

# Newscaster

The Official Publication of the Winnipeg Amateur Radio Club  
The Manitoba Repeater Society  
The Winnipeg Seniors Citizen's Radio Club

mailing address

W.A.R.C.  
Attn: Newsletter  
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December 1993

## Electronic Christmas Tree Ornament Contest

Date: December 13, 1993  
Time: 7:30 p.m.  
Place: Sturgeon Creek Regional Secondary School

### Other Important Dates:

WARC: January 10, 1994 - Upgrading your licence  
WSC: December 14, 1993 - Annual General Meeting  
December 16, 1993 - Christmas Party  
MRS: Spring meeting TBA  
Other: Every Sat. & Sun. VE4TTU station in operation

Warc: Executive for 1993/94

President: Dave Panting - VE4EF  
Vice-Pres: Barret Filbert - VE4ABA  
Secretary: Dick Maguire - VE4HK  
Treasurer: Gary Smith - VE4YH  
Past Pres: Judy Norton - VE4JBN  
Membership/Newscaster: Kay Quinn - VE4YF  
Program Chairman: Rob Kaufman - VE4GV  
Flea Market: Pat Giesbrecht - VE4PLG  
Members at large: Scott Marshall - VE4WSM

### Notes from your Editor: by Derek, VE4HAY

**Merry Christmas**, everyone. I bet you can hardly wait for the 25th morning. All that prodding and hinting in the last 4 months just may pay off on Christmas morning <grin with eager anticipation>. I want to thank all those who sent me articles. I now had to decide which one's to hold till next month. I'm sorry if yours did not make it this month, but keep reading, it will show up soon.

I wonder if anyone would like to play Santa on the air this year. I'm sure a lot of Amateurs have kids at home who would like to talk on the radio (just like dear old Dad (or Mom)), and who better to make that first contact with, than good old St. Nick. (ho4-hoho or something like that) If you are interested please make it known at the WARC meeting. A good date for this would be December 19th right after the MRS net on the VE4WPG repeater. Any would be Santa's in the crowd.

### Words from the President of WARC: by Dave, VE4EF

Our last meeting was held at the Museum of Man and Nature and we had the opportunity to visit the Touch the Universe Exhibit and have a look at VE4TTU. There were approximately 60 people at the meeting and from the amount of time that they spent playing with the displays in TTU it is apparent that most of them are kids at heart (hi). It was great to have so many members and guests (including 3 students from the VE4OV School of Amateur Radio). Many thanks to Ed VE4YU and Rob VE4GV for arranging this meeting. Since the November meeting, Rob VE4GV has become the proud father of a healthy baby girl, Ashley. Congratulations! Also since the November meeting the weather has turned decidedly winter-ish which means you know what. . . tower climbing time. By some strange coincidence my HF antenna (a full wave quad - a thing of beauty and a joy forever) only seems to need repairs after the first good snowfall. So I spent all day Saturday, November 27 trying to solder all them little bits of wire back together again while trying not to turn myself into a human lawn

dart. What a wonderful hobby! At the December 13th meeting we will be having our second annual Electronic Christmas Tree Ornament Contest and Some Good Eats and Good Fellowship all organized by Judy VE4JBN and her band of merry volunteers (not elves). In addition, we will be considering the normal weighty business matters of running the mighty WARC and enjoying a short presentation by Vern VE4VQ about the canoe trip he and his radio took this summer. I hope to see you there!

### **Winnipeg Senior Citizen's Radio Club. by Bill, VE4WU President.**

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Well here we are winding down 1993 another year and wondering where it all went.

No doubt this is a very busy time for most of us, but a reminder that the breakfast will be held on Thurs. December 9, 1993 9:00 am at the Norlander Inn on Pembina Hwy.

Saturday, December 11, 1993 from 10:00 am will be a clean up day and members are requested to lend their support.

Tuesday December 14, the Winnipeg Senior citizens Radio Club will hold it's General Annual Meeting at which time the election of officers and board members will take place in the club rooms, 598 St. Mary's Road. at 9:30 am

Then on Thursday December 16 we will be holding our Christmas Party in the Club rooms 11:30 am - 3:00 pm Members wishing to donate food items please contact the club at 233-3122 as to what would be appropriate.

Classes for members who wish to up-grade their skill will be formalized and scheduled for the coming year. To date the request is for computer and packet classes. If you have not already done so, and your are interested in these subjects please contact the club.

As we reflect our thoughts over the past year for some making their first contact, others seeking that elusive DX QSO or just communicating across town or around the world, the thrill and satisfaction of Amateur Radio is an unequaled hobby. Friendship and understanding develops within our amateur fraternity and as time goes on we add call-signs and names to our logs and remember those who have become silent keys. We are indeed fortunate as our lives have been enriched by this great experience and no doubt we are eagerly anticipating the coming year with it's challenges and rewards.

On behalf of the Winnipeg Senior Citizens Radio Club inc. VE4WSC and myself, I would like to take this opportunity to wish one and all **"A VERY MERRY CHRISTMAS AND A GREAT NEW YEAR IN 1994"**

### **Manitoba Repeater Society by Derek, VE4HAY**

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With the newscaster this month we are sending out membership applications. If you have already re-nued for the 1994 year please ignore the form. It's easier to send one to everyone than to pull for those who have paid. In short, anyone who has paid since the Flea Market has paid for the 1994 year., all others will have their membership expire on New Year's Eve. So please fill out the form and send in your money. We are planning to produce a roster of members in February 1994, and you will want to make sure that your name is on it.

Since I missed the meeting last month, as well as a lot of other members (lousy weather), I thought I would let everyone in on what happened as told by Dick, VE4HK.

The Manitoba Repeater Society Inc. held its much awaited semi annual general meeting at Sturgeon Creek High School, October 25. We used the auditorium, our favourite location. The turn-out was a little sparse, mainly due to the "interesting" weather conditions.

One of the highlights of the meeting was an excellent technical presentation by Michael VE4MJM, explaining the proposed repeater linking system. Michael along with Tim VE4TEG cleared up most problems, during a question and answer period.

Once we completed the business portion of the meeting, everyone trooped off to the cafeteria for some solid and liquid refreshment.

The highlight of the whole evening was when Barry VE4MA gave a very entertaining and educational program about moonbounce (EME).

Barry brought out a fascinating series of slides and overheads, which along with his words, kept everyone on the edge of their chairs. VE4MA has been deeply involved with moonbounce for many years, and his experience showed. I know that everyone learned a lot about one of the more esoteric areas of amateur radio.

On behalf of the entire executive of the Manitoba Repeater Society, I would like to wish everyone **"A JOYOUS CHRISTMAS, AND AN ENRICHING NEW YEAR"**

### **Reminder**

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Don't forget to bring your best Christmas coffee mug to the annual WARC Christmas meeting. There will be a prize for the number one mug.

### **Ralph's Reg's by Ralph, VE4RY**

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Q. Which of the following is illegal?  
a) Handling third party message traffic for free

- b) Transmitting an AM (amplitude modulated) signal at less than 100% modulation
- c) Identifying your station every 15 minutes
- d) Using your HT to transmit on a commercial frequency, if approved by your boss .

Answers elsewhere in this newsletter  
MINUTES FOR W.A.R.C.

NOVEMBER 8 1993

Meeting began 7:32 VE4EF presiding

The site of the meeting was the Manitoba Museum of Man and Nature,

Approximately 60 members in attendance

VE4EF welcomed everyone

Everyone introduced him or herself

Minutes of October meeting accepted as published in Newscaster

moved VE4SYG; seconded VE4GV

CARRIED

Business Arising

a discussion re the Newscaster took place. VE4HAY advised that there were 430 copies printed for November. He also solicited contributions for the Newscaster.

Correspondence

WARC received several memberships, along with a letter requesting information on how to become a ham radio operator. This letter was turned over to VE4OV, our instructor for further action.

Treasurers Report

Accepted as presented

moved VE4YH ;

seconded VE4HK

carried

WARC had \$2412.05 in the bank. The Flea Market made a profit of \$664.00, along with \$255.00 from memberships. We have \$3239.05

as of today. VE4YH has cheques and cash for several more memberships tonight.

Flea Market Report

VE4PLG advised that the actual profit was \$543.35 for the Flea Market. The difference between that and the figure in the Treasurer's Report was due to a float provided beforehand.

VE4PLG suggested that WARC donate part or all of the profits to the Manitoba Repeater Society for their repeater linking project.

VE4PLG made an alternate suggestion that some or all of the profits be used to finance a mall display

Newsletter Report

VE4HAY advised that he had only two articles for the December Newscaster. He requested that people write more articles for our newsletter, especially with a local angle. He will be including the latest bandplan in a future edition.

New Business

VE4YU noted that the RAC membership would be \$36.00 after the first of January 1994. The dues will remain at \$28.00

until then. VE4YU will accept memberships in RAC and forward them to headquarters.

Question from VE4JS: can amateurs in Manitoba use call sign prefix CH4?

Answer from VE4GV: no, but depending on specific circumstances

VE4SN added that, as QSL Manager, he did not want special prefixes, due to the confusion that they cause. He noted that he has received cards misdirected to VE4, that should have gone to every other country in the world with a "4" in the call sign.

Question from VE4JS: does the "Maple Leaf" award still exist?

Answer from VE4GV: not sure, suggest you check out Melinoski's guide, or ARRL Operating Manual.

VE4EF said he would check and put info in a future Newscaster

VE4YU is checking the ARRL Operating Manual

VE4QA announced that "Seniors Today" newsletter had an excellent article about ham radio

VE4AJR noted that VE4BC wrote the article

VE4SYG stated that he has all the necessary information on building Baycom packet TNC

VE4MJM claimed that he is willing to make a bulk purchase and distribute to WARC members

VE4GHR has the "Poor Man's Packet" source code at home "somewhere"

\*\*\*\*PRESENTATION\*\*\*\*

Business meeting adjourned 0801

Several small groups visited VE4TTU

After everyone saw the station, VE4YU spoke about volunteering at VE4TTU.

A discussion followed, involving parking at the Museum, amongst other issues.

VE4APN won the door prize, a flashlight purchased from WES Electronics.

VE4HK presented the Worked All Winnipeg Award to Alexander VE4APN

VE4EF asked for a general discussion (free for all)

VE4SYG spoke about Baycom packet TNC's. He also asked whether WARC should be running code classes.

A long, involved discussion followed, Some highlights

-run CW practice on HF

-run CW practice on an MRS repeater

-use "Supermorse" shareware program

-VE4EF and VE4SN each have copies that they are willing to distribute to members

-monitor WIAW

-Radio Shack code tapes

-VE4YU has a copy

-come to meetings a half hour early to practice

-not practical, since one must practice daily to become proficient at CW

VE4EF announced that the January meeting will be all about upgrading

Question from VE4JS: are we in danger of losing 220 MHz?

Answer from VE4EF: probably yes, since DISC will likely harmonize with the USA

A discussion ensued

VE4HAY touched on the latest application from St. James Assiniboia School Division for an experimental ATV licence for teaching students. He also stated that the executives of Manitoba Repeater Society and Winnipeg Amateur Radio Club were both adamantly opposed to this application. (VE4EF was to make our feelings very clear to Mr. Dan Kerr, of DISC)

VE4GV spoke about upcoming contest, and strongly urged everyone to get on the air, at least for a little while. He stated that there are very few VE4's on the air during contests.

Question from VE4JS: Is there a band plan on phone?

Answer from VE4EF: it is deregulated, but enforced by gentleman's agreement. See the November Newscaster.

Meeting ended 0930

**Would be HAM needs help?**  
**by Dick, VE4HK**

There is an elderly gentleman in Deer Lodge Hospital, who is interested in short wave listening and Amateur Radio. His name is Harry Sleigh, and he can be found in T6 at Deer Lodge.

He would love to have some visitors to chat about radio and "the good old days". If you can spare a few minutes today or any other day, please go to Deer Lodge Hospital and brighten up his day.

**'Hints and Kinks':**  
**By Ralph, VE4RY**

Nylon Ty-raps make excellent insulators for HF wire antennas. The white ones are practically invisible and seem to last several years, at least.

(ed. The black ones last longer when exposed to the UV rays of the sun)

**Brain Teaser**  
**by ALLAN VE4QEW.**

I S N W K T P H P Y O S I M A R  
U T S T A N D A R D F A D G E X  
P N Q E C V D U X O C N I L A H  
T E T X T O E E J W V K C J N Y  
T M C C O Y A G B B M C O V N L  
D E P W C Z J X U O M U M A E B  
F L N O L O O P B I E D T B T W  
A E E O W H L I O N D R E B N M  
K M Z H M E L L I L A E K M A U  
W L A D D E R L I N E B C T C S  
Q Y I T Z N D S S N P B A L U N  
E O U P E R A M U V S U P D O A

M T N S A U A H F P X R U Q D L  
H W R H E T R A P S P N K P Y R  
Y A A R C A W D I P O L E T T I  
L Q M H V Q Y N T M N C Y E W S

**WORD LIST**

ALINCO COAX HARDLINE  
LARSEN STANDARD AMATEUR  
COLLINS ICOM MOBILE  
ANTENNA JPOLE DIPOLE  
PACKET TRAPS KENWOOD  
ELEMENTS BALUN POWER SUPPLY  
WAVE GUIDE BEAM HANDHELD  
LADDER LINE YAESU YAGI  
TRANSMATCH RUBBER DUCK

**NOTICE**  
**by Dick, VE4HK**

If YOU know of any hams who are in the hospital, became silent keys, or had a new addition to the family (a child, not a TS980), please phone Dick VE4HK at 256-3143, or call on 146.76, to pass on all the details. I will then sent an appropriate card on behalf of WARC and MRS. (The best time to find me on 2 meters is on 146.76, during the FGMRADSN, from 7:40 to 8:00 am, weekday mornings, or during the MRS 2 meter nets)

**HF BAND PLAN (VE Style)**  
**Submitted by Dave, VE4EF**

Approximately two years ago, the Department of Communications announced that the Canadian amateur bands would be deregulated in terms of what types of emissions would be allowed at any particular frequency. This effectively means that Canadian amateurs can broadcast in whatever mode they choose anywhere within the amateur band allocations. However, band subdivisions are still mandated throughout much of the amateur world and even in those countries (like Canada) where deregulation has occurred, these rules are observed by common agreement. What follows is the suggested Canadian HF band plan.

BAND	FREQUENCY	CW	SSB
160M	1.800-2.000	1.800-2.000	1.800-2.000
80M	3.500-4.000	3.500-3.725	3.725-4.000
40M	7.000-7.300	7.000-7.050	7.050-7.100
		7.100-7.150	7.150-7.300
30M	10.100-10.150	10.100-10.150	10.100-10.150
20M	14.000-14.350	14.000-14.100	14.100-14.350
	18.068-18.168	18.068-18.168	18.068-18.168
	21.000-21.450	21.000-21.100	21.100-21.450
	24.890-24.990	24.890-24.990	24.890-24.990
	28.000-29.700	28.000-28.100	28.100-29.700

**Other Repeaters in VE4 land**  
**VE4UHF**  
**by Kirby, VE4NU**

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New Dual-bander? Wondering if it was all worth it? FEAR no-more... "Yes Margret, there is life on the UHF band!" VE4UHF is located in central Winnipeg, (Osborne and River), and is open for all licensed amateurs to enjoy. The repeater is privately owned and operated with no membership fees required at this time. The repeater operates on an output of 443.000 Mhz with a Positive 5 Mhz split. The repeater does not respond to carrier rather it MUST see a 127.3 hz PL (ctcss) tone modulating your carrier. Most newer radios simply require you to set the "pl" encode ON with the correct tone frequency enabled. As well, the repeater is continually transmitting the 127.3 hz sub-audible tone on its output carrier, allowing radios with PL decoders to detect and unsquelch when this tone is present. When PL-squelch is enabled, your radio will become impervious to intermod and mixing interference so common in downtown Winnipeg. A recent addition at the request of the users is the implementation of DTCS (dual tone coded squelch) paging. This feature allows users with pre-assigned personal codes to selectively page other individuals or a entire group of users through the entry of a pre-defined dtmf code to the repeater controller. The controller will match the user or users to the code received and page out the assigned users with High speed tone groups. The repeater also possesses a cloaked auto-patch facility which is open to all users. Users are asked to restrain themselves during business hours as we are "piggy-backing" another commercial user at the site. Access codes for the patch are as follows; Patch access: 10xxx-xxxx\* (sent without breaks) Terminate Call: 44\* Auto-dialer assignments are also available upon request. Contact VE4NU In addition, a list of common access auto-dial codes are available upon request. Briefly, here are the tech spec's on the machine. Repeater: Motorola MSY -15 Watts Filters: - 4cavity duplexer with GLB ent. 6-pole helical filter pre-selector Antenna: Diamond X-500 HNA hvy-duty. 11.7 Db colinear. Controller: S-Comm 7K system.

Recently, antenna and feedline improvements were made, with the antenna being re-situated to a higher mount free and clear of obstructions. Also, feedline was upgraded to 1/2" heliax on the entire run (Tnx to: Murray and Tom) This machine is workable on a consistent basis with a hand-held (medium low power), 30 miles north of Winnipeg on Hwy #7 (Teulon), after these changes. Signal reports are always welcome, as UHF propagation can be very surprising and unique at times. For further information please contact myself VE4NU on packet 145.090 VE4NU-1 (Pbbs), I'll be glad to respond to your requests.

**VE4CNR**  
**by Ralph, VE4RY**

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The transmitter, a Bendix hybrid with tube final and driver is located at Symington Yard. In the basement of the Yard Office it sits in a rack, along with the ID-er and relay control. The receiver is in the elevator room atop the CPR building on Henry Avenue. The receiver and transmitter are linked together via landline. The receiver is a Syscom, all solid state, with a Motorola cavity and pre-amplifier and the audio is tailored for maximum readability on weak signals. Since the receiver and transmitter are separated by several miles, no duplexer is required; however this is one of the few repeaters where maximum input signal does not necessarily coincide with maximum output into your radio. But, because of its 'bare-bones', no-frills concept it remains one of the most active and friendliest machines in the Winnipeg area. Its range to mobiles is about 25 miles. Custodian of the license is Walter, VE4VB and it is co-maintained by Kirby, VE 4NU and yours truly VE4RY. And as they say so often, 'see you on 'CNR'.

**Ralph's Answer**

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A. d) On commercial (and CB) frequencies the radios themselves, not the operator are licensed, and the radios must be 'type approved' to be used on those bands.

73...Ralph

**Baycom Kit, a cheap packet TNC**  
**by Dan VE4SYG**

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Hello there. If you don't already know I have embarked on a project to build about fifty Baycom tnc's. For those of you who don't know what I am talking about, first a tnc is a terminal node controller, and second a Baycom is a specific controller that will work with an IBM or compatible computer through a standard serial port. Now having clarified that let's go on.

This kit is built up on a prefabricated board obtained locally, all parts and cables have to be soldered to the circuit board and then mounted into a small project box. This looks to be a very easy kit to build and I hope it will go well. The kit will contain instructions and the appropriate software to run the hardware. Just a note here for users this tnc has no internal software, but is entirely run from your computer, it does all the decoding and encoding etc., the hardware just hooks up between your radio and computer. Also for those people who want to use H.F. packet it is available through the software via a small change in configuration. Coming soon is the NOS version software and also Macintosh hardware and software. I hope that the interest in packet and kits continue as this is a fun way to do both.

If people out there have helpful hints or would like to get in on a build I am good in the 1993 Manitoba Bluebook Fall Edition. I can be contacted via phone or letter or two meters via the linked repeaters as I monitor VE4WPG on 147.390 most of the time.

Thanks to VE4's NS, GV, EF, GHR, and RBL for your help and support so far with source, parts lists, software, and advice; it is a big help for me. Please watch for further articles in this publication and bulletins on two meters swap and shop and the WARP net.

### **R.A.C Report** **by Bill VE4JR**

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The following is a copy of a letter received by Bill VE4JR section manager for Radio Amateurs of Canada inc. from Bob Shehyn, VE5FY, RAC midwest director 1511 Spadina Street, SW, Regina, SK S6H-7E1

I thought it best to convey to you and those Amateurs in your area by this means of communication, a synopsis of the most recent RAC board of Directors meeting held in Toronto, ON during the weekend of the 24 - 28th September 1993.

There were six of the seven Directors present along with the four Vice Presidents, the General Manager, the Treasurer, The Secretary, the two Legal Counsels, and of course our President. Also included at this meeting was the Board of Directors for the Canadian Amateur magazine, including the new editor.

The agenda was HEAVY. As this was RAC's first working meeting in its history, we had a tremendous amount of items to be covered and ratified. There were no stones left unturned, and because of the lengthy discourses, our days were seventeen hours long. We had the interest of the Canadian Amateurs in our uppermost thoughts throughout the entire weekend. Subjects such as:

- Legal management matters
- Financial management matters
- Membership Services Management matters
- Review member transaction & records work
- QSL Bureau management - incoming/outgoing
- Publications management and marketing
- Magazine management reports
- Special event issues ('94 Convention)
- Affiliate Club programs management review
- Contests program review (RAC & supported)
- RAC Awards program review
- Sale of RAC Memberships by ARRL

As you can see by the above partial list of the agenda items, there was a lot of ground to be covered. The above list was by no means the only items discussed as there was an equally as long list for the remainder of the weekend to cover and would be too

lengthy for me to list here. Suffice it to say, that we did meet our objective in a positive and meaningful manner. It is hoped that the November issue of the TCA will give more ample details of the meeting.

In one of the key sessions, it was stressed upon us as we must stress upon you, the Assistant Directors, (& Section Managers), that the only way RAC will be able to survive/function is a manner that the Canadian Ham is accustomed to, is to recruit as many Hams as possible into the Radio Amateurs of Canada. The very existence of RAC depends upon the support by the membership. Right now, there are over 36,000 hams of which only 8,000 hams have indicated their support to RAC. We need more participation, and the only way we can do it is by a vigorous membership campaign in your (our) areas. One big question that we (directors) had to wrestle with was the membership dues. It is a fact that the dues have not increased for the past five (5) years, and we all know just how the economy has risen drastically during that time. So has RAC's cost of management services, publications, the QSL Bureau, and the cost of producing the TCA magazine. You might as well bite the bullet since this is a NOT FOR PROFIT organization, which must give its members the best deal possible for its dollar. So you can tell Hams that the price is going up soon so it rests upon the individual ham to join RAC which shall continue to provide the same services as before, and more if memberships numbers increase.

It can be stated that the FIELD SERVICES ORGANIZATION issues have been reviewed in principle, and adopted by the RAC board, and shall continue to provide those services now enjoyed by all hams. There was an extensive review of its goals and principles and it was unanimously accepted by all that it continue to function in its present form. It goes without saying that there will be a complete review of its structure, and rules to be brought forth to the next Board Meeting in one year's time. The Field Organization and the News Bulletin Service was also looked at and adopted with some minor revisions.

The subject of Committees and Volunteers, (mandates, structures, and appointments), Advisory Committees, (RAC & ARRL), Standing Committees (managing RAC), Government Committees (interfacing issues), and Volunteer Co-ordinators & Managers. All of the foregoing was reviewed for updating those persons sitting those positions as well as new persons appointed into them was a meaningful process, which the right person was placed in the appropriate vacant slot.

As you can appreciate there was no time to 'DOODLE', on the provided pads, and that I felt I had accomplished the mission reasonably well for my talents are somewhat limited but since I had been elected represent Manitoba and Saskatchewan, I knew that all of

our best efforts had to grow in a positive manner. Let me forewarn you now, that my position of Midwest Director is up for election this coming spring, and that it will present an opportunity for someone else to run for it, as well as myself. Should you decide to allow me to run again, then contact me via HF on one of the nets and we can briefly discuss this matter. It will be advertised in the TCA well in advance, and I shall convey to you a form which must be filled out by yourself, and four (4) other RAC members.

I want you to know that I have in my possession an RAC BANNER which is available for you to use at your local level of Amateur Radio events. For those of you in Manitoba, I shall try to get one for each of you (directors) to use while so employed with RAC. HI!  
NOTE - I have deleted some of this report as it deals with matters that pertain to assistant directors, and myself as SM.

**NTS-PROCEDURES**  
**From: info-serv@arrl.org (ARRL HQ AUTOMATED ELECTRONIC MAIL SERVER)**

#### TRANSMITTING A RADIOGRAM

Transmitting the radiogram for the first time applies both to originated radiograms and radiograms that have been received for relay. Let's assume you have found a station to receive your radiogram, either by your own efforts to find one or as a result of having been told by a net control station to transmit it to so-and-so. You call him, he says he is ready to receive (QRV). A voice example would go something like this: "Copy message number fifteen, routine, KYIT ten, Newington, Connecticut, two one five one zulu, April twelve. Mrs. Judy Smith, one nine zero eight Moon Street Northeast, Albuquerque, New Mexico, eight seven one one two, telephone two nine eight six four zero eight. Break. Mother and Dad arrived home safely Sunday afternoon X-ray love. Break. Uncle George. End of message, no more". On CW, it would go like this: NR 15 R KXIB 10 NEWINGTON CONN 2151Z APR 12 MRS JUDY SMITH AA 1908 MOON ST NORTHEAST AA ALBUQUERQUE NM 87112 AA 298 6408 BT MOTHER AND DAD ARRIVED HOME SAFELY SUNDAY AFTERNOON X LOVE BT UNCLE GEORGE AR N. Phone operators use the proword "break" for separation of the address and signature from the text. It is incorrect procedure to use the words "going to" preceding the address and "break and the text" preceding the text. Radiograms should be sent by voice, not read. That is, reading puts emphasis on certain syllables and words, and this means de-emphasis of others. In transmitting a radiogram by voice, no word or syllable should be

de-emphasized. Letting your voice fall at the end of a sentence as would be done in reading is poor practice in voice traffic work, as is letting your voice fall for unaccented syllables. You are not a broadcast announcer. Keep in mind that the receiving operator must put down what you transmit, completely and accurately. Avoid such inanities during transmission as "Mrs., a married lady" or "Moon, opposite from Sun." They only confuse things and give a bad impression of our service. Avoid giving dates as "four, twelve, eighty-eight." Just say "April twelve" and forget the year. (We hope no message will be over a year old! Also, don't say "today's date." Spell all difficult or unusual words (e.g., "Ferrier, I spell F-E-R-R-I-E-R"). If the word is very difficult, unusual, or a group of letters not forming a word, spell it out using ITU phonetics (e.g. "NCOIC, I spell: November, Charlie, Oscar, India, Charlie.") Using phonetics excessively is poor procedure. Usually simply spelling the word is sufficient.

#### RECEIVING A RADIOGRAM

Some of the problems of receiving have already been touched on above. The principal rule to follow is do not, repeat do not assume you have received a part of a radiogram correctly if you are not absolutely certain. This is what causes most of the "garbles" in our amateur message handling. A single letter lost in a crash of static can completely change the meaning of an entire CW message, as can loss of an entire word by voice. Most operators are prone to "guess" and usually they guess right. But if you did not actually "copy" the missing part, it is taking a chance. It's best to make sure. Modern procedure, both on voice and CW, uses "break in." On voice, this usually refers to "VOX" procedure, in which the transmitting operator can pause long enough between words or phrases to let his VOX relay open, enabling the receiving operator to "break" if he misses something. On CW, the meaning of "break-in" is that the receiving operator may miss the last word of this phrase: "... arrive on Sunday." He would simply say "on" and the transmitting operator would repeat "Sunday" and go on with the message. On CW, the receiving operator, after missing "Sunday," presses his key to interrupt the transmission, sends ON and the transmitting operator repeats SUNDAY and goes on with the message. "Break-in" procedure is strongly recommended for all radiogram traffic. If break-in is not used, it is necessary to get "fills." This makes it necessary for the receiving operator to note the parts missed and get the missing parts filled after the radiogram has been completed. On voice, simply ask for "word after..." or "word before..." or if more than one word might have been missed, "between... and." On CW, the abbreviations WA, WB, or BN are commonly used. When break-in is not used, it is common practice

for transmitting stations to repeat (on voice "I repeat," on CW a question mark) difficult words, letters or groups. Perhaps the second most prevalent cause of "garbling" of messages is poor handwriting. Many people cannot make out their own handwriting a day or more after it is written, and in some cases only an hour or so delay can erase the memory of what a scrawl is supposed to mean. The answer is to copy by typewriter or a personal computer. A little practice is all that is needed to be able to do this as easily as copying by pencil; usually it is faster, and always is more legible. If you must copy by hand, require the transmitting operator to send at a speed at which you can write legibly; don't scrawl illegibly because you don't want to admit you can't copy that fast. Copy five words or groups to a line by hand, ten (5+5) by typewriter, to enable an instant "check of the check." In fact, this is the origin of the word "check" for word count.

### **RELAYING THE RADIOGRAM**

The rule is that received radiograms must be relayed or delivered within 48 hours after receipt. However, this is only a "counting" rule; for practical purposes, the rule is to relay or deliver the message as soon as possible after receipt. This means immediately if you have an outlet; otherwise, as soon as an outlet is available. The public is conditioned to "instant communication" and will be unimpressed with messages, even free ones, which are slower than the mail, and in some cases "slower than walking." Relaying the message uses the same procedure as transmitting, but here are some principles that are applicable especially to relaying. For one thing, when you are relaying a message, its contents are none of your concern. You take no action and make no changes, nor any comments on its contents, except in making sure you receive it correctly and relay it in the same condition. Neither do you judge its importance, except on the basis of the precedence assigned to it by the originating station. If you disagree with the precedence assigned, your argument is with the originating station, not necessarily the one sending the message to you. Relaying stations are authorized to change the form of radiograms they handle, if incorrect when received, but not the content. Even spellings that appear to be obviously incorrect are best relayed exactly as sent; for all you know, the writer may have a purpose in spelling incorrectly. The best rule to follow in relaying is to relay the radiogram exactly as you received it, after making certain that you received it correctly. If the station sending it to you is the originating station, he may change it if desired; otherwise, no changes (except in form) should be made.

### **COUNTING RADIOGRAMS**

All amateurs who handle traffic are invited to report their total message count monthly to their Section

Manager. For counting purposes, traffic is divided into a few categories, as follows: Originated: Any radiogram originated by someone other than yourself, filed with your station for initial transmission on the air. Received: Every radiogram received by Amateur Radio at your station. This includes all messages received, whether received for relay or received for delivery. Sent: Any message transmitted from your station by radio to another station, whether such a message was initially transmitted from your station or was received from another station. Delivered: Any message delivered by you to the addressee, provided that the message was received at your station by radio and that the addressee is someone other than yourself. This delivery must be an off-the-air function (by telephone, mail in person, etc.)

The traffic total is the sum of originated received, sent and delivered points. Note that in some cases the same message can be counted twice; for example, the same message received by radio and then relayed to another station by radio is counted both in the "received" and "sent" categories, while a message received by radio and then delivered is counted both in "received" and "delivered" categories. When transmitting or receiving messages in book form, count one point for every three messages in the book, plus another point for any over a multiple of three. That is, a book of three messages would count as a single message, but a book of four, five or six would count as two, and a book of seven would count as three, etc. "Booking" of messages is a time-saving device for those who want to use it in the interest of efficiency. It is similarly perfectly proper procedure to separate booked messages into single messages if desired; that is, the transmitting station decides in what form they shall be sent, as long as it is proper. Each message, regardless of its content, deserves to receive separate treatment. Messages handled using unauthorized "short cuts" cannot properly be included in your traffic count.