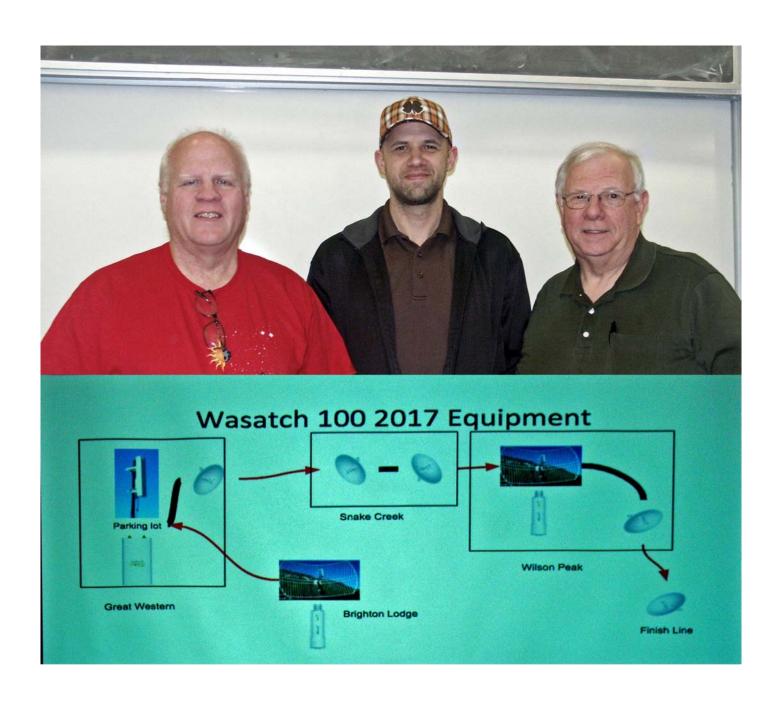
The Microvolt

May, 2018



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 Tom Kamlowsky, 4137 Clover Lane, Salt Lake City, UT, 84124-2711.

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: Tom Kamlowsky, 4137 Clover Lane, Salt Lake City, UT, 84124-2711.

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: Ton Kamlowsky, WA7ZRG, 4137 Clover Lane, Salt Lake City, UT 84124-2711. Let the Secretary know if you prefer the electronic edition of *The Microvolt* instead of the printed version.

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 2018 Board

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Committee Chairpersons and Members

Bookseller: Rick Gregory, ,KG7GOW	801 582-7783
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, KA70EI	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:

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The Microvolt

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May Meeting: What's Going On in ARRL and the Utah Section?

Since 1928 UARC has been affiliated with the American Radio Relay League, ARRL ARRL is the national organization of amateur radio operators and is the organization that goes to bat for the ham community in FCC matters such as spectrum privileges and interference from unlicensed devices. It also sponsors field organization activities such as the National Traffic System (NTS) and the Amateur Radio Emergency Service (ARES).

Our elected ARRL Section Manager (SM) for Utah is Mel Parkes, NM7P. Mel is responsible for appointing hams to fill various field offices for our state including Emergency Coordinators for ARES and Net Managers for NTS nets. Mel will will be the presenter for the May UARC meeting to be held Thursday evening, May 10.

Mel will tell us about what is currently going on in the Utah Section and ARRL generally. He will also be prepared to address topics chosen by the audience.

The May meeting will also include an opportunity to sign up for UARC's annual Steak-Fry, to be held on Saturday, July 14. Our book seller will not be available, but ARRL books will return at the June meeting.

The meeting will take place at 7:30 P.M. on Thursday, May 10, in room 2050 (the "Robison" classroom) of the Warnock Engineering Building on the University of Utah campus.

The front elevators in the Warnock Building have the second floor locked out in the evening. There are two possible solutions for the handicapped. The first is to get into the elevator and then send an able-bodied person up the stairs to the second floor to call the elevator. The second method is to find your way to the elevator in the southwest corner of the building (the same elevator we have been using during fall semester) and use it to access the second floor.

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 meetings during the University's spring semester of 2018 will be in room 2050 on the second floor.

See http://user.xmission.com/~uarc/meetmap.html for a map and information on finding the building. The room number varies depending on availability.

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

- 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 features images from the April meeting about how MESH networking was used for high-speed communication for the annual Wasatch 100-mile Endurance Run. The presenters are (l. to r.) Ed Sim, N7RTA; Joseph Gray (son of Charles); and Charles Gray, KE6OZU. Thanks to Ron Speirs, K7RLS, for the photos.

Meet the Presenter

I am Mel Parkes, NM7P, the current ARRL Section Manager, and have served in that office since 1999. I thoroughly enjoy participating in many different activities in ham radio and serving each of you in whatever capacity I am called upon to do.

I am an Extra Class licensee, a life member of ARRL, an ARRL and W5YI Volunteer Examiner, and an active member of three local Amateur Radio clubs. I am the President of the Utah VHF Society, I have been an active committee member of the Utah Hamfest Incorporated for over 20 years, and more recently the Great Salt Lake Hamfest. I have served over 25 years in the Air Force Military Affiliate Radio System (AF MARS) program. I enjoy DX'ing when time permits and I hope to finally get my DXCC in the near future.

Professionally I am an electrical engineer and have spent many years as a Broadcast TV Engineer. I currently work at the University of Utah Electrical and Computer Engineering Department assisting with the management of the student labs, computers and test equipment.

I was asked to prepare a presentation for UARC this month about ARRL. I have given much thought about what our club members might want to have me tell them about ARRL and after much thought I have decided to present a few comments about ARRL and then give each of you the opportunity to be part of the presentation. Please come prepared to ask and discuss any topics about Amateur Radio. The presentation might be listed as "Everything you wanted to know about Ham Radio but were afraid to ask!" This will be a very informal night where we can all participate and discuss many topics. Just remember: no question or comment will be overlooked. We will all learn from each other.

73 and see you at the meeting.

- Mel, NM7P

"Book Lady" No More

Last month we announced a contest to find a new title for Rick Gregory, KG7GOW, the new person in charge of making ARRL books available at meetings.

The winner (chosen by Rick himself) is "bookseller." It was suggested (along with several others) by our President, Morris Farmer, AD7SR. Congratulations to Morris who gets a credit toward a new book.

Steak-Fry

Our annual steak-fry will be held on the afternoon of Saturday, July 14, at "The Spruces" campground in Big Cottonwood Canyon. The May meeting will be the first of two chances to make reservations at a regular UARC meeting. This event substitutes for July meeting and is a great chance to enjoy an afternoon among fellow hams in a cool canyon on what is typically a hot July afternoon.

Price this year is \$15. Be sure to sign up with the club Secretary at the meeting.

Field Day

Be sure to set aside the weekend of June 23 and 24 on your calendar for the annual nationwide Field Day non-contest. Field Day is a time when hams take to the outdoors running portable and mobile stations and try to work as many stations as possible in 24 hours. Every year it has the most participants of any amateur radio operating activity.

UARC will be entering as a multi-transmitter club station from our usual spot near Payson Lakes on the Mt. Nebo Scenic Loop. It is a great time to combine hamming with a family campout. If you're new to HF, this will be a great time to see a station set up from scratch and used to contact stations all over the country. In case you just have a Technician class license, there will be enough General and Extra Class licensees present that you can make some contacts while a higher class licensee is in the tent making sure everything is going properly.

As for camping opportunities, Saturday night will feature a potluck dinner with the club supplying a main course. There is plenty of space for kids to play and explore. The Payson lakes are less than a five-minute drive away and rumored to have good fishing..

Field Day is great practice for those interested in emergency communications. An important skill in emergencies is the ability to copy information down quickly and accurately, even when it contains numbers and terms that mean nothing to the operator receiving the message. Field Day helps develop those skills. In making contacts as quickly as possible, the operator must accurately log the callsign, entry class, and ARRL section of each station he works

UARC's setup will start as early as Thursday evening, June 21. Actual operation will begin at noon on Saturday and run through noon on Sunday, the 24th.

Errata

Due to a layout error in last month's *Microvolt*, the "Member of the Month" feature ended abruptly with some unrelated paragraphs from a previous issue. If you would like to read the full story about Willard Liddell, you can download the (corrected) April electronic version of *The Microvolt* at:

http://www.utaharc.org/Microvolt/Apr2018jq9.pdf.

Sunspot Low Approaching

The propagation news may have been discouraging for much of April. Solar flux rarely got above 70 and the the first 12 days of the month included 11 with zero sunspots. Solar flux rarely rose about 70. (The lowest it ever gets is about 64.) Although not officially there, we may be getting close to the end of solar cycle 24. We won't know exactly when the solar minimum occurred until several months afterward. It takes several months of averaging to see what the general trend was and when it reached its minimum.

A bright moment happened on about the 12th of the month when Dr. Tabitha Skov announced the sighting of the first sunspot of the new cycle, Cycle 25. It can therefore be announced that there *will* be a Cycle 25.

There are two ways to tell spots from the new cycle from those of the old. The new spots usually appear 20 degrees or more above (and below) the solar equator, while the spots from the old cycle are usually close to the equator. Also, the magnetic field around spots of the new cycle is oriented in the opposite direction from that of old cycle spots. One could say that the complete solar cycle is really a 24-year event rather than merely 12. A sign that the minimum has been reached is when roughly equal numbers of old and new spots are showing on the sun's surface at the same time.

Dr. Tabitha has a weekly feature on YouTube about the latest happenings on the sun. See: https://www.youtube.com/user/SpWxfx/videos or

https://youtu.be/9MEEzyxJ cw.

Being near the time of solar minimum is not all bad. Although the upper bands (20 through 10 meters) are not open nearly as long or as frequently as we would like, conditions on the lower bands may actually improve for long distance work. The effect of low solar flux is that skip is longer than usual. This creates a problem on the upper bands because the skip becomes *so* long that the return signal from the ionosphere completely misses the earth and the band appears dead. But the lower bands (160 through 30 meters) are showing longer skip than usual but still usable. So the best time to work DX on 80 or 160 meters is the wee hours of the morning on a cold winter night near the sunspot minimum.

April 18: IARU's Birthday

(from the April 12 ARRL Letter)

Wednesday, April 18, was World Amateur Radio Day (WARD), this year marking the 93rd anniversary of the International Amateur Radio Union (IARU), founded in Paris in 1925. Each year, WARD celebrates Amateur Radio's contribution to society.

"World Amateur Radio Day is an opportunity for our member-societies to show our capabilities and promote the use of Amateur Radio, both on the air and through social media," IARU President Tim Ellam, VE6SH/G4HUA, said. "It is a celebration of what the Amateur Radio Service has brought to the public over the years, and of our ability to provide communication to assist others in times of crisis."

Amateur Radio experimenters were the first to discover that the shortwave spectrum — far from being the wasteland "experts" of the time considered it to be — could support worldwide propagation. In the rush to use these shorter wavelengths, Amateur Radio was "in grave danger of being pushed aside," the IARU's history has noted. Amateur Radio pioneers met in Paris in

1925 and created the IARU to support Amateur Radio around the globe.

Two years later, at the International Radiotelegraph Conference, Amateur Radio gained the allocations still recognized today — 160, 80, 40, 20, and 10 meters. The IARU has been working to defend and expand Amateur Radio frequency allocations ever since.

From the 25 countries that formed the IARU in 1925, the IARU has grown to include 160 member-societies in three regions. IARU Region 1 includes Europe, Africa, the Middle East, and Northern Asia. Region 2 covers the Americas, and Region 3 is composed of Australia, New Zealand, the Pacific island nations, and most of Asia. The International Telecommunication Union (ITU) has recognized the IARU as representing the interests of Amateur Radio.

"I wish all amateurs a fantastic day of celebration of Amateur Radio, encourage everyone to get involved, and, most of all, to have fun!" IARU President Ellam said

License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
05/16/18	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
05/16/18	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	N/A
05/21/18	(Mon.)	Taylorsville ³	Garth Wiscombe, W7PS	(801) 558-5936
06/02/18	(Sat.)	Salt Lake City ^{1,4}	Gordon Smith, K7HFV	(801) 582-2438
04/14/18	(Sat.)	Hurricane ²	Gary O. Zabriskie, N7ARE	N/A
06/06/18	(Wed.)	Ogden	Rick Morrison, W7RIK	(801) 791-9364
06/06/18	(Wed.)	Clearfield	Mike Youngs, KK7VZ	(801) 573-3922
06/07/18	(Thu.)	Logan	Richard D. Elwood, KE7GYD	(435) 770-7050
06/09/18	(Sat.)	Hurricane ²	Gary O. Zabriskie, N7ARE	N/A
06/20/18	(Wed.)	Provo ⁵	Steve Whitehead, NV7V	(801) 465-3983
06/20/18	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	N/A
06/25/18	(Mon.)	Taylorsville ⁵	Garth Wiscombe, W7PS	(801) 558-5936

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

More details at http://user.xmission.com/~uarc/testinfo.html.

Member of the Month Stan Eriksen, K7BTA

By Linda Reeder, N7HVF

This month we are featuring Stan Eriksen, K7BTA. Stan originally lived in San Francisco but moved to Norway with his family at age 14.

Stan's stepfather, Bob Tauxe, W6JTA, influenced Stan in amateur radio. Bob got into amateur radio when he was 13 years old and received his license in 1932. During World War II Stan's stepfather was a radio operator on a B-24 bomber. Stan's stepdad was very proficient in the Morse Code with a copying speed of 60 words per minute. He let Stan talk on his radio equipment, a Kenwood TS-930. One QSO was with Papau, New Guinea, and left Stan quite excited. This happened in 1966.

When Stan served a mission for the LDS church in Holland, on one of the islands there was a museum called The Elusion. They had all kinds of ham radio equipment and they let people talk under the third party rules. Stan tried speak to his stepdad but couldn't reach him.

Stan got into amateur radio when he was 30 years old. He received his Novice license in 1986. In 1994 Stan obtained his Technician license. His call sign was KA7WXE. Stan said when he would visit his stepfather in California, his dad would

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

³New location is the Taylorsville City Hall, 2600 Taylorsville Blvd, Room 110

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

⁵Preregister by going to http://www.hamstudy.org/sessions/ and finding the session date.

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always check to see if there was ham radio testing going on.

During this time Stan was very active in amateur radio. Stan's first radio was a Kenwood TS-802S. He talked on 10 meters. Stan was involved with MARA. He was also a part of ARES for 10 years. Stan worked with the Red Cross and was the director of the Red Cross in Utah County. Stan helped the boy scouts get their merit badges in amateur radio.

In 2005 Stan's stepfather passed away and Stan inherited all of his stepfather's equipment. He put amateur radio on the back burner for awhile until 2017 when Stan decided to get active in amateur radio again and obtained his General license. He knew his stepfather would be pleased. Stan said he tried to pass the code a long time ago. Each time he tried he missed it by 1. He was very glad he didn't need to worry about that this time.

Stan really wanted his stepfather's call sign; unfortunately someone else had it. There is a program called "legacy" in which one can reserve a loved one's call sign and no one else can touch it. One must send proof he or she is legally related to the deceased individual. When Stan found out about this it was too late. Stan did get a call sign that had his stepfather's first letter of his first name and the first and second letters in his last name. So Stan's call sign now is K7BTA. He is happy about that.

Stan has also rejoined UARC. He was a member a long time ago when he first got into amateur radio. Stan is a member of the Herriman Amateur Radio Club and is one of the net controls on the club net. The members take turns being net control.

Stan is very active in digital radio and was one of the guest speakers at the digital communication conference on Saturday, March 25. The topic was Cyber Security for Hams. His talk was at 1 P.M. The Microvolt (USPS 075-430) is published monthly except August for \$20.00 per year or \$1.50 per issue by the Utah Amateur Radio Club, 699 E. South Temple STE 100, Salt Lake City, UT 84102-1282. Periodicals Postage Paid at Salt Lake City, Utah. POSTMASTER: Send Address changes to The Microvolt, c/o Tom Kamlowsky, 4137 Clover Lane, Salt Lake City, UT 84124-2711.

Stan has a degree in electronics and computer science. Stan has been a broadcast radio engineer. He has built several radio station repeaters. He even had his own radio show. He does commercials on the side. Stan works for Zion Bank Corporation. He keeps their computer network secure.

Stan enjoys putting up dipole antennas. He also enjoyed slinky antennas. They really worked well when he was in college. Other hobbies Stan enjoys are: golf, hiking, backpacking and snow shoeing.

Stan, welcome back to the hobby.



Stan Eriksen, K7BTA (Thanks to K7RLS for photo.)