



Newly elected Program Chairman, Keith Howard, KA7RLB, enjoys Ham Radio and is featured in this issue of *The Microvolt*. ***Please note that the UARC Monthly meeting for May will be May 13th instead of the 1st Thursday, due to finals week at the U of U being the first week of May.

The

Microvolt

February 2004

Please Send Dues to:

UARC

c/o Dick Keddington

1732 Woodside Dr #32

Holladay, Ut 84124-1624

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Prologue

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 first Thursday of the month at 7:30 PM in the University of Utah Engineering and Mines Classroom (EMCB) building, Room 101.

Membership: Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$15 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 \$15 may obtain a membership without a *Microvolt* subscription for \$9. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 1732 Woodside Dr #32., Holladay, UT 84124-1624. ARRL membership renewals should specify ARRL Club #1602.

Contributions: Monetary contributions are gladly accepted. Send directly to the Club Treasurer: Mark Hodgen, 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-) has autopatch facilities on both the Orem exchange (covering Santequin to Lehi) and the Salt Lake City exchange (covering Draper to Layton). The 449.10 repeater has autopatch facilities into Salt Lake City only available to UARC members. Due to the volume of traffic, only mobiles should use this autopatch. Autopatch use is open to all visitors to our area and to all club members. Non-members who wish to use the autopatch are encouraged to help with the cost of maintaining the equipment by joining the club.

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.

Publication: The *Microvolt* is the official publication of the Club. Deadline for submissions to the *Microvolt* is the 10th of each month prior to publication. Submissions by email are preferred (gopenshaw@msn.com), but other means including diskettes and typewritten submissions can be mailed directly to: Gary Openshaw, 861 Roosevelt Ave., Salt Lake City, UT 84105. All submissions are welcome but what is printed and how it is edited are the responsibility of the Editor and the UARC board. 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, 1732 Woodside Dr #32., Holladay, UT 84124-1624.

UARC 2004 Board

President: Glen Worthington, WA7X	272-8825
Executive VP: Roy Eichelberger, W7ROY	571-2447
Vice Pres: Gordon Smith, K7HFV	582-2438
Secretary: Dick Keddington, KD7TDZ	274-9638
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Program Chair: Keith Howard, KA7RLB	463-0106
Program Chair: Telvin Mills, KB6BYU	968-5089
Imm. Past Pres: Brett Sutherland, N7KG	298-5399

Committee Chairpersons and Members

"Book Lady": Fred Desmet, K17KM	485-9245
Historian: Ron Speirs, K7RLS	968-4614
Field Day Chair:	
Club Trustee: Brett Sutherland, N7KG	298-5399
Engineer: Randy Finch, K7SL	277-7135
ATV Engineer: Clint Turner, KA7OEI	566-4497
Board Liaison &	
Autopatch Engineer: Gordon Smith, K7HFV	582-2438
Provo Autopatch Host &	
ATV Engineer: Dale Jarvis, WB7FID	224-3405
Repeater Monitor:	

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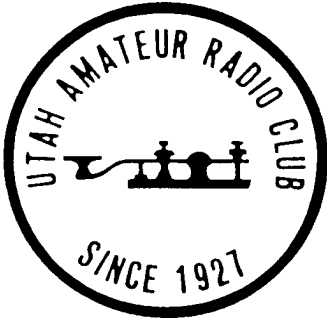
For late breaking news listen to the UARC Information Net Sundays at 21:00 on 146.62 or set your browser to:
www.xmission.com/~uarc/announce.html

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



The Microvolt

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publications available so conveniently at our meetings. Great Job Fred!!!

There are other ideas, projects (some to finish) and programs we hope to announce shortly to enhance and return value to the membership of this club. Stay tuned.

You will probably hear me more on the club repeaters in an effort to get to know you better.

Thanks for your support and remember, "It's just a hobby."

Actually there and 73
Glen WA7X



QST from the Prez

Glen Worthington, WA7X

We just completed our first meeting as the new UARC board of directors and if the enthusiasm of this group is an indication of the club we are

going to have a great year.

One of the first things I would like to do is give recognition for the many individuals that contribute to the club that may or may not be visible to all. In an effort to identify those who have contributed I would like to ask those who know of, or even those who have contributed items or services to the club to email me at mail@wa7x.com a note describing the contribution, the name and call sign(s) of those we need to recognize. I believe it is very important that we are aware of the many contributions that make this club work. Hopefully next month I can begin to publish some of the feedback on this topic.

One person I want to mention this month (because I know this one) is Fred Desmet, affectionately known as the "Book Lady." Reviewing our P&L statement it became quite obvious that this is a "profit center" within our non profit club, or in other words aside from club dues the biggest financial contribution. This is tough work, lugging

hundreds of pounds back and forth each club meeting and events where sales can be had. And what a service to have the best of Amateur

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Bob Wood, W7OAD
UARC Member

Member of the Month

Linda Reeder, N7HVF



This month we are featuring Keith Howard KA7RLB. Keith has been in amateur radio on and off for 21 years. In 1957, Keith took a class and made it all the way up to General, but let it lapse in 1966, so he had to start all over again. Keith was a Novice for 17 years. In 1987 they opened up the ten-meter phone band, 28.300 to 28.500. He really enjoyed that. Finally in May of 2000 he obtained his Technician license and in September of 2001 Keith obtained his General license. He is working very hard on getting his Extra.

When Keith was first licensed he had an ARC-5 military transmitter and worked 40-meter CW with it. He was in the army for three years. Keith was in the aviation battalion and worked on helicopters. Keith has been in the moving business as a truck driver for 28 years.

Keith and his wife Joann have four children: three boys and one girl. His daughter Marilyn has her Technician license. Marilyn's call sign is KC7JQB.

Keith's favorite thing about amateur radio is rag chewing. He really enjoys the HF bands. He mostly gets on 40 meters and 75 meters. Keith is a member of the Utah Beehive Net and a couple of nets in California. He also enjoys PSK 31.

For the last four years Keith has assisted Fred Desmet, KI7KM, with the books. Keith is a member of UARC and was elected to be one of the chairpersons for UARC for 2004. He is also a member of the Davis County Amateur Radio Club.

Keith, congratulations on your elected position.

73, N7HVF, Linda Reeder

January's Meeting: Amateur Satellites



Much of the world's communications have gone to satellite over the last several decades. Even with limited budgets, amateur radio has its own set of satellites. Our January meeting featured Randy Kohlwey, N7SFI, who told us all about our amateur space communications possibilities. Randy mentioned "Oscar Orbiting Satellite Carrying Amateur Radio" (OSCAR) AO-E scheduled to launch March 31st, 2004. Randy, thank you for your presentation.

Multitester Essential

By Greg Smith, K7APW

One Dollar Ninety-five cents!

I recently discovered a small little book hidden away on my bookshelf, long neglected since my high school days. The most startling fact about this

book was its price, \$1.95. I wondered how much money I have saved by the knowledge gained from this small book. The book is titled "How to use your VOM/MULTITESTER or DVM" by Louis M. Dezettel.

I watched my Father repair all kinds of broken gadgets. His tool kit always contained the usual arsenal of handyman tools, hammer, screwdrivers, pliers, diagonal cutters, and a flashlight. There was always a Multitester nearby to diagnose the mysteries of life. The meter could reveal the invisible electrons as they raced through the meter movement on their way to some useful task.

I have saved hundreds of dollars on repair costs at my home on such items as clothes washers, dryers, cook ovens, lighting, telephone, and automotive electrical problems.

The multimeter in the ham shack is an essential piece of equipment. The uses of a multitester include the testing of the following: Resistive components, capacitive components, inductive components, semiconductors, battery condition, current flow, estimating battery requirements for operating your station, trouble shooting feed lines, and many other uses.

The last three chapters of the book layout a basic strategy for troubleshooting radio, TV, and audio equipment. The final chapter discusses tests for RF applications. Conclusions:

Money spent---1.95 +Tax

Time spent---Two hours

Results: Reading this book does not qualify the reader to tackle Television repair, but has solidified my desire to always have a multitester in my toolbox or grab-and-go kit. □

February's Meeting: Towers

Planning to do some tower work? Want to know how to do it safely? The coming UARC meeting will present some information you need. The meeting, to be held Thursday, February 5th, will feature Mack Gilbert, K7HEN, who has over 40 years of experience in the commercial radio world and has installed over 1000 towers. He tells us that OSHA standards have recently changed. People

used to go up a tower with nothing for protection but a piece of rope and hope for the best. Now, however, there are quite different standards in place. Mack will show some of the modern safety equipment. In 2002, 350 people were killed doing tower work. Don't become a statistic.

Mack also will talk about grounding and lightning protection. This is another area where research has changed the accepted practices. Protection schemes that had been accepted for decades have been proved ineffective. Come out and find out what *does* work.

Mack has had experience with installations in the Land Mobile Service all over the west. Mack was first licensed as an amateur radio operator in 1958, when he was only 13 years of age. He started with his own business in Vernal, Utah, from 1971 to 1983. He worked for Motorola, Microwave Division, for two years in Alaska. He moved back to Utah and worked two years for General Electric as a Service Development Manager, moving to Utah Power & Light for six years. He then had his own business for 15 years, known as M.G. Telecommunications. At the present time he is working for Wasatch Electric.

That's Thursday, February 5th, at 7:30 P.M. in room 101 of EMCB on the University of Utah campus.

Tech Net Starts

A new net made its debut on Wednesday, January 14. The UARC board decided to try holding a weekly Technical Discussion Net each Wednesday at 9 P.M. The first session was not, perhaps, well-announced, but it still drew about seven check-ins and ran close to an hour with our new President, Glen Worthington, WA7X, acting as net control. If you've wondered how a particular antenna works, need advice on how to bias the op-amp in your latest project, or want to share a recent discovery with folks who might appreciate it, this might be the net for you. Check the club's 146.62 MHz repeater, 9 P.M. on Wednesday evenings.

March's Meeting Planned

UARC Program Chairman Telvin Mills, KB6BYU, announced that the March 4th, 7:30 p.m., club meeting will feature John Lloyd, K7JL, who is the Utah Frequency Coordinator. John is the clearinghouse for repeater information and frequency utilization within the state of Utah for the amateur VHF, UHF, and microwave bands. John will reveal all of his secrets for assigning repeater frequencies within the state and tell how he keeps things from getting all jumbled up on the air. The meeting will be held March 4, at 7:30 PM in room 101 of EMCB on the University of Utah campus.

Albert Klein, Silent Key

Albert Klein W7OVP was an active member of the UARC for many years and I had the pleasure of attending the yearly steak fry with him this past year. Albert built his first kit at the age of 15 and received his first ticket in 1938. He was the chief radio operator aboard the USS Suamico during WWII. Al retired in 1982 after 25 years working at the Tooele Army Depot as an equipment calibration technician. He enjoyed the Tuesday night net and was survived by his wife Ruth; children Janice, Sharon (Pierre) Neyme, Scott (Becky), and Kent (Carol), and 11 grandchildren. Thank you, Elliott Neyme KD7VEF (Grandson) – Seattle, Wa.

License Classes

There will be some opportunities in the early part of 2004 to attend classes leading to amateur licenses. Here are the ones we've heard about:

Technician: Salt Lake County's Amateur Radio Emergency Service (ARES) will hold a class leading to the Technician Class license starting Monday, January 5. Class sessions will take place at the Murray Fire Station, 40 E. 4800 South.

General and Extra: UARC will be conducting a class that will cover the General and Extra Class licenses in order. Students may join for either segment or both. Both code and material for the

written exams will be taught. The class will be held on Tuesdays starting January 6. The Extra Class portion will begin on March 2. Location will be the church at 5000 W. Pavant Avenue (3725 South).

Anyone wishing to sign up in advance should contact either Brett Sutherland, N7KG, at (home) 298-5399, or (work) 994-9944, extension 101, or Ron Speirs, K7RLS, 968-4614.

UVHFS Swap Meet

The Utah VHF Society has announced that its annual swap meet and election meeting will be held on Saturday, February 21, starting at 8 A.M. The swap meet is generally the most heavily attended swap meet of the year in Utah. The officers have indicated that there may be a chance to discuss state policies regarding frequency coordination and voice-over-IP nodes.

The Utah VHF Society supports repeaters throughout the state of Utah and also is the frequency coordination body for the state. Dues are \$15.00 per year. Members will have free admission to the swap meet. Of course, anyone may pay his dues and become a member at the door. For others, admission is \$2.00 for adults and \$1.00 for those 12 years old and under.

For those planning to display material for sale, there is a charge of \$3.00 for floor space for those who supply their own tables (up to eight feet long), and \$5.00 for a table already in place.

UVHFS memberships run for the calendar year, so many memberships will expire on January 1, 2004. It is recommended that those planning to join the Society or renew their membership do so before the swap meet. In that way they will be able to avoid lines on the morning of the swap meet, and have their names published in the annual directory, which will be distributed at the meeting.

For more information on the swap meet, its location, and how to pay dues, check <http://www.ussc.com/~uvhfs/fairpark.html>.

UARC Financial Statement

INCOME

Advertising	150.00
ARRL Dues Coll	93.00
Book	
income	4949.00
Dues	5651.00
Int Inc	19.83
Steak fry INC	622.00

TOTAL INCOME 11484.83

EXPENSES

Administration	\$152.61
ARRL Dues Paid	78.00
Books	3612.80
Storage Shed	29.81
Capital-Other (TS-450B)	500.00
Club Meetings	260.21
Field Day	1019.09
Grants	50.00
Ham Hot Line	306.36
Insurance	325.00
Microvolt Postage	1019.70
Microvolt Printing	2422.71
Misc	45.78
NSF checks LOSS	15.00
Returned Check Charge	5.00
Repeater Phone	881.85
Repeater-Other	228.17
Steak fry	984.06
Sales Tax	306.41

TOTAL EXPENSES 12242.56

**TOTAL INCOME -
EXPENSES -757.73**

Editor's note

If you have any suggestions or constructive criticisms, I would welcome them. My E-Mail address is gopenshaw@msn.com. This is the club's newsletter and any articles or suggestions would be appreciated. Otherwise you will have to take whatever is written.

Thank you for your cooperation and patience.

73 Gary Openshaw, KC7AWU

A Big Thank You

I would like to thank all those who have served so diligently on the UARC Board last year and some have served many years. Your service and time rendered to the Club has been countless and all of your accomplishments have helped the club immensely. In behalf of the new UARC Board we would like to thank you for an outstanding job well done. Best wishes on your new endeavors.

Editorial -- Support

Gary Openshaw, KC7AWU

As a member of UARC, looking at the financial statement above makes me wonder why the club should need help. UARC depends upon its membership to support the club. After all it is your club. I have noticed that many of those using the club's repeaters are not members of UARC. I know we have an open repeater policy as many other repeaters do, but it takes finances to keep and maintain the club's repeaters. I use other repeaters as well as the UARC repeaters and feel an obligation to support the club that sponsors those repeaters also. Please join UARC in support of using their repeaters.

It is refreshing to me to attend and be back with the UARC Board and to have new members step in and serve. There are many things that UARC could do if the club membership would contribute the one item everyone has the same amount of, and that is time. It seems the busiest same people end up doing it all when if more people were willing to lend a hand it would be lighten the load of all. There are many positions and opportunities (as Field Day Chairman, hold classes, elmering, participating on the UARC net, and many others) one could do during this year to make the UARC club what it is capable of doing. If you would contact one of the UARC Board and let them know you would like to help, it would greatly be appreciated by all. Thank you.

UARC Steak-Fry

The annual UARC Steak Fry will be held on July 10th, 2004 at the Spruces-Area 7. Be sure to plan that day on your calendar and keep it open.

EXAM SCHEDULE

01/27/04*	(Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	484-6355
01/29/04	(Thu.)	Roosevelt	R Chandler Fisher, W7BYU	(435) 722-5440
02/07/04	(Sat.)	Salt Lake C.	Gordon Smith, K7HFV	582-2438 534-8116
02/10/04	(Tue.)	Salt Lake C.	Kevin Lethco, KD7URV	442-6530 (Provo)
02/18/04	(Wed.)	Provo	Steve Whitehead, NV7V	465-3983
02/18/04	(Wed.)	St. George	Ronald C. Sappington, WI7Z	(435) 673-4552
02/24/04*	(Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	484-6355
03/03/04	(Wed.)	Farmington	Fred Villanueva, N7FV	295-6560
03/13/03	(Sat.)	Tremonton	Robert A. Anderson, AA7TR	(435) 257-2154
03/17/04	(Wed.)	Provo	Steve Whitehead, NV7V	465-3983
03/17/04	(Wed.)	St. George	Ronald C. Sappington, WI7Z	(435) 673-4552
03/25/04	(Thu.)	Roosevelt	R Chandler Fisher, W7BYU	(435) 722-5440

*Only Technician elements (1 and 2) given at this session

NET SCHEDULES

Sun.	2100	146.62 MHz	Utah Amateur Radio Club Information Net
Mon.	2100	147.18 MHz	Intermountain Intertie Net (Ragchew)
Mon.	2100	144.25 MHz	Weekly 2-meter SSB net
Tues.	1900	146.98 MHz	West Desert Amateur Radio Club
		& 145.37 MHz	
Tues.	1930	146.90 MHz	Ogden Amateur Radio Club
Tues.	2000	147.18 MHz	Utah VHF Society (business and swap)
		& 147.12 MHz	
Tues.	2100	147.34 MHz	Utah Valley Amateur Radio Emergency Service
Tues.	2100	146.72 MHz	Bridgerland Amateur Radio Club Net
Wed.	2000	146.88 MHz	SL County Amateur Radio Emergency Service
Wed.	2000	145.43 MHz	Utah Box Elder - Thiokol Net
		& 145.20 MHz	
		& 448.43 MHz	
Wed.	2100	146.74 MHz	Mercury Amateur Radio Association, SL area
Wed.	2100	145.49 MHz	Mercury Amateur Radio Association, Ogden area
Wed.	2100	145.37 MHz	Mercury Amateur Radio Association, Provo area
Wed.	2100	50.125 MHz	Weekly six-meter net
Thu.	1900	147.42 MHz	Davis County Amateur Radio Club
		& 449.925 MHz	

HF NETS

Daily	1230	7272 kHz	Beehive Utah Net (formal traffic handling)
Daily	0200Z	3937 kHz	Farm Net (Same UTC summer and winter)
Daily	1930	3708 kHz	Utah Code Net (formal traffic handling)
Sat.	1100	7272 kHz	Quarter Century Wireless Association (QCWA)