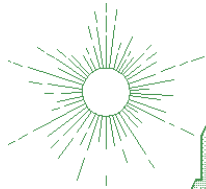


ADAW

4529 W. Park Place
Glendale, AZ 85306-1512



June



ADAW

Arizona Desert Aire Waves

Vol 46, No 6

June 2021

CLUB MEETING SCHEDULE

SARC

Jun 2nd - 7:00 PM
On Line

AARC

Jun 10th - 7:00 PM
American Red Cross/Echolink

YARC

Jun 3rd - 7:00 PM
Via Zoom

TBARC

Jun 17th - 6:30 PM
Via Zoom - See Website

CADXA

Jun 3rd - 7:00 PM
via Zoom

ARA

Jun 24th - 7:30 PM
Electronically

MARCA

Jun 15th - 6:30 PM
via Zoom

MARA

Postponed

ARCCC

Jun 8th - 7:00 PM
Via Microsoft Teams

WVARC

Jun 7th - 7:00 PM
Via Zoom

SuperstitionARC

Jun 15th - 7:00 PM
Via Zoom

CHRC

Jun 12th - 9:00 AM
Via Zoom

ANSR

Jun 17th - 7:30 PM
via GoToMeeting

KARC

Jun 8th - 6:30 PM
New Hope Christian Fellowship

OVARC

Jun 18th - 7:00 PM
Ascension Lutheran Church

AMO

Jun 10th - 7:00 PM
Charles K Luster Bldg

ATN (VOAR)

Postponed
www.whereby.com/atn1

QCWA-AZ Chapter

TBD
Various

SunLifeARC

Every Monday - 10:00 AM
Via Zoom

CARL

TBD
Check Web Site

MMRG

See Web Site

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	Open		
Treasurer	Bob Hodges	K7JTT	602.375.9982
Activities Mgr	Lori Cripps	WA7EDI	602.955.7517
Membership	Bob Hodges	K7JTT	602.375.9982

AARC c/o Bob Hodges, K7JTT, 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 7:00 p.m. in Room 8 at the new Scottsdale 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	Ray Vasquez	K4RMV	k4rmv@scottsdalearc.org
Secretary	Mike Childers	K7URK	k7urk@scottsdalearc.org
Treasurer	Douglas Mitchell	W7ADD	w7add@scottsdalearc.org
Past President	Paul Finell	W7EFQ	w7efq@scottsdalearc.org
Board Members	Gene Geller	K0VN	
At-Large	David Yee	N7AJR	
	Bill Kouchis	N9EIV	
	Jim Dye	AG7AU	
	Paul Finell	W7EFQ	
	Chris Schweiger	NE7EE	
	Bruce Harmsen	KA9EYX	

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	bmclean1@gmail.com

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

THUNDERBIRD AMATEUR RADIO CLUB

The Thunderbird Amateur Radio Club meets the **THIRD THURSDAY** of each month at 7:00 p.m. at North Phoenix Campus of Northern Arizona University located at 15451 N. 28th Avenue (near I-17 and West Greenway Road). The meeting is held in room 147. See the website (<http://w7tbc.org>) for a map and more details.

President	Charles Loftus	KG7KRN	president@w7tbc.org
Vice President	Rick Tejera	K7TEJ	vicepresident@w7tbc.org
Secretary	Andrew Cornwall	KF7CCC	secretary@w7tbc.org
Treasurer	Walt Reinert	NJ8G	treasurer@w7tbc.org
Directors	Clair Wyant	KG7MAJ	kg7maj@w7tbc.org
	Robert Lutes	N7NO	n7no@w7tbc.org
	Chuck Erickson	K7CAE	k7cae@w7tbc.org
	Jeff Rogers	KD7PYE	kd7pye@w7tbc.org
Past President	Brian McCarthy	AK7F	ak7f@w7tbc.org
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.

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	Saroj Gilbert	KM6BQD	
Treasurer	Doug Bessemer	K0VPL	
Past President	Peter Petrotta	KD7OIW	

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

MARICOPA AMATEUR RADIO ASSOCIATION

The Maricopa Amateur Radio Association (MARA) meets the **FIRST SATURDAY** of each month at 9:00 a.m. at Maricopa PD Community Room, 17985 N Greythorn Dr. in Maricopa.

President	Bob Howard	W8RH	president@copahams.org
Vice President	Scott Bushman	WI7Y	vicepresident@copahams.org
Secretary	Bob Proctor	N6YPE	secretary@copahams.org
Treasurer	George Hogan	K7TGH	treasurer@copahams.org
PIO:	Steve Miller	W6SDM	pio@copahams.org
Webmaster:	Louis Sandoval	W8LES	w8les@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



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. Monthly meetings are held in various parts of Arizona. The AZ Chapter will be resuming meetings and Sunday morning nets in May.

The AZ Chapter meets on the air every Sunday morning at 0700 MST (0730 during December and January) on 3890 +/- QRM. During December and January, the net time is moved to 0730 MST.

President	Tom Fagan	K7DF	
Sec/Treasurer	Carl Foster	KB7AZ	
Club Editor	Carl Foster	KB7AZ	carlfoster@cactuscomm.net

Web Site: <http://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	

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	Jim Mortensen	W7AZY	
Vice President	Bill Turley	KJ7GYH	
Secretary	Marie Mortensen	N7SKS	
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, 825 S 48th Street in Tempe, near SR143 and University Drive. 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	Brian McCarthy, AK7F	ak7f@w7ara.net
Vice-President	Erv Heimbeck, K0OTZ	k0otz@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
Dennis Bietry, KE7EJF	ke7ejf@w7ara.net
Lance Halle, KW7LH	kw7lh@w7ara.net
Joe Godfrey, AE7JG	ae7jg@w7ara.net
Patrick Baldwin K14NSF	pbaldwin99@gmail.com
James Wasson, N7ELL	n7ell@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: \$18.00/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 Board meetings are held the second Tuesday of each month at 7:00 PM via "Zoom Meeting." Club meetings are held the **THIRD TUESDAY** of the month except December at 7:00 PM via "Zoom Meeting." All meetings run approximately 24 hours. Visitors are Encouraged. If you would like to attend one of our meetings, please contact the President at least 24 hours prior to the meeting for the Zoom information:

President@SuperstitionARC.org

President	Steve Estes	KB7KWK	480.251.0551
Vice President	Brian Betz	W7JET	
Secretary	Scott Simeon	KI7KIM	
Treasurer	Bryan Hubbard	KF7DPC	480.205.8122
Board Members:	Bob Thomas	N8ANV	239.253.8279
	Emmet Plant	KB3MPN	
	Fred Atkinson	WB4AEJ	602.464.4406
	Greg Watkins	WB7VOK	
	Jeff Harris	K2DFE	602.617.6930
	Jeff Heinze	N7CCW	480.720.7908
	John Wolven	KG7NSP	

Mailing Address: Superstition ARC, 5155 E Eagle Dr #21522, Mesa, AZ 85277.

Web Sites: SuperstitionARC.org and SuperstitionSuperFest.org. The Superstition Amateur Radio Club, Inc. is a 501(c)(3) non-profit corporation. For more information, send email to: info@superstitionarc.org.

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	Norm Johnson	AA7OO	480.278.2886
Vice President	Ray Vasquez	K4RMV	
Treasurer	Don Aldridge	WA7RLL	
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

The Central Arizona DX Association meets the **FIRST THURSDAY** each month at 7:00 p.m. Until further notice, meetings will be held virtually on Zoom. Visitors always welcome. See www.cadx.org/meetings.html for a map.

President	Bill Poole	AA4Q	billpoole@yahoo.com
Vice President	Ron Smith	N7RD	n7rd@cox.net
Secretary	Bob Davies	K7BHM	k7bhm@cox.net
Treasurer	Mike Wright	N7MW	n7mw@aol.com
Past President	Larry Loen	WO7R	lwloen@gmail.com
Directors	Eric Schecter	KC7ES	eschecter@gmail.com
At-Large	John Jolly	N7NWL	wa7nw1@gmail.com

CADXA, P.O. Box 24616, Tempe, AZ 85285-4646. Email: cadxa@cox.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.cadx.org.



YAVAPAI AMATEUR RADIO CLUB

The Yavapai Amateur Radio Club meets the **FIRST THURSDAY** of every month at 7:00 PM (currently our meetings are on ZOOM due to COVID) 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	John Snedden	KT7P	president@w7yrc.org
Vice-President	Mike Reid	WU7V	vice_president@w7yrc.org
Secretary	Tim Norton	K7PVY	secretary@w7yrc.org
Treasurer	Sam Prather	K7SCP	treasurer@w7yrc.org
Past President	Bill Noe	WG7W	
Board Members	Dave Erlach	W7VSX	rocketdog@dslextreme.com
	Mike Schnell	NC7X	ka9cid@gmail.com
	John Laing	K7PRS	k7prsextra@gmail.com
	Ray Kolman	KI7COM	spudsman@gmail.com

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

ORO VALLEY AMATEUR RADIO CLUB

The Oro Valley Amateur Radio Club meets the **THIRD FRIDAY** of each month at 7:00 p.m. at Ascension Lutheran Church located at 1220 W Magee Road in Tucson. (December is annual Christmas Party). (Monthly meetings are being held on ZOOM during the Pandemic.) Visitors are **VERY** 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@arrrl.net
Vice-President	David Beauchesne	AK2L	ak2l@arrrl.net
Secretary	Logan Zintsmaster	KE7AZ	lrahnz@garlic.com
Treasurer	Hanna Eckert	KG7TPD	haneck@aol.com
Board Members	Fred Bresani	W2HZ	w2hz@verizon.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/>.

CHANDLER HAM RADIO CLUB

The Chandler HAM Radio Club (call sign N7CHN) meets the **SECOND SATURDAY** of each month at 9:00 AM. Starting June 12th, club meetings will be held in person in the "Jackrabbit" room at the Veterans Oasis Park Education Building at the NE corner of Chandler Heights and Lindsey Roads. You can still join via Zoom. 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	Michael Reed	AA0MR	pres@chandlerhams.org
Vice President	Norm Fasoletos	K7NWF	vp@chandlerhams.org
Secretary	Mary Stephen	AE6Q	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

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	Jim Felkey	N7BBS	480.966.7084
Sec./Scheduling	Sam Marshall	N7INV	602.291.0992
Treasurer	Karen McConaghy	NO7D	602.799.7338
Station Engineer	Ron Taylor	WA7GIL	602.390.5335
Webmaster	Allyson Lee	KI7LGD	w7asc.webmaster@gmail.com

Board Members:

Jean Jolkovski	W4CIH	ADAW, Publicity
Tom Salt	AD7PM	At Large
John O'Neal	K7JP	Teacher Packets
Bob Burleson	KG7QJ	Trustee/President Emeritus
Robert Faerber	W9AQ	Log Book
Scott Gillins	W2KP	At Large

Direct Phone: 602.716.2082 Web Site: <http://www.w7asc.org>
 For information: Email to carl@w7asc.org or call Jack, KD7ROB at 480.759.5195.

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 Tuesday of the month at 1:00 PM at Lou's Tivoli Gardens, 12535 W Bell Rd in Surprise. 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 daily and Monday - Thursday at 8:00 PM. Please check our website (below) for other events and information.

President	Danny Hoerr	KM4HFT
Vice-President	Bill Ciccone	KA2KHW
Secretary	Lee Ann Ciccone	KJ7AZR
Treasurer	Doug Totel	K9RZ
Board Member:	Krissy Larson	KI7GJJ
	Joe Jacobson	KJ7PUL
	Frosty Oden	NQ1S
	Larry Johnson	WO7C
Past President	Danny	KM4HFT
Committees:		
Membership	Krissy Larson	KI7GJJ
Technical Advisory	Frosty Oden	NQ1S
Equip. Donations & Sales		
	Ken Jenkins	WB6MMV
	or Jim Seay	WB7RBN

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 meets **EVERY MONDAY** from October through April each year at 13:00 (1:00 p.m.) on Zoom. For access, 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	Sue Rogers	W7SKH	happyham7777@gmail.com
Vice President	Ralph Towers	KA0CET	retowers@hotmail.com
Secretary	Chuck Rogers	W7CBR	rogers_charles@hotmail.com
Treasurer	Dwight Carlson	KF7WI	dec@kalama.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
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 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

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



ADAW

ADAW Staff

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AMATEUR RADIO SERVICE DEMONSTRATION STATION

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 the 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.

Unfortunately, as I write this, the Harkin’s Ham Shack remains closed due to COVID-19 concerns. Additionally, our web page is temporarily down. However, our Twitter feed and Facebook page can be accessed at twitter.com/w7asc_arc and facebook.com/W7ASC, respectively. And, all licensed amateur radio operators are invited to join us Wednesday and Saturday mornings at 0900 MST for the CARL Net on 440.375 MHz, offset +5.0, tone 100. The repeater is located on South Mountain.

The Way We Were.

My chosen tag line this month should sound familiar to some of you, but others were not even born yet when it was coined. It is the title of a 1973 romance drama about two individuals coming together in a mix of strong differences and similarities. Yes, the stuff of Hollywood, but it resonates with me today as we, as a society—including amateur radio affinity groups—speak often of the “new normal.” And, that prompted me to consider, again, what that means to us as members of various ARCs today.

We have all grown accustomed to, and comfortable with, new practices such as ZOOM meetings, virtual hamfests, online learning, social media (SoMe). And, we expect some, if not all of that will remain when we get back to the way we were. But, if we are honest with ourselves, we must admit that the COVID pandemic did not invent change; it has been driving our participation in amateur radio since the spark-gap transmitter gave way to vacuum tubes. And, just as “The Way We Were” was a romance story, the romance with amateur radio has likewise changed over the years. Our membership demographics have changed. We compete with a growing field of attractions for people of diverse interest and talent.

To test that hypothesis, I pulled out a contact list for C.A.R.L. from 2013. A list of volunteers staffing the W7ASC

CARL Continued from Previous Column

ham shack at Arizona Science Center. That list included the latest date each of the operators had been scheduled to work at the shack and their number of volunteer hours for the current year. Here is a summary:

Total Operators	46
Participating in 2013	34
New to the group	16

A few were obviously “retired,” but still interested. A large number of new operators had joined over the previous two years. Nearly half the active volunteers amassed more than 100 hours in 2013. This was a healthy, active group of operators spread across age, background, time as a ham, etc.

Fast forward to today; complete with the effects of time and the pandemic. Our volunteer group coordinator, Sam N7INV, says the list now stands at about 30 when you discount the handful on the list from our biweekly on-air net. Of the 16 newbies on the 2013 list, only 2 are still active. The 21 weekly volunteer slots have gotten harder to staff. Why is that? Did we fall asleep at the wheel and fail to recruit? Did the pool of potential volunteers evaporate? Not a monumental decline, but a cautionary trend worthy of thought as we plan on getting back to the way we were.

I think two primary factors led us down that path, and, under adverse conditions, we need to redouble our efforts for recruiting. Many in our list of nearly a decade ago “aged out” for volunteering. The younger cohort of operators and potential new operators came under increasing pressure from the myriad of activities competing for their free time. The pool remains large and is actually growing, but the harvest yield is shrinking. Unfortunately, “If you build it, they will come” only works in the movies. We need to think more like mass marketers: 20 to 40 contacts for 1 recruit.

Are we down for the count? No way! We just need to do a better job reaching the masses with the right message, and our best opportunity for that is just around the corner as we get back to the way we were before COVID-19. People, including radio operators, are weary of hunkering down in their homes and on their computers. Let’s help them find their way into our new normal.

73, HPE CU FACE2FACE SOON
de WB4ZSC Steve
vyix99@yahoo.com
480.570.1041

ADAW

Hamfest Calendar

25 September 2021 - **RST Tucson Fall Hamfest** - hosted by the Radio Society of Tucson will be held at the Target Store, 9615 E Old Spanish Trail in Tucson. Hours - 7:00 AM - 11:00 AM. Set up begins at 6:00 AM. Free Admission and Parking. Seller Spaces \$10 per Parking Space. ARRL Card Checking - Prizes - NO VE Testing. Snacks Brought to You by BSA Troup 157. No Alcohol, Drugs, or Firearms. Talk-In Frequencies - FM:145.250 FM Tone 156.7; DSTAR: 445.900 K7RSJ B; Fusion: 146.800. For Information & Map, visit <http://www.k7rst.org>

2 October 2021 - **TARA Swapfest** - hosted by the Tonto Amateur Radio Association will be held at Rumsey Park in Ramada #5, 400 McLane Road in Payson. Hours are 9:00 AM until 12:00 Noon. A BBQ/Potluck will be held after close. VE Exams will be held. Table fee: \$5.00. Contact Hal Key, KG5LVG at 480.225.5987 or email to hkey073@gmail.com for more information.

16 October 2021 - **Amateur Radio Tailgate ShowLow** - hosted by the Kachina Amateur Radio Club will be held at the ShowLow Masonic White River Lodge #62, 741 E Whipple Street in ShowLow. More information will follow. Contact w8ybm18@gmail.com for information

30 October 2021 - **Copafest** - hosted by the Maricopa Amateur Radio Club 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. Setup begins at 5:00 AM. Balloon Launch, VE Testing, Card Checking, 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.

6 November 2021 - **HARKfest** - hosted by the Hassayampa Amateur Radio Klub will be held at North Ranch Escapees RV Park, 30625 S Hwy 89 in Congress. Free Admission - Free Tailgate Sites (Pre-Registration Required). Watch for more details.

13 November 2021 - **Oro Valley ARC Hamfest** - hosted by the Oro Valley Amateur Radio Club will be held at Marana Middle School, 11285 West Grier Rd in Marana. Gates open at 7:00 AM, closes at 1:00 PM. Admission is \$5.00 which includes a bottle of water. Children under 12 with a paid adult and students with any Arizona school ID are free. Sellers spaces are \$10.00 per space and includes seller's admission. Indoor VE Session with pre-registration preferred, but not required. Send an email to pre-register (email licensing@tucsonhamradio.org). Interesting Seminars - ARRL Card Checking and LOTW Assistance at ARRL Booth - Food Truck for Breakfast and Lunch. Contact hamfest@tucsonhamradio.org for more information. Visit the website at www.tucsonhamradio.org.

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For Sale / Wanted



**LOOK!
Great Deals!**

For Sale

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.

Cleaning out 50 year collection of ham related parts, connectors, ICs, cables, antennas, poles, and such, all on a "make offer" basis. Contact Bill, W7JSW at hoskingb@cox.net to arrange a meeting.

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: Ken Jenkins, WB6MMV at kjenkins5623@gmail.com or Jim Seay, WB7RBN at wb7rbn@arrrl.com.

ADAW

Hamfest Calendar Continued from Previous Column

4 December 2021 - **Superstition Superfest** - hosted by the Superstition Amateur Radio Club will be held at Superstition Springs Center, 6555 E Southern Ave in Mesa. Hours are 7:00 AM to 3:00 PM. Email info@superstitionsuperfest.org for more information and visit the web site for the latest details - superstitionsuperfest.org.

18-19 February 2022 - **Yuma Hamfest** - hosted by the Yuma Amateur Radio Hamfest Organization will be held at the Yuma County Fairgrounds, 2520 E 32nd Street in Yuma. Visit the web site at www.yumahamfest.org for up to date information.

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). 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 a 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.

June Test Sessions

Jun 1st - Oro Valley ARC -- 6:00 PM

Town of Marana Community Room, 5100 W Ina Rd, Tucson
Contact - David Beauchesne 520.639.8626
No Walk-Ins / Register or Call Ahead

Jun 15th - Hassayampa AR Klub -- 2:00 PM

Home, 30645 S Wandering Way, Escapees North Ranch, Congress
Contact - Charles Carter 316.651.7710
No Walk-Ins / Register or Call Ahead

Jun 5th - CHRC Laurel VE Team -- 10:00 AM

Tri-City Baptist Church, 2211 W Germann Rd, Chandler
Contact - Norman Fasoletos 602.319.4834
No Walk-Ins / Register or Call Ahead

Jun 16th - Thunderbird ARC -- 6:00 PM

<https://www.ve@w7tbc.org>
See Website for Location
Contact - Walter Reinert 602.668.7804
No Walk-Ins / Register or Call Ahead

Jun 5th - 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

Jun 19th - Hualapai ARC -- 10:00 AM

3571 ELum Ave, Kingman

Jun 12th - NOMADS -- 9:00 AM

Behind Church, 2228 E Brown Rd, Mesa
Contact - Robert Bingham 480.404.1408
No Walk-Ins / Register or Call Ahead

Jun 19th - West Valley Electronic Club -- 9:00 AM

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

Jun 14th - Radio Society of Tucson -- 7:00 PM

Biscuits Country Cafe, 7026 E Broadway Blvd, Tucson
Contact - Diane Zimmerman 520.664.5070





KARC Continued from Previous Column

Master! Yes, he actually took a class about grilling, smoking and making rubs, etc. There are many more things that he was involved in that makes some of us feel like we are standing still.

He kept himself busy learning a variety of things. He was generous with his time and help, when and where it was needed. It was said of him, he was a walking encyclopedia about all things Ham Radio. He recently had been up on his antenna making improvements on it. We are glad to have known him! Peace to all of his Family and Friends. Thank you, N7QVU Jerry, so long, until we meet again!

Hello to All from the Kachina Amateur Radio Club! Happy June to you!

We are working hard up here, because the extended daylight hours have allowed us to make the most of the day. Actually, some of us are working hard at recreating longer, if the truth be known! It's all good! We may get to the radio just in time for our turn on the Net, then off we go again to finish up what we'd like to get done before the day's end. We have enjoyed some really nice days up here. So many blossoms on the fruit trees and bushes. It looks like it will be a great year for fruit. We are looking forward to that.

We'd like to welcome KJ7WXU Nick Anderson and KJ7WXV Rebelle Anderson. Congratulations on passing your tests for Technician! The General Class is only one test away! Keep going!

Tuesday, May 11th, we had our Monthly Club Meeting. KJ7GYH Bill Turley and W7RJB Randy Beecroft gave a presentation about Antennas. It was about some very simple, easy to make ideas that could fit your time, interest and budget. We thank them for their time. There were four elk spotted grazing outside the building just beyond the parking lot. They are the locals! We really appreciate the New Hope Christian Fellowship Church for allowing us to meet there monthly. It has been nice to get together in person to visit, and the extra daylight makes it a lot nicer for driving.

June 26-27 is the Summer Field Day. Check out our website for up-to-date information about the location.

In other news from the mountain, N7QVU Jerry Wyatt, became a Silent Key on May 2, 2021. He was 71.

Many people who knew him met him in a Serving capacity. He is greatly missed and fondly remembered by us up here. He loved his family and he loved giving to those who wanted to learn. A great example of serving your fellow man without expecting anything in return.

He was a Vietnam Veteran – Korea – Military Police, an Extra Class Ham Radio Operator, a Volunteer Pilot Flights for Life for United Blood Service. He liked restoring tractors, and a Model T. He was a Volunteer with the Navajo County Sheriffs, ran a Certified Weather Station, and was part-time Teacher at Glendale Community College. He was Major and Commander of a 60-+ member senior/cadet Civil Air Patrol flying Squadron, spent 26 years at American Express Technologies [Programmer, Network Engineer, Project Management], was a Radio Disc Jockey, and a BBQ Grill



N7QVU Jerry Wyatt, his daughter Michelle, grandsons Zane Patrick and Atticus Wyatt. This was summer, 2019. Jerry fully restored the Model T.

That's our report from up here where the stars twinkle so bright at night that you could pluck them out of the sky and bag them up like lightning bugs for a nightlight and the Milky Way looks like a major roadway!

Take care and be well,
Tara KI7KLJ

ADAW

D-DAY
June 6th

Continued Next Column



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

It's been a busy few weeks with wildfires popping up across Arizona and New Mexico. While wildfires are always a concern for many of us in the southwest, single-family fires are the single biggest threat facing most families. In the last week, Red Cross volunteers in Arizona have responded to assist 90 individuals across Arizona.

As part of its mission to help keep communities safe, the Red Cross and its partners are pleased to offer virtual education sessions on Home Fire Safety for residents of the Arizona and New Mexico Region from the comfort of your home. Our volunteers will be happy to consult with you and provide valuable information to keep your family safe and help you develop a home fire safety plan. We can also assist with installing free smoke detectors for those with missing, defective or old smoke alarms. If you would like to know more about this program, send an email to charles.zurenko@redcross.org to request a phone call from one of our knowledgeable volunteers.

Our club members are involved with assisting our Yuma Red Cross office as it plans to relocate to a new larger space later this month. To help facilitate the move, we sent a team to Yuma to remove the antenna from the roof at the old office. When they get settled into their new space, we will head back down to get them up and running again. We will need to run new coax, set up their operating position and make sure the rooftop antennae are all tuned for optimal performance. We will also need to comply with the new FCC rules for RF exposure. This will be a good opportunity to establish an SOP for our members to use when operating from shelters or other temporary facilities.

We recently conducted a communication survey from a potential shelter site in Maricopa. We stood up our radio room at the chapter and deployed a team to the Maricopa site to test various RF options between the shelter and the Red Cross chapter. This gave us a good indication of our ability to deploy quickly and set up our gear in the event of an activation in Maricopa. Similar surveys will be scheduled at other locations around the state in the coming weeks as we continue training our members in the run-up to wildfire season.

Several hams in Arizona took part in the Nationwide EmComm Training exercise on May 8th. While we await the final report from the organizing team, we do know that there

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Due to the ongoing situation with COVID-19, the June meeting will be held virtually using Zoom. The meeting will be Thursday night, June 3rd starting at 7:00 p.m. (0200Z). You can begin checking in at 6:30 p.m. and visit informally with other club members on Zoom until the meeting starts, we often start our in-person and now Zoom meetings with introductions and maybe a “brag” question to the group, we will have this stage from 6:30 to 7PM, when our presentation will begin, the club business meeting will be held after the presentation. Please turn off your computer camera and microphone when the formal part of the meeting starts. The link to the Zoom meeting will be sent to all members just prior to the meeting. Our meetings are open to all. If any of you reading this would like to join via Zoom or would like any other information about CADXA, send me an email: aa4q@arrl.net.

June 2021 CADXA Presentation

Speaker: Lloyd Berg N9LB

Topic: Lightning Protection for Amateur Radio Stations

We are going to learn from Lloyd's 50 years of experience of building and maintaining AM, FM and TV Broadcast Stations. Before retirement, Lloyd held the top-level Society of Broadcast Engineers, “Professional Broadcast Engineer” certification. His most challenging work was 13 years of serving as Chief Engineer at WUSA AM/FM in Tampa Florida – the “Lightning Capital of the World,” with over 100 lightning days per year. Lloyd has been continuously licensed since 1969, and is a member of the Madison DX Club in Wisconsin. He is active on HF & MF frequencies with wire antennas and also on 1296, 222, 432, 144, and 50 MHz. We are coming into our monsoon season here in the desert, so this presentation will be one of great interest to all hams in our club.

He will start his Zoom presentation at 02:00 UTC as per request. He will try to answer questions at the end of his presentation. Thank you in advance to Lloyd for presenting to CADXA at our June meeting.

The May program was “Ferrites & Common Mode Chokes” Kevan Nason, N4XL. The replay is posted at: <https://www.youtube.com/watch?v=LpwjC5z9C2E>.

CADXA has several year-long on-the-air activities set up similarly to CQ's DX Marathon. This allows members to track their progress working DX against other members. It encourages working the common ones again every year in

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After two days of Spring, we are now hunkered down for the Summer. There are signs that Amateur Radio activities are slowly recovering. Like many others, I too wish I was heading to Dayton this year. This just makes me optimistic that Hamvention 2022 will be bigger and better than ever.

Our November Hamfest is still on track. We are planning now, just as we always would at this time of the year. We will get our final authorization from the school in July. Once they approve, the final planning will begin. If you haven't already, circle November 13th on your calendar. If you have been here before, the venue is the same. We have accumulated some valuable gear for our sales table this year.

Congratulations to our recent raffle winners. Although we can't meet in person, we have used electronic methods to hold our regular raffles and some nice prizes are now in the hands of the winners.

Thank you to Gary – KT7AZ for keeping our C4FM systems going strong. It seems that between mother nature and some unexplained equipment glitches, there is always something for Gary to tend to. Before problems are even noticed, Gary has them resolved. NICE!

Our Sunday evening C4FM net is going strong thanks to a great team of Net Controls Stations. Welcome to Andreas, W1IXQ, our newest NCS. Andreas runs the net like he's done it forever. Nice Job!

We will soon have a survey out to members as we would like to consider a bunch of projects to continue to expand the club. We need the members to weigh in on where they would like to go. Stay tuned.

The board is considering changing its meeting schedule so that the weekends are free and clear to do other things. More info should follow shortly.

Happy Father's Day! 73, Steve-W1SR

ADAW

AzRCCC Continued from Page 11

were approximately 800 Winlink Check-In Forms received from operators across the USA. For this exercise, there were Red Cross volunteers checking in from Canada, France, Germany, South Africa, Panama, Venezuela, and over a dozen Red Cross hams checking in from the Netherlands to commemorate World Red Cross and Red Crescent Day.

Many of our members are looking forward to this year's ARRL Field Day. Last year, the pandemic interrupted plans and kept many hams home. With many of us already vaccinated, and more getting vaccinated every day, Field Day looks to be a good opportunity for us to gather with friends outdoors and enjoy some good food, good company and good times on the air.

The Arizona Red Cross Communications Club meets the second Tuesday of each month. We continue to host our meeting online using MS Teams. For more information about our club, visit our website at www.k7arc.org.



June 26 - 27

CADXA Continued from Page 11

between chasing the really rare DX entities. Also, someone with a smaller station working lots of casual QSOs might beat out a DXCC Honor Roll guy with a KW and a ton of aluminum in the air. Tune in to our meeting to see this month's status!

In this day and age, clubs may be looking for socially distanced speakers. At CADXA, many of our members have presentations on the world of DXing, QSLing, Contesting, Station Construction and related subjects ready to present to your club. We know how to present via programs like Zoom. Contact us through our website <https://www.cadxa.org/contact.html> or email us at cadxainfo@gmail.com or me at aa4q@arrrl.net for details.

See you on Zoom for the June meeting.

73,
Bill Poole, AA4Q
CADXA President 2021
aa4q@arrrl.net



History corner – A few interesting things in ARA history

- August 25, 1980 - Mt. Ord. An 80' Monopole tower begins installation. The 10'x15' building is ready for inspection by the US Forest Service.
- September 13-14, 1980 - Mt. Ord work party planned for installation work.
- September 19, 1980 - ARA completes payment of the construction costs for the building and tower for Mt. Ord. Total construction cost \$13,414.95
- May 30-31, 1992 - Mt. Ord Open House and Camp Out.
- March 12, 1993 - The 80' monopole on Mt. Ord breaks at the 40' level during a severe storm between 13:00 and 14:00 hours. The top half with all the antennas fell across several other buildings. An ARA team discovered it on Sunday afternoon on a trip to investigate poor signal reports. They did not come prepared for what they found. They worked through the afternoon and into dark restoring as much as possible on a temporary basis.
- June 6, 1998 - Picnic at North Mountain Park for all of those who helped with Public Service Events.
- June 1999 - Bank One auto patches updated to require 10-digit dialing prior to the mandatory deadline September 1 1999.
- June 2001 - Lance reported the Bzzzzzzzit noise being heard by many valley UHF repeater frequencies (ham and commercial) was identified as a taxi company's failing GE Mastr Pro.
- June 2002 - Three ARA members made an early morning trek to Mt. Ord to replace an intermittent 444.500 radio.
- June 2004 - ARA is conducting fund raising for the Pinal Mount Fund to upgrade the radio site and tower.

ARA Site Profile

Mount Ord site profile and repairs update courtesy of Dennis Campbell, AE7WU

The Mount Ord repeater is located approximately 34 miles South of Payson. The site is at 7,128 ft. elevation, overlooking Tonto National Forest in the Mazatzal mountain range. This ARA site has amateur / commercial equipment and it shares the hilltop with a forest ranger fire lookout tower, so you know the scenery is stunning!

The site consists of the two linked repeaters, MetroLink

ARA Continued from Previous Column

146.92-162.2, RimLink 147.36-162.2, and the 444.500+100.0 system. Mt Ord is the RimLink hub site. Rimlink Hub radios link to Mount Elden, Mingus Mountain, Green's Peak, Pinal Peak, and Smith Peak (currently not linked). Link radios also connect to the Metro Link Hub at Shaw Butte and to Mingus Mountain.

The Mt. Ord repeaters are running on Motorola Micor radios with modifications making them more suitable for remote locations. The repeaters are controlled by an RLC3 controller and custom built cards in a backplane to handle audio levels and PL decoding. The controllers have many capabilities. They monitor the status of the AC power, the DC power, AC generator power, operating voltages inside the radios, etc. An alarm condition on some of these triggers a voice message to be sent over the active radios, such as "On Battery" if the AC power is off and the generator is not running. Status monitors can be checked non-intrusively without disturbing active conversations.

The self-supporting tower stands 80ft. tall with the Station Master antenna extending 20ft. above the top.

The site power is supplied by Arizona Public Service, backed up by a propane generator with 500 gallon tank, and AGM backup batteries with a Samlex battery charger. The batteries will support the site for several days in the event of a total AC power loss.

In February reports of problems with RimLink on Mt Ord came to the attention of the technical committee. In March a problem with the 444.500 system was reported. Due to access constraints with late melting snow the first opportunity to visit the site was Friday, April 23rd. Dennis and Cole ascended Mt Ord in a four wheeler to survey the situation.

Upon arrival the team performed technical checks on the RimLink system measuring the receive sensitivity and transmit power right at the radio and also at the jumper connecting to the hard line to the antenna. Sensitivity of 0.25 uV, and power of 7 Watts toward the antenna. The VSWR at the jumper was less than 1.1 to 1. The real problem was a physical one. The antenna at the top of the tower was leaning over almost perfectly horizontal pointing due north. Assessing the situation from the ground it appeared the mounting system would need to be replaced.

During the visit they also checked on 444.500. The receiver was hearing a lot of traffic but without the correct PL tone for the repeater. First impression is an uncoordinated repeater on the frequency. The interference and technical committee will be working to resolve the issue.

On May 1st a return trip consisting of five ARA members went up to the site to correct the problem with the 147.36 antenna. It was Joe Godfrey, Mike Montalvo, Bill Jackson, John Braden, and Dennis Campbell. They arrived on site at 10:00 AM. The team had assembled a collection of hardware to remount the antenna not knowing exactly the condition they

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Az Amateur Radio Club Meeting May 13

The program was about the new FCC RF Exposure Rules that just went into effect. Gary Hamman, K7GH, had given this program at the Red Cross Club virtual meeting on the previous Tuesday evening, but he revised some of the slides, so the presentation included some of the same material and some different material. During the meeting he used EchoLink for audio for those not at the meeting in person. They connected to WA7EDI since W7IO-R was off. He turned up the gain on the WA7EDI laptop that was near him to pick up his audio and so comments from the audience might also be audible. He tried to frequently pause for comments from EchoLink attendees and announced what presentation slide number we were on.

We also discussed Field Day options. Most favored the Mingus Mountain RV Park if it is available. Lori brought some goodies that were individually wrapped.

Gary also sent the meeting notice and presentation slides to club members as well as those at recent license sessions and some others. The meeting started a little after 7:00 PM and finished about 9:00 PM.

73,
Lori, WA7EDI

ADAW

Monthly Update

Greetings. As the weather gets warmer, outdoor gatherings become more problematic. These have been fun and informative gatherings in the parks, but will likely come to an end in May.

Our monthly club meetings continued to be held via Zoom through May. The meeting is held the second Saturday of the month at 9:00 AM. Starting with the June meeting, on the 12th, we will begin to meet in person once again! This will be a welcome change for all. You will still be able to join via Zoom. There is a link to the meetings on our website; chandlerhams.org. The new meeting location is the Education Center at Veterans Oasis Park at the intersection of Chandler Heights and Lindsey in Chandler.

Our Thursday evening net continues at 8:00 PM. It is located on 443.050 MHz, + offset, and with a PL tone of 100. Thanks to MARCA for the use of their repeater, located on South Mountain. Gary – KI7PBR is normally the net control and Steve - KJ7UKA serves as the alternate. Both do a great job. Please 'check in' and see what it is all about.

We now have a new website active with a great new look. You will find links to our meetings and the calendar gives other events as well. Please check it out!

VE testing continues on a limited basis at the Tri-City Baptist Church in Chandler at 10:00 AM on the first Saturday of the month. Check our website for registration. Slots are booked out a couple of months until we can get a larger room but cancellations do occur.

Mike – AA0MR
President CHRC

ADAW

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would find at the top. Between what they could reuse and what was brought for the trip there was enough hardware to correctly remount it. The RimLink 147.36 antenna was relocated to the East leg of the tower. While at the top the climbers took the opportunity to take corrective action on the RimLink hub antenna. It was remounted to the Southwest leg of the tower to avoid future problems. The team verified the operation by getting a ham in West Phoenix to talk to a ham up toward Payson and a ham using the Pinal machine. This exercised the 36 machine, RimLink to Shaw, and Rimlink to Pinal. The team left the site at 4:00 PM.



The Yavapai Amateur Radio Club, like many others, continues to operate with Covid-19 restrictions in place. Our regular monthly club meetings have been conducted via Zoom, with as many as 40+ members on line. If you would like to join the fray, the Zoom link can be found on the front page of our website, www.w7yrc.org. NEW! We are planning (fingers crossed) to conduct the June meeting live and on Zoom. Check our website for details.

YARC is an ARRL Special Service club. During 2020, we were unable to support any public service events (wonder why?). But this year seems to be opening up and we are scheduled to provide communications for several events. Up next comes the Yarnell Memorial Run on June 5, and the Prescott Rodeo Parade on July 3. One of the largest is the Whiskey Row Marathon, which has been scheduled for October 9. With eleven events scheduled, they are coming back!

We continue to conduct license testing sessions using a staggered time and social distance arrangement. Doing this, we can accommodate as many as 20 candidates. Our next session will be on June 5, 2021. Pre-registration is required at www.w7yrc.org/arrl-vec/. We require registration ahead of the test sessions because the COVID restrictions limit group size, and time and place of testing can be changed without much warning.

YARC will operate Field Day on Saturday, June 26, from Little Dealer Little Prices, located on HWY 69 in Prescott Valley. Mr. Danny Sampson (General Manger) has graciously offered his RV Dealership for the YARC Field Day and Picnic Event. Mr. Sampson has agreed to provide our club the necessary space needed for set up of our radio equipment and picnic area for this event. Ray KI7COM is the event Chairman and he has many great things for this fun outdoor event to test our radio skills. Multiple stations will operate from 11:00 AM till Sunset.

Student Radio Science Day is planned for the Field Day event. YARC is inviting all students, their families, and youth organizations to join us for an exciting and interactive "Radio Science Day," a very special regional amateur radio and radio science exhibition. THERE WILL BE HANDS-ON, INTERACTIVE, YOUTH EXHIBITS AND ACTIVITIES that will begin at 11:00 AM and end at SUNSET. Interactive exhibits will include hands-on activities, handheld and mobile radios, making live radio contacts, learning how radio science makes communications possible, learning about electronics

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Public Service Calendar

Maricopa County Emergency Communications Group Events

EVENT	LOCATION	DATE
ADA Bike Rides	North Phoenix	10/23/2021
Auxcomm Interest	TBD	12/31/2021

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.

YARC Continued from Previous Column

and how to solder, using radio to protect yourself and family, and participating in hidden transmitter hunts. For details see our website.

WWW.PVNSG.

The Yavapai Amateur Radio Club has a 2-Meter and 70CM FM net dubbed the "1300 Net." It is held every day of the week, 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

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. When things return to normal why not join us for one of our regular club meetings. All the info will be on our website, www.w7yrc.org.

Remember; BE RADIO ACTIVE!

ADAW



Emergency Communications Since 1961

SHORT SKIP

WVARC 60th Anniversary

The 60th anniversary of the West Valley Amateur Radio Club will be celebrated this year – on October 16th. Traditionally, the 60th anniversary is celebrated with a diamond. So, we will be having the WVARC Diamond Jubilee on October 16th! Now is the time to start planning. On this Saturday, March 27th, at 10:00 a.m., we will be having our first planning meeting for the 60th Anniversary committees. The Zoom information is at the bottom of this post.

All club members are invited to the meeting. If you have interest in participating or attending the celebration, please attend this meeting.

Most of our committees have chairs, but we are still looking for a few special assignments. We especially need:

- Someone with interest in commercial graphic artwork
- a chair for the food and beverage committee
- an overall chair to pull all the subcommittees together

The current chairs are

Music: Bill KA2KHV

Club History: Jim N7YTI

Events: Ray W0IVB

Note: Any musically-inclined members who would be willing to perform should call Bill KA2KHV (623-388-3443). He's looking for fellow musicians!

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WVARC Continued from Previous Column



History of the West Valley ARC

by Jim Rogers, N7YTI

A lot of people made our club what it is today. It would be hard to begin to address all of them, but a few stood out in the Short Skip and need to be mentioned.

Sam Lewbel, W7JHQ. Sam was very active since the early 1970s and wrote many articles for Short Skip, such as how to use your oscilloscope or a new VOM, and many more subjects. Sam was instrumental in getting our repeaters on the air in the late 1980s. Sam passed away in April 1992, and in the Short Skip, they mention how he had mentored many hams and was always available to help anyone that asked. His call is the one we have on the 449.800 repeater today.

An example of his contributions to the club and Short Skip was shown in the June 1990 Short Skip.

Sam's Corner de W7JHQ

Did'ja ever wonder why we use lower sideband below 20-meters and upper sideband above? Back in the early days of ham SSB operation, some smart, but frugal ham (or was he lazy?) discovered that if he used a 9 MHz crystal to generate the sideband signal, then all he needed was a single VFO that tuned from 5.0 to 5.5 MHz and by mixing them, he would produce two signals (sum and difference) for amplification and output:

$$9 + 5.0 = 14.0 \text{ MHz} \qquad 9 + 5.5 = 14.5 \text{ MHz}$$

In my book, that is the 20-meter band plus.

$$9 - 5.0 = 4.0 \text{ MHz} \qquad 9 - 5.5 = 3.5 \text{ MHz}$$

And that looks like the 80-meter band minus.

However, look at the top frequency for each listing and you will see that for the same direction of change in the tunable oscillator (VFO) we change is opposite directions and we are now on upper sideband on 20 and lower sideband on 80. And all with one crystal and one VFO. (There was no 40-meter voice operations at that time.)

Now you know why, since the early '50s, we use upper sideband on frequencies in the 20-meter band and above, and lower sideband on frequencies below the 20-meter band. And no one has the nerve to change that and ruffle the feathers of the whiskey QCWA members of which I am a member.

ADAW



Club Field Day Using Special Event Callsign K7K

On the fourth weekend of June (26-27), the club will be operating ARRL Field Day in the woods about 30 miles north of Payson.

FCC Rules offer some station identification guidance for operators of special-event stations using 1x1 callsigns, as follows:

- **Station ID** using the operator's FCC-issued callsign must occur once per hour and at the end of the session. The operator must also identify with the special-event call every ten minutes and once at the end.

When operating on voice, I identify using my callsign and the special-event callsign like so:

"This is WB7C operating as K7K." > For use at start of shift and once every hour.

"This is WB7C Ending operation as K7K." > For use at end of shift, with possible variants asking people to stand by as we seat a new operator in front of the mic.

Whoever is operating the station should enter his callsign into the computer log if possible. There will be four transmitters with operators working in shifts to keep the stations on the air full-time. Each station has its own log.

- **CW ID procedure**

Using my callsign and the club's Field Day call as an example, this how I cover the legal requirements on CW. It is brief and out-of-the-way:

de WB7C as K7K BT > For use at start of shift and every hour, sent once.

de WB7C as K7K SK > For use at end of shift, sent once.

de K7K > ID as required in normal fashion.

In the above examples, BT and SK with over-lining are procedural signals in Morse code. They are sent with the letter pair squashed together as one character.

- **For latest Field Day info**

Please see the club website for the latest details and possible changes. We have to watch for high fire danger in June.

Third Tuesday, June 15th Club Meeting, 7 PM on ZOOM

The ZOOM link will open at 6 PM for chatting before the 7 PM meeting. We will notify members via email with the ZOOM link; Nonmembers, please email President@SuperstitionARC.org for the link. We always

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Superstition Continued from Previous Column

welcome visitors.

Brian, W7JET, schedules our presentations. He doesn't always get a confirmation from the invitee until well past ADAW publication deadlines, so please check the website for last-minute updates.

We Need Someone to Chair the SuperFest Committee!

In his fourth year as Chairman, John, KG7NSP, is asking for help. He is willing to train a new Chairman to take the reins next year. You will have a playbook to work from, with all the hard work already done. To volunteer, please contact President@SuperstitionARC.org.

Please also consider sitting in on the ZOOM committee meetings to get a feel for the job. Please email the President to get connected.

President's Corner – by Steve, KB7KWK

Hello all club members, new and old. Oops, I mean new and existing. Hi Hi. I hope you are all doing well and are ready for life to return to normal. Well, as best we can anyway.

It looks like the club will not have access to our meeting room at the Charles K. Luster building anytime soon. After speaking with the City of Mesa, they informed me that they are not sure if they will open the room this year. If they do, it will be later on in the year. So we will continue to use Zoom for all of our meetings.

That said, the club is still planning our Field Day trip this year. We will again be going to Lost Eden up in the cool northern pines of Arizona. Field Day is one of the club's most popular events, which gets us all together in person. We can all get to know each other as well as play some radio for 24 hours.

Speaking of getting together, we had a great time at the annual club picnic over the 24th of April weekend. We had 41 people come out for lunch Saturday. About 15 people camped out from Friday to Sunday. It was a great time hanging out with everyone at lunch and around the campfire both nights. I heard a lot of stories. They may or may not be true, but it was fun anyway.

We also had John, KD8PC there. He brought his guitar and played song after song around the campfire.

I want to thank Brian, W7JET, for organizing this event. It was nice to finally put a face with some of our new club members. We are already planning for next year.

John, KG7NSP, our hamfest chairman, has gotten plans well underway for the big Superstition SuperFest. As you all know, this is the club's biggest event and fundraiser. Without the hamfest, this club would struggle to pay the bills.

I cannot say this enough; John needs help with this event. It takes a year of planning to pull it off, and he needs help.

Not only does he need help. He also needs someone to take over as chairman. He will help anyone who steps up, so you are not alone. I hate to say this, but if we do not get help with the

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SuperFest, it may not happen at all. One of the largest hamfests in Arizona may very well go away.

How sad that would be, just because the club cannot get any of its 225 members to help out. PLEASE, PLEASE, PLEASE, HELP OUT.

73 for now, and I hope to see you all at the Zoom meetings. We have some great presentations this year.

Club publication Article Submission deadlines (revised):

ADAW: Please submit information to this column by the 5th of this month, for next month's issue, to Editor@us60.us ADAW will publish later this month.

Communicator: Please submit articles by the 27th of this month, for next month's issue, to Editor@SuperstitionARC.org. Communicator will publish to club members early next month.

73 – Larry Kuck, WB7C for Superstition ARC's part of this ADAW.



Superstition ARC Repeaters

- 147.120 MHz (+) 162.2 Hz - Linked to 449.600 (-) (Analog Only)
- 449.600 MHz (-) 100.0 Hz - Linked to 147.120 (+) (Analog Only)
- 448.275 MHz (-) 100.0 Hz - Fusion
- WB7TJD-L Echolink Node

Club Nets

- Morning Drive Time Net:** Mon-Fri, 7:00-8:00 AM - Trivia
- Saturday Supershow:** Sat, 8:00-9:00 AM - Trivia
- Weekly 6 Meter Sideband Net:** Wednesdays, 7:00 PM on 50.140 MHz, W7ASL-L EchoLink, and 145.575 FM Simplex
- Club Net:** Wednesdays, 8:00 PM - Discussion, Elmer Q&A.
- Mesh Information Net:** Thursdays, 7:00 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

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.



**CHAPTER 16
BARRY M. GOLDWATER ARIZONA CHAPTER**

Our membership is up to 28 as of the end of May. Amateurs in Arizona who have been licensed for 25 or more years are invited to join the QCWA.

Tom and Carl are working hard to revitalize the Barry M Goldwater chapter here in Arizona. We are reseating in-person meetings in various parts of the state, but don't have any set dates yet. Currently we have a weekly on-air roundtable on Sunday mornings at 0730 MST. We are hoping that 40 meters will work for everyone because the antennas are smaller and easier for people in small lots to put up a dipole. Check the website to get the latest frequency and exact start time. Please chat up membership at your local club meetings and encourage people to join. Our meetings are fun and are not so frequent that they interfere with other activities.

We now have an email list server so members can post notices to all members with a single email message.

If you have web experience, we can use an experienced Webmaster. Tom and Carl are in Tucson, and they are looking for members in other parts of Arizona to set up quarterly meetings.

Catch you on the air.
President: Tom Fagan, K7DF, president@azqcwa.org
Secretary/Treasurer/Webmaster: Carl Foster, KB7AZ, treasurer@azqcwa.org.

Website: <http://www.azqcwa.org/>
DUES: \$7.00/year and current national QCWA membership.





TBARC Continued from Previous Column

Welcome to new net controls!

If you join the club net (Tuesdays at 7:30 p.m. on the 147.040 / 446.150 repeaters) you'll hear a few new voices as net control. Both Walt NJ8G and Mark N1MAE will be lending their talents. The format of the net stays the same: short-timer check in (and out), then round-table check in. We usually have a ham radio topic to discuss. Then we'll go down the list of check-ins and ask each participant for their comments about the topic or anything else that they want to bring. If there's time, we'll go down the list again. This is a great net to build your skills as a net control, and a great net to learn about ham radio. See you on Tuesday at 7:30 p.m.!

Field Day is a go!

We've confirmed it with Jack Lunsford in Flagstaff. He's happy to host us this year after last year's hiatus due to the pandemic. There are (of course) additional precautions taken this year. Bring your mask, and everyone who attends has to have had the full series of COVID-19 vaccinations. Get more details and sign up at w7tbc.org/field-day and we'll see you from Friday, June 25, 2021 through Sunday, June 27, 2021 at Jack's cabin, 6850 Orange Box Drive, Flagstaff, AZ!

If you can't make it to Flagstaff

Even if you're not making the trip up the hill, we still want you to participate in Field Day with us! This year the ARRL has modified the rules to allow hybrid Field Day participation - either on site or from a location of your choice - including your home. The 2021 rules say you can contact as many Class D and Class E class stations this year as you want - even if you're operating as a Class D station yourself. You just need to keep your power below 150 W, use your own callsign, and send your log in to the ARRL. When you send your log, you'll be asked for an optional club name. Use "Thunderbird Amateur Radio Club" for the club name (spelled exactly that way but without quotes) and your activity will be logged for TBARC Field Day as well as for your own. Join us in the fun!

Do you need to do a site survey?

With the updated FCC rules on RF exposure, you might want to think about what you need to do to stay legal. If you make no station changes, you've got until May 3, 2023 to complete an RF exposure survey. On the other hand, if you make changes, you don't get to use that grandfather clause: you have to do the calculations as soon as you replace (or add) that antenna or radio. The ARRL has a web page at arrl.org/rf-exposure that gives more details and resources.

June meeting

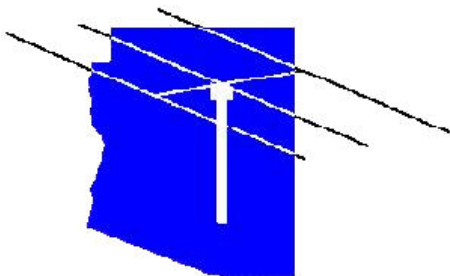
We still think in-person meetings will resume in the fall, based on what we expect to happen with NAU. Our June meeting is going to be virtual, and Israel was still working on a presenter at press time. Join us then for more ham radio information! The conference URL and details are on the TBARC website, w7tbc.org. See you at the (virtual) meeting!

Andrew Cornwall KF7CCC
kf7ccc@arrl.net

Continued Next Column



No Reports Received



MARCA INC.

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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Rugged Construction in an Ultra Compact Body • Stable 100 Watt Output with Efficient Dual Internal Fans • 32-Bit IF DSP Provides Effective and Optimized QRM Rejection • 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



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FTDX10 | HF/50MHz 100 W SDR Transceiver

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FTM-300DR | C4FM/FM 144/430MHz Dual Band

• 50W Reliable Output Power • Real Dual Band Operation (V+V, U+U, V+U, U+V) • 2-inch High-Res Full Color TFT Display • Band Scope • Built-in Bluetooth • WIFES-X Portable Digital Node/Fixed Node with HRI-200



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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



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- MAIL - All store locations

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The radio

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