

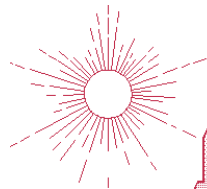
**ADAW**

4529 W. Park Place  
Glendale, AZ 85306-1512



# FEBRUARY

Groundhog Day  
February 2nd



# ADAW

**Arizona Desert Aire Waves**

Vol 44, No 2      February 2019

## CLUB MEETING SCHEDULE

### SARC

Feb 6th  
Scottsdale Senior Center  
7:00 PM

### AARC

Feb 14th  
Red Cross Bldg. - Phx  
7:00 PM

### OPRC

Jun 12th  
Marshall Conference Ctr  
at Tucson Medical Ctr  
7:15 PM

### TBARC

Feb 21st  
North Phoenix Campus  
Northern Arizona University  
7:00 PM

### CADXA

Feb 7th  
PERA Club  
6:00 PM

### CARL

TBA  
AZ Science Center  
Call for Time

### ARCCC

TBD  
American Red Cross Bldg  
Phoenix  
9:00 AM

### SuperstitionARC

Feb 19th  
Charles K Luster Bldg  
7:00 PM

### MARCA

Feb 19th  
Denny's Restaurant - Tempe  
6:30 PM

### ANSR

Feb 21st  
via GoToMeeting  
7:30 PM

### OVARC

Feb 15th  
Ascension Lutheran Church  
7:00 PM

### KARC

Feb 12th  
Solterra at White Mtn - Show Low  
6:30 PM

### WVARC

Feb 4th  
Shephard of the Desert  
Luthern Church  
7:00 PM

### ARA

Feb 28th  
Denny's Restaurant - Tempe  
7:30 PM

### MARA

Feb 2nd  
Maricopa PD Community Rm  
9:00 AM

### YARC

Feb 7th  
Prescott Rodeo Grounds  
7:00 PM

### TCARA

Feb 18th  
Goodyear City Hall  
7:00 PM

### QCWA-AZ Chapter

March/April  
Tucson Area  
12:00 PM

# ADAW Member Clubs

## ARIZONA AMATEUR RADIO CLUB

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

President	Gary Hamman	K7GH	602.996.8148
Vice President	Mark Kesauer	N7KKQ	602.843.0960
Secretary	Reinhard Geissler	K7RGG	
Treasurer	Bob Hodges	K7JJT	602.375.9982
Activities Mgr	Lori Cripps	WA7EDI	602.955.7517
Membership	Bob Hodges	K7JJT	602.375.9982

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

## SCOTTSDALE AMATEUR RADIO CLUB, INC.

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

President	James Wasson	N7ELL	480.456.1154
Vice President	David Yee	N7AJR	
Secretary			
Treasurer	Ed Nickerson	WU7S	480.949.5162
Past President	Paul Finell	W7EFQ	602.741.6563
Board Members	Irv Hembeck	K00TZ	
At-Large	David Yee	N7AJR	
	Bill Kouchis	N9EIV	602.723.0700
	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](http://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](http://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](mailto: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 7:15 p.m. in the Marshall Conference Center at Tucson Medical Center. 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	Ted Willis	AA7HX	520.790.3828
		(www.oprc.org)	
Trustees:	(all repeaters operating under the K7TRA call)		
Primary	Ron Kalish	N7SPW	146.660, 147.220-
	Paul VanBeverhoudt	KA7LFX	224.06+
Secondary	Ted Willis	AA7HX	146.66-
	Paul VanBeverhoudt	KA7LFX	224.06+

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 Kesauer	N7KKQ	602.843.0960
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. Four luncheon meetings are planned each year. The meeting months and locations are announced by newsletter, but generally follow the following schedule:

Spring Meeting	March/April	Tucson Area
Summer Meeting	June/July	Prescott Area
Fall Meeting	October	Phoenix Area
Holiday Meeting	December	Carefree Area

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](mailto: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 Rashback	KK7KEN	

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

### KACHINA AMATEUR RADIO CLUB

The Kachina Amateur Radio Club meets the **SECOND TUESDAY** of each month at 6:30 p.m. at the Solterra at White Mountains, 5408 W White Mountain Blvd in Show Low.

President	Tim McFadden	K7DXA	
Vice President	Steve Herron	AG7GD	928.242.2558
Secretary	Marie Mortensen	N7SKS	
Treasurer	Dennis Wilkes	W7DRW	928.739.4700

Mailing Address: Kachina Amateur Radio Club, P O Box 2996, Show Low, AZ 85902. Email: [info@kachinaarc.org](mailto:info@kachinaarc.org) Dues are \$15/yr for individual; \$25/yr for family. Membership is January 1 - December 31. Website: [www.kachinaarc.org](http://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](http://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 at 7:00 p.m. on the **THIRD TUESDAY** of each month (except December) at the Charles K Luster Building, 640 N. Mesa Drive, Mesa (use the glass door on your left at the main entrance). Visitors are welcome. Board meetings are held at 6:30 p.m. on the second Tuesday of each month (except December) at Black Bear Diner, 1809 E. Baseline Road, Gilbert.

President	Steve Estes	KB7KWK	480.251.0551
Vice President	Andy Keels	KD4ABB	602.809.3561
Secretary	Brent Butler	W7FK	480.332.1141
Treasurer	Douglas Mitchell	W7ADD	480.540.4110
Board Members:	Tony Manzo	W7KLV	
	Dan Karnes	W7TWR	602.502.5259
	Don Rollock	W2EUL w2eul@yahoo.com	
	Jeff Harris	K2DFE	602.617.6930
	Jeff Heinze	N7CCW	480.720.7908
	Jeff Marchesky	K7ZLX	602.628.0238
	Rod Fritz	WB9KMO	

Superstition ARC, 5155 E Eagle Dr #21522, Mesa, AZ 85277. Web Site: [SuperstitionARC.org](http://SuperstitionARC.org) and [SuperstitionSuperFest.org](http://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](mailto: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	Norm Johnson	AA7OO	480.278.2886
Vice President	Dave Hall	N7ZPY	
Treasurer	Don Aldridge	WA7RLL	
Board Member	David Yee	N7AJR	
Trustee:	Norm Johnson	AA7OO	480.278.2886
Webmaster:	Norm Johnson	AA7OO	480.278.2886

MARCA, Inc., PO Box 28246, Tempe, Arizona 85285. 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 PERA Club, located at 1 E Continental Drive in Tempe. Visitors always welcome. See [www.cadxa.org/meetings.html](http://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@cox.net
Board Members	Fred Hoffert, III	NA2U	cwman1@aol.com
At-Large	Reinhard Geissler	K7RGG	d11uf@compuserve.com

CADXA, P.O. Box 24616, Tempe, AZ 85285-4646. Email: [cadxa@cox.net](mailto: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](http://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](http://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	W7PVA	president@w7yrc.org
Vice-President	Joe Thomas	KG6IDN	vice_president@w7yrc.org
Secretary	Art Jackson	KA5DWI	secretary@w7yrc.org
Treasurer	Jim Fortney	K6YK	treasurer@w7yrc.org
Board Members	Kathy Laing	KJ6KMK	kj6kmk.yarc@gmail.com
	Sandy Meadowcroft	KF4JHC	sandymeado2@yahoo.com
	Ray Kolman	KI7COM	spudzman@gmail.com
	Dave Erlach	W7VXSX	rocketdog@dslxtreme.com

Yavapai Amateur Radio Club, P O Box 11994, Prescott, AZ 86304-1994. DUES: \$20.00/yr. Visit the website at [www.w7yrc.org](http://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. (June is normally Field Day. December is annual Christmas Party and date and location varies.) Visitors are welcome. Board Meetings are held at 9:00 a.m. at the Oro Valley PD Substation EOC on Tangerine Rd (next to WalMart) in Tucson. Check the web site at [www.tucsonhamradio.org](http://www.tucsonhamradio.org) for dates.

President	Steve Wood, W1SR	president@tucsonhamradio.org
Vice-President	Fred Bresani, W2HZ	vicepresident@tucsonhamradio.org
Secretary	Carl Foster, KB7AZ	secretary@tucsonhamradio.org
Treasurer	Hanna Eckert, KG7TPD	treasurer@tucsonhamradio.org
Board Members	Ross Eckert, K4WBR	
	Scott Boone, K7ADX	
	Gary Pierce, WE7GP	
	George Cooley, NG7A	
	Marnee Dearman, KG7SIO	

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](http://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.) Board meetings are held the last month of each quarter at the AZ Science Center. 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
Secretary	John O'Neal	K7JP	480.345.7800
Treasurer	Karen McConaghy	NO7D	602.799.7338

**Board Members:**

Jean Jolkovski	W4CIH	ADAW, Publicity
Steve Warford	WB4ZSC	Tech/IT, CARL/ASC Interface
Tom Salt	AD7PM	At Large
Sam Marshall	N7INV	Scheduling
John O'Neal	K7JP	Teacher Packets
Bob Burleson	KG7QJ	President/Emeritus
Robert Faerber	W9AQ	Log Book

Direct Phone: 602.716.2082

Web Site: <http://www.w7asc.org> Web Master - Allyson Lee

For information: Email to [carl@w7asc.org](mailto:carl@w7asc.org) or call Jack, KD7ROB at 480.759.5195.

### TRICITY AMATEUR RADIO ASSOCIATION

The TriCity Amateur Radio Association meets the **THIRD MONDAY** of the month at 7:00 p.m. in the Goodyear City Hall Conference Room located at 190 N Litchfield Road in Goodyear. Parking is available on the west side of the building. No meetings are held in June, July, August, and September. (A social gathering is held at Village Inn at 2700 N Litchfield Road after the meeting.) Weekly Rag Chew every Wednesday at Village Inn (2700 N Litchfield Road) at 2:30 p.m. All hams are welcome. Weekly net is held Wednesday evenings at 7:30 p.m. on 446.400 MHz (PL 100 Hz). Events are posted on our Yahoo Group page at <https://groups.yahoo.com/neo/groups/TRICITYARA/info>

President	Bob Nobis	N7RJN	n7rjn@nobis.net
Vice President	Open		
Secretary	Carol Melton	AK7N	ak7n@azsnaps.com
Treasurer	Arnold Knack	KA7AOK	ka7aok@gmail.com

TriCity ARA, P O Box 6293, Goodyear, AZ 85338-6293. DUES: \$18.00/yr. for individuals, \$25.00 for family. Web Site: <http://n7tca.org>.



### WEST VALLEY AMATEUR RADIO CLUB

The West Valley Amateur Radio Club, an Arizona 501(c)(3) non-profit corporation, has been providing emergency communications since 1961. Meetings are the **FIRST MONDAY** of each month at 7:00 PM at Shepherd of the Desert Lutheran Church, 11025 N 111th Avenue in Sun City. The board meets the third Tuesday of the month at JB's Family Restaurant, 9889 W Bell Rd in Sun City at 2:00 PM. 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	Gary Robin	K9HDU	623.234.2252
Secretary	April Kramer	KI7GFJ	602.284.6212
Treasurer	Tom Connor	W7TLC	623.444.7956
Board Member:	Robert Paul	KG7FIL	623.252.0149
	Nancy Collins	KG6QWW	623.398.5286
	Many Blanco	KI7QLD	480.395.1653
	David Putman	W7DCP	253.307.0544
Past President	James Rogers	N7YTI	623.214.9219

**Committees:**

Membership	James Rogers	N7YTI	623.214.9219
Support Communications Committee Chairman	Kris Philo	AI8TT	623.853.0586
Technical Advisory Committee Representative	Frosty Oden	NQ1S	602.899.8055

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://www.westvalleyarc.com>

Email: [suncitywvarc@gmail.com](mailto:suncitywvarc@gmail.com)

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



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

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### ADAWWEBSITE

[www.adaw.org](http://www.adaw.org)

ADAW

## Public Service Calendar

### Maricopa County Emergency Communications Group Events

EVENT	LOCATION	DATE
Pancake Run	Paradise Valley Mall	02/03/19
Xterra McDowell Mtn	Fountain Hills	02/03/19
Black Canyon 100K		02/16/19
	Spring Valley to the Emery Henderson Trailhead	
Lost Dutchman Marathon	Apache Junction	02/17/19
JROTC Orienteering - First Water		02/23/19
	First Water Trailhead - Superstition Mtns	
Xterra Black Canyon Trail Run		03/10/19
	Black Canyon City	
ADA Tour de Cure	North Valley	03/16/19
Mesquite Canyon	Waddell	03/16/19
Crown King Scramble	Lake Pleasant to Crown King	03/30/19
El Tour de Mesa	Mesa	04/06/19
March of Dimes for Babies		04/13/19
	Wessley-Bolin Park, Downtown Phoenix	
Pat's Run	Sun Devil Stadium at ASU and Tempe Town Lake	04/27/19
Zane Grey 50 Highline Trail Run		04/27/19
	Payson Mogollan Rim	
Barnburner Mountain Bike Ride		09/07/19
	Kendrick Peak (Northwest of Flagstaff)	

To sign up for an MCECG Public Service Event: [www.mcecg.net](http://www.mcecg.net)

For information, contact Dennis Bietry - KE7EJF at 602.274.3732 - email, [ke7ejf@cox.net](mailto:ke7ejf@cox.net), or contact the Event Coordinator for the event.

ADAW



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## From The Editor's Desk

# Old Pueblo Radio Club INTERMOD

## President's Column

Did you make it to Arizona's first hamfest of the new year? The 2019 Thunderbird Hamfest was held at the Glendale Nazarene Church, which was a new location for the event. The church's parking lot was easily accessed from Cactus Road and provided ample space for vendors, tailgaters, and attendee parking. It's a great location for a hamfest.

Club and group tables were set up on the walkways near the church with vendors/tailgaters occupying the parking lot. A food truck was available right up front for beverages, snacks, and assorted sandwiches so no one went hungry (or thirsty) during the hamfest. Free VE testing was held from 10:00 - 11:00 a.m. The ARRL Card Checkers were on-site to look over and verify QSL cards. Three grand prizes were given away at noon and a special door prize was awarded at 11:00 a.m. Hourly prizes were drawn at 9:00 and 10:00 a.m.

Turnout was great and everyone seemed to have an enjoyable time shopping, browsing, and visiting. The weather cooperated beautifully this year also. A little brisk in the early hours, but warmed up nicely as the morning progressed.

If you missed this year's event, you missed a good one. Mark your January 2020 calendar now for next year's hamfest and make plans to attend. You won't regret it!

As I write this, Quartzfest is taking place outside of Quartzsite, Arizona. Hopefully someone who attended this week-long event will write up a few paragraphs for next month's edition of ADAW. Any takers?

The 2019 ARRL Southwestern Division Convention is scheduled for February 15 & 16, 2019. This year's convention will once again be held in conjunction with the Yuma Hamfest at the Yuma County Fairgrounds in Yuma. This is a prodigious event includes all the usual activities of a convention along with those of a hamfest. In addition, the Yuma Hamfest boasts the largest (and most expensive) list of prizes of any event in the country! Seventeen grand prizes will be up for grabs at this year's hamfest, along with a multitude of door prizes for those attending. Don't miss it!

The Amateur Radio Council of Arizona will hold its first meeting of the new year at the Yuma Hamfest on February 16. Affiliated clubs are encouraged to send their delegate or alternate to the meeting. As always, everyone is welcome to attend any of the ARCA meeting.

Until next month - 73,  
Chris, N7PVL

Upon reviewing my last letter, I was reminded (again) why I should not be writing very late at night.

I incorrectly stated that our OPRC 147.30 MHz (110.9 Hz tone) repeater was taken off the air. First, this repeater is not ours, and second, it is operating quite well under the control of Pima County's OEM volunteer organization, OEMCOMM. It is an open repeater located near Reed Park, and is usually linked to a mountain top repeater, 146.88 MHz (110.9).

What has been decommissioned is our 147.22 MHz north side repeater, as well as our 146.82 MHz west side repeater. Our 146.66 MHz (110.9Hz) open repeater remains in operation.

Thank you, Dan KC7VDA, for bringing this to my attention.

73 de Ron, N7SPW  
President, OPRC

ADAW

### OPRC Repeaters

146.66 - PL 110.9	wide coverage	W7GV
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### RACES Repeaters

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

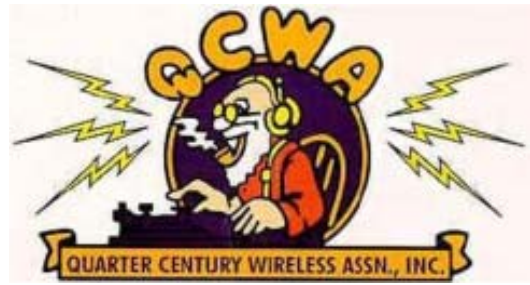
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L.E. Purchase Computer Consultants, Inc.  
1-888-922-9295 or 602-863-0502

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

Have you been a ham for at least 25 years? Then celebrate by joining the Quarter Century Wireless Association!

The Barry M. Goldwater Chapter 16 Arizona chapter has four lunch meetings a year with fabulous speakers. Check us out at <http://www.azqcwa.org> we are also on Facebook at <https://www.facebook.com/AZQCWA> We are always looking for speakers and great lunch locations. Let us know.

**ADAW**

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***CARL Continued from Previous Column***

ASC does a great job of encouraging Arizona schools to use the Science Center as an extension of the classroom. Yellow school buses are a common sight in the Heritage square parking area. The ASC corridors are often filled with the chirping of young voices. As these youngsters enter the Station, some are captivated by the idea of Morse code. Some classes actually teach it, but only on paper as dots and dashes as marks, without sound. These children in particular, are fascinated to learn that they can hear Morse, or see it as a flashing light. It is not unusual for children to either stay in the station to send names of friends and family, or even of pets, just to continue the experience. Some really very young visitors show amazing Morse ability. Even children with special needs have been able to demonstrate a Morse skill.

This theme is a common one in this newsletter, but it is well worth repeating – expand your Ham radio pleasure by volunteering at W7ASC. Go to the website (W7ASC.org), find the application, and send it in - or bring it in person to the Shack. Want to ask some questions about volunteering? Phone the direct number as shown at the beginning of this newsletter. We hope to see you at the Shack very soon!

73 de w4cih Jean  
jeanjol@hotmail.com - 480-664-7353

**ADAW**

*Continued Next Column*

***AMATEUR RADIO SERVICE DEMONSTRATION STATION***

W7ASC is located in the Arizona Science Center and operated by C.A.R.L. the CENTER FOR AMATEUR RADIO LEARNING a 501(c)(3) not-for-profit corporation. Direct phone number: 602-208-2082.

By the time that you read this, the annual C.A.R.L. meeting will have elected officers and appointed BOD members for 2019. These positions will be listed in an upcoming newsletter.

The Station is operated by a corps of volunteers. The intent is to operate at all times when the Arizona Science Center (ASC) is open. In order to meet this goal, the station has a list of volunteers scheduled by Sam, N7INV. This list of available volunteers changes, for a variety of reasons. Applicants who wish to volunteer are always welcome. Please go to the W7ASC web site at [www.w7asc.org](http://www.w7asc.org) where you can get an application.

The Station operates for the benefit of the visiting public. Those visitors may, at their option, learn to send a name in Morse code, for which they are awarded a certificate and a badge. There is also an option to speak in Amateur Radio, for which a more elaborate award, as Guest Operator, is presented by the Ham volunteer at the controls.

ASC is a busy place, attracting, as it does, people from diverse locations. Arizona schools use ASC as a field trip destination, so the station is visited by groups of school children. Parents arrive with children in tow, and the Station (or Shack) is a very popular exhibit.

Visitors often take the opportunity, while conversing with a live person, to ask questions about communication topics. Volunteers are challenged to explain the difference between Ham radio and Citizens Band. People who are interested in ham radio often ask just what they must buy to get started. Must they erect a tower? What are the age limits? An amazing number of people still believe that they must be able to pass a Morse code test in order to obtain a Ham radio license! A very common question for the Volunteer on duty is: Isn't Ham radio obsolete since cell phones are everywhere?

If a person enjoys speaking to the public about communication technology, volunteering at W7ASC is a wonderful experience. Visitors continue to demonstrate an amazing body of misinformation about communication technology in general, and about Ham radio in particular.





The January 10th meeting of the Arizona Amateur Radio Club involved election of officers. Apparently the membership is happy with the AARC as it is since the current officers were unanimously reelected. The officers are:

President: Gary Hamman, K7GH  
Vice-Pres: Mark Kesauer, N7KKQ  
Secretary: Reinhard Geissler, K7RGG  
Treasurer: Bob Hodges, K7JJT  
Activities Mgr: Lori Cripps, WA7EDI

The evening's program was given by President Gary Hamman. It was about HF propagation for contacts at short ranges (around the state). Gary shared some knowledge that came from doing this for several decades on traffic nets and emergency communications nets and exercises here in Arizona.

The AARC has a 2-meter net that meets every Thursday at 7:00 PM when there is no club meeting. The frequency is 147.060. Visitors are welcome.

73,  
Lori, WA7EDI

Happy New Year and all that. Hopefully your resolutions are still in effect! MARA celebrated the New Year with a new slate of club officers, and a new article editor. David French, N7FAN, has taken over writing and submitting articles to ADAW.

We had our Officer elections at the November meeting, with the winners to be seated at the January meeting. Our new officers are: Curt Steger, NA7CS, President; Wayne Kropp, KI7SPW, Vice President; George Hogan, K7TGH, Treasurer; Bob Proctor, N6YPE, Secretary. We thank the outgoing officers for two years of service to the club and wish them the best with their newfound free time!

Our normal morning December meeting was rescheduled by one week and became an afternoon pizza party at Barro's Pizza in Maricopa. A great time was had by all who attended.

Two amplifiers were recently donated to the club for use on our repeaters. A 2-meter amp will be put into service with our WIRES-X repeater (146.780), as soon as it goes up on the CAC Maricopa tower. The 70cm amp will be placed into service on our Thunderbird Farms repeater (446.300). These will allow us to turn down the output power on the repeaters, thus increasing their lifespan. Hopefully we'll have more technical information in the next article.

By the time you are reading this, the 2019 Winter Field Day will have passed into history. The club plan is to operate a portable setup at the Pinal West Park, on SR-84, in Stanfield. This has all the feel of a remote site, but it is still about 30 minutes from Maricopa. For our members in Hidden Valley, it's even closer to home.

Next month's article should hopefully have news and pictures from the operation. Until then, 73, and don't eat too much Valentines candy. de N7FAN

ADAW



ADAW

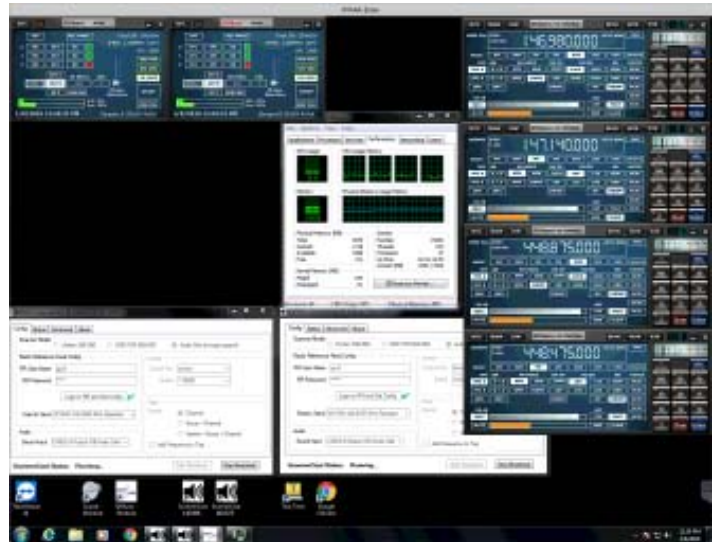


*ARA Continued from Previous Column*

Anyone is welcome to monitor Mt Elden. To isolate a specific repeater, you can adjust the balance in your player application.

## Remote Monitoring

*by Brian McCarthy, AK7F*



The ARA network of repeaters continues to grow. There is no one point where all of the repeaters can be heard and monitored. The technical committee is testing an approach to monitor remote sites through internet streaming.

Although other sites may be streamed, Mt Elden is the test site for the ARA. A computer was installed, with two SDRPlays (Software Defined Radios) to cover the VHF and UHF amateur bands. The SDRs digitize the RF signals for further processing by the computer.

At this time, the ARA only has two (2) streams to the internet (VHF and UHF). This is handled through separate software stacks for each band. Since there are two (2) repeaters on each band, the Left and Right channels each contain one of the repeaters for its band.

Each band has its own instance of SDRUno to decode the audio from the digitized RF. Each instance supports two (2) virtual receivers to decode both repeaters (Left and Right). Each SDRUno instance provides stereo audio to a virtual sound card. The virtual Sound card emulates the line-in and line-out seen on a physical sound card with the line-in connected to the SDR and the line-out to the streaming software.

The streaming software is provided by Radio Reference to stream the stereo audio to the internet. The repeaters are available from Broadcastify through any computer or smart phone.

This is a picture of the software running on the computer. The upper left are the SDRUno instances with the Virtual Receivers down the right side. Along the bottom are the two (2) streaming instances.

The Technical Committee can always use help. You can email Lance, KW7LH, at [techchair@w7ara.net](mailto:techchair@w7ara.net) or everyone is welcome at any of our meetings.

<http://w7ara.org/mtg/Meetings.aspx>

There are still many opening at public service events. If you can help, please sign up at MCECG.

<https://mcecg.net>

Hope to see you soon.

73,  
Brian McCarthy, AK7F

### VHF

<https://www.broadcastify.com/listen/feed/29576>

The Left Channel is the 146.980- Repeater, which is a stand alone. The Right Channel is the 147.140+, Repeater which is part of the Rimlink.




### UHF

<https://www.broadcastify.com/listen/feed/29577>

The Left Channel is the 448.875- Repeater, which is connected to the Utah VHF Society Inter-Mountain Intertie. The Right Channel is the 448.475- Repeater, which is a stand alone.

**ADAW**

**R.J. CARLI ENGINEERING CORP**

 	 	<p>7311 E. STETSON DRIVE SCOTTSDALE, ARIZONA 85251</p> <p>RAYMOND J. CARLI, P.E. ELECTRICAL ENGINEER W7GNE</p> <p>(480) 941-8810 (OFF.) (480) 945-7020 (FAX)</p>
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If anyone is considering a major radio shack, workshop, addition or going into business for yourself, I am offering professional Electrical, Mechanical and Plumbing Engineering services to radio club members at a 20% discount for residential property, and 10% discount for commercial property. Talking is always free.

*Continued Next Column*



Hello all,

The Thunderbird club put on a great HAMFEST this year at a new venue at Cactus and 59th Avenue. The facilities were great, and LOTS of tail-gaters and home ham businesses. For a change, I did purchase a few items. Why? I have the reputation of "having everything," but I had a couple wants, which I filled. The best thing was the people (fellow hams), some of which I had not seen in more than 20 years. The weather was outstanding Following the hamfest was the ScQRPion QRP club meeting, which was also great.

One of our past members has posted on his web site a lot of good information on FUSION radio, as well as a number of other ham related items. His web site is: [kf7zvl.com](http://kf7zvl.com) Kelly does have a good web site, well worth looking at.

Our HAMFEST is progressing for the third Saturday in MARCH with a new venue.

I have been spending a bunch of time in my other QTH in Chino Valley. Working on an old Airstream travel trailer, as well as installing shelving in the apartment of the workshop. After the shelving is installed and I have disposed of a bunch of storage in the workshop, I will install a couple ham antennas.

I have been looking at Magnetic loop antennas. They look fascinating for the two new ham bands below the AM broadcast band. Most hams do not have the real estate for installing a full sized antenna. A friend of mine from Motorola (W7IUW) I understand holds the DX record on one of these bands from Washington State to New Zealand. He has a lot of land in Washington, but I don't know how large his antenna is.

73's all,  
Paul W7EFQ



## Classes

The Radio Society of Tucson (RST) will be conducting a class for the Technician class license. The six (6) weekly classes will begin on Sunday, February 24, 2019 at 6:00 p.m. at Tucson Hardesty Police Station, 1100 S Alvernon Way in Tucson. There is no charge for the class and the FCC exam. The book being used is the 2018-2022 Gordon West Technician Class book which is available on Amazon for approximately \$25.

For more information and to register for the class, contact Ken Lesniak, KG7KHY at [kg7khy@gmail.com](mailto:kg7khy@gmail.com).



## For Sale / Wanted



**LOOK!  
Great Deals!**

### For Sale -

#### A-4 Antenna For Sale - \$450

This is an older model that does not have the stainless steel hose clamps on the elements. It is the same size and has the same features as the modern A-4S. The mast mount plate is new, and some of the elements have been replaced with stock A-4S parts. The antenna is stock - does 10, 15, & 20 meters. It does not have the 40 meter add on. It is boxed and ready to go now. Contact: Bob Howard, W8RH at 520.709.6176 voice/text or email [w8rh@live.com](mailto:w8rh@live.com).

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](mailto:kjenkins5623@gmail.com) or Bob Kettler WA6MIO at [rdkettler@msn.com](mailto:rdkettler@msn.com).

#### 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.**





*OVARC Continued from Previous Column*



Activities at the Oro Valley Amateur Radio club are very diverse. We have member clusters focused on HF, VHF/UHF, Digital Modes, APRS and the list keeps going.

This month I would like to highlight the tremendous efforts and progress made by our Repeater Group with special thanks to Gary, KT7AZ for his leadership and vision. As everyone can see on our website, we have several repeaters that cover many square miles of southern Arizona. Although it may seem that they are not used very often, they are there at those critical moments when visitors are looking for directions or club members run into difficulty on a project. The old days of analog repeaters are quickly giving way to new digital modes that bring many advantages. Of course, our open Sunday evening net is always a good opportunity to put our whole network on the air. To accommodate all of the different operating modes, Gary and his team are working diligently to convert our repeater system over to accept any mode you would like to use. There will always be some inconveniences associated with multimode operations but the upside is that users won't have to purchase a new radio just to operate our repeaters. Eventually analog operations will be completely gone and users will have to purchase a digital radio of some sort to continue operating but the plan is to give users plenty of time to make their decision to move to digital operations so that they can make educated purchasing choices. Gary, Jim – W5ZIT, Tom – W7TRA, Gary – AE7GP and Howard – KC7AC are all on the front lines of this exciting and educational change to our repeater network. Thanks to you all!

Our monthly outings continue and January was no exception. On January 5th, about 40 members and their guests descended on Picacho Peak State Park. Roger – W7ROG brought his propane heater to keep the operators warm. Ross – K4WBR was the usual Chef Extraordinaire and Walt – AL7KE organized a fox hunt during the outing with a first and second place prize awarded to the winners. Even Beep made it a happy morning. As with all of our events we encourage everyone to come and try out a new antenna or a new item of any sort that we can accommodate and check out. We'll all learn something from this. Many thanks to Tom – W8TK as always for organizing these events. We have one every month, so please join us anytime; we would love to have you.

I hope everyone enjoyed the holidays! We are looking forward to an active 2019 in Oro Valley!



## Hamfest Calendar

15-16 February 2019 - **Yuma Hamfest** - hosted by the Yuma Amateur Radio Hamfest Organization will be held at the Yuma County Fairgrounds, 2520 E 32nd Street in Yuma. Gate Open for Camping Thursday, February 14th at 2:00 PM. Event Hours: Friday, Noon - 5:00 PM and Saturday, 8:00 AM - 5:00 PM. Vendor Setup starts Friday, 7:00 AM - Noon. Admission - \$5.00 per person. Consignment Sales Available. VE Testing, On-Site Camping Seminars and Speakers, Hospitality Area, Balloon Launch Antenna Clinic and more. Visit the web site at [www.yumahamfest.org](http://www.yumahamfest.org) for more information or email [info@yumahamfest.org](mailto:info@yumahamfest.org).

16 March 2019 - **SpringFest** - hosted by the Scottsdale Amateur Radio Club. Location will be announced. Tentatively - hours are 6:00 AM until 12:00 noon. Overnight RVs are welcome. Refreshments, VE Testing, Tailgating and more. Talk-In: 147.18 (PL 162.2). Contact: Ed Nickerson, WU7S at 480.949.5162 or email at [enickerson427@aol.com](mailto:enickerson427@aol.com). Visit the website at <http://www.scottsdalearc.com> for all the latest information.

30 March 2019 - **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>

20 April 2019 - **April Hamfest at DeVry** (date tentative) - 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. Hours are 6:00 AM to 11:00 AM. Admission Donation: \$2.00. Tailgate Spaces: \$10.00 each. VE Testing in school library at 9:00 AM. DX QSL Card Checking from 9:00 to 10:00 AM. Commercial Vendors - Tailgaters - Prizes - Coffee - Doughnuts - Sodas. Talk-In on 147.060 (+) PL 162.2 Hz. Contact Gary Hamman at [k7gh@arrl.net](mailto:k7gh@arrl.net) or 602.996.8148 for information or to reserve a space.

4 May 2019 - **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.

31 May - 1 June 2019 - **2019 Prescott Hamfest at ERAU** - hosted by the Eagle Amateur Radio Club at ERAU and the Yavapai Amateur Radio Club will be held at Embry Riddle Aeronautical University (ERAU), 3700 Willow Creek Road in Prescott. Hours are: Friday, 7:00 AM - 4:00 PM and Saturday 7:00 AM - 3:00 PM. Seminars, Tailgating, Vendors, DXCC Card Checking, Prizes. General Admission \$5.00 - Good for Both Days. Tailgate \$10.00 per parking space, each additional space \$5.00. Inside Commercial Vendor Table - \$25.00, each additional table \$10.00. Talk-In Frequency: W7YRC 146.880 MHz (-) PL 100 Hz. No Guns, Drugs, Alcohol, Smoking, Vaping, or Fireworks per ERAU Policy. Leashed or Caged Animals permitted in Outside Public Areas ONLY. For up-to-date info, visit the website at [www.prescottthamfest.com](http://www.prescottthamfest.com)

27 July 2019 - **White Mountain Hamfest** - hosted by the Kachina Amateur Radio Club will be held at 1101 Woodland Road in Lakeside. Overnight camping may be available. VE Testing, Demonstrations, Hourly and Grand Prizes, Tailgaters, and Refreshments. Further details to follow. Visit the web site at [www.kachinaarc.org](http://www.kachinaarc.org) and click on "Hamfest" or email [info@kachinaarc.org](mailto:info@kachinaarc.org) for up to date information.

28 September 2019 - **Tucson Fall Hamfest** - hosted by the Radio Society of Tucson will be held at the Target Store, 9615 E Old Spanish Trail in Tucson. Hours - 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>

26 October 2019 - **Copafest 2019** - hosted by the Maricopa Amateur Radio Association will be held at the UltraStar at Ak-Chin Circle, 16000 N Maricopa Road 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](mailto:fest@copafest.org) or visit the website at [www.copafest.org](http://www.copafest.org).

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](http://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](mailto:kf7ccc@arrl.net)

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](mailto:president@w7tbc.org)
- Vice President: Darrell Bradshaw [vicepresident@w7tbc.org](mailto:vicepresident@w7tbc.org)
- Secretary: Gary Larson [secretary@w7tbc.org](mailto:secretary@w7tbc.org)
- Treasurer: Bob Townsend [treasurer@w7tbc.org](mailto:treasurer@w7tbc.org)
- Board Members:
  - Kenneth Charleton K4FZH [k4fzh@w7tbc.org](mailto:k4fzh@w7tbc.org)
  - Nic Holladay KI7HZQ [ki7hzq@w7tbc.org](mailto:ki7hzq@w7tbc.org)
  - Clair Wyant KG7MAJ [kg7maj@w7tbc.org](mailto:kg7maj@w7tbc.org)
  - Andrew Cornwall KF7CCC [kf7ccc@w7tbc.org](mailto:kf7ccc@w7tbc.org)
- Past President: Gary Duffield WK7B [wk7b@w7tbc.org](mailto: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*



*Clair reads election results*



*Ham of the Year*



*Walt serves the cake*

## 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 2nd - 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 2nd - DeVry ARC & WVARC -- 9:00 AM**

DeVry University Library, 2149 W Dunlap Ave, Phoenix  
Contact - David Morrill 623.680.5011

**Feb 2nd - Oro Valley ARC -- 10:30 AM**

Ascension Lutheran Church, 1220 W Magee Rd, Tucson  
Contact - Quinton Gleason [licensing@tucsonhamradio.org](mailto:licensing@tucsonhamradio.org)

**Feb 4th - West Valley ARC -- 6:00 PM**

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

**Feb 6th - Green Valley Amateur Radio Club -- 7:00 PM**

Pima County SAV Bldg, 601 N La Canada Dr, Green Valley  
Contact - Earle Cate 303.898.9471

**Feb 7th - CARBA -- 7:00 PM**

Lighthouse YMCA, 2900 N Columbus Blvd, Tucson  
Contact - Matthew Grossman 520.750.7189  
Pre-Reg by email preferred - [veregistration@rstclub.org](mailto:veregistration@rstclub.org)

**Feb 9th - 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 11th - East Valley VE Team -- 6:00 PM**

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



Continued Next Column

### Test Sessions Continued from Previous Column

**Feb 11th - Radio Society of Tucson -- 7:00 PM**

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

**Feb 12th - Hassayampa AR Klub -- 2:30 PM**

Home, 30645 S Wandering Way, Escapees North Ranch, Congress  
Contact - Charles Carter 316.651.7710  
No Walk-Ins / Call Ahead for test and location info.

**Feb 16th - 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 19th - Boy Scout Troop 127 -- 8:00 PM**

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

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

Honor Health Medical Office Bldg, 19841 N 27th Ave, Phoenix  
Contact - James Skinnell 602.826.1949

**Feb 23rd - 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 23rd - Arizona ARC -- 7:00 PM**

American Red Cross, 4747 N 22nd St, Phoenix  
Contact - Gary Hamman 602.996.8148  
No Walk-Ins - Call Ahead



### 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](mailto:rahaworth@cox.net)*



## President's Corner

Steve, KB7KWK

Hello all club members and welcome to 2019. I am proud to be your President for the 11th year in a row.

It is a great feeling for me that you have elected me once again as your President. I will try to do my best this year to guide the club through another year of success. This will be my last year as President of the club. I will be taking a break in 2020 as an officer. I believe it is time to let some new people take over.

We have two new board members this year: Tony Manzo W7KLV and Rod Fritz WB9KMO. With their help and the help from the rest of the board, we will try our best to bring you more great programs and builds this year.

I believe last year was one of the best years I have seen in the club. We had more attendance at each meeting than I have ever seen. I also think that we had more meeting programs that people were interested in at those meetings. I also notice more participation in club activities outside of club meetings.

We had a lot more people at Field Day up North, Falcon Field Day in Mesa, and the club picnic, and I was so proud to see all the help at the SuperFest. I hope to see at least that many people or more in 2019. Thank you to all of you who helped out. We had another record-breaking SuperFest.

73 for now and I hope to see you all at the meetings. – Steve

### Shopping on Smile.Amazon.com Pays Dividends for the Club!

Shop at Amazon using Smile.Amazon.com and designate the Superstition Amateur Radio Club as your charity of choice. As of October 2018 the club has earned \$305.85; that is enough to cover the yearly rent at the Stone Castle (449.600) Repeater site in East Mesa. The amount gets recalculated every quarter and will get posted on the Superstition ARC (.org) website in January. -- Courtesy of Dale Schmidt, N7QJK

Incidentally, that site gets its "Stone Castle" name from our use of river rocks gathered from off the Salt River near Blue Point Bridge in the late 1970s!

### Tuesday, February 19 Club meeting at 7:00 PM

Our February presentation is not yet announced as of this December writing. However, Andy, KD4ABB did a fantastic job of bringing us informative and interesting topics laid out in laymen's terms in 2018, one of the duties of Vice President.

Andy will be working hard in 2019, so you can expect more high-quality presentations geared to the new ham.

Starting again in February, the club will sell tickets for a drawing held that very evening. Prizes ranged from Yaesu FT-991 Shack-In-The-Box transceivers to antennas and accessories in 2018. Tickets went for \$20 apiece for these prizes last year. Handheld FM transceivers and accessories were the norm on the \$5 ticket drawings. You can expect 2019 to be at least as good!

### Superstition Continued from Previous Column

Our meeting location is on Page 3 of the Member Clubs section of this ADAW.

For the latest info, please see the Superstition ARC (.org) website.

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

### Superstition ARC Christmas Party!



ADAW

### Superstition ARC Repeaters

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

### Club Nets

**Morning Drive Time Net:** Mon-Fri, 7:00-8:00 AM - Trivia  
**City of Mesa CERT Team Monthly Net:** First Tuesday of month, 7:00 PM  
**Weekly 6 Meter Sideband Net:** Wednesdays, 7:00 PM on 50.140 MHz, W7ASL-L EchoLink, and 145.575 FM Simplex  
**Club Net:** Wednesdays, 8:00 PM - Discussion, Elmer Q&A.  
**Mesh Information Net:** Mondays and 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](http://www.superstitionsuperfest.org) for the latest information.

Continued Next Column





Kachina started the new year with the general meeting on 8 January and we are looking forward to 2019.

Our December meeting was the annual Kachina Amateur Radio Club Christmas Party. It was a great evening! Beautiful decorations, an abundance of delicious food, and a really fun gift exchange were enjoyed by all. The event was well attended: it was a wonderful finish to the 2018 calendar year.

It's now 2019 and the first monthly meeting was held on 8 January. We are currently meeting at the Solterra at White Mountains, 5408 W White Mountain Blvd., Show Low, Arizona. Our meetings are scheduled for the second Tuesday of each month and are open to all. We welcome all visitors, and especially prospective new amateur radio operators. The doors open at 6:00 p.m. and the meetings begin at 6:30 p.m.

While our website address has not changed, the website is taking on a new look. We welcome all to check it out at [www.kachinaarc.org](http://www.kachinaarc.org). Remember it is a work in progress so feel free to follow along with us as we add features. Kachina's email address has not changed so don't hesitate to contact the club if you have questions or comments. The email address is [info@kachinaarc.org](mailto:info@kachinaarc.org).

Kachina's new officers were elected at the November meeting, and took office starting 1 January, 2019. The 2019 officers are:

President:	Tim McFadden K7DXA
Vice President:	Steve Herron, AG7GD
Secretary:	Marie Mortensen, N7SKS
Treasurer:	Dennis Wilkes, W7DRW

Kachina ARC's mailing address:

Kachina Amateur Radio Club  
P O Box 2996  
Show Low, AZ 85902.  
Email: [info@kachinaarc.org](mailto:info@kachinaarc.org)

Dues are \$15/yr for individual; \$25/yr for family. Membership is 1 January - 31 December.

Website: [www.kachinaarc.org](http://www.kachinaarc.org)

Thanks for checking us out and we all look forward to 2019.

Arizona Near Space Research is looking for a few good men or women. Being a member of this group is a lot of fun, and the membership requirements are easier than you think. First of all, you DO NOT need a ham radio license. It helps if you have one, and if you want one, we will help you get it. You do not need an off-road vehicle. We do have off-roaders in our membership that work on the more challenging payload recoveries. You're always welcome to ride along with them and learn the ropes. The chase team needs navigators as much as it needs drivers.

So what is it that we do? Simply put, we launch helium-filled balloons into near space at altitudes approaching, and sometimes surpassing, 100,000 feet. The payloads that we carry include experiments put together by students from Arizona's colleges and universities. The students assemble and invent devices that record atmospheric conditions at heights three times that of commercial airliner flight and provide valuable scientific information that helps us understand the climate on Earth. Think of us as the Uber or Lyft of near space. Without our service, these future scientists, pilots, engineers, and astronauts wouldn't have a way of delivering their experiments.

Besides being a mentor to students, our members participate in a perpetual learning experience. Almost every flight is a discovery, be it scientific or something new about some part of the state where we launch or recover.

Meetings couldn't be more convenient. Because our membership includes people from all over the state, we meet via Go-To-Meeting, which can be accessed from computer or phone. We meet monthly. Membership dues are \$10 per year. Our group is funded partially through the Arizona Space Grant Consortium with funding from NASA, partially through donations, and through member dues.

Some, but not all, of our activity is at hamfests. The next scheduled flight is at the Yuma hamfest February 16-17. Other flights are scheduled for sites around the state, including one at Dine' College in Tsaile, Arizona on the Navajo Nation. We have flown more than 120 flights since our group was founded. Members do not have to be at every event. Most of us have day jobs and other obligations, so you can attend the activities that fit your schedule and skip those that don't.

Visit our website at [ansr.org](http://ansr.org). You can sign up for membership, read about past or future flights, or contact us with any questions you may have, or stop by our booth in Yuma.

Steve Miller , W6SDM





*CADXA Continued from Previous Column*

These charts plot recent totals from the top five finishers as scores and as a fraction of the best year, 2015. Notice that the difference between peak years and years like 2019 is only about 3 per cent. That's just as true for you as it is for a top station. So, it means you can work just about as much DX in 2019 as you ever did.

Do you want to learn to do just that? Just show up at any of our meetings. Our next meeting is February 7th, at the PERA Club, One East Continental Drive, Tempe. The meeting starts at 7:00 p.m., but come a half hour earlier and members will be happy to answer your questions about the world of DXing. You can also access our website any time: <http://www.cadxa.org> for many DXing resources.

We also can give presentations to your club on the world of DXing on any relevant topic – HF antennas, station-building, QSLing, and anything else your members might profit from. Just email me at lwloen at gmail dot com.

One last key item: As I begin my term as President, I want to give a shout-out to Lee, KY7M, who led us so ably in recent years. We will miss your leadership “at the top,” Lee, and I look forward to your counsel as Past President.

The February meeting will be held at 7:00 p.m. on Thursday night, February 7th, at the PERA Club. Our ARRL Arizona Section Manager, Rick Paquette, W7RP, will present “Hot Legal Issues for Ham Radio in Arizona.”

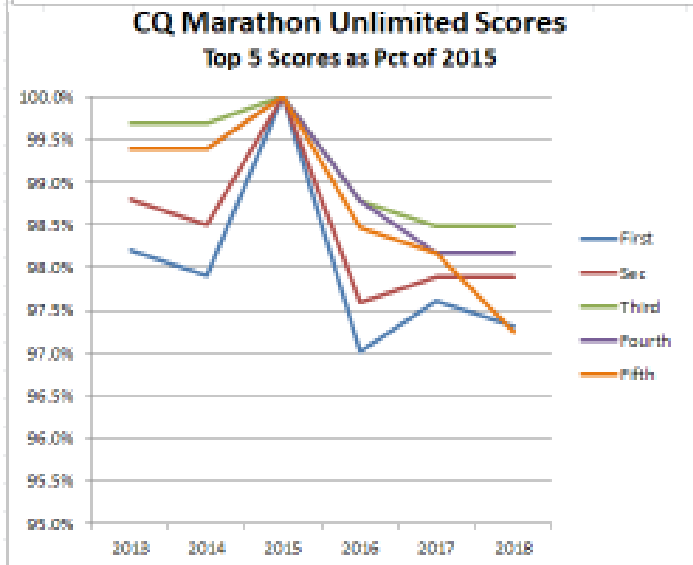
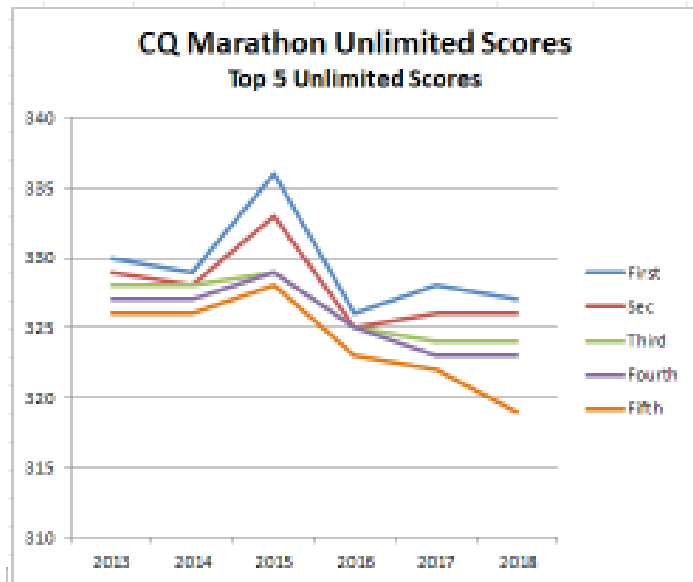
Please feel free to arrive early to socialize with your friends. Refreshments will be served at the break. Guests are always welcome. The new parking lot south of the PERA Club is the place to park for the meeting while building construction continues in the old parking lot.

73,  
Larry, WO7R  
CADXA President

Have you given up on DXing because of what people tell you about the “bad sunspot cycle?” That’s barely half true. It is true that you won’t find much to work on 10 meters right now. But, there is plenty of DX to be worked. You just have to be on 20, 30, 40, and 17 meters. In fact, 20 meters is plenty.

Want proof? Look at the CQ DX Marathon scores. The DX Marathon is a year long competition (details here: <http://www.dxmarathon.com/>) organized around the idea of “how many DXCC can you work in a year?”

The DX Marathon web site shows that Mixed DXCC is nearly as good no matter what the state of the sunspots. For instance:



*Continued Next Column*

**ADAW**



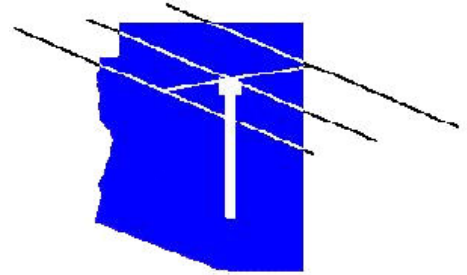


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**ADAW**



MARCA INC.

The holidays are over and we are well into the New Year. We had a huge turnout for our January 7th meeting. It is great that so many of our members have an exceptional interest in Winter Field Day and our upcoming auction!

After completing the business portion of our last meeting, Manny, K7QLD presented information regarding Winter Field Day, WFD. Manny and his associates, John, KE7JYP and Frank, WW5HAM, have put forth an incredible amount of effort so we will have the most rewarding Field Day ever! The February 4th auction is similarly headed for a colossal success!

More great news . . . Testing at our meeting produced three (3) new Technician Class Licensees and two (2) upgrades to General!



**ADAW**

**ADAW**

**ADAW**



**ADAW**

**ADAW**



**American Red Cross**

**Arizona Red Cross Communications Club**

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- World's first dual TFT display • 200W output on all bands
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### TM-D710G | 2M/440 Dualband

- V+V/V+U/U+U operation • Built-in GPS • Built-in TNC for APRS & DX-Cluster operation • 50W 2M & UHF • 1,000 memories • Dual receive • Green or amber backlight colors
- Latest APRS firmware w/new features • Sky Command II remote functions

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### TS-480SAT/HX | HF + 6M Transceiver

- 480HX 200W HF & 100W 6M (no tuner) • 480SAT 100W HF & 6M w/AT • Removable w/front panel/speaker • DSP built-in

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### TS-890S | HF/50MHz Transceiver

- Receive performance on a whole other level from narrow bandwidth roofing filters that only full down conversion can provide • CW Morse code decode/encode possible with stand-alone unit • 150dB Blocking dynamic range (BDR) • Expanded touch operation scope • Kenwood Sky Command II Support • Remote operation achieved without host PC Direct remote-control function (KNS)



### TM-V71A | 2M/440 DualBand

- High RF output (50W) • Multiple Scan • Dual receive on same band (VxV, UxU) • Echolink® memory (auto dialer) • Echolink® Sysop mode for node terminal ops • Invertible front panel • Choice of green/amber for LCD panel • 104 code digital code squelch • "Five in One" programmable memory • 1000 multifunction memory

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### TH-D72A

2M/440 HT w/extended RX

- 5W TX, RX 118-524 MHz, VxU, VxV, UxU
- APRS w/built-in 1200/9600 TNC • Built-in GPS, Built-in USB, digipeater • Echolink® compatible • MII-Spec STD810

**Call For Special Low Price!**



### TS-590SG | HF/50MHz Transceiver

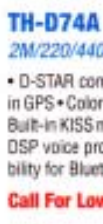
- Equipped with 500 Hz/2.7 kHz roofing filter as standard • ALC derived from TS-990S eliminating spike issues • Antenna output function (shared with DRV connector) • CW - morse code decoder function • Improved 1st mixer • New PFB key with multi-function knob • New split function enabling quick setting • LED backlight with selectable color tone



### TM-281A | 2 Mtr Mobile

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### TH-D74A

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- FAX - All store locations
- MAIL - All store locations

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