



YAVAPAI SIGNAL



The Yavapai Amateur Radio Club • Prescott, Arizona • DM-34 • Volume 23 – No.6 • June 2008

Whiskey Row Marathon - May 3, 2008

By Lloyd Halgunseth, WA6ZZJ



Saturday morning, May 3, 2008 is the morning of the 30th running of the Whiskey Row Marathon in Prescott. It is also, according to my records, the 10th consecutive year that the Yavapai Amateur Radio Club has provided the Prescott YMCA with full special event radio coverage of the entire route. Some club members that have been around longer than me tell about the club providing communications for the Marathon in previous years, but before my time here in Prescott. I first became involved in 1997 when the ARES assisted the Yavapai County Jeep Posse in providing the communications with the Posse covering the forest road areas and ARES doing the 'in city' coverage. It was in 1998 that the YMCA contacted us to provide full route coverage. Starting in 1999 the communications was done as the Yavapai Amateur Radio Club and has been so ever since. The communications coverage provided is so essential to the YMCA that YARC is considered a major sponsor of the Marathon.

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The alarm goes off at 0300 on this Saturday morning. It's time to get up, turn on the coffee pot and get ready to be on station at Cortez and Union Streets with the ARES/RACES MARC for net control by 0500. On the way into town to set up there are already some of our YARC members getting on station at some of the nine 'Water Stations' located approximately every two miles on the marathon route from which communications is provided. These water stations are manned by volunteers from different organizations to provide the runners with drinks and fruit as they pass the locations.

Net control is busy checking in our operators as they head for their respective stations. Positions are: Net Control, an operator in the YMCA Van that travels the marathon route, a shadow operator for the Race Director, two operators on 'quads' to cover the forest road portion of the route and at least one amateur at each of the nine 'Water Stations' with some of the busier locations being staffed with two operators.

Some of the early radio traffic between net control and the Water Station locations deals with the YMCA volunteers arriving (or not arriving) at their locations. When they do arrive, have them check the supplies to be sure everything is in good order. The call comes that one location has no trash bags. Have the volunteers check the totes one more time... Whoops, there they are in the bottom. Another problem solved by our radio communications. This year there was one location with no water cups, so net control contacted one of the 'quads' to transport cups from another location. Once the

• **Whiskey Row Marathon**
(Continued from Page 1)


YMCA van is on route, they take over the supply situation and as the race progresses they are asked to transport runners, who have for some reason become unable to continue running the Marathon, back to the Courthouse Square.

Once all of the races (Full Marathon, ½ Marathon, 10K and 2 mile run) have started, our radio traffic settles down a bit. There are still supplies to be taken care of and then keeping track of the lead runner in the marathon, and last we keep track of the last runner (or walker) to make sure all runners have passed the Water Stations so they can start shutting down. The last runners are tracked until they pass all locations on the way back or until 1200, whichever comes first. All runners are told they must be off the course by 1200 or there will no longer be support available.

The Whiskey Row Marathon is considered one of the five toughest to run in the country due to its elevation gain. The course goes from around 5280 feet at the start, to over 7000 feet in the first seven miles and then drops to 6100 feet at the 13.2 mile point, where the runners turn around and go back over the same route. Some years have seen the runners 'lucky' enough to run in snow at the higher elevations.

For Marathon pictures, go to John, WB9VGJ's website:
<http://tinyurl.com/56nbfk> ■

Membership Count:



1st Thurs. in April.....	135
Gain/Loss.....	+9
1st Thurs. in May.....	144*

* Includes 3-month memberships

Minutes of May 1, 2008
Board Meeting



Meeting was called to order by the President, KB7TRE at 1820 hrs.

Also in attendance, WB9VGJ, KF6SPS, N6LSA, KE7DTR, W3IVQ, KD7VBG, and WB7RFY.

Program committee reports on planned schedule through summer.

W3IVQ suggests a special program directed to youth; committee will check with W7JLC to include balloon program for that effort.

Hamfest Planning including set-up (KB7TRE, KE7DTR, KF6SPS), parking (KD7VBG), shopping (KD7VBG), signs (KB7TRE), raffle (WB7RFY), VE (AB7NK), cooking, talk-in, cashier(s), refreshments to be finalized at meeting. Flyers distributed to HRO, etc... and available online. KB7TRE has received several inquiries about event from early announcements. Raffle prizes reviewed and accepted.

Field Day briefly reviewed; final planning at June Meeting.

Reminder of date change for July meeting to July 10th.

Club insurance renewal due; annual cost \$ 347.00.

Adjourned at 1852 hrs.

Respectfully Submitted,
Jeff, WB7RFY
YARC Secretary

Minutes of May 1, 2008
General Meeting

Meeting was called to order by the President, KB7TRE at 1905 hrs. Following the Pledge of Allegiance, introductions were made.

Attendance: 65 of whom 35 signed in. Many guests included Chris Campbell, KE7NAR and Alex Carter, NS6Y.

On motion of AB7NK, second by WB9VGJ, and no dissenting votes: Doug Jarmuth, N0DAJ; Dude Shirley, KC7FRA; Jim Ball, WB7UZV; Sean Sobel; Logan Crabtree; Noah Hogue; and Christina Gonzales were accepted into the membership.

Minutes from 03 April, 2008 were accepted as published.

Treasurer, KD7VBG reports beginning balance of \$ 1895.52, ending balance of \$ 2025.56, and repeater fund balance of \$ -191.08. Report accepted.

Committee Reports:

ARES/RACES: WA7ZZJ relayed plans for Whiskey Row Marathon on 03 May, and reviewed recent wildfire expo, Prescott Valley multi agency exercise and new installation at Prescott Valley EOC.

Whiskey Off Road Bicycle Event on 26 April: Lee, KC7CBK reviewed, including several medical incidents and pre-planning for next year's event.

Patches: 3 old stock remain. New order should arrive during this month and be available next month, including new 'smaller' version suitable for caps as requested by members.

Shirts: W6CCD has a few on hand in M, L, & XL.

Badges are available thru WB6ODR for \$ 6.75. (WA7ZGK & KD8HDF ready for pickup).

School Groups: Granite Mountain Middle School had several students successfully test today. Will coordinate with Doug Holt at Camp Verde Middle School for a combined school club event. Bradshaw Mountain Middle School had a productive car wash and water fight as a fund raiser, and is heading into summer break with 12 active members. Will have a display as incoming students tour the school in mid May.

VE Report: AB7NK reports a session was held on May 1st with 6 new licenses earned, 4 being youth. Next session will be 9:00 AM prompt 31 May in conjunction with our Hamfest.

Elmer: KA7JAS reports being a bit behind on requests, but all OK and do-able. Applause for all the wide-ranging efforts.

Refreshments: K6UWV reminds all to recycle as they enjoy marvelous treats provided by KI7JZ.

Young Hams Net: Nightly round table at 8:30 local well attended; Sunday night Net on 147.22 may move earlier to accommodate out of area youth participation.

Hamfest: YARC/VVARA Hamfest committees are seating. Volunteer now. 8:00am to 2:00pm Saturday May 31st, 2008, at GMMS. Flyer and Map on website www.W7YRC.org under Hamfest. Has solicited a lot of inquiries from around the State and is expected to grow significantly from last year. KB7TRE and KF6SPS coordinators; KD7VBG to assist and do many duties.

Astronomy week in April resulted in Club display and several community contacts.

Field Day/Picnic/Activities well covered for now; final planning at our June meeting.

On Motion of WB6ODR, second by WB9VGJ, and no dissenting votes, LIFE MEMBERSHIP is conferred to DALE LESLIE - N7XFD to acknowledge years of service and assistance to the club.

SK: KX6H, Jack Hageman (04/22/2008) was honored in memory by W3IVQ

Tonight's program will be 'Geocaching 101' presented by WB6ODR.

50/50 Drawing: \$ 56.50 was won by Ken, WA6AQK.

Meeting was adjourned at 20:23 pm.

Respectfully submitted:

Jeff, WB7RFY
YARC Secretary

YARC Officers for 2008

President

Terry Pemberton, KB7TRE
kb7tre@cableone.net

Vice President

Jack Ragen, W3IVQ
ragen@cableone.net

Secretary

Jeff Hanna, WB7RFY
jeff668@commspeed.net

Treasurer

Patti Halgunseth, KD7VBG
kd7vbg@cableone.net

Board of Directors (includes Club Officers)

John Broughton – WB9VGJ

Tom Griswold -- N6LSA

Richard Bozeat – KE7DTR

Walter Schumann – KF6SPS

Newsletter Editor: Joe Oliver, AC6AA

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.

Treasurer's Financial Reporting Sheet



Club / Group Name: YARC
Reporting Date: May '08

Patti Halgunseth, KD7VBG
Treasurer

Members Name	Dues Paid	Repeater Fund	Donations	Prize Money Paid Out	Net Cash In per Member
Dewey Shirley/N-KC7FRA	\$18.00	\$4.00			\$22.00
Doug Jarmuth/N-N0DRJ	\$18.00	\$2.00			\$20.00
Jim Ball/N-WB7UZV	\$18.00	\$12.00			\$30.00
Robert Tilman/R-K7CJW	\$18.00	\$2.00			\$20.00
David Morrow/R-KD7YEG	\$18.00	\$7.00			\$25.00
Roy Jackson/R-AD7FW	\$18.00	\$2.00			\$20.00
Pete Morrison/R-K6VVR	\$18.00	\$2.00			\$20.00
Fred Zimmermann/R-N7PJN	\$18.00	\$2.00			\$20.00
Michael Ritter/R-AC7FH	\$18.00	\$2.00			\$20.00
Tom Griswold/R-N6LSA	\$18.00	\$2.00			\$20.00
Gail Griswold/R-K7YTI	\$0.00				\$0.00
???????/T-Shirt	\$19.00				\$19.00
Doug Jarmuth/T-Shirt	\$21.17				\$21.17
4-Patches			\$12.00		\$12.00
Tech Book			\$20.00		\$20.00
50/50			\$113.00		\$113.00
Ken Severance/WA6AQK				\$56.50	(\$56.50)
Total:	\$220.17	\$37.00	\$145.00	\$56.50	\$345.67

Miscellaneous Club Expenses	Cash Out	Check Number
David Passell=Refreshments	\$9.17	1006
Marsh Affinity=Insurance	\$347.00	1007
State of Arizona=Renewal	\$10.00	1008
Patti Halgunseth=Hamfest	\$7.41	1009
Patti Halgunseth=ARRL Flyers	\$19.97	1010
Insty Print=Newsletter	\$27.49	1011
Repeater Fund	\$37.00	Cash

Club Funds Summary	Totals
Starting Balance	\$2,025.56
Net Expenses	\$458.04
Net Income	\$345.67
	\$1,913.19

Repeater Fund (\$154.08)
Cash Flow (\$121.37)

Total: \$458.04

For Sale

Complete 500 Watt Mobile Station \$800.00

Yaesu FT-857D HF/VHF/UHF Transceiver • Ameritron AL-500M 500W Amp. • Stealth Motorized Antenna • Dual UHF/VHF Antenna • MFJ 6" SWR Meter • Cables, etc. included.

Call: Bill Jackson, W6HDP (928) 458-0106

This Month's Featured Ham

By Pat Oliver, K7DUC



Dick Butts, KE7DTZ

Dick first got his Technician license on April 30, 2005, and his General license on March 30, 2007. He presently operates on 2 meters, 70 cm, with IRLP, and on 20 meters and 40 meters. He works SSB and FM. His equipment includes a Kenwood TS-450S, a Yaesu FT-8800, and a Yaesu FT-60 HT.

He operated 20 meter mobile while camping, but has not erected his new Cushcraft R8 antenna for HF yet -- which is fully assembled.

Although Dick has, as yet, not participated in any contests, he would like to in the future.

Dick's most memorable contact occurred up in Big Lake. He was on 20 meters with a 13 year old girl from Louisiana, who was a General Class operator. He had a good QSO with her and later received her QSL card.

Another memorable event occurred while camping at White Horse Lake, near Williams. A 5 year old child fell out of a 5th wheel, injuring himself. He required ambulance transportation to a hospital. Dick called for help on his radio via the Bill Williams repeater. The Williams PD was contacted and an ambulance was sent to the campground.

He also worked at a private campground at the North Rim when a fire broke out. He was able to help the command center, producing evacuation plans and other tasks. This was another occasion where Ham Radio came into use.

Dick has built, in addition to putting together the Cushcraft antenna, a Heathkit transceiver and an oscilloscope.

Dick's radio related mail includes a thank you card from the family of the injured boy at White Horse lake, and the QSL card from the young lady from Louisiana.

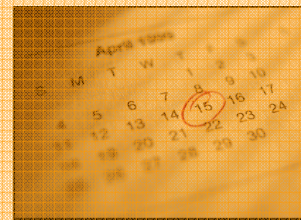
He is a member of both YARC and VVARA. He is also a VE and has joined ARES/RACES, with which group he worked in Phoenix helping Katrina victims.

Dick's professional life started in Battle Creek Michigan at the Kellogg Company. He and Ruth, his wife, moved to Prescott in 1972, whereupon he joined the Yavapai County Sheriff's Department, where he held many positions during his 25 years of employment.

Dick would like to see YARC expand both in membership and new ideas.

He is a very valuable and accomplished member of our club. We are fortunate to have him. ■

Upcoming Events



- **May 31, 2008** - Prescott Hamfest at Granite Mountain Middle School, 1800 Williamson Valley Road in Prescott.
- **June 7, 2008** - ARES/RACES training meeting at Yavapai County Public Works Ready Room.
- **June 7, 2008** - White Mountain Hamfest at Show Low Intermediate School, 500 Linden Road in Show Low.
- **June 28 - 29, 2008** - Field Day/YARC Picnic at Watson Lake in Prescott.
- **July 18, 2008** - ARCA/Williams Hamfest at 800 Rodeo Road in Williams, AZ.
- **September 12 - 14, 2008** - ARRL Southwestern Division Convention in Mesa, AZ.



By Lloyd, WA6ZZJ

ARES/RACES.....

TRAINING MEETING "WHAT'S IN YOUR GO-KIT?".....

The next quarterly ARES/RACES training meeting is scheduled for Saturday, June 7, 2008. It will be held at the Yavapai County Public Works Ready Room located at 1100 Commerce Dr. in Prescott. The meeting will be from 9:00 a.m. until approximately noon. The topic covered will be "Go-Kits". We covered this topic a couple of years ago, but since then we have had several new members join so it is time to go over it again. Every ARES/RACES member should have at the very least a basic deployment Go-Kit and preferably a 72 hour kit. Bring your own kit to 'show and tell' with others. We will all learn from it.

All amateurs are invited to attend and also encouraged to join our ARES/RACES team.

Time permitting we will introduce attendee's to and have a quick run down on emergency communications operating in our new MARC communications vehicle.

THE WILD FIRE SEASON IS UPON US.....

Even though we have had some rain early in the year, the wild fire conditions are still ripe in the areas around us. Most areas have already initiated fire restrictions, but even with the restrictions in place the Forest Service manages to find somewhere around 5 or more abandoned campfires in the forest weekly. Some were discovered when we were under 'red flag' conditions and had they not been caught in time it quite possibly could have been a much worse situation.

YARC and SPECIAL EVENT COMMUNICATIONS.....

The 30th Annual running of the Whiskey Row Marathon took place on Saturday, May 3, 2008. There were 1591

runners overall in the four events (Full, 1/2, 10K and 2 mile run). The weather this year was almost picture perfect for an event like this. No snow in the higher elevations like last year.

Nineteen YARC and ARES/RACES amateurs took part in providing the communications for this event from the nine 'Water Stations', YMCA Van, Shadow, two Quads and Net Control. Some coming from as far away as Congress to help. Special Event Communications is an excellent emergency communications training opportunity as well as a public service.

A big **THANK YOU** to all who participated.

It looks at this time like our Special Event Communications is slowing a little until in September when we will once again be getting very busy. During this 'slower time' is the time to check over your equipment and make sure it remains in good working order. Batteries need to be kept charged, antennas checked for wear and tear and maybe work on that portable antenna or back up power supply system you've been planning.

FIELD DAY.....

Field Day will be held this year at Watson Lake Park in Prescott. It will take place in the upper Ramada on Saturday and Sunday, June 28th and 29th. Plans are progressing as to the number of stations, antennas, etc.. Set up will be Saturday morning with operation from 1800 UTC on Saturday until 1800 UTC on Sunday.

This year we plan on using computer logging for the event and Patti, KD7VBG, will be giving a presentation on using the logging program, N1MM Logger, at the June YARC meeting.

The annual YARC picnic will be held in conjunction with Field Day on Saturday with food, fun and games. "Fox Hunts" are in the planning and we look forward to having the "Tupperware Navy" on hand with their kayaks.

For those unfamiliar with "Fox Hunting" (No.. you don't have to ride horses following the hounds) Pete Morrison, K6VVR, will give a presentation on that at the June YARC meeting as well.

Overall, we are looking to have a very fun and informative time. With Field Day, having a good time, testing emergency communications and teaching others about amateur radio is as or more important than seeing who can get the highest score by making contacts. ■

ANNUAL



**PRESCOTT HAMFEST
HOSTED BY
YARC / VVARA**

**HURRY!
HURRY!
HURRY!**



*DONUTS, COFFEE,
HOTDOGS & SODA
FOR A NOMINAL FEE!*



**TALK IN FREQUENCY
146.880- PL-100 HZ**

WHERE:
Granite Mountain Middle School
1800 Williamson Valley Rd.
Prescott, AZ 86305

Set up on the basketball court.
Bring your own tables.
Sellers Fee: \$10.00 per Space.

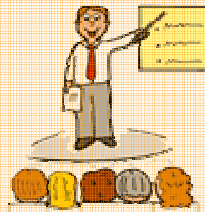
WHEN:
Saturday, May 31st, 2008
Gates open at 6:00 am.
Swap meet starts at 8:00 am and ends at
2:00 pm.

VE Testing Promptly at 9:00am
HOW:

Check our website for directions.
W7YRC.org

WHY:
Meet friends, make friends, swap stories and
gear.

Program Speakers



June: Patti, Halgunseth, KD7VBG will discuss "Field Day Logging" and Pete Morrison, K6VVR will talk about "Fox Hunting".

July: Gordon Barth will give a presentation on "Physical Fitness".

August: Bob Clark will talk about Normon Rockwell.

September: Jim Clark, N5RO will give a talk on the Salvation Army Team Emergency Radio Network (SATERN).

VE Tidbits



by Mary Vince – AB7NK

A special testing was held on May 1st for students from the Granite Mountain Middle School Amateur Radio Club. Rather than duplicate the results, please see the K7GMG Granite Mountain Grizzly's article. Thanks to Pete K6VVR, Dick W6CCD & Ken KE7KWH for assisting with the special testing.

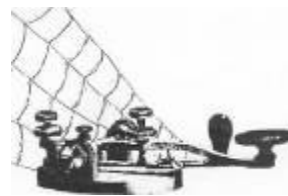
The next VE testing will be May 31st at 9:00 a.m. during the Prescott Hamfest at Granite Mountain Middle School, Room 404. Anyone wishing to test on that date, please contact me at either ab7nk@arrl.net or 928-775-2158. So far, I've heard from 13 applicants wishing to test for various license classes. This could prove to be another record breaking testing session.

Once things slow down during testing, any VE wishing to leave may do so. Please keep in mind we'll need to keep a minimum number of VE's during all phases of testing.

See ya'll at the hamfest & save me a donut!!! 😊

Mary – AB7NK

VE Team Leader



Silent Key

Jack Hageman, KX6H

Jacobus "Jack" Hageman, 65, of Chino Valley, Ariz., born Feb. 26, 1943, in Netherlands, passed away April 22, 2008, in Prescott, Arizona.

Jack had been a YARC member since July 5, 2007.

Whiskey Off Road Mountain Bike Event

Date April 26th in the year 2008

A Story By Lee Cunningham, KC7CBK



The day started out warm and sunny. A hundred or so colorful bikes and riders were lined up for the start of the 50 Proof (50 mile) ride to start at 0900 hours. The course starts on Goodwin Street (5060 feet), just east of Montezuma and winds west toward Park. There the course turns south to Country Club; west to Highland; then south to Copper Basin road. So far the uphill grade has not been too steep. As you may well know Copper Basin road has been under construction for several months now. The road has been paved to this point; now it's unpaved. Even though the road has been graded, the road is full of rocks, ruts, and miscellaneous traffic

signs and barricades. Now the grade gets steeper. (5470 feet) The dirt road turns to pavement just past Hassayampa Village lane, but the obstacles still abound. Holes in the road, patches and those barricades. Stop at Rancho Vista road stop sign, maybe. (5824 feet) Up the steep grade to Camp Pearlstein road, that's the continuation of Forest Road 51. (6124 feet) Turn right through the Camp. Wave to the campers. Through the open gate, we hope it's open. A quick left to the first trail, FT-393. It's uphill to Copper Basin road. (6446 feet) A quick left turn, a quick right, across Aspen Creek to the entrance to Aspen Creek Trail. In about ten minutes the riders look for the entrance to FT-48. (6869 feet) This starts the single track and the technical part of the ride. This includes riding up water bars, over rocks, in ruts, over fallen trees and a hike-a-bike section or two. At the end of this technical section the riders head for FT-260 (6560 feet) which is primarily downhill but with some of the rockiest sections on the course. This section is where the major accidents happen. Three riders were injured this year when they lost control of their mountain bike in the loose shale rock. Two were transported by land vehicles and the more serious injury, a broken ankle, was air lifted to a hospital. The rider required surgery that evening, which required two plates to repair the tibia and fibula, the two bones below the knee that connect to the ankle. The rider was released the next day.) FT-260 kicks out at the head of FR-53, Cooper Creek Road near White Spar road. (5429 feet) It's uphill to Copper Basin road again. (6087 feet) Turn left or west on Copper Basin to Skull Valley. (4263 feet) This is a fun stretch of the road, mostly downhill. The riders get up to 35 or 40 miles per hour. A quick stop at Skull Valley for refreshments and a pit stop. Back on the trail. It's all uphill to the intersection of Copper Basin and Thumb Butte roads. (6785 feet) Turn left or north on Thumb Butte road to the Sierra Prieta Overlook. (6941 feet) This section of road is an obstacle course with all the pot holes. A quick stop to look at the valley below and catch your breath. Then a 180 degree turn to the entrance to FT-9401J. This is mostly a downhill trail but with rocky sections. The trail exits on FR-51 for a smooth ride to FT-321. You get a good look at the green forest as you transition to FT-323. Careful, hikers may be on the trail. FT-392 is affectionately known as the Garden Grove trail. Downhill to FT-367 and out again on Thumb Butte road. (5718 feet) Back on the pavement and it's all downhill to the finish line at Goodwin and Montezuma streets. Maybe a stop at the aid tent to patch up the cuts and scrapes.

The 25 Proof (25 mile) riders follow the same course until they get to Copper Basin road at Cooper Creek road. They make a right turn or east up the hill to the junction of Thumb Butte and Copper Basin roads where they turn toward Sierra Prieta Overlook. The 15 Proof (15 mile) riders turn right or west as they exit FT-393 to the junction of Copper Basin and Thumb Butte roads. A short ride through the mine field of pot holes on Thumb Butte road to the Sierra Prieta Overlook. And they, too, enter FT-9401J. ■

For additional pictures of this event, see WB9VGJ's Slideshow at <http://tinyurl.com/4drydm>

Granite Mtn Grizzly's



K7GMG

By Mary Vince, AB7NK

The Granite Mountain Middle School ham radio club has been exceptionally busy this past year. The club call sign is K7GMG – K7 Granite Mountain Grizzly's!

Every Thursday after school for two hours the club meets and consists of four serious students and one mom. Throughout the year other students have come and gone.

After devouring any goodies arriving that day, the kids were ready to get down to studying. QRZ.com appeared to be the website of choice by everyone. I concentrated on teaching theory and answering questions, lot and lots of questions, while Neil, KA7JAS brought in priceless treasures to demonstrate, and handed out very small dummy loads to take home. I believe the word to describe the dummy loads was "COOL"!

May 1st, Terry KB7TRE, arranged for the kids to get out of class (they never complained) in order to take their amateur radio test. It was a very successful day. However, a special testing was held on May 6th to give applicants one more chance. Thanks K6VVR, W6CCD and KE7KWH for assisting with the testing.

Thursday morning, May 8th, I received a phone call from the ARRL/VEC department on a separate matter. Feeling like a proud mom/grandma, I couldn't resist telling anyone and everyone who would listen about the K7GMG hams. I was

asked to hold a moment and when the gentlemen came back he said he very possibly could have the call signs for me before I left for the school's celebration party that Terry, Neil, Dick W6CCD, Dick's wife and myself were having for the new licensee's.

Armed with cake, ice cream & soda, Neil and I arrived with the new call signs for Terry, KB7TRE.



There are NO words to describe the excitement as KB7TRE surprised the new hams with their call signs. The first Granite Mountain Grizzly ARC licensee's are:

- | | |
|-----------------|-----------------------|
| Sean – KE7TWO | 8 th grade |
| Chris – KE7TWP | mom of Logan |
| Logan – KE7TWQ | 6 th grade |
| Noah – KE7TWR | 7 th grade |
| Hunter – KE7TWW | 6 th grade |



Congratulations to all the new licensee's and new YARC club members! ■

Noise

By Tom, W8JI -- www.w8ji.com



The noise that limits our ability to hear a weak signal on the lower bands is almost always an accumulation of many signal sources. Below 18 MHz, the noise we hear on our receivers (even at the quietest sites) comes from terrestrial sources. Receiver noise is generally a mixture of local groundwave and ionosphere propagated noise sources, although some of us suffer with dominant noise sources located very close to our antennas.

Our locations fall into three basic "radio" categories that may or may not be related to our actual communities:

Note: noise levels quoted in this text are the average of three independent studies by Bell Labs, FCC Land Mobile Advisory committee, and the Institute for Telecommunication Sciences. Rural data are actual measurements of summer noontime and winter midnight noise at my location, several miles from high voltage transmission lines and far from any industrial or suburban populations.

Urban Noise

In urban-type noise situations, noise arrives from multiple random sources through direct and groundwave propagation from local sources. One or more sources can actually be the induction-field zone of our antennas (in most cases the induction field dominates at distances less than $1/2\lambda$). Urban locations are the least desirable locations because typical noise floors average 16dB higher than suburban locations. There is often no evidence of winter night noise increase on 160 meters, since ionosphere-propagated noises are swamped out by the combined noise power of multiple local noise sources. Much of the noise sources are utility distribution lines, because of the large amount of hardware required to serve multiple users. Other noise sources are switching power supplies, arcing signs, and other unintentional man-made noise transmitters.

Suburban Noise

Suburban locations average about 16 dB quieter than urban locations, and are about 20 dB noisier than rural locations. Noise generally is directional, arriving mostly from areas of densest population or the most noise-offensive power lines. Utility high-voltage transmission lines are often problematic at distances greater than a mile,

and occasionally distribution lines can be problems. The recent influx of computers and switching power supplies has added a new dimension to suburban noise.

There is often a small increase in nighttime winter noise at exceptionally quiet suburban locations. This increase occurs when propagated terrestrial noise equals or exceeds local noise sources.

Rural Noise

Rural locations, especially those miles from any population center, offer the quietest environment for low-band receiving. Daytime 160 meter noise levels are typically around 35-50 dB quieter than urban, more than 20 dB quieter than suburban locations. Nighttime brings a dramatic increase in low-band noise, as noise propagates in via the ionosphere from multiple distant sources.

Primary local noise sources are electric fences, switching power supplies, and utility lines. I can measure a 3 to 5dB daytime noise increase in the direction of two population centers, Barnesville (population 7500, distance 6 miles) and Forsyth (population 10,000, distance 6 miles) Georgia.

Typical daytime noise levels, measured on a 200 foot omnidirectional vertical, are around -130 dBm with a 350 Hz bandwidth (noise power is directly proportional to receiver bandwidth). Noise power increases about 5 to 15 dB at night, when the band "opens". As in the case of suburban systems, directional antennas reduce noise power.

Nighttime is the "big equalizer", reducing the advantage of location as distant noises increase with improved propagation.

Polarization

Noise is generated by randomly polarized sources. Noise polarization is filtered by the method of propagation.

Noise arriving from the ionosphere is randomly polarized. It arrives at whatever polarization the ionosphere happens to favor at the moment. It has the same ratio of electric to magnetic fields as a "good" signal.

Noise arriving from sources within a few wavelengths of the antenna is also randomly polarized. It has NO dominant field, it can either be electric or magnetic field dominant.

Noise arriving from ground wave sources some distance from the antenna is vertically polarized. This is because the earth "filters out" any horizontal components. Horizontal electric field components are "short circuited" by the conductive earth as they propagate, and are eliminated. ■

ANSR-44 Balloon Flight

By Jack Crabtree, W7JLC

Here are pictures from ANSR-44 balloon flight. There were six Arizona middle and high schools with 35 students involved in the flight. We had a pre-flight meeting on Friday night, the flight on Saturday, and a post-flight meeting on Sunday morning. The balloon reached 92,307 feet in altitude and traveled 50.8 miles. All payloads were successfully recovered. The students had a great time.



ANSR-44 Balloon Launch



Up Up and Away



Granite Mountain Middle School



Recovery

YOU'LL SLEEP MUCH BETTER TONIGHT KNOWING THESE THINGS:

- The average chocolate bar has 8 insects' legs in it.
- The average human eats 8 spiders in their lifetime at night.
- A cockroach can live nine days without its head before it starves to death.
- A polar bear's skin is black. Its fur is not white, but actually clear.
- Elvis had a twin brother named Garon, who died at birth, which is why Elvis' middle name was spelled Aron; in honor of his brother.
- More people are killed by donkeys annually than are killed in plane crashes.
- Stewardesses is the longest word typed with only the left hand.
- Shakespeare invented the word "assassination" and "bump."
- Marilyn Monroe had six toes.
- If you keep a Goldfish in the dark room, it will eventually turn white.
- Women blink nearly twice as much as men.
- Right handed people live, on average, nine years longer than left-handed people do.
- The sentence "the quick brown fox jumps over the lazy dog" uses every letter in the English language.
- The continents names all end with the same letter with which they start.
- The word racecar and kayak are the same whether they are read left to right or right to left.

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,
2nd Floor; above Bank of America)
informal – all are invited

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

Area Repeaters

Frequency	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+	100.0	Prescott Heights	W2YAV				
147.140+	162.2	Flagstaff/-Mt. Elden	ARA		Linked to Mt. Ord 147.360-		
147.220+	162.2	Mingus Mtn	VVARA				
147.260+	103.5	Mt. Union	ARES/RACES				
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. 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/
- www.azrepeaters.net
- 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

