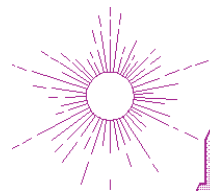


ADAW

4529 W. Park Place
Glendale, AZ 85306-1512



ADAW

Arizona Desert Aire Waves

Vol 45, No 1

January 2020

CLUB MEETING SCHEDULE

SARC

Jan 8th
Scottsdale Senior Center
7:00 PM

AARC

Jan 9th
Red Cross Bldg. - Phx
7:00 PM

OPRC

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

TBARC

Jan 16th
N Phx Campus of NAU
7:00 PM

CADXA

Jan 2nd
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

Jan 21st
Charles K Luster Building
7:00 PM

MARCA

Jan 21st
Denny's Restaurant - Tempe
6:30 PM

ANSR

Jan 16th
via GoToMeeting
7:30 PM

OVARC

Jan 17th
Ascension Lutheran Church
7:00 PM

ATN (VOAR)

Jan 19th
Denny's Restaurant - Tempe
6:00 PM

WVARC

Jan 6th
Shephard of the Desert
Luthern Church
7:00 PM

YARC

Jan 16th
Prescott Rodeo Grounds
7:00 PM

MARA

Jan 4th
Maricopa PD Community Rm
9:00 AM

KARC

Jan 14th
Solterra at White Mountains
6:30 PM

CHRC

Jan 11th
Barrow's Pizza - Chandler
9:00 AM

QCWA-AZ Chapter

Jan 15th/Jan 14th/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	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	K0OTZ	
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	bmcleanl@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 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	Andy Keels	KD4ABB	480.622.4000
Vice President	Ed Taggard	K7EDT	
Secretary	Brent Butler	W7FK	480.332.1141
Treasurer	Bryan Hubbard	KF7DPC	
Board Members:	Jeff Harris	K2DFE	602.617.6930
	Jeff Heinze	N7CCW	480.720.7908
	Bob Thomas	N8ANV	
	Larry Fort	AB7C	
	Don Rollock	W2EUL w2eul@yahoo.com	
	Fred Atkinson III	WB4AEJ	
	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 club information, please send email to: Communications@SuperstitionARC.org.

ADAW

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	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	W7VSX	rocketdog@dslextre.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
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 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/amateurstvnetwork 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 at 1115 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	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	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@arrrl.net.

President	Jerry Davis	K7AZJ	k7azj@arrrl.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**



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ADAW WEBSITE

www.adaw.org



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Amateur Radio WA7HXZ

Silent Key



*Mark Kesauer, N7KKQ
August 2, 1952
to
November 28, 2019*

Mark Knight Kesauer, N7KKQ (age 67) passed away late Thanksgiving (November 28, 2019) night after a long battle with Glioblastoma Multiforme. Born in Utica, New York to William and Barbara (nee Hopp) Kesauer, Mark graduated from Vandalia-Butler High School in 1970. He then earned an associate's degree from United Electronics Institute in Louisville, KY in 1972. His career in electronics and computer-aided design began in Fort Wayne, Indiana and subsequently took Mark from Vandalia, Ohio to Garland, Texas and on to Phoenix, Arizona. Mark was an avid Amateur Radio Operator (HAM) and served on the boards of several clubs in the Phoenix area including the Arizona Amateur Radio Club, the Amateur Radio Council of Arizona, and the Arizona Red Cross Communications Club. He was also a Phoenix Red Cross volunteer where he was instrumental in installing and maintaining the Amateur Radio communications equipment and helping around the office. His love of electronics and his love/hate relationship with computers led him to become the "go to guy" whenever equipment needed fixed or solutions needed found. Mark was also an integral part of the Arizona Desert Aire Waves providing both technical support and occasional literary contributions. As the infamous "Shaggy," his original cartoons brought comical and sometimes satirical humor to ADAAW's readers. Mark was a very generous person who was always ready to give of his time and efforts to help others. His quick wit and sense of humor lifted the spirits of those around him, endearing him to all who knew him. Mark is survived by his wife of 46 years, Christine (nee Howard) of Phoenix, AZ; daughter, Melinda (John) Wilson and grandson, Connor Wilson of Sacramento, CA; mother, Barbara (nee Hopp) Kesauer of Clayton, OH; sister, Ellen (Terry) Husak of Scottsdale, AZ; brothers, Peter (Karen) and Nicholas Kesauer of Dayton and Clayton, OH respectively; and numerous in-laws, nieces, nephews, relatives, and friends. He was preceded in death by his father, William F Kesauer; and 3 daughters, Mary-Alicia, Jessica, and Sarah; and numerous relatives. Mark was a very humble person and honors always embarrassed him. His explicit request was that no funeral or memorial of any type be held. Therefore, respecting his wishes, none will be held.

ADAAW

Public Service Calendar

Maricopa County Emergency Communications Group Events

EVENT	LOCATION	DATE
Xterra - White Tank	Waddell	01/05/20
Prickly Pedal	Cave Creek to Lake Pleasant	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
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.

ADAAW



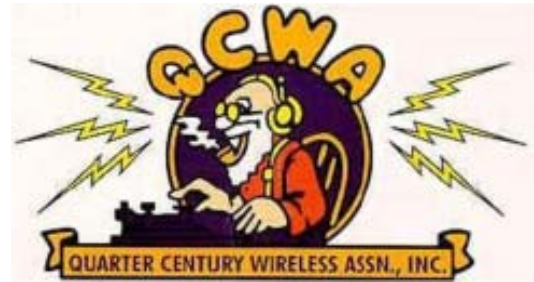
4747 N 22nd St. - Suite 100 - Phoenix, AZ 85016
 VHF – 146.84 MHz – PL 162.2 / UHF – 446.900 MHz – PL 131.8
 Echolink Node #731289 – K7ARC-R

In the new year, we have an opportunity to visit several locations across the region. We will be receiving approximately 4,000 smoke alarms as part of the Sound the Alarm initiative. These will need to be distributed across the region. We have been offered the chance to do some radio testing in conjunction with these deliveries. We'll have more information on dates and locations in a couple weeks. Some of the destinations may require an overnight stay. If you are interested and willing to drive a Red Cross vehicle to deliver these smoke alarms to offices across Arizona and New Mexico, let us know. We will follow up when we have more information regarding dates and destinations.

Radio testing will most likely consist of accessing local repeaters, testing linked repeater systems, surveying Red Cross locations for possible installation of low-band Red Cross radios and if time permits, exercising Winlink capabilities from remote facilities. We may also have time to do some HF testing, depending on location. It would also be helpful to have a couple folks monitor radios locally as well. Let us know if you would like to assist with these efforts in January and February.

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



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.

ADAW



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

The tech team at the station has been busy. The station has been on the air for more than 20 years and the equipment is showing signs of wear. The antennas, with their feed and control cables, have been exposed for much of that time. The Arizona sun is not kind to materials. Connectors corrode and break down under temperature cycles. Insulation deteriorates and transmission cables become more lossy. New devices have become available that can improve performance. Science Center building has undergone some serious maintenance that has impacted the W7ASC installation. The station itself has been moved to a location that is a different floor than the initial installation, requiring the rerouting of feed lines. When old & weather-beaten coax is moved, it is inevitable that some of it will be damaged. Since W7ASC operates on a very limited and unpredictable budget, the W7ASC Board does not always have the resources required to replace the defective elements.

Thanks to some equipment donations and the efforts of some board members who took these items to local hamfests where the surplus gear was turned into cash, the Station budget was able to fund the purchase of some badly needed parts. The Tech committee took advantage of some mild weather to install a new antenna with associated cabling. You saw some pictures of the team in the December ADAW. Subsequent operations have confirmed that the Station performance has benefitted from the expenditure of funds and committee efforts. There is still a to-do list that needs to be addressed, but improvement on all bands is now within reach. W7ASC is fortunate to have among the volunteers quite a few highly capable and motivated members. We hesitate to name names for fear of leaving one or more off the list. Perhaps we will be provided a subcommittee report that can be included in future Newsletters.

Please be reminded that there is an informal event that takes

CARL Continued from Previous Column

place weekly. It involves some of the volunteers who gather for breakfast at Biscuits restaurant in Ahwatukee, Friday and Saturday, starting at about 0700. Talk-in is on the South Mountain repeater 440.375.

The Station is well known for teaching visitors to send their name in Morse code, which earns the guest a certificate and a badge. But, there is much more that goes on there. For one thing, visitors are invited to spend some time on-air, chatting with hams who reach the W7ASC signal through our fine repeater systems reaching throughout the state (& occasionally SSB). That experience earns the visitor a “Visiting Operator Certificate.”

For those visitors who express and interest, the volunteers-on-duty can explain some of the history of Morse code, radio and the reason that a ham station is really a demonstration of applied science. We explain that radio science is still relevant today because the modern phone device requires a mobile & base-station radio system. We provide a “Prospective New Ham” packet, which is proving to be quite popular. Also, our big map with clocks displaying time around the world draws a lot of attention. A young 4th grader in a tour group yesterday at W7ASC proclaimed “this is real science!!”

Sound like fun? Well, it is! Consider volunteering. Sam N7INV, who keeps the schedule, will find room at the station that matches your availability. Phone the station (number listed above) or go to our website and find our application. Of course, the best thing is to visit the station. But call ahead as there is not always a volunteer on duty.

73 until next month,
de Jean W4CIH
480-664-7353_jeanjol@hotmail.com

ADAW



Continued Next Column



Hello all,

I hope Santa was good to you over the last few weeks HAM radio wise.

It is a new year and we are looking for successful activities in the club. We do have a number of HAMFESTS in the valley in the next couple months. Operating events include the Winter Field Day, among others.

We are providing educational opportunities to the club members and visitors at the next couple club meetings (February and March) with hands on usage of the digital mode FUSION. Please bring your FUSION hand-held radio to the next meetings. The club has two FUSION repeaters. We are attempting to upgrade the membership to newer HAM radio modes and technology. This is important to both older HAMS and well as new entry HAMS

Many of our members are actively pursuing special interests in the field of HAM radio. These hams are usually available to advise those interested in these subjects, Among these are:

QRP - operating with low power using less than 20 watts

SOTA - Summits on the Air - going to selective high peaks and operating from there

DX hunting - contacting foreign hams on the air (low band)

CW - Contacting stations using Morse Code

FUSION - Contacting HAMS worldwide using FUSION technology via the Internet

Have a HAPPY and a SUCCESSFUL New Year.

73's

Paul W7EFQ

On Saturday, November 23, Arizona Near Space Research launched two high-altitude balloons into near space. The flights originated from Pinal West Park, about five miles west of Stanfield, Arizona and were designated ANSR-128/129 ASCEND-36/37 respectively. The ASCEND program flies student payloads for colleges and universities throughout Arizona.

While ascending, the 2nd balloon, ANSR-129, actually passed the first balloon and burst at 105,882 feet. ANSR-128 actually burst higher at 106,909 feet and also went much farther downrange due to the slower ascent rate. The first balloon landed about three miles west of Kearny, Arizona. Flight 129 was recovered northwest of Coolidge, Arizona.

In addition to dozens of students and their instructors participating in the flights, the launch, support, and recovery crews consisted of Stephen Thomas KE7TLS, Elijah Brown AD7ZJ, Steve Miller W6SDM, Randy Peckenpaugh WB0SMX, Clayton Jacobs KJ6QJS, Vince Jenkins KC7IIU, Kim Jenkins, Athena Roberts, Paul Gibbons, and Bryson Hinton. Our FAA liaison was Bob Shipton K8EQC. Ground Station operation and flight predictions were handled by Bob Thompson KC8BOB.

Our purpose is promoting science, technology, engineering, and mathematics (STEM) through amateur radio and high-altitude ballooning. For more information about ANSR, visit our website at www.ansr.org.

Steve Miller, W6SDM

ADAW

SARCCONSTANTS:

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.



ADAW



I hope everyone had a safe and happy holidays with their family. Hopefully you found new radio gear under the Christmas tree.

The ARA had a successful 2019. Bylaws Committee spent many hours crafting a comprehensive and understandable document. The team did a great job and should be thanked. The membership has elected to adopt the new bylaws. The Bylaws go into effect January 1st. If you have questions, please email AK7F@w7ara.net.

The 2020 Board has already met for the election of officers. Most of the Directors are names you know. We would like to welcome Patrick Baldwin, KI4NSF to the board. We look forward to Patrick helping out.

2020 starts a new decade for the ARA and Amateur Radio. With this, the ARA, will be evaluating potential technologies for the future. This includes replacement options for the 20+ year old repeater controls which operate every ARA site (preferably, before they fail). Patrick will be leading this committee. If you would like to participate, email him at ki4nsf@w7ara.net.

2020 will be another great year. Please join us at the Tech and Board meeting on Thursday, January 2nd at 1830 hrs and at the General Meeting on January 30th at 1930 hrs.

Happy New Year!!!

73,

Brian McCarthy, AK7F
President, ARA

ADAW

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.

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



Hamfest Calendar

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 or drop a note to the organizer, Kriss, KR1SS at kristynweed@gmail.com.

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. Send email to suncitywvarc@gmail.com for more information.

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(-) PI 162.2 Hz. Watch for more details.

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.



TBARC Continued from Previous Column

leader with the AEN-MAR nets on Monday night, MCECG, and the County's Disaster preparedness. Thank you Andrew !!!

Darrell stepped in as the Vice-President, but has demonstrated his leadership in many ways. Darrell has been an active member of the board and has been called on to lead many efforts. Darrell is on his second year as a Hamfest coordinator. Last year, he organized leaders for all aspects of the Hamfest: from parking, to admission, to vendors, the food truck, and seminars. He is repeating his great job and is on track for the 2020 Hamfest on January 11th. Darrell is active on the technical projects for the club and works on many of the sites. He was key to the success of White Tanks and was part of the team which painted Towers Mountain site. Darrell has been a great leader for the club. Thank you Darrell !!! *****

Hamfest Coming Up!

Thanks to a lot of people who are chipping in, we expect to have an outstanding hamfest this year! See it for yourself - mark your calendars for Saturday, January 11, 2020 - and get set for interesting presentations, lots of great bargains, and of course, awesome prizes! We'll be giving away an Anytone AT-D868UV, a Yaesu FT-8900R and the grand prize, an Icom IC-7300! 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, Glendale Nazarene Church, 5902 W. Cactus Road, Glendale, AZ. Check out tbirdfest.org (not .com, .org!) for more details and directions.

New Club Officers

The election results haven't been formally announced yet - that comes at the meeting on December 12, which is still in the future as I write this. But we do know we'll have an almost entirely new team coming up in the new year. A big thank you to the outgoing board members, and another big thank you to the ones coming in who will be settling into their roles. When we say this is your club, this is exactly what we mean!

Membership Drive

It's that time of year again - time to renew your TBARC membership. Ken Charleton NX7B renewed before the November meeting and won the MFJ mag mount antenna. Who will win the Alinco DJ-MD5? Hope you signed up early - and hope it's you!

******* Ham of the Year - 2019 (ghost written)**

2019 has been a very busy year and we always like to highlight the major contributors. This year it was hard to decide, so we have two "Ham of the Year" awards. They are, in no particular order, Andrew Cornwall, KF7CCC, and Darrell Bradshaw, KE7T.

Andrew has been on the board for several years. He is the current TBARC editor for ADAW and monthly captures the events of the club. If that is not enough, he is an active member of the board. His leadership has shaped the club which has led to its success. Andrew is active at nearly every event, leads our weekly net and helps out wherever he can. Andrew is also a

January General Meeting

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 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. January's presentation will be "RTTY - Radio Teletype" by Gordon Bousman NW7D. You might have heard those deedle-deedle tones on the HF bands. Did you know they were there before we had computers? How is that possible? Join us to learn more!

Andrew Cornwall KF7CCC
kf7ccc@arrl.net



Alex Munro, K7AEM demonstrates his SOTA gear



Ken Charleton, NX7B wins the MFJ mag mount antenna

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.

January Test Sessions

Jan 2nd - PV Ham Study Group -- 7:30 PM

Trinity Lutheran Church, 3950 N Valorie Dr, Prescott Valley
 Contact - J M Scherfling 928.632.2050
 No Walk-Ins - Call Ahead

Jan 18th - Chandler VE Team -- 10:00 AM

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

Jan 4th, 11th - NOMADS -- 9:00 AM

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

Jan 18th - Hualapai ARC -- 10:00 AM

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

Jan 4th - Unsponsored -- 6:00 PM

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

Jan 21st - 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

Jan 4th - Oro Valley ARC -- 10:30 AM

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

Jan 21st - Boy Scout Troop 127 -- 8:00 PM

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

Jan 6th - 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

Jan 21st - 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

Jan 8th - Chandler VE Team -- 5:00 PM

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

Jan 25th - Yavapai ARC -- 9:00 AM

Jeep Posse Bldg in Pioneer Park, 1200 Commerce Dr, Prescott
 Contact - Donald Bauer 928.775.4690
 Pre-Register online: www.w7yrc.org

Jan 11th - 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

Jan 26th - 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

Jan 13th - 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

Jan 15th - Thunderbird ARC -- 6:00 PM

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





President's Corner

Steve, KB7KWK

The time has come for me to step down as President of the Superstition ARC. I was elected as club President in November of 2008. I was very surprised that I was even nominated, much less elected. Although I had been in charge of a large company in the past, I had no idea what the hell I was doing. I had never been to a club board meeting prior to taking office so I had no idea what to expect.

I quickly learned that this club was in need of some repair. I had a lot of ideas to bring to each board meeting and hoped that the board would agree on some of the changes that I wanted to make. I must admit there was some opposition in the beginning by some of the members that had been around for a long time. Some people do not like change.

I eventually convinced them that this was the best course of direction for the club. I do not take full credit for any changes that were made to the club that led it in direction. I want to thank each and every Board Member that helped me through the years.

I also would like to thank every Vice President that sat by my side through the years. There were many nights on the phone discussing club business so that the right choices were made to benefit the club and its members.

When I was elected in 2008, there was a total of 75 members in this club. I told myself a few years ago that I would continue to run for President and hopefully stay President until the club reached 200 members. In the summer of 2019, that goal was met, making the Superstition ARC the largest club of its kind in Arizona. This is due to all of you club members and to the Board of Directors and Officers who took two days out of every month to make this all happen.

I will miss being your President. However, I have confidence that your next President, Andy KD4ABB will continue to take charge and lead the club into 2020.

This is my final President's Corner. 73 to all of you for now. I hope to see all of you at the meetings and club events.

Steve Estes — KB7KWK
President, 2008-2019

2020 Club Officers & Board Elected in November

At the club's November Annual Meeting, the membership voted for the 2020 Officers and Directors, who were sworn in

Superstition Continued from Previous Column

at the meeting and who take office on January 1, 2020.

ADAW publishes the club officials on Page 3 in Member Clubs, so I will not list them again here. But I will say Congratulations to all. Thank you, 2019 Board for a job well done.

Of the carry-overs, Brent remains Secretary, former Vice President Andy is our new President and former 11-year President Steve was voted to a seat on the Board.

Upcoming event dates

Tuesday, Jan. 14 @ 6:30 PM - Board Meeting (5:30 for Dinner) - Black Bear Diner. Address is on Page 3.

Tuesday, Jan. 21 @ 7:00 PM - Club Meeting and Junque Auction - Mesa's Charles K. Luster Building (Address on page 3)

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

Tuesday, Feb. 11 - Board Meeting (as above)

Sunday, Feb. 16 - Lost Dutchman Marathon - See www.mcecg.net to sign up to provide amateur radio support.

Tuesday, Feb. 18 @ 7:00 PM - Club Meeting - See Page 3 for address.

Club Junque Auction Jan. 21

The Junque Auction regularly brings lots of good gear, so be sure to bring some money with you. You will want to arrive at least 15 minutes early to browse the goodies. Sellers should arrive at least half an hour before the meeting to get your items entered. The meeting promptly starts at 7:00 PM. Visitors are always welcome.

Please listen in on the Club Net on the 147.12 and 449.60 linked repeaters for the latest information. We welcome check-ins from any licensed radio amateur; no club membership is required to participate!

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



Continued Next Column

ADAW

Continued on Page 16



Our January meeting will be the CADXA Annual Awards Banquet on Friday, January 17th, starting at 6:30 p.m. at the PERA Club, 1 East Continental Drive, Tempe. If you wish to attend (membership not required), reservations and payment must be made in advance no later than January 12th (see below). We will have a presentation suitable for hams and non-hams plus our annual awards and raffle prizes. Watch the CADXA website for more details — <https://www.cadxa.org/>

Our December meeting program was on the Phoenix Mesh Network. Gary Hinton, AC7R, gave us a detailed explanation of the history of Mesh and how it is expanding public service communication into UHF and microwave frequencies, allowing more modern data communications in localized emergencies. He brought along samples of the various types of transmitters used for Mesh communications and set up a mini-Mesh network in our meeting room with the types of Mesh devices and antennas that can be used independent of the internet.

Members should note that dues for 2020 are now due. Also, if you want to attend the Banquet, you must make your reservation and submit your payment (\$30 per person) no later than January 12th. You can pay your dues at any time, including at the Banquet. You can mail a check to our treasurer, Mike Wright, N7MW (good on QRZ.com) or email him at n7mw [at] aol.com to arrange payment via PayPal. Dues remain the same at \$25 per person, plus \$12.50 more for each additional family member residing at the same address.

Finally, from my family to yours, wishing you and yours Happy Holidays and a great year for DX in 2020.

73,
Larry Loen, WO7R
CADXA President

ADAW



As I write this on December 10, in my mind I can almost smell the turkey, which although it is in the refrigerator, tomorrow will be our delicious dinner for the Christmas party, and I know it will be accompanied by many delicious dishes brought by our excellent culinary experts in the AARC! I'll tell you all about it in the next ADAW!

The past few weeks some of you may have been traveling along with us vicariously on the Emerald Princess from Florida westward through the Panama Canal to Los Angeles. It was a great journey! It was made even more special since we were able to share it with our friends from the Sierra Vista area, Ev Wittig and his family.

It looks as though 2020 will be an interesting and very active year for amateur radio. We have many hamfests to look forward to. We expect to see many of you.

73,
Lori, WA7EDI

ADAW

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.



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. 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. 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.

Our January meeting program will be by Doug Theriault NO1D, who will talk about "Allstar Digital Mode Used for VHF/UHF." In February, Jo KF7WOT and Rob KG7LMI will discuss "ARES/RACES."

For several years we have held Field Day at our club station location. YARC will host Field Day and our annual club picnic June 27-28 in Prescott Valley at the 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 year for the event promises to be bigger and better.

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 offer practice tests as well 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.

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.

ADAW



The Kachina Amateur Radio Club regularly meets the second Tuesday of each month at Solterra in the White Mountains, 5408 W. White Mountain Blvd., in Show Low. The January meeting will include the introduction of the new officers for the 2020 calendar year. Additional details will be available on our club website: kachinaARC.org.

Our new officers are:

President: Randy Beecroft -W7RJB

Vice President: Jim Mortensen -W7AZY

Secretary: Marie Mortensen -N7SKS

Treasurer: Dennis Wilkes -W7DRW

Our recurring calendar events are: We meet the second Saturday of each month at 9:00 a.m. for donuts at Basha's in Taylor, AZ. We also meet the 3rd Saturday of each month for breakfast, at Sal and Teresa's Mexican Restaurant on Deuce of Clubs in Show Low. We enjoy sharing our common interests in eating delicious food and having fun together!

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

Submitted by Lydiann McFadden

ADAW





Happy New Year Everyone! We're headed into the Big 2-0, a whole new decade.

Looking back, how did 2019 go? Pretty well, actually. In 2019, the Amateur Television Network accomplished a lot and we're proud of it. 2020 will be even more spectacular!

Our Sunday, Tuesday and Wednesday night ATV Nets are now streamed on YouTube in High Definition. We're also starting to upgrade our repeaters to High Definition. That's a notable improvement over the Standard Definition repeaters and streams we had a year ago.

We have several new ATN chapters throughout the United States that are linking into our ATV Nets over the Internet. There's more activity than ever, especially on Tuesday nights. Check it out by going to W6ATN Live on www.youtube.com at 8:30 p.m. MST.

You probably didn't know you can now send your video and audio to us over the Internet so we can put you on our ATV repeaters and streams, even if you don't have any ATV gear. Just use your computer with a built-in or USB camera and mic to browse to www.whereby.com/amateurtvnetwork. For something really cool, do this with your smart phone! That's quite a leap from just chatting back to us with text a year ago.

Every month now, we hold in-person social meetings with a twist of technology at Denny's Restaurant, 825 S 48th St in Tempe. These meetings are www.meetup.com sessions called Video on Amateur Radio (VOAR). We cater to anyone interested in creating video and transmitting it over Amateur Radio. That includes videographers, animators, documentary makers, educators, high altitude balloon and drone flyers, mesh video operators and ATVers. Our next Meetup is the third Sunday, January 19th from 6:00 p.m. to 9:00 p.m.

In addition to our monthly meetups, we have our regular ATN-AZ Winter Meeting coming up. It will be after the TBARC Hamfest on Saturday, January 11th from 11:00 a.m. to 3:00 p.m. at Innovative Control Systems, 10801 N 24th Ave, Suite 102 in Phoenix. Please RSVP to Kevin Jacobson AD7OI at kwjacob71@gmail.com.

Several of us will likely carpool to the ATN-CA Winter Meeting in California on Saturday, February 8th. Contact Rod Fritz WB9KMO at wb9kmo@gmail.com for details.

We are planning our first ATN Surprise Hamfest, scheduled for Saturday, March 14th to be held in a large lot next to 12959 W Grand Ave in Surprise AZ. More details will be available soon. In the meantime, if you have questions, contact Bob Minnick W8ARZ at povertyflataz@yahoo.com or Rod Fritz

ATN Continued from Previous Column

WB9KMO at wb9kmo@gmail.com.

We regret to report that there's a battle of the bands (no, not music) brewing out there . . .

Breaking News! Mike Collis WA6SVT of the Amateur Television Network (ATN) just called our attention to a pressing issue related to our Amateur Radio microwave bands. The ARRL just found out that the FCC plans to make a decision on December 12th to adopt an NPRM that would remove all secondary users from the 3.3-3.6 GHz band as well as allow new commercial primary users (we are secondary) in the 5850-5925 MHz part of the 5.8 GHz band.

ATN plans to join the fight along with the ARRL. ATN and the ARRL had a similar fight about 18 years ago and we were successful to keep experimental licenses from approval. The first new license to be cancelled involved local government placing video in the 2.4 GHz band. Any group wanting to join in the fight, please contact Mike Collis WA6SVT wa6svt@gmail.com as soon as possible.

The FCC Fact Sheet on this docket can be found online at <https://docs.fcc.gov/public/attachments/DOC-360941A1.pdf>. It's urgent that this message gets out immediately and interested ham groups should contact both Mike and the ARRL right away. Feel free to forward copies of this information to your ATV, mesh networking and microwave friends to encourage their response.

Enjoy the holidays!

Ed Olague K5OLA, President

Rod Fritz WB9KMO, Vice President

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***

Continued Next Column



MERRY CHRISTMAS & HAPPY HOLIDAYS TO ALL!

2019 was another year of growth for OVARC. We continue to have increasing membership, more donations and more fun with our fabulous hobby. I am grateful every day for all of the work by our members to make our events and activities so beneficial to all of amateur radio.

Our membership growth is undoubtedly a function of the newly licensed hams in our local area. Without continuing classes organized and led by David-AK2L, this would never have happened. Thank you, David for all of your work and instruction. So many people have their licenses because of you and will remember your leadership.

After hams get their ticket, it can be a challenge to keep them active. Thanks to Tom-W8TK, we have a continuing schedule of Operating Events every month to keep our members on the air so they can learn and operate. Another THANK YOU to Tom for the time and effort spent in making our Field Day such a huge activity for the club.

For our working members, it can be difficult to find the time to operate a contest for hours at a time. This is where our VHF/UHF repeater system steps in so that our commuters can enjoy some air-time. Of course, our public service efforts greatly benefit from our system as well. Thanks to Gary-KT7AZ for his thoughtful planning and hard work to make our repeater system so robust.

Thanks to our Board of Directors for their tireless efforts in keep our club operating with the future in mind.

Our Hamfest is a key event for OVARC. There are a few members behind the scenes that know the ropes and how to optimize our event. Thanks to Scott-K7ADX, Howard-KC7AC, Roger-K7ROG, Carl-KB7AZ and Mike-K7VTT for all of your help in coordinating another successful event this year.

Thanks to our Fox Hunt coordinator Walt-AL7KE for coordinating fun and learning events. Thanks to Brian-W4ES for doing a great job running our Sunday Net. Thanks to Quinton-NU7Y for coordinating the VE sessions. Thanks to Fred-W2HZ for working with donors and bolstering our donation pool of equipment.

Thanks to Hanna-KG7TPD for keeping our finances in line and for so many other areas in which she contributes.

My hope for 2020 is that we continue to create fun and enjoyable activities for our members and that we all continue to learn and explore different areas of our hobby.

Safe Travels to ALL over the holidays and Best Wishes for a Happy and Healthy 2020!

No Reports Received

Old Pueblo Radio Club INTERMOD

President's Column

RACES Repeaters

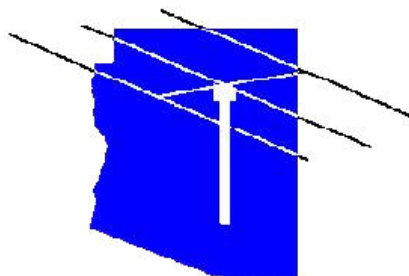
145.150	packet/wide	N7OEM
146.880 - PL 110.9	wide coverage	N7OEM
448.55 - PL 110.9	wide coverage	N7OEM



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- 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 | 4FM 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 bps ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band



FT-70DR 4FM/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 4FM/FM 144/430 MHz Xcvr

- Analog/C4FM Dual Monitor (V+V/U+U/V+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



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- PHONE - Toll-free phone hours 9:30AM - 5:30PM
- ONLINE - WWW.HAMRADIO.COM
- FAX - All store locations
- MAIL - All store locations

YAESU
The radio

Happy New Year to all of you from all of us at HRO Phoenix!
Thank you for a great 2019 & we look forward to seeing you again in 2020
The 2020 YUMA HAMFEST is Friday, February 14th & Saturday, February 15th, 2020
and HRO Phoenix will be selling there 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.