



Ohm Town News

APRIL 1995

Voice of the Bridgerland Amateur Radio Club

President's Corner

I would like to give K7OA, JIM LOFTHOUSE, a great big thank you for the time spent teach the CW class and providing us with some excellent practice. I know there was much effort and time spent in our behalf, and we want Jim to know how much we appreciate all that he has done for the group. I am sure that those that attended Jim's class found it very helpful. At least I did. The class started out really good with over 12 people. Towards the end, it had dwindled down to 3 or so regulars. I feel that those who stuck it out will find that their efforts will pay off when the exam is taken. Good luck, and from all of us in your class, **THANKS JIM!**

ATTENTION, ATTENTION, PLEASE READ THE FOLLOWING:

As we all strive to keep up with the fast pace that we live, there comes a time when we have to reevaluate our lives, and put our priorities back in line.

It is with deep regret that I have to announce that one of our Board members can no longer serve in his capacity. Work is very demanding on his time; with travel, overtime, family obligations, etc. So as of immediately, Wally Gibbons, WB7ASQ, has terminated his position as a member of the Board for BARC. I really appreciate his honesty with us, in that he says: 'I would rather not do a job at all, than do a job badly for reasons beyond my control. I do not feel that I am serving the members, the Board, and the presidency of BARC adequately and I only see the problem getting worse.'

On behalf of the Board and hopefully all of you, I would like to say thank you Wally, for the time that you have spent with us, and the help that you have rendered so far. We wish you well, and look forward to seeing you out to the activities that time will allow.

Club members, the bylaws in Article V Section 4 states: "Vacancies occurring between elections must be filled by a special election at a general meeting after which the withdrawal or resignation is made known. Nominations for replacement shall be made by the Board. Nominations shall also be accepted from the floor. Voting shall be conducted per Article XII and the person receiving the largest number of votes will be the new Officer. The newly elected Officer shall take office immediately."

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Ham Profile

Hugh VanOrden N7KW

By Mary Ann Jeppsen KB7ZOY



Hugh VanOrden has been a ham for 37 years. In 1958 he got his General. He recalls that at that time, CW and written tests had to be taken at the same time. If a person passed the CW, he could go on and take the written, but if he didn't pass CW, it was over. There was a six-month waiting period before the test could be taken again.

In the late 1960's, the FCC began making changes to reduce the frequencies available for General class. In 1976, Hugh passed Advanced and Extra and 20 WPM CW to get back the privileges he had enjoyed before.

Hugh's ham shack is impressive. It has no less than 18 pieces of equipment, both old and new, neatly arranged and uniquely installed. His first purchase was a Halicrafter SX99 receiver that he listened to before getting his license. He built his first transmitter from a HeathKit DX-100B. His newest piece of equipment is an HF Kenwood TS440S.

Installation of his equipment includes a balanced twin lead feedline in a bronze welding rod within a PVC pipe to provide a path for wires into his shack. The dipole antenna and open wire balanced feedline give tuner loading capability on any of the HF bands. He has a plug and socket arrangement to disconnect the antenna from the

See **HAM** on Page 5

On the other side.

By Kevin Reeve N7RXE

Most amateurs have had some experience with 911. Many have used the autopatch to call 911 to report problems. Others have listened with their scanners to dispatchers send police, fire, and ambulances to the scene. For the past month local RACES members have been getting a first hand look at what goes on at central dispatch at the Cache County Sheriffs Office.

Peggy Langille, Director of the Countys Communication Center, has been training RACES members on dispatching. In December, Peggy gave the same tests as those given to someone applying for a dispatching job. Those test included spelling, word meaning, prioritization, and listening skills. RACES members also heard actual 911 calls ranging from suicides to a humorous report by a man who was bitten by a deer in his car.

During the January training session, Margy Larson, a dispatcher, gave a tour of the radio console in the EOC and answered questions. RACES members have also been able to visit the communications center and observe first hand what takes place on other side of the 911 phone line.

As most of you know by now George Becker has accepted a job with the National Guard in the Salt Lake area. Taking his place is Bob DeGasser. Bob is anxious to continue the training and program that is already in place and has been meeting with RACES leaders to plan and keep things rolling. At the January RACES Meeting, Bob announced that the Search and Rescue had installed a 2 meter radio in their communications vehicle and would like the RACES organization to help with communications during searches.

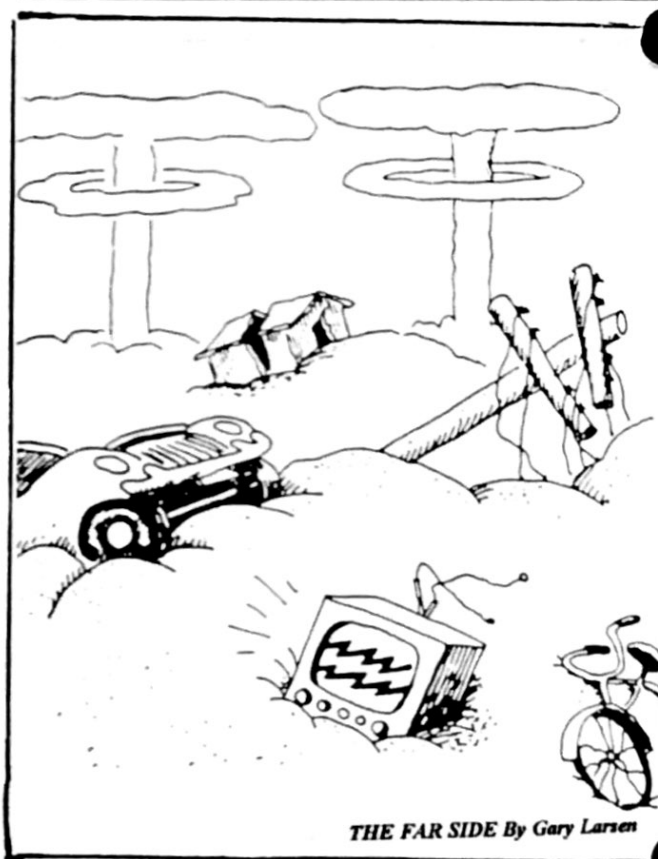
Tyler Griffiths, N7UWX, the RACES Emergency Coordinator reports that there is still some radio and other work to do on the mobile EOC. An antenna junction box has been installed and connectors need to be put on the ends of the cables. Some of the radios will be moved around to make them more accessible for use. Some minor generator work needs to be done. Several work parties will be organized in the coming months.

As you know many of the cities in the county have purchased packet stations for their fire halls. This will make it possible to provide reliable communications in a county wide emergency or disaster. Amateurs from each city are needed to operate these and participate in training. If you are interested in helping out in this area, please contact one of the RACES coordinators.

RACES meetings are held the second Wednesday of each month at 7:30 PM at the Cache County EOC. Meetings will continue to focus on items to help members complete their RACES certification for Levels I, II, and III. Thanks to all who have helped make our local RACES/ARE organization a great success.



Tyler Griffiths N7UWX, gets a lesson in dispatching from Lee Bunce at the Cache County Communications Center.



THE FAR SIDE By Gary Larsen

"This is a test. For the next thirty seconds, this station will conduct a test of the emergency broadcast system ..."

PRESIDENT

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It is the recommendation of the Board that Clint Wellard, KB7PNI, be nominated to fill this vacancy.

Attached to this newsletter is your proxy ballot. Please mark it accordingly and send it in, or come to the April Club meeting and cast your vote, so this vacancy can be filled.

I hope everyone will be understanding in this matter, and will continue to show the great concern and care for others that has been present in the past. If anyone has questions or concerns, please feel free to contact me.

Dean - N7WDY



"This is N7WDY UT calling. How's the weather up there?"

Beyond 2M FM

Reprinted from Kenwood Report, March 1995, Vol 1.3.

You've had your license for awhile now and enjoyed using 2M FM with repeaters and simplex. Now you would like to expand you hamming. How about trying DX? This doesn't mean upgrading (and possibly learning Morse code). You can work DX on the VHF bands!

DX means working over long distances, not just countries outside the US. Weak signal operation on 2M and the other VHF and UHF bands can be quite exciting. It can be either direct contacts or through any of several amateur satellites now in orbit.

The weak signal portions of the 2M band are from 144.000 to 144.300 and 145.800 to 146.000. The national calling frequency for SSB is 144.200. The first 100KHz of the band is for CW only. The satellite portion is 145.800 to 146.000.

Antennas are horizontally polarized for SSB and CW operation. Circular polarization is typically used for satellite operation. Modest antennas of 7 to 10 elements can be quite effective to start out with. The distances you

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**BRIDGERLAND AMATEUR RADIO CLUB, INC.
PROXY BALLOT ON THE ISSUE OF BOARD VACANCY**

I am in favor of Clint Wellard for the Board of Directors _____

I am opposed to Clint Wellard for the Board of Directors _____

I wish to write in the following person for the position on the Board of Directors _____

Please have this ballot carried to the Club meeting April 13, 1995, or send to Cheryl Thurgood, 41 West 345 North, Box 194, Hyde Park, UT 84318. Suggestions or comments may also be directed to Mrs. Thurgood. Proxy ballots must be turned in prior to official voting at the meeting.

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HAM

Continued from Page 1

inside. On the outside is a spark gap lightning ground. However, he is sure there is no absolute protection from direct lightning strike because of his personal experience where extensive damage was done even though the equipment was disconnected from the inside.

Hugh lives in Lewiston in the home that his parents built in the 1920's. His father was a mail carrier but also had a small farm, so Hugh learned to milk cows, bale hay and hoe sugar beets. He graduated from North Cache High School; served in the Army for two years during the Korean war, and with the help of the GI Bill, graduated from Utah State University in 1959 with a BS degree in automotive technology. He retired in 1986 from Thiokol after 25 years as a design engineer. He stress analyzed various designs of solid propellant during temperature changes, pressure loads and G forces during launch.

Amateur radio is not Hugh's only hobby. He started flying when he was 15 years old, in a J3 Piper Cub. In the early 1960's he got his license and bought a 4-place single engine Mooney Mark 21. It is, of course, well stocked with communications equipment. He still proudly owns and flies this same plane.

Photography is another long-time hobby. Hugh converted a shed into a darkroom, and is proficient in black and white developing. Among his many acquisitions is a Leica 3F German built 35mm camera which he bought when he was in the service. He has a projector, enlarger and other equipment for all his slides.

Hugh owns a 1966 2-door black Bonneville Pontiac which he fondly calls his "black batmobile." He ordered it new from the factory exactly as he wanted. It still has the original paint. Ham equipment is installed in a sub-panel.

If you want to talk to Hugh, you can usually reach him through ham radio—he may be in his shack, or maybe mobile, as he drives his batmobile or flies his Mooney Mark 21.

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WANTED (to copy)—Manuals for HeathKit SB-200 amp and Kenwood phone patch controller PC-1. Call **Harl, W7LTH**, 245-3669. Tnx.

BEYOND

Continued from Page 3

may be able to communicate will be much greater than comparable FM operation.

There are several different types of propagation that can yield DX contacts on 2M and the other VHF and UHF bands. One of the more common ones is tropospheric ducting. A 'tropic duct' can provide communications over more than 1000 miles. (An opening last summer allowed hundreds of hams in western states to work stations in Hawaii on 2M, 70cm and higher bands. Many stations were only running 25 to 50 watts out to 7 to 10 element antennas.)

Meteor showers provide another type of propagation and they occur on a regular and predictable basis. They are reported in "The World Above 50MHz" column in 'QST' as well as in other ham magazines.

SSB audio has a very different quality than FM. It was originally referred to as 'Donald Duck' sounding. It is necessary to tune around on a signal to get it to understandable when you are first listening to SSB signals. It does get easier with practise and will soon be second nature.

CW stations are tuned to typical audio tone of 800Hz. The radio will have an automatic offset in transmit to compensate for this so the station you respond to will hear the same tone in his/her receiver.

You will need a radio that has SSB capabilities to use the weak signal modes.

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NEXT CLUB MEETING

7:30 pm, Thursday, April 13, 1995
at the Cache County EOC

ALL BARC MEMBERS

EVERYONE SHOULD RECEIVE THEIR COPY OF THE BARC 1995 MEMBER DIRECTORY WITH THIS, THE APRIL 1995 NEWSLETTER. IF YOU DID NOT RECEIVE YOUR DIRECTORY, PLEASE CONTACT ANNIE KC7CXM, OR ALAN KC7CXN, AT 752-3400.

NOTICE TO ALL VISITORS

WHAT YOU ARE ABOUT TO WITNESS IS AN AMATEUR RADIO STATION LICENSED AS _____ BY THE FEDERAL COMMUNICATIONS COMMISSION IN WASHINGTON D.C.

BEFORE YOU ASK THE QUESTIONS, HERE ARE THE ANSWERS:

1. The total cost of this equipment cannot be discussed here as it creates marital conflicts.
2. No, we cannot send a message to your brother in Hong Kong. We suggest you call Western Union.
3. This is strictly a hobby; we do not have the facilities or the time to fool around with TV sets, radios or hi-fi. We suggest that you see a serviceman.
4. Yes, the antenna in the backyard is essential to the operation of the equipment.
5. The farthest station we have contacted has been in the Ubangiland.
6. The cards on the wall are called QSL cards. They are confirmation of contacts made with other stations.
7. It is technically impossible for this station's equipment to interfere with television reception, telephones or stereo systems. Any interference problems of that nature are caused by design flaws in the home entertainment devices themselves.
8. An Amateur Radio station may only be operated by a highly qualified, technically skilled electronics expert. It takes dedication, training and intelligence to reach the level of competence that justifies one to be licensed by the United States Federal Government. Therefore, it is not considered inappropriate to show proper awe, respect and general obsequiousness when I discuss my hobby or operate the controls.

FURTHERMORE...

IF YOU ARE GRANTED THE EXTREME HONOR OR BEING INVITED TO SPEAK INTO THE MICROPHONE, PLEASE OBSERVE THE FOLLOWING RULES:

1. Speak in a low and soothing tone.
2. Do not disagree with me in any manner.
3. Say no bad words and tell no off-color jokes.
4. It is customary for guests to make complimentary remarks about this station and its licensed operator when talking to other hams on the air.

DO NOT TOUCH ANYTHING, TURN ANY KNOBS, SIT ON THE EQUIPMENT, ETC. I HAVE LOST SEVERAL VISITORS BY ELECTROCUTION IN THE PAST FEW WEEKS.

THANK YOU FOR YOUR COOPERATION.

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"4... for ID"

Reprinted from *Microvolt, Number 1;*

By *Mike Collett, K7DOU.*

It was a dark and stormy night. The ether was alive with the marching wave fronts of dozens of 2 meter signals from handhelds, mobiles, and an occasional base station. Speakers crackled with hesitant voices, owners of brand new "tickets" only hours old. The drawl of old-timers was mixed with 'mid-frequency' teenagers, and the higher-pitched but melodious voices of YL's.

Lively conversations were the order of the night. The Old Men talked about "tubes" that glowed in the dark. The Young Men wondered aloud; what a sight that must be. After all, the only "tubes" They remembered seeing were carrying them downhill at near-terminal velocities just the evening before on the crusty snow. No one had ever seen one glow.

As ten o'clock approached, the repeaters settled into quietness. The junior ops were now in bed, and the mobiles were in the garages. The base stations were selected to the OFF positions and the Old Men hunkered around the television sets for the news. And then it happened.

It happened right at ten o'clock; first, on channel two. "This is KUTV, Channel two, in Salt Lake City, Utah...for ID." The Old Men couldn't believe their ears. They switched over to Channel 4, and again, there it was. "This is KTVX, Channel four, in Salt Lake City, Utah...for ID." In desperation, they tried channel 5. Surely, the conservative bastion of the Wasatch Front hadn't succumbed to this devilish assault on their ears. But, lo, again they cringed to hear it: "This is Channel five, in Salt Lake City, Utah...for ID."

"Did you hear that?"..."Can you believe your ears?"..."Am I dreaming?"...they said to one another. It was unlike anything they'd ever heard. And, listening to the "Free Thinkers" on the bottom end of 75 meters on a winter night, in '75, had convinced them they'd just about heard it all.

"Why else would stations give their call signs if not to identify themselves?" they wondered aloud. Could it be a secret code? A signal from outer space? No. No, it was just what they had heard, and nothing more. So they thought the world had indeed changed while they were at work that day. Someone had changed the rules!

Well, then. They'd better get with the program. They'd show 'em they weren't too old to learn new tricks.

The next morning, Sam checked into the commuter round table on .62. "Hi, Bob," he spoke into the microphone. Cheerfully, and carefully remembered to add, "...for name.' It's 45 outside, '...for temperature,' and seems a might chilly this morning."

Bob was tuned into the new wavelength as well. "Well, good morning, Sam, '...for greeting'. You're right about the chill. I had to scrape the frost off the windshield before I could get underway, '...for commute.' This is KB7XYZ, 'for ID.'" Heh, heh, they had the hang of it now, by golly. Transistors may have crept up on them and caught them unawares, but they weren't going to let the "new rules" catch them sleeping. No siree, Bob. Not on your life.

—Mike Collett, K7DOU. Period.

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SMOKE TEST

This discovery might be more profound than the recent work done on dark suckers (light bulbs). As I was working on a solid state device the other day the realization of a basic truth came over me. It was so simple! So obvious! Why didn't I see it before? I discovered how ICs work, because every time you let the smoke out of an IC, it stops working. Of course! Smoke makes all things electrical work.

Remember the last time smoke escaped from your voltage regulator? Didn't it quit working? I sat and smiled like an idiot as more of the truth dawned. It's the wiring harness that carries the smoke from one device to another, and when the harness springs a leak, it lets the smoke out of everything at once, and then nothing works. The starter motor requires large quantities of smoke to operate properly and that's why the wire going to it is so large.

If improvements in wiring are to be achieved, we are going to have to find a way to keep smoke from leaking much the same way as we do for air in tires.

WORLDRADIO

-El Dorado County ARC

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WANT TO SOLDER ALUMINUM?

Try this! Place a drop of clean motor oil on the place where the aluminum is to be soldered. Without wiping it off, take a sharp tool and scratch the area to be soldered. Apply a hot soldering iron to the spot and use resin-core solder. The solder adheres both physically and electrically. A good idea is to try a practice run on a piece of scrap aluminum before you try the real thing.

WORLDRADIO

TARC BULLETIN

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