

## Arizona's 96th Birthday Celebration

By Mary Vince, AB7NK

On a snowy February 14, 2008, three Granite Mountain Radio Club Students and seven Bradshaw Mountain Radio Club members took part in Arizona's 96th birthday at the Sharlott Hall Museum. Unfortunately, the snow was sporadic and didn't last.



Granite Mountain Radio Club students are: Shawn, Noah, Logan & mom Chris. Hunter was home with the flu. Thanks to Terry KB7TRE & all those who came to make this day possible for the kids.

Bradshaw Mountain Radio Club students are: Jason, Nick, Diana, Dylan, Sean, Adrianna & Derrick. Thanks goes out to Principal Brian Buchholtz for his support of the radio club. Jim N5RO has worked very hard to get this club operational at BMMS.

**<LEFT: Lunch in the Snow**

The donuts were gone and lunch came early due to the Bradshaw Radio Club's schedule.

Two stations were set up, one for VHF/UHF and the other for HF. Thanks to Bob WB6ODR for his arrow shooting skills and all those who assisted in getting the G5RV & mobile screwdriver antenna setup to work with the FT847 radio's.

The 1<sup>st</sup> VHF contact was made with WA8ULG, who was mobile on his way from Scottsdale to Parks. Logan & Noah enjoyed their QSO's with Ted and everyone got a chuckle out of his phonetics' "Ugly Little Germ"!



Logan and Noah

For many of the students from Bradshaw Mountain, this was their first experience with HF and calling CQ. We found a clear frequency, asked if it was in use, and it was now time to call CQ. After the fourth time, a gentleman from El Paso, TX answered their CQ, and they all had a nice QSO.

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● **Arizona** (Continued from Page 1)

Everyone was surprised at how easily you could talk to another country just by pressing a few buttons on the microphone keypad. A few countries were contacted using IRLP. Everyone learned quickly that you need to take into consideration the time of day in another country – as they soon found out when trying to reach someone in Australia.

Officer Crabtree stopped by and before long Logan had him on the air calling CQ on VHF. Everyone had fun asking Officer Crabtree different questions about his radio and what frequency he uses. It was quite amusing when he replied his radio only has channels.



**Logan Instructing Officer Crabtree**

The principal from Granite Mountain listens intently as Shawn has a QSO with someone in another state.



**Shawn and Principal Hillig**

The number of QSOs weren't many, but the quality was outstanding. As most of the Bradshaw Mountain kids said, the entire experience was "AWESOME". Both clubs are excited about doing this again next year, when Arizona will be 63. ■

## *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. If you hear a 1400 Hz pulsing tone, the repeater is on backup battery power and usage should be limited to necessary communications. Our deepest gratitude to Bill Kafka, W2YAV for allowing us to acquire this repeater. ■

### **YARC Officers for 2008**

<b>President</b>	<b>Vice President</b>
Terry Pemberton, KB7TRE kb7tre@cableone.net	Jack Ragen, W3IVQ ragen@cableone.net
<b>Secretary</b>	<b>Treasurer</b>
Jeff Hanna, WB7RFY jeff668@commspeed.net	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

**Minutes of February 7, 2008  
Board Meeting**



Board meeting was called to order by KB7TRE at 1815hrs. Also in attendance WB9VGJ, KF6SPS, N7LSA, KD7VBG, and WB7RFY.

After holiday party was reviewed and deemed a success. KB7TRE will join the committee for 2009. Special thanks to WB7RRQ, KC7MTY, Ron and Karen Sampson.

N6LSA reports April program will be Ned Stearns, AA7A on 3X (Guinea) DXpedition. Because of speakers travel, this will be a program first meeting. Will continue to solicit program ideas from membership.

Hamfest was discussed with possibility of moving date into May; membership will be polled at tonight's meeting.

Field Day activities to be coordinated by KD7VBG will need several committees to cover all this year's event will encompass. Overall goals of Fun and Fellowship with Public and Preparedness, although a good operating score

would be nice too. Effort to get several area towns and cities to declare an Amateur Radio Day Proclamation will be made.

Statehood Day will again be acknowledged by a special station at Sharlot Hall Museum on February 14 from 9:am to about 3:pm. Several youth already committed. Event coordinated by KB7TRE and WB6ODR.

World Arts Festival Staff has changed; event is now one day, Saturday September 13 from 10:am to 9:pm. An event coordinator is needed if we will again have a display and station. Adjourned 1840hrs.

Respectfully submitted,  
Jeff Hanna, WB7RFY  
YARC Secretary

**Minutes of February 7,  
2008 General Meeting**

Meeting called to order at 1902 MST by the President, KB7TRE. Following Pledge of Allegiance introductions were made.

**Attendance:** 51 of whom 40 signed in.

**Visitors:** 3, including N7CQO, Terry Ford, and Doug Edwards (no call).

**New Members:** On motion of WB9VGJ, second by K6UWV and no dissenting votes,

KC6UUG Chris Hancock (former member), WD8DOT Gary Shapiro, and K7GST Buz Mills were inducted.

**Meeting Minutes Of January 03, 2008** were approved as published.

**Treasurers Report:** KD7VBG reported a beginning balance of \$1312.70, ending balance of \$1342.72, and Repeater fund balance of -\$249.08. Approved as read.

**COMMITTEE REPORTS:**

**ARES/RACES/Public Service:** WA6ZZJ reports receipt of letter of thanks from YMCA "they couldn't do it without us" referencing Rails to Trails special events communications. A busy Spring ahead; multi agency exercise in Prescott Valley in late April to test new EOC; May 3<sup>rd</sup> is Whiskey Row Marathon; sign up sheet now available. Friday May 28 is annual regional wild fire exercise, and KB7CBK reminds that the Whiskey Off-road bicycle event is on April 26; additional event info at <http://epicrides.com> (no www.) and he will be checking trail conditions for comm. sites prior to event. Some positions expected to be walk-in only. 12-15 needed.

**IRLP:** No report. Comment that if site is found active and no response, please close.

**Classes:** N7CW reports General Feb 9 & 16, Extra in March, & Technician in September. Space is available with outstanding instructors.

**Membership Count:**



1st Thurs. in Jan.....144  
Gain/Loss.....+2  
1st Thurs. in Feb.....146\*

\* Includes 13ea 3-month memberships

**VE Testing:** AB7NK states Feb 23 at 9:00 am is next scheduled session.

**Public Information:** Please forward any articles/info to WB7RRQ. Will attempt Proclamations for Field Day as date approaches.

**Patches:** are available from the Treasurer for \$ 3.00. Supply is running low and will soon reorder and anticipate increase in value.

**Badges:** are available from WB6ODR; has KA7ODO, WA7ZGK, KA7ODN, and KX6H awaiting pick-up.

**ARCA Report:** from WB6ODR on recent vote for AZ State Convention in Williams.

**Repeater:** WB6ODR credits KA7JAS with new equipment being ready to install, however recent weather makes site access difficult. Watch for progress.

**School Clubs:** Granite Mountain Middle School group active; several students will participate in Statehood Day special events station. Bradshaw Mountain Middle School group has moved meetings to Tuesday, however Thursdays remain a radio operating day.

**Elmering:** KA7JAS reports all needs fulfilled.

**Refreshments:** K6UWV reports creamer again available.

**Young Hams Net:** KI6AHH is working with KC7GAT on linking IRLP and Echolink sites to include a Washington youth group in local

net. All well and growing.

### **OLD BUSINESS:**

**Post Holiday Party:** A bit of miscommunication, but an excellent party. Outstanding thanks to all of the committee and volunteers. Wrapped gifts are a great idea that added to elegant event.

**Certificates of Appreciation:** were presented to Patti Halgunseth, KD7VBJ for Hamfest 2007;

Lloyd Halgunseth, WA6ZZJ for A R E S / R A C E S / PublicService;

Bob Smith, WB6ODR for Serving as Repeater Committee Chairman, Webmaster, and Badges.

**Programs:** March will be presentation by KE7NAP on working with the blind;

April presentation by Ned Stearns, AA7A on West African DXpedition. April will be a reverse format, with program first, business meeting last.

**Hamfest:** The second annual Hamfest will be??? May is suggested; weekend after Memorial Day was proposed. KB7TRE to check availability of school complex. Would like ARRL/ARCA sanctioning.

**Field Day:** Goal to be practicing skills and having fun. KD7VBJ will Chair but needs several committees and every-

one's support for all that is planned. WA6ZZJ will coordinate Watson Lake site; W5VJH will lead Picnic committee; K6VVR will coordinate the Fox Hunt; KC8BOB will coordinate Aquatics; WB6ODR will lead Geocaching. No official response from Verde Valley ARC as yet as to their participation plans.

Several generators are available; commercial is available at site for back-up.

Site is available from 6:am Saturday to Noon Sunday, plus tear-down and clean-up time. Will high-light public demonstrations.

**QSL Cards:** A few have been received. Please bring yours and any unwanted you've received to add to the GMMS shack display.

**World Arts Festival:** Saturday, September 13 from 10:am to 9:pm. Due to conflicts, WB9VGJ cannot Chair this year; a new Event Chairman is needed as date conflicts with scheduled Technician Class and ARRL SW Division Convention. Is a good Public Service and Public Relations opportunity at Prescott Valley town hall. Please contact WB9VGJ soon if we are to support this event in 2008.

**Statehood Day:** Special Event station K7A will be active Thursday, February 14 from about 9:am to 3:pm. KB7TRE and WB6ODR coordinating with Mrs. Geiss of Sharlott Hall Museum for the operation near the Morris Goldwater

Telegraphy display. On motion of KE7NAP, second KV8TD and no dissenting votes, up to \$ 100.00 approved to provide food and refreshments for Special Event volunteers and Guests.

**ARRL SSB DX Contest:** N7CW invited members and guests to participate from his station between 5:00 pm Friday March 1<sup>st</sup> and 5:00 pm Sunday March 2<sup>nd</sup>. Youth encouraged. Please contact in advance.

**50/50 Raffle:** \$ 47.50 was won by Ed Yurkiewicz, KE7PJG.

**Announcements:** K6UWV has an Icom IC HM-90A remote control microphone with DTMF keypad, if anyone has a need please contact.

**Tonight's Program:** Al Crook, KD7MTJ will present Travelogue style their October 2007 travels in Kanab area of Utah including Bryce Canyon, Two Bridges, and Pink Coral Sands.

Motion to adjourn the business meeting by WB9VBJ, second KD7VBG; with no dissenting votes. Meeting adjourned at 2002 MST.

## Need a Ride?



Are you without wheels and need a ride to a YARC club meeting?

Check into the Wednesday night net on 146.880 at 7:00 p.m., prior to the first Thursday of the month.

There is a good chance that someone will offer you a ride.

From "ARRL ARIZONA SECTION NEWS" Feb. 2008  
Tom Fagan K7DF, ARRL Section Manager Arizona

### ARIZONA PRB-1

Dan Brown NA7DB is working with Representative Nancy McLain on re-introducing the Arizona PRB-1 bill. Recall that last year it got through the House with a 56 to 2 vote in favor of the bill.

Dan says "We discussed some possible changes/additions to the bill. The political decision is to leave the bill exactly the way it passed the House. If we try to make it more complex or involve money, it will create friction in the process.

The strategy for the House is to contact the Representatives and thank them for their support last year. Then let them know that the same bill they voted YES on last year is up again and we will appreciate their support.

In the Senate where our bill was held by the Government Committee Chairman, we have made BIG progress. So please do not attack that Chairman!

We have made progress with the HOA lobbyists and have an agreement with the Arizona Counties Association.

We still will have to contact all 30 Senators and make sure they understand our Bill and ask for their support.

There will be Committee hearings to attend and we need groups of Hams making the rounds of the House and Senate to meet with and educate those folks. Because of the Budget Crisis I think it will be in February when our Bill comes up.

Please let me know if you would like to be involved in the Committee hearings process and personally visiting with our legislators in this effort to get our Amateur Radio Bill passed. I hope everyone will be involved in contacting their Representatives and Senators when we have a Bill number.

A huge thanks to everyone who made the effort last year to help get our bill through the House. I hope in 2008 we will get the job done in the Senate also." ■

### Hamfests/Conventions/Special Meetings

**February 15-17, 2008** Yuma HamExpo at the Yuma County Fairgrounds  
[www.yumahamexpo.com](http://www.yumahamexpo.com)

**March 8, 2008** SpringFest hosted by the Scottsdale Amateur Radio Club, Scottsdale Community College, Chaparral & Hwy 101, Scottsdale, AZ, ARCA Meeting - 11:00 AM

**March 8, 2008** Tucson Ham Radio Spring Picnic at Christopher Columbus Park. More info can be found at [www.tucsonhampicnic.com](http://www.tucsonhampicnic.com)

**April 2008**, AARC Hamfest, hosted by the Arizona Amateur Radio Club, DeVry University, Dunlap, Rd, Phoenix, AZ

**May 3, 2008**, CARA Hamfest, hosted by the Cochise Amateur Radio Association, Club Site, Moson Rd, Sierra Vista, AZ ARCA Meeting - 11:00 AM

**July 18-20, 2008** ARCA/Williams Hamfest hosted by the Amateur Radio Council of Arizona Williams Rodeo Grounds, 800 Rodeo Rd, Williams, AZ  
[www.arca-az.org](http://www.arca-az.org) ■

**September 12-14, 2008** ARRL Southwestern Division Convention Mesa AZ  
Come check us out at [www.AzHamCom.org](http://www.AzHamCom.org)



By Lloyd, WA6ZZJ

## ARES/RACES.....

### Training Meeting

The first ARES/RACES quarterly training meeting is scheduled for Saturday, March 15, 2008 and 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. We also anticipate having a session at a location in the Verde Valley at the same time. The meetings will be a 'back to basics' pencil and paper message handling meeting concentrating on the ICS-213 message form that we will be using. There will be a short review of the ICS-213 and why it is the form that will be used by ARES/RACES. Then the group will be broken into smaller groups to have hands on message handling experience.

This meeting will be open to all interested amateurs whether you are an ARES/RACES member or not. It is important that all amateur radio operators should have a basic knowledge of sending and receiving messages in a formal setting.

### Wild Fire Exercise

ARES/RACES will be involved in a multi agency Wild Fire Exercise on Friday, March 28, 2008. This is an important annual event that is conducted by the different agencies involved in fire protection in the Prescott basin. Agencies involved will include but are not limited to: Fire departments in the area, US Forest Service, Emergency Management, ARES/RACES, Yavapai Sheriff's Department, Yavapai County Jeep Posse, Animal Disaster Services, American Red Cross, Yavapai Regional Medical Center, Yavapai County Health Department and other agencies.

## SPECIAL EVENT COMMUNICATIONS.....

**The Whiskey Off Road** on Saturday, April 26, 2008 is our next tentatively scheduled communications event. This

is an off road bicycle run that could have 400 riders or more. It is very important that they have reliable communications on this event. Details are still being worked out and the total number of operators needed is not yet known, but we hope to have that information soon.

**Whiskey Row Marathon** on Saturday, May 3, 2008. This will be the 30<sup>th</sup> annual running of this event and it is a long standing tradition for YARC to provide communications for the YMCA on this event. Twenty plus operators are needed for this event and the more we have the more we can double up on assignments. There are 16 signed up for this event so far, but more are needed. If you missed the sign up at the last meeting, I will have it there again at the March meeting, so plan on signing on to assist. There have been some minor changes in the route and the addition of a 9<sup>th</sup> water station which I will cover at the April YARC meeting.

**While on Special Event Communications..** I know I keep saying this, but I hope it will sometime get more of our club members interested in participating in our communications events. It's not that I don't enjoy seeing all the old familiar faces that do such a good job when called upon, but seeing some new faces would be nice too. These events are a very good way of doing public service and helping YARC to maintain its "Special Service Club" status with the ARRL.

It may be that some of the members out there that haven't participated think that they lack the experience necessary. No need to. If it is your first time on an event we will assign you with a veteran operator so you can learn and ease your way into becoming one of our veteran communicators. It's not hard and really it gets to be a fun time and a tradition with some club members.

## FIELD DAY 2008.....


Field Day this year will be on Saturday and Sunday, June 28<sup>th</sup> and 29<sup>th</sup>. This year YARC has voted to have it at Watson Lake Park in Prescott and will set up at the Ramada on top of the hill overlooking the lake. The club has also voted to hold this year's annual picnic on the Saturday of the event.

The Ramada is reserved from 0600 on Saturday until noon on Sunday. Set-up will be done on Saturday morning so we are ready to start operating at 1800 UTC and operations will continue until 1800 UTC on Sunday.

From the ARRL Field Day Packet: "First, and foremost, is **Field Day should be a fun activity**. Field Day serves as one of the biggest introductory "drawing cards" we offer in trying

to expand interest in the hobby. A Field Day that is technical in set-up may well produce a good score. But remember that a Field Day that practices the “KISS” principle (Keep It Simple, Silly) is more likely to attract interest and participation than one which is run like a hard-core contest”.

Please plan on getting involved and sign up for an operating stint at one or more of the receiver/transmitter positions that will be set up. I’m sure operators will especially be needed through the night time hours. The Ramada has easy good road access and will be well lit, so consider operating a night shift. There will be a sign up sheet at the YARC meetings as the time gets closer. ■




The International DX Convention is the world’s premier DX convention, if you’re a DXer or interested in any aspect of Ham radio you need to be at Visalia. Top DX operators from around the world will be there.

Pre-register (**Before March 23, 2008**) and **SAVE**.


For further information go to:  
<http://www.dxconvention.org/index.html>

### For Sale

6 Meter Linear Amplifier - \$200  
Mirage A 1015 G  
Input Power = 10 watts, Output Power = 150 watts  
Built in receiver preamplifier  
Requires +12 VDC at 16 – 20 amps  
N7CW Bud Semon 771-8267 or [n7cw@cablone.net](mailto:n7cw@cablone.net)



# VE Tidbits



by **Mary Vince – AB7NK**

## PRESCOTT AREA VE TESTING

Saturday, February 23, 2008 9:00 A.M. SHARP  
Saturday April 5<sup>th</sup>, 2008 9:00 A.M. SHARP

Testing to be held at:

Embry Riddle University  
3700 Willow Creek Road  
King engineering & Technology Center (KETC)  
Bldg 72 -Room 132  
Prescott, AZ 86301-3720

**PLEASE COME PREPARED THE DAY OF TESTING**

Items needed:

- Photo ID
- Original License and 1 photocopy
- Original CSCE and 1 photocopy (if applicable)
- scratch paper & calculator (if planning to use one)
- 2 - #2 pencils & a pen

\$14.00 – make checks payable to ARRL – VEC

Pre-registration is not required however an email would be appreciated – [ab7nk@arri.net](mailto:ab7nk@arri.net)

All license classes will be given & walk ins are always welcome.

Good luck to all.

Mary – AB7NK, VE Team Leader

## 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

## This Month's Featured Hams

By Pat Oliver, K7DUC



**Al Crook, KD7MTJ**

Al got his Technician License in 2001. He describes himself as a 2 meter operator. He has enjoyed being net control on the Knobby Knee net on Tuesday morning for some time.

He credits Bob, WB6ODR and Terry, KB7TRE for encouraging him to join our club. He then served YARC as Treasurer for 2 years.

Al communicates with Carol, his XYL, when he goes out hunting, by contacting Bob, WB6ODR on 2 meters, who relays the information by telephone, letting her know how Al is doing.

Al came from Boston and grew up in New Hampshire, where he had his own dairy farm. He met Carol while he was in the Air Force.

He served 4 years in the Air Force during the Korean war. Prior to entering the service, he obtained his commercial pilot certificate and flight instructor certificate. His knowledge of airplanes led him to his profession as a pilot during much of his life all over the United States, including 16 years in Alaska. He has been a pilot in a flying service, worked for the FAA, worked as a flight instructor, headed an air taxi service, and was Chief of the Flight Standards District Office in Anchorage and Fairbanks, Alaska, where he retired 16 years ago.

During his tenure as a pilot, Al flew for Bing Crosby, and remembers fondly a radio transmission between Bing and comedian, Phil Harris.

Another hobby of Al's and Carol's is photography. They belong to a local camera club and have many beautiful pictures on the walls throughout their house.

As briefly mentioned before, Al loves to hunt. Several trophies of animals also adorn their walls. He supplied meat for many meals in the Crook household.

He operates with an ICOM IC-2100, both at home and mobile. He has a 4 foot antenna on his roof.

Al would like to see YARC continue to grow and have more young people in the ranks to replace all us older folk as we pass on. He also would like to see more people become more active in the club and its activities.

Al has been an active member in our organization and we are lucky to have him. ■

### Program Speakers



**March:** Ellis, KE7NAP will give a presentation on working with the visually impaired.

**April:** Ned Stearns, AA7A will speak of his experience as a 3X on a DXpedition to Guinea, West Africa.



### Plan to Join the ARRL or Renew Membership ?

Ask our Treasurer for a special ARRL Club Membership Application or down-load the Application from the YARC Website. Complete the Application and return it to the Treasurer with the application fee.

There is no extra cost to you, and our club gets to retain a portion of the dues.

# Treasurer's Financial Reporting Sheet



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

Patti Halgunseth, KD7VBG  
Treasurer

Members Name	Dues Paid	Repeater Fund	Donations	Prize Money Paid Out	Net Cash In per Member
Gary Shaprio/N-WD8DOT	\$18.00	\$2.00			\$20.00
Buz Owen Mills/N-K7GST	\$18.00	\$2.00			\$20.00
William Burkett/R-KE7IXS	\$18.00	\$2.00			\$20.00
John Marsh/R=2-KC5DKN	\$36.00	\$4.00			\$40.00
Michael Paget/R=KD7DGT	\$18.00	\$2.00			\$20.00
Terry Pemberton/R=KB7TRE	\$18.00	\$2.00			\$20.00
Sandy Pemberton/R=KD7GJH	\$0.00				\$0.00
Ricky Beswick/R=KE7PIX	\$18.00	\$2.00			\$20.00
Chris Hancock/N-R=KC6UUG	\$18.00	\$2.00			\$20.00
Edward Yurkiewicz/R=KE7PJG	\$18.00	\$2.00			\$20.00
Henry Riviere/R=W4ZBP	\$18.00	\$2.00			\$20.00
4 Patches			\$12.00		\$12.00
Repeater Fund/KB7OCR		\$4.00			\$4.00
50/50			\$95.00		\$95.00
Ed-KE7PJG				\$47.50	(\$47.50)
Deposit Dinner Checks			1233.5		1233.5
Received Checks Dinner			175.5		175.5
<b>Total:</b>	<b>\$198.00</b>	<b>\$26.00</b>	<b>\$1,516.00</b>	<b>\$47.50</b>	<b>\$1,692.50</b>

Miscellaneous Club Expenses	Cash Out	Check Number
Judy Rosevear=Party Gifts	\$105.50	989
Hotel St. Michael=Holiday	\$806.23	990
Terry Pemberton=NRA Supplies	\$29.52	991
David Passell=Refreshments	\$29.85	992
Terry Pemberton=Statehood	\$100.00	993
Insty Print=Newsletter	\$27.49	994
Postmaster=P.O. Box Rental	\$56.00	995
Repeater Fund	\$26.00	Cash

Club Funds Summary	Totals
Starting Balance	\$1,342.72
Net Expenses	\$1,180.59
Net Income	\$1,692.50
	\$1,854.63
Repeater Fund	(\$223.08)
Cash Flow:	\$511.91

# Storage Batteries for Emergency Backup

By Paul Honore' W6IAM

Several times, lately, the question has been asked, "How should I connect a lead-acid storage battery to supply emergency power to my rig?" The bad news is there's no single answer to the question. There are, however, as many opinions as there are hams who use batteries. The good news is that most of the opinions are valid. Over the years I've tried three different approaches and all work well enough so I'll outline them here and you can take your pick. If none of these appeal to you, additional methods can be found on the internet or in back issues of QST magazine.

## Method 1. "Float" the battery on the power supply

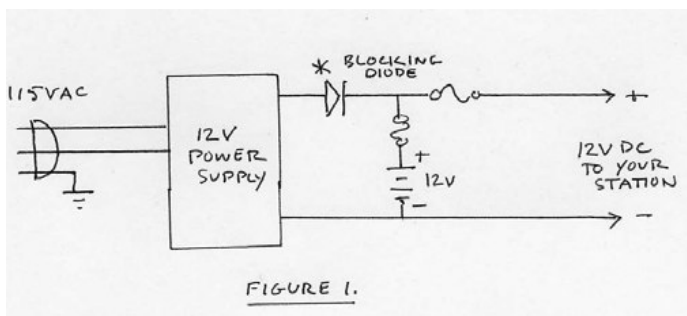


FIGURE 1.

You can connect the battery in parallel with your power supply. This will provide an automatic changeover from mains to battery power without any hiccup in operation and the power supply will charge the battery whenever it is turned on. There are some things to consider, however. Unlike your power supply, the battery has no built-in current limiting or short circuit protection. It is capable of delivering several hundred amps of current for enough time to melt down a lot of things. In fact a dead short across the output terminals is likely to cause the battery to self destruct, splattering bits of shrapnel and sulfuric acid all over the place. That could spoil your whole day! If you use this approach, be sure to include a fuse close to the Positive battery terminal to prevent this sort of catastrophic event from happening. Make the fuse slightly larger than the maximum current you intend to draw from the power supply. Make sure that your power supply doesn't drain current from the battery when it is turned off. If you find a current drain you'll have to include a locking diode in series with the supply output. The diode must be capable of handling at least twice the maximum current your station will draw and it will probably need a heat-sink. The diode will drop between .5 and 1.5 volts internally so you'll have to increase the power supply output voltage to compensate.

## Method 2. Switch between the battery and the power supply

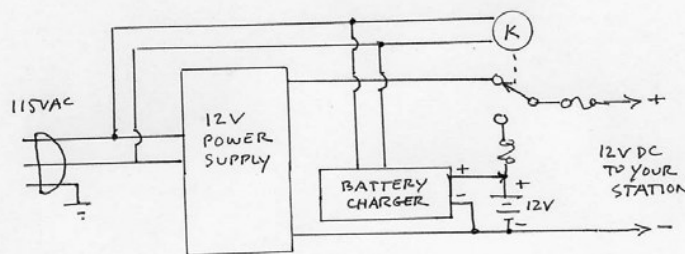


FIGURE 2

Using this method, the battery and the power supply are kept independent of each other and a trickle charger keeps the battery topped off and ready for instant use. A mechanical switch can be used to make the changeover or you can make it automatic by substituting a 110VAC relay for the switch. This way, the power supply is connected to the station by default and switching to battery backup is automatic on power failure. Since the battery and the power supply are independent of each other, no steering diode is needed and the battery remains on "charge" whether the *Clallam County Amateur Radio Club QTC May 07* Page 6 power supply is turned ON or OFF. If you don't have a suitable 115VAC relay you can use a small transformer to power a 6, 12 or 24VAC relay, if needed, add a rectifier diode to power a DC relay.

## Method 3. Battery power only, with continuous charge

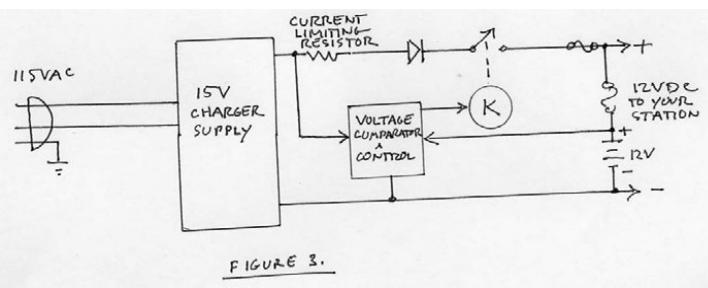


FIGURE 3.

Because we have so many power failures on the Olympic Peninsula and the fact that they usually occur when I'm likely to be operating in emergency mode, I chose to power my station on battery only. To maintain a full charge at all times, I built a rather unique voltage-sensing charger based on a design by Bob Lewis AA4PB and published in the ARRL Emergency Communications Handbook. I described the modifications in the March issue of CCARC-QTC (*A continuous Charger for Lead-acid Storage Batteries.*) I prefer this adaptive charging approach because it maintains a full charge on the battery without overcharging it and the charger is left on-

See Batteries Page 11

● **Batteries** (Continued from Page 10)

line 24/7 with no hash or switching transients in either transmit or receive mode regardless of operating power or frequency. It's not difficult to build and I highly recommend it.

Be careful when handling or connecting storage batteries. Wear protective clothing and safety glasses and to avoid sparking and possible explosion always connect leads to the battery terminals first, and then to the load. To avoid acid spills and collateral damage, place the battery in some type of ventilated container. There are specially designed battery boxes available at automotive and marine supply stores. Keep the battery well away from your operating area, preferably OUTDOORS where hydrogen gas can be vented safely and harmlessly. Mine is housed in a freezer chest on a balcony outside my radio shack. Power is brought into the shack via heavy duty automotive cables through a Bakelite panel mounted in a small window opening. Terminals made from 3/8 inch brass running-thread provide feed-through connections and a 100 Amp cutout switch in the positive lead provides a safety disconnect. ■

## ***Lessons In Electric Circuits***

An excellent free series of textbooks on the subjects of electricity and electronics is available for download at <http://openbookproject.net/electricCircuits/>. This series consists of six volumes covering the following:

Volume I – DC

Volume II – AC

Volume III – Semiconductors

Volume IV – Digital

Volume V – Reference

Volume VI - Experiments

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## ***THE NITTY GRITTY DICTIONARY***

**ADULT:** A person who has stopped growing at both ends and is now growing in the middle.

**BEAUTY PARLOR:** A place where women curl up and dye.

**CANNIBAL:** Someone who is fed up with people.

**CHICKENS:** The only animals you eat before they are born and after they are dead.

**COMMITTEE:** A body that keeps minutes and wastes hours.

**DUST:** Mud with the juice squeezed out.

**EGOTIST:** Someone who is usually me-deep in conversation.

**GOSSIP:** A person who will never tell a lie if the truth will do more damage.

**HANDKERCHIEF:** Cold Storage.

**INFLATION:** Cutting money in half without damaging the paper.

**MOSQUITO:** An insect that makes you like flies better.

**RAISIN:** Grape with a sunburn.

**SECRET:** Something you tell to one person at a time.

**SKELETON:** A bunch of bones with the person scraped off.

**TOOTHACHE:** The pain that drives you to extraction.

**TOMORROW:** One of the greatest labor saving devices of today.

**YAWN:** An honest opinion openly expressed.

**WRINKLES:** Something other people have. You have character lines.

## 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, N7PJJ

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

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Many thanks to Bob Smith, WB6ODR, our Webmaster

