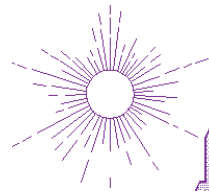


ADAW

4529 W. Park Place
Glendale, AZ 85306-1512



February



ADAW

Arizona Desert Aire Waves

Vol 45, No 2

February 2020

CLUB MEETING SCHEDULE

SARC

Feb 5th
Scottsdale Senior Center
7:00 PM

OPRC

Mar 11th
Big Heart Coffee - Tucson
1:30PM

CADXA

Feb 6th
Granite Reef Senior Center
7:00 PM

AARC

Feb 13th
Red Cross Bldg. - Phx
7:00 PM

TBARC

Feb 20th
N Phx Campus of NAU
7:00 PM

ARA

Feb 27th
Denny's Restaurant - Tempe
7:30 PM

ARCCC

TBD
American Red Cross Bldg
Phoenix
9:00 AM

SuperstitionARC

Feb 18th
Charles K Luster Building
7:00 PM

MARCA

Feb 18th
Denny's Restaurant - Tempe
6:30 PM

ANSR

Feb 20th
via GoToMeeting
7:30 PM

OVARC

Feb 21st
Ascension Lutheran Church
7:00 PM

ATN (VOAR)

Feb 15th
Denny's Restaurant - Tempe
6:00 PM

WVARC

Feb 3rd
Shepherd of the Desert
Lutheran Church
7:00 PM

YARC

Feb 6th
Prescott Rodeo Grounds
7:00 PM

MARA

Feb 1st
Maricopa PD Community Rm
9:00 AM

KARC

Feb 11th
Solterra at White Mountains
6:30 PM

CHRC

Feb 8th
Barrow's Pizza - Chandler
9:00 AM

QCWA-AZ Chapter

Feb 19th/Feb 11th/TBD
Phoenix/Prescott/Tucson
9:30AM/10:30AM/TBA

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	
Secretary	Open		
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) 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	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	Randy Beecroft	W7RJB	
Vice President	Jim Mortensen	W7AZY	
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 every 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 central Mesa. Visitors are Encouraged. The Officers and Board of Directors meet the second Tuesday of every 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	Andy Keels	KD4ABB	480.622.4000
Vice President	Ed Taggart	K7EDT	480.813.7440
Secretary	Brent Butler	W7FK	480.332.1141
Treasurer	Bryan Hubbard	KF7DPC	480.205.8122
Board Members:	Jeff Harris	K2DFE	602.617.6930
	Jeff Heinze	N7CCW	480.720.7908
	Bob Thomas	N8ANV	239.253.8279
	Larry Fort	AB7C	480.861.7066
	Don Rollock	W2EUL w2eul@yahoo.com	
	Fred Atkinson	WB4AEJ	602.464.4406
	Steve Estes	KB7KWK	480.251.0551

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 more information, contact: 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. The May meeting is an outdoor barbecue at 6:00 p.m. at the PERA Club. Visitors always welcome. See www.cadxa.org/meetings.html for a map.

President	Larry Loen	WO7R	lwloen@gmail.com
Vice President	Mike Fulcher	KC7V	kc7vmike@q.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	John Jolly	WA7NWL	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.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	John Snedden	KT7P	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	sandymeadow2@yahoo.com
	Dave Erlach	W7VXS	rocketdog@dslxtreme.com
	Mike Reid	N7IEP	mdr126@gmail.com
	John Laing	K7PRS	

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
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) is a group of radio amateurs that promote video operation on linked repeaters and mesh networks. We hold business meetings in January and July and social meetings the **THIRD SUNDAY** of each month at 6:00 PM at Denny's Restaurant, 825 S 48th Street in Tempe. Watch our nets on Wednesday and Sunday at 7:00 PM Arizona time and Tuesday at 7:30 PM Pacific time. Our video streams are on www.youtube.com, search for W6ATN Live or W7ATN-Mesa Live. Send your live video to whereby.com/amateurtvnetwork or on amateur radio ATV or FM.

ATV Repeater Inputs: All Sites: 434 MHz AM/DVB-T and 2441.5 MHz FM

ATV Repeater Outputs: Phoenix - 1253.25 and 5910 MHz, Mesa - 421.25 & 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

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. Membership dues are \$75 annually. 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	Fred Peters	K7WFP	
Secretary	April Kramer	KI7GFJ	
Treasurer	Doug Totel	K9RZ	
Board Member:	Gary Franklin	K8BKB	269.501.3898
	Joe Fitzgerald	KV2H	623.784.9940
	David "Cee" Putman,	W7DCP	253.307.0544
	Tom Smith	WA0OFO	
Past President	Pat Regan	KD7TFD	623.341.7613
Committees:			
Membership	Krissy Larson	KI7GJJ	
Technical Advisory	Frosty Oden	NQ1S	
Equip. Donations & Sales			
	Ken Jenkins	WB6MMV	
	or Jim Seay	WB7RBN	wb7rbn@arrl.com

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	Open		secretary@chandlerhams.org
Treasurer	Byon Garrabrant	N6BG	treasurer@chandlerhams.org
Web Master	Open		webmaster@chandlerhams.org

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



The *Arizona Desert Aire Waves* is published monthly and is the official news media of the sponsoring clubs. All news items, articles and inquiries 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**



Groundhog Day
February 2nd

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Remember ?

From the Editor's Desk

The Arizona Sun City Grand Hams will be holding a special event to celebrate the one year anniversary of having antenna privileges within their HOA. The event will correspond with Winter Field Day and will demonstrate Emergency Communications to their 17,000 community residents. They'll be operating a Special Event Station as N7G prior to the start of Winter Field Day, which officially runs from January 25 at 1900Z to January 26 at 1900Z, and will be operating three stations - one on CW or RTTY, one on HF SSB, and one VHF/UHF station. They have invited the local citizens, politicians, and the media to visit and learn what Amateur Radio can do in the event of a major disaster or power outage. (And we all know that a power outage in the middle of summer in Arizona is MAJOR disaster!)

If you get this month's ADAW before the event is over, look for N7G on the bands and give them a shout. You'll be helping to show the general public just what Amateur Radio is all about.

February brings a couple of great events for you to visit. The first is the West Valley Amateur Radio Club Auction on February 3rd. The auction will be held at Shepherd of the Desert Lutheran Church, 11025 N 111th Avenue in Youngtown. Doors open at 6:00 PM and the auction takes place at 7:00 PM.

The next event is the ever popular - Yuma Hamfest. The hamfest will once again be the location of the Southwestern Division Convention. The event, held at the Yuma County Fairgrounds, will be held on Friday, February 14, from noon to 5:00 p.m. and Saturday, February 15, from 8:00 p.m. until 5:00 p.m. The always delicious hamfest dinner will be held on Saturday, February 15, from 6:00 p.m. until 8:00 p.m. culminating with the awarding of the Grand Prizes. This event offers lots to see and do - vendors to shop - speakers to hear - seminars to attend - and more. The calendar on page 12 and the flyer in the flyer file have all the details. Mark your calendar for February 14 & 15 and plan to attend.

Next month - March - brings a passel of hamfests for you to choose from. There's the new ATN Surprise Hamfest on March 14th, followed by the Scottsdale Springfest on March 21st (which is back in their previous location at the church), and then the Tucson Spring Hamfest on March 28th. Each of these events promises to be great. Choose the one closest to you, or more than one, and plan to spend an enjoyable morning visiting with fellow hams and browsing through all the treasures.

Hope everyone gets to enjoy at least one of the upcoming events. Maybe someone can write up a paragraph or two about one of the events for next month's ADAW. Those of us who cannot attend will be grateful.

'Til next month - 73,
Chris, N7PVL

ADAW

Public Service Calendar

Maricopa County Emergency Communications Group Events

EVENT	LOCATION	DATE
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
Lost Dutchman Marathon	Apache Junction	02/16/20
JROTC Orienteering - Sophies Flat	Sophies Flat	02/22/20
Mesquite Canyon	Waddell	03/07/20
Xterra Black Canyon Trail Run	Black Canyon City	03/08/20
ADA Tour De Cure	North Valley	03/14/20
Crown King	Lake Pleasant-Crown King	03/28/20
El Tour De Mesa	Mesa, AZ	04/18/20
Pat's Run	Sun Devil Stadium/ and Tempe Town Lake	04/18/20

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.

Classes

The Radio Society of Tucson (RST) will be holding a technician class license course. Six (6) weekly classes will begin at 6:00 PM on Sunday, February 2, 2020 at the Tucson Hardesty Police Station, 1100 S Alvernon Way in Tucson, AZ. There is no charge for the class. Text being used for this course is the 2018-2022 Gordon West Technician Class book available for about \$25 on Amazon. No charge license exams will be offered through the Radio Society of Tucson (RST). For more information or to reserve a space, email Ken Lesniak, KG7KHY at kg7khy@gmail.com.

ADAW



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

Thunderbird Hamfest

Thanks to all who came out on Saturday. We made some good contacts and had a chance to catch up with friends and other clubs also interested in Em Comm. It was a great day for a hamfest and I hope you all had a chance to get out and shop the tailgaters. I saw some good buys out there and found a great deal on a 50-amp Astron power supply that just might find a new home in the K7ARC shack.

Quartzfest

Quartzfest is just around the corner. This year we will have the Command Post onsite and also plan to bring along one of the GP medium tents to provide a place for overnight stays. If you plan to spend the night bring along your sleeping bag, blanket, pillow, and any other comfort items to help you feel at home. We'll provide the tent, cots, and a heater for the tent. The weather is looking pretty good for the Quartzfest week with temps in the 60s and overnight lows in the 40s. Check the schedule for a workshop of interest and plan your visit accordingly. Be sure to visit the Quartzfest website to see the schedule of workshops and don't forget to read their latest newsletters to help give you a feel for the event.

Red Cross Shelter Rodeo

We have been asked to assist with the upcoming Shelter Rodeo being held in Parks on Friday, Jan. 31st and Saturday, Feb. 1st. The Shelter Rodeo offers training on shelter, feeding, and logistics support for volunteers across the region. Accommodations will be in a staff shelter set up for volunteers to get experience setting up and running a shelter. While we are still working out the final details of our participation, this provides an opportunity to demonstrate the resources and skills that amateur radio operators bring to the table in a disaster scenario. We expect to also exercise our plan to establish comms between the shelter, the Red Cross office in Flagstaff, and the Coconino EOC as the shelter rodeo continues. More details are forthcoming and an event will be posted to the K7ARC website for member sign up.

ARCCC Continued from Previous Column

National Guard Visit

We've been invited to visit the 91st CST-WMD on Wednesday, Feb. 5 at 10:00 a.m. An event has been posted on the K7ARC website for you to sign up if you plan to attend. Our thanks to Jim, N6GWS for following up to reschedule this visit.

General Membership Meeting

It's been a while since our last general meeting. Our snowbirds are back in town and this is a good time to get to get our meetings back on track. Let's plan to get together on Saturday, Feb. 8th at 10:00 a.m. at the Red Cross chapter. We have some new members and look forward to bringing everyone up to speed on current projects. An event is posted on the K7ARC website for sign ups.

Yuma Hamfest

The Annual Yuma Hamfest is the site of the ARRL's premier event for the Southwest in 2020, the Southwestern Division Convention. It is also the largest hamfest in Arizona. Several of our members attend each year. Most of the major manufacturers are represented and there are lots of commercial vendors including HRO, DX Engineering, Wired Communications, RF Gear 2 Go, and lots more. Add to that the tailgaters, seminars, workshops, a Saturday night BBQ dinner and awards banquet, and a ton of awesome raffle prizes and you can see why this is such a popular hamfest. Mark your calendar for Feb. 14th and 15th at the Yuma County Fairgrounds.

Charles Zurenko, N2TFS - Disaster Services Technology
Arizona - New Mexico - El Paso
4747 N. 22nd Street
Phoenix, AZ 85016
(602) 336-6669 (p) - (607) 435-3461 (c)
Charles.Zurenko@redcross.org



ADAW

Continued Next Column

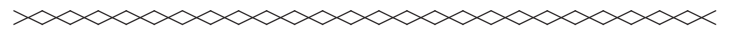


CARL Continued from Previous Column

Amazing that this all came together, but we are not done yet. Where did those pioneers obtain the electricity that made this all work? Keep in mind that, up to this point, electricity was just a lab curiosity. There were no generators or alternators. The telegraph system was powered by batteries, which means a collection of cells. The first telegraph system could not simply purchase batteries. A clever chemist, physicist or engineer devised a battery that was shipped in pieces and assembled by the operator at each station. When the plates were consumed in the chemical reaction that produced electricity, they were replaced. Initially, there was no standard configuration. System operators tried differing materials. While in use, some of these material combinations gave off toxic fumes, so a vent system had to be designed.

The human factor entered into the system requirements. Since each station required at least one operator, how were all these Morse code operators trained?

When one thinks about all of those factors that had to be available before the telegraph system could operate, it is a wonder that it ever happened!



The station uses HF for demonstrating many digital modes, so when the beam no longer worked, those demonstrations did not do well. Here is the report from Ron, and his assistant, who brought the beam back into action.

Report from Ron WA7GIL – Station Engineer - “On Monday, December 9, Paul and I cut a 200’ piece of new coax and put connectors on it (there were no visitors yet so we had time and space to do this). We took it up on the roof and used it to replace the 20+ year old spliced segment that went from the beam to the remote antenna relay box near the solar panels. This was the segment that had been disconnected by someone over the Thanksgiving holiday. This new piece is up and working. SWR checks are good on the beam. When we removed the old piece of coax, it crumbled in our hands. Good indication that it was time for it to be replaced.”

If you have considered volunteering at W7ASC, and you should, go to the web site where you will find an application. Complete it and send by mail to Jonathan Martinez, Arizona Science Center Volunteer coordinator, or bring it to the Shack. Once accepted, Sam N7INV will find a spot in the schedule that fits your availability. The schedule is arranged for the convenience of the volunteers – not the other way! Call now and join the fun!!

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

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) 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.

“IT TAKES TWO TO TELEGRAPH”

The Volunteers at W7ASC demonstrate and teach Morse code. History tells us that Morse was first used on the Telegraph system. We are also told that Morse code was invented by Samuel Morse, though some believe that it might have been invented by Vail. Regardless of the true story, it must be clear that in order to be used for communication there had to be both a sender and receiver. So – who was the second person to learn Morse code? A quick search of history fails to provide an answer, but the telegraph system would not work unless there was an operator at each railroad station. How did they learn to send and receive Morse?

There is more to the story, of course, and some answers are hidden. Consider that a telegraph system had many parts. If any of those parts were missing, there would be no system! So, where did the wire come from? It certainly was not a common item to be found at the local hardware store. The wire that was first used was iron, clearly not the best conductor. And it appears that it was not insulated. The wire that was used on the first DC-to-Baltimore test was lying on the ground. Not really the best conditions.

Then there had to be a switch, what we now call a Key, to complete the circuit under operator control, thus forming the dots and dashes of Morse. We depend on history to tell us that Morse’s assistant, Vail, was the mechanic who fashioned that first telegraph key. At the receive end of the circuit, there had to be a device that turned the electrical signals into human-readable form. That sounder was the first crude relay. Think of it as a device that worked only because someone saw a practical use for electromagnetism. When the key is depressed, completing the circuit, the armature in the receiving relay is pulled down to make a “click”

ADAW

Continued Next Column



Hello All.

The New Year has started with lots to look forward to in the New Year. The Thunderbird HAMFEST was of the best ones (in my perception) they have ever had, there were more vendors, more people, great weather. Great going guys! I got there at 8:00 AM, stayed for 3-1/2 hours, and mostly talked to friends and old friends. I was only capable of going through the swap meet once. What a FANTASTIC time I had.

I am looking for our HAMFEST in Scottsdale. We are working on our preparations for it. I would really like to be as good as T'Bird's. I would like to see all of our members attend and most to help. We are so pleased to have recovered our previous site at the church in North Scottsdale. We have a number of prizes supporting new venues for HAM radio, specifically Digital radio (FUSION), and others not yet advertised.

Our HIP (Ham in the Park) has been VERY successful with the willingness of Al Jensen (KE7FSD) in Teaching entry skills to "New B's" entry level into digital HAM radio.

On the subject of digital communications, our next club meeting will be focused on FUSION. Please bring your fusion HT to the next couple meetings for hands on training. Our meetings are the FIRST Wednesday of each month, 7:00 PM at the Scottsdale Senior Citizens Center 1/2 block North of McDowell Rd. on Granite Reef Rd.

73's
Paul W7EFQ



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.



CHAPTER 16

BARRY M. 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.





For Sale / Wanted



LOOK!
Great Deals!

For Sale

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, 840 Rodeo Drive, on the Prescott Rodeo grounds. Meeting times are 7:00 PM with people showing up to visit and chat about 6:00 PM. For directions, visit 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. 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. Our 2020 calendar begins with the Whiskey Basin Trail Run, April 18, 2020. Additionally, many of our members are active in the Yavapai Co. Ares/Races.

The Prescott Hamfest has a new venue. The location is the Arizona Downs racetrack, 10501 E. State Route 89A, Prescott Valley, AZ. The dates are May 8-9, 2020. The location will easily and conveniently accommodate our growing event. The fourth year for the event promises to be bigger and better. We are very excited about this facility and this year's event promises to be better than ever.

Following in June, YARC will conduct Field Day and our annual picnic June 27-28 in Prescott Valley at the Little Dealer RV facility campus. It should be great fun with a minimum of hardship as it is both a remote (field) location and in town. Access to both events will be easy.

YARC hosts license test sessions on a bimonthly basis. New members and those wishing to upgrade their licenses can take the test on January 25th. Check the club website for other upcoming dates. We also offer practice tests on Wednesday evening prior to the test date. Find us at www.w7yrc.org.

We also offer periodic classes for anyone interested in becoming a ham and getting licensed. Look for the class schedule on the website.

Our February meeting program will be by Doug Theriault NO1D, who will talk about "Allstar Digital Mode Used for VHF/UHF." So, come on up, down or over to Prescott, and pop in for a visit or join us. We are a fun club with lots of activities. The Yavapai Amateur Radio Club is here to serve.

Stacked 70CM KLM Yagis - Two, 16-element stacked side-by-side for vertical polarization. Gain 14.0 dBd each, 17dBd for the stack. Broadbanded 420-450 MHz. I used it for ATV. Boom length 10 ft. 3in. \$160 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.

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@arrl.com.



*Presidents' Day
February 17th*

Hamfest Calendar

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, Walton Hall, 11025 N 111th Ave in Sun City. Doors open at 6:00 PM and auction begins at 7:00 PM. For information, contact Kris, KI7GJJ at suncitywvarc@gmail.com.

14 - 15 February 2020 - **Yuma Hamfest 2020 / 2020 ARRL Southwestern Division Convention** - hosted by the Yuma Amateur Radio Hamfest Organization will be held at the Yuma County Fairgrounds, 2520 E 32nd Street in Yuma. Gates open for camping Thursday, Feb 13th at 2:00 PM. Event Hours are Friday, Feb 14th from Noon to 5:00 PM and Saturday, Feb 15th from 8:00 AM to 5:00 PM. Hamfest Dinner and Prize Drawing Saturday night, Feb 15th at 6:00 PM until 8:00 PM. Visit the website at yumahamfest.org for all the details.

14 March 2020 - **ATN Surprise Hamfest** - hosted by the Amateur Television Network will be held at 12983 W Grand Avenue in Surprise. Hours are 7:30 AM until 12:00 Noon. General Admission: \$1 per person. Tailgaters, Vendors & Club Booths are \$10 per space with set up beginning at 6:30 AM. Early Arrival and Camping May Be Available. Contact Bob Minnick, W8ARZ at povertyflataz@yahoo.com for space and booth reservations. Talk-In on 448.400 MHz FM PL 100.0. Direct questions to Rod Fritz, WB9KMO at wb9kmo@gmail.com.

21 March 2020 - **SpringFest** - hosted by the Scottsdale Amateur Radio Club will be held at 17705 N Pacesetter Way in Scottsdale. Gates open to the public at 7:00 AM. Vendor set up at 6:00 AM. General Admission - \$5.00 per person. Vendor/Tailgate - \$20 for 2 parking spaces. Raffle prizes and hourly drawings. Refreshments and snacks will be available. For questions, contact Bill Kouchis, N7EIV at n9eiv@arrl.net or Ray Vasquez, K4RMZ at k4rmv@arrl.net.

28 March 2020 - **Tucson Spring Hamfest** - hosted by the Radio Society of Tucson will be held at the Target Store, 9615 E Old Spanish Trail in Tucson. Hours - 6:00 AM - 11:00 AM. Free Admission and Buyer Parking. Tailgate Spaces \$10 per Parking Space. Free VE Testing at 9:00 AM - GOTA Station - QSL Card Checking - Prizes. Snacks & Beverages Available for Purchase. No Alcohol, Drugs, or Firearms. Talk-In Frequency 146.800 FM Tone 156.7. For Information & Map, visit <http://www.k7rst.org>

11 April 2020 - **April Hamfest at DeVry** - hosted by the Arizona Amateur Radio Club and the Arizona Red Cross Communications Club will be held at DeVry University, 2149 W Dunlap Avenue in Phoenix. Date is Tentative. Watch for Details.

5 May 2020 - **Cochise Hamfest and 7th Region Communications Exercise** - hosted by the Cochise Amateur Radio Association will be held at the club site, 2756 South Moson Road in Sierra Vista. Gates open at 7:00 AM. Free Admission and Parking. Tailgating - \$5. Inside Table - \$10. VE Testing from 9:00 until 11:30 AM. Coffee, Pastry, and Drinks Available. Hourly Prizes with Main Prize drawing at 12:00 Noon. Talk-In on 146.76(-) PL 162.2 Hz. Watch for more details.

8 - 9 May 2020 - 2020 **Prescott Hamfest and ARRL 2020 Arizona State Convention** - hosted by the Yavapai Amateur Radio Club will be held at Arizona Downs, 10501 E State Route 89A in Prescott Valley. Hours are 7:00 AM until 4:00 PM each day. General Admission is \$5.00 (good for both days). Full-Time Students FREE with Student ID - 12 years and younger FREE. Tailgate on Friday and Saturday - \$10.00 for first parking space, \$5.00 for each additional space. Commercial Vendors Indoor Table - \$25.00 for first table, \$10.00 each additional table. Tailgate Flea Market, Consignment Sales, Hourly and Grand Prize Drawings, DXCC Card Checking, Seminars and so much more. Food and Refreshments available for purchase. Limited RV Dry Camping for Thursday and Friday nights only - Pre-Registration Required. Talk-In K7MRG 147.000 MHz (-) PL 162.2 Hz. Sorry - No Guns, Drugs, Alcohol, Smoking or Vaping permitted. Leashed Animals are permitted in outside areas only. Check website (www.prescotthamfest.com) for updates. Hamfest Chairperson: Don Braun, KB6BOB -- kb6bob@cox.net.

26 September 2020 - **Tucson Fall Hamfest** - hosted by the Radio Society of Tucson will be held at the Target Store, 9615 E Old Spanish Trail in Tucson.

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.





It's a new year and we have a new executive at the Thunderbird Amateur Radio Club. Already I've heard a number of new ideas percolating that sound like fun for everyone this year. If you weren't at the December meeting, allow me to introduce the new board:

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:

Kenneth Charleton K4FZH k4fzh@w7tbc.org
Nic Holladay KI7HZQ ki7hzq@w7tbc.org
Clair Wyant KG7MAJ kg7maj@w7tbc.org
Andrew Cornwall KF7CCC kf7ccc@w7tbc.org

Past President Gary Duffield WK7B wk7b@w7tbc.org

A big thank you to everyone who ran in the election, even if your name's not in the paragraph above. Your participation makes us better!

And speaking of participation . . . I know there will be a number of new committees that are started. If you have good ideas for operating activities or build projects, bring them to the meeting. Let the board know what interests YOU.

Also announced at the December meeting was the Ham of the Year - who is Clair Wyant, KG7MAJ. Clair was singled out as someone who was willing to step outside his comfort zone to take on tasks that would contribute to the benefit of the club. Congratulations Clair!

It hasn't happened yet, but by the time you read this we'll have finished up with our hamfest. I'll thank everyone who took part, and in particular the volunteers who set up, took tickets, directed traffic, gave exams, and in general, made life better for the attendees. And I hope the weather will have cooperated!

One more thing of note that happened so quickly that many of you might not have noticed it, we ran into trouble with our UPS on White Tanks. A crew went up, solved the problem and came back down in record time. Thanks to everyone who made that happen.

Have you been to a TBARC meeting yet? Why not stop by? We'd love to have you join us, and guests are welcome. Our meetings are held on the third Thursday of the month at the

Continued Next Column

Yesterday, January 9, the Arizona Amateur Radio Club had a very special meeting. The program for the evening was a presentation by Charlie, N2TFS, on linked repeater systems. It was very well done, and everyone in attendance learned something from Charlie's presentation. I, for one, learned a lot! Thanks, Charlie.

A special moment during the meeting was a moment of silence in remembrance of Mark Kesauer, N7KKQ, who passed away on November 28, 2019 after a long battle with Glioblastoma Multiforme. Mark was very active in the AARC and did very much for the club.

Treasurer Bob, K7JJT, reported not much change in the treasury since there was not a lot of club activity. That will definitely change! The plans for the hamfest at DeVry are tentatively made for April 11, Easter weekend.

Our thanks to Chris, N7PVL, for all she does with ARCA and the ADAW which is so informative to all of us!

73,
Lori, WA7EDI

ADAW

TBARC Continued from Previous Column

North Phoenix Campus of Northern Arizona University. It's near Greenway and I-17, starting at around 7:00 p.m.. See the club website at w7tbc.org for directions. Israel, who's the leader of the presentations committee, was still deciding on the presenter as of press time, and although I'd heard rumors of a talk about 630m/2200m, as of press time I can't promise who will be there. Find out about a topic in ham radio - something you haven't heard before, or maybe something where you're an expert and can contribute your knowledge. Join us at the meeting!

Andrew Cornwall KF7CCC
kf7ccc@arrl.net

ADAW

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.

February Test Sessions

Feb 1st, 8th, 15th, 22nd, 29th - NOMADS -- 9:00 AM

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

Feb 12th - Chandler VE Team -- 5:00 PM

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

Feb 1st - Un-sponsored -- 6:00 PM

DeVry University Library, 2149 W Dunlap Ave, Phoenix
Contact - David Morrill n7tw@arrl.net
No Walk-Ins / Call Ahead

Feb 15th - Hualapai ARC -- 10:00 AM

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

Feb 1st - Oro Valley ARC -- 10:30 AM

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

Feb 18th - Hassayampa AR Klub -- 2:00 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

Feb 5th - Scottsdale ARC -- 5:00 PM

Scottsdale Granite Reef Senior Center,
1700 N Granite Reef Rd, Scottsdale
Contact - Ray Vasquez 602.363.4207
Bring FRN number from FCC

Feb 18th - Boy Scout Troop 127 -- 8:00 PM

St Francis Xavier School Library, 4715 N Central Ave, Phoenix
Contact - John Kelly 602.264.6854

Feb 6th - 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

Feb 18th - 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

Feb 8th - CHRC VE Team -- 10:30 AM

Barro's Pizza, 1880 S Alma School Rd, Chandler
Contact - Norman Fasoletos 602.319.4834

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

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

Feb 8th - Yuma ARC -- 9:00 AM

Yuma County Sheriff's Office, 141 S 3rd Ave, Yuma
Contact - Robert Spencer 928.941.7069
No Walk-Ins / Call Ahead

Feb 22nd - Chandler VE Team -- 10:00 AM

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

Feb 10th - East Valley VE Team -- 6:00 PM

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

Feb 23rd - 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

Feb 10th - Radio Society of Tucson -- 7:00 PM

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





President's Corner

Andy Keels, KD4ABB

The View From the Top of the Tower

This will be a new experience for me, having to write an article for the newsletter every month. Public speaking has always come easy for me, but writing articles never has.

Sometime around New Year's Eve the club's President for the last 11 years, Steve Estes KB7KWK, climbed down off the club tower and I'll be going up the tower to check out the view. For the next 12 months the club president's column will be my "View From the Top of the Tower."

The Superstition Amateur Radio Club has experienced tremendous growth over the last ten years which has brought with it additional responsibilities for all those in club leadership roles.

Some of the challenges I see for the club in the coming year will be retaining all the new members we've added recently, continuing to capture the knowledge from our past officers in the new operating practices document, and attracting and training new leaders within the club.

The general public will be directed to: info@superstitionarc.org for club information and questions about donations.

A couple of key initiatives I intend to work with this year's board of officers and directors to enact are the following: I want to ensure the club remains inclusive of all our members no matter what their interests, capabilities, or equipment allows. This includes making sure our club's single most valuable asset, our repeater system, remains open, analog, and accessible to everyone. Our flagship repeaters (147.120+ and 449.600-) attract many hams visiting and new to the valley due to the busy and friendly activity they find there.

I want to work to encourage new and younger hams to join the club and become active participants. I want to develop greater participation and involvement from our existing members. A club or organization that doesn't develop new leaders will become stagnant and fall into decline. This is true with all non profits: religious, charitable, or service-based.

The success of our club lies in the next generation and we need to provide guidance and support for them to develop. Part of this effort will be to expand upon the effort begun by last year's board with the creation of a set of published Operating Guidelines that captures all of the best practices and lessons learned from our past and present leaders. The club's adoption of HamClubOnline has been a huge help with this effort and I

Continued Next Column

Superstition Continued from Previous Column

hope to further develop our use of this tool.

The "view from the top of the tower" can be both scary if you look down, and inspiring if you look out toward the horizon. I look forward to sharing with all of you more of what I see and hear from the top of the tower this year.

Best Wishes, Andy Keels KD4ABB

President, Superstition Amateur Radio Club

147.12, 449.600 Reserved Saturday, Feb 8

On February 8th, the repeaters will be in use by the Mesa CERT team for the Sprouts Mesa Marathon. Please refrain from using the 147.120 and 449.600 repeaters from 5:00 AM to approx. 2:00 PM. Please feel free to use the 448.275 repeater in the meantime. Thank you.

Prize Winners, 2019 SuperFest

3 Grand Prizes:

1st Prize, Yaesu FT-991A: Doug Brown AG7KU

2nd Prize, Icom IC-7300: Jeff Harris K2DFE

3rd Prize, Yaesu FT-891: Emmett Plant KB3MPN

Hourly Drawing Winners:

For 9:00 AM: Hal Mann, WA7ZCZ, won BOX #1

For 10:00 AM: Dean Rachwitz, W7ADN, won BOX #4

For 11:00 AM: Phil Williamson, G6GIY, won BOX #2

For Noon: Bruce Hegrenes, K0OE, won BOX #3

Door Prize Winner: Hal Mann, WA7ZCZ, Yaesu FT-70DR

Foxhunt Winner: Roger Rugg, N0RSR, BaoFeng UV5R 8w
Congratulations All of you Lucky Winners!

February 18, 7:00 PM Club Meeting, Presentation

Our Program presentation will be Remote Base Operation by Brent Butler, W7FK. What is a "Remote Base," you ask? Come on over and find out! Briefly, your home station can be used, with its big antenna, while you're out and about is just one example. Visitors are Encouraged to attend.

For Club member meeting and Board meeting locations and times, please turn to page 3 in this ADAW. The 2020 Officers and Directors and club Contact information is there too.

Article Submission Deadlines:

For this ADAW column by the Superstition ARC: 3rd of this month for next month. Publishes 24th of this month.

For the Communicator, the club's member newsletter: 27th of this month. Publishes first week of next month.

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

ADAW

Continued on Page 16

2019 SuperFest Pictures



Ticket Sales



SuperFest Crowd



December 7, 1941 Commemorative Table



Plaque on the Table

Late-breaking news: Arizona Near Space Research will be flying a high-altitude balloon at the Yuma Hamfest. We're still working out details and assigning payloads. Look for us in the same area we usually do our flight preparations and set up our ground station near the big metal building.

Oh, and something new: We will have ANSR patches for those who donate to our group or become members. We are a 501(c)3 nonprofit organization and a portion of our funding is through donations.

If you would like to know more about our organization, visit our website at www.ansr.org.



Superstition Continued from Page 15

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.



NOTE NOTE NOTE!

We have changed our longtime meeting location.

We are now at our new monthly meeting place, the Granite Reef Senior Center, 1700 N Granite Reef Rd, Scottsdale. The meeting will be on February 6th, 2020, starting at 7:00 p.m. Our social hour starts at 6:30 p.m.

The February meeting will feature a presentation by Larry Loen, WO7R, on “What the CQ Marathon Taught Me about DXing.” Larry is an Honor Roll DXer who won the Zone 3 Mixed Marathon in 2018 and may win North America with his 2019 digital only Marathon results.

While the CQ DX Marathon is interesting in its own right, it is perhaps even more interesting as a source of information about DXing – even if you never turn in a score! In operation since 2006, there is now an extensive database of scores that, with a little imagination, will reveal many truths about DX and DXing and what you can do from your own station. In particular, it shows how you can run up a very good DXing score in any year despite “no sunspots.” Marathoners do. Come hear all about it.

See you at the Granite Reef Senior Center in Scottsdale!

On January 13th, 2020, the Chandler Ham Radio Club turned six months old. We have gone thru a lot of growth in this period in both number of members and organizing as a club. We participated and manned a booth in both the Maricopa and the Superstition hamfests. We had many visitors at both events and signed up several new members as a result. We also achieved our goal of creating a VE Team with members of our club and will be having our first test Session in Feb of 2020.

As we look to the New Year, we plan to continue to grow and spread our baby wings a little more. We approved charging dues for our club membership beginning this year. Dues are on a per year basis and are \$25/primary member and \$10/Family member in same household. We are currently also considering a discounted “Student Fee,” but have not established that yet. We already signed up to man a booth at the Scottsdale SpringFest coming up in March and again plan to attend both the Maricopa and Superstition later this year.

The club purchased a projector and screen so we can host technical presentations related to Amateur radio as well. You can always stay up with our events (in the calendar) and news on our website “<http://chandlerhams.org>.”

We expect 2020 to be an exciting year for the Chandler Ham Radio Club. Thank you to all who have and continue to help us move forward.

73 de Ki7PBR, Gary
President Chandler Ham Radio Club



**Mardi Gras
February 25th**

ADAW

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*

ADAW



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SHORT SKIP

Happy New Year to All!

A new year and a new decade will usher in some new technologies to our hobby that we haven't seen yet. At the Consumer Electronics Show this week, I experienced the planned mass penetration of AI which will no doubt impact our hobby too. There's lots to learn about AI and more experiences yet to come.

OVARC has major plans underway to fully transform our VHF/UHF repeater system to an all digital network. The simplicity, robustness and lower costs are just side-effects of our Fusion implementation. Remember when SSB became the new mode of voice communication supplanting AM? Is this any different? Probably not. As with AM, analog methods are not being outlawed. Analog methods will probably remain with us for a long time as the transition to digital modes will take time but definitely come with a host of benefits.

As we bring up the digital network, small things like Echolink, with its tortuous latency, will no longer be needed. Instead Fusion Hotspot users can communicate on the OVARC system just as they would locally and without the latency issues.

We have chosen Fusion for a number of reasons but the primary reason is the low cost of entry and the simplicity of programming Fusion radios. For about \$140 you're on the air with a dual band analog/Fusion radio. Our analog network is getting harder to maintain and the cost of linking repeaters is escalating. Although our coverage map will be "under construction" while we build out the network, our goal is to offer the broadest coverage in southern Arizona whether it be on our Digital Fusion network or our analog network.

OVARC Board elections take place at our January meeting. Sadly we are losing two board members that have served OVARC for a long time, Carl - KB7AZ and Ross - K4WBR. Both have made significant contributions to the club; their contributions will be missed. Nominated for the board are Hal - N7BAZ and Logan - KE7AZ.

The year ahead is well planned. Tom - W8TK has a full compliment of outings planned, several members are beginning their Hamvention planning, and we're already counting the days to Field Day 2020.

After a very successful Hamfest in November 2019, we

As I write this, our biggest event of the year is still a month away! The West Valley ARC's Annual Auction is always one of my favorites. Thanks to everyone who joins us! Thanks as well to the many volunteers who make it happen.

By the time you read this, we will be preparing for our March picnic. Our club has a new board for 2020, who are attempting to get back to the basics and have fun with ham radio! We'll continue to have great presentations, so look for future announcements with additional details.

In January, we had guest speaker Patrick Stoddard, WD9EWK of AMSAT and a proposal from our Tech Committee chair regarding new Yaesu digital repeaters for our club. John Siepmann, N9NA, was our Ham of the Year for 2019. Congratulations John!

Have you ever been to a WVARC meeting? Stop on by, we would love for you to join us, and guests are always welcome! Our meetings are held on the **FIRST MONDAY** of the month at 7:00 PM, with VE Testing prior to the meeting. See our club website for details and directions: <https://westvalleyarc.com/membership-%26-meetings>.

73

April, KI7GFJ, secretary

ADAW

OVARC Continued from Previous Column

have already locked in November 14, 2020 for our next Hamfest. Circle that on your calendar.

Of course, we always welcome new members. Please join us at breakfast on Saturday or come to one of our monthly meetings and check us out. Details are on our website at tucsonhamradio.org.

73, Steve - W1SR

ADAW

Continued Next Column



The Kachina ARC will be conducting a Technician License review session on the last weekend in January 2020. The first half of the review will be held on Saturday, January 25, 2020 from 8am to noon. The second half will be on Sunday, January 26, 2020 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 the following weekend on Saturday, 1 Feb 2020, at 9:00 AM at that same location. Walk-Ins are welcomed, however, pre-registration is preferred. You can email the team at VEtesting@cableone.net to pre-register. 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.

ADAW



See our new flyer in the flyer file.

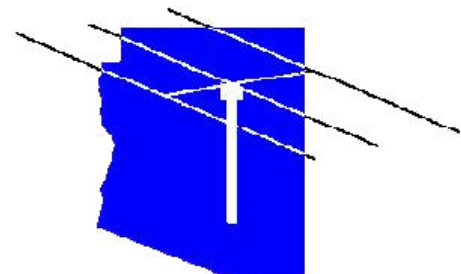
No Reports Received

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



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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



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



FTDX3000 | 100W HF + 6M Transceiver

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



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-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-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



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



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 • Snap-shot Picture Taking Capability With Optional MH-85A11U



FTDX101D | HF + 6M Transceiver

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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



FT-65R | 144/430 MHz Transceiver

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- 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

PENCIL IT IN - THE 2020 YUMA HAMFEST is Friday, Feb. 14th and Saturday, Feb. 15th. HRO Phoenix will be selling there again this year!!! We Would love to see you in Yuma.

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