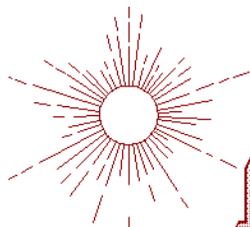


ADAW

4529 W. Park Place
Glendale, AZ 85306-1512



ADAW

Arizona Desert Aire Waves

Vol 36, No 9/10

Sept/Oct 2011

ARE YOUR DUES CURRENT?

**Check Your Club's Listing
on Page 2 for Information.**

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

CLUB MEETINGS SCHEDULE

SARC

Oct 5th
Scottsdale Senior Center
7:00 PM

AARC

Oct 13th
Red Cross Bldg. - Phx
7:30 PM

OPRC

Oct 12th
AZ Bldg at Tucson Medical Ctr
7:15 PM

CARL

TBA
AZ Science Center
TBA

QCWA

Oct 15th
Monti's La Casa Vieja
11:00 AM

TBARC

Oct 20th
Thunderbird School
of Global Mgmt
7:00 PM

ADAW MEMBER CLUBS

ARIZONA AMATEUR RADIO CLUB

The Arizona Amateur Radio Club meets on the **SECOND THURSDAY** of each month at 7:30 p.m. in the Red Cross Building, located at 6135 N. Black Canyon Hwy., Phoenix (N. of Bethany Home Rd., E. side of Freeway on frontage Rd.).

| | | | |
|------------------|---------------|--------|--------------|
| President | Gary Hamman | K7GH | 602.996.8148 |
| Vice President | Bob Milburn | KB7TWF | 480.991.1702 |
| Secretary | Leslie Hickey | N5LDH | 602.246.4303 |
| Treasurer | Bob Hodges | K7JJT | 602.274.1647 |
| Red Cross Liason | Larry Penrod | AC7FC | 602.955.0349 |
| ARCA Liason | Dick Baum | NS7A | 602.870.1135 |
| Membership | Bob Hodges | K7JJT | 602.274.1647 |

AARC c/o Bob Hodges, K7JJT, 1432 E Colter St., Phoenix, AZ 85014-3011. DUES: \$15.00/YR, Prorated (\$18.00 Family, \$9.00 Student), MEMBERSHIP YEAR BEGINS FEB. 1.

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. 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 | Bob Burleson | KG7QJ | 480.961.1109 |
| Vice President | Tom Salt | AD7PM | 480.926.0348 |
| Secretary | John O'Neal | K7JP | 480.345.7800 |
| Treasurer | Larry Foster | KC0JON | 480.767.0593 |
| Board Members | Ray Waddoups | KE7FUM | 480.654.9883 |
| | David Zinder | W7PMD | 602.358.7826 |
| | Jordan Snell | KC7CWX | 480.844.3744 |

Web Master, ARCA Rep - Roger Buel, W9NCQ - 602.493.7242
For information: Email to carl@w7asc.org or call Bob Burleson, KG7QJ at 480.961.1109. Web Site: <http://www.w7asc.org>

ADAW STAFF

PUBLISHER/EDITOR

Christine Kesauer N7PVL 602.843.0960

AARC EDITOR

Lori Cripps WA7EDI 602.955.7517

SARC EDITOR

Ed Nickerson NU7S 480.949.5162

CARL EDITOR

Bob Burleson KJ7QJ 480.961.1109

OPRC EDITOR

Ron Kalish N7SPW 520.207.3852

QCWA EDITOR

Robert McCuskey W7BV mccuskey@email.arizona.edu

TBARC EDITOR

Thelma Speed KF7MLX 602-252-4505

DISTRIBUTION

Mark Kesauer N7KKQ 602.843.0960

ADAW EMAIL

adawaz@arca-az.org

ADAW WEB SITE

www.adaw.org

SCOTTSDALE AMATEUR RADIO CLUB, INC.

The Scottsdale Amateur Radio Club meets the **FIRST WEDNESDAY** of each month at 7:30 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 | Paul Finell | W7EFQ | 602.741.6563 |
| Vice President | Bob Johnsen | K7TR | 480.946.1427 |
| Secretary | Ed Nickerson | NU7S | 480.949.5162 |
| Treasurer | Tom Barry | W7UF | 480.998.8494 |
| Past President | Bob Johnsen | K7TR | 480.946.1427 |
| Membership | Gerald Jacques | KE7GYM | 480.239.8679 |
| Board Members | Jerry Jacques | KE7GYM | 480.239.8679 |
| At-Large | Dreux Jacques | KB8YYA | |
| | Louis Schmitt | NQ7I | |
| | Alan Jensen | KE7FSD | |
| | Judy Jensen | KE7IXI | |
| | Stephen Thomas | KE7TLS | |
| | James Wasson | N7ELL | |
| | David Yee | N7AJR | |

SARC, P. O. Box 10878, Scottsdale, AZ 85271-0878. Phone: 602.735.3988. DUES: \$20.00/YR, (\$10.00/Add'l Family Member).

OLD PUEBLO RADIO CLUB

The Old Pueblo Radio Club meets the **SECOND WEDNESDAY** of each month (except June, July and August) at 7:15 p.m. in the Arizona Building 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: | | | |
| | Bill Price | N7GUO | |
| | Ivan Settle | KB7USM | |
| | Cliff Hauser | KD6XH | |
| WebMaster | Ted Willis | AA7HX | 520.790.3828 |
| | | (www.oprc.org) | |
| Trustees: | (all repeaters operating under the K7TRA call) | | |
| Primary | Cliff Hauser | KD6XH | |
| | | 146.660, 146.820, 147.220- | |
| | Paul VanBeverhoudt | KA7LFX | 224.06+ |
| Secondary | Ted Willis | AA7HX | 146.66- |
| | Ralph Turk | W7HSG | 146.82- |
| | 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.

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**

ADAW MEMBER CLUBS

QUARTER CENTURY WIRELESS ASSOCIATION CHAPTER 16 - BARRY M GOLDWATER ARIZONA CHAPTER

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.

| | |
|----------------|---|
| President | Douglas Besemer, K0VPL motoman1@aol.com |
| Vice President | Jean Jolkovski, W4CIH jeanjol@hotmail.com |
| Sec/Treasurer | Robert McCuskey, W7BV mccuskey@email.arizona.edu |
| Webmaster | Robert Smith, WB6ODR lrsmith@cableone.net |

AZ QCWA, Robert S. McCuskey, W7BV, Email: mccuskey@email.arizona.edu. DUES: \$7.00/year and current national QCWA membership. Web Site: <http://azqcwa.org>

THUNDERBIRD AMATEUR RADIO CLUB

The Thunderbird Amateur Radio Club meets the **THIRD THURSDAY** of each month at 7:00 p.m. at Thunderbird School of Global Management located near 59th Ave. and West Greenway Rd. (Enter at the light at Country Gables and 59th Ave. Follow the road to the staff parking lot. Proceed to the Snell Bldg. The meeting is held in room #29 or otherwise posted.)

| | | |
|----------------|-----------------|--------|
| President | Jim Puza | AE7JP |
| Vice President | Peter Decker | K7IJR |
| Secretary | Jack York | KE7VOU |
| Treasurer | Al Johnson | AE7GM |
| Directors: | Ken Croxton | KD7OWZ |
| | Israel Vincente | AD7ND |
| | Walt Reinert | N7GDP |
| Past President | Jack Lunsford | KD7RCJ |

For further information about the ThunderBird Amateur Radio Club, send an e-mail to: info@w7tbc.org or call 602.493.7242.



Pineberry Creations

pineberryboutique.etsy.com
pineberrycreations.etsy.com

Unique Handmade Jewelry and Gift Items
 at Affordable Prices
pineberryboutique@me.com or pineberrycreations@me.com

From the Editor's Desk

Hi all.

I apologize for not getting a September issue of ADAW out to everyone. Some health issues took precedence last month. This issue is a combined September/October issue so you won't miss any of the news from your club.

The Old Pueblo Radio Club will be holding their annual swap meet on October 22 at Kino Sports Park. This is a week later than usual due to some scheduling conflicts with the park. It's a growing event and always a good bet.

With the weather cooling off, it's time again for more outdoor activities and that includes special events. Check out the special event calendar on page 4 for a list. It's easy and fun and a great way to hone your operating skills.

The weekend of August 13 - 14 was "Fry's Free Day" at the Arizona Science Center. Fry's grocery store sponsored the event which offered free admission to the Science Center for the weekend. It was figured that there were 10,500 admissions. The Center for Amateur Radio Learning at the Science Center kept very busy over the weekend. Check out their report on page 11.

The end of the month (October) will see the little ghosts and goblins running around again. Please drive carefully and keep them safe.

Til next month,
Chris, N7PVL

ADAW



Event Calendar

Application for El Tour de Tucson November 19, 2011

October 22, 2011 - **OPRC Hamfest** - hosted by the Old Pueblo Radio Club will be held at Kino Sports Park in Tucson. Watch for details.

November 12, 2011 - **Oro Valley Radio Club Hamfest** - hosted by the Oro Valley Amateur Radio Club from 8:00 AM until 12:00 noon. Location to be announced. Visit the web site at www.w0hf.com for information.

December 3, 2011 - **Superstition Hamfest** - hosted by the Superstition Amateur Radio Club will be held at Mesa Community College, Dobson & Highway 60 in Mesa. Visit the web site at <http://wb7tjd.org/hamfest/> for more information.

February 17 - 18, 2012 - **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. Hours - Friday, noon to 5:00 PM - Saturday, 8:00 AM to 5:00 PM. Buzzard barbecue, Saturday, 6:00 - 8:00 PM. ARCA meeting - Saturday, 11:00 AM. Visit the web site at www.yumahamfest.org for details.

July 20 - 22, 2012 - **ARCA/Williams Hamfest** - hosted by the Amateur Radio Council of Arizona will be held at the Williams Rodeo Grounds in Williams. Keep watch for more details.

The annual El Tour de Tucson event is coming. Join us along with over 3000 volunteers to make this event a very special one.

Name: _____ Call: _____

Address: _____

Zip Code: _____ Telephone #: _____

All day: _____ morning: _____ aft : _____

Radio: _____ HT: _____ Mobile: _____

ht batteries: _____ antenna: rubber ducky: _____

good one: _____

You can get the information on this form back to me via mail, fax, E-mail or phone.

Ted Willis, AA7HX
Amateur Communications Coordinator
5649 E. 32nd St
Tucson, AZ 85711-6606
Tel #: 520.790.3828
E-mail: tedaa7hx@cox.net

ADAW

ADAW



Old Pueblo Radio Club INTERMOD

President's Column

September Column

The Old Pueblo Radio Club will open its fall season with its general membership meeting on Wednesday, 14 September 2011 at 1915 hours at the volunteer building of Tucson Medical Center — yup, same place. If all goes as planned, Cliff Hauser, KD6XH, will be our speaker for the evening.

Last month, one of the summer storms took aim at the tower owned by Ted, AA7HX, and bent it into a horizontal plane. Ted is working to repair the damage to the tower and to his roof, which was penetrated by his Yagi. All should be well soon at Ted's house, and nobody was hurt. He is back on the air with a vertical.

As a result of the damage to Ted's tower, our 146.66 MHz repeater went off the air, as reported last month. This damage has also been fixed, and 146.66 is operating normally again.

At the September meeting, we will be discussing matters relating to our annual swap meet, scheduled for Saturday, 22 October 2011, at the Kino Sports Complex on S. Forgeus, on the North side of Ajo Road (same location as last year). This is an ARRL-sanctioned event, which will last from 0700 to 1200, or when everybody is tired, whichever is first. More on this in the October issue. Please note that it is one week later than usual to avoid a conflict in the use of the premises,

Have a great month

73 de
Ron Kalish, N7SPW
President, OPRC

ADAW

OPRC Repeaters

| | | |
|-------------------|---------------|------|
| 146.66 - PL 110.9 | wide coverage | W7GV |
| 146.82 - PL 110.9 | wide coverage | W7GV |
| 147.22 - PL 110.9 | wide coverage | W7GV |

RACES Repeaters

| | | |
|--------------------|---------------|-------|
| 145.150 | packet/wide | N7OEM |
| 146.880 - PL 110.9 | wide coverage | N7OEM |
| 147.300 - PL 110.9 | wide | N7OEM |
| 448.55 - PL 110.9 | wide coverage | N7OEM |

October Column

As this column is being written, a typical monsoon-style storm is in progress from Sells through Cochise County, and the WX receiver is bleating its little heart out. But who are we to bemoan the arrival of rain.

As some may know, Ted, AA7HX, sustained major damage to his tower (and to the roof of his house) earlier this summer when winds in his neighborhood were clocked at more than 70 mph. After being repaired, the tower was returned to its rightful location this morning, and things should return to normal, antenna-wise, in the near future.

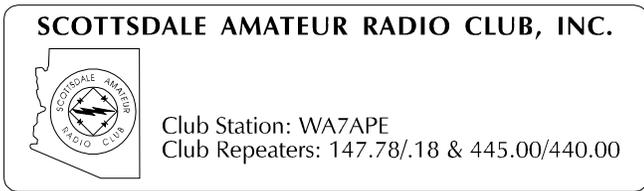
Once again, Ted is coordinating amateur radio coverage for El Tour de Tucson. The event will be held on 19 November 2011. We know that he can use all the help he can get. There should be an application form elsewhere in this issue of ADAW. Please fill out and return, or just call him or send an email. His phone is 520-270-2865. His email address is tedaa7hx@cox.net.

Our first meeting this fall will have been held on 14 September 2011. Cliff, KD6XH, is on the agenda as speaker. We also will be discussing plans for our annual swapmeet. The event is scheduled to take place at its usual location, Kino Sports Park (North Campus) on 22 October (one week later than usual). Set-up will be at 0630 and the event will begin at 0700. We usually wind things up by noon. At this time, RST will be assisting, including selling coffee and donuts. The Lion's Club has tentatively agreed to serve breakfast. We also have a room for testing, meeting, etc. Our meeting on 12 October will be the final meeting prior to the swap meet, so members are encouraged to attend so that we can make last minute assignments.

See you at the meeting and/or swapmeet.

73 de
Ron Kalish, N7SPW
President, OPRC

ADAW



September Column

Hi Guys,

There was a last minute change in the program schedule for August and September. Mike Wyman, W1DRY provided a great program on the new, or fairly new, EleCraft K3 radios. It was very enlightening to hear the specs and special features this equipment has to offer. And you can have the fun of putting it all together yourself. Yes, this outstanding radio is in kit form. Not like the kits of old, where you soldered components together and hoped for the best. This kit is more of an assembly style where all of the modules can be assembled into a beautiful case. Very nice job, Mike, and something I am going to think about.

Speaking of kits, Paul Finell W7EFQ, our prez, provided us with a hand out for all of the electronic kits that are currently available. A lot of the club members have expressed an interest in building an electronic device of some kind. Paul suggested we have a contest, of sorts, in which the kits that we build, will be graded on construction. He and David Yee, excused themselves from this contest because they build devices all the time and it would not be fair to us neophytes. Instead, they will be the judges for this contest. So, anyone interested in participating in this contest, all you have to do is pick out a kit and build it. The judging will take place at the January 2012 meeting and there will be prizes. I am picking out my kit as we speak.

The program for September is going to be "Fun with Antennas" by Phil Maynard W7ZT. This program was scheduled for August, but it had to be moved to September because of a conflict.

This is the part of the year when most people leave town for the cooler climes of the Rim Country. Ah, the smell of the pine forest and the wood smoke from a camp fire is the perfect, soothing pastime for our weary souls. Unfortunately, I am stuck here in town for the duration. My back is still on the mend and I just can't chance it to head up to my favorite spot on the rim. But, having said all of that, we just have to make do with the current situation and enjoy the pool and the mall. We have been having the grand kids over a lot this summer to enjoy the pool and the bar-b-q. The pool is great fun and although it is 90 degrees, it is still cooler than the outside air. Besides, when you get out of the pool, the water evaporates off and believe it or not, you feel cool. Or cool enough to get another beverage and check the hot dogs on the grill. What would summer be like without hot dogs, hamburgers, potato salad, maybe some corn on the cob, watermelon, etc.? The

grand kids all love it and so do I. They range in age from 3 to 16 and all swim like fish. Their parents mostly sit on the edge of the pool or the steps and keep an eye on the gang. Now, the other pastime is going to the mall just to walk around and window shop. We need to walk as much as possible anyway. We always end up buying something, just to help the economy.

The monsoon this summer did give us some rain but we could sure use more of it. Hopefully, we will get some before Labor Day, but you never can tell. It may turn out to be a dry monsoon. We have had more dust storms than usual I think. According to the paper, this has been a record year for forest fires and now that the vegetation has been burned off of the slopes, along comes the rain to create more damage. Oh well, that is mother nature at her worst.

Whenever I can, I listen to the 2-meter radio that is in my office. I put it on scan to listen to all of the repeaters to see what is happening. Occasionally, I hear hams up in the high country using the link to the 147.36. They are enjoying the cool weather and I am jealous for sure. That ARA repeater link is very nice indeed and puts most of the high country in touch with us poor souls in the Valley so they can rub it in.

I used to do some radio control model airplane flying at SCC in years past. I belong to the Scottsdale Model Flyers and they have a great flying field at the school. My eyesight has improved with new glasses, so I am going to do some more flying. But first, I need to replace the batteries in the transmitter and onboard the aircraft. Batteries go bad if you don't use them. They will not take a charge any more. The other club members go flying early in the morning before it gets too hot and I will do the same. I will have a full report next month.

The club has a weekly net on 147.18 with a PL of 162.2. The net is 7:00 P.M. on Tuesday evening. It is a great chance for you to try out your 2 meter or 440 radio. So join us on Tuesday evenings for the fun.

Well, that is all I have for now. Until next month, keep on hamming, be well and enjoy life.

73 Ed WU7S
enickerson427@aol.com

ADAW

SCOTTSDALE AMATEUR RADIO CLUB, INC.



Club Station: WA7APE
Club Repeaters: 147.78/.18 & 445.00/440.00

October Column

Hi Guys,

August was a record setting month for weather and almost everything else around here. I have cleaned our pool twice a week for the past month and that must be a record. And with the super hot conditions, I have to add water and chlorine just about every day. On the week ends, the grand kids usually show up for a swim and some fun in the yard. I love to see them enjoying the pool. It makes me feel a lot younger just to be around that much energy. I have wanted to get one of those floating lawn chairs and just float around the pool, with an adult beverage, while they play but that could end up in a dunking of you know who! The pool is a lot of fun during the hot summer months and provides much needed exercise. Although, most of the exercise I get is from cleaning and vacuuming the darn thing. It does help my aching back too.

The program for September was "Fun with Antennas" by Phil Maynard W7ZT. He had a great presentation with photographs of the Saturday antenna parties featuring the strangest antennas you ever saw and they all worked. He and his friends made many contacts with these unusual antennas or as some call them aerials! The photographs were provided by Judy Ferrara K7JLF. Great program.

The program for October will be a presentation on Satellite radio by Rich Tejera K7IRT. There are quite a few satellites up there and it will be interesting to find out how to locate them and use them.

Our grand daughter, Brandi, has been attending Saint Daniels the Prophet Catholic Church School here in Scottsdale. She has been there through the fourth grade and has many friends. But since the school is closing, she has to go to a new school. Her mother has picked Our Lady of Perpetual Help Catholic Church School, also in Scottsdale. Some of her friends at the old school are also going to the new one, so she has adapted very quickly. She has tried out for a school play, Beauty and the Beast, and so we are enjoying listening to a budding actress at work rehearsing her lines. The trouble is, she does not know which role she will have. But that will not detour her from her goal. She has a tape of the movie so she is practicing most of the parts. This should be interesting. I have to get out our old video camera for this event. There is bound to be some great footage.

I have been rearranging my ham shack lately and so I have not been on HF. This new plan was put together before I fell and broke my back and was supposed to be finished in April. Well, so much for plans. I finally have gotten to the point

where I can lift modest weights, but it is a very slow process. I am busy at work and so this work is to be done in the evenings. Besides, I am taking a class at SCC on Tuesday and Thursday afternoons and I have physical therapy also on the same days in the morning. Dog class has also started, so there goes another evening. But after working all day, I just do not have much enthusiasm left in the evenings. And trying to keep up with the work schedule in between has been impossible. I think this is going to be finished this month and I'll be on the air again. I have heard the HF bands have not been very good lately, so I have not missed much.

Last month, I promised to get one of my radio-controlled model airplanes off of my work bench and up in the air. Well, that has not happened yet, but I have high hopes this is the month. It is cooling off a bit in the AM and that is the only time to get out of the air conditioning and go flying. I will let you know how this ends.

The club has received another antenna and tower donation. This is from the estate of Earl Murphy. It is a 40-footer and we are planning a work party to dismantle the tower. If you are interested in purchasing a tower for your station, we now have two towers available. Earl's tower is a free standing triangular steel tower and we have an aluminum triangular free standing tower ready to go. I broke my back on the last tower work party, so I probably will not be working on any ladders at this one, but I will be there to help.

The club has a weekly net on 147.18 with a PL of 162.2 or on 440.00 with a PL of 100. The net is 7:00 P.M. on Tuesday evening. It is a great chance for you to try out your 2 meter or 440 radio. So join us on Tuesday evenings for the fun. And if you would like to try your hand at being net control, please let me know and we will be glad to give you a try.

Well, that is all I have for now. Until next month, keep on hamming, be well and enjoy life.

73 Ed WU7S
enickerson427@aol.com

SARC CONSTANTS:

SARC is a 501 (c)-3 club. That means all donations are fully tax deductible. Contact Paul Finnell, W7EFQ at 602.741.6563 for information on estate donations and equipment pick-up.

For membership information, call Gerald Jacques, KE7GYM at 480.239.8679. Please send address change requests to Gerald no later than the 7th of the month in which you would like the change to occur.

To field check QSL cards for most ARRL awards, call Nick Sues, W7ZMD at 602.992.4133.





AARC meeting location, the Red Cross Building. Two generals and one extra class license were earned.

I look forward to the ARRL Southwestern Division Convention at Torrance, California, September 9-11. A report on our latest club activities and the Torrance Convention will be forthcoming in our next column.

73,
Lori, WA7EDI
(602) 955-7517
cripps@cybertrails.com

September Column

Although Chris, N7PVL, gave you a summary of the Williams Hamfest in the August ADAW, I need to add my accolades to the ARCA members who did an outstanding job of putting together a quality hamfest under what were abnormal conditions after the theft of their equipment. When we arrived, we were greeted by Chris herself who was managing the registration booth. This year, fortunately, ARCA was able to obtain permission to use a small building on the premises since they have not yet replaced the trailer, which is usually the registration booth. Marking off the grounds this year was done with a new unit which was purchased to replace the one that had been stolen. The new unit is much more effective than the old one. The markings were clearer, and I understand the job was more easily performed. Borrowed equipment was used for some of the other tasks. A ticket barrel, for instance, was obtained for the drawings, and I can imagine that there was a myriad of other needs filled by many phone calls by the ARCA staff. A donated golf cart was a new and valuable addition to the hamfest. Mark, N7KKQ, put his skills together to come up with a method to transport it. It saved a lot of steps during the preparation, served as a shuttle during the meet itself, and expedited the tear down. Mark also added a new PA system, which was advantageous during the hamfest. The ARCA staff deserves a lot of credit for the planning, the work, and the diligence they showed in putting on the Williams Hamfest, a very enjoyable one without a single raindrop!

This last month Joe, WØSLL, led two VE sessions. One of them was a special one AARC did for a completed class at the class location, the new fire station on 7th Street and Cave Creek Highway. The VE's had a 60-mile round trip, but the results were very good. Fifteen applicants were tested resulting in twelve technician and two general licenses being earned. One of the technician licenses was awarded to a seven-year-old boy. We welcome these enthusiastic newcomers who realize that amateur radio provides a very important service.

The other VE session that Joe handled was at the usual



One of the many vendors at Williams



A bright display at Wired Communications

ADAW



October Column

September's first AARC 2-meter net produced a surprise for all of us. Thanks to the Echolink system that is now working well for us, we had a check-in from BH4AGO, an amateur located in Shanghai. The Echolink setup has made it possible for John, K7JHK, to join us on the net from Casa Grande, and we have had several other stations join us from out of state; however, BH4AGO is the first international visitor we have had on the net.

At our September meeting Gary, K7GH, gave a presentation on message handling and operating during an emergency. Although some members may have had experience with message handling, we now have a more immediate need for proficiency in this skill. The American Red Cross, whose facility we have been using for meetings, VE testing, and Field Day, has requested our help in operating their radio facility for emergency communications when necessary. Many members have volunteered to be on call for this, and the presentation on message handling and review of the Red Cross radio station's equipment was very well received.

As I write this column, I am at Torrance, California, attending the Hamcon 2011 ARRL Southwest Division Amateur Radio Convention. If attendance at major conventions has not been a part of your amateur radio activities in recent times, you are missing a very important part of the hobby. The interchange of ideas with people like our Keynote Speaker, Rod Stafford, W6ROD, who has been involved with the International Amateur Radio Union since 1998, meeting with members of more than 160 national Amateur Radio societies from around the world, is a valuable experience.

Gayle Olson, K6GO, president of the YL-DXpeditions Club, and Margie Hoffman, KG6TBR, one of her five DXpeditions Team members, kept the audience's attention at the Sunday breakfast. They told of their YL-DXpedition to a new DXCC entity, Curaçao, which was formed from the breakup of the Netherlands Antilles in October of 2010.

If you don't think it's possible to work Hawaii from the West Coast on 2 meters, you would have been amazed at the presentation "Working Hawaii on 2 Meter SSB Via Tropo"

by Gordon West, WB6NOA.

Technical sessions are a big part of the convention, but attendance is also an excellent way to keep up with the latest in equipment, to find bargains at the swap tables, to get tips on improvement of your station, and to just have a great time. Take a look at the schedule of hamfests and conventions that is published monthly in this newsletter and also in the newsletter sent to you each month by our Section Manager, Tom Fagan, K7DF. Mark your calendar for one of these events in the near future.

73,

Lori Cripps, WA7EDI

(602) 955-7517

cripps@cybertrails.com



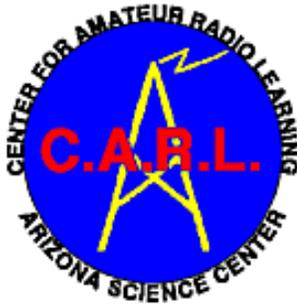
Gayle Olson, K6GO and Margie Hoffman, KG6TBR



Gordon West, WB6NOA



Rod Stafford, W6ROD



September Column

BACK TO SCHOOL!

Well, it's now official. Back to School ads are showing up in e-mail and snail-mail. Schools will be starting up over the next few weeks so the W7ASC Ham volunteers are getting ready! W7ASC will be going back to "Winter" shifts/hours starting September 6th. Weekdays are usually flooded with school groups in the morning, which is always fun (and a challenge).

Part of the preparation has been done. John, K7JP, has updated the "Teacher CD's," and we are stocking up on "I Sent My Name in Morse Code" stickers (send your name, get a sticker!) We try to get all involved, even the Teachers that stop by at the W7ASC shack.

The Volunteer's experience at the Harkin's Ham Shack is so enjoyable, to a large extent that it is so unpredictable. Who are these folks, kids and teachers, and what will interest them?

There is a core agenda, of course! Provide the visitors with a different kind of experience, and be sure that they leave with new, interesting, information. Improve their understanding of Ham radio.

That is where the visiting teachers fit so well. These professionals have a mind set that they are to absorb information in order to pass it onto students. Our challenge is to provide these special people with facts, information and experiences that they can use in their classrooms. Can we show them that Ham radio is an enlightening and educational hobby?

But wait! — how do we identify the teachers? Look and listen. Telltale signs might be badges or clipboards. Watching what their charges are doing at the W7ASC shack. Morse code? Talking to someone on the radio? Their conversation might give a clue. Sometimes the kids have question forms to fill out, usually with a few questions relating to Ham Radio.

The W7ASC volunteers can get the teachers involved and let them know that we have a CD available for those who show an interest.

As mentioned above, John, K7JP, a retired teacher, has prepared a great Ham radio CD as a handout for teachers. Add to that the various flyers and the package becomes useful and impressive.

Look for those teachers and send them forth with a pro-Ham point of view. That is a challenge, but also a great deal of fun. The next new Ham that you hear on the air might be a teacher who visited you at W7ASC. What a feeling!

Jean (W4CIH) and the iPad, in Ahwatukee

=====

A few other updates: the General License class is almost over with the VE test scheduled for Saturday 9/10. We have seven students and hope to have the final test results for the next ADAW. Also, the Tech License class is scheduled to start up in October at MCC.

Check the ARRL Class search tab or call for details at 480-961-1109, e-mail kg7qj@cox.net. More next time.

The W7ASC Shack can always use new volunteers. Spread the word at your Ham Club. Call 480-961-1109 and volunteer now. We have a 20 minute CARL PPT Presentation available with pictures of the new remodeled Harkins Ham Shack that can be presented to your club.

—73 Bob Bureson KG7QJ
480-961-1109 - kg7qj@cox.net

ADAW



Folks waiting to go into the ASC's "Fry's Free Weekend"



Mike, NR50 and kids at East station



Andrea KE7OPV at the East station



October Column

Fry's Science Center Frolic at W7ASC

First of all A BIG THANKS to the Saturday (8/13) and Sunday (8/14) Volunteer crews: John K7JP, Jean W4CIH, Tom AD7PM, Andrea KE7OPV, Ken K7DFY, and Mike NR5O.

The weekend of August 13 & 14 was just a bit busy at W7ASC as admission to the Center was FREE Courtesy of Fry's Grocery. We were informed that there was a total of 10,500 admissions for the weekend. Only a few of them missed the Ham Shack. By the end of the first day the inventory of code sheets was at a low ebb. The Code Key was begging for mercy. On-duty volunteers felt as if they were running for Public Office. Just to put that number into perspective, the Center considers a 4,000 visitor day to be beyond expectations.

It seemed to work since there was extra help. Tom, AD7PM and his daughter, Andrea KE7OPV, decided to join the fun with John K7JP and Jean W4CIH (photo of Andrea at the East station). Nice change from all that grey hair in earlier shots. Crowds brought their remarkably well-behaved cherubs to the Shack for the Ham Experience that comes with the award of certificates and the ceremonial application of the "I SENT MY NAME IN MORSE CODE" sticker on their shirt front. Many of those youngsters managed to convince their adult companions to enjoy that same procedure. And then on the air for a QSO and the award of that highly-coveted "Guest Operator Certificate" from W7ASC. Many signed by Andrea, as well.

What a fun day! This is one of the richest Ham radio experiences, a thrill to see the reaction from so many of the Public as they realize what a large and busy group Hams are. Not at all like CB radio or collecting stamps.

We must report the downside. Things were so busy that John K7JP never had a chance to rewire the Shack, his usual Saturday pastime.

Mike NR5O and Ken K7DFY arrived on Sunday morning, in time to set up and brace for action. The doors were flung open and the human Haboob blew in. The waiting line at the Shack entrance attracted even more! What was so attractive? Oh, yes. Morse Code, that flashing light, plus long 2M QSO's with those super-helpful Hams on the other end. As some visitors got the idea, there were some mike hogs that caused the line to grow even longer. But who can pull the mike away from a youngster as they light up with that first QSO thrill? Certainly not a Ham.

At the other position, some teens got into PSK31 when they realized that this is high-speed texting, but worldwide. And so it continued until two tired, but happy, Hams dragged themselves out to the parking lot for the trip home. Hard to believe that Ham radio can ever be more fun.

When you think about it, this is just like inviting a group into your own Shack. Just show them what you do whenever you are on the air. Share the thrill! Reawaken the excitement that you felt as you looked

at your first ticket, hit the key or squeezed that PTT for that first memorable QSO.

—30—de W4CIH

Here are some comments from the Sunday crew:

The Sunday "Free Fry's Day" at the ASC C.A.R.L. started off quickly. As soon as visitors started making their way to the My Digital World section of the Museum, Mike (NR5O) and I (Ken K7DFY) were deluged with curious children and adults (see photos). Mike stayed busy for hours showing children how to send their name in Morse Code - a real hit with the younger set.

I had the FT-990 and Sloper Antenna monitoring 14.080. A steady stream of visitors was curious how PSK31 worked. Interestingly enough, it was the young teen crowd most interested in RTTY and I know why. The keyboard! They know how to use a computer and PSK31 fits right in to their own experiences. As soon as I explained the functionality of PSK31, the youthful visitors took to PSK31 like old pros. One teenage girl had a long QSO with a fellow in CA who is a Road Engineer for Sonoma County.

However, the hit of the day was 2 meters. When the kids started chatting on the radio with a real person, the line for a chance on the radio became long and excited. I found a willing amateur radio operator on 146.710 who was sitting in his home close to Fools Hollow Lake. He spent about 30 minutes patiently speaking with children, congratulating them on their radio technique and making them feel part of the amateur community. I believe the youngest operator I presented with a radio operating certificate was five years old. The call sign of this generous ham operator is on the log. Parents too were mesmerized with the technology of amateur radio. Mike and I put quite a bit of effort into explaining to the parents how to get themselves and their children involved in Amateur Radio.

I am sure some new hams were created on Sunday. I cannot tell you how many people we spoke with but my best guess is in the hundreds.

— 73, de Ken K7DFY

=====

A few additional updates: the General License class is now over The VE test given by David (N7TWT) Morell's VE group on Saturday 9/10. A BIG THANKS to all that helped out! We had seven of eight pass the test. The next Tech License class is scheduled to start up October 15th at MCC. Check the ARRL Class search tab or call for details at 480-961-1109, e-mail kg7qj@cox.net.

The W7ASC Shack can always use new volunteers. Spread the word at your Ham Club. Call 480-961-1109 and volunteer now. We have a 20 minute CARL PPT Presentation available with pictures of the new remodeled Harkins Ham Shack that can be presented to your club.

—73 Bob Burleson KG7QJ
480-961-1109 kg7qj@cox.net



CHAPTER 16

BARRY M. GOLDWATER ARIZONA CHAPTER

September Column

The following story found its way to my email recently from one of our members. I thought others might enjoy it as much as I did. It is entitled, "The Job is Yours" (Author Unknown)

"Back when the telegraph was the fastest method of long-distance communication, a young man applied for a job as a Morse Code operator. Answering an ad in the newspaper, he went to the office address that was listed. When he arrived, he entered a large, busy office filled with noise and clatter, including the sound of the telegraph in the background. A sign on the receptionist's counter instructed job applicants to fill out a form and wait until they were summoned to enter the inner office.

"The young man filled out his form and sat down with the seven other applicants in the waiting area. After a few minutes, the young man stood up, crossed the room to the door of the inner office, and walked right in. Naturally the other applicants perked up, wondering what was going on. They muttered among themselves that they hadn't heard any summons yet.

"They assumed that the young man who went into the office made a mistake and would be disqualified. Within a few minutes, however, the employer escorted the young man out of the office and said to the other applicants, "Gentlemen, thank you very much for coming, but the job has just been filled." The other applicants began grumbling to each other, and one spoke up saying, "Wait a minute, I don't understand. He was the last to come in, and we never even got a chance to be interviewed. Yet he got the job. That's not fair!"

"The employer said, "I'm sorry, but the last several minutes while you've been sitting here, the telegraph has been ticking out the following message in Morse Code: "If you understand this message, then come right in. The job is yours." None of you heard it or understood it. This young man did. The job is his."

The next meeting of the AZ Chapter QCWA will be on Saturday, October 15th at Monti's La Casa Vieja in Tempe. Our guest speaker will be Christopher Dean, KD7KEN. He will talk to us about the history of light frequency communication as used before the advent of telegraphy and codes used before Morse Code was introduced. As usual, we will gather between 11:00 A.M. and 12 noon, have lunch at 12 noon, followed by the speaker's presentation and the official annual business meeting.

October Column

The next meeting of the AZ Chapter QCWA will be on Saturday, October 15th at Monti's La Casa Vieja in Tempe. Our guest speaker will be Christopher Dean, KD7KEN. His talk, "The Rise, Fall and Return of Optical Telegraphy," will look into the development of optical telegraphy from its origins around the world, discuss the reason for its meteoric rise in use during the Apache Wars, to its almost complete extinction for the Army during the Philippine War, to its return today in the new digital age.

As usual, we will gather between 11:00 A.M. and 12:00 Noon, have lunch at 12:00 Noon followed by the speaker's presentation and conclude with the official annual business meeting.

73,

Bob McCuskey, W7BV
Sec./Treas., QCWA -AZ Chapter
mccuskey@email.arizona.edu



www.thesignman.com
1-888-426-8241

BADGES - CAPS - LICENSE PLATES & FRAMES

The SignMan of Baton Rouge
rick@thesignman.com
879 Castle Kirk Drive
Baton Rouge, LA 70808

RUBBER STAMPS (vertical text on left)
PATCHES - DECALS (vertical text on right)

COLOR BADGES, DESKSTANDS, KEYCHAINS, MUGS

Specializing in SKYWARN, EM, RACES, ARRL, ARES & CD Items



September Column

Greeting:

There doesn't seem to be much to write about this month. The weather is as hot as it is every summer, but at least it seems to me it's raining more this year. It seems I haven't had to water the grass as much. There are no activities going on except the first Saturday breakfast and the regular third Thursday meeting. That makes it kind of hard to write this column so I was thinking – Like the general population, most of our club members came to Arizona from somewhere else. Have you ever wondered what summers were like here in Arizona before we had air conditioning? Well, let me take you back in time.

When they were younger, both my grandmothers would travel every summer taking their small children with them. My father's family would drive to San Diego. They stayed at the same resort every summer. My mother's family would travel to the mountains. They stayed with her parents and took the train to get there. Even in the 1800's, everyone who could went to California for as much of the summer as possible. Some had standing reservations at a hotel for a specific period of time every summer. Children quickly learned, the one person you never wanted to upset was the landlady. Your reservations for next year could be "accidentally" lost.

This was not an easy trip to make. Elaborate preparations started days in advance. Steamer trunks would have to be aired out and filled with bedding and towels. Laundry would have to be done on a wash board. If you were lucky, you may have had one of those new fangled machines, a wringer washer. The laundry had to be hung on the line to dry which took no time at all. Then you had to light the stove so you could heat up your iron. In those days respectable women ironed everything they washed including sheets, towels and underwear. Most households employed a maid or two because a wife and mother just couldn't do it all.

There were no paved roads. Even in my childhood I can remember seeing parts of an old plank road that ran through the sand dunes between Yuma and San Diego. If you met a car coming toward you, one of you would have to yield the right-of-way and back up to a turn out until the other car passed. Remember the canvas bags that hung on the front of the radiator? In the fifties remember that round fan that fit in the

window that blew hot air into the car?

It took twice as long to go somewhere. Of course, there were no freeways. To travel from Phoenix to San Diego you had to drive through towns like Tacna-by-the-Sea. There were signs all along the way. Long before you reached Tacca there were signs along the highway "Free Coffee" "Stop for a free cup of Joe" "Stop by our café for a steaming, hot cup of coffee." When you stopped all you wanted was a giant glass of water. "Oh," they would say, "That will be a dollar. The coffee's free, but the water costs a dollar." Gordon's Well just on the other side of the sand dunes did the same thing.

Who can forget Gila Bend? There was a service station there who advised everyone who stopped that their water pump was leaking, but they could change it for a nominal amount. They tried this on my grandmother once. She left the car with them while she went next door to have breakfast. They were supposed to fill it up, check the tires and water. When she came back, they told her they had changed the water pump. They "couldn't sleep nights if they hadn't and such a sweet, little, old lady like her was stranded in the desert."

Now if there was one person in this whole world who could take care of herself, it was my grandmother. She demanded that they put her water pump back on.

"I'm sorry, but it fell apart when we took it off."

"I didn't ask you to change it. There was nothing wrong with it. You're going to put a new water pump on now and I'm not going to pay for it or you'll see what a sweet little old lady can do."

They did and she didn't.

In the good old days traveling was more of an adventure but would you want to trade it for the comfort you enjoy now?

Next meeting is on the 18th of August at 7:00 p.m. Be sure to order new club shirts and hats. Al AE7GM brought a sample to the Saturday breakfast. You'll want one of each for sure, maybe two.

73's

Thelma, KF7MLX

ADAW

Want Ads

Wanted - Rohn 25/45 gin pole.

Contact Ray, W7GNE - Home: 480.998.1893

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, or locations may change. Call test session contact to confirm information. Walk-ins are permitted unless otherwise specified.

October Test Sessions

Oct 1st - DeVry & West Valley ARC -- 9:00 AM
DeVry University, 2149 W Dunlap Ave, Phoenix
Contact - David Morrill 623.925.0680

Oct 6th - Radio Society of Tucson -- 7:00 PM
Lighthouse YMCA, 2900 N Columbus Blvd, Tucson
Contact - Matthew Grossman 520.750.7189
Pre-Reg by email preferred - veregistration@rstclub.org

Oct 8th - East Valley VE Team -- 4:30 PM
Queen Creek Fire Dept, 21802 S Ellsworth Rd, Queen Creek
Contact - Fred Bollinger 480.984.8825

Oct 8th - Yuma ARC -- 9:00 AM
Yuma County Sheriff Office, 141 S 3rd Ave, Yuma
Contact - Robert Sidebottom 928.344.6469
No Walk-Ins - Must Pre-Register

Oct 17th - East Valley VE Team -- 6:00 PM
City of Mesa Bldg, 640 N Mesa Dr, Mesa
Contact - Steve Gurley 480.704.3666

Oct 18th - Boy Scout Troop 127 -- 8:00 PM
St Francis Xavier School, 4715 N Central Ave, Phoenix
Contact - John Kelly 602.264.6854

Oct 21st - Tonto ARA -- 6:00 PM
Payson Public Library Meeting Rm, 328 N McLane Rd, Payson
Contact - Darde De Roulhac 928.468.1487

Oct 22nd - Arizona ARC -- 7:00 PM
American Red Cross, 6135 N Black Canyon Hwy, Phoenix
Contact - Joe Cutitta 623.215.2226
No Walk-Ins - Pre-Registration Required by Friday Nite



Public Service Calendar

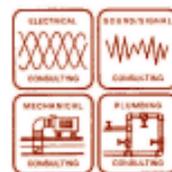
| EVENT | LOCATION | DATE |
|---------------------------------|--|-------------|
| Diabetes Walk | Midwestern University Near Loop 101 & 59th Avenue | 10/01/11 |
| Diabetes Walk | Rawhide Rawhide Near Wild Horse Pass Casino | 10/01/11 |
| Tour de Scottsdale | N E Valley | 10/02/11 |
| Cactus Cha-Cha | White Tanks Mtn Park | 10/08/11 |
| Tour de Paradise | Phoenix/Paradise Valley/Anthem | 10/15/11 |
| JR ROTC Orienteering | Lake Pleasant | 10/22/11 |
| Cave Creek Mt Bike Race | Cave Creek | 11/12/11 |
| Javalina Jundred | McDowell Mtn Park | 11/12-13/11 |
| Cave Creek Road Ride | Cave Creek | 11/13/11 |
| Fiesta Bowl Half Marathon | Scottsdale | 12/04/11 |
| JR ROTC Orienteering | First Water Trail Head | 12/10/11 |
| Runner's Den Road Classic | Paradise Valley Mall, Southeastern Phoenix | 02/12/12 |
| March of Dimes March for Babies | Wesley Bolin Plaza (State Capitol) | 04/14/12 |

To sign up send email to: mcecg@yahoo.com
MCECG on the Web MCECG.ORG for event sign up
For information on events, join - azhamserve@egroups.com

Jim Pierce, N7QVW - 623.551.1204 - jim@n7qvw.net
Brian McCarthy, N7TUQ - 623.486.0507 - n7tuq@arrl.net



R.J. CARLI ENGINEERING CORP



7311 E. STETSON DRIVE
SCOTTSDALE, ARIZONA 85251

RAYMOND J. CARLI, P.E.
ELECTRICAL ENGINEER
W7GNE

(480) 941-8610 (OFF)
(480) 945-7020 (FAX)

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.

12 STORE BUYING POWER



HAM RADIO OUTLET

WORLDWIDE DISTRIBUTION

Manufacturer Day in Salem NH - Aug 22!

Special one day only pricing at ALL 12 HRO STORES

(Salem only) - Hourly Prices -

- Meet Mfr. Reps -

- See the latest gear -

- Refreshments -

10:00 - 5:30 pm

(No purchase necessary)

ANAHEIM, CA

(Near Disneyland)
933 N. Euclid St., 92801
(714) 533-7373
(800) 854-6046
Janet, KL7MF, Mgr.
anaheim@hamradio.com

BURBANK, CA

1525 W. Magnolia Blvd., 91506
(818) 842-1786
(800) 854-6046
Eric, K8EJC, Mgr.
Magnolia between
S. Victory & Buena Vista
burbank@hamradio.com

OAKLAND, CA

2210 Livingston St., 94606
(510) 534-5757
(800) 854-6046
Mark, W17YN, Mgr.
I-880 at 23rd Ave. ramp
oakland@hamradio.com

SAN DIEGO, CA

5375 Kearny Villa Rd., 92123
(619) 500-1900
(800) 854-6046
Hay, 163 & Claremont Mesa
saddiego@hamradio.com

SUNNYVALE, CA

510 Lawrence Exp., #102, 94005
(408) 736-9406
(800) 854-6046
Jon, K6WV, Mgr.
So. from Hwy. 101
sunnyvale@hamradio.com

NEW CASTLE, DE

(Near Philadelphia)
1509 N. Dupont Hwy., 19720
(302) 322-7092
(800) 644-4476
Jim, K3JN, Mgr.
RT.13 1/4 mi., So. I-295
newcastle@hamradio.com

PORTLAND, OR

11705 S.W. Pacific Hwy.
97223
(503) 598-0555
(800) 854-6046
Leon, W7AD, Mgr.
Tigard-99W exit
from Hwy. 5 & 217
portland@hamradio.com

DENVER, CO

8400 E. 31st Ave., #8, 80231
(303) 745-7373
(800) 444-9476
John, WB1G, Mgr.
denver@hamradio.com

NEW LOCATION!

PHOENIX, AZ

10615 N. 43rd Ave., 85029
(602) 242-3515
(800) 444-9476
Gary, N7GJ, Mgr.
Corner of 43rd Ave & Pactor
phoenix@hamradio.com

ATLANTA, GA

6071 Buford Hwy., 30340
(770) 263-0700
(800) 444-7927
Mark, KJ4VD, Mgr.
Doraville, 1 mi. no. of I-285
atlanta@hamradio.com

WOODBRIIDGE, VA

(Near Washington D.C.)
14803 Bulfinch America Dr. 22101
(703) 643-1063
(800) 444-4799
Steve, W4SHG, Mgr.
Exit 161, I-95, So. to US 1
woodbridge@hamradio.com

SALEM, NH

(Near Boston)
224 N. Broadway, 03079
(603) 898-3750
(800) 444-0947
Chuck, N1UC, Mgr.
sales@hamradio.com
Exit 1, I-93;
28 mi. No. of Boston
saalem@hamradio.com

Yaesu Summer Specials Good Thru 8-31-09



FT-897D VHF/UHF/HF Transceiver

- HF/6M/2M/70CM • DSP Built-in
- HF 100W (20W battery)
- Optional PS - Tuner • TCXD Built-in

Call Now For Our Low Pricing!



FT-950 HF + 6M TCVR

- 100W HF/6M
- Auto Tuner built-in
- 3 roofing filters built-in
- DMU-2000 Compatible

Call Now For Low Pricing!



FT-8800R 2M/440 Mobile

- V-U/V-V/U-U operation
- V-U full duplex • Cross Band repeater function
- 50W 2M 35W UHF
- 1000+ Memory channels
- WIRES ready

Call Now For Low Pricing!



VX-3R 2M/440 HT

- Ultra-Compact Dual-Band HT w/ Wide band RX
- 1.5W RF out 2m/ 1w RF out 440
- WIRES Compatible
- 1000 Memory channels
- AA Battery compatible w/Optional FBA-37

Call For Low Intro Price!

FT-60R

- 2m/440 HT
- SW Wide-band receive
- CTCSS/DCS Built-in
- Emergency Auto ID

Low Price!



VX-7R/VX-7R Black

- 50/2M/220/440 HT
- Wideband RX - 900 Memories
- 5W TX (300mw 220Mhz)
- Li-Ion Battery
- Fully Submersible to 3 ft.
- Built-in CTCSS/DCS
- Internet WIRES compatible

Now available in Black!

VX-6R

- 2M/220/440HT
- wideband RX - 900 memories
- 5W 2/440, 1.5W 220 MHz TX
- Li-Ion Battery - EAI system
- Fully submersible to 3 ft.
- CW trainer built-in

NEW Low Price!

VX-8R

- 50/144/222/440 Handheld
- 5w (1W 222)
- Bluetooth optional
- waterproof/submersible 3 ft. 30 mins
- GPS/APRS operation optional
- Li-Ion Hi-capacity battery
- wide band Rx

NEW!



FT-857D

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

Call for Low Price!



FT-7900R 2M/440 Mobile

- 50w 2m, 45w on 440mhz
- Weather Alert
- 1000+ Mems
- WIRES Capability
- Wideband Receiver (Call Blocked)

Call Now For Your Low Price!



FT-2000/FT2000D HF + 6M tcvr

- 100 W w/ auto tuner • built-in Power supply
- DSP Filters / Voice memory recorder
- 200W (FT-2000D)
- 3 Band Parametric Mic EQ • 3 IF roofing filters

Call For Low Pricing!



FT-450AT HF + 6M TCVR

- 100W HF/6M • Auto Tuner built-in • DSP Built-in
- 500 Memories • DNR, IF Notch, IF Shift

Call Now For Special Pricing

AZ, CA, CO, GA,
VA residents add
sales tax. Prices,
specifications,
descriptions,
subject to change
without notice.

Look for the
HRO Home Page
on the
World Wide Web
<http://www.hamradio.com>

#1
in Customer
Service

COAST TO COAST
FREE SHIPPING
UPS - Most Items Over \$100
Rapid Deliveries From
The Store Nearest To You!

