

# The *Microvolt*

September, 2016



## Prologue

**Publication:** *The Microvolt* (USPS 075-430) is the official publication of the Utah Amateur Radio Club, Incorporated, 699 E. South Temple Ste 100, Salt Lake City, UT 84102-1282. It is published monthly except August. Subscription is included with club membership at \$20 per year. Single copy price is \$1.50. Periodicals postage paid at Salt Lake City, Utah. Postmaster: send address corrections to *The Microvolt*, c/o Dick Keddington, 5474 Hews Place, Taylorsville, UT, 84129-1416.

Deadline for submissions is the 24th of each month prior to publication. Submissions by email are preferred (k7hfv@arrl.net), but other means including diskettes and typewritten submissions can be mailed directly to: Gordon Smith, 632 University St., Salt Lake City, UT 84102-3213. Reprints are allowed with proper credits to *The Microvolt*, UARC, and authors. Changes in mailing address should be communicated to the Club Secretary: Dick Keddington, 5474 Hews Place, Taylorsville, UT, 84129-1416.

**Club:** The Utah Amateur Radio Club was organized under its present name in 1927, although its beginnings may date back as early as 1909. In 1928, it became affiliated with the American Radio Relay League (club #1602) and is a non-profit organization under the laws of Utah. It holds a club station license with the call W7SP, a memorial call for Leonard (Zim) Zimmerman, an amateur radio pioneer in the Salt Lake City area.

**Meetings:** The club meets each month except July and August. The meetings are held on the second Thursday of the month at 7:30 PM in the University of Utah's Warnock Engineering Building, generally in room 1230 or 2230, sometimes in 2250 or 105.

**Membership:** Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$20 per year, including a *Microvolt* subscription. *The Microvolt* and membership cannot be separated. Those living at the same address as a member who has paid \$20 may obtain a membership without a *Microvolt* subscription for \$12. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 5474 Hews Place, Taylorsville, UT 84129-1416.

**Contributions:** Monetary contributions are gladly accepted. Send directly to the Club Treasurer: Chuck Johnson, 1612 W. 4915 S. Taylorsville, UT 84123-4244. For in-kind contributions, please contact any board member to make appropriate arrangements.

**Repeaters:** UARC maintains the 146.62- and 146.76- repeaters. The repeaters are administered by the UARC Repeater Committee. Comments and questions may be directed to any Committee member. The Lake Mountain repeater (146.76-) is IRLP node 3352. Instructions for IRLP use are on the club website.

**Ham Hot-Line:** The Utah Amateur Radio Club (UARC) has a Ham Hotline, 583-3002. Information regarding Amateur Radio can be obtained, including club, testing, meeting, and membership information. If no one answers leave your name, telephone number and a short message on the answering machine, and your call will be returned.

## UARC 2016 Board

President: Clint Turner, KA7OEI	801 566-4497
Executive VP: Lonnie Oaks, K7LO	801 255-1225
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Imm. Past Pres: Linda Reeder, N7HVF	801 364-7006

## Committee Chairpersons and Members

"Book Lady": Brett Sutherland, N7KG	801 298-5399
Historian: Ron Speirs, K7RLS	801 904-3587
Field Day Chair: (To be determined)	
License Trustee: Brett Sutherland, N7KG	801 298-5399
Repeater Engineer: Randy Finch, K7SL	801 556-7565
ATV Engineer: Clint Turner, KA7OEI	801 566-4497
Autopatch Engineer: Gordon Smith, K7HFV	801 582-2438

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## IRLP Information

For information on using the club's IRLP node on the 146.76 repeater, check <http://www.utaharc.org/irlp>.

For late breaking news listen to the UARC Information Net Sundays at 21:00 on 146.62 or set your browser to: <http://user.xmission.com/~uarc/announce.html>

We are grateful to the management of XMission, our Internet Service Provider (ISP), for the donation of this Web-Page service.



For account information go to:  
<http://www.xmission.com/>  
 Or call 801 539-0852



## The Microvolt

The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah  
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### September Meeting: Hamshack Essentials

What all is in your hamshack? Do you have all the essentials? Are there some things that others consider essential that you have always thought were optional? Come to the September meeting and find out!

At our September 8 meeting, as a way to kick off the fall season, Chuck DeWitt, W7DTO, will be telling us all about what you should have in your hamshack. Come and find out what you've been missing.

Chuck's talk will include a couple of humorous things he's found useful. He will discuss how the essentials have changed over the years and how what was critical to have years ago has little value in the modern shack. Whether you're new to the hobby or a long-timer you should find this talk interesting.

The meeting will be on Thursday, September 8, at 7:30 P.M. in the Warnock Engineering Building in room L102. To reach the "L" three-digit numbered rooms, take the elevator in the southwest corner of the main floor down to level "L1." (The elevators near the east entrance don't go there!)

UARC meetings are held on the second Thursday of each month at 7:30 P.M., in the Warnock Engineering Building on the University of Utah campus. The meeting during the University's fall semester of 2016 will be in room L102. See the map at <http://user.xmission.com/~uarc/meetmap.html> for information on finding the building. The room number varies depending on availability.

Of course, the meeting will include the "standard" meeting features:

- Availability of ARRL books from Brett, the "book lady"
- An opportunity to join UARC or renew your membership
- An opportunity to join ARRL or renew your membership
- The chance to meet face-to-face the people you talk to on the air
- The "Meeting after the meeting": A chance to enjoy pizza or other gastronomic delights with other hams. It happens at Litza's Pizza, 716 E. 400 South.
- The "Meeting before the meeting": A similar get-together for those who can leave work early enough to get there by 5:15 P.M. It is held at "The Village Inn," 910 E. 400 South in Salt Lake City.

### Latest News

#### Our Cover

Our cover this month is from our July Steak-Fry in Big Cottonwood Canyon. On the left is our chief grill-master, Bruce Fereday, KF7OZK, and on the right a view of a number of other diners. Weather

was comfortable and there was enough food for everyone. Sharron, wife of Ted Cowan, NA7C, took a number of additional photos of the event, and they can be seen at:

<https://www.dropbox.com/sh/4lmm0hmiyb83z3f/AAPiZNAo5VdFYfUUlnsLrcEa?dl=0>

## Swap Meet on September 17

There will be a swap meet on Saturday, September 17, in Bountiful, sponsored by the Davis County Amateur Radio Club (DCARC). Location is Bountiful City Park in the Bowery. To find the park, take the 400 North exit from I-15 and look for the park on your left as you pass 200 West.

Everyone is invited. There is no charge for attendance or for display space. The event starts at 8 A.M. and will continue until interest runs out, typically about 11 A.M.

## Homebrew Night: October 13

The annual Homebrew Night, a chance for builders of ham radio equipment to show off their projects, will be coming up at our October meeting, to be held Thursday evening, October 13. Everyone who has built something not shown at a previous UARC Homebrew Night is welcome to participate. Anything that can reasonably be used in amateur radio is eligible. Power supplies, linear amplifiers, UHF transverters, sequencers for remote preamps, and antennas are examples of likely kinds of homebrew equipment.

If your project is too large or permanently mounted to bring to the meeting, bring along pictures, diagrams, specifications, or whatever documentation is needed to show what you have done. The video projector will be available.

## Technician and General Classes

Bill Rouleau, AE7UI, and I will be teaching a Technician course on Tuesday evenings starting on September 13<sup>th</sup>. We will also be teaching a General license upgrade course beginning Monday evening, September 12<sup>th</sup>.

Both courses will run for about eight weeks and be taught in my shack in the basement of my home, about 5000 South and 1500 East. Classes start at

7:00 PM and run for two hours. There is no charge for either course, but you will need the ARRL *License Manual* which will be available for about \$30.00 at the class.

If you are interested in either course please contact me by email (preferably) at: <mailto:f.morris1@comcast.net>, or by phone: 801-278-4966. I will send details out to those interested a couple of weeks before the course begins.

—Morris Farmer, AD7SR

## Ross Hansen, WB7BYZ, SK



Many Utah hams will remember Ross Distributing in Preston, Idaho, which, for many years, was the primary source of amateur transceivers for many of us in Utah. It helped that the UPS route for Preston went through Salt Lake City, and items ordered on Monday would often arrive on Tuesday.

Ross Hansen, WB7BYZ, the ham who operated the store, passed away on June 29, a little more than a month short of his 82<sup>nd</sup> birthday.

Ross had had a long interest in radio and electronics for most of his life, having built crystal sets while growing up. He repaired radios while in high school and graduated to including television sets, while television was still in its infancy.

His obituary can be found at <http://www.webbmortuary.com/notices/Ross-Hansen>.

## Field Day Report

Thanks to all who participated in UARC's Field Day entry at the end of June. The event had a few hiccups, but generally went well. We didn't make as good a score as last year due, partly, to difficulty making contacts on 20-meter SSB, and partly due to just not having enough operators.

Special thanks to Lonnie Oaks, K7LO, who supplied two of the operating tents and acted as our GOTA ("Get-on-the-Air") station coach. Thanks also to Bruce Fereday, KF7OZK, who took care of the chicken and pork main dish for Saturday night dinner. We greatly appreciate the efforts of all who helped set up, operate, log, and tear down.

See the following page for a full breakdown of our scoring.



A crew prepare the A-4 for erection at UARC's 2016 Field Day entry..  
(Photo by KD7TDZ)

**The Microvolt September 2016**

<b>UARC 2016 Field Day Contacts and Scoring (2015 Values in Parentheses)</b>						
<b>Band</b>	<b>CW</b>		<b>SSB</b>		<b>Total</b>	
<b>80</b>	—	(—)	160	(200)		
<b>40</b>	471	(376)	544	(408)		
<b>20</b>	226	(560)	95	(541)		
<b>15</b>	—	(—)	—	(9)		
<b>6</b>	—	(—)	22	(50)		
<b>(GOTA)</b>	—	(—)	11	(12)		
<b>Total Contacts</b>						
	697	(936)	832	(1220)	1529	(2156)
<b>Contact Points</b>						
	1394	(1872)	832	(1220)	2226	(3092)
<b>Power Mult</b>						
			X2		4452	(6184)

<b>Bonus Points</b>	Emergency Power:	300	
	Public Information Table	100	
	Message Origination	100	
	Natural Power	100	
	W1AW Bulletin	100	
	Educational Activity	100	
	Safety Officer	100	
	Web Submission	50	
	Youth Participation	20	
	<b>Total Bonus</b>		<b>970</b>
<b>Grand Total</b>		<b>5422</b>	<b>(7034)</b>

## License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

<b>Date</b>	<b>Day</b>	<b>City</b>	<b>Contact Person</b>	<b>Phone</b>
09/07/16	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922
09/21/16	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
09/21/16	(Wed.)	St. George <sup>2</sup>	Gary O. Zabriskie, N7ARE	N/A
09/27/16	(Tue.)	Salt Lake City <sup>3</sup>	Garth Wiscombe, W7PS	(801) 558-5936
10/01/16	(Sat.)	Salt Lake City <sup>1,4</sup>	Gordon Smith, K7HFV	(801) 582-2438
10/05/16	(Wed.)	Ogden	Rick Morrison, W7RIK	(801) 791-9364
10/08/16	(Sat.)	Hurricane <sup>2</sup>	Gary O. Zabriskie, N7ARE	N/A
10/19/16	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
10/19/16	(Wed.)	St. George <sup>2</sup>	Gary O. Zabriskie, N7ARE	N/A
10/22/16	(Sat.)	Logan	Richard D. Elwood, KE7GYD	(435) 753-4360
10/25/16	(Tue.)	Salt Lake City <sup>3</sup>	Garth Wiscombe, W7PS	(801) 558-5936

<sup>1</sup>Preregistration required. Check with the contact person before the test session.

<sup>2</sup>More information at <http://www.dixieham.org/meetings.html>

<sup>3</sup>New location: Senior Center at the Columbus Center, 2530 S. 500 East

<sup>4</sup>More information at <http://www.utaharc.org/Exams/>

## **AES Shuts Down**

Amateur Electronic Supply (AES) closed its doors at the end of July after 59 years of selling amateur radio equipment. AES was a prominent source of amateur gear on the web and at conventions including the annual Dayton Hamvention.

The founder of AES was the late Terry Sterman, W9DIA. He started the business in 1957 when he was just 18 years old. Starting January 1, 1998, ownership was transferred to Amateur Electronic Supply LLC, with Phil Majerus, a Wisconsin businessman, at the helm. Besides the headquarters store in Milwaukee, AES operated stores in Cleveland, Orlando, and Las Vegas. The Las Vegas store was particularly convenient for Utah hams.

Ham Radio Outlet (HRO) has taken over the Milwaukee store and it will become their newest location after some renovation. They plan to hire back some of the previous AES employees.

## **Dayton Hamvention Moves**

The famous Dayton Hamvention, possibly the most-known amateur radio gathering in the country, will be moving from its traditional site at the Hara Arena. The new venue is the Greene County Fairgrounds in Xenia, about 30 miles to the southeast of Dayton.

Tim Duffy, K3LR, of DX Engineering, has recently placed a video tour online at:

<https://www.youtube.com/watch?v=FXXI18G0QA0>.

He has told ARRL he gives the new site a clear thumbs-up saying,

“I can tell you that I have been hearing from all over the world a sigh of relief after [people] see the video we did at the Fairgrounds. The new venue is huge, and it is clean — it will be perfect for Hamvention.” Duffy said he likes the Greene County Fairgrounds so much that he thinks that Hamvention will be even better at its new site than it had been for the past 10 years or so at Hara Arena in Trotwood, Ohio.

## **“Symbol Rate” Comments Due in October**

In response to an ARRL petition to change the rules regarding digital transmissions on HF to restrict bandwidth rather than baud rate, the FCC has proposed in WT Docket 16-239 to simply remove the baud rate restrictions. Many amateurs believe this is a bit *too* liberal as it might allow signals that could occupy the entire 20-meter band. The ARRL petition had proposed that data emissions below 29.7 MHz be limited to a bandwidth of 2.8 kHz.

Those who would like to file comments on the proposal have until October 11. The full text of the proposal can be found at:

[http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0728/FCC-16-96A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0728/FCC-16-96A1.pdf).

## **Member of the Month**

### **Brannon Burgon, KI7AJ0**

**By Linda Reeder, N7HVF**

This month we are featuring Brannon Burgon, KI7AJ0. Brannon is new to the hobby. He

received his General class license on January 16th of this year after passing the test in Provo.

Brannon has some software defined radio (SDR) software on his computer that allows him to listen to amateur radio frequencies. This is what got Brannon interested in amateur radio. In fact, that is how Brannon learned about UARC. Brannon joined UARC and attended his first meeting two days before he received his license. It was the meeting about grab and go kits presented by Larry Jacobs, WA7ZBO.

After hearing various ham voices on the air from very old to very young, Brannon decided he would try to pass the tests. Brannon has a background in electronics, so it wasn't hard for him to learn the materials to pass the tests. He passed his Technician and General exams on January 16, 2016. I asked him if he plans on upgrading to Extra and he said "maybe next year."

At the time Brannon get his license, his main intent was using ham radio for emergency communications. However, he quickly learned that ham radio is also a fun hobby. Now he is looking forward to slowly building his skills and trying out many of the things that ham radio operators can do, including digital communications.

Brannon is net control for the UARC information net on the third Sunday of each month at 9 P.M. He enjoys talking with the "76ers." Brannon attended the Great Salt Lake Hamfest and built a tape measure Yagi antenna for two meters and 70 centimeters. Brannon enjoys building, but he would rather learn about things that are already built and learn how they are made.

Brannon works as a computer programmer in Cottonwood Heights. Besides doing a lot of listening and talking on local repeaters, Brannon enjoys hanging out with his family, programming computers, and occasionally goofing around with electronics and landscape photography.

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Brannon, welcome to amateur radio. We wish you the best in all of your endeavors



Brannon Burgon, K17AJO  
(Photo by K7RLS)