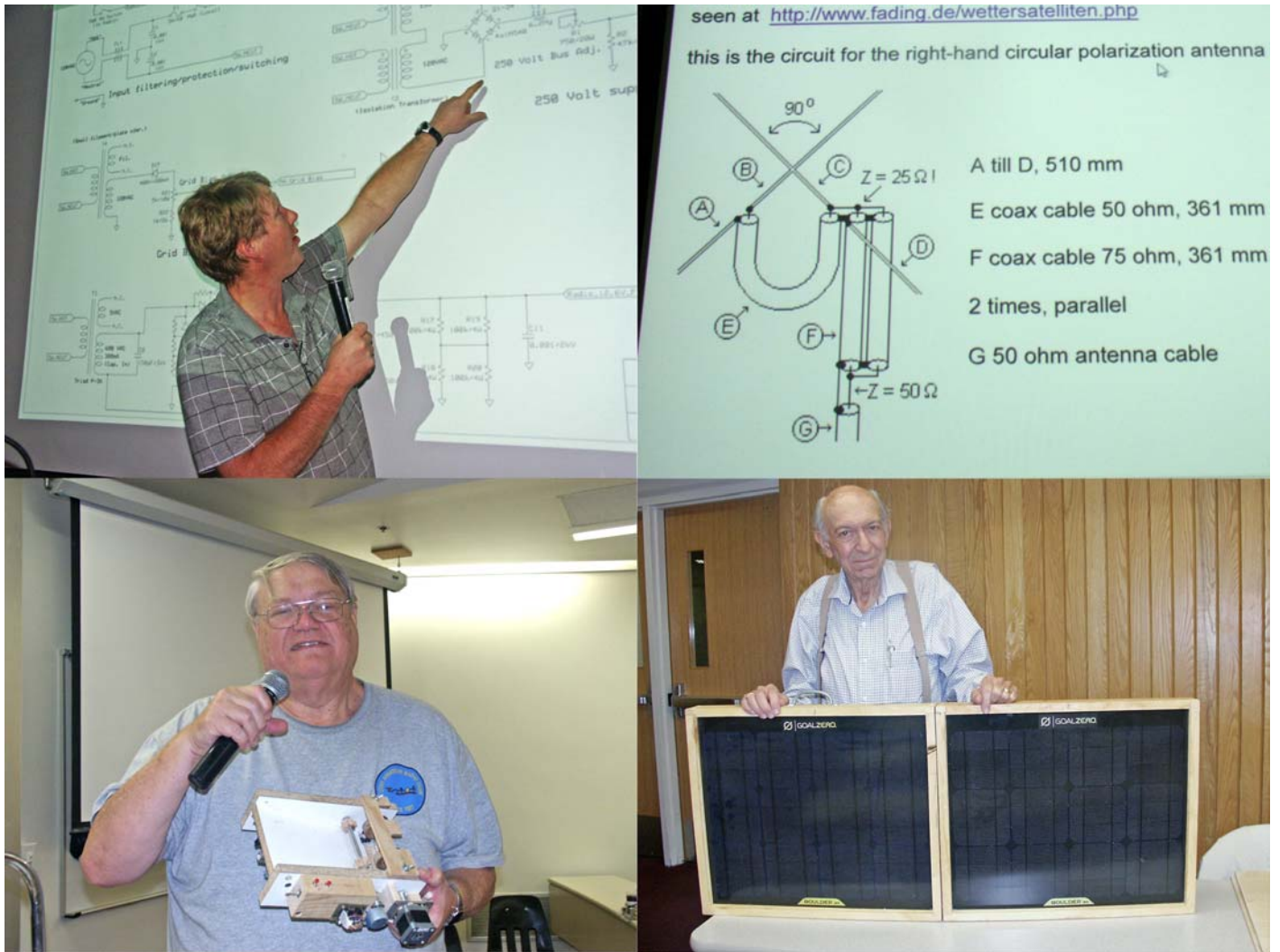


The *Microvolt*

November, 2016



Some Projects from “Homebrew Night”

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
Vice Pres: Bruce Fereday, KF7OZK	801 883-9428
Secretary: Dick Keddington, KD7TDZ	801 274-9638
Treasurer: Chuck Johnson, WA7JOS	801 268-0153
<i>Microvolt</i> Editor: Gordon Smith, K7HFV	801 582-2438
Asst. <i>Microvolt</i> Editor: Rick Asper, AC7RA	801 865-1693
Program Chairperson: Morris Farmer, AD7SR	801 278-4966
Program Chairperson: Chuck DeWitt, W7DTO	435 882-9002
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>

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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
Volume 59, Issue 10, September, 2016

November Meeting: DX and DXpeditions

What does it take to get into DX? Do you need the \$4000 rig and the 75-foot tower? What are DXpeditions all about and who pays for them? The November UARC meeting will be a chance to find out.

Our November meeting, Thursday, November 10, will feature serious DXer Jared Smith, N7SMI, from Smithfield, Utah. Jared has recently returned from a DXpedition to Tuvalu, a tiny island in the south Pacific. This visit not only gave other amateurs a chance to get this rare country in their logs, but also helped establish a permanent Tuvalu Amateur Radio Club and get two local amateurs on the air.

The meeting will be on Thursday, November 10, 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 shows a sample of the projects displayed at our October Homebrew Night. Clockwise from the upper left they are Clint, KA7OEI, showing the schematic for his power supply for a Drake TR-3 transceiver; diagram of circularly polarized antenna for six meters built by

Morris, AD7SR; Dick Keddington, KD7TDZ, showing his frame which allows portable use of bargain solar panels; and Chuck Johnson, WA7JOS, showing his stamping machine for use on the bead rollers that he manufactures. Additional photos can be found on the UARC web site at <http://user.xmission.com/~uarc/hb16phot.html>.

Thanks to Ron, K7RLS for the photos.

Technician and General Classes

Morris Farmer, AD7SR, will be starting classes in January, 2017, for all classes of amateur license.

The schedule is as follows:

Class	Day	Start Date
Technician	Mon	01-16-17
General	Tue	01-17-17
Extra Class	Wed	01-18-17

The textbook for each class will be the ARRL [*License Manual*](#) for the desired class of license. Manuals will be available for purchase at the first class session.

Classes will meet weekly from 7 to 9 P.M. at Morris' house. The Technician and General Classes will run for about eight weeks, the Extra Class, about sixteen. Volunteer examiners will be present at the last session of each class to give license tests. Morris will be joined by Bill Rouleau, AE7UI, for the Technician and General Classes, and by Ron Speirs, K7RLS, for the Extra Class, as instructors.

Nominations Wanted

It's time to be thinking about officers to run UARC in 2017. Many of the current officers are willing to run again, but many would like to get a vacation and see some new blood on the Board of Directors. Would you like to participate in doing some of the jobs to keep the club alive? Get in touch with one of the current board members and get your name on the list.

At the November meeting the Nominating Committee will present its slate of nominees and the floor will be open for nominations from the floor as required by our bylaws. Think about whether you

might like to run or if you know someone who would do a good job and be willing to serve.

Repeater Pictures

Last month's *Microvolt* contained an article by club President, Clint Turner, KA7OEI, about recent work on two of the club's repeaters. We did not have room for the accompanying photos and forgot to mention that they are available on the web. You might be particularly interested in what an 800-pound battery module looks like.

Check out the photos at:

<http://user.xmission.com/~uarc/picrpt16.html>.

New Crossroads Repeater

Susan Smith, KJ7ABC, tells us that the Salt Lake Crossroads Amateur Radio Club has recently installed a new Yaesu Fusion Repeater in the Ensign Peak area north of the state capitol. The repeater can accept both the digital "Fusion" mode and traditional analog FM.

The frequency is 448.525 MHz. A PL tone of 100 Hz is required. This repeater may be used in conjunction with the 147.50 simplex frequency for the group's weekly net, Thursday evenings at 2100.

WIMU Hamfest Returns in 2017

Many hams remember the long-standing tradition of a Wyoming-Idaho-Montana-Utah (WIMU) hamfest held in Island Park Idaho on the first weekend of August each year. After the traditional location became unavailable, the event moved around for several years, but ultimately sputtered and died.

Larry Jacobs, WA7ZBO, has announced a reappearance of WIMU next June. It will take place on June 16-18, 2017, in Garden City, Utah, on Bear Lake, using the Town Center City Hall and the bowery in the city park. More details will become available at <http://wimuhamfest.org/>.



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i. Percent Paid (15c divided by 15f times 100)		98.9%	98.9%

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Gordon R. Smith

Editor

Date

October 4, 2016

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
11/05/16	(Sat.)	Bluffdale	Erik D. Swanson, KG6GOP	(510) 684-3669
11/16/16	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
11/16/16	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	N/A
11/29/16	(Tue.)	Salt Lake City ³	Garth Wiscombe, W7PS	(801) 558-5936
12/03/16	(Sat.)	Salt Lake City ^{1,4}	Gordon Smith, K7HFV	(801) 582-2438
12/03/16	(Sat.)	Logan	Richard D. Elwood, KE7GYD	(435) 753-4360
12/07/16	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922
12/10/16	(Sat.)	Hurricane ²	Gary O. Zabriskie, N7ARE	N/A
12/21/16	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983

¹Preregistration required. Check with the contact person before the test session.

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

³New location: Senior Center at the Columbus Center, 2530 S. 500 East

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

Member of the Month

Mark Hansen, KG7SBN

By Linda Reeder, N7HVF

This month we are featuring Mark Hansen, KG7SBN. Mark has been interested in amateur radio for a long time influenced by his friend, Kevin Westenskow, KB7SNA. Mark met Kevin in his LDS ward and both of them worked for the church for awhile. Mark's job was in the Information Systems department.

Mark is one of Kevin's buddies who didn't pass the license test back in the 80's. Mark says he remembers taking the test in the old Blue Cross/Blue Shield building. Through the years Kevin tried to convince Mark to get his amateur radio license until, finally, Mark decided it was time to go for it. Mark heard about a class being taught by Morris Farmer, AD7SR, and decided to take it. Kevin took the class with Mark as a refresher course. Mark says that Kevin is a fantastic mentor. Mark was really impressed with the wealth of knowledge Morris has about amateur radio. This is what Mark likes about amateur

radio: the willingness of members to help others get into the hobby. Mark took the class in November, 2014, and received his Technician license in March, 2015. These classes run about six weeks.

Mark bought an Icom T-70A handheld from Morris. Mark enjoys talking on the '62 repeater. He says he would like to broaden his horizons in amateur radio. There are so many different ways of communicating on amateur radio and he would like to learn about them. Mark plans on getting his General license next year.

Mark graduated from the University of Phoenix with a Bachelor's degree in business. He has worked in the medical industry for 25 years working with medical equipment. He delivers equipment to different hospitals, installs the equipment, makes sure it works, and shows the

staff how to use it. So Mark does lots of traveling including many out-of-town trips.

Mark and his wife, Kimberly, have five children: three boys and two girls. Mark and Kimberly have two wonderful grandchildren: a granddaughter, and a grandson. Mark would like to get his boys interested in amateur radio.

Mark is a member of UARC. He said he would like to attend some of the meetings, but his business keeps him busy. Mark enjoys the out-of-doors, exploring trails and getting out in the woods to see what is out there. Mark also loves shooting.

Mark, welcome to the hobby and congratulations on getting your Technician license.

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More Homebrew Photos



Clint, KA7OEI, with his homebrew antenna tuner



Glen, WA7X, powers a CFL lamp from 12V DC

(Thanks fo K7RLS for photos)