THE OVMRC RAMBLER

Volume 36, Number 4 - April 1993

Helpless hams harried by receding hare lines!

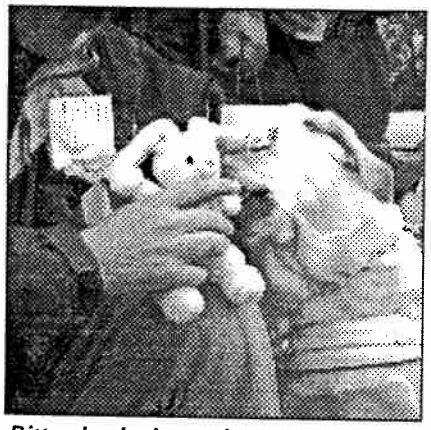
by Wil (Rabbit) Warren, VE3XMT

On Saturday, March 13 1993, Wil VE3XMT, Anne Jeffrey, Mike VE3FFK and Peter VE3EPB organized a bunny hunt with a twist – it simulated a mid-air crash of two planes. Although this was not an OVMRC sponsored event, many mobilers participated, and we thought you'd like to hear what went on. Ed.

Well we did it! And now the whole story can be told. The day was cold... and it grew colder. With the "storm of the century" in the brewing we still went out. For those of you down south reading this, it was -11°C with a wind chill of -28°C.

We used 146.490 MHz as the simplex coordinating net frequency and 147.1215 MHz as the bunny frequency to broadcast the tapes made for the purpose. The tapes did ***not*** include a proper ELT signal just to make sure no one listening on a scanner would mistake our exercise for the real thing.

The hunters checked in from 09:00 to 10:00 and they appointed Al VE3TYJ as mobile net control and Dave VE3YNC as base net control. At 10:00 the bunny began transmitting a pretaped spiel of dialog 'In the Air' and a short while later another spiel 'On the Ground'. After that a third 'endless loop' message played continuously at low power. This was the signal everyone chased.



Bitten by the bunny bug *Photo: VE3PUE*

The participants were:
Al VE3TYJ, Dave VE3ZZU, Ray VE3RYH, Dan VE3XDD, Ian VE3PSK, Maurice-André VE3VIG, Gaston VE2EMG, Jean VE3VTS, Gord VE3XGD, Dan VE3DCL, Tim VE3QDX, Doug VE3QDM, Steve VE3USM, Duncan VE3BDC, Sharon VE3TDW, Dave VE3YNC and several others who are soon to be licensed.

Dan VE3DCL arrived at the simulated crash site first and he did his best to tell the others where he was. He soon found that there was more than one transmitter. The exercise called for a mid-air crash between a hareplane and bearplane, so there were two ELTs to find. (That's why different teams got different bearings.) Because the exercise was performed on a simplex frequency, and the base station was unable to hear DCL, lots of doubling occurred. Eventually the message got through, and the hunters converged on the end point.

Once most of the hunters knew where the bunny was, I headed over and fired up the barbecue. The smell of food encouraged the arriving hunters to find the cardboard pieces of airplane parts that Mike and Peter had scattered about. Collecting the parts was easy until the hunters noticed that the wing needed three people to carry and four tools to extract.

On the pre-bunny net we had listed the necessary tools (32 items) that the hunters collectively had to have to retrieve the parts. No tools, no food. This tactic encouraged everyone to get into the act.

During most of the hunt, everyone used tactical call signs and grid-square coordinates. The maps may next be used when one of our local pesky button pushers shows up. Now that most of the hunters now have common information and a little experience it will be much easier to locate the next jammer.

I taped the whole exercise (almost 90 minutes) and I am making copies for others to enjoy. The tactical communications are quite fascinating and the interchanges educational. I encourage anyone setting up a hunt to give this a try. The 24 hamburgers and 24 hot dogs were all eaten as was the "Sex-in-a-Pan" dessert We had fun and a great day. Thanks to all for joining in.

–73–

The Ottawa Valley Mobile Radio Club

RAMBLER

The *Rambler* is published monthly by:
The OVMRC
Box 5530, Station F
Ottawa, Ontario
Canada K2C 3M1

Mark Your Calendar!

Next general meeting:

Thursday, April 15, 1993 19:30 local time in the auditorium at the National Museum of Science and Technology. Gerry King VE3GK on the wonderful world of HF (with slides and exhibits!).

Next executive meeting:

Thursday, April 22, 1993 19:00 local time in the volunteer room at the National Museum of Science and Technology.

Deadline for the next issue of the Rambler:

☞ ***Extra Early ☜ Thursday, April 15, 1993.

The 1992-1993 OVMRC executive

President: Jerry Wells, VE3CDS, 225-7374
Vice-President: Larry Wilcox, VE3WEH, 747-5565
Past President (ex officio): Bob Sharp,VE3YBC
Treasurer: Richard Adams, VE3EIT, 749-2619
Secretary: Larry Woram, VE3WLN, 835-2959

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Amateur radio exhibit: Cy Webster, VE3SIY, 733-2371
Amateur radio training (acting): Doug Carswell, VE3ATY, 839-5854
Field day: Vic Bajaj, VE3BSV, 726-9270
Flea market: Ken Barry, VE3KJB, 746-4823
Historical (acting): Pat Brewer, VE3KJQ, 825-8721
Hysterical: Neil Herber, VE3PUE, 829-4668
Membership: Mike Beausoleil, VE3BGP, 739-8871
Newsletter: See hysterical (don't ask)
Publicity and programs: Keith Beardsley, VE3SVQ, 731-7912
Radio operations: Ian Kennedy, VE3SNX, 747-8387
Technical: John Pope, VE3ACI, 989-3629

Ramblerites

Contributors to this issue:
Wil VE3XMT, Jacques VE3TSC, Roger VE3XRR, Ron VE3UWR, Larry VE3WLN, Ed VE3VLF, Jerry VE3CDS, Ian VE3SNX,.
Next month this will be empty. See rumblings p 3.

Circulation:
Bill Chapman, VE3RWC, Her Majesty's mailer.
Fred Haire, VE3NJF, Extraordinary exemplar.
Dave Scobie, VE3BOX, Mr. Copier.
Dave Scobie, VE3BOX, Mr. Copier.

Affiliated clubs

The OVMRC exchanges bulletins with the following organizations:
Augusta Amateur Radio Association, Augusta, ME
Border City Radio Club, Windsor, ON
CARF, Kingston, ON
CRRL, Arva, ON
Chatham-Kent Amateur Radio Club Inc., Ridgetown, ON
Calgary Amateur Radio Association, Calgary, AB
Halifax Amateur Radio Club, Halifax, NS
Heritage Amateur Radio Club, Cobourg, ON
Kingston ARC, Kingston, ON
London Amateur Radio Club, London, ON
Ottawa Amateur Radio Club, Ottawa, ON
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Sudbury Amateur Radio Club, Sudbury, ON
Saskatoon Amateur Radio Club, Saskatoon, SK
Thousand Islands Amateur Radio Association, Prescott, ON
West Island Amateur Radio Club Inc., Dorval, PQ

Sponsors

The OVMRC provides bulletins to the following organizations for their past support of our activities:
Bytown Marine, Ottawa, ON
Kenwood Electronics Canada Inc., Mississauga, ON
Seaway Communications Co., Cornwall, ON

We gratefully acknowledge the support provided by Fulline Office Products in printing the Rambler.

Ramblings

Wise words from our President, Jerry Wells, VE3CDS

Ah! Spring at last. How nice to see some warmer weather and the snow banks disappearing – I thought the winter would never end. It's time to see how the outside antennas survived the weather.

I looked at my transmission lines coming from the tower and there seems to be a bit of a sag where the coax went over the porch roof and into the house. The heavy snow on the porch must have pulled the cable as there was slack inside the house. That looks like the only problem as far as I can see. The rotor on the tower is somewhat sluggish and will have to be looked at, but that will keep until the warm weather arrives. So much for my antennas, have a look and see that your installation is okay.

On a different note I had an interesting encounter with a very persistent grey squirrel. Many years ago I had dipoles for 10, 15 and 20m installed in the attic. My shack was located in the basement at that time. I drilled a one-inch hole on the underside of the eaves *[in the soffit, Ed.]* and ran the transmission lines down the outside of the house and in through the basement window. This setup was in place for several years. When I abandoned the indoor antennas for new ones in the back yard and relocated the shack upstairs, it was no longer necessary to have these unsightly cables running down the side of the house, so I pulled the lines up into the attic. I left the small hole under the eaves.

Well, last Friday my neighbor called to inform me that I had a house guest, a big grey squirrel. This uninvited guest had enlarged the hole to a size that would give him easy access to a nice dry warm home. I spent the following day trying to catch a glimpse of him when he (or she) was out and about. I never did see the squirrel on Saturday. I knew he was there because I could hear him scampering about as he surveyed his new home. I tried to entice the new house guest with peanuts and ended up feeding every squirrel in the neighborhood (five to be exact). The house guest was nowhere to be seen.

Early Sunday morning, I put a piece of masking tape over the hole. When I saw the tape broken later in the morning, I knew the squirrel was out. I confirmed that by going up into the attic, and then I covered the hole. Later in the day I saw the squirrel sitting on the porch roof, wondering where the hole went. The squirrel is still casing the house for possible re-entry. The lesson here is, if you drill holes in the house for antenna wires, make sure they are squirrel-proof.

Looking at other activities of interest I am pleased to report that our radio course has been completed and all of the students who wrote the basic exam passed. The majority also passed their 5wpm code. Several of the students also passed 12wpm code and the advanced theory. Our newly licensed hams will be recognized at the April meeting. Congratulations to the new graduates! Many thanks to the instructors, who will also be recognized at the April meeting. For the new hams, be sure to let us know your call sign so that we can update club records.

We are at that time of year again when we need to look for members to serve on the next executive of the club. If you feel that you would like to get more involved, please contact any member of the current executive.

–73–

Rambler rumblings true! Erstwhile editor ends egregious exaggerations – he's out of material!

by Rambler staff

Judicial proceedings against the Rambler editor are being considered in response to the revelation that his "huge supply of material" has dwindled to nothing. In his defense, the editor claims that OVMRC members stopped submitting material because they thought his supply was endless. "Do they believe in perpetual motion too?", he whined. He is soliciting donations for his defense fund, preferably on disk.

–73–

Minutes *from the last general meeting, by Larry Woram, VE3WLN*

OVMRC General Meeting, March 18, 1993

1) Call to Order
The meeting was called to order at 19:40 by Jerry VE3CDS. Jerry welcomed the members and guests. The evening's guests included Chris Henderson, Jean VE3VTS, Doug VE3AIK, Ken VE3MVV, Ann VE3TSB, SP7ROF, Danny, Gord VE3UIZ, Don VE3XDD, Peter VE3PGM, Brian VE3YBT, Mike VE3CNK, Doug, Mark and John.

2) Transfer of Presidential Powers
In keeping with tradition, Vice-President Larry VE3WEH bestowed upon Jerry the OVMRC gavel and the key to the executive washroom. Jerry gave a brief history of the origin of the key and the club's "Field Day privy."

3) Flea Market
Ken VE3KJB reminded everyone that the club's annual flea market would be held on May 15, 1993, at Dow's Lake. Doors open to the public at 09:00. Tables are available at $10 and $20 for commercial. As always admission is free.

4) Museum.
Cy VE3SIY announced the receipt of a donation of a MFJ 1278 data controller and software from MFJ for VE3JW. The Museum has some leaks in the roof which mean we have to take down the tower. Cy and Jerry met with Mr. Morin from Health and Welfare concerning the Senior Operators grant. Mr. Morin was very pleased with the project and indicated that more funds will made be available to the Senior Operators.

5) Newsletter
In view of the difficulties encountered with last month's *Rambler,* Neil VE3PUE announced that he had no comment that was fit to print.

6) Training
Doug VE3ATY advised that this year's classes were over and they only had a review left. Five students have already passed with Ernie achieving 99% on the written plus his 12wpm. It is expected that 20 amateurs from the class will graduate.

7)Membership
Mike VE3BGP informed us that we have approximately 286 members.

8) CARF Bulletin
Dan VE3EBI read the CARF bulletin for March 15, 1993, detailing the concluding meetings for CARF and CRRL and the initial meeting of the new organization, Radio Amateurs of Canada (RAC). RIC-25 has been passed and will be available at the DOC offices.

9) Help
Jake VE2TQX is looking for help with his MFJ 1278 and his computer. He is also looking for help with an R5000 interface module. Anyone who can help please contact him. Ed VE3RDZ announced his annual bulk coax purchase. RG213 for approximately 42¢ a foot and 9913 for less than $1 a foot. Contact Ed. VE3RWZ has short lengths of copper wire available for the asking.

10) Announcements
Field Day will be held at the National Museum of Science and Technology. Further information will be available at the April meeting. Lorraine VE3VAT announced the Class of '92 reunion to be held at Robbie's Restaurant.

11) New Business
At the start of the meeting, questionnaires were distributed to the members to solicit their feelings on what they wanted to see at upcoming meetings. Topics included antennas (multi-band, HF, VHF, satellite, verticals, etc.), contests, CW proficiency exams, summer picnics, information sessions, computers and amateur radio, and safety. From the discussion generated by the questionnaires and the feedback, Jerry indicated that the executive had enough to ensure interesting and informative meetings. The next guest speaker will be Gerry King VE3GK at the April meeting describing how to get on HF with a basic antenna.

During the break, Jake VE2TQX demonstrated a digital voice recorder that he built from a kit. Jerry helped Jake demo the unit with a recording and playback of his voice. Leonard VE3LPH announced that he and Moe VE3JTD had arranged to purchase club jackets at a reasonable cost. The jacket will be available, if enough interest is shown. See the March *Rambler* for more information.

12) Door Prize
This month's door prize (an ARRL Repeater Directory) was won by Jim VE3NVJ.

13) Adjournment
The meeting was adjourned at 21:35 and was followed by coffee and ragchew.

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From the mailbox

by Larry Woram, VE3WLN

The first item of interest in this month's mail, especially as I look out at all the snow, is a flyer from Themes At Sea, Inc. in Coral Gables, Florida. Themes at Sea is offering the YAESU DX-Caribe Cruise. There will be two stations aboard the ship, S.S. Ocean Breeze, operating while at sea. Contests are scheduled during the cruise. Guests will include astronaut Ron Parise WA4SIR, Martti Laine OH2BH, Ellen White W1YL and YAESU staff. Islands visited will be Aruba, Bonaire, Grenada, Barbados, Martinique and Curacao. Prices start at $1395 US for the eight-night adventure.

The February meeting of the Kingston Amateur Radio Club was held on February 2, 1993. The speaker Doug VE3KXA spoke on kit building and how to save money and become more aware of the technical aspects of the hobby. The KARC has grown to 107 members, thanks to the dedicated volunteers who put on amateur classes. Nevertheless, they are actively recruiting new members to the club.

Ground Waves, from the Windsor Amateur Radio Club reports a rumor that a local golf dome (driving range?) may be the site for Field Day. They hope to test the new "porcupine HF antenna array" now under development. The theoretical gain is said to be 112dB. However, it is admitted that a decimal point may be missing. Part 2 of *The History of Heathkit* detailed how the company evolved from building home built aircraft to entering the field of electronics and their first kit, an oscilloscope. From there they grew to where in the 1970s their catalog included 400 kits and accessories and sales topped $60 million. Clifford Burr, of Kenmore, N.Y. has built over 100 kits including the first oscilloscope which has worked perfectly for over 27 years.

Down the road the Border City Radio Club held their annual BCRC Swap on February 15, 1993. The auctioneer for the event was Jerry VE3EXT. Everyone who uses a PC and their spell checkers will appreciate the following from Cindy Speer. "I have a spelling checker, it came with my PC. It plainly marks four my revue mistakes eye can knot sea. Iran this poem threw it, I'm sure your pleased too no its letter perfect inn its weigh, my spelling checker tolled mi sew!" (it passed my checker.)

[This little ditty has appeared in several newsletters, including TCA. Each of the examples had different errors! Ed.]

The Ottawa Amateur Radio Club met on February 3, 1993. Jim Dean VE3IQ spoke about Naval communications equipment and methodologies from WWII to the present. Jim noted that the use of CW is rapidly diminishing and it will cease to be taught by 1995.

[CARF reports the US Coast Guard will cease all Morse code services in the medium frequency radio telegraphy band effective August 1, 1993. Ed.]

Jim was assisted by Ed LeBlanc VE3VLF who talked about the new Canadian Patrol Frigates and the HF, VHF, UHF and Satcom systems. *The Groundwave* reported that software on VE3XDX has been improved and is available from Paul Cooper for $10. To encourage amateurs to upgrade their licenses, the OARC CPO Challenge has been issued. A new category has been created for home-brew night: prototype code practice oscillators. The category will be judged on simplicity, tone quality, reproducibility and ingenuity.

The Heritage Amateur Radio Club *Bulletin* included a band plan for the amateur bands from 144 MHz to 1300 MHz. The HARC also polled their members to see what type of activities and meetings they would like to see in the future. This seems to be a popular method of renewing interest in the hobby.

The Saskatoon Amateur Radio Club's March issue of *Feedline* did not include the answers to the quiz printed last month. Now I will have to wait another month to see if my answers were right. The Regina Amateur Radio Association are sponsoring the Regina Hamfest '93 scheduled for July 30 to August 1, 1993. Advance registration is $10, $15 at the door. The three-day event includes eighteen planned sessions, a wine and cheese party, a dinner banquet, a flea market and lots of fun.

The March issue of the *WIARC Bulletin* included an announcement of their Spring auction scheduled for April 24, 1993, at St. John Fisher Church

See Mailbox..... page 7

The "other" modes

by Ian Kennedy, VE3SNX

Make mine Morse – is CW Completely Worthless?

So, what is Morse besides being the bane of most amateurs existence? (I say most because – believe it or not – there are people who absolutely love it.) Morse is defined in the Concise Oxford Dictionary as "The alphabet or code invented by S. F. B. Morse, Amer. electrician d. 1872 in which letters are represented by various combinations of two signs, e.g. dot and dash, long and short flash, etc." Many amateurs learn Morse because they have to in order to gain the privilege of working the HF bands. Most don't even give consideration to the fact that like all other modes of communications, it is very structured and there is more than one form of it.

In a "perfect" Morse signal the spacing is as follows:

dot = 1 dot
dash = 3 dots
character space = 3 dots
word space = 7 dots
bauds per cycle = 50 dots

Note that the space between characters indicates the space between characters in the same word. In Morse code, the standard "word" is PARIS, which (count them!) consists of 50 dots. Of course there is a mathematical formula to go with this:
WPM = (dots per second x 60) / 50

As I said previously, there is more than one form of Morse as I have described below.

Manual Morse
(using a conventional hand key)
Characters are formed by the manual operation of a conventional Morse key. Dots, dashes and spaces lack uniformity and vary according to individual operators.

Automatic Morse
(machine sent pre-punched tape)
Characters and spaces are of uniform length.

Semi-automatic Morse
(using a bug key)
Morse characters are formed by the combination of automatically formed dots and manually formed dashes and spaces.

(using a electronic key)
Morse characters are formed by the combination of automatically formed dots and dashes. Spaces are manually formed.

(using a keyboard)
Complete Morse characters are formed automatically, spaces between characters are manually introduced.

I have given you a brief overview of Morse. Of course keyboard Morse is much easier to copy than manual Morse using a hand key, but the trick to learning Morse is practice, practice and more practice. Don't always stick with a tape when learning. Every now and then, tune in a receiver and copy it "live". You'll be surprised at the difference.

See you next time.

[For more about Morse, see From the mailbox, page 5. Ed.]

–73–

Antenna antagonists hammer US hams

by Roger, KC4NHB via VE3TSC

David K. & Sharon T. Brower (WA4NST & N4XLF) of Vero Beach, Florida recently lost a two-year legal battle over their 68-foot radio tower and antennas. In the final judgement for the plaintiffs (seven households) Judge Charles E. Smith found the radio transmissions to be a noxious and offensive activity, the appearance of the tower and antenna an annoyance and nuisance to the neighborhood. Smith also broadly ruled that the tower is a building that exceeds the two-story limitation for buildings in the deed restrictions and limitations of the subdivision. The deed restrictions are silent about antenna support structures.

Pending appeal, Smith has stayed his order to remove the radio tower and antenna but has enjoined the Browers from further radio transmissions from their home!

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Ex-columnists seek re-employment at Rambler!

by Ron Clément (VE3UWR) and Roger Rose (VE3XRR)

As we wrote in the February issue of the *Rambler,* we were hoping to stay a part of our club's bulletin. With the demise of the *Class of '92* column, we have been trying to come up with a sure way to keep the bulletin supplied with reading material. As we did in the March issue, we can always keep writing about things done by club members outside of the club's own activities. Although there are many interesting things being done, we didn't think it was appropriate to always use the OVMRC's bulletin to publicize other clubs' activities.

[We have absolutely no objection to publicizing any activity that involves or would be of interest to OVMRC members, regardless of who sponsors it. We even advertise other clubs' flea markets! Ed.]

During the club meeting in March, one of the members commented that he would sure like to know more about the members who were talking. You see, the ham operator who made that comment is blind. (We're sorry we didn't get his call letters, but we believe his name is Tim.)

Ron VE3UWR

Roger VE3XRR

Anyway, he suggested that members should give their call letters and name when they speak so that he can associate that information with the voice he hears. Well, that in itself is easy enough for us to try and keep in mind. However, taking that suggestion a little further, we thought it would be great if we could learn about club members through the *Rambler.*

What if we could get to know a person's background: how long they have been a member, how long they have been a ham, what do they like best in hamming, what type of work do they do, and so forth? Who knows, maybe lots of us have other things in common – past military service, where we grew up, where we work. That would surely make it easier to approach other club members and have something to talk about.

So, with that in mind, we are proposing to write a series of articles which will highlight members of the OVMRC in future bulletins. We have prepared a simple questionnaire to help people get started telling us about themselves. We will write a column where, we hope, the membership can learn a little bit about who is who in the club.

We intend to get several articles written up, and pick them at random to publish in the *Rambler.* A new one would be published each month, our esteemed editor and space permitting of course.

Here is your chance to shine and be heard in your club's bulletin by just answering a few questions. We hope many of you will take this opportunity and support this venture.

–73–

Mailbox**.....** *from page 5*

in Pointe Claire. Tables are $10. Sixty five members attended the February meeting. The guest speaker, Sheldon Harvey, talked about shortwave DX. Five new members were welcomed to the club bringing their membership total to 148.

The March issue of *TelePARC* described two ways to save money. Bill VE3EKA *[a world famous cheapskate, Ed.]* suggested getting on packet and using e-mail instead of "snail-mail" – no postage or GST. His second suggestion is to get a fax modem for your IBM clone and take advantage of the low evening rates. Bill sent a fax to Laramie, Wyoming after 23:00 for 23 cents instead of "48 cents plus the gouge and screw tax."

Bill reported in another article his experience with a VR (virtual reality) machine that was recently on display at the St. Laurent Mall. For $8.50 he was treated to a 3-1/2 minute experience he described as "stimulating." From the headset he saw computer generated 3D graphics depicting a science fiction environment. Sound was CD-quality in stereo.

–73–

Regular Rambler reviewer goes ballistic!

by Ed LeBlanc, VE3VLF

[We have been saving this item for a while, but now it is time for the world to know the secrets of ham radio in the 24th century. Ed.]

Have you ever wondered how the communications system works on the U.S.S Enterprise when you watch an episode of Star Trek? Have you ever figured out how they can get a message to Starfleet Command in a few hours when it is hundreds of light years away? Curious about how they can establish a QSO with someone by just mentioning their name? More importantly, have you ever wondered if ham radio will be around by the 24th century? By looking for clues in Star Trek episodes and studying the latest edition of the *Star Trek Technical Manual,* I think I can supply some answers to these elusive questions.

Let's look first at the internal communications system of everyone's favorite starship. Spread throughout the Enterprise are 12 000 disk shaped terminal node devices (TNDs). These TNDs contain a mic/speaker, optical fiber modulation input/output subcircuit, A/D and D/A conversion and other 24th-century goodies. The ship's crew can use these devices to call someone on the ship.

As you know, setting up an intraship QSO on the Enterprise is a snap thanks to the processing power of the computer. All a space cadet has to do is state his or her name and the name of the person to be contacted. The computer analyzes the call, finds the recipient and opens the channel. One beef I have about Star Trek comms procedures is that the originating station gives his callsign first then the callsign of the station he is calling, rather than the other way around. This would never do in the 20th century world of ham radio!

Another beauty of the starship comm system is that you don't have to say 73, 88 or even ditditditdahditdah (SK) to end the QSO. The computer's artificial intelligence routines will check if the parties have formally broken the channel or look for certain contextual cues or voice inflections. If none are given, the computer will keep the line open for 10 seconds then close it if nothing more is said. One thing I haven't figured out yet is why crew members sometimes use their communicator badges instead of these TNDs while onboard.

The TNDs are linked via an optical data network with an RF system as backup. A second backup layer consists of copper-yttrium-barium superconducting strands. I guess plain old copper wires aren't up to Starfleet specs.

The communicator badges really get their work out when an "away team" beams down to a planet and maintains contact with the ship. The badges are used for communications and a lock-on for transporter operations so Chief O'Brien can get them out of Romulan poker game in a nanosecond.

The heart of the communicator is a subspace transceiver assembly (STA) which has a mic/speaker arrangement and a subspace field emitter. (We'll talk about subspace in a microsecond.) The STA also digitizes audio inputs, performs encryption/decryption and has a sarium krellide power cell. I guess the old ni-cads don't cut the mustard in the 24th century. However, tapping the badge when the QSO is over is still important as it turns off the communicator and conserves battery power. I wonder why we don't see any desktop drop-in battery chargers lying around the bridge?

The range of the communicator is limited. Badge to badge communications is 500 km tops. Although this is pretty good without a 5/8 whip antenna, the away team needs 40 000 km range to contact the Enterprise. Hence, it is the ship's comm system that does the heavy job.

The communicator is a personalized device that is programmed to respond to a crew member's bioelectrical field and temperature profiles. If some Ferengi tries to use it, he's out of luck. Maybe Kenwood or ICOM should see if they can adopt this principle for next year's handhelds.

The vast distances signals have to cover in the Star Trek world are accomplished via the subspace medium. This is the property that enables the Star Trek writers to defy Einstein and go faster than the speed of light. Without it, Star Trek would take hundreds of years per episode!

The propagational speed of subspace signals is equivalent to Warp Factor 9.9997, under ideal galactic conditions of course. This makes subspace radio about 60 times faster than the Enterprise. I wonder if Lt. Worf has to tune in WWV at 18 past the hour to check the solar flux (galactic flux?) index before he starts pounding brass?

See Star Trek..... page 9

Large leaks leave seniors soaking!

by Jerry Wells, VE3CDS

As I reported to you at the last club meeting, we have encountered a short delay in getting VE3JW back on the air. The roof at the National Museum of Science and Technology is in pretty sad shape and extensive leaks have occurred throughout the building. This means we have to remove the antennas from the roof while it is repaired or replaced. Removal day is scheduled for April 3, 1993.

For now, we will install the vertical antenna – one of the items purchased with our New Horizons grant for Seniors from the Department of Health and Welfare. Later in the spring, when the snow is all gone and the ground has dried up, we will install the new tower and beam. Funding for the tower and beam is also provided to us through the New Horizons Program.

The new antenna will be free-standing, placed at the back of the museum close to the new location of the communications display which will incorporate the new amateur display and VE3JW. We hope the new display will be on schedule.

We intend to operate from the the grounds of the museum for Field Day this year. One station will be operated by the seniors using our new Kenwood 850. Any club members who wish to do so can come and operate this first-class rig. We will also be using museum equipment – the 757 – in one of the other stations. We will publish more details on Field Day as we get closer to the event. Don't forget! It's the last full weekend in June (the 26th and 27th) at the National Museum of Science and Technology.

As part of our program to re-equip the new amateur station at the museum, I am pleased to report that the club received a donation of a TNC from MFJ in the United States. The unit is capable of operation in several modes. This will enable us to demonstrate packet radio, teletype, slow scan TV, and so on at the new VE3JW setup. We need to get the support of some of the bright young club members to check out this equipment and ensure that we are ready when the time comes to set up the new station. If you are interested contact me, Jerry VE3CDS, or John VE3ACI.

–73–

Star Trek..... *from page 8*

The Enterprise itself has a series of 20 medium power subspace transceivers imbedded within the hull of the ship. Subspace use isn't cheap as the whole system gobbles up a grand total of 143 MW of power. I wonder if there is such a thing as QRP subspace?

RF acts as a back up to the subspace system with a network of 15 RF transceivers. Sometimes the RF system is used to contact different cultures still using this archaic medium. It's nice to know that the new FT-1000 you just bought will still have a place in the 24th century.

On the subject of ham radio, we see an example of it in the Star Trek episode "Pen Pals". While doing some experiments with the ship's sensors during his free time, LCdr Data does some 24th-century-type short-wave listening. During his monitoring activities, he comes across an interplanetary CQ and begins a regular sked with an alien girl.

From this, we can deduce that, in the world of Star Trek anyway, ham radio is alive and well. However, there are some disturbing things one notices. There is no Federation DOC license pinned up in his shack. Maybe he's got his license in his wallet but then again they don't have wallets in the 24th century. Another problem is that he never uses his callsign. Maybe he signs during the commercials when we can't see him. Could he be some type of "freeband" bootlegger, using a handle of "Subspace Sam" or "Warp Drive Willy?" I doubt it as Data always does things according to Starfleet regulations. We can't be sure if Morse code will still be a requirement as we never see Data tuning into W1AW on subspace for some code practice.

Although Star Trek may or may not be an accurate indicator of life 400 years in the future, I think we can correctly assume that communications will continue to improve by leaps and bounds. Whether ham radio will be a part of that leap depends on what we as a community of communicators do with our hobby now in the 20th century.

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Upcoming Events, Help Wanted

HELP the flea bitten!
Sue VE3SLC is looking for volunteers to staff the Flea Bite at this year's flea market (see May 15, below). She is also looking for donations of squares, cookies, muffins, sandwiches and so on. The loan of a couple of 30-50 cup coffee urns would be greatly appreciated. To help with any of these items, please call Sue at 839-5854 after 17:00.
Contributed by VE3SLC

April 14, 1993
Class of '92 dinner & reunion. For information contact Lorraine VE3VAT at 228-7111.
Contributed by VE3NVL

April 17, 1993
The Brownsburg flea market in Grenville, Quebec. Contact Allan VE3BOA.
Contributed by CARF

May 1, 1993
The Smith Falls flea market in Lombardy. Contact Diane Buckley VE3IGG at 283-2182.
Contributed by VE3CGD

May 15, 1993
OVMRC flea market. Canadian Forces Reserve Barracks, Dow's Lake, Ottawa, Ontario. Free admission. Doors open to vendors at 08:00, to the public at 09:00. Tables ($20 for commercial vendors and $10 for all others) can be reserved by contacting Ken Barry, VE3KJB at 746-4823. Wheelchair accessible. Refreshments. Talk-in on VE3TWO, 147.300+.
Contributed by VE3NVL

June 26-27, 1993
Field Day! Contact Vic VE3BSV evenings at 726-9270.

Still (always!) looking
Net controllers needed to relieve the regulars. The Wise Owl net, the Pot Hole net etc., etc. No experience necessary. Contact Ian VE3SNX at 747-8387.
Contributed by VE3SNX

Stolen Radio

TM731 Kenwood dual-band radio, serial number 20500948. Anyone with information please contact Randy Wagner, VE3RWW at 825-5171 anytime.

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JTD's Jumbo Jacket Jubilee

Limited time offer!
Leonard VE3LPH and Moe VE3JTD are still taking orders for high-quality jackets with OVMRC on the back and your name and call on the front. All orders with funds ($28.75, all taxes included) must be in by April 19, 1993. XXL now available. (Not to be confused with XYL.) For more info call Moe on VE3TWO or Leonard at 733-5122 or read last month's *Rambler*.

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Copying conundrum concluded – Ricoh to the rescue!

by Neil Herber, VE3PUE

Many thanks to Dave Scobie VE3BOX and his employers, Fulline Office Products for coming to our rescue and offering to print the *Rambler* at minimal cost on their high-speed Ricoh photocopiers. As a thank-you, we have published a small ad here for them. On behalf of all members, THANKS!!

–73–