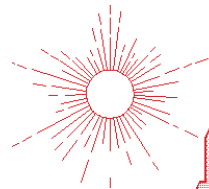


ADAW

4529 W. Park Place
Glendale, AZ 85306-1512



ADAW

Arizona Desert Aire Waves

Vol 44, No 12 December 2019

CLUB MEETING SCHEDULE

SARC
Dec 11th
E Valley Inst of Tech - Culinary Arts
5:00 PM

AARC
Dec 12th
Red Cross Bldg. - Phx
6:00 PM

OPRC
Dec 11th
Big Heart Coffee - Tucson
1:30PM

TBARC
Dec 12th
Old Country Buffet - Glendale
6:00 PM

CADXA
Dec 5th
Granite Reef Senior Center
7:00 PM

ARA
Jan 23rd
Denny's Restaurant - Tempe
7:30 PM

ARCCC
TBD
American Red Cross Bldg
Phoenix
9:00 AM

SuperstitionARC
Dec 11th
Golden Corral - Mesa
7:00 PM

MARCA
Dec 17th
Denny's Restaurant - Tempe
6:30 PM

ANSR
Dec 19th
via GoToMeeting
7:30 PM

OVARC
Dec 20th
Ascension Lutheran Church
7:00 PM

QCWA-AZ Chapter
Dec 18th/Dec 10th/TBD
Phoenix/Prescott/Tucson
9:30AM/10:30AM/TBA

WVARC
Dec 2nd
Shephard of the Desert
Luthern Church
7:00 PM

YARC
Dec 5th
Prescott Rodeo Grounds
7:00 PM

MARA
Dec 14th
Barro's Pizza - Maricopa
4:00 PM

KARC
Dec 10th
Solterra at White Mountains
6:00 PM

CHRC
Dec 15th
Floridino's Pizza & Pasta
6:00 PM

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	Mark Kesauer	N7KKQ	602.843.0960
Secretary	Reinhard Geissler	K7RGG	
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 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). The club also holds a net every Tuesday night at 7:00 p.m. on the 147.78/.18 repeater.

President	James Wasson	N7ELL	480.456.1154
Vice President	David Yee	N7AJR	
Secretary			
Treasurer	Ed Nickerson	WU7S	480.949.5162
Past President	Paul Finell	W7EFQ	602.741.6563
Board Members	Irv Hembeck	K00TZ	
At-Large	David Yee	N7AJR	
	Bill Kouchis	N9EIV	
	Ray Vasquez	K4RMV	(ARCA Rep)
	Bruce Harmsen	KA9EYX	
	Chris Tabor	K7TAB	

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

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	Brian McCarthy	AK7F	president@w7tbc.org
Vice President	Darrell Bradshaw		vicepresident@w7tbc.org
Secretary	Gary Larson		secretary@w7tbc.org
Treasurer	Bob Townsend		treasurer@w7tbc.org
Board Members	Clair Wyant	KG7MAJ	kg7maj@w7tbc.org
	Kenneth Charleton	K4FZH	k4fzh@w7tbc.org
	Nick Holaday	KI7HZQ	ki7hzq@w7tbc.org
	Andrew Cornwall	KF7CCC	kf7ccc@w7tbc.org
Past President	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 32544, Phoenix, AZ 85064-2544.

OLD PUEBLO RADIO CLUB

The Old Pueblo Radio Club meets the **SECOND WEDNESDAY** of March, June, September and December at 1:30 p.m. at Big Heart Coffee, 4802 E 22nd Street in Tucson. Visitors are welcome.

President	Ron Kalish	N7SPW	520.207.3852
Vice President & Treasurer	George Devich	N9IUK	520.760.0125
Board of Directors:	Jim Ulmer	KC7THU	
	Lin Donnelly	KF7CNR	
WebMaster			

Mailing address: OPRC, P.O. Box 42601, Tucson, AZ 85733-2601. DUES: Individual - \$20.00/YR, Family - \$30.00/YR.

AZ RED CROSS COMMUNICATIONS CLUB

The Arizona Red Cross Communications Club meets 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	Peter Petrotta	KD7OIW
Vice President	Charlie Zurenko	N2TFS
Secretary	Rob Rodriguez	KI7PDR
Treasurer	Mark Steele	KI7RB
Past President	Frank Engstrom	KB7IQ

Arizona Red Cross Communications Club - K7ARC, 4747 N 22nd Street, Phoenix, AZ 85016.



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 schedule is as follows:

Phoenix - Third Wednesday of each month at 9:30 a.m. at Iron Works Food and Spirits, 17233 N 45th Avenue in Glendale. 602.843.0909. Contact John Marshall at wa7bsr@gmail.com

Prescott - Second Tuesday of each month at 10:30 a.m. at Golden Corral, 1901 E AZ-69 in Prescott. 982.776.1664. Contact Don Broadston.

Tucson - Seeking volunteer to set up monthly meetings in Tucson.

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	John Marshall	WA7BSR	623.334.2583
Vice President			
Secretary			
Treasurer	Dave Hanson	W7BJw7bj@outlook.com	
Webmaster	John Marshall	WA7BSR	623.334.2583

Web Site: <http://azqcwa.org> Email: azqcwa@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	Ray Tyrrell	N6MY n6my73@gmail.com	
Treasurer	Bob Sitterley	K7POF	928.636.2146
Secretary	Lori Cripps	WA7EDI	602.955.7517
Board Members:	Phil Hazlett	WA7UID	
	Sonja Hazlett	WB7CWW	
	Peggy Williams	KD7AWU	
	Jerry Roberts	KB7CN	
	Gary Hamman	K7GH	
	Ken Rasback	KK7KEN	

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 p.m. at the Solterra at White Mountains, 5408 W White Mountain Blvd in Show Low.

President	Tim McFadden	K7DXA	
Vice President	Steve Herron	AG7GD	928.242.2558
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: info@kachinaarc.org 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:

Lance Halle, KW7LH	kw7lh@w7ara.net
Dennis Bietry, KE7EJF	ke7ejf@w7ara.net
Doug Pelley, WB7TUJ	wb7tuj@w7ara.net
Joe Godfrey, AE7JG	ae7jg@w7ara.net
Dennis Campbell, AE7WU	ae7wu@w7ara.net
Mike Montalvo, KF7MBK	kf7mbk@w7ara.net
Marty Dusenberry, KE7DGP	ke7dgp@w7ara.net
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 meets the **THIRD TUESDAY** of each month (except December) at 7:00 p.m. at the Charles K Luster Building, 640 N. Mesa Drive (near N. Mesa Drive & E University Dr.) in Mesa. Visitors are encouraged. The Officers and Board of Directors meet the second Tuesday of each month (except December) at 6:30 p.m. at Black Bear Diner, 1809 E. Baseline Road (near Gilbert Rd & E. Baseline Rd.) in Gilbert.

President	Steve Estes	KB7KWK	480.251.0551
Vice President	Andy Keels	KD4ABB	480.622.4000
Secretary	Brent Butler	W7FK	480.332.1141
Treasurer	Douglas Mitchell	W7ADD	480.540.4110
Board Members:	Tony Manzo	W7KLV	480.654.8669
	Dan Karnes	W7TWR	602.502.5259
	Don Rollock	W2EUL w2eul@yahoo.com	
	Jeff Harris	K2DFE	602.617.6930
	Jeff Heinze	N7CCW	480.720.7908
	Jeff Marchesky	K7ZLX	602.628.0238
	Rod Fritz	WB9KMO	805.722.8804

Superstition ARC, 5155 E Eagle Dr #21522, Mesa, AZ 85277. Web Site: SuperstitionARC.org and SuperstitionSuperFest.org. The Superstition Amateur Radio Club is a 501(c)(3) non-profit organization. For club information, please send email to: Communications@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. at Denny's Restaurant located at 825 S 48th Street in Tempe (SE corner of University & 48th Street). Monthly presentations cover a broad spectrum of interesting subjects. Visitors are welcome to attend. Come early for dinner and 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	Dave Hall	N7ZPY	
Vice President	Norm Johnson	AA7OO	480.278.2886
Treasurer	Don Aldridge	WA7RLL	
Board Member	David Yee	N7AJR	
Secretary	Open		
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. (except for January Awards Banquet) at the Granite Reef Senior Center, 1700 N Granite Reef Road in Scottsdale. Visitors always welcome. See www.cadxa.org/meetings.html for a map. The May meeting is an outdoor barbecue at 6:00 p.m. (reservations required).

President	Larry Loen	WO7R	lwloen@gmail.com
Vice President	Tom Boza	NE7X	qrz-dx@ne7x.com
Secretary	Bob Davies	K7BHM	k7bhm@cox.net
Treasurer	Mike Wright	N7MW	n7mw@aol.com
Past President	Lee Finkel	KY7M	ars-ky7m@gmail.com
Board Members	Fred Hoffert, III	NA2U	cwman1@aol.com
At-Large	Reinhard Geissler	K7RGG	dl1uf@compuserve.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.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	Bill Noe	WG7W	president@w7yrc.org
Vice-President	Joe Thomas	KG6IDN	vice_president@w7yrc.org
Secretary	Tim Norton	K7PVY	secretary@w7yrc.org
Treasurer	Sam Prather	K7SCP	treasurer@w7yrc.org
Board Members	Kathy Laing	KJ6KMK	kj6kmk.yarc@gmail.com
	Sandy Meadowcroft	KF4JHC	sandymeado2@yahoo.com
	Ray Kolman	KI7COM	spudzman@gmail.com
	Dave Erlach	W7VVSX	rocketdog@dslxtreme.com
	Mike Reid	N7IEP	mdr126@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). Visitors are VERY welcome. Board Meetings are held at 9:00 a.m. at the Ascension Lutheran Church located at 1220 W Magee Road in Tucson. Check the web site at www.tucsonhamradio.org for dates.

President	Steve Wood, W1SR	W1SR@arrl.net
Vice-President	Mike Peterson K7VTT	azmacguru@gmail.com
Secretary	Carl Foster KB7AZ	carlfoster@cactuscomm.net
Treasurer	Hanna Eckert, KG7TPD	haneck@aol.com
Board Members	Fred Bresani W2HZ	
	Ross Eckert K4WBR	
	Gary Pierce AE7GP	
	Marnee Dearman KG7SIO	
	Tom Ambler W7TRA	

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/>.

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	Curt Steger	NA7CS	president@copahams.org
Vice President	Wayne Kropp	KI7SPW	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:	David French	N7FAN	david@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

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
Section 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) is a group of radio amateurs that promote audio and video operation on linked repeaters and on mesh networks. We hold regular meetings are held each year in January and July, and typically have monthly social events. Refer to our www.atn-tv.org website for details. Watch our nets on Wednesday and Sunday at 7:00 PM Arizona time and Tuesday at 7:30 PM Pacific time. Browse YouTube.com and search for **W6ATNLIVE** or **W7ATN-MESALIVE**. Alternately, browse to **BATC.TV** and select Repeater and **W6ATN**, **W7ATN**, or **W7ATN-MESA**. Send your live video on the Internet at whereby.com/amateurtvnetwork or on amateur radio ATV or FM.

ATV Repeater Inputs: 434 MHz AM/DVB-T and 2441.5 MHz FM
 ATV Repeater Outputs: 1253.25 and 5910 MHz (Phoenix and Orange County), 1277.25 MHz (Tucson), 1289.25 MHz (Mesa and Santa Barbara), and 3380 MHz (Ventura County)

FM Repeater Outputs: 448.400 MHz, PL 100.0 (White Tanks), 445.225 MHz, PL 103.5 (Mt Lemmon), 447.175 MHz, PL 100.0/C4FM (Mesa), and 1286.15, 223.82, and 146.43 MHz (CA)

President	Ed Olague	K5OLA	602.885.7725
Vice President	Rod Fritz	WB9KMO	805.772.8804
Sec/Treasurer	Lee Weitzel	K0CCU	602.439.4840
Repeater Trustee	Kevin Jacobson	AD7OI	760.898.4601
Webmaster	Roland Hoffman	KC6JPG	562.577.1381

ATN-AZ, 4134 W. Danbury Dr. Glendale, AZ 85308. Membership dues are \$75 annually. For more information about our meetings, membership, repeaters and club activities, please see our website <http://ATN-TV.org>

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 at 11115 W Nevada Avenue in Youngtown at 10:00 AM the third Tuesday of the month in June through September and at 2:00 PM October through May. 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	Pat Regan	KD7TFD	623.341.7613
Vice-President	Dick Stout	KE7RD	623.815.0985
Secretary	Gloria Putman	KI7SQV	623.238.9963
Treasurer	Alven Brite	N7GVF	623.979.5944
Board Member:	Gary Franklin	K8BKB	269.501.3898
	Joe Fitzgerald	KV2H	623.784.9940
	David Putman	W7DCP	253.307.0544
	Bob Shoemaker	KG6EJW	858.598.7972
Past President	Gary Robin	K6HDU	623.234.2252
Committees:			
Membership	Jim Rogers	N7YTI	623.214.9219
Technical Advisory	Gary Franklin	K8BKB	269.501.3898
Equip Donations & Sales	Gary Franklin	K8BKB	269.501.3898

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 10:00 a.m. at the Greenfield Village RV Resort located at 99 South Quinn Circle in Mesa. Meetings are held in a gated community. For access, please contact Jerry Davis, K7AZJ at k7azj@arrl.net.

President	Jerry Davis	K7AZJ	k7azj@arrl.net
Vice President	Sue Rodgers	W7SKH	happyham7777@gmail.com
Secretary	Chuck Rodgers	W7CBR	rogers_charles@hotmail.com
Treasurer	Cliff Bean	AE7VZ	klyffone@gmail.com

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

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

ADAW Member Clubs

CHANDLER HAM RADIO CLUB

The Chandler HAM Radio Club (call sign N7CHN) meets the **SECONDSATURDAY** of each month at 9:00 AM at Barro's Pizza located at 1880 S Alma School Road in Chandler. Visitors are welcome. Check the web site at chandlerhams.org for dates. Weekly net is held every Thursday at 8:00 PM on 443.050+ PL100.

President	Gary Laatsch	KI7PBR	president@chandlerhams.org
Vice President	Norm Fasoletos	K7NWF	vicepresident@chandlerhams.org
Secretary	Lisa Allen	KJ7DJR	secretary@chandlerhams.org
Treasurer (acting)	Gary Laatsch	KI7PBR	treasurer@chandlerhams.org
Web Master	Lisa Allen	KJ7DJR	webmaster@chandlerhams.org

No dues at current time. Web Page: <http://chandlerhams.org>.

ADAW

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**



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MMRGEDITOR		
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ADAW

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From The Editor's Desk

I'm happy to be a special guest columnist for your December 2019 ADAW. As 2019 draws to an end, I think about all the things ham radio has become over the years. For many of us, 2019 has been a tough year. It seems we cannot watch the news without seeing division and discord. This year, I hit a momentous milestone for hams. I've now been a ham for a quarter century. To say there has been many changes in 25 years is putting it lightly. When I passed my Novice exam, there was no internet, no cell phones, and no electric cars. The world seemed smaller and less complicated. Ham radio opened up the world through this small radio connected to a really big antenna.

Why did you pick up that book? For me, it was being with my parents and our great group of friends. It was field days, contests, hamfests, conventions, and club meetings. We traveled the state and made friends along the way. Some of those friends have left us over the years. While we mourn those, we rejoice in the many others who have joined our family. While we may have differences in other areas of life, we all enjoyed ham radio and the company. It connects us. So while the country seems a little more divided this year, let us remember why we picked up that book.

With that feeling in your mind, get involved again. Remember that excitement with others. Share tales of field days or that Southwestern ARRL Convention aboard the Queen Mary with your children and grandchildren, your family, and your friends while you gather for holiday celebrations. Share with them what made you pick up that book, and all the fun adventures you have had along the way after you got your license. What about being a ham makes you proud? What makes you happy? Share that!

Join a net and talk about your first ham radio contact, or the first QSL card you received. Go to a hamfest and talk to an old friend, make new friends, and peruse the sellers' tables. You can start with the Superstition SuperFest Hamfest on December 7th at Mesa Community College, or the Thunderbird Hamfest on January 11, 2020 at the Glendale Nazarene Church. Go to your club's meeting. These pages are full of information on club activities to share in and enjoy. Contact your local school, or Boy Scouts, or Girl Scouts and offer to give a presentation about ham radio. Share those happy feelings inside you with our youth — the future of our hobby.

Let's make 2020 the year hams put aside their differences and work to secure ham radio's future, so that in 2030, there will still be someone opening that book, taking their test, and joining our beloved ham radio family.

Happy Holidays!
Melinda, KC7FWR

Public Service Calendar

Maricopa County Emergency Communications Group Events

EVENT	LOCATION	DATE
12Ks of Christmas	Freestone Park - Gilbert	12/14/19
JROTC Sophies Flats	Northeast of Wickenburg	12/14/19
Xterra - Estrella Mtn Trail Run		12/15/19
	Estrella Mountain Park	
Xterra - White Tank	Waddell	01/05/20
Prickly Pedal	TBD	01/18/20
JROTC First Water	North of Apache Junction	01/25/20
Pancake Run	Paradise Valley Mall/Phoenix	02/02/20
Xterra - McDowell Mtn	Fountain Hills	02/02/20
Black Canyon 100K	Spring Valley to Emery Handerson Trailhead	02/15/20
JROTC Orienteering - Sophies Flat		02/22/20
	Sophies Flat	
Mesquite Canyon	Waddell	03/07/20
Xterra Black Canyon Trail Run		03/08/20
	Black Canyon City	
Crown King	Lake Pleasant-Crown King	03/28/20
Pat's Run	Sun Devil Stadium/ and Tempe Town Lake	04/25/20

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.





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 Learning (C.A.R.L.), a 501(c)(3) organization. W7ASC is open to all visitors to the Arizona Science Center during those hours when the Arizona Science Center 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

BREAKING NEWS! A team headed by the Ron WA7GIL, the W7ASC station engineer successfully installed a new multi-band HF vertical antenna on the ASC roof on Saturday 19 October. Thanks to the team and to Jim N7BBS for making the antenna selection.



BOARD of DIRECTORS & A Controversial Topic

If you are reading this Newsletter, you probably belong to a Ham club. Most clubs have a Board of Directors (a.k.a. BoD) which purport to “manage” your club. These fellow Hams are responsible for initiating and managing the club activities, managing the funds and running the meetings. This BoD is

Continued Next Column

CARL Continued from Previous Column

usually elected. They report to and answer to the members. This is not always an easy task as club members rarely agree on how the club should spend its money, go for Field Day and design their QSL card. Big issues! Since many clubs ask members to pay dues, there can be a predictable source of funds. The major objective is to keep the members happy. Since every Ham is an expert, that can be a bit tricky.

Consider now the unique situation at the Center for Amateur Radio Learning (C.A.R.L.), an organization comprised entirely of Ham volunteers who have passed a background check. C.A.R.L. operates W7ASC, a Ham radio demonstration station that is located within the Arizona Science Center (ASC) building. As a 501(c)(3) not-for-profit, C.A.R.L. has no predictable income source. The members contribute time, not money.

The BoD must balance the interests of the members, who are also ASC volunteers, the ASC management, and the many visitors who are the only reason that ASC exists! If the Ham volunteers are unhappy, they always have the option of staying home, so the BoD is not merely subject to a vote. We should all give the C.A.R.L. BoD members a regular standing ovation for keeping that station going. This has been happening for over 22 years - 363 days every year! Yes! ASC does close two days per year. For a list of the current BoD, find it at the front of this ADAW newsletter.



Your faithful scribe is off on a tangent as the year draws to a close. Permit this scribe to put forth a theory, based on no scientific data, but based on a few years of observation. The W4CIH log book, if kept current, would now comprise several volumes. More than half of those contacts are on CW.

The ham population that is CW proficient demonstrates a remarkable level of mental activity. Dementia is so rare, in this population sample, that it is worth noting. The observation is about mental acuity, not just activity. Is there something here that has been missed by the medical researchers? Or has there been insufficient research into the potential benefits of Morse code?

Your faithful scribe has zero medical training. But think about it – how many active CW operators do you know who have exhibited mental decline? Or is the desire to become a Ham licensee prima facia evidence of mental deficiency? Your opinion is hereby solicited.

The editorial staff of the W7ASC newsletter wishes you, and yours, a happy New Year, great DX and a mild winter.

73 de W4CIH
jeanjol@hotmail.com
480-664-7353





CHRC At COPA-Fest 2019

The Chandler HAM Radio Club made its very first public showing at the COPAFest 2019. Thank you, Maricopa Amateur Radio Club, for saving a spot next to you at your event. We appreciate all you have done to help us get started.

Not only was it the Clubs first HAMFest, it was also mine (Gary, KI7PBR). Very nice!!! I love the fellowship and friendliness of HAM operators. We also had several residents of Chandler walk by and say, "I didn't know Chandler had a HAM radio club?"...well four months ago we didn't. This is exactly why we wanted to attend this event, to get the word out. For me personally I was able to put actual FACES to many of the operators I have talked to on the air for the last 2+ years.

About 15 to 20 of our existing members showed up as well. The club made a good showing at the event. At one point there were at least 10 of us just all standing at our booth talking. That's what this is all about.

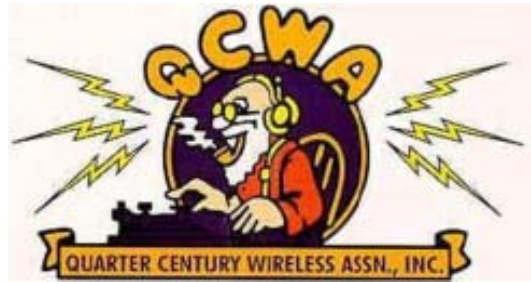
So glad we were able to attend and it was very much a success. Thank you to all responsible for setting up this event and to our members who participated. It's nice to know the members of our club are active in the amateur radio community.

Just the first of many more ...

Gary, KI7PBR
CHRC President.

PS: Just after I wrote this article, two new members joined the club bringing out membership to 50! Both were at the HAMFest.

ADAW



CHAPTER 16 BARRYM.GOLDWATER ARIZONA CHAPTER

Amateurs in Arizona with twenty five years of experience are invited to join the QCWA. There are monthly meetings in various parts of Arizona

Phoenix, AZ

Third Wednesday of each month at 9:30 AM
Iron Works Food and Spirits
17233 N 45th Ave.
Glendale, AZ 85308
602-843-0909
Contact: John L Marshall
WA7BSR@gmail.com

Prescott, AZ

Second Tuesday of the month at 10.30 AM
Golden Corral
1901 E AZ-69
Prescott, AZ 86302
928-776-1664
Contact: Don Broadston

Tucson, AZ

We need a volunteer to set up monthly meetings in Tucson.

Officers are:

(All officer positions are open for volunteers.)

President: John Marshall WA7BSR 623-334-2583

Vice President: Open

Secretary: Open

Treasurer: Dave Hanson W7BJw7bj@outlook.com

Webmaster: John Marshall WA7BSR WA7BSR@gmail.com

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

ADAW



Hello All,

We, (SARC) were having the usual problems finding a 'home' location for our HAMFEST this spring. It is my understanding that many clubs are having the same problem. We do have a location, it is at the same location we have had previously, at the church in North East Scottsdale. We are expecting a very good turnout.

We have been working with our By-Laws that are more than thirty years old. In the process of updating them, we have addressed some of the financial limitations, and have resolved them.

Many of our club members have suggested having a homebrew contest, which we have not done for many years. I am looking forward for more members to want the same thing.

Our HIP *(Ham in the Park) has been very active with 10+members attending. There is lots of learning, teaching, and demonstrations at each.

On a personal note, I have an extreme balance problem, and dropped an old body (auto) grinder that had no Deadman switch, it continued to run and found its way to my shin bone and ankle. After a few weeks it appears to be healing well. Somehow I need to learn to be more careful.

73's,
Paul W7EFQ

ADAW

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.



"The 2019 OVARC Hamfest was excellent," said so many visitors that came to enjoy the morning. While there were some that came on Friday evening to stay in their RV's overnight, one visitor started early from Kingman and arrived about 4:30AM in Tucson on Saturday morning. That's called Hamfest dedication. Our sales table was filled with donated items and many walked away with a great deal.

We are very grateful to have such a great venue available to us for the Hamfest. The Marana Middle School is perfect for such an event. With overhead solar panels to block the sun, classrooms for our seminars, restrooms, close access to the Freeway, and plenty of room to spread out, this is the ideal spot.

Thanks to so many at OVARC for volunteering their time, suggestions and presence to make the event what it was. I'm sure I will forget someone but he goes: Thanks to Howard for "running the show," to Judy for getting more than 70 vehicles parked, to Rick for checking in hundreds of attendees, to Carl for organizing the seminars, to Fred for working to organize the sales table for many months, to Quniton for running the VE session, to Walt for providing expert overnight security, to Bev for driving all over Tucson picking up and delivering things, to Roger for organizing the PA systems and helping with multiple miscellaneous items, to Scott for organizing the cone layout on Friday and the vehicle layout on Saturday, to JW for his tireless efforts in managing the cones, to Hanna for keeping us organized, and to Ross for loading and unloading many necessary items for the event. Many thanks also to Tom-1, Tom-2, Mike, Bruce, Kiersten, Ken, Logan, and Ben.

As we get closer to the end of year, we'll be starting our membership drive for 2020. If you're a member of your local club, please renew your membership for another year. Our collective organizations rely heavily on member dues so please contribute, if you can, and even better, participate in your club's activities. Ham radio is a great way to keep the mind and body active so get active and get involved.

THANK YOU to all that make our club excellent and THANK YOU to all that visited our Hamfest and we hope to see you again in 2020.

HAPPY THANKSGIVING & 73,
Steve-W1SR

ADAW



Now that 2019 is complete, we should all reflect on how our hobby has benefitted each of us and our community. 2020 will bring new opportunities and challenges for everyone.

I am always excited to see the growth and maturity the Maricopa County Emergency Communication Group (MCECG) has achieved. I have seen many people working on their ICS courses (100&700 or 200&800). These skills are the same across all of our served agencies to allow the team to work within an ICS structure in a time of need. I would encourage more to study the ICS material and when called on by an agency, be ready for deployment (we do not self-deploy). Connect with the local clubs for help finding an agency to support.

Speaking of deployments, if requested, could you deploy in 30 minutes? What about 60 - 90 minutes? We must always be ready when called on for emergency deployment and be an effective communicator regardless of the situation.

Everyone needs practice. The AEN-MAR Net Control team are already preparing for next year. They hold week practice and training on the Metro link system every Monday night at 2100. Bring your questions and gain experience in a fun, action-packed hour.

The ARA maintains many sites and repeaters. This is a lot of work and we are always looking for help. Help could be from people wanting to learn the technical side of the hobby, or the seasoned veterans. Join us the First Thursday of Every month at 1830. All are welcome.

Following the Tech meeting is the monthly board meeting at 1930. Everyone is welcome.

The month of December is a time to spend with your Family. Some may travel, some will enjoy the time locally. Whichever, take time to be with your Family and Friends.

As you set your New Years resolution, set goals for your hobby. Complete ICS training, help with the site maintenance 3-6 times next year, or may participate in multiple public service events through MCECG.

The ARA has supported Amateur Radio in Arizona for more than 50 years. The support is through the willing hearts of its members. I encourage you to get involved with the ARA and Amateur Radio in Arizona. For more information, visit the website at www.w7ara.org.

Have a safe and enjoyable holidays. See you in 2020.

73,
Brian McCarthy, AK7F



This has been an exceptionally busy time for amateur radio. Many were at Copafest on October 26, then November 2nd found many of us at Harkfest. On Thursday, November 7, several of us got together at the American Red Cross Building to begin work on the radio room reboot. The building manager had begun replacing the flooring and painting the walls, and we needed to clear the desks, pack up everything, and move the contents to a basement storage area to facilitate this work. So the radio room in the American Red Cross Building is TEMPORARILY no more.

When you read this, the November 14 meeting will be past history and we will have enjoyed hearing Frank Engstrom tell about and show photos of his trip to Alaska. Volunteer examiners will have been available for testing on November 24th, the last Sunday of the month. We will then be looking forward to our annual Christmas dinner and meeting, which will be on December 12. Lori will be bringing the turkey, and is hopeful that some expert carver will offer to carve. The dinner will be a potluck as in the past, and planning will start at the November meeting.

73,

Lori, WA7EDI



National Pearl Harbor
Remembrance Day
December 7, 2019



Hamfest Calendar

7 December 2019 - **Superstition Superfest** - hosted by the Supersition Amateur Radio Club will be held at Mesa Community College, 1833 W Southern Ave in Mesa. Hours are 8:00 AM - 4:00 PM. Admission is \$5.00/person (includes 1 door prize ticket) and children 12 and under free. Tailgate is \$10.00 for 2 spaces which includes 2 paid admissions tickets. VE Testing will be available. Registration is from 8:00 to 9:00 AM with testing beginning at 9:00 AM. ARRL Card Checking, Special Event Station, GOTA Station, Fox Hunt, Prizes, Live Music, and Food Vendor will be available. Contact the Hamfest Chairman at chairman@superstitionsuperfest.org for more information.

11 January 2020 - **Thunderbird Hamfest 2020** - hosted by the Thunderbird Amateur Radio Club will be held at Glendale Nazarene Church, 5902 W Cactus Road in Glendale. Hours are 8:00 AM until Noon. Vendor set up after 5:00 PM Friday, January 10 and Saturday, January 11 after 6:00 AM. General Admission - \$5.00 per person includes one door prize ticket. Kids under 12 are free. Grand Prizes, Hourly Prizes, Seminars, ARRL QSL Card Checking, Snacks and Beverages Available. Laurel VE Testing from 10:00 AM until 11:00 AM. For latest information, check the website at <http://www.tbirdfest.org>. Questions? Email hamfest@w7tbc.org.

19 - 25 January 2020 - **Quartzfest 2020** - will be held at Roadrunner BLM Short Term Camping Area, 53rd Street North, US Highway 95, Quartzsite. Visit the website at quartzfest.org for more information.

3 February 2020 - **West Valley ARC Auction** - hosted by the West Valley Amateur Radio Club will be held at Shepherd of the Desert Lutheran Church, 11025 N 111th Ave in Sun City. Doors open at 6:00 PM and auction begins at 7:00 PM. Send email to suncitywvarc@gmail.com for more information.

14 - 15 February 2020 - **Yuma Hamfest 2020 / 2020 ARRL Southwestern Division Convention**. Visit the website at yumahamfest.org for all the details.

March 2020 - **SpringFest** - hosted by the Scottsdale Amateur Radio Club. Details to follow.

28 March 2020 - **Tucson Spring Hamfest** - hosted by the Radio Society of Tucson. Watch for Details

26 September 2020 - **Tucson Fall Hamfest** - hosted by the Radio Society of Tucson. Watch for Details.



Did you know that there is one family in the Mingus Mountain Repeater Group that shares the call ending in POF?

K7POF is Bob Sitterley in Chino Valley, AZ

W7POF is Bob's daughter Robbin of Sun City West AZ

and

K9POF is Bob's grandson Brian of Lamar CO

ADAW

Hamfest Calendar Continued from Previous Column

24 October 2020 - **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.

14 November 2020 - **Oro Valley 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.

ADAW

Continued Next Column



TBARC Continued from Previous Column

Hamfest call for presenters

There's still some space for presenters at the Thunderbird Amateur Radio Club's hamfest. If you're going to be there (on January 11, 2020) and have a topic that's of interest to the Amateur

Radio Community, why not share it with us? Topics can be on building projects, operating methods, technology, radio science, radio history - really, the sky's the limit! If interested, please contact Rick Tejera K7TEJ at k7tej@omiss.net or 623-572-0713.

Membership drive

It's that time of year again - time to renew your TBARC membership. This year we have great membership drive prizes for those who sign up early - in November, we'll be giving away an MFJ mag mount antenna to someone who signed up early. In December, we'll be giving away an Alinco DJ-MD5. You could win either one (or both!) just by signing up early.

December General Meeting

There is none! Instead, we're having a holiday party - at a different time than usual. Join us on Thursday, Dec 12 (that's one week earlier than usual) at Old Country Buffet, 17125 N 79th Ave, Glendale, AZ 85308 - for an evening of camaraderie and enjoyment. That's where the election results will be announced. Let the restaurant know you're with TBARC at the front door and you'll get a discount.

Andrew Cornwall KF7CCC - kf7ccc@arrl.net



The Paint Crew



Hamfest prizes announced

The prizes have been announced for the Thunderbird Amateur Radio Club hamfest. This year at 12:00 noon, we'll be giving away the grand prize, an Icom IC-7300. If you don't go home with that, there's a chance you might go home with a Yaesu FT-8900R, or an Anytone AT-D868UV. But you can't win any of those if you don't have a ticket! Go to tbirdfest.org/prizes and get yours now, or buy them at the hamfest. And at 11:00 a.m., the door prize will be given away - a Yaesu FT-70DR handheld. The only way you can win that is to attend the hamfest - see you there on January 11, 2020 at the same prime location as last year. Check out tbirdfest.org for more details and directions.

Technician class early 2020

We're already looking around for people who are interested in getting their Technician license. If you're reading this, odds are good that you already have it - but if you've got friends who don't, and you want to hear them on the air: direct them to w7tbc.org/ham-radio-license-class where plans are firming up. We'll need at least 10 people in order to put the class on, and right now it's looking like it will happen early in 2020. It may be a dangerous question - but is this the time to get your spouse licensed?

Repeater painting project

Our crew of volunteers headed up to Towers Mountain on Saturday, November 2 to paint the repeater building as part of our agreement with ASI. ASI was more than pleased with the work, which you can see in the photos. A big thanks to Ken NX7B, Darrell KE7T, Greg KG7JQK, Ron WA7NAH, Ron KG7OH, Robert N7TYX, Nic KI7HZQ, Brian AK7F, and Walt NJ8G for making the trip up to Crown King on a Saturday morning.

Club elections

By the time you read this, we'll have had the vote which decides who's on our board for next year. Thanks to everyone who voted, and a very big thank you for everyone who volunteered to take on a role. Your enthusiasm is what keeps the club going!

Continued Next Column

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.

December Test Sessions

Dec 2nd - West Valley ARC -- 6:00 PM

Shepherd of the Desert Lutheran Church, 11025 N 111th Ave,
Walton Hall, Sun City
Contact - David Morrill 623.680.5011
No Walk-Ins / Call Ahead

Dec 5th - CARBA -- 7:00 PM

Lighthouse YMCA, 2900 N Columbus Blvd, Tucson
Contact - Matthew Grossman 520.462.0448
Pre-Reg by email preferred - veregistration@ac7il.org

Dec 7th, 14th, 21st - NOMADS -- 9:00 AM

Venture Out RV Resort, 5001 E Main St, Mesa
Contact - Robert Bingham 480.404.1408
No Walk-Ins / Call Ahead

Dec 7th - WM-VETeam -- 9:00 AM

Solterra Senior Living, 5408 White Mountain Blvd, Show Low
Contact - Vincent Cattolica ka7joi@cableone.net

Dec 7th - Oro Valley ARC -- 10:30 AM

Ascension Lutheran Church, 1220 Magee Rd, Tucson
Contact - Quinton Gleason licensing@tucsonhamradio.org

Dec 9th - East Valley VE Team -- 6:00 PM

City of Mesa Utilities, 640 N Mesa Dr, Mesa
Contact - Fred Bolinger 480.242.8606

Dec 9th - Radio Society of Tucson -- 7:00 PM

Hardesty Mid-Town Police Bldg, 1100 S Alvernon, Tucson
Contact - Diane Zimmerman 520.664.5070

Dec 11th - Chandler VE Team -- 5:00 PM

Gangplank, 250 S Arizona Ave, Chandler
Contact - Ray Vasquez 602.363.4207
No Walk-Ins / Call Ahead

Dec 17th - Motorola ARC of Arizona -- 5:00 PM

Denny's Restaurant, 825 S 48th St, Tempe,
Contact - Edward Olague 602.885.7725
No Walk-Ins / Call Ahead

Dec 18th - Thunderbird ARC -- 6:00 PM

Honor Health Medical Office Bldg, 19841 N 27th Ave, Phoenix
Contact - Brian McCarthy 623.486.0507

Dec 19th - Hassayampa AR Klub -- 2:30 PM

Home, 30645 S Wandering Way, Escapees North Ranch, Congress
Contact - Charles Carter 316.651.7710
No Walk-Ins - Call Ahead for Test and Location Info

Dec 21st - Hualapai ARC -- 10:00 AM

Kingman Fire Station, 2600 Northern, Kingman
Contact - Daniel Miller 928.897.3883

Dec 29th - Arizona ARC -- 7:00 PM

American Red Cross, 4747 N 22nd St, Phoenix
Contact - Gary Hamman 602.996.8148
No Walk-Ins - Pre-Register by Saturday Before



ADAW



Hello everyone. I hope all of you are having a good fall season; Well, as good as fall gets here in the good old Valley of the Sun. The good news is, it is getting a little cooler outside and we can now all climb towers and fix those sunbaked coaxial cables and antennas. I need to do a little of that myself. But remember to be safe. We lost a few hams this year from climbing accidents. I don't think there were any in Arizona so let's keep it that way.

We are getting close to the end of the year and that means it is time for the Superfest on December 7th. As we always mention, this is the Superstition ARC's big event for the year. The Superfest proceeds are a lot of what keeps the club going through the year, and now that we are the second biggest hamfest in Arizona, it is even better. That all being said, the SuperFest Committee is still looking for those club members who can volunteer some help for the event. Remember it takes a lot of work to run this hamfest. You can help out for however little or much time you want. It's not like you will have to work the event for the entire time. So please help out if you can so we can continue to hold this great hamfest. There is a sign-up page on the club website.

The club's annual meeting is in November, when the election for the Board of Directors and Officers for 2020 takes place. Outgoing President Steve Estes, KB7KWK issued the club's Oath of Office to the election's winners before the meeting ended.

I hope to see all of you at the next club meeting.
73 for now!

November Ballot – Election results? Next month

For President: Andy, KD4ABB

For Vice Pres: Ed, K7EDT

For Secretary: Brent, W7FK

For Treasurer: Bryan, KF7DPC

For Board of Directors (seven seats):

Jeff, K2DFE - Jeff, N7CCW

Bob, N8ANV - Larry, AB7C

Dale, N7QJK - Don, W2EUL

Fred, WB4AEJ - Rod, WB9KMO

By the time this ADAW is out, this ballot will be voted. We had some competition for the Board seats! I will report the results in January 2020 ADAW.

Upcoming event dates

2019 Superstition SuperFest @ 7:30 AM till 4:00 PM - See <https://www.superstitutionsuperfest.org>. - Flyer in this ADAW Supplement.

Superstition Continued from Previous Column

Tue. Dec 10, 01900 PM – Christmas Dinner - Golden Corral, 1868 N Power Rd, Mesa. South of McKellips.

Tue. Dec 17, 2019:30 PM – Board Meeting (5:30 for Dinner) - Black Bear Diner. Address is on Page 3.

Tue. Jan. 14, 2020 @ 6:30 PM – Board Meeting (As Above)

Tue. Jan. 21, 2020 – Club Meeting and Junque Auction - Mesa's Charles K. Luster Building (Address on page 3)

Jan. 25-26, 2020 – Winter Field Day - See <https://www.winterfieldday.com> for Rules

Arizona Mesh Organization (AMO)

The club has spun off its Mesh group to allow it to operate independently as a new club dedicated to the Mesh Network. The Arizona Mesh Organization, or AMO, will be closely affiliated with Superstition ARC.

The Amateur Radio Mesh network created by Superstition ARC began small with nodes using highly directional antennas aimed at each other over a four-mile path between Steve, KB7KWK and Larry, AB7C, using WiFi Channel 1, 2412 MHz and converted Linksys routers some five or six years ago. It remained largely point-to-point-to-point using directional antennas on hams' towers, with Steve operating a number of routers aimed in different directions, serving as the system's hub. These routers discover each other once a new one is in range of another.

The \$2 used linksys routers from thrift stores started going up in price as their sudden popularity became apparent. They were flashed with Broadband-Hamnet firmware, but interference from all of the neighborhood home WiFi networks limited the usable beam-width of each node.

Our Mesh was moved down to the exclusive amateur frequency of 2397 MHz with a 10-MHz bandwidth, colloquially known as "WiFi Channel -2." Using commercial routers that could be flashed with firmware developed by the Amateur Radio Emergency Data Network (AREDN), operation outside of the community WiFi band became possible, making for stations farther away and further off of beam-center able to participate. (The ham band segment runs from 2390 to 2450 MHz.)

The Mesh now uses some tall buildings and Userly Pass to extend range and fill in coverage gaps. Wide bandwidth permits a higher data transfer rate, but the mesh chose to go with just 5-MHz bandwidth recently to further increase sensitivity and range. The mesh also uses microwaves in the 3- and 5-GHz ham bands.

Flashing the routers with amateur radio firmware makes them amateur radio transceivers, requiring a license to operate



Superstition Continued from Page 15

under Part 97 Rules. For more information, follow the Mesh Net on Thursdays on 147.12. Rod, WB9KMO, also hosts Mesh workshops at his home.

73 from Larry Kuck, WB7C for Superstition ARC's portion of ADAW

NOTE NOTE NOTE! We have changed our meeting location.

We are now at our new monthly meeting place, the Granite Reef Senior Center, 1700 N Granite Reef Rd, Scottsdale. The next meeting will be at 7:00 p.m. on Thursday night, December 5th. Our social hour starts at 6:30 p.m. See below for news about dues and the Annual Awards Banquet.

Our presentation at the December meeting will be about the Phoenix Mesh Network. Our presenter, Gary Hinton, AC7R, has been a licensed amateur radio operator since 1975. He has enjoyed participating at Field Day, doing Fox Hunting, and using APRS to support Public Service events.

Gary has designed and fabricated several PC boards, including: Motorola Oncore(R) GPS APRS Tracker, Interference Tracking Node, and Repeater Control Backplane for the Arizona Repeater Association (ARA).

Recently, he has been learning about Mesh and helping to expand the Mesh Network in the East Valley. Mesh is a means of expanding public service into UHF and microwave frequencies, allowing more modern data communications in localized emergencies. Come hear about this important development.

Our November presentation was "Life is Long Enough for QRP!" Mark Gustoff, WO7T, gave a rousing presentation, complete with visual aids, and even a few prizes! He excellently covered how to do QRP, especially portably, in the context of living and operating in Arizona.

Members should note that annual dues are due. You can pay at any meeting or mail a check to our treasurer, Mike Wright, N7MW (good on QRZ), or email him at n7mw@aol.com to arrange payment via PayPal. Rates remain the same (\$25 per individual, plus \$12.50 more for each family member in the same household).

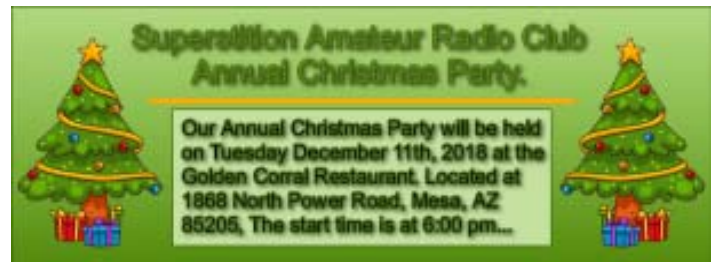
Our Annual Awards Banquet will be held on Friday night, January 17th, at the PERA Club, with meals similar to last year's that were well received. The cost is \$30 per person. Please make your reservation and pay our Treasurer for the Banquet as soon as you can. Guests are always welcome at our Banquet.

See you at the Granite Reef Senior Center!

73,
Larry Loen, WO7R
CADXA President

ADAW

ADAW



ADAW

Superstition ARC Repeaters

147.120 MHz (+) 162.2 Hz - Usery *
448.275 MHz (-) 100.0 Hz - Usery - FUSION
449.600 MHz (-) 100.0 Hz - East Mesa *
KB7KWK-L Echolink Node 538499 *
* - Linked Full Time

Club Nets

Morning Drive Time Net: Mon-Fri, 7:00-8:00 AM - Trivia
City of Mesa CERT Team Monthly Net: First Tuesday of month, 7:00 PM
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

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.



The Yavapai ARC welcomes visitors, both licensed and those interested in ham radio. Come join us for one of our regular club meetings. We meet on the first Thursday of every (almost) month, in the Freeman Building on the Prescott Rodeo grounds. Meeting times are 7:00 PM with people showing up to visit and chat about 6:00 PM.

YARC is one of the largest and most active amateur radio clubs in the southwest. Our home is in beautiful Prescott, Arizona, where we have the summertime benefit of our 5000-foot altitude. We are an ARRL Special Service club. The designation reflects our active public and community service efforts. YARC currently provides support communications for 13 community events in the greater Prescott area. The 2019 event calendar is now completed, but 2020 begins in February with the "Run Sedona" race.

Reading my musings above, I should not that the summertime advantage (weather) somewhat diminishes this time of year. While it will approach 71 degrees today (Nov.15), it is starting out at a cool 39 degrees, while you valley dwellers are basking in 60 degree mornings. But, we just get moving a little later in the mornings for the next few months.

The November meeting always include our election of officers and BoD members for the following year. This time around we voted for VP, Secretary, and two Board members. Virtual drum roll, please. And the winners are: John Snedden-VP, Tim Norton-Sec, Dave Erlach and John Laing-Board members.

Two other traditions that happen at the November meeting are the presentation of a Lifetime Membership Award and the Lloyd Halgunseth Memorial award. The Lifetime Membership award was presented to Kathy Laing KJ6KMK. And the Lloyd Halgunseth Memorial award went to Frank Bender K8FB. Both are well deserving of the recognition.

Each year YARC operates a special event station in November for the birthday of the NRA. This year it is November 17th, Special Event Station, K7NRA will be on the air from "Gunsite Academy" in Paulden, AZ. By the time you read this, the event will have concluded. Hope you had the opportunity to join in from either end of the conversation.

Big news for YARC in 2020. For several years we have held Field Day at our club station location. Field Day, June 27-28, 2020 will be in Prescott Valley at Little Dealer RV facility. It should be great fun with a minimum of hardship.

The Prescott Hamfest is currently negotiating for a new venue that can accommodate our growing event. The fourth

Continued Next Column



The Kachina Amateur Radio Club is sponsoring a two-day review class to assist those planning to test for their Technician License on 7 December 2019.

The first half of the review will be held on Saturday, November 23, 2019 from 8am to noon. The second half will be on Sunday, November 24, 2019 from noon to 5pm. The review sessions will be conducted at the Solterra Senior Center, 5408 Hwy. 260 (White Mountain Blvd.), Lakeside, AZ.

The Laurel VE Team, WM-VET, will be conducting license testing on Saturday, 7 December 2019, at 9:00 AM at that same location. Walk-Ins are welcomed, however, pre-registration is preferred. You can email the team at VEtesting@cablone.net to preregister. Please include your name (the exact name used to create your FRN, if you have an FRN), license call (if you have one), and which license exam you wish to take. An acknowledgement will be emailed back to you.

At the test session, the following will be required: A government issued photo ID, your FCC Registration Number (FRN) if you have one OR your social security number, the original and a copy of any passed exam element credit (CSCE), and a copy of your current license if upgrading. The test session begins at 9:00 AM.



YARC Continued from Previous Column

year for the event promises to be bigger and better.

YARC tries not to forget our new members and those wishing to upgrade their licenses. Test sessions for 2020 have not yet been confirmed, but will be posted as soon as they are finalized. Check the club website for the dates soon, www.w7yrc.org.

So, come on up, down or over to Prescott, and pop in for a visit or join us. The Yavapai Amateur Radio Club is here to serve.

For Sale / Wanted



LOOK!
Great Deals!

For Sale

Cushcraft 13B2 2M Beam - \$130 including documentation
Contact Erik Basilier K7TV ebasilier@cox.net

Stacked 70CM KLM Yagis - Two, 16-element stacked side by side for vertical polarization. Each model 440-16X beam covers 420 - 450 MHz with specified gain 14.0 dBd. Boom length is 10 ft 3 in. \$200 including manual. Contact Erik Basilier K7TV at ebasilier@cox.net

Steppir 3-Element Antenna with optional 40M - 30M Dipole (Trombone) Kit. Also with 6M passive element, SDA 100 with D25 splice, and plug in connector junction box (pipe-bomb upgrade). Excellent Condition - \$2,000.00

Contact Bob Drake AF7EL at 623.385.6531 or email af7el@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.

USTower MA-550XHD Xtra Heavy-Duty Tubular Tower

This is a 55-foot tower that is in excellent condition. It has spent its entire life in Arizona. It is a three (3) sections tower - 12" diameter on the first, 10" diameter on the second, and 8" diameter on the third. Also included is the MARB 550XHD & MAF550XHD raising fixture for tilting the tower, the MDP750 heavy duty motor drive with positive pull down, the MCL100 limit switch package, M-5 5'2" OD mast, one each 10" & 8" MA coax arm assemblies, on 12" MA arm assembly, hand winch, thrust bearing, and rotor plate for mounting the rotor below and rotating the tower, a new set (4) of 1 1/8" diameter bolts supplied by US Tower, and a complete manual. Structural Analysis with Arizona wet stamp also included.

Asking \$3000 or best offer - cash or certified check payable to WVARC. Buyer may pick-up or ship. All arrangements and costs are buyer responsibility.

Contact Gary Franklin franklin6209@att.net or phone 269.501.6898 for tower ratings and more information.

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 Bob Kettler WA6MIO at rdkettler@msn.com.

ADAW

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Real Estate

*Are you or someone you know looking for a Ham Home?
I can help you find a home with a tower or one where a tower can be added. Call or email me to get started.*

Richard Haworth W7MDQ
Coldwell Banker Residential Brokerage
602-370-1450 Cell, rahaworth@cox.net



December 21st

No Reports Received



Old Pueblo Radio Club *INTERMOD*

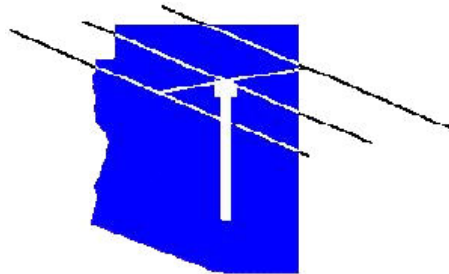
President's Column



RACES Repeaters

145.150	packet/wide	N7OEM
146.880 - PL 110.9	wide coverage	N7OEM
448.55 - PL 110.9	wide coverage	N7OEM

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



MARCA INC.



Emergency Communications Since 1961

SHORT SKIP



Wishing you a happy holidays!

See you next year!

ADAW

HAM RADIO OUTLET

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NOBODY BEATS AN HRO DEAL!



FTDX5000MP Limited | 200W HF + 6M Xcvr

- Internal Power Supply • Two Totally Independent Receivers
- Super Sharp "Roofing" Filters • High Performance Yaesu Custom- designed 32-bit Floating Point DSP • True Analog Meter Precision



FTDX3000 | 100W HF + 6M Transceiver

- 100 Watt HF/6 Meters • Large and wide color LCD display • High Speed Spectrum Scope built-in • 32 bit high speed DSP /Down Conversion 1st IF



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 + 6M Transceiver

- Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics
- Unparalleled - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream



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

- 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



FT-857D | Ultra Compact HF/VHF/UHF

- 100w HF/6M, 50W 2M, 20W UHF • DSP included • 32 color display • 200 mems • Detachable front panel (YSK-857 required)



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

- Massive heatsink guarantees 80 watts of solid RF power • Loud 3 watts of audio output for noisy environments • Large 6 digit backlit LCD display for excellent visibility • 200 memory channels for serious users



FTM-100DR | C4FM FDMA/FM 144/430 MHz Xcvr

- Power Packed System Fusion Transceiver • High Audio Output Power • Rugged Powerful Transmitter • Integrated 66ch High Sensitivity GPS • 1200/9600 APRS Data Communications



FTM-400XD | 2M/440 Mobile

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



FT-70DR 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-2DR C4FM/FM 144/430 MHz Xcvr

- Analog/C4FM Dual Monitor (V+VU+UV+U) • System Fusion compatible • 1200/9600 APRS Data Communications • Integrated 66ch High Sensitivity GPS • Wide Band Receiver • Snapshot Picture Taking Capability With Optional MH-85A11U



FT-65R | 144/430 MHz Transceiver

- Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 5 Watts of Reliable RF Power Within a compact Body • 3.5-Hour Rapid Charger Included • Large White LED Flashlight, Alarm and Quick Home Channel Access

FT-60R | 2M/440 5W HT

- Wide receiver coverage • AM air band receive
- 1000 memory channels w/alpha labels • Huge LCD display • Rugged die-cast, water resistant case • NOAA severe weather alert with alert scan



- 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

HRO Phoenix is the home of all your Ham Radio gift giving needs. We also have Gift Certificates to make your holiday shopping easier. For your last minute shopping, we will be open on 12-24 and 12-31 from 10 AM to 3 PM. (We will be closed on 12-25-2019 and 1-1-2020) Thanks for making 2019 a great year and we look forward to seeing you in 2020! Happy Holidays from all of the staff at HRO PHOENIX

Now serving you at our Phoenix store: Manager Ron AJ7T, Steve W7QY, Mike K7DD, Jim K7EOG, Jim KE7EEU, Richard K1RAB, and Bob W8RH.