

The Microvolt

November 2011



WA7JOS
CHARLES JOHNSON
PIC Processor



KF&OZK
BRUCE FEREDAY
Iolo Antenna



K7ALA
JOHN HARDY
*Direction Finding
Antenna*

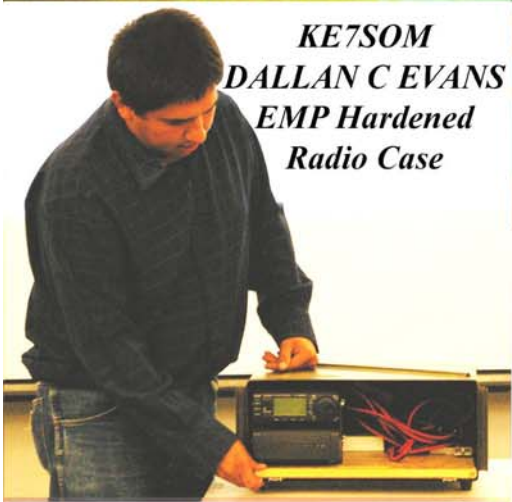


K7RJ RONALD M JONES

10ghz Beacon



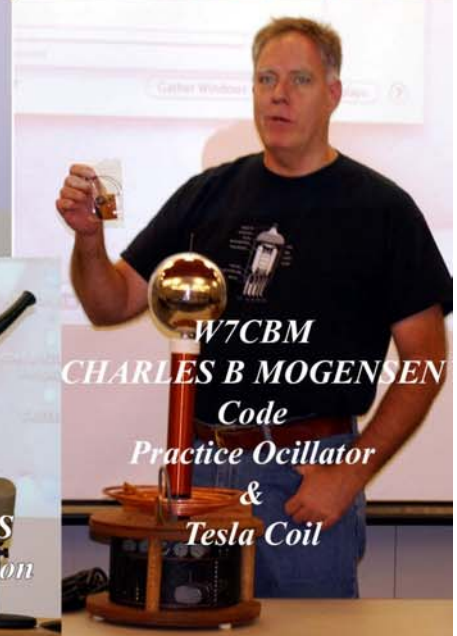
KE7SOM
DALLAN C EVANS
*EMP Hardened
Radio Case*



KA7PGH
ROLAN S CARR
Polarity Checker



KF7RUQ
RYAN VANDYKE
*HT Stand
Dual Bank J-Pole*



W7CBM
CHARLES B MOGENSEN
*Code
Practice Ocillator
&
Tesla Coil*



N7LN
DARVELL D HUNT
*Emergency Power
12V DC Generator*



K7RLS
RONALD L SPEIRS
*Battery Replacement on
Leaf Blower*

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 \$17 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, 1783 Woodside Drive, Holladay, UT, 84124-1620.

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, 1933 Woodside Drive, Holladay, UT, 84124-1632.

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.

Membership: Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$17 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 \$17 may obtain a membership without a *Microvolt* subscription for \$9. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 1783 Woodside Drive, Holladay, UT 84124-1620.

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 2011 Board

President: Linda Reeder, N7HVF	801 364-7006
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Vice Pres: Brett Sutherland, N7KG	801 298-5399
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Historian: Ron Speirs, K7RLS	801 904-3587
Field Day Chair:	
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



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The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah
Volume 54, Issue 10, November 2011

November Meeting: Public Service Opportunities

What do we do as amateurs to deserve the considerable frequency spectrum that we use free of charge? One of the most common activities is public service communication. Each year non-profit and charitable organizations sponsor many kinds of running, cycling, and boating events, for which the safety can be improved with the help of amateur radio communications. What are the events? Do they need more help? What equipment and experience do you need to participate? These are some of the questions that will be answered at the coming UARC meeting, to be held on Thursday, November 10, 2011.

We have been able to obtain Brett Neilson, KC7IIB, as our guest speaker. Brett has organized a dedicated group for support of [amateur radio public service events](#). Events can be fun as well as being great preparation and testing for emergency communications. Come and hear how to get involved. Again, the meeting will be held on Thursday, November 10, at 7:30 P.M.

UARC meetings are held on the second Thursday of each month at 7:30 P.M. During fall semester, they will be in room 1230 (the “Duke” classroom) of the Warnock Engineering Building at the University of Utah. Some of our traditional parking on the east side of the building is blocked off for construction, so if you find it full, another recommended parking area is near the southeast corner of the Merrill Engineering Building lot. Go south along the east side of Merrill, then go in the north door of Warnock. See the [map](#) for information on finding the building.

Some of our traditional parking on the east side of the building is blocked off for construction, so if you find it full, another recommended parking area is near the southeast corner of the Merrill Engineering Building lot. Walk south along the east side of Merrill, then go in the north door of Warnock. See the map at http://user.xmission.com/~uarc/ab1ip_meetmap.html for information on finding the building.

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. The November get-together will be at “Crown Burger,” 377 E. 200 South in Salt Lake City.

Latest News

Our Cover

Our cover this month shows many of the entries in Homebrew Night at the October UARC meeting. Thanks to Bruce Ferreday, KF7OZK, for taking the photos and composing the cover. The tower near the top center belongs to the moderator of the evening, Dale Heisler, WJ7L, in a demonstration that homebrew projects don't necessarily have to be completed rapidly.

Nominations Needed

As well as the public service program, our November meeting will feature presentation of nominations for 2012 UARC officers and a chance to make nominations from the floor. Think about who you would like to lead the club in the coming year and possibly even consider taking an office yourself.

DX Seminar, November 12

If you've always wanted to be a DXer but weren't sure how to get started, the answer may be at hand. The Utah DX Association has announced the all-day "First Annual DX University," to be held on Saturday, November 12, 2011. The event will be held at the University of Utah Merrill Engineering Building, room 2325, starting at 8:00 A.M. It is scheduled to run until 4:30 P.M.

There is a charge of \$15 and pre-registration is required. Deadline is Thursday, November 10. Experienced DXers will teach techniques of setting up a station, picking the right bands, getting through the pileups, and getting confirmations. There will be a variety of instructors including Wayne Mills, N7NG, from Jackson, Wyoming, member of the ARRL DX Advisory Committee. For more information and registration, see the DX University Web Site at :

<http://www.k7ala.com/dxu/>

KC7AW, SK

We report with regret the passing of John ("Dink") Dinkelman, KC7AW, on Sunday, October 9, 2011, just one day past his 87th birthday. Dink had a strong presence in Wasatch Front amateur radio for many years. He retired from a naval career in 1978 and was very active in amateur radio from then on. For many years he was the net manager for the weekly Utah VHF Society swap and business net held on two meters.

Dink was a big believer in "paying the rent" on our hobby by participating in public service and emergency communications. Even after his health began to decline he was a regular participant in the Wasatch-100 run from the Big Mountain Pass site. Dink's was a cheerful, reasoned voice that undoubtedly had a beneficial impact on many amateurs.

Dink's obituary can be found at:

<http://www.mcdougalfuneralhomes.com/sitemaker/sites/McDoug2/obit.cgi?user=486136Dinkelman>
or by following the link at <http://utaharc.org/News/>.

First Contact Award

At our October meeting, our Utah ARRL Section Manager, Mel Parkes, NM7P, pointed out a new program that the League is sponsoring. For most of us, our very first contact as a licensed operator is a memorable achievement. If you are the very first contact for a new ham, you can go online to request a handsome certificate confirming that first QSO. The certificate will be mailed to you for your signature. Then, you can mail it to the new ham or, possibly, find an opportunity to present it in person.

See <http://www.arrl.org/first-contact> for full information.

2011 Field Day Results

The results are in! The scores from last June's Field Day contest, the annual nationwide event for portable and mobiles stations, are now available on ARRL's web site. It appears that there were 26 entries from Utah with scores ranging from 16,668 points down to 46. Here are the raw results.

#	Call	Score	Category	QSOs	Power Mult	GOTA Call	Section	Participants	Club
1	K7UM	16,668	4A	5,363	2	KF7P	UT	32	Utah DX Assn
2	K7DAV	4,828	3A	1,081	2	AL7AA	UT	104	Davis Co ARC
3	W7SP	4,434	2A	1,059	2	K7LO	UT	115	Utah ARC
4	WA7LNW	3,700	1B1B	355	5		UT	1	
5	K7GL	2,498	3A	804	2	K7NAL	UT	20	Wasatch Back Tri-Co AR Group
6	W7IVM	2,394	5A	488	2		UT	50	
7	K7UB	2,368	4A	562	2		UT	30	Golden Spike ARC
8	N5LZ	2,180	1B1B	203	5		UT	1	
9	N0KGM	1,956	1F	753	2		UT	3	
10	K7EA	1,658	1E	352	2		UT	1	
11	W7SU	1,656	2A	258	2		UT	40	Ogden ARC
12	N7HRC	1,420	4A	135	2	N7HRC	UT	10	
13	NA7UT	1,100	1B2B	130	5		UT	2	
14	W7BAR	948	5F	136	2		UT	30	
15	WX7G (+N7BW)	578	1B2	125	2		UT	2	
16	W7SUR	570	2A	185	2		UT	9	Skyline RC
17	WI7J	482	1A	166	2		UT	3	
18	KB0LQJ	330	1E	16	5		UT	1	
19	AK7O	258	1D	52	2		UT	1	
20	WA7YAZ	250	1D	61	2		UT	1	
21	KC7PVD	206	1E	28	2		UT	1	
22	WV7P	202	1D	76	2		UT	1	
23	KF7PLA	175	1E	1	5		UT	1	
24	N7RCN	120	1D	35	2		UT	1	
25	WA7BME	98	1D	12	2		UT	1	
26	KD7SWL	46	1D	23	2		UT	1	

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Of course it's hard to compare the results of an entry running four stations at 150 watts each with a group or individual running a single QRP transmitter on batteries. A reasonable way to compare entries in different entry classes seems to be to find the percentile of each station within its entry class. (Percentile is the percentage of entries with lower scores than the one being rated.) Below is our own tabulation in percentile order.

Utah Field Day Entries for 2011 by Percentile

Call	Score	Class	Position	Of	Percentile	2010 Percentile	Club
Portable Stations							
K7UM	16,668	4A	1	125	99.2	99.2	Utah DX Association
WA7LNU	3,700	1B1B	11	160	93.1		
K7DAV	4,828	3A	58	349	83.4	85.1	Davis County ARC
N5LZ	2,180	1B1B	29	160	81.9		
W7SP	4,434	2A	81	387	79.1	77.6	Utah ARC
K7GL	2,498	3A	153	349	56.2		Wasatch Back Group
NA7UT	1,100	1B2B	19	36	47.2		
K7UB	2,368	4A	77	125	38.4	47.7	Golden Spike ARC
W7SU	1,656	2A	250	387	35.4	27.4	Ogden ARC
W7IVM	2,394	5A	56	83	32.5	45.2	Bridgerland ARC
WX7G	578	1B2	13	19	31.6		
N7HRC	1,420	4A	109	125	12.8		
WI7J	482	1A	130	149	12.8		
KD7SWL	46	1D	364	385	5.5		
W7SUR	570	2A	373	387	3.6		Skyline ARC
Fixed Stations							
K7EA	1,658	1E	43	253	83.0	59.7	
N0KGM	1,956	1F	7	38	81.6		
AK7O	258	1D	169	385	56.1		
WA7YAZ	250	1D	171	385	55.6		
WV7P	202	1D	204	385	47.0		
N7RCN	120	1D	263	385	31.7		
KB0LQJ	330	1E	177	253	30.0		
WA7BME	98	1D	289	385	24.9	35.4	
KC7PVD	206	1E	219	253	13.4	31.4	
W7BAR	948	5F	7	8	12.5	45.6	Borderline ARC
KF7PLA	175	1E	232	253	8.3		

Congratulations to the Utah DX Association who scored number one in the nation in the 4A class (four simultaneous transmitters as a club portable entry) out of 125 entries in that class.

UARC improved its percentile slightly over 2010 coming in third in the state for raw score and fifth in order of percentile. The 1D class was particularly popular with five entries compared to three in 2010. Good luck to everyone in 2012.

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
11/02/11	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922
11/16/11	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
11/16/11	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
11/19/11	(Sat.)	Herriman	Joel R. Stewart, KE7TGI	(801) 971-2534
11/19/11	(Sat.)	North Salt Lake	Gary L. Davis, KE7MQF	(801) 865-0299
11/29/11	(Tues.)	Salt Lake City	Eugene McWherter, N7OVT	(801) 541-1871
12/03/11	(Sat.)	Salt Lake City ¹	Gordon R. Smith, K7HFV	(801) 582-2438
12/10/11	(Sat.)	Logan	V.P. Rasmussen, N7JFG	(435) 770-0630
12/21/11	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
12/21/11	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678

(Salt Lake City test on last Tuesday omitted in December.)

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

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

³More information at <http://utaharc.org/Exams>.

Member of the Month:

Phil Bullock, K7PB

By Linda Reeder, N7HVF

This month we are featuring Phil Bullock, K7PB. Phil said he has been in amateur radio even longer than Gordon, K7HFV. Phil was 13 years old when he obtained his first license, but his interest in electronics dates back to the fifth grade. At the time he took his test, he was attending Farrer Junior High School in Provo. He was influenced by one of his neighbors who was into amateur radio.

Phil has his Extra Class license. Phil loves to build amplifiers and transmitters, in fact this is his favorite part of amateur radio. Phil has built a remote-control system which enables him to operate his home station from wherever he goes.

Phil lives in Arizona during the winter. He has a computer network there that can be connected to

the network he has in Utah. Phil has been a member of UARC for many, many years. At one time Phil was an instructor for UARC and taught amateur radio classes at Murray High School and at West High School.

When Phil was in high school he worked on broadcast radio equipment at KOVO in Provo. After graduating from college, Phil worked for Mountain Bell for 20 years including time in microwave, accounting, and regulatory matters. Then he worked 15 years for the Utah Department of Commerce regulating the telephone industry. Phil now works on computers.

Phil is a pilot and has his commercial license, instrument rating, and is qualified as an instrument instructor.

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Phil is widowed. His wife, Inez, held a Technician license and had the call. K7SVN.

Phil is a life member of the ARRL. He is also a life member of the QCWA, the Quarter Century Wireless Association. Phil has used Morse Code for many years but says he doesn't use it as much now. He is active on 80 and 40 meters.

Phil we wish you the best in all of your endeavors.

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Phil Bullock, K7PB
(Photo by K7RLS)