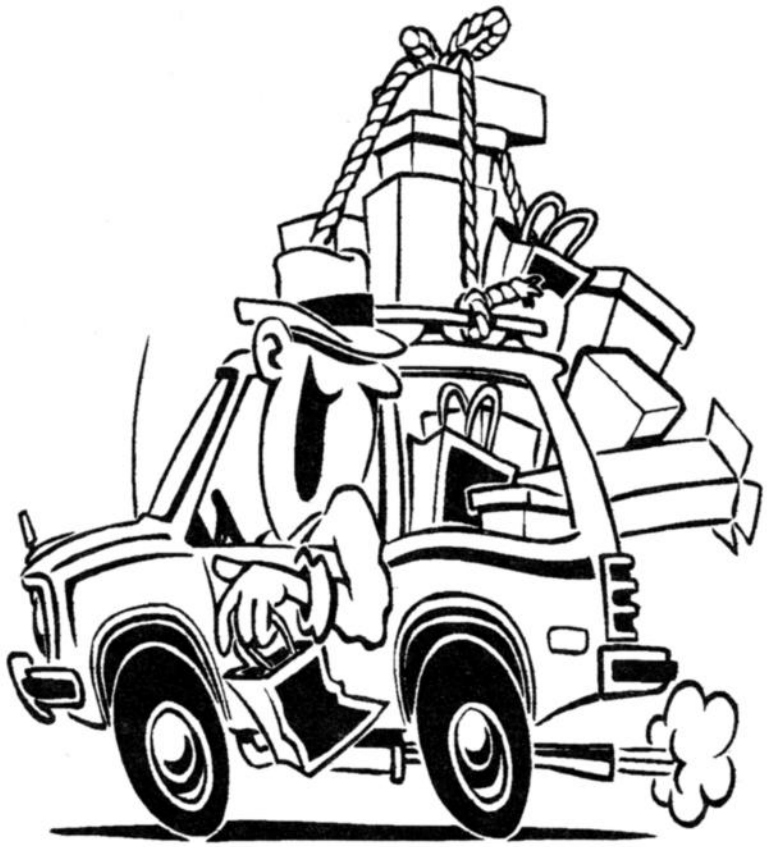
9/97

ARRL CLUB #1602



SWAP MEET ISSUE

Published by the
Utah Amateur Radio
Club HAM
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The MICROVOLT
632 University Street,
Salt Lake City, Ut.
84102

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the

MICROVOLT

Periodicals

PLEASE SEND DUES TO:
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c/o GARY OPENSHAW
861 ROOSEVELT AVE.
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The Utah Amateur Radio Club was organized under it's present name in 1927, although its beginnings my 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. 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 Exhibition hall located on the Salt Lake County Fairgrounds just south of Murray City Park. Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are $13 per year, including a MICROVOLT subscription. Those living at the same address as a member who has paid $13 may obtain a membership without a Microvolt subscription for $9. ARRL membership renewals should specify ARRL Club #1602. UARC maintains the following repeaters: 146.62 (minus) and 449.10. The repeaters are administered by the UARC repeater commitee. Comments and questions may be directed to any commitee member. The Lake Mountain repeater (146.76 minus offset) 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. 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 and maintaining a club membership. THE MICROVOLT: The Microvolt is the official publication of the club. Deadline for submissions to the Microvolt is the 10th of each month prior to publication, except Aug. All submissions are welcome but what is printed and editing are the responsibility of the UARC board. Reprints are allowed with proper credits to the MICROVOLT, UARC, and authors.

THE DESERT EDITION OF

THE MICROVOLT

Publication of the Utah Amateur Radio Club

VOLUME XLI ISSUE 9 SEPT, 1997

Feature Of The Month

This month we are featuring Dee Christensen W7YPC. Dee Has been totally blind since birth. He has two children, a son in Texas and a daughter in California. He has seven grand children. Dee was married for 47 years. His wife Alice recently passed away. Dee worked as a salesman for a show company KNAPP.

Dee Has been in amateur radio since 1955. However, his interest in amateur radio dates back to the year 1932. Dee was attending The Utah School for the blind at the time. They had an old crystal radio and they would sneak and stay up until 3 in the morning listening to Cliff Peterson on 160 meters. Cliff's call sign back then was W6IWY because back then Utah was 6 Land. Cliff's call sign now is W7JVU. Anyway, Cliff worked at The Paramount ice cream shop five blocks from The School For The Blind. Dee and Cliff became good friends. In fact, Cliff gave Dee his first oscillator so that he could learn CW. Then, Dee joined the boy scouts and became very proficient in the Morse code. It wasn't until years later that Dee obtained his first ham license. Dee never was a novice or tech. He went straight to general.

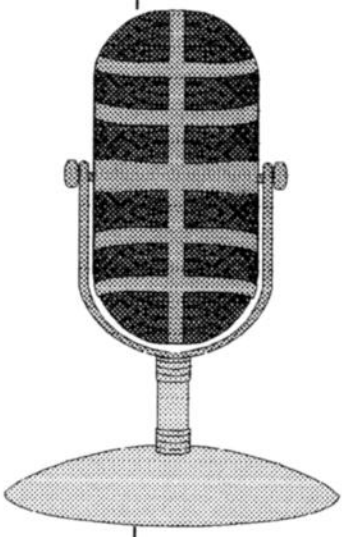
Lenoard Zim Zimmerman W7SP Whose call sign we use as a memorial for our club station was Dee's Elmer. After Dee received his general license Lenoard gave Dee his first radio which was strictly code.

Dee was active in traffic handling. He was the net control for the traffic and weather net for many years. He was an Elmer and helped many people get in to the hobby. He was Gordon Smith's Elmer K7HFV in 1958. Dee was elected president of UARC in Dec. 1955.

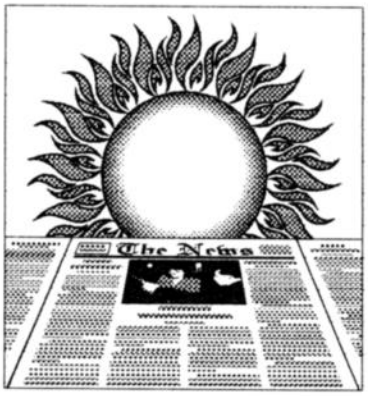
Dee's favorite facet in amateur radio is the people he has met from all over the world and his favorite mode is CW.

Dee, thanks for your contributions to amateur radio.

73 N7HVF Linda Reeder



The Address For The Microvolt Editor IS:
Cokie Eddy
147 East B/C 4rth Avenue,



Dugway, UT 84022
New Phone 522-4474 (Ditto Exchange)
Or 1-801-831-4474 (Long distance)

UTAH AMATEUR RADIO EXAMINATION SCHEDULE

Date	Location	Contact Person	Home Ph. Bus. Ph.

EXAMINATION PROGRAMS BY CITY

City: Brigham City Contact Person: Terry Wyatt
VEC: ARRL Phone: 458-2216
Location: Box elder High School Computer Lab
Schedule:
Thursday April 24 7:00 PM
Thursday June 12 7:00 PM

City: Farmington Contact Person: Brent Thomas, AC7H
VEC: ARRL 637 East 2150 South
Bountiful, Utah 84010

Home Ph: 298-3322 Bus. Ph: 538-3700
Location: Davis County Jail Complex,
800 West State St.,
Farmington
Service entrance
Schedule: First Wednesday of Jan., Mar., July, and Sept., 7 p.m.

City: Logan Contact Person: Paul Hansen, WO7N
VEC: ARRL 1676 East 1600 North
Logan, Utah 84321
Bus. Ph: 752-6425
Schedule: Second Saturday of April and October, 9:00 a.m.

City: Ogden Contact Person: Matthew George, AB7GM
VEC: ARRL 473 Hiland Road
Ogden, UT 84404
Phone: 393-9159
Recorded exam information: 627-6064
Location: Weber State College, Science and Technology Building, Rm 228
Schedule: First Saturday of May and November, 8:00 a.m.

City: Provo Contact Persons: Steve and Linda Whitehead
VEC: W5YI 497 South 700 East
Payson, Utah 84651
Home Ph: 465-3983 Bus. Ph: 225-5200
Location: Provo Campus of Utah Valley State College
Schedule: Third Wednesday evening of each month
Notes: Do not confuse this location with the larger Orem campus.

City: Salt Lake City Contact Person: Gordon Smith, K7HFV
VEC: ARRL 632 University Street
Salt Lake City, Utah 84102
Home Ph: 582-2438 Bus. Ph: 532-3400 Ext. 8116
Location: Blue Cross/Blue Shield Cafeteria
2455 East Parley's Way, main (west) building,
West door Schedule: First Saturday of Feb., APR, June, Aug. and Dec.
20 w.p.m.: 8:00 a.m.
13 w.p.m.: 8:30 a.m. 5 w.p.m.: 9:15 a.m.
No code test needed: Any time between
8 and 10 a.m.
Notes: Preregistration is required.
The owners of the building require that the door be kept locked. Those who preregister will receive the code required to get in. Preregistration also speeds the session and gets licenses on the way faster after the session. It takes only a few minutes by phone or on the air. Gordon usually monitors 146.62.

City: Salt Lake City Contact Person: Eugene (N7OVT) or Carol McWherter, (KC7LLW)
VEC: W5YI 536 E. Leland Avenue
Salt Lake City, Utah 84115
Home Ph: 484-6355
Location: LDS Church 2700 S. 300 East. South Salt Lake
Pre-registration preferred. Please leave message if not at home.

Schedule: Last Tuesday of each month, 7 p.m.
Notes: This session is intended primarily for those seeking Novice,
Technician, or Technician-plus licenses. Only elements 1A, 2 and 3A will be administered. Pre-registration is required.

THINGS TO BRING TO TEST SESSION

1. Two forms of ID (If licensed , your original and one form of ID)
2. $6.05 - Cash or Check.
3. A copy of your licensee, and or copies of your pending 610 form or certificate of credit along with the original.
4. You may bring a filled out 610 form or a form will be available at the test session.
5. Pencils or pens.
6. You may bring a calculator but you must show that it is not pre-programmed.

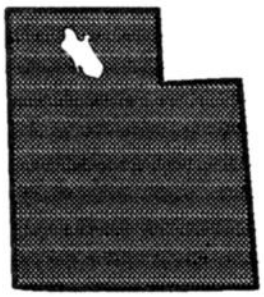
You may use a typewriter or lap top computer only if you make arrangements in advance.

WEB- INFO

UARC WEB PAGE ADDRESS!
http://www.xmission.com/~uarc

MY NEW E-MAIL ADDRESS COKIE@CYBERNECT.COM
OUR ARRL SECTION MANAGER JIMKATPA@AOL.COM
ARRL HOME PAGE HTTP://WWW.ARL.ORG
CALL SIGN LOOKUP
HTTP://WWW.UARL.EDU/DOC/HAMULR/CALLSIGN.HTML
CANADIAN BACON (HAMS) HTTP://WWW.RAC.CA
DX INFO
HTTP://WWW.CLINETIFI/~JUKKA/WEBCLUSTER.HTML
ELECTRONIC SWAPMEET
HTTP://WWW.WESTES.COM/ADS/ADS.HTML
OUR FEDERAL GOVERNMENT
HTTP://WWW.FEDWORLD.GOV
F.C.C. HTTP://WWW.FCC.GOV
HOUSE OF REPRESENTATIVES HTTP://WWW.HOUSE.GOV
INTERNET/PACKET GATEWAY
HTTP://WWW.W2XO.PGH.PA.US

I.T.U. INFO HTTP://WWW.ITU.CH
LAT./LONG LOOKUP HTTP://WWW.MIT.EDU:8001/GEO
NEIGHBORHOOD ANTENNAS
HTTP://WWW.HAMWEB.COM/~SJL/STONER/ANTENNA.HTML
NTIA HTTP://WWW.NTIA.DOC.GOV
SARAX
HTTP://WWW.NASA.GOV/SAREX/SAREX_MAINPAGE.HTML
WHOWHERE? (FIND PEOPLE YOU ARE LOOKING FOR)
WWW.WHOWHERE.COM



UTAH AMATEUR RADIO CLUBS

UARC or Utah Amateur Radio Club meets the first Thursday of each month except the months of July and August. The meeting is held in the Theatre Building located on the Salt Lake County Fairgrounds (5200 S. and 200 E.) just south of Murray Park at 7:30 PM. There is a newcomer's meeting held prior to the main meeting at 7:00 PM.

The Davis County Amateur Radio Club meets the 2nd Saturday of each month at 10:00 AM at the Davis County Sheriff's Office, 800 West State street, Farmington UT. Members and nonmembers are welcome. Dues are $15.00 per year and can be paid at any Club meeting. The Davis Club supports the 147.04 repeater. DAVIS ARES conducts a net each Thursday at 7:00 PM on 147.42 simplex. They also have a DAV node for packet on 145.07. For further information please contact Kent Whitney KI7ST 444-1264

OARC or Ogden Amateur Radio Club meets the 3rd Wednesday of each month in Ogden at 7:00 PM. The meetings are held at the Red Cross building at 2955 Harrison BLVD. Members and nonmembers are invited. Dues are $15.00 per year and can be sent to P.O Box 3353, Ogden, Utah 84409. OARC supports the 146.90 repeater and conducts a net there Tuesdays at 7:30 PM. They also support the 146.82 repeater. The contact person is Jerry Peters WA7ADK who can be reached at 825-8798.

The VHF Society is a group dedicated to maintaining a system of repeaters in our area. Dues are $10:00 per year and can be sent to PO Box 482 Bountiful Utah 84011-0482. The VHF Society holds a swap and traffic net for it's members each Tuesday night at 8:00 P.M. on the 146.940 repeater. For further information please contact Eldon Kearl KB7OGM at 571-9955.

Salt Lake County ARES (Amateur Radio Emergency Services) conduct a net each Wednesday Night at 8:00 PM on the 146.88 repeater. All amateurs are welcome to participate. Their in-person meeting is held the third Wednesday of each month. For more information please contact Kirk Boman 278-9799 or Jerry Wellman Wb7ULH 969-8258

Utah Valley ARES holds their general meeting the 1st Tuesday of every month at 7:00 PM. They also conduct a net each Tuesday at 9:00 P.M. on the 147.34 repeater which is also linked to the 224.7 repeater. The contact person is Robert Earl. N7EGG at 225-8870

MARA or Mercury Amateur Radio Association is a world wide group of Radio Amateurs dedicated to training and traffic handling for emergency operation. They conduct VHF nets each Wednesday at 9:00 PM. They also conduct health and welfare traffic net on 3.873 MHz (80 meters). The Salt Lake area is on the 146.74 repeater and their contact person is Willy Peake N7VVL at 466-1114. The Ogden area is on the 145.49 repeater and the Provo area on the 145.37 repeater with Vince Newmeyor N7MLP at 785-5611 as their contact person.

UPRA (Utah Packet Radio Association) holds their general meeting on the 2nd Saturday of each month at 2:00 PM at the State Capitol Annex Building north of the State Capital. All amateurs are welcome. The purpose of the Club is to educate people who are new to packet and to coordinate packet activities. Their dues are $15.00 per year and can be sent to PO Box 92 Riverton, UT 84065. Their contact person is Jack Christensen, KC7NX at 277-6629.

UBET (Utah Box Elder Thiokol) holds a net every Wednesday at 8:00 PM on the 145.43, 448.300 , 145.29 repeaters. Net control changes monthly. Contact Wayne jensen AB7TS for details about net. Club meetings are held the first Tuesday of every month at 7:00 PM in the Thiokol Rec. Council Building (old J.C. Penney's building) 62 South Main Street. (East side of street next to Brigham City sign.) Club President is Doug Nelson KC7HGL 257-1520.

THE BRIGERLAND AMATEUR RADIO CLUB meets the 2nd Thursday of the month (except June, July, and August) in the basement of the Sheriffs Office. They hold a net at 9:00 PM on the 147.20 repeater every Tuesday. Their contact person is Dean Stevens N7WVY at 753-2664.

THE UTAH TCPIP Users Group Of UTUG is an informal group that discusses TCPIP protocols and other packet information. The are geared to all levels of users, new and seasoned. They hold a weekly net Sundays at 8:00 PM on the 146.620 repeater. Their contact person is Matt Simmons KG7MH at 965-1038

The High Valley Net from Heber meets every Monday at 9:00 PM on the 147.18 repeater. Their contact person is Doug Neilson, N7PPW at 756-5927 or Joe Chenworth, KG7GY at 564-3598

The University of Utah Radio Club is open to University Staff, alumni and students. There is a fully equipped station available 24 hours a day. Their contact persons are Marvin Match KA7TPH at 581-6085 or Clint Turner KA7OEI at 972-5541

The Salt Lake Community College Amateur Radio Club is open to anyone. They would like to welcome interested parties to join them. They meet on the South campus in room N285 on the first Saturday of the Month at 3:00 PM. Please contact Keith KI7SL at 957-3247

Rocky Mountain Radio Assn. is open to all Utah hams and they support the 447.900, 448.400, 448.700 repeaters. Their net is on 447.800 and 52.525 (six meters) every Wednesday night at 8:00.
Please contact Marc Peterson (KB7YJJ) at 977-1845 for info!

What To Do This Year?

Sept. 4 Swap meet
Oct. 2 Rosh Hashanah We would like to have Eldon K. and John Lloyd talk about repeater interlinks
October 31 Halloween
Nov. 6. HOMEBREW
Dec. 4 Elections.
Dec. 25 Christmas
Dec. 31 New Years Eve

FIELD DAY A SUCCESS

Thanks to Tom Schaeffer, NY4I, for coordinating this year's event, and the many helpers who made it possible. Antenna launching began on Friday with many personal VHF and UHF beams, J-poles, and as Gordon would put it, "some we still can't identify". For HF we had the usual tower and tri-bander on the generator trailer. There was also a pair of phased 40M verticals, a Carolina windom, and a three element, 80M wire beam, which kept several people busy late into Friday night and most of Saturday morning to erect and tune. The club station, W7SP, ran class 2A plus the novice/technician station making 339 CW and 402 Phone contacts. Our total score was 2870. There was an excellent turnout from the club members, filling our usual Payson Lakes clearing, and overflowing into the adjacent meadow. More than 30 camping units, covering the range from motor homes to sleeping under the stars, and
most everything in between, were present during the weekend. Many others came up during the day on Saturday or Sunday. Field Day operations ended at noon Sunday, and by 2:00 the antennas were down, and the meadow was vacant. Special thanks go to Clint Turner, KA7OEI, for an heroic attempt to fix our ailing generator. It was still running pretty well, but failed to carry a load of more than 3KW. Thanks also to Alan Seyboldt for the use of his generator to keep us on the air during repairs.

HAVE A GREAT LABOR DAY...

--Chuck Johnson
If you agree with any of the following statements, you might want to consider taking a remedial science class.
A teacher forwarded this list of comments from test papers, essays, etc., submitted to science and health teachers by elementary, junior, high, high school, and college students. As she noted, "It is truly astonishing what weird science our young scholars can create under the pressures of time and grades."

"H2O is hot water, and CO2 is cold water"

"To collect fumes of sulphur, hold a deacon over a flame in a test tube"

"When you smell an odorless gas, it is probably carbon monoxide"

"Water is composed of two gins, Oxygin and Hydrogin. Oxygin is pure gin. Hydrogin is gin and water."

"Three kinds of blood vessels are arteries, vanes and caterpillars."

"Blood flows down one leg and up the other."

"Respiration is composed of two acts, first inspiration, and then expectoration."

"The moon is a planet just like the earth, only it is even deader."

"Dew is formed on leaves when the sun shines down on them and makes them perspire"

"A super saturated solution is one that holds more than it can hold."

"Mushrooms always grow in damp places and so they look like umbrellas."

"The pistol of a flower is its only protections against insects."

"The skeleton is what is left after the insides have been taken out and the outsides have Been taken off. The purpose of the skeleton is something to hitch meat to."

"A permanent set of teeth consists of eight canines, eight cuspids, two molars, and eight cuspidors."

"The tides are a fight between the Earth and moon. All water tends towards the moon, because there is no water in the moon, and nature abhors a vacuum. I forget where the sun joins in this fight."

"A fossil is an extinct animal. The older it is, the more extinct it is."

"Equator: A managerie lion running around the Earth through Africa."

"Germinate: To become a naturalized German."

"Liter: A nest of young puppies."

"Magnet: Something you find crawling all over a dead cat."

"Momentum: What you give a person when they are going away."

"Planet: A body of Earth surrounded by sky."

"Rhubarb: A kind of celery gone bloodshot."

"Vacuum: A large, empty space where the pope lives."

"Before giving a blood transfusion, find out if the blood is affirmative or negative."

"To remove dust from the eye, pull the eye down over the nose."

"For a nosebleed: Put the nose much lower then the body until the heart stops."

"For dog bite: put the dog away for several days. If he has not recovered, then kill it."

"For head cold: use an agonizer to spray the nose until it drops in your throat."

"To keep milk from turning sour: Keep it in the cow."

The following additions are from Eric Whiteman:

"When you breathe, you inspire. When you don't, you expire."

"Nitrogen is not found in Ireland because it is not found in a free state."

"The body consists of three parts -- the brainium, the borax, and the abominable cavity. The brainium contains the brain, the borax contains the heart and lungs, and the abominable cavity contains the bowls, of which there are five -- a,e, i, o, and u."

Contributed by: Auyeung

Amateur Radio Newsline

THE FOLLOWING IS A QST.....

Ham radio searches to two missing girls and Milwaukee hams face a new restrictive tower ordinance. This, because the city council can't tell the difference between Amateur Radio and CB.

OHIO MISSING CHILDREN SEARCH

Ham radio has been assisting in the search for two missing children in southern Ohio. On Wednesday, July 9th four year old Cody and

eleven year old India Smith were playing in the yard of the family farm house south of Urbana, Champagne County, Ohio. The children's father looked out the window about 1:15 PM and saw them playing. That was the last time the two children were seen. A bit later, when the children's father went out to summon them inside, they were gone. A hasty search of the grounds reveled nothing. At 4:30 PM a call was placed to the Champagne County Sheriffs Office. A search was begun immediately with no results.

The search area widened over the next two days and neighbors, volunteers, local law enforcement officials and even the FBI were involved.

On Friday, July 11th the Ohio District 3 Amateur Radio Emergency Services Coordinator was contacted to provide amateur communications. The search teams were spread out over an area of ten square miles. And teams could be out of touch for up to two hours at a time.

For the next three days, approximately 45 amateurs from Montgomery, Miami, Champagne and Clark Counties provide voice and ATV communications

assistance. The Dayton Amateur Radio Association communications van was used several times as a restricted access conference center for law enforcement officials. And the Miami County Amateur Radio Club communications van was

used as a media center for announcements to TV stations from Dayton, Columbus, Cincinnati and to the national media.

Over the three day search, teams roved on foot up to four miles from the family farm house. The American Red Cross handed out over 2500 bottles of water to volunteers as they scoured the area in the summer heat. When the search area was laid out on a map, every building, farm field, creek, river, railroad track, and woods in a ten square mile area had been searched by humans and tracking dogs.

The disappearance of Cody and India Smith has been reported nationally on television and in the newspapers. As we go to air, the two little girls have still not been found.

(Via Amateur News Weekly)

HAM FOILS PRISON ESCAPE

Thomas Sorrow, KE4ITN, of Cleveland, Alabama, has been recognized by the Alabama Department of Corrections for confiscating electronic parts and schematics for a transceiver from an inmate. The inmate, serving a life without parole sentence for capital murder, was plotting to escape from the maximum security St. Clair Correctional Facility at Springville, Alabama. Sorrow, an Extra Class licensee and correctional officer employed at St.

Clair, credits his hobby for his being able to identify the contraband and to assist in foiling the inmate's escape.

(Via ARRL Letter)

CB mix-up gets hams stung by new Milwaukee antenna ordinance Milwaukee, Wisconsin hams are on their way to having to live with a new and highly restrictive antenna ordinance because the city council cannot tell the difference between CBers and hams. This according to Scott Frakes,

KB9PRG who tells Newsline that on July 25th, the City of Milwaukee Common Council passed the restrictive measure aimed in part at taking 11 meter

Class D CB operators off the air and sent it on to the Mayor for signing. The new law will require a Special Use Permit, and a hearing before the Board of Zoning Appeals for a tower to be erected. The law will cover any tower and

antenna that is over the maximum height limit of 40 feet.
The ordinance also increases setback requirements, that would in many cases preclude even getting a Special Use permit. It also has provisions that the
proposed tower must not be a deterrent to the area. There are other provisions, many aimed at commercial towers.

But here is the CB related kicker. As said, the new law was not only aimed at limiting the number of commercial towers in the city. The council also
wants to put an end to CB interference to consumer electronic equipment.
In years past, amateur radio towers were specifically exempted in Milwaukee. However, the committee that this ordinance came out of was also talking about interference problems with CB radio operators, and made reference to the fact that this might get rid of CBers as well. So they took out the exemption for amateur radio, thinking that this was for CB radio.
What hams in Milwaukee will be able to do to educate their legislators at this late date remains to be seen. Its also not known if existing towers and antennas will be grand fathered under this new Milwaukee tower law.

(Via KB9PRG, others)

WATCH YOUR TOWER LEASES!

Meantime, if you have a repeater at a commercial or broadcast site, listen up. The July 21st edition of Broadcasting & Cable features an article entitled 'The DTV Push Is On for 1998." In it, Ira Goldstone, the Vice President of Engineering and Technology for Tribune Broadcasting was asked about tower space issues in terms of locating the newly required DTV antennas. Goldstone says that Tribune "will lighten tower loads as leases run out."
The implication is that FM stations and probably most other sub-letters -- including ham radio repeaters may find themselves without suitable tower space so that tower owners can accommodate the needs of Digital TV.
As previously reported, tower space at all commercial sites will soon be at a premium. This as broadcasters have to more than double their transmitter facilities to accommodate Digital Television while also maintaining their old analog signal for years to come. (Via Broadcasting and Cable Magazine, CGC Communicator)

AMSAT-NA PRESIDENT SPEAKS OUT ON LATEST P3D DELAY

AMSAT President Bill Tynan, W3XO, has spoken out on the latest delay in the launch of the Phase 3D ham satellite. As reported last week, the European
Space Agency has informed AMSAT that it will have to increase the structural integrity of the new ham satellite to be certain it survives launch. This last minute notification has brought cries of righteous
indignation from a growing number of AMSAT North America members. Members who say that it was wrong of AMSAT to pin its hopes for a launch with one agency. But in a letter to Bruce Paige, KK5DO, and posted to the AMSAT North America Bulletin Board, Tynan takes the offensive. He says that last
minute adjustment in requirements such as those made by ESA are not unusual in the space and missile industry. He says that he encountered many such changes in his thirty-six years as a guided missile engineer. Tynan adds: "It is not a matter of poor engineering, or bad faith, on their part. It's merely that sometimes these things happen when the state of the art is being pushed."
As to when Phase 3D will be launched. Tynan will not comment to a specific date. Instead he

says that at this juncture everything is only speculation which he will not enter into. Instead he notes that all negotiations with ESA are in the hands of Dr. Karl Meinzer, DJ4ZC. Meinzer is the P3D Project Leader. Tynan says -- and we quote -- "We can only hope that Dr. Meinzer will be successful in arranging something suitable for a launch if we are not able to go on 502."
In closing, Bill Tynan, W3XO adds simple prayer. He says: "Keep the faith!"

(Via AMSAT-NA BBS)

U.S. COSMONAUT CALL

Russian Cosmonaut Valdimir Titov, has become a U.S. licensed ham. Titov, now KD5AOS, took his test at a Clear Lake Amateur Radio Club test session on Saturday May 10th. Titov is scheduled to go on a shuttle mission in September that docks with the Mir. By the way. Talk about a call sign perfect for a ham in space. KD5 Acquisition Of Signal.

(Via AMSAT, ARRL)

ARRL RFI EXPERT

And speaking about perfect call signs, how about this one. ARRL Lab Supervisor Ed Hare, the League's point on issues dealing with radio frequency interference, recently took advantage of the vanity call sign program to obtain an apropos new call. He is now known as W1RFI. Under his former call sign, KA1CV, Ed has been well known among members of the QRP community.

(Via ARRL)

SATELLITE LICENSES

The FCC has issued an Notice of Proposed Rule Making that seeks additional comments on a framework to allow satellites licensed by other countries to provide service in the United States. The comment due date is August 21st with replies due no later than September 5th.

(Via FCC Release)

NO BANKRUPTCY DELAYS

Outgoing FCC Chairman Reed Hundt has taken a slap at the legal profession. Hundt has urged Congress to make it crystal clear to those he calls "even the most ingenious, pettifogging, persevering lawyers" that provisions of the Bankruptcy Code "are not applicable to any FCC license for which a payment obligation is owed. As such, declaring bankruptcy does not relieve any licensee from payment obligations, and does not affect the Commission's authority to revoke cancel, transfer, or assign its licenses." So says Reed Hundt of the FCC.

(Via Washington News)

PACKET COURSE OFFERED IN TROY

The Troy, New York Amateur Radio Association will host a new "Introduction to Packet Radio" course on Saturday and Sunday, September 27 and 28. Both sessions of this course are free and will cover the basics of packet operation, including station setup, basic commands, TNC parameters, node networks, bulletin boards, computers, software, and operating courtesy. A working station will demonstrate packet's capabilities and limitations. All students will receive free copies of IBM compatible packet

software along with the course workbook. For more information or to register, contact Stephen Anderman, WA3RKB, evenings after 8:30 PM Eastern time at (518) 664-6809.

(Via WA3RKB)

AMATEUR RADIO AND THE INTERNET

More repeaters are adding linking worldwide on the Internet. One of the latest is Washington, DC's Green Mountain Repeater Association. Green Mountain is not only connecting their repeaters 146.61 and 146.88 MHz to other repeaters around the country but to hams worldwide as well.

According to Murray Green, K3BEQ, the linking of amateur radio to the computer world is a slow process that will take time for some of our amateurs to accept. He says that the repeater to Internet connection may not be as revolutionary as the explosion of repeaters in the 70s. It is however quickly becoming another method of extending the range of repeater transmissions. This, for amateurs to explore, use and enjoy in the best interests of amateur radio and public service.

(Via K3BEQ)

IRC ARES/RACES CHAT NET

The ARES and RACES Internet Relay Chat Net is held every Sunday morning at 10:00 hours Pacific Daylight Time. Anyone can log onto it from most any Internet Service Providers, worldwide. For more information go to the net web page at:
www.kennerla.com/ares

(Via Press Release)

ARRL WANTS YOU

If you have a project that you would like to share, then QST magazine wants to hear from you. The League publication is looking for project articles ranging from the simple to the complex, covering every aspect of Amateur Radio. To submit an article for consideration, simply send it to:

Paul Pagel, ARRL, 225 Main Street Newington, CT 06111

(Via ARRL)

ARRL TO HELP RECRUIT KID HAMS

The ARRL Board will soon be introducing a program to coordinate enlisting local volunteers from League affiliated and special service clubs to introduce young people to technology through Amateur Radio and to potential careers in technology. In creating the program, the ARRL Board cited the increasing importance of technological literacy and President Clinton's call for greater volunteer efforts on behalf of youth as reasons for the project.

(Via ARRL)

EQUIPMENT THEFT

A Canadian ham club has been robbed of its station. On the morning of June 26th at about 3 AM the emergency command post of the COBRA Radio Club, of the Niagara region was broken into by thieves who made off with a good portion of the clubs equipment. These radios were used for A.R.E.S and CANWARN communications work. If you have any

information about the equipment please contact the Hamilton Region police.

(Via RAC)

DX

In DX, CO2OJ reports that winds in excess of 120 kilometers per hour have taken down his six and two meter yagi antennas. Oscar says that he also has a damaged mast but hopes to have his antenna system back up and working as soon as he can.

(Via CO2OJ)

And the ARRL is looking for signal reports of its 20 meter W1AW Bulletin Service. A change has been made to the W1AW 20 meter bulletin antennas.
W1AW needs signal reports from amateurs who listen to its 20 meter transmissions. Please note your QTH, the time of reception, mode, signal strength and quality. Use the standard RST system if you can. Mail your reports on a postcard to:

W1AW, 225 Main St., Newington, CT 06111

You can also e-mail them to:

w1aw@arrl.org

(Via ARRL)

And Hawaii has been heard and worked from California on 2 meters. Gordon West, WB6NOA, describes the contact:

"KH6HME, our Hawaii contact in Hawaii on Mauna Loa, drove up to the top of the 8500 foot operating station. Turned off the beacon, and came on the air. About 50 hams throughout southern California were able to work Paul direct on 2 meters on 144.170 MHz. And we even heard some Hawaii repeaters coming through on FM as well."

Gordon adds that SSB appears to provide the most reliable communication for Southern California to Hawaii 2 meter DXing.

(Via WB6NOA)

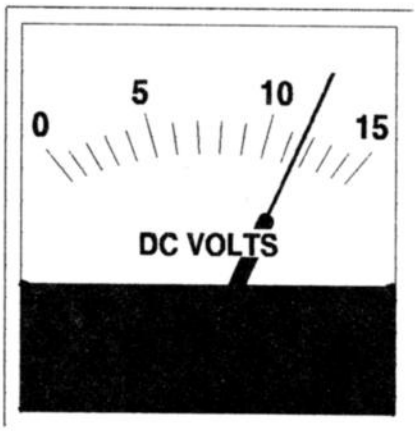
DELETE THIS REALLY HOT NUMBER

Bob Gonsett's CGC Communicator tells the story of a lady in Bloomington, California who called the fire department to obtain earthquake information.
She was given a California Office of Emergency Services 800 number to call, but what she got was not exactly what she was expecting.

It seems that the California State OES once had an earthquake hot line at its temporary Pasadena Disaster Center. It was discontinued about 1 ½ years ago. And since telephone numbers are in short supply, the telephone company reassigned the number to what only can be described as a truly HOT line!

(Via CGC Communicator)

With thanks to the ARRL, the CGC Communicator, the FCC and WA3RKB, that's all from the Amateur Radio Newsline. You can write to us at:
Newsline, P.O. Box 660937, Arcadia,
California 91066
Our e-mail address is:
newsline@ix.netcom.com
Our web page is at:
www.arnewsline.org
For now, with Bill Pasternak, WA6ITF at our editors desk, we at Newsline say 73 and we thank you for listening.



ELECTRICAL SAFETY

>From the Ohio Buckeye Bullet Army MARS Bulletin

As we are all involved in electronic communications, we should be aware of the dangers involved when working around live voltage.

Most of us think that 100 kilovolts is more dangerous that 100 volts. This is not really the case. The voltage is not the primary consideration, but the current it can produce. Any amount of current over 10 milliamperes is painful, and any current between 100 and 200 milliamperes, while causing severe burns and unconsciousness, does not cause death, usually, if the victim is given immediate artificial respiration.

The current is dependent upon the voltage and skin resistance. Wet skin may have resistance as low as 1000 ohms and 20 volts may give a lethal shock.
Dry skin may have over one half megohm and a voltage of 5,000 volts will give a painful, but not very dangerous shock.

At 20 milliamperes, the shock is painful and the victim cannot let go. At 100 milliamperes, the heart rthym is disrupted and the heart muscles will probably go into ventricular fibrillation. At over 200 milliamperes, the heart muscles will probably clamp and stop beating, making artificial respiration a necessity.

To not become a statistic, work only when the power is turned off. If you must work on live circuits, be sure you are standing on a non-conductive surface and work with one hand only. Also, be sure there is someone available in case of need. If you must remove a victim from a powered circuit, turn off the power and use insulated material to drag him away so you will not be in contact with the live circuit.

Hummmmmm or "Sounds like your charger is plugged in..."

To use an HT while the battery is being recharged, use a 1000 mfd capacitor across the input from the wall charger, and a small toroid in series. This will take out the hum which bothers others on your transmissions when the wall charger is plugged in.

The components can be taped onto the wall charger case. Be sure you don't use the charger this way without first plugging it into the battery -- there is no voltage regulation from most chargers - the current is just limited to about 50

milliamperes. Also, be sure to keep the battery terminals clean. Dirty terminals can build up resistance and cause a memory loss sooner than expected, along with other unhappy things, depending on the make of the HT.
Cheers
Lon WM7E
ed--Most of the editing in this article was done at midnight by Lon Stuart's Trolls

Measurement of Electromatic Fields at Amateur Radio Stations

OET Report ASD-9601, January 1996

The FCC's Office of Engineering and Technology (OET) has released a technical report entitled, "Measurements of Environmental Electromagnetic Fields at Amateur Radio Stations." The report describes a joint measurement study of environmental radiofrequency (RF) fields in the vicinity of nine amateur radio stations that was conducted by the FCC and the U.S. Environmental Protection Agency (EPA) in southern California. This information will be useful to the FCC in determining how to implement newly revised guidelines for human exposure to RF energy. Amateur stations were chosen that represented a variety of antenna and equipment types, many of which are commonly used by amateur radio operators. Measurements of electric and magnetic field strength were made in areas near amateur antennas and equipment in order to determine typical and "worst case" exposure levels of amateur radio operators, their families and other individuals who live or work in the vicinity of these stations. Measurements were made using instrumentation appropriate for the particular transmitting frequency being used at a given location. Both broadband and narrowband instruments were used. For most of the stations surveyed, current RF protection guidelines for field strength and power density were not exceeded in accessible areas. The highest readings in accessible areas were generally associated with vehicle-mounted antennas. However, when "duty factors" are taken into account routine exposures from such antennas would be expected to comply with safety guidelines.

If maximum permissible power levels and different facility configurations are used, higher exposure levels than those measured here cannot be ruled out. Such exposures could affect the amateur operator or other individuals in the immediate vicinity of a station. However, it is concluded that appropriate
precautionary measures and facility siting should be sufficient to prevent exposures that are in excess of safety guidelines.

The complete text of the report can be FTP'ed from

http://www.fcc.gov/oet/info/documents/reports/#ASD-9601

Bruce Bergan

New FCC RF Safety Standards Include Amateur Radio

From The ARRL Letter for August 9, 1996:

New FCC RF safety standards that become effective January 1, 1997, could affect the way some hams operate. As a result of a Report and Order adopted
by the FCC on August 1 (ET Docket No. 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation), Part 97 will require hams running more than 50 W PEP to conduct routine RF radiation evaluations to determine if RF fields are sufficient to cause human exposure to RF radiation levels in excess of those specified. "Measurements made during a Commission/EPA study of several typical amateur stations in 1990 indicated that there may be some situations where excessive exposures could occur," the FCC said in ending the blanket exemption for Amateur Radio. Although all amateur operation must comply with the new regulations for Maximum Permissible Exposure

(MPE), amateur operation at power levels of less than 50 W PEP is "categorically excluded" from the requirement to perform a "routine evaluation" of station operation before operating. Where routine evaluation indicates that the RF radiation could be in excess of the limits, "the licensee must take action to prevent such an occurrence," the Report and Order stated. The FCC said this could mean altering operating patterns, relocating the antenna, revising the station's technical parameters--such as frequency, power or emission type--or "combinations of these and other remedies." Although the new exposure criteria will apply to portable and mobile devices in general, at this time routine evaluation for compliance will not be required of devices such as "push-to-talk" portable radios and "push-to-talk" mobile radios used by Amateur Radio operators. These transmitting devices will be excluded from routine evaluation. The FCC encouraged the amateur community "to develop and disseminate information in the form of tables, charts and computer analytical tools that relate such variables as operating patterns, emission types, frequencies, power and distance from antennas." The Commission said it intends to provide "straightforward methods for amateur operators to determine potential exposure levels" by year's end.

"Exactly what is involved in conducting a 'routine RF radiation evaluation' is not yet clear," observed ARRL Executive Secretary David Sumner, K1ZZ, adding that the FCC has promised to release a revised OST/OET Bulletin Number 65, "Evaluation Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." The League is now studying the 100-plus page docket, to see if the League should seek reconsideration of any aspects of the FCC decision.

In the Report and Order, the Commission adopted Maximum Permissible Exposure (MPE) limits for electric and magnetic field strength and power density for transmitters operating at frequencies from 300 kHz to 100 Ghz. These MPE limits are generally based on recommendations of the National Council on Radiation Protection and Measurement (NCRP) and, in many respects, are also generally based on the guidelines issued by the Institute of Electrical and Electronics Engineers Inc (IEEE) and subsequently adopted by the American National Standards Institute (ANSI) as an ANSI standard (ANSI/IEEE C95.1-1992). The Commission used the 1992 ANSI/IEEE standards instead of the 1982 ANSI standards that had formed the basis for the existing rules under which Amateur Radio stations were categorically exempted.

ARRL Laboratory Supervisor Ed Hare, KA1CV, said the new regulations will give hams an incentive to demonstrate that Amateur Radio operation is safe. "Although this means that hams will have to become more educated about RF safety, most amateur stations are already in compliance with the new regulations," Hare said.

Sumner said that for certain unusual situations where there is "uncontrolled exposure" to neighbors and the general public, "amateurs may well have to make changes in how they operate." The ARRL Lab staff and the RF Safety Committee are continuing to evaluate the new requirements.

Hare noted that the administrative burden for hams will be minimal, and the FCC does not require amateurs to submit any documentation to the FCC. "In essence, the FCC is telling amateurs that if they run more than 50 W, they need to learn about RF safety and evaluate how this applies to their own operation," he said.

The new regulations also will require the addition of five questions on RF environmental safety to the amateur examinations for Novice, Technician, and General-class elements 2, 3(A) and 3(B). Sumner noted that the Commission's Report and Order does not take into account the practical problems associated with such a significant revision to the volunteer-administered amateur examinations, and that more time than the Commission has allowed will be required to do a good job. The Commission acknowledged the updated guidelines generally are more stringent than the current rules and are based on recommendations of the federal health and safety agencies, including the Environmental Protection

Agency and the Food and Drug Administration. The Commission said that the new rules will protect the public and workers from strong RF emissions. Adoption of the new rules by August 6 was required by the Telecommunications Act of 1996.

The Commission also incorporated into its rules provisions of Section 704 of the Telecommunications Act of 1996 that preempt state

or local government regulation of personal wireless services facilities based on RF environmental effects, to the extent that such facilities comply with the Commission's rules concerning such RF emissions. This preemption does not directly affect Amateur Radio, however.

The FCC said amateur stations "present an unusual case with respect to compliance with RF exposure guidelines," in part because they are authorized to transmit from any place where the Commission regulates the service, as well as on the high seas, and the FCC does not pre-approve individual amateur station transmitting facilities and no additional application is made for permission to relocate an amateur station or to add additional stations at the same or other locations. The FCC also noted that amateur stations "vary greatly" from one location to another, transmit intermittently, and can involve "as many as 1300 different emission types--each with a distinctive on-off duty cycle." The FCC said most amateur stations engage only in two-way communication, thus cutting the transmitting time of any given ham station. "There are many variables,therefore, to be considered in determining whether an amateur station complies with guidelines for environmental RF radiation," the FCC said in the Report and Order.

In comments filed earlier with the FCC, the ARRL strongly opposed adoption of the new requirements. The ARRL said most Amateur Radio users do not possess the requisite equipment, technical skills, and/or financial resources to conduct an environmental analysis. The League has, for several years, recommended a policy of "prudent avoidance" of exposure to electromagnetic radiation as a common-sense approach to potential--but not yet proven--health hazards and against such practices as running high power to indoor antennas or to mobile antennas that might expose the vehicle's occupants. The ARRL also argued that amateur stations, because of their intermittent operation, low duty cycles, and relatively low power levels, rarely exceed the 1992 ANSI/IEEE standard. Finally, the ARRL noted that unlike other radio services, RF safety questions already are included in amateur license examinations.

The FCC agreed in part. "We concur with the ARRL that amateur operators should follow a policy of prudent avoidance of excessive RF exposure," the Commission said. "We will continue to rely upon amateur operators, in constructing and operating their stations, to take steps to ensure that their stations comply with the MPE limits for both occupational/controlled and general public/uncontrolled environments." But the FCC expressed concern that Amateur Radio operations "are likely to be located in residential neighborhoods and may expose persons to RF fields in excess of the MPE guidelines."

For now, the League advises hams not to panic and to read up on the subject. You can download the complete Report and Order by pointing to http://www.fcc.gov/Bureaus/Engineering_Technology/Orders/ fcc96326.txt.

. General information on RF safety is available in the safety sections of the 1996 edition of The ARRL Handbook and in the 15th edition of The ARRL Antenna Book. These materials offer guidelines on how to comply with the ANSI standard the Report and Order refers to. Additionally, the ARRL Technical Information Service offers an information package on RF safety. It includes a reprint of the Handbook material, an April 1994 QST article by Wayne Overbeck, N6NB, and a bibliography on the subject. This package is available for $2 for ARRL members or $4 for nonmembers, postpaid. Nonmembers should include payment with orders. Contact Bridget DiCosimo, e-mail bdicosimo@arrl.org or write 225 Main St, Newington, CT 06111. Other resources are available on the ARRLWeb page at http://www.arrl.org/news/rfsafety/. The ARRLWeb RF Safety information will be updated as circumstances dictate.