



Bud, N7CW and Lloyd, WA6ZZJ

ARES/RACES members ascended Mt. Union to replace the antenna on the 147.260 repeater.

See Mt. Union Repair Trip, Page 6

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**THANK YOU**



Award presented to Joe Oliver, AC6AA at YARC August Meeting

Thanks to all you folks who have contributed to the Yavapai Signal over the past four years. This is the 50th issue of our newsletter that I have edited. With your help, we shall continue to publish a newsletter that our club can be proud of.

Thanks to the YARC for this award presentation, and a special thanks to Jeff, WB7RFY for constructing this unique award. 73, Joe, AC6AA

### Membership Count:

- 1st Thurs. in July.....178
- Gain/Loss..... +3
- 1st Thurs. in August...181

\* Includes 7, 3-Month Memberships



## *Welcome to the Yavapai Amateur Radio Club*

The Yavapai Amateur Radio Club (YARC) is an ARRL affiliated Special Service Club. The club participates in many activities in the tri-city area by providing communications for local events, emergency communications, and promotion of the hobby throughout the community.

Membership in the YARC is open to any interested amateur or non-amateur alike. Dues are \$20.00/year (Full-time students \$15). The YARC meets at 7:00 p.m. local time on the first Thursday of every month in the Technology Room 404, at the Granite Mountain Middle School, 1800 Williamson Valley Road in Prescott. It is about ½ mile north of Iron Springs road, and all amateurs and non-amateurs as well are invited. Programs of interest are included as part of the meeting.

The weekly Net is held every Wednesday at 7:00 p.m. local time on 146.880- repeater. All amateurs are invited to participate, and visitors are always welcome.

The Yavapai County ARES/RACES Net is held on Monday nights approximately at 7:00 p.m. local time on the 145.290- repeater on Mingus Mountain. A PL of 127.3 is required.

### *Club Repeater*

The YARC 146.880- repeater is located on the hill above Willow Creek road and requires a PL of 100.0 Hz. Our deepest gratitude to Bill Kafka, W2YAV for allowing us to acquire the original club repeater.

## *Minutes of August 6, 2009 Board Meeting*



Meeting was called to order at 1806 hrs. by the President, W7TQJ. Also in attendance:

KB7TRE, KF6SPS, KE7DTR(6:30), N6LSA, K6VVR, AB7NK, WB7RFY, W7JLC, WN7L, KC8BOB, W5VJH, KE7KWH, and KA7JAS.

Upcoming programs and preparations for tonight's program were reviewed.

Proposed rebuild of website discussion was tabled to next meeting. Sample url's distributed on agenda.

West Yavapai Guidance Clinic & Yavapai Food Bank added to GMMS; Sharlot Hall Museum, previously considered for financial gifts. Discussion tabled due to pending questions. Re-visit at next meeting.

Concerns rose over participation at 2009 Yavapai County Fair. Insurance rider must be applied for soon if booth is going forward. Possibility of static display with flyers, etc... when volunteer staff not available briefly mentioned. KV8TD will address at meeting.

W7JLC has made special request in advance to address the Board, specific to "friction between clubs".

6:14 pm. W7JLC: Disappointed; always advocated the clubs do things together. Interviewed a number of people (10-12), all but one say they did not fully understand what was going on. Unanimously they & I have a perception of a good part of it is rooted in personal disputes at the

management level of both clubs. Could have been avoided with better communication. Money is the least of the issue. Suggests VVARA & YARC Boards meet. Perhaps it was an experiment, it failed, we ought to just get along and get back into ham radio, keep factions apart. Maybe in a few years it will come up again, and we'll see then. Money should not be an issue. Perception. Polarization. Personal wedges. Counted 51 joint members. YARC members, who are also VVARA members, are most hurt by this. Separate ways, that's OK. No personalities. Others would like to comment:

KC8BOB: Feel we all should be supporting both clubs. What is this doing to ham radio and to improve both clubs and the relationship between both clubs? Hamfest report published in newsletter show 38 hamfest volunteers, 23 of whom are VVARA members. Noted that all listed were not actively involved. Do not understand mentality of us versus them.

W5VJH: Noticed in the last year that openness has ceased. Good relationship threatened. Avoid Politics. I don't think it was right.

WN7L: What I voted for was not clear; as Vice-President of VVARA I probably would have opposed; it was underhanded. Promote Amateur Radio. A misunderstanding.

KA7JAS: Two clubs – two separate purposes. Common goal should be to make the Amateur community better.

K6VVR: As Vice-President of YARC, I was here for set-up, I worked as much as possible both days to make a good hamfest, yet I am being counted as a VVARA volunteer, which was not the case.

AB7NK motioned for a joint board

meeting, K6VVR seconds, idea dismissed from floor with comment from W7JLC “just point out that it was resolved and that’s all, get on with ham radio”; no vote.

6:50 pm

Board reviewed what was just offered.

Will offer clarification at membership meeting.

Meeting was adjourned at 1857 hrs.

Respectfully Submitted;

Jeff Hanna, WB7RFY

YARC Secretary

### *Minutes of August 6, 2009 General Meeting*

Meeting was called to order at 1902 hrs. by the President, W7TQJ.

Following the Pledge of Allegiance, introductions were made.

**Attendance:** 73 of whom 65 signed in. Visitors included Robert Marie; Peter Genereux, W3OOF & David Hancock, KD7DUE.

**Minutes of the July 2, 2009 meeting,** on motion of KB7TRE, second of K6UWV, & no dissenting votes, were approved as published.

**New Members:** On motion of K7IOG, second by N6LSA, and later motion by WB7UZV, second of AD7ZK, Mark Pansing, KF7CYE, Kenneth Kelly, W7WV, Terry Ford, N7CQO & Tim Urell, were voted into the membership with no dissenting votes.

**Treasurer:** AB7NK reports beginning balance of \$4550.37, ending balance \$4616.98, and repeater fund balance of \$ 714.92. On motion of N7CW, second by KD7VVBG, and no dissenting votes, report was accepted as read.

**Presentation:** In recognition of excellence and dedication, Yavapai Signal Editor Joe Oliver, AC6AA, on the occasion of 50<sup>th</sup> issue as Editor, was presented with a ‘tubed’ trophy and standing ovation of the membership, in acknowledgement of continuous and outstanding efforts for the club.

#### **COMMITTEE REPORTS:**

**ARES/RACES:** KD7VVBG reviewed upcoming public service events and dates; sign-up sheets are on the front table, or contact [WA6ZZJ@cablone.net](mailto:WA6ZZJ@cablone.net).

**Newsletter:** AC6AA reports all OK.

**IRLP:** W7JLC reports all well; host repeater owner has renewed coordination for the next 2 year period.

**PIO:** WB7RRQ solicited any materials suitable for public dissemination be sent to [ROSEVEAR520@cablone.net](mailto:ROSEVEAR520@cablone.net).

**VE Report:** AB7NK announced next scheduled session is October 24, 2009 at Embry-Riddle; open to all and for all test levels. [AB7NK@arrl.net](mailto:AB7NK@arrl.net).

**Patches:** Treasurer has two sizes available for \$3.00 each & club stickers for \$1.00 each.

**Shirts:** W6CCD reports a few remaining in M & XL. \$19.00.

**CLASSES:** W7JLC and team will be conducting a one day intensive 8 hour Technician Class on Saturday, October 10<sup>th</sup> at Embry-Riddle, open to all. Contact [JSCRA@cablone.net](mailto:JSCRA@cablone.net).

**Repeater:** Committee chair WB6ODR says running perfectly.

**Badges:** Several on order as of tonight, \$6.75 each. KB7HH’s is available for pickup. Order at meeting or contact [LRSMITH@cablone.net](mailto:LRSMITH@cablone.net).

**Elmer:** KA7JAS has a list, is point person for any questions or needs. [KA7JAS@arrl.net](mailto:KA7JAS@arrl.net).

**Refreshments:** K6UWV pointed out available treats & sweets. One pot of coffee already drained; there will be fresh by break.

**School Clubs:** KB7TRE reported for all. Bradshaw Mountain has installed new vhf/uhf antenna; will need assistance to install HF antenna system after classes commence. Granite Mountain acknowledged donation by VVARA to the school via check in amount of \$316.02 (applause). County education fair may occur at rodeo grounds in fall, will have joint amateur radio display and may ask for staffing assistance.

**Young Hams Net:** KI6AHH reports all progressing well, please encourage any young folks to participate.

**Slow Code Net:** WB7UZV encourages all to check-in or listen in. Code practice CD’s are available to borrow if you’d like more practice. Roundtable format; a lot of fun.

**Programs:** Tonight K6VVR, assisted by WB7UZV will lead those interested through actual construction of a tape measure yagi antenna suitable for fox hunting. September is W7TQJ on Zepp and long-wire antennas. Other ideas are solicited for upcoming months, [RICHBOZEAT@cablone.net](mailto:RICHBOZEAT@cablone.net).

#### **OLD BUSINESS:**

**County Fair:** KV8TD has sign-up sheets available to staff fair booth October 1st – 4<sup>th</sup>, with set-up on Sept 30<sup>th</sup>. Dates conflict with Prescott Road Rally and other events. Need full participation to promote amateur radio at this year’s fair. [W6NXH@aol.com](mailto:W6NXH@aol.com). Would like one General or higher on each shift to allow broader HF demos.

**Hamfest:** W7TQJ spoke to misunderstandings and confusion over vote last month to expand sponsorship of the Annual Prescott Hamfest. It was not evidently clear that funds would no longer be split with Verde Valley Amateur Radio Association or any co-sponsors, so was clarified. "Co-sponsors shall receive recognition as co-sponsor and hamfest booth at no charge for their use. They will not share in any profits or losses. We did not take away co-sponsorship by the VVARA. We did not take away their space at the hamfest. We did not take away their credit as co-sponsor." Board has tabled discussions due to this pending issue; will be reviewing options to benefit community with any future hamfest profits. After long pause, question from floor asked "what repercussions from other side of the hill?"; was referred to VVARA for response.

**NEW BUSINESS:**

**Philanthropic:** Last month's speaker set out a bucket with instructions that "if you enjoy, toss a few coins in to benefit Hospice in Yuma". Letter from Hospice of Yuma received thanking all for "\$90.67 collected during your Amateur Radio lecture to benefit Hospice of Yuma". K6VVR noted that during recent lunch bunch at Red Robin, assembled collected \$360.00 to benefit a firefighter's family (Chris Moffet) awaiting a transplant operation. KB7TRE rose and reminded all that Yavapai Food Bank is always challenged; current economic conditions keeping shelves bare. Suggests those that can or care to, as a standing procedure, start bringing a can of food or other non-perishable food stuffs to the YARC meeting; will be forwarded in bulk to the food bank. Small contribution can collectively make a big difference (applause). KE7ODP reminds that cash is always an option to assist the food bank; an impromptu collection was started on the spot.

**NRA Birthday Special Event Station:** Briefing by WB9VGJ, this has become an annual event using K7NRA (Mike Campbell, Cottonwood) call sign, operating from Gunsite Academy (Buz Mills, K7GST, Paulden). Club usually covers some lunch costs; lots of fun; come operate and visit November 17, 2009, 8: am to 4:pm. Motion by AE7BK, second by KE7NAP, and no dissenting heard, chicken, salads, drinks, donuts, etc... approved for the special event.

**Caution:** N7RIS encourages all to identify and act properly on our amateur bands, after witnessing incident of poor operating behavior.

**50/50 Drawing:** \$69.00 was won by Brian Stapleton, KW6J. Additional drawing for a dozen fresh eggs was won by K6VVR.

Meeting was adjourned at 1955 hrs. on motion of WB9VGJ, second of KA7LKW, and no dissenting votes.

Respectfully submitted;  
 Jeff Hanna, WB7RFY  
 YARC Secretary



**Pete, K6VVR and Jim, WB7UZV hand out kits and instructions for YAGI antennas to be used for Fox Hunting. Assembly took place on August 6th after the YARC business meeting held at the Granite Mountain Middle School.**

To see pictures of this well-attended event, go to John Broughton, WB9VGJ's Webshots page at <http://tinyurl.com/nb2aa5>

***Bring a Can of Food***



Those folks who can, or care to, as an ongoing practice, please bring a can of food or other non-perishable food stuff to the YARC meetings.

Items will be forwarded in bulk to the Yavapai Food Bank, which is challenged to keep enough food on their shelves.

If everyone could just share a little of what they have, it could make a big difference in helping others get through these difficult times. ■

## Yavapai Amateur Radio Club Treasurer's Summary August 2009

By Mary Vince, AB7NK Treasurer

### INCOME

7/10	KF7CYE	Mark Pansing	N	1493	30.00
7/10	KF7CYE	Mark Pansing	ARRL/N	1495	39.00
7/31	AD7UR	Richard Myers	R	4481	20.00
7/31	W7WV	Kenneth Kelley	N	1503	20.00
7/31	W7CNQ	Art Demlong	R	1435 (2yrs)	40.00
8/6	W7JLC	Jack Crabtree	R	6919	20.00
8/6	KD7MTJ	Al Crook	R	8093	20.00
8/6	KD7VBG	Patti Halgunseth	R	3149	20.00
8/6	NO CALL	Tim Urell	N	cash	40.00
8/6	N7CQO	Terry Ford	N	2932	42.00
8/6	CASH	50/50			<u>138.00</u>
Total Income					\$429.00

### EXPENSES

7/13	KF7CYE	ARRL/New Mark Pansing		1098	24.00
8/6	K6UWV	Dave Passell – refreshments		1099	27.77
8/6		Allegra		1100	30.18
8/6	KW6S	Brian Stapelton / 50/50		cash	69.00
8/9		Hotel St. Michael's (1-16-2010)		1101	500.00
8/14	KV8TD	Yavapai. County Fair Assn		1102	<u>90.00</u>
Total Expense					\$740.95

Beginning Balance	\$ 4,616.98	July ending repeater balance	\$714.92
Aug Income	<u>429.00</u>	Aug repeater fund	<u>50.00</u>
Sub Total	5,045.98		
		August repeater fund balance	\$779.92
Expenses	<u>&lt;740.95&gt;</u>		
Sub Total	\$ 4,305.03		
August repeater fund	<u>(779.92)</u>		
General Fund Balance	\$ 3,525.11		

Net Loss <311.95>

AB7NK Treasurer  
8/20/09

**NOTE:** The September YARC meeting date has changed for this month only. Due to a school function on our regular meeting night, we will meet on **Thursday, September 10, 2009.**



By Lloyd, WA6ZZJ

## ARES/RACES.....

### MT. UNION REPAIR TRIP.....

On Thursday, July 23<sup>rd</sup> a crew of ARES/RACES members ascended Mt. Union to replace the antenna on the 147.260 repeater and do some general maintenance on and in the building. A temporary 4.5 dB gain antenna was installed in January after a wind and ice storm blew down the then permanent antenna at that time. A repaired 8.3 dB gain antenna was put up and from reports received right after the installation, and since, it has increased the repeater signal strength in some of the former weak signal areas.



Lee, KB6CBK on Tower

Thanks to Bud, N7CW, for organizing the effort and thanks to Tom N6LSA, Terry KB7TRE, Jim N6KZ, Lee KC7CBK, Bud N7CW and Lloyd, WA6ZZJ for assisting in the repair and maintenance efforts. The repeater site is much improved thanks to their work.

If anyone needs a repeater site cleaned up, I might be able to recommend a few names.....

Once again, Thanks to these folks for their dedication and hard work.

### SPECIAL EVENT COMMUNICATIONS.....

Upcoming Events...

September and October are going to be busy months for Yavapai Amateur Radio Club Special Event Communications.

Saturday, September 12<sup>th</sup> the March of Dimes March for Babies (5 to 9 operators). This event is currently staffed with enough operators.

Saturday, September 19<sup>th</sup> the Tour De Pee Vee ½ Marathon, 10K, 5K and 2 mile (10 to 15 operators).

Saturday, September 26<sup>th</sup> the Groom Creek Classic with a new for this year ½ Marathon along with the 10K, 5K and 2 mile (10 to 15 operators). Patti, KD7VBG, is in charge of communications for this event.

Friday and Saturday, October 2<sup>nd</sup> & 3<sup>rd</sup> the Prescott Road Rally. Volunteers can register at: <http://prescottrally.com/>

Saturday, October 17<sup>th</sup> the Step Out to Fight Diabetes Event. John, WB9VGJ, is in charge of communications for this event.

If you have not already signed up to participate in one or more of these events there will still be time to do so at the September YARC meeting.

Special event communications is an excellent way to get practice and improve your emergency communications skills. ■



**I HID THE NEW AMP I JUST BOUGHT IN THE CLOSET---  
WHEN THE WIFE FINDS OUT ABOUT THAT, THE SKY  
WILL COME CRASHING DOWN!**

## VE Tidbits



by **Mary Vince – AB7NK**

### VE TESTING

Saturday, October 24, 2009

9:00 A.M.

Embry Riddle University  
3700 Willow Creek Rd  
AXFAB Bldg #75

To pre-register send an  
email to [ab7nk@arrl.net](mailto:ab7nk@arrl.net)

For more info go to the club  
website at [www.w7yc.org](http://www.w7yc.org)  
click on the VE tab.

## Amateur Radio License Class Announcement

Yavapai County Amateur Radio Clubs are pleased to announce a free Amateur Radio License course to be held on Saturday, October 10th, 2009. This course will consist of an intensive one day session that will cover the material required to pass the FCC license exam for the Technician class license.

The location for this course will be at Embry-Riddle Aeronautical University (ERAU), room 103 of the Aerospace Experimentation and Fabrication Building (Building 75-AXFAB), 3700 Willow Creek Road, Prescott, Arizona. The course will start at 8:00 A.M. and will complete about 4:30 P.M. There will be a few breaks and a half hour for lunch.

This license class is sponsored by the ERAU Eagle Amateur Radio Club and the Yavapai Amateur Radio Club. There is no cost for the course.

The recommended but optional text book for this course is The ARRL Ham Radio License Manual, 1st edition, 2006-2009. A quantity buy discount will make the manual available for \$20.00 (normally \$24.95), Note the ordering deadline is September 29, 2009. Textbook details are available from [www.arrl.org](http://www.arrl.org).

Exams for all license classes will be conducted on October 24, 2009. The cost of the license exam is \$15.00. The exam session will be held at 9:00 A.M. at the same ERAU location as described above. Additional details of the exam will be made available to those attending the course.

Registration for this class is requested. You may register by sending an email to the address below. You will be placed on an email list, which will be used to disseminate further information, campus maps, and updates.

Jack Crabtree, W7JLC

Volunteer Instructor Coordinator

Prescott, AZ

928-771-2344

[jskra@cableone.net](mailto:jskra@cableone.net)

## Need Cards Checked for ARRL Operating Awards?



Jim Zimmerman, N6KZ can check your QSL cards for DXCC, WAS, VUCC, WAC, etc.

For information contact Jim at: (928) 713-0542.

He is located at 778 Grapevine Lane,  
Prescott, AZ 86305.

## Upcoming Events

- September 12, 2009 - March of Dimes March for Babies.
- September 19, 2009 - Tour de Pee Vee 1/2 Marathon.
- September 26, 2009 - Groom Creek Classic.
- October 1 - 4, 2009 - County Fair
- October 2 - 3, 2009 - Prescott Road Rally.
- October 10, 2009 - Technician Class at Embry Riddle.
- October 10 -11, 2009 - Arizona QSO Party
- October 17, 2009 - Step Out to Fight Diabetes Event.
- October 24, 2009 - VE Testing at Embry Riddle.
- November 17, 2009 - NRA Birthday Special Event Station.

### YARC Officers for 2009

#### President

Bob Erdmann, W7TQJ  
W7TQJ@cableone.net

#### Vice President

Pete Morrison, K6VVR  
pm\_service@earthlink.net

#### Secretary

Jeff Hanna, WB7RFY  
jeff668@commspeed.net

#### Treasurer

Mary Vince, AB7NK  
ab7nk@ARRL.net

#### Board of Directors (includes Club Officers)

Terry Pemberton -- KB7TRE

Tom Griswold -- N6LSA

Richard Bozeat -- KE7DTR

Walter Schumann -- KF6SPS

**Newsletter Editor:** Joe Oliver, AC6AA  
joliver@cableone.net

## Data Professionals Heathkit Page

Providing support for legacy Heathkit Products.

*Data Professionals* of Pleasanton California has purchased the Copyrights and existing inventory of all legacy Heathkit product documentation from Heath Company of Benton Harbor Michigan for an undisclosed amount. The new company will make copies of the original legacy manuals available to the marketplace via <http://www.d8apro.com/> and through eBay and PayPal.

Owner Don Petersen explains that he previously worked at Heathkit in Benton Harbor as a service technician and kit design engineer in the 1970s. Don now has various manuals, original parts and replacement kits for elderly Heathkits that could be very helpful if you are repairing or restoring these fine examples of do-it-yourself electronic technology. ■

## Facts for Well-Informed Hams

- Sharks are immune to disease, i.e., they do not suffer from any disease.
- Antarctica is the coldest continent -- averaging minus 76 degrees in winter.
- Man is the only animal that will eat with an enemy.
- The average woman uses about her height in lipstick every five years.
- A rat can last longer without water than a camel can.
- An elephant can smell water 3 miles away.
- Queen ants can live to be 30 years old.
- Women blink twice as much as men.
- It is impossible to sneeze with your eyes open.
- A dentist invented the Electric Chair.
- A person can live without food for about a month, but only about a week without water.
- 24 Karat Gold is not pure gold, since it contains a small amount of copper. Absolutely pure gold is so soft that it can be molded with the hands. ■

# Grid Expedition 2009

By Bud Semon, N7CW

This year's summer vacation was to be a couple weeks in northwestern Montana, primarily for my partner Susan to attend a quilting class in Kalispell. After looking at the most wanted grids map, I convinced her that we should drive there and I should operate 6 meters from some of the rarer grids along the way.

I intended to operate mobile during the entire trip, and if the band opened, fine. If not, fine. Kalispell is near the intersection of DN27, DN28, DN37 and DN38. DN37 and DN38 are relatively rare, so I planned to operate both CW/SSB and high speed meteor scatter (HSMS), with WSJT (Weak Signal Communication, by K1JT), from there. Then on the way home, I would stop in some of the rare UT grids. After I published my itinerary, I got an email from Paul, K7CW, who needed DN34. So I agreed to try and stop there to work him.

During my planning and scheduling, Jim, KS7S, foolishly agreed to act as my coordinator for HSMS contacts using Ping Jockey. Since I didn't expect to have Internet access in most of the places I was going, this was an incredible help. And Jim was able to give me operating advice along the way. Unfortunately, HSMS works best in the early morning and once I crossed into UT, we moved to Mountain Daylight Time – one hour later than AZ time. So when I got up at 5 AM to be on the air, Jim was getting up at 4 AM. What a guy!

As you might expect, the band did not cooperate on most of the trip north. We drove through some particularly rare grids, with some wonderful radio locations and didn't hear one signal. Such is the Magic Band! I did manage to work a few stations from DN41, DN31, DN32, DN33, DN34 and DN35.

DN34 covers some flat terrain and then, moving north, becomes fairly mountainous. Jim suggested stopping before the mountains to try and work Paul. So we pulled off the highway into a rest area to try our hand at setting up the equipment. Although I had set everything up before leaving home, this would be my first QSO under portable conditions. As I was setting up, a guy got out of a motor home parked in the rest stop and came over to see what we were doing. He asked me "Working any DX?". My jaw dropped – he introduced himself as WA6???. What are the chances? Continuing to set up, we found one coax connector was broken. Fortunately, I had spare coax. It took me about 40 minutes to set everything up and 2 minutes to work Paul with FSK441. Susan is an expert at butt shots – here is one:



Here is the equipment:

The setup consisted of an FT100D radio driving a Mirage A1015 150 watt amplifier (borrowed from W7QHE). I used a Samsung netbook computer running WSJT and a Tigertronics SignaLink sound card interface. The antenna is a 3 element yagi from M<sup>2</sup>, on 20 feet of mast and an under-tire mount.

After we arrived in Kalispell, I took some time to try and find the grid boundaries of DN27/DN28 and DN37/DN38. The exact corner of all 4 grids was not accessible. I found a couple spots for DN27/DN28 – neither very good radio locations. I did operate

**See Grid Expedition 2009, Page 10**

## ● Grid Expedition 2009 (Continued from Page 9)

from there for 1 morning. I found a fair spot for the DN37/DN38 boundary, although the radio horizon to the northeast was pretty high. It was in a cul-de-sac of a development-to-be; the streets were in, but no houses. I operated from this spot for the contest.

The rules for grid boundary operations are a bit ridiculous. They require you to be physically in both grids simultaneously. And they would like a movie to prove it! Well, GPS accuracy is not good enough to guarantee that. I parked my car as the GPS read 48.00000°, but by the time I got around to taking a video, the GPS read something else. So for each grid boundary, including DN27/DN28, DN37/DN38, DM39/DM38 and DM46/DM47, there is a movie showing the GPS reading, but it was never XX.00000°.



I operated the VHF Contest from the boundary of DN37 and DN38. These rules are also stupid. They forbid a station from claiming to be on a boundary – you must choose only 1 grid. So I chose DN37, as it is slightly rarer. However, the QSL card shows that the QSO counts for both grids.

After some hiking in Glacier National Park:



and some wildlife encounters:



we headed home.

Once again, horrible 6M conditions accompanied us. I managed to work stations in DN37, DN38, DM48 and DM46 from the car. I stopped at the grid boundary for DM39/DM38, worked some guys on WSJT, then moved to DM48. I actually had a sporadic E opening while I was in DM48 and managed a few SSB QSOs in addition to the WSJT action. We moved to the boundary of DM46/DM47 for more WSJT. We also had a short Es opening while driving in DM46. I had a great time, both vacationing and operating the radio. Look for me in 2010 – another quilting vacation is in the works, along with some more rare grids. ■

## Need a Hand?



If you need assistance, we want to help you. If you are just starting out in ham radio, or simply have run across something that you could use a hand with... technical assistance or answers to questions about the Yavapai Amateur Radio Club, are available from knowledgeable club members.

**Don't Hesitate to Ask for Help!!** Call Neil Vince, KA7JAS at: (928) 775-2158

# 50 MHz Halo revisited

By Bruce Randall, W1ZE

Several years ago Dick Stroud, W9SR had an article in QST titled “Six Meters from Your Easy Chair.” This article caught my eye so I made a copy of the article and put it in my Ham radio antenna computer file (a very large file).



A year ago, after I got my 55-foot tower up in the air with my SteppIR Yagi on it, I thought it would be a good thing to have an Omni-directional, horizontally polarized antenna for six-meters so I could keep tabs on the calling frequencies to alert me to six-meter band openings.

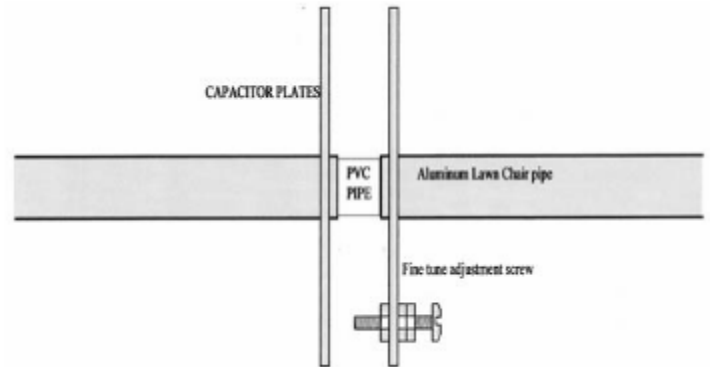
A halo or squalo antenna would fit my needs. At about the same time I was about to clean out the garage and noted two old cheap Wal-Mart aluminum folding-chairs. One was a little bent out of shape and the other had its webbing coming apart. Dick’s article came to mind and they were saved from a trip to the Phippsburg recycling center and relocated to the workshop.

I made a trip to the hardware store for a small piece of aluminum sheet to fabricate the capacitor plates and a blank galvanized electrical quad box cover to be used as the mounting plate.

With hacksaw and tin-snips I went to work. A few hours of fabrication work the antenna started taking shape. After it was assembled I went into the test mode with my antenna analyzer. After some gamma-match adjustments and finding a proper capacitor gap, I got it resonant in the in six-meter band. What was troubling to me was the touchiness of the capacitor disc plates adjustment. I could never seem

to get the SWR sweet spot at 50.125. It was either out of the band on the low side or up at the high end of the band, never a happy medium. I needed a smaller capacitor in parallel to the big disc capacitor to fine-tune the antenna.

What I settled on was a 6-32 brass screw and a few brass nuts that would act as a screwdriver adjusted capacitor mounted near the edge of one capacitor plate.



This mod worked slick. After rough tuning of the capacitor plate I could fine-tune the screw to have the lowest SWR at 50.125. Two turns of the screw would move the sweet spot 20 kHz. After final adjustment, I had 1.5:1 or less from 50.010 to 50.500 MHz, with most of that range 1.1:1.

I have made dozens of QSOs with it and it works very well as an Omni-directional horizontally polarized antenna.

If you would like to build a lawn chair halo and need the plans, go to the ARRL web site. If you are a member, download the following PDF file from:

[www.arrl.org/members-only/tis/info/pdf/020133.pdf](http://www.arrl.org/members-only/tis/info/pdf/020133.pdf)

If you are not a member, I will be happy to send you a copy of the plans. I can be reached at [w1ze@arrl.net](mailto:w1ze@arrl.net).

73, Bruce



BEFORE



AFTER



**Kenwood AT-230  
Tuner**

**Asking Price is \$180.00**

Not collector quality, casewise, as it does have some minor scuffing, but the internals are really nice. Can provide detailed pictures if someone requests them by e-mail.

Ken Kelly, W7WV at: [w7wv@live.com](mailto:w7wv@live.com)

(928) 778-1774

## Weekly Breakfasts



### Tues. Morning Breakfast:

**7:00 a.m. at**  
**Back Burner Cafe**  
 8400 E. Long Mesa Drive  
 & N. Robert Road  
 Informal – all are invited.

### Wed. Morning Breakfasts:

**7:00 a.m. at**  
**Iron Horse Restaurant**  
 (Hwy 89 in Chino Valley)  
 (N 34°43'56.5" W112°27'15.4")\*  
 informal – all are invited

**8:00 a.m.**  
**Masonic Lodge**  
 (1280 Willow Creek Road,  
 2<sup>nd</sup> Floor; above Bank of America)  
 informal – all are invited

\* Location data (per WGS84) provided  
 by Fred Zimmermann, N7PJN

## Area Repeaters

Fre- quency	PL	Location	Owner/Club	Auto- Patch	Rem. BaseOr Linked	Vo IP	Notes:
52.560-	100.0	Mt. Union	N7NGM			Echo	-500KHz Offset
53.040-	None	Prescott Airport	WB7BYV				-1MHz Offset
145.290-	127.3	Mingus Mtn.	ARES/RACES				
146.780-	91.5	Williams Mtn.	BWARC			IRLP	
146.880-	100.0	Prescott	YARC				
146.980-	162.2	Flagstaff	CARC				
147.000+	162.2	Mingus Mtn	MMRG				
147.040+	107.2	Prescott Heights	W2YAV				
147.140+	162.2	Flagstaff/-Mt. Elden	ARA		Linked to Mt. Ord -		Mt. Ord=147.36
147.220+	162.2	Mingus Mtn	VVARA				
147.260+	103.5	Mt. Union	ARES/RACES				
224.080-	156.7	Mt. Union	WA7JC				
442.150+	100.0	Mingus Mtn	W1OQ/Northlink				
442.350+	100.0	Glassford Hill	N7KPU			IRLP	
445.300-	100.0	Prescott	WINSYSTEM		Node 3727	IRLP	
448.475-	100.0	Flagstaff-Elden	ARA	Yes			
448.500-	100.0	Prescott	K6JSI				
448.875-	100.0	Flagstaff-Elden	Northlink		Linked		
449.175-	100.0	Towers Mountain	Northlink		Linked		
449.675-	88.50	Prescott Airport	WB7BYV		Linked to P Mtn.		P mtn=927.3875
927.3875-	151.4	Prescott	WB7BYV	Yes	Yes	Echo	Be Nice

**Y.A.R.C. IRLP NODE**  
**Node Number 3182**  
**442.350+ MHz with a**  
**PL Tone of 100.0 Hz**

For more Repeater Information & Listings refer to:

- [www.w7ara.org/Web/](http://www.w7ara.org/Web/)
- [www.azrepeaters.net](http://www.azrepeaters.net)
- [www.azfreqcoord.org/listings.htm](http://www.azfreqcoord.org/listings.htm)

## YAVAPAI AMATEUR RADIO CLUB

P.O. BOX 11994

PRESCOTT, AZ 86304

Visit us on the web at <http://www.w7yrc.org>

Many thanks to Bob Smith, WB6ODR, our Webmaster

