meeting or breakfast. A sponsor will be assigned to get you acquainted with our merry band



ADAW Member Clubs

CENTER FOR AMATEUR RADIO LEARNING

The Center for Amateur Radio Learning is a hands-on amateur radio station, W7ASC, located within the Arizona Science Center at 600 E. Washington, Phoenix. Hours of operation are the same as the Arizona Science Center (subject to availability of volunteers.) The station is located on the third floor of the Science Center, in the "My Digital World" gallery. Board meetings are held the last month of each quarter at the AZ Science Center. An annual meeting for all volunteers is held the **THIRD SATURDAY** of January. Watch ADAW for details.

President	Jack Landon	KD7ROB	480.759.5195
Vice-President	Gary Malhoit	N4WU	
Sec./Scheduling	Sam Marshall	N7INV	602.291.0992
Treasurer	Karen McConaghy	NO7D	602.799.7338
Station Engineer	Rusty Kinner	WA8ZID	
Board Members:			
	Tom Salt	AD7PM	At Large
	John O'Neal	K7JP	Teacher Packets
	Jerry Quenneville,	K1GJQ	ARCA Delegate

Direct Phone: 602.716.2082

AMATEUR TELEVISION NETWORK

The Amateur Television Network (ATN) promotes video operation on linked repeaters and mesh networks. Business meetings are in January and July. Monthly social meetings are postponed due to the pandemic. Join us online at www.whereby.com/atn1 on Sundays at 7:00 PM AZ time and Tuesdays at 8:30 PM AZ time for our ATV Nets. It's a lot of fun!

If you can, check in with RF on ATV, FM or DMR...

ATV Repeater Inputs: 434 MHz AM/DVB-T and 2441.5 MHz FM
 ATV Repeater Outputs: Phoenix - 1253.25 and 5910 MHz,
 Mesa - 421.25 and 1289.25 MHz, Tucson - 1277.25 MHz
 FM Repeater Outputs: Phoenix - 448.400 MHz PL 100.0,
 Mesa - 445.175 MHz PL 100.0, Tucson - 445.225 MHz PL 103.5
 DMR Talk Groups: 9410 "ATV Talk" and 31024 "ATN"

We also stream 24x7 on www.youtube.com/amateurtelevisionnetwork and on YouTube at W7ATN-Arizona Live and W7ATN-Mesa Live.

President	Ed Olague	K5OLA	602.885.7725
Vice President	Rod Fritz	WB9KMO	480.322.5149
Sec./Treasurer	Lee Weitzel	K0CCU	602.439.4840
Repeater Trustee	Kevin Jacobson	AD7OI	602.694.0851
Webmaster	Roland Hoffman	KC6JPG	562.577.1381

ATN-AZ, 4134 W. Danbury Dr. Glendale, AZ 85308. Full membership dues are \$75 annually. Affiliate membership is free. Website: www.atn-tv.org. Email: wb9kmo@gmail.com

WEST VALLEY AMATEUR RADIO CLUB

The West Valley Amateur Radio Club, an Arizona 501(c)(3) non-profit corporation, has been providing emergency communications since 1961. Meetings are the **FIRST MONDAY** of each month at 7:00 PM at Shepherd of the Desert Lutheran Church, 11025 N 111th Avenue in Sun City. The board meets on the third Thursday of the month at 10:00 AM as a Zoom meeting. A weekly breakfast is held on Thursdays at Lou's Tivoli Gardens, 12535 W Bell Rd at 7:00 AM. Club nets are held on 147.300 (tone 162.2) at 9:00 AM and at 8:00 PM. Please check our website (<https://westvalleyarc.com>) for other events and information.

President	Bill Ciccone	KA2KHV
Vice-President	Josh Cavender	KE7WIL
Secretary	Lee Ann Ciccone	KJ7AZR
Treasurer	Jeff Rogers	KD7KYE
Board Member:	Bob Runke	AB7RR
	Mike Stevens	K7BLT
	Larry Johnson	WO7C

Committees:		
Membership	Krissy Larson	KI7GJJ
Technical Advisory	Frosty Oden	NQ1S
Equip. Donations	TBD	
	& Sales	

WVARC, P O Box 1573, Sun City, AZ 85372-1573. DUES: \$15.00/YR for family residing at the same address. MEMBERSHIP YEAR - January - December. Web Site: <http://westvalleyarc.com>. Email: suncitywvarc@gmail.com

SUNLIFE AMATEUR RADIO CLUB

The Sunlife Amateur Radio Club is a Snowbird Club and meets **EVERY MONDAY** at 10:00 AM from October through the end of April both in person and on Zoom at Greenfield Village, 111 S Greenfield Road in Mesa. Please contact Sue Rogers, W7SKH at happyham7777@gmail.com.

Nets:

20 Meter Net: Monday, Wednesday, & Friday, 14329 Mhz SSB 12:30 p.m./11:30 a.m. during daylight savings time.
 10 Meter Net: Tuesday & Thursday, 28.329 Mhz, SSB. 7:00 p.m./8:00 a.m. during daylight savings time.
 Venture Out: 2 Meter Net: Monday, Wednesday, & Friday, 1:00 p.m., 146.58 MHz FM simplex, 12:30 p.m.

President	Ralph Towers, KA0CET	retowers@hotmail.com
Vice President	Jim Hood, K5TT	
Secretary	Greg Watkins, WB7VOK	
Treasurer	Cheri Goforth, KD7ZXD	treasurer.sunlifearc@gmail.com

Membership dues are \$10.00/year. If you would like to be a member, visit the website at <https://www.sunlifearc.org/>

ADAW Member Clubs

AMO - ARIZONA MESH ORGANIZATION

The Arizona Mesh Organization (AMO) is a 501(c)(3) amateur radio club. Our goals and purpose is to promote and support ARDEN MESH Networks throughout the state of Arizona, to explore new technologies, to promote the education of what amateur radio mesh is, to support and exchange information with mesh users throughout the state, to further the technology of mesh radio itself, to support emergency and public service communications, and (of course) to have fun along the way. AMO's board meets the **FIRST THURSDAY** and club meetings are held the **SECOND THURSDAY** of each month via Zoom. If you would like to attend either of these, contact the President, Michael, KI7LXY at president@arizonamesh.org at least 24 hours in advance. Visit the web site at <https://arizonamesh.org> for more information on the AMO Club and up-to-date news.

President: Michael Bailey, KI7LXY president@arizonamesh.org
Vice-President: Steve Estes, KB7KWK vicepresident@arizonamesh.org
Treasurer: Scott Gillins, W2KP treasurer@arizonamesh.org
Secretary: Robert Fridell, N3BZ secretary@arizonamesh.org
Board of Directors
Dale Schmidt, N7QJK n7qjk@arizonamesh.org
Heidi Brewer, K7ZAE k7zae@arizonamesh.org
Gary Hinton, AC7R ac7r@arizonamesh.org
Bob Howard, W8RH w8rh@arizonamesh.org
Rodney Fritz, WB9KMO wb9kmo@arizonamesh.org

Mail Address: Arizona Mesh Organization Inc, 7939 E Golf Avenue, Mesa, Arizona 85209. DUES: Full Membership \$25.00 per year. Visit the AMO web site for more information on membership. If you would like to join, visit our web site and click on the HamClubOnline Banner: https://arizonamesh.org/amo_membership.shtml

ARIZONA OUTLAWS CONTEST CLUB

The Arizona Outlaws Contest Club ("AOCC") does not hold routine meetings. At least once per year, we hold the AOCC Roundup, a catered event that rotates each year between Phoenix, Tucson, and Prescott. All members have access to an email reflector. Members post comments, questions, and their contest scores. All licensed amateur radio operators interested in amateur radio contesting (also known internationally as "radiosport") are eligible for membership. For more information, see our website, www.arizonaoutlaws.net.

President: Mike Fulcher, KC7V mikekc7v@gmail.com
V. P. North Area: Ray Benny, N6VR n6vr@arrl.net
V.P Central Area: Chuck Zanella, KF7U Chuck_KF7U@outlook.com
V.P. South Area: Owen Watson, AK7W ak7w.owen@gmail.com
Secretary/Treasurer: Larry Reader, KE2VB larry.ke2vb@gmail.com

Arizona Outlaws Contest Club, 1099 N Olympic Pl, Tucson, AZ 85737. Dues are \$10 per year. For more information, contesting resources, and a membership application, visit our website: www.arizonaoutlaws.net.

ORO VALLEY AMATEUR RADIO CLUB

The Oro Valley Amateur Radio Club meets the **THIRD FRIDAY** of each month at 7:00 p.m. at Northwest Campus, Pima Community College, 7600 N Shannon Road in Tucson. (Monthly meetings are live-streamed.) Visitors are welcome. Board Meetings are held at 7:00 p.m. via ZOOM. Check the web site at www.tucsonhamradio.org for dates.

President: Steve Wood W1SR w1sr@arrl.net
Vice-President: David Beauchesne AK2L ak2l@arrl.net
Secretary: Logan Zintsmaster KE7AZ lrahnz@garlic.com
Treasurer: Beverley Hester WB7BEV wb7bev@cox.net
Board Member: Fred Bresani W2HZ w2hz@verizon.net
Board Member: Andreas Prorocok W1IXQ teslarocks77@gmail.com
Board Member: John Behrens K7JWB johnbehrens@comcast.net

DUES: \$25.00/year (Household members living at same address \$15.00 each additional). To join or for additional information, visit website at <http://www.tucsonhamradio.org/>.



THE AMATEUR'S CODE

ONE

The Amateur is Considerate . . . He never knowingly uses the air in such a way as to lessen the pleasure of others.

TWO

The Amateur is Loyal . . . He offers his loyalty, encouragement and support to his fellow radio amateurs, his local club and to the American Radio Relay League, through which Amateur Radio is represented.

THREE

The Amateur is Progressive . . . He keeps his station abreast of science. It is well-built and efficient. His operating practice is above reproach.

FOUR

The Amateur is Friendly . . . Slow and patient sending when requested, friendly advice and counsel to the beginner, kindly assistance cooperation and consideration for the interests of others; these are marks of the amateur spirit.

FIVE

The Amateur is Balanced . . . Radio is his hobby. He never allows it to interfere with any of the duties he owes to his home, his job, his school, or his community.

SIX

The Amateur is Patriotic . . . His knowledge and his station are always ready for the service of his country and his community.



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The *Arizona Desert Aire Waves* is published monthly and is the official news media of the sponsoring clubs. All news items, articles and inquires should be submitted to each club's editor. Any information and opinions printed herein are those of the contributors and are not necessarily those of the sponsoring clubs. Full permission is granted to quote from this publication providing credit is given to the individual contributor and the ADAW. ALL RIGHTS RESERVED. **Deadline is 10th of the month**

From the Editor's Desk

They say that April showers brings May flowers. With all the rain we've been getting lately, lets hope that the showers decided to take the month off! May should already display an explosion of all things green and blooming.

The April Hamfest and Electronics Swap at DeVry is just around the corner. The expanded event will be taking place on April 8 in the DeVry south parking lot at 2149 W Dunlap Road in Phoenix. The hamfest will feature the usual tailgating and vendor setups as well as VE testing, DX QSL Card checking, prizes, and refreshments.

This year several meetings will be held in conjunction with the hamfest. The Arizona Repeater Owners Group will hold their Spring meeting at 9:00 AM. The committee advises that there will be no voting or discussion on the proposed band plan changes at this meeting. The proposed and historic band plans can be found at www.azfreqcoord.org/by/by.htm. If you have comments, you can submit them to coordinators@azfreqcoord.org.

At 10:00 AM, Congresswoman Debbie Lesko will give a presentation on the bill she introduced in the US House of Representatives (H.R. 9664) on December 21, 2022. This bill would require the FCC to replace the current HF digital symbol rate limit with a 2.8 kHz bandwidth limit. The ARRL (American Radio Relay League) petitioned for this same thing in 2013. The FCC issued a Notice of Proposed Rulemaking in 2016, but no further action was taken. The presentation will be held in the DeVry courtyard.

The Amateur Radio Council of Arizona will hold its Spring Meeting at 11:00 AM. The council will discuss several topics including an ARDC Grant and the new Flagstaff Hamfest being presented by the Northern Arizona DX Association. All are welcome to attend.

Plan to attend this event. It promises to be great this year.

73, 'til next month!

Christine, N7PVL





OVARC Continued from Previous Column



It seems that Winter has abruptly ended after a notable snowfall early in the month. This weather surely makes club outings inviting.

Many thanks to several members that made our first outing of 2023 a huge success. Andreas-W1IXQ did most of the heavy lifting. THANK YOU, ANDREAS! GREAT JOB! We converged on Brandi Fenton Park at the end of February and had a great time. Thanks to Walt for planning the Fox Hunt. There were about 25 people that attended the outing and about a dozen that participated in the Fox Hunt. Congratulations to Paul-KI7HLO for being the first place winner followed by Gerry-KK7HTF and Joe-KC2J. The prizes were small but the fun was magnificent.

OVARC has organized an NCS Forum. This is for Net Control Stations and those interested in becoming net control stations. We have invited Bob-KA7VPR to be our moderator and give us all some tips and tools that we can use to be better net control stations. The forum is open to anyone. Please contact Steve at W1SR@arrl.net to pick up the ZOOM credentials. Bob has been a net control station for many public service events and has the expertise from which we all can learn. Thank you in advance for doing this Bob.

Our March meeting will be held at a new venue thanks to Gerry-KK7HTF. Through Gerry's tenacity we have arranged to hold our VE sessions and meetings at the Northwest Campus of Pima Community College. The address is 7600 North Shannon Road. It's a beautiful campus and one that will easily serve our needs.

On Tuesday, April 4th we will begin a series of in-person Technician License classes. The classes will be held at the Northwest Campus of Pima Community College. Classes are open to everyone. If you are reading this, surely you know of someone that would enjoy live instruction to get their first amateur radio license. Email David at licensing@tucsonhamradio.org for details. Thanks to David-AK2L for organizing this.

Hamvention and Field Day are just around the corner. Hope you are planning to participate in one or both of these great events.

73! Steve – W1SR



Continued Next Column

For Sale / Wanted



**LOOK!
Great Deals!**

For Sale

For Sale - Military Tube Tester TV-7D/u

Working. Very Clean. Recently updated and calibrated (May 2022) by Dan Nelson (an acknowledged expert). Can provide documentation and test report. Updated with Nelson's digital meter with plate current test button. Great for matching tubes. Built like a tank. Item dimensions 16"L x 9"W x 7"H. Weight 19 lbs. Located in North Central Phoenix, AZ.

\$1,300.00 (Or Best Offer)

Contact Wayne, KC9IC at 815.263.9329

For Sale - US Tower MA40 - 40 foot - 2 Sections

includes: MARB Rotor Base, CX-2M 2 Coax Arms
4 cement anchor bolts, 6-foot top mast
All hardware, winches, and cables

\$1,000.00

(Current US Tower listing - \$6,560 including freight)

Located in 43rd Ave and W Bell Rd area of Phoenix

Contact Lee Weitzel K0CCU at 602.330.4840

For Sale - "The Dominator" 6 meter, 5/8 wave vertical antenna. Made like a tank in Italy by SIRIO. Is in perfect condition in Tucson. \$100.00

Contact Richard Bruns, K7VQ at d_brunz27@yahoo.com

11.0/13.5 KW 120/240 V Predator Generator

Looks and runs like new. Electric start with 12V battery and charger. Purchased 8/3/16, has 37 hours total run time. Comes with Manual, complete maintenance log, 90' 50-A cable, and dual 6' loading ramps. \$1800.00 Contact: Dave West K9JKN at WestDL@aol.com or 480.641.1480.

The **West Valley Amateur Radio Club** has radios and ALL kinds of supplies available for sale through the club. We get some old equipment that won't sell that will be added to the items for free. Contact: TBD



The Kachina Amateur Radio Club has finalized our 501C3 organization with the IRS. Our primary goal is to support for and promote amateur radio in the White Mountains area of Arizona. Thanks to our members our website now takes donations and paying of club dues on our website.

The winter months have seen several snowstorms in the area where severity caused interrupted utility power. Some of our sites were running on battery power, or some locations, we were operating on generator power. This allowed our members to also provide communications through our repeaters in the area with emergency Communications.

Our club will be assisting in equipping our county Search and Rescue command post with radios and antennas.

Our training teams are providing classes to prepare hams in the area to obtain their amateur radio licenses or upgrade. And our VE team provides testing sessions. Go to Kachinaarc.org for schedules.

Congratulations to our new Technicians: John Pearsol - KK7KHX, Wade Millet - KK7KIG, Joseph Hargett - KK7KJN, Stephan Birdsong - KK7KIA, Shella Moffatt - KK7KKJ, Barbara Schultz - KK7KDL



Public Service Calendar

Maricopa County Emergency Communications Group Events

EVENT	LOCATION	DATE
Pats Run	Sun Devil Stadium at ASU and Tempe Town Lake	04/15/2023
Zane Grey 100K	Mogollon Rim, N. of Payson	04/22/2023
Flag2GCMT Bike Ride	N of Flagstaff to Grand Canyon	08/05/2023
Mogollon Monster	Rim Country, E. of Pine	09/09/2023

To sign up for an MCECG Public Service Event: www.mcecg.net

For information, contact Dennis Bietry - KE7EJF at 602.274.3732 - email, ke7ejf@cox.net, or contact the Event Coordinator for the event.



Hamfest Calendar

8 April 2023 - **April Hamfest at DeVry** - hosted by the Arizona Amateur Radio Club and the Arizona Red Cross Communications Club (K7ARC) will be held at DeVry University, 2149 W Dunlap Avenue, Phoenix. Hours are 7:00 AM until 11:00 AM. Admission donation - \$5.00. Tailgate Spaces - \$10.00 each. VE Testing at 9:00 AM. DX QSL Card Checking from 9:00 to 10:00 AM. Repeater Owners Meeting at 9:30 AM. ARCA Meeting at 11:00 AM. Prizes - Coffee - Donuts - Sodas. Talk-In on 147.280 (+) PL 162.2 Hz. For more information or to reserve a space, contact Gary Hamman at k7gh@arrl.net or 480.216.2665.

6 May 2023 - **Cochise Hamfest and 7th Region Communications Exercise** - hosted by the Cochise Amateur Radio Association will be held at the club site, 2756 South Moson Road in Sierra Vista. Gates open at 7:00 AM. Free Admission and Parking. Tailgating - \$5. Inside Table - \$10. VE Testing from 9:00 until 11:30 AM. Coffee, Pastry, and Drinks Available. Hourly Prizes with Main Prize drawing at 12:00 Noon. Talk-In on 146.76(-) PL 162.2 Hz.

13 May 2023 - **Prescott Hamfest** - hosted by the Yavapai Amateur Radio Club will be held at Granville Elementary School, 5250 Stover Drive in Prescott Valley. Hours are 8:00 AM until 12:00 Noon. General Admission is \$5.00 per person. Full time students with student ID and those 16 years and younger are free. Swapfest spaces are \$10.00 each with a maximum of 3 spaces. Pre-registration for spaces is advised - www.prescotthamfest.org. RVs, Campers, and Trailers will not be permitted due to limited space. Sorry - No guns, Drugs, Alcohol, Smoking, Vaping, or Fireworks. Only leashed animals are permitted. visit www.prescotthamfest.org for additional details

15 July 2023 - **Flagstaff Hamfest** - hosted by the Northern AZ DX Association will be held at Sinagua Middle School, 3950 E Butler in Flagstaff. Hours are 7:00 AM to 3:00 PM. Admission Donation \$5.00. Students with ID and those 16 years and younger are free. Tailgate spaces - \$10 per space. Tailgate set up 6:00 AM to 7:00 AM. Inside Vendor space \$20 per 10'x10' space. Vendor set up Friday noon to 4:00 PM and Saturday 6:00 AM to 7:00 AM. VE Exams, Seminars, Speakers, ARRL Forum, ARCA Annual Meeting, Repeater Owners Meeting. Talk-In on 146.98(-) 162.2 PL. No Overnight Parking and no RVs permitted in Tailgate area due to limited space. Sorry, No guns, Drugs, Alcohol, Smoking, Vaping, or Fireworks. Only Service animals are permitted. For more information: Email President@nadxa.com. Web Site: FlagstaffHamfest.org

23 September 2023 - **Tucson Autumn Hamfest** - hosted by the Radio Society of Tucson. Watch for details.

28 October 2023 - **COPAfest** - hosted by the Maricopa Amateur Radio Association will be held at The Ultrastar at Ak-Chin Circle, 16000 N Maricopa Rd in Maricopa. Hours are 7:00 AM until 1:00 PM. Admission Donation is \$5.00 per person. Spaces are \$10.00 for two parking spaces. Set up begins at 5:00 AM. Balloon Launch, VE Testing, Card Check-



At the March 9 AARC meeting, Lori Cripps, WA7EDI, reported the results of the February 25 VE test session. KL7 call signs were issued to the new technicians. The FCC returned to issuing KK7 calls on March 7. Steve Tolnai, W7WSV, gave a positive report on solar activity as all of the metrics used to report solar activity are up. Several of us presented information about Samuel Morse, the inventor of telegraph and the Morse code.

The April Hamfest and Electronics Swap at DeVry is April 8. It is put on by the AARC and AZ Red Cross Communications Club. Planning for it is in progress. See you there!

73,
Lori Cripps, WA7EDI

ADAW

Hamfest Calendar Continued from Previous Column

ing, Vendor Exhibits, Seminars, Prizes and more. Many activities available in the Multitainment Center including laser tag, bowling, movies, games, dining and more. Dining and Hotel also available. For information, email fest@copafest.org or visit the website at www.copafest.org.

4 November 2023 - **HARKfest Tailgate Hamfest** - hosted by the Hassayampa Amateur Radio Klub will be held at Redeemer Lutheran Church Annex, 470 Rose Lane in Wickenburg. Hours are 8:00 AM to 12:00 Noon. Free Admission. \$5.00 Outside Tailgating - \$10.00 Inside Table. Must pre-register with HARKfest Manager, Duane, KD0KYK: djgrooms@yahoo.com. Main and door prizes. Overnight Full RV hook-up or dry camping available barely 15 minutes up Hwy 89 at North Ranch Escapees RV Park (northranch.escapeesrvparks.com). For more information and questions, email Duane, KD0KYK at djgrooms@yahoo.com.

11 November 2023 - **Tucson Hamfest** - hosted by the Oro Valley Amateur Radio Club will be held at Marana Middle School, 11285 W Grier Road in Marana. Gates open at 7:00 AM (5:00 AM for sellers). Closes at 1:00 PM. \$5.00 Admission includes a bottle of water. Children under 12 are free with a paid adult. Students are free with any AZ school ID. Seller spaces - \$10.00 per space (includes the seller). Indoor VE session. Pre-registration preferred - email licensing@tucsonhamradio.org. ARRL Card Checking, Interesting Seminars, Prizes! Food Truck available for Breakfast and Lunch. Contact hamfest@tucsonhamradio.org for more information.

Continued Next Column



YARC is one of the largest and most active amateur radio clubs in the southwest. Our home is in beautiful Prescott, Arizona, at an elevation of 5400 ft. Why not join us for one of our club meetings. All the info will be on our website, www.w7yrc.org.



The 2023 Prescott Hamfest will be held on Saturday, May 13th, from 8:00 to 12:00 MST at Granville Elementary School in Prescott Valley. The hamfest is co-sponsored by the Yavapai Amateur Radio Club (YARC) and the Amateur Radio Council of Arizona (ARCA). The hamfest has been sanctioned by the ARRL.

The grand prize is a Yaesu FT-991A transceiver. The DX Store and Comet Antennas have also donated a Comet CA-500 Mark III antenna analyzer as a grand prize.

There will be tailgating sales, hourly prize drawings, YARC Youth Group sales, as well as the group's project displays and demonstrations. The ARRL Arizona Section Manager, Rick Paquette W7RAP, will have a booth at the hamfest, along with ARRL QSL card checking. Coffee and donuts will be available for purchase.

Tailgating vendors who want to sell radio-related equipment and parts are encouraged to preregister for their parking spaces online to ensure they will have a covered place to sell their wares. You can also purchase grand prize raffle tickets online. You do not need to be present to win any of the grand prizes.

Go to www.prescotthamfest.com for further information, to preregister your tailgating spaces, to see a list of the grand prizes, and to purchase grand prize raffle tickets.

License classes are available if you want to get licensed or upgrade. The schedule for 2023 is here.

Technician Class just concluded in March, but another will follow on September 23rd and 30th at the Jeep Posse Building 8:30 a.m. to 4:00 p.m.

General Classes are April 22nd, 29th and May 6th, then October 28th and November 4th, at the Jeep Posse Building 8:30 a.m. to 4:00 p.m.

Continued Next Column

YARC Continued from Previous Column

Amateur licensing tests are available in Prescott every month. Both YARC and our fellow licensing group "ARRL Ham Radio Exams" test on alternate months. YARC's next session will be on April 1, 2023. Pre-registration is recommended at www.w7yrc.org/arrl-vec/. All test sessions for 2023 are now on the YARC website or the ARRL exams page on their site.

The Yavapai Amateur Radio Club has a 2-Meter and 70CM FM net dubbed the "1300 Net." It is held every week day (except Saturday & Sunday) at 1300 hours MST on 146.880 (PL of 100 Hz) and 447.650 (PL of 100Hz). These Linked repeaters have AllStar node 502370 and Echolink W7YRC-R.

Other nets we conduct are:
Wednesday Night FM Net - 7:00 PM
Friday Night 6 meter FM Net - 7:00 PM
Saturday Coffee FM Net - 9:00 AM

Details of all nets can be found on our website, www.w7yrc.org

Our public service events are back soon, beginning April 15, 2023 with the Whiskey Basin Trail Run and followed by the BIG Whiskey Off Road Bike Event on April 28, 29, and 30, 2023.

The Yavapai Amateur Radio Club meets at the Freeman Building at the Prescott Rodeo Grounds, 840 Rodeo Drive, Prescott, AZ 86305 on the first Thursday of every (almost) month, at 7:00 PM. Or, if you would like to join the fray via Zoom, the link can be found on the front page of our website, www.w7yrc.org

Remember; BE RADIO ACTIVE!



**HOLOCAUST
MEMORIAL
DAY APRIL 18**



License Testing Information

When you are ready to take an exam for an Amateur Radio license, there are Volunteer Examiners available to assist you. Each Applicant will need to bring a picture ID (some test sessions require two forms of identification). An FCC-issued FRN number is required. If you do not have an FCC-issued FRN number, visit <https://apps.fcc.gov/coresWeb/publicHome.do> to obtain one. If you are upgrading your class of license, be sure to bring the original (and a copy) of your license and/or Certificate of Successful Completion of Examination (C.S.C.E.). There may be an exam fee required.

PLEASE NOTE: Dates, times, locations, fees may change. Arrive promptly at time listed. Fees may vary and exact change or check is required at most sessions. Call test session contact to confirm information. Walk-ins are permitted unless otherwise specified.

IMPORTANT NOTICE: In light of the current situation with the COVID-19 virus, please call to verify whether test session will be held.

April Test Sessions

Apr 1st - Chandler Ham Radio Club -- 10:00 AM
Tri-City Baptist Church, 2211 Germann Rd, Chandler
Bldg D, Room 170
Contact - Byron Garranbrant ve@chandlerhams.org
Walk-Ins Allowed / Registration or Call Ahead
Register at: chandlerhams.org/testing/

Apr 1st, 8th, 15th, 22nd, 29th - NOMADS -- 9:00 AM
Venture Out RV Resort, 5001 E Main St, Mesa
Contact - Robert Bingham 480.404.1408
No Walk-Ins / Register or Call Ahead

Apr 1st - K7ARC VE Team -- 10:00 AM
American Red Cross, 4747 N 22nd St, Phoenix
Contact - Brandi Bridges k7arc.ve@gmail.com
No Walk-Ins / Register at k7arc.org

Apr 1st - Yavapai ARC -- 9:00 AM
Jeep Posse Bldg in Pioneer Park, 1200 Commerce Dr, Prescott
Contact - Donald Bauer 928.775.4690
Pre-Register online: www.w7yrc.org

Apr 1st - Kachina ARC -- 9:00 AM
Taylor/Snowflake Fire Dept, 425 Papermill Rd, Taylor
Contact Vincent Cattolica 520.591.4576

Apr 3rd - WVARC -- 6:00 PM
Shepherd of the Desert Lutheran Church-Walton Hall
11025 N 111th Ave, Sun City
Contact - David Morrill 623.680.5011
No Walk-Ins / Register or Call Ahead

Apr 8th - April Hamfest at DeVry -- 9:00 AM
DeVry University SW Door, 2149 W Dunlap Ave, Phoenix
Contact - David Morrill 623.680.5011

Apr 10th - East Valley VE Group -- 6:00 PM
Charles K Luster Bldg, 640 Mesa Dr, Mesa
Contact - Ray Vasquez 480.696.1581
MUST obtain FRN prior to exam - \$15.00 Exam Fee Cash Only

Apr 10th - Radio Society of Tucson -- 7:00 PM
Immanuel Presbyterian Church, Witherspoon Hall
252 E 22nd St, Tucson
Contact - Diane Zimmerman 520.664.5070

Apr 15th - Northern Arizona DX Association -- 10:00 AM
Flagstaff Fire Station #6, 3877 S Lake Mary Rd, Flagstaff
Contact - Mike Hanks 928.606.4437
No Walk-Ins / Register or Call Ahead

Apr 15th - Hualapai ARC -- 10:00 AM
VE's Residence, 3571 E Lum Ave, Kingman
Contact - Alyce Ingle 425.231.9173

Apr 15th - West Valley Electronic Club -- 1:00 PM
The Shack, 11115 W Nevada Ave (111th & Nevada), Youngtown
Bring FRN, pencil & pen, and \$15.00
Contact - David Morrill 623.680.5011
No Walk-Ins / Register or Call Ahead / Limited Seating

Apr 18th - HARK -- 2:00 PM
Congress, 30736 S Wandering Way, Congress
Contact - Duane Grooms 602.814.9603
No Walk-Ins / Register or Call Ahead

Apr 18th - Boy Scout Troup 127 -- 7:00 PM
St Xavier School, 4715 N Central Ave, Art Room, Phoenix
Contact - John Kelly 480.823.8993





AMATEUR RADIO SERVICE DEMONSTRATION

W7ASC is a Demonstration Station for the Amateur Radio (public) Service. The Volunteers who operate the station are members of the Center for Amateur Radio Learning (C.A.R.L.), a 501(c)(3) corporation. W7ASC is open to all who visit Arizona Science Center (ASC) during those hours when ASC is open. The station is located on the third floor of the Science Center in the “My Digital World” gallery. Direct phone number is 602-716-2082.

ASC is open daily, 10:30 a.m. – 4:00 p.m. The ham shack hours are essentially the same, dependent on availability of volunteer staff. You can also learn more about us by searching our W7ASC callsign on QRZ.com. Our Twitter feed can be accessed at twitter.com/w7asc_arc. We hope to have our web page back up shortly.

CARL Annual Meeting

CARL held its annual meeting on Saturday, 18 Feb 2023 in the board room at the AZ Science Center. Here is a brief list of highlights from the meeting.

Karen NO7D provided the annual treasurer’s report. Jack KD7ROB discussed shack status. Jerry K1GJQ gave the group the latest status on developing our MESH link. Plans were made to honor two past volunteers Peter Petrotta KD7OIW SK & Stuart Scott AE7SS SK on our Silent Key Plaque. We discussed our initial plans for 2023 Field Day. Rusty WA8ZID provided background information on our upcoming preamp installation with our satellite antenna system. The group decided to replace the computer in our East operation position. Jack is working on a display commemorating our recent ISS contact. Finally, an election of officers was held prior to the meeting’s adjournment. Congratulations to our two new officers - Gary N4WU (Vice-President) and Rusty WA8ZID (Station Engineer).

W7ASC Operating as W1AW/7

Rusty has also been working in coordination with W7JET, who is coordinating the Volunteer on the Air (VOTA) W1AW/7 operations for AZ. W7ASC was to use W1AW/7 for VHF/UHF/SAT operations during the time the AZ Science Center is open during the week of March 15-21. If our volunteers operated on 2 meters or above at the Center, they could have optionally used the W1AW/7 call. In the points scheme for VOTA’s year-long activity, these contacts are worth five

License Testing Information

Continued from Page 12

Apr 18th - MARCA ARC -- 5:00 PM

Denny's Back Room, 825 S 8th St, Tempe

Contact - Ray Vasquez 480.696.1581

MUST obtain FRN prior to exam - \$15.00 Exam Fee Cash Only

Apr 19th - Thunderbird ARC -- 6:00 PM

Northwest Christian School, 16401 N 43rd Ave, Phoenix

Enter Gate 9, Room 423

Contact - Walter Reinert 602.668.7804

No Walk-Ins / Register or Call Ahead

Apr 21st - Oro Valley ARC -- 5:30 PM

Pima Community College, 7600 N Shannon Rd,

Bldg A, Rm 208, Tucson

Contact - David Beauschesne 831.345.3308

Apr 25th - Green Valley Amateur Radio Club -- 1:30 PM

Green Valley Fire Dept HQ, 1285 W Camino Encanto, Green Valley

Contact - David Bowen 520.526.2104

Apr 29th - Arizona ARC -- 10:00 AM

American Red Cross, 4747 N 22nd St, Phoenix

Contact - Gary Hamman 602.996.8148

No Walk-Ins / Register or Call Ahead

Pre-Register Required by the Thursday before session

Apr 29th - Kachina ARC -- 9:00 AM

Taylor/Snowflake Fire Dept, 425 Papermill Rd, Taylor

Contact Vincent Cattolica 520.591.4576



CARL Continued from Previous Column

points each. Contacts via terrestrial repeaters do not count, only communications logged on simplex or via Satellite.

If you are interested in sharing your love of amateur radio with our interested and inquisitive visitors at the Arizona Science Center, then perhaps you would like to join the Center for Amateur Radio Learning and volunteer with us at W7ASC. If so, please contact Jack KD7ROB at jacklandon17@gmail.com.

73 de N7INV Sam

w7asc.sked@gmail.com

602.291.0992



Continued Next Column



Emergency Communications Since 1961
SHORT SKIP

Amateur Radio Finally Gets a Seat at the EM-Comm Table!

We have seen decades of public service by hams assisting communities and activities. Parades to foot races, to disasters and saving communications; hams have been the main ingredient in the communications mix worldwide. So, if we are good enough for other events, why aren't we represented at the big events? Utilizing our proven skills and vast array of "free" radio equipment by trained operators for the public good?

Well . . . this year it finally started to change. Usher in Super Bowl 57!



Photo Courtesy Michael Drapkin, WB2SEF

Amateur radio was officially asked to assist the three letter big boys along with local agencies providing communications for the "Big Game!"

I was privileged to have been called up to active status after my recent completion of AUXCOMM training. Having passed the required FEMA (ICS 100, 200, 700 and 800) and Homeland Security, 20-hour, Cybersecurity, and Infrastructure Security Agency (CISA) sponsored classes.

My assignment was being a part of the Aux-Comm (auxiliary communications) team at Phoenix fire station #4, just outside of Margaret T. Hance Park. The NFL and selected vendors hosted a week-long party at the park in downtown Phoenix. My job was to shadow the Phoenix Police and Fire units providing protection and medical aid to over 250,000 guests at the park during the week. Security was very high with helicopter flying overhead and many multi-agency personnel throughout the grounds. Our team discovered an abandoned

WVARC Continued from Previous Column

backpack and reported it to the FBI for further investigation. But, through meticulous forward planning, nothing major unfolded.



Photo courtesy Ed Taggard, K7EDT

After the mostly uneventful week was over and my team won (Kansas City), we were faced with miles of paperwork to document our involvement. Then, further evaluated on our performance and tasks in a multi-page "Task Book."

Shortly after the event, Krissy Larson, KI7GJJ and I were asked to meet with Deputy Chief, Aaron Glass, acting Emergency Manager of the Avondale Emergency Operations Center, recently constructed in 2018. Besides everyday activities and events, they activate the EOC for the week-long, twice yearly, NASCAR at Phoenix Raceway in Avondale.

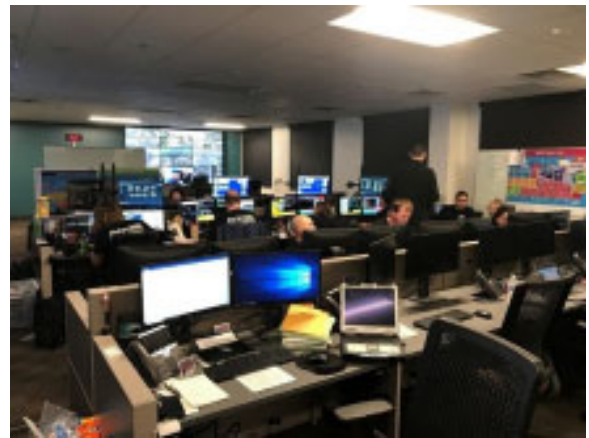


Photo courtesy, Avondale EOC

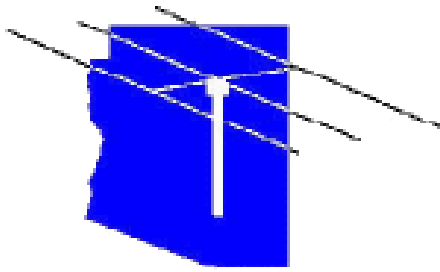
Chief Glass expressed "great interest" in ways they could incorporate amateur radio as an integral part of their city's emergency operations plan from now on. He asked for key-contacts and asked if we would keep our selves available for further discussions.

This is the start that amateur radio has waited decades to have a seat at the table since the invention of radio!

Frosty, NQ1S

Continued Next Column





MARCA INC.

Immediately before the February MARCA meeting, we gave Technician exams to two candidates. I'm pleased to report that both candidates passed.

There's not a lot to report about the meeting. We had some good discussions about a variety of topics at the meeting. We decide to continue the Zoom access to our meetings, at least for the near future.

It was mentioned, again, that although our club's origins were Motorola employees, we now welcome all hams to attend our meetings and join our club! As a reminder, we meet the third Tuesday of the month, currently at the Denny's restaurant that's at 825 S. 48th Street, just south of University Dr. It is basically the southeast corner of the 143 freeway and University Dr. (I've been known to joke that if it were much closer to Sky Harbor, we'd have to go through metal detectors to get in!) Or check out our web site at w7mot.org for info on attending via Zoom.

For anyone looking for an opportunity to take the exam to get or upgrade a license, we offer them at 5:00 PM before the meeting. However, you MUST preregister and have an FRN number. Contact Ray Vasquez, K4RMV to preregister.

Although I did not attend the Scottsdale Hamfest on March 18, I did see the report on the 9:00 PM news on Ch 3. Congratulations to James Wasson, N7ELL, on being interviewed!

Clark Jones, KI7TU



HAVING FUN

CLUB EVENTS

Club Weekly Net (N7CHN NET)

Every Thursday Evening at 8:00 p.m. on MARCA repeater 443.050. This is a weekly NET for all amateur radio operators.

VE Test Session Apr 1st, 2023

Our VE test sessions are scheduled for the First Saturday of every month at Tri-City Baptist Church at 10:00 a.m. See club page for details - <http://chandlerhams.org/testing/>

CHRC Monthly Meeting

Chandler Ham Radio Club monthly meetings are held on the Second Saturday of every month at Tri-City Baptist Church at 9:00 a.m. See club page for details - <http://chandlerhams.org/meeting/>

Club Monthly Breakfast

Chandler Ham Radio Club breakfast is the Fourth Saturday of every month at 8:30a.m. Denny's is on the NE corner of Germann and Gilbert roads. All are invited. Denny's 3971 S Gilbert Rd, Gilbert, AZ 85297



April 1st



April 22nd



ARA History Looking back 43 years

Membership

It's time for annual renewal of your membership for 2023 supporting the ARA repeater system. <https://www.w7ara.org/rcu/welcome.aspx>. Membership info is available at <https://www.w7ara.org/mbr/Membership.aspx> or email membership@w7ara.net.

Meetings

Join us at our next General Meeting in person or virtually. Our in-person meeting moved to the Denny's at Priest and Broadway. If you can't join us in person, our ARA virtual meeting is the next best thing to being there without the food. Follow the link for more details. <https://www.w7ara.org/mtg/Meetings.aspx>. The March 2023 General Meeting will be a presentation on ARES and FirstNet by Brian, WB7OML

Tech Committee

Pinal Peak VHF 147.200 repeater is not working with Rim Link. The tech committee is aware and will schedule a trip when the access road to the site is clear. The Tech committee is always looking for interested members who are experienced or willing to learn about the ARA repeater system. Contact Dennis Campbell ae7wu@w7ara.net for more information.

Amazon Smile

Amazon permanently shut down the Amazon Smile customer donation program on Feb. 20, 2023. Thank you for your directed donations throughout the past years.

ARA UPDATE Repeater Frequency lists
<https://www.w7ara.org/z/Repeaters.aspx>

ARA UPDATED Repeater Maps
<https://www.w7ara.org/mbk/>



SQUELCH TAIL

Arizona Repeater Association Inc.
"Arizona FM Today"
Annual Flood Issue

148: 04/84 34/84 18/78
147: 95/35
449.3/444.3*
448.25/443.25
*Auto Patch

MARCH 1980

Water Water Everywhere

Editor's Note: (This article was written by interviewing Amateurs involved in the emergency flood communications, and by notes taken during the annual Net operations. Due to the tremendous number of Amateurs involved in helping out with this emergency, we will not attempt to mention everyone who was active in helping out. If you listened, you know who was there. Those names and calls included, happened to be providing a unique service, or were operating from a critical area. I personally wish to thank every Amateur who took the time to help out in this emergency. I have never before witnessed such a cooperative effort by Amateur Radio operators. This whole operation proved that Amateur radio in this Valley is worth its weight in gold.)

ANOTHER FLOOD CRISIS — BY ED REAL W7ARF

Squelch Tail estimates that from 250 to 300 radio stations in Central Arizona were involved directly in emergency communications and other community services during the annual Salt River 100 year Flood. If you listened to the constant flow of communications between emergency centers on the local two meter FM repeaters, you could hear urgent requests by the score. They ranged from critical calls for medical assistance and supplies, down to mere routine calls from amateurs trying to travel around the Phoenix area who wanted to know what routes were open. The experience gained from the floods of the last two years helped the amateurs and the various relief and disaster services move quickly to readiness.

Many amateurs put in long shifts at one location, and then moved to another location when replacement operators were needed. During the worst of the flooding, most emergency centers were running 24 hours a day.

The emergency all began with rain on Wednesday, February 13, which did not seem very heavy in the Phoenix area, but dumped lots of water on the Salt River, Verde River, Agua Fria, and other watersheds. By Friday morning, a large volume of water was pouring into the reservoirs. At first, a normal amount of water was released from the dams, but on Friday the Salt River Project began releasing the highest volume of water into the Salt River in recent history, around 180,000 cubic feet per second. As the flood moved down the normally dry river bed, it flooded areas along the river untouched by the previous floods in 1976 and 1979.

Amateur manned stations with their own equipment at the evacuation centers quickly set up in strategic locations. They also set up at the Red Cross headquarters at 15th St. and Flower, and at the Arizona Emergency Operations Center (EOC) at the National Guard headquarters on East McDowell Road. Certain amateurs assumed the task of rounding up operators for each of the locations, usually in four or eight hour shifts. They receive excellent cooperation. Locations of the Red Cross centers included: Mc Clintock High School in Tempe, Kino Junior High School in Mesa, South Mountain High School in Phoenix, Linderoth Elementary School in Cashier, El Mirage Elementary School, Buckeye Union High School, the Maricopa Recreation Center in Sun City, Phoenix Union High School, and the Coronado High School in Scottsdale. Evacuees by the hundreds moved into these shelters Friday and Saturday, generating a heavy load of messages between them and the Red Cross headquarters station.

MARCH 1980 PAGE 2 FLOOD CRISIS (CONTINUED)

Our 14/94 repeater on the White Tanks Mountain proved its reliability and stamina by functioning flawlessly during the whole period, often with the transmitter on for hours without a break. Some traffic for certain services was shifted to our 18/76 repeater and the 22/92 repeater of the Maricopa County Repeater Group.

As the evacuation centers opened, they were stocked with blankets, cots, and other necessities. When the displaced people arrived, they were made as comfortable as possible. A constant stream of messages flowed between the centers, Red Cross headquarters, and other agencies that furnished flood relief. The additional items requested ranged from diapers for the many infants who arrived with their families, to dietary foods for various special diets. Agencies from other areas sent supplies that were short here, such as 200 cots and blankets, from the Red Cross in Las Vegas.

Many City, County, and State agencies geared up to provide emergency services to flood victims. Most had their own radio communication services, and amateur radio communications were used mainly as backup, or into the areas not otherwise covered. Mr. Bill Tidmore of the Red Cross reported that agencies that spanned the Salt and Agua Fria rivers, and had to limit calls between affected areas to only emergency situations. Some radio amateurs stood by to handle urgent calls from the Avondale area after the Indian School Road bridge was washed out, taking the twisted pair with it.

Meanwhile, considerable flood information was passed through the Maricopa Mountain repeater on 90/06, keeping authorities posted on the flood of water coming towards Phoenix from the North. Large releases of water were made from Waddell Dam at Lake Pleasant, which quickly flooded low areas at Helley Acres east of Sun City and in El Mirage. The Linderoth School accommodated many evacuees from the Avondale area and also from an area around 15th Ave. and Southern, south of Cashier, where many people were flooded out of their homes during the past two year's floods.

The ladies pitched in mightily at central stations, especially during those hours when people were at work and couldn't be on the air. Gen. W7KDY, Dottie, KTESA, Doc, WB7ULY, Don, WA7GRQ, and others devoted countless hours to keeping the messages and flow of other communications moving.

RAINBOW VALLEY ISOLATED

A large contribution to public safety by radio amateurs happened in the Rainbow Valley area south of Buckeye. When the heavy water flow down the Gila River reached that area Saturday, it flooded the only good access road and knocked out the power line. Howard, WB7NUV, came up from Gila Bend to provide emergency communications in the valley, south of the river. He probably contributed to saving lives there by getting authorities to the serious situation and organizing communications and other services for the flooded residents there. After almost continuous operation until Monday morning, KOJCA drove down there Monday by way of Maricopa and back roads to take over the communications task. On Sunday night, the Arizona National Guard flew six power generators to Rainbow Valley by helicopter. Since no radio communication equipment on the creek matched the frequencies used by ground units in the area, WA7ZYX flew in the helicopter to provide radio contact with WB7NUV at the landing area.

RAIN RAIN GO AWAY

By Sunday noon, the flooding began to recede as water releases from the dams decreased. The centers at Phoenix Union High School, and Coronado School were closed. By Monday, the evacuation centers at El Mirage, Linderoth School, Buckeye School, and South Mountain High School were still open, but the others were closed. This relieved the pressure for a large number of operators, but radio communications between the still open centers and the Red Cross headquarters continued from early morning to late night. Even the rain had slackened off to squalls at times. This was not the end, for another storm was moving in, and the radio amateurs would be called on again later for more help.

AMATEURS COLLECT WEATHER DATA

On Monday, February 13, weather reports warned of another storm approaching that could add to the flooding woes. The storm struck north of Phoenix Tuesday evening, sweeping across Buck Canyon City, the North Phoenix Area, Cave Creek, and Carefree in a wave of three intense thunderstorms. Stations in those areas passed invaluable weather information to the amateur station at the Arizona EOC, where it was given to authorities. The data included water flow, the height of water in stream beds and water, amount of rainfall, and the path taken by the storm. Hail and damaging winds were reported. One amateur reported that the wind blew down his antennas. The EOC relayed this information along to the Maricopa County Civil Defense and to the National Weather Service at Sky Harbor Airport. The EOC relied heavily on the amateur radio reports and officially thanked the amateurs for their services. During that evening the great number of messages and reports handled by WA7ZYX at the EOC control station required that the EOC staff help copy information.



General Meeting Tuesday, April 18 at 7:00 PM

Please see Page 3 of this issue for the address and related information. Visitors are always welcome to attend our meetings.

Club Member Emails: Do Not Hit "Reply" Button

Emails to club members are handled through a No-Reply mailing list run by HamClubOnline. The Subject begins with: [SuperARC] The message body starts with: ** CLUB COMMUNICATION **

Please use the email address, if any, provided in the message body. Start a new message to the sender. Using the email client's Reply button will send your reply to a bounce address at HamClubOnline. It will never reach the club.

March President's Corner *by Steve KB7KWK*

I would like to welcome all the new members to the club. It has been nice to see all of you at the club meetings and hearing you on the repeaters.

I was wondering what would happen with the meeting attendance when we dropped the Zoom links. Well, it turns out that we have been filling the room with members. Folks have been telling me that it is really nice being able to meet in person again and talk to other members face-to-face. I have finally been able to meet with people I have talked to on the radio, but have never met. Thank all of you for attending the meetings.

Our activities team is doing a great job bringing presentations and outside activities to the club. They work hard to have some good information for you at all meetings. If you have any ideas of presentations you would like to see at a meeting, please contact your Vice President and let him know your ideas. He and I will follow through and have it at a future meeting.

The next club outing will be our annual picnic. We are still working on when and where. In the past we had our picnic in March at a Mesa Park. This year it may be somewhere else and we are working on what to do about food. By now everyone knows what happened at last year's Field Day and we don't ever want to repeat that. Stay tuned!

{Steve also mentioned that Club Vice President Brian W7JET is the state coordinator this year for the W1AW/7 Volunteers on the Air operation in March. This event is now past tense in April, but here, in Steve's words, is his final remarks in the March President's Corner: – WB7C}

Hams all over the world look to make that W1AW contact. If you wish to operate the event then let Brian know. If you have never had hundreds of people calling you at one time after you throw out a CQ, then you will want to give it a try. It is great

Continued Next Column

Superstition Continued from Previous Column

fun. This event will start in mid-March. 73 for now and I will catch you on the air.

Deadlines to Include Your Input in Our Publications:

We publish this column and the club Communicator newsletter. We welcome your input to both publications.

The Communicator: Please email Editor@SuperstitionARC.org with your input by: March 27th. The Communicator will publish to club members in early April.

This publication: Please email WB7C@SuperstitionARC.org with your input by: April 5th. The May ADAW will publish to club members in late April.

73 – Larry Kuck WB7C for SuperARC's part of this ADAW.

Superstition ARC Repeaters

Output	CTCSS	Links To	Mode
147.120 MHz +	162.2Hz	449.600*	FM Only
449.600 MHz -	100.0Hz	147.120*	FM Only
448.275 MHz -	100.0Hz	WIRES-X	Fusion

* Also Links to Echolink Node: **WB7TJD-L**
* Also Links to AllstarLink **Node 52987**

Club Nets

- Morning Drive Time Net:** Mon-Fri, 7:00-8:00 AM - Trivia
- Club Net:** Wednesdays, 8:00 PM - Discussion, Elmer Q&A.
- Mesh Information Net:** Thursdays, 8:00 PM - Net control Steve, KB7KWK
- Fusion Confusion:** Monday & Friday, 8:00 PM - 448.275
- 10-Meter Rag Chew:** Thursdays, 8:00 PM, 28.465 MHz USB

SuperARC Merchandise Store

<https://superARC.big3creative.com>

Club Membership is open to anyone with an interest in Amateur Radio. Visit: <https://superstitionarc.org> for more information.

Superstition SuperFest

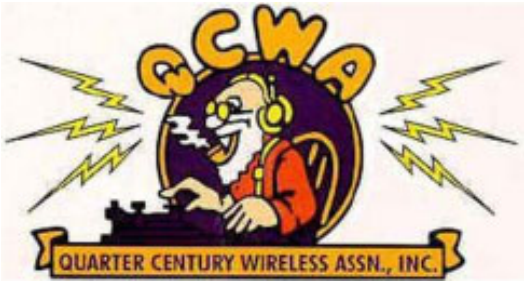
The Superstition SuperFest is held on the first Saturday of December. Visit www.superstitionsuperfest.org for the latest information.



**Administrative Professionals Day
April 26th**



No Reports Received



CHAPTER 16
BARRY M. GOLDWATER ARIZONA CHAPTER



4747 N 22nd St. - Suite 100 - Phoenix, AZ 85016
VHF - 146.84 MHz - PL 162.2 / UHF - 446.900 MHz - PL 131.8
Echolink Node #731289 - K7ARC-R



SARC CONSTANTS:
SARC is a 501 (c)(3) club. That means all donations are fully tax deductible. Contact Paul Finell W7EFQ at 602.741.6563 for information on estate donations and equipment pick-up.
For membership information, call Ed Nickerson, WU7S at 480.949.5162. Please send address change requests to Judy no later than the 7th of the month in which you would like the change to occur.



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FTDX101MP | 200W HF/50MHz Transceiver

- Hybrid SDR Configuration • Upgraded 71 dB Max. Attenuation w/C-Tune • New Generation Scope Display 3DSS • AFB (Active Band Indicator) & MPVD (Multi-Purpose VFO Outer Dia) • PC Remote Control Software to Expand the Operating Range • Includes External Power With Matching Front Speaker



FTDX10 | HF/50MHz 100 W SDR Transceiver

- Narrow Band and Direct Sampling SDR • Down Conversion, 5MHz IF Roofing Filters Produce Excellent Shape Factor • 5" Full-Color Touch Panel w/3D Spectrum Stream • High Speed Auto Antenna Tuner • Microphone Amplifier w/3-Stage Parametric Equalizer • Remote Operation w/optional LAN Unit (SCU-LAN10)



FT-991A | HF/VHF/UHF All Mode Transceiver

- Real-Time Spectrum Scope with Automatic Scope Control • Multi-color waterfall display • State of the art 32-bit Digital Signal Processing System • 3kHz Roofing Filter for enhanced performance • 3.5 inch Full Color TFT USB Capable • Internal Automatic Antenna Tuner • High Accuracy TCXO



FTDX101D | HF + 5M Transceiver

- Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics • Unparalleled -70dB Maximum Attenuation w/C-Tune • 15 Separate (HAM TC + GEN S) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



FT-891 | HF+50 MHz All Mode Mobile Transceiver

- Stable 100 Watt Output • 32-Bit IF DSP • Large Dot Matrix LCD Display with Quick Spectrum Scope • USB Port Allows Connection to a PC with a Single Cable • CAT Control, PTT/RTTY Control



FTM-3000R | C4FM/FM 144/430MHz Dual Band

- 50W Output Power • Real Dual Band Operation • Full Color TFT Display • Band Scope • Built-in Bluetooth • WRCS-8, Portable Digital Mode/Fixed Mode with HRI-200



FT-2980R | Heavy-Duty 80W 2M FM Transceiver

- 80 watts of RF power • Large 6 digit backlit LCD display for excellent visibility • 200 memory channels for various users



FT-818ND | HF/VHF/2M/440 All Mode Portable Xcvr

- Ultra-Compact/Portable • 208 Memory Channels • Internal Battery Operation Capability • Two Antenna Connectors • Built-in High Stability Oscillator ±0.5 ppm



FTM-2000R | C4FM/FM 144/430MHz Dual Band

- 1200/9600bps APRS® Data Communications • 2" High-Res Full-Color TFT Display • High-Speed Band Scope • Advanced C4FM Digital Mode • Voice Recording Function for TX/RX



FTM-400XD | 2W/440 MHz

- Color display-green, blue, orange, purple, gray • GPS/APRS • Parked 1200/9600 bps ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band

FT-700R C4FM/FM 144/430MHz Xcvr

- System Fusion Compatible • Large Front Speaker delivers 700 mW of Loud Audio Output • Automatic Mode Select detects C4FM or FM Analog and Switches Accordingly • Huge 1,105 Channel Memory Capacity • External DC Jack for DC Supply and Battery Charging



FT-5DR C4FM/FM 144/430 MHz Dual Band

- High-Res Full-Color Touch Screen TFT LCD Display • Easy Hands-Free Operation w/Built-In Bluetooth® Unit • Built-In High Precision GPS Antenna • 1200/9600bps APRS Data Communications • Supports Simultaneous C4FM Digital • Micro SD Card Slot



FT-65R | 144/430 MHz Transceiver

- Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 3 Watts of Reliable RF Power/With in a compact Body • 3.5-hour Rapid Charger Included • Large White LED Flashlight, Alarm and Quick Heavy Channel Access



FTM-6000R | 50W VHF/UHF Mobile Transceiver

- All New User Operating Interface-E2D-II (Easy to Operate-II) • Robust Speaker Delivers 3W of Clear, Crisp Received Audio • Detachable Front Panel Can Be Mounted in Multiple Positions • Supports Optional Bluetooth® Wireless Operation Using the SSM-BT10 or a Commercially Available Bluetooth® Headset



- RETAIL LOCATIONS – Store hours 10:00AM - 5:30PM - Closed Sunday
- PHONE – Toll-free phone hours 9:30AM - 5:30PM
- ONLINE – WWW.HAMRADIO.COM
- FAX – All store locations
- MAIL – All store locations

YAESU
The radio

It is time for Spring! HRO is your home for the latest gear at the best prices. We now have a new FT-8 demo station running here in your Phoenix store. Look for the call WD7HRO and you could work one of us here in the store. Come by and see how easy it is to get up and running on the Digital modes. The bands are OPEN so get "Radio Active from everyone here at HRO PHX.

*Now serving you at our Phoenix store:
Manager Ron AJ7T, Mike K7DD, Bob W8RH, Richard K1RAB, Ira AI7HC, Paul N0RWW, and Jim KE7EU.*