

The RARA RAG

Published by

The Rochester Amateur Radio Association

INCORPORATED

VOL. 28

JANUARY 1976

NO. 5

VALENTINE DINNER-DANCE ON VALENTINE'S DAY

The fifteenth annual Valentine Dinner-Dance of the Rochester Amateur Radio Association, will be held on a red letter day, Valentine's Day, Saturday, February 14. The location is the new Airport Holiday Inn, 911 Brooks Avenue, just east of the airport and at the Brooks Avenue (east) exit of Route 47 West.

The first of the series of dinner-dances was an outgrowth of the club's annual ladies night at the club meeting. It was inspired by Cappy Capauldy, K2UXF, and was held on a very cold blustery Saturday night (February 10, 1962) at the Manger Hotel in downtown Rochester. The Manger has since disappeared from Rochester. It was replaced by the Seneca Office Building, a part of the Midtown Plaza complex.

The dinner-dance is the one night each year at local amateurs can take their spouses out for a night on the town, and still be with their amateur friends. However, radio talk is forbidden at the dinner.

Gene Molter, WB2BAM, will be Master of Ceremonies. There will be entertainment and an orchestra for dancing.

Tickets for the evening cost \$10 each (or \$20 per couple). Pick them up at the club meeting. If you are unable to attend, they may be ordered by mail.

LAST CHANCE

Club records indicate a few people have failed to renew their memberships. Some of the names are long time members. Others are recent members. No matter which category these people fit, we want them to continue in our organization.

The club By-Laws state that a member is no longer in good standing when his membership has lapsed past the 60 day point. All memberships expired on October 31. The magic hour then becomes midnight on New Years Eve.

Dues are \$5 for regular memberships, \$6 for family memberships and \$2 for associate (licensed) memberships. For regular members, that cost is .0136986 cents per day. Since 1976 is a leap year, membership becomes a real bargain...only .0136612 cents per day.

You can stay on the member list by renewing at the January club meeting or by sending your check to Rochester Amateur Radio Association,

Mobile Coronary Care Unit Is Subject of January 2 Meeting

by Jim Collinsworth, WB2EDT

Mr. Richard L. Schoenberger, Superintendent of Public Safety Communications for Monroe County will present an overview and explanation of our community's life saving Mobile Coronary Care Unit.

The RaRa Meeting is at 8:00 p.m. Friday, January 2, at the Farm and Home Center, 249 Highland Avenue.

Anyone who has watched the popular television series "Emergency" must be impressed with the hardware and techniques employed to communicate the telemetry of a patient's condition and to render subsequent on-the-spot treatment under the guidance of a doctor many miles away.

Our local facilities, in conjunction with STEP (Society for Total Emergency Programs) now provide similar care. Many of you will recall our communications support for the "Cycle for STEP" campaign a couple of summers ago. The request for our assistance came through our speaker, Dick Schoenberger. This project was aimed at raising funds to provide the high level of training required and to draw public attention to the new program. Two local ambulances (Perinton Volunteer and National) are now operating Mobile Coronary Care Units with trained paraprofessional medic crews. Other equipped ambulances will be added as crews can be trained.

Basically, the responding crew attaches sensors to a suspected heart patient. Then, using a 15-watt portable/mobile UHF, FM transceiver, through a repeater at Cobbs Hill, connected to the hospital, they transmit an electrocardiogram (EKG). The same circuit is used simultaneously for voice communications.

With the data provided, the physician at the hospital can direct advanced life support treatment administered by the trained emergency medical technicians.

Come to the meeting to get a good view of both this new valuable service, and the communication technology and equipment employed.

P. O. Box 1388, Rochester, New York 14603.

This is the last copy of the Rag you will receive if dues have not been paid. IMPORTANT - if you fail to receive a copy in February but have paid your dues, be sure to check with Bud Young, WA2UGE, membership chairman.

The RaRa Rag

Published by

The Rochester Amateur Radio Association
INCORPORATED

Managing Editor . . . Harold Smith, WA2KND
Art Director Russ Heuer, K2PLO
Photographers Al Crum, W2BWK
 Harvey Samuels, WA2LUE
Staff Helen Smith, WA2YRH
 IBM Computer, 360
Editorial office, 153 Mason Avenue, Rochester,
N. Y. 14626. Telephone; 716-225-5260.

VOL. 28 JANUARY 1976 NO. 5

OFFICERS:

President: William C. March, WA2CER

Vice-President: James P. Collinworth,
WB2EDT

Secretary: Robert E. Phelps, WB2DPT

Treasurer: Leonard M. Gessin, WA2ZNC

BOARD OF DIRECTORS

Frederick H. Becker, W2GV

Edwin J. Holdsworth, WA2EKR

David D. Holtz, WB2HTH

Alan H. Komenski, WB2ZFM

John L. Schooley, W2BLU

Harold C. Smith, WA2KND

Ralph P. Young, WA2UGE

Club Historian: Bruce Kelley, W2ICE

Licensing Course Director:

Robert Lauzon, WB2NSD

Membership Chairman: Ralph Young, WA2UGE

The RaRa Rag is published monthly except July and August by the Rochester Amateur Radio Association, P. O. Box 1388, Rochester, N. Y. 14603. Subscription price \$1.00 per year (included in \$5.00 annual membership dues). Second class postage paid at Rochester, N. Y.

..... From the President

by Bill March, WA2CER

The December meeting program was a real hit, thanks to Program Chairman, Jim Collinworth, WB2EDT. Those who frequent the local 2 meter FM channels had a preview of what was coming. Terry Rogers, WA2BFP, described the history of cathode ray tubes and the capabilities of CRT devices in the ham shack. However, the presentation was uniquely delivered in a comical style similar to a combination of Paul Lynde and Jonathan Winters. Terry was ably assisted by Harry Woodworth, WB2CED.

Bob Lauzon, WB2NSD, and Dave Hassett, K2SQI, gave this year's Novice Class their first code exam. Twenty-eight out of 29 passed the test and are waiting for the written part. More code exams will be given shortly.

The special fund drive for the Heath SB-104 club station is progressing slowly. As of Wednesday, December 10th, the fund stood at \$159.

Board meetings have been lasting past 11:00 p. m. each month because of the large amount of business being discussed. Some of the items discussed at the last meeting were club membership, the area ARRL Public Relations Assistant, the Valentine's Day Dinner-Dance, and a proposal to sponsor an Explorer Post.

Effective January 1, 1976, Dave Holtz, WB2HTH, will resign as ARRL Public Relations Assistant for the area. Dave's commitments at home and his job have kept him from doing what he considers is needed from a PR assistant. With Gene's consent, the Board has nominated Gene Molter, WB2BAM, to fill the post vacated by Dave. Dave will continue as Public Relations Chairman for RaRa.

Present club membership is over 400. At last count, about 70 of last year's members have not renewed their membership. If these members intend to renew, dues must be received by December 31st to avoid removal from the membership list. If there is some reason why these members do not want to renew, the Board would appreciate hearing about it.

The Valentine's Day Dinner-Dance will be held, most appropriately, on Saturday, February 14, 1976 (Valentine's Day), thanks to Chairman Bud Young, WA2UGE, and John Schooley, W2BLU. Other details should be found in this issue. I hope many club members will be able to attend.

RaRa was contacted by the Boy Scouts of America about sponsoring an Explorer Post for 16 to 21 year-old youths interested in amateur radio. Ms. Murphy of the Boy Scouts, who attended the last board meeting, showed where over 200 county youths expressed this interest in a recent survey. As a result of the meeting, the proposal will be put before the membership at the January meeting. Ms. Murphy has been invited to show a 5 minute slide-tape show about Explorers. Those members with interest in this proposal are urged to attend January meeting.

In closing, I hope the Holidays are joyous for everyone.

TIRE WORLD OF GREECE

2318 West Ridge
225-2220

- Dayton Tires
Div. of Firestone Tire and Rubber Co.
- All Mobil Needs
- Please call for appt. (repairs)
- Special price to RaRa members
- Compare our prices

RAY ROBERTS BOB
(Mgr.) WA2QUA
WA2SSU



VHF CONTEST

The RaRa affiliate, the Rochester VHF Group, is making an all out effort this year to become the highest scoring club in the nation. Our best effort in previous years got us as high as second place.

The contest, the annual ARRL VHF Sweepstakes, will be from 2 p. m. local time Saturday, January 3 until midnight local time Sunday, January 4. Logs and information have been mailed directly to almost 400 potential operators.

For anyone with VHF equipment, the contest is a simple matter. Just get on the air and make as many contacts as possible during that time period on any or all VHF bands.

A sample contest exchange is as follows: "W2XYZ this is W2ZAS. Copy number 1, precedent A, from W2XAS, check 68, section Western New York. Go ahead." The reply is: "QSL number 1, copy my number 14, precedent B, from W2XYZ, check 67, section Western New York." The calls and numbers should be yours and the other stations. This is only an illustration. The precedent is A if your station is running 50 watts or less and B if over 50 watts. The check is the last two digits of the year you were first licensed as an amateur radio operator.

Log forms are available at local radio stores and at the club meetings. Get on the air! Lets make Rochester the national winner. If you are only on to give out some points, keep a log and give the VHF Group the points. Completed logs forms should be mailed promptly to Eddie Dunn, W2ECH, 25 Bittersweet Drive, Fairport, New York 14450.

BADGES

YOUR NAME AND CALL

ONLY \$1.25

K2JD ENGRAVING

P. O. DRAWER G

PITTSFORD, N.Y. 14534

WANT TO WORK THOSE SPLIT CHANNELS WITH YOUR ICOM IC-230?

Contact us NOW for a set of three crystals that will let your IC-230 do the job on the standard 15 kHz split channels. Guaranteed crystals by Sentry. Set of 3 regularly \$17.85. NOW only \$14.50 per set if you mention where you saw this ad.

CFP Communications

Division of CFP Enterprises
211 NORTH MAIN STREET
HORSEHEADS, NEW YORK 14845

Phone: 607-739-0187

Local CD Changes Name

by Jim Collinsworth, WB2EDT

Effective the first of January, the local Civil Defense office becomes — Office of Emergency Preparedness to reflect the change in its role over the years to a much broader support service.

Brig. General Edward Smith has been appointed director, Marv McIntyre, K2ZAA continues as Communications and Warning Officer. Several staff members are new, and we will try to introduce them in a subsequent RaRa Rag issue.

RaRa and local AREC (Amateur Radio Emergency Corps) continue our support of the Office of Emergency Preparedness RACES (Radio Amateur Emergency Service). This combined Ham volunteer organization continues under the guidance of the RaRa Emergency Preparedness Liason Committee chaired by Jim Collinsworth, WB2EDT Emergency Coordinator/Radio Officer, assistant EC/RO's Ed Holdsworth, WA2EKR, and Ed Gable, W2MPM; Recording Secretary, Bill March, WA2CER; Assistant EC for Medical/Hospital Liason George Negus, K2OIU; Assistant EC's John Schooley, W2BLU, and Joe Hood, K2YAH. Several other RaRa members serve on this valuable committee.

They have planned a February meeting to brief the new director and other county officials on ham radio in general and on the service local hams provide through AREC/RACES, local organizations like RaRa, and local repeater groups.

K2KWK Appointed ARRL Official Bulletin Station

Dwight Hill, K2KWK, has received American Radio Relay League appointment as Official Bulletin Station. ARRL Official Bulletins and other items of interest are presently sent each Sunday night at 8:45 p. m. on area 2 meter FM repeaters to obtain a wide coverage area. Exact frequencies are 146.28/88 and 146.19/79 WR2ABF, alternating each week the same as the Monroe County FM Net. An expanded schedule is being reviewed and will be announced as soon as possible.

Bulletins from K2KWK are intended for the new ham or the one who is upgrading; and, those listeners who might be interested in introductory level code practice. In addition to the listening audience already operating on 2 I am hopeful of catching the ear of someone with the popular public service band in expensive tuneable radio. Suggestions of text and schedules to meet these goals are always welcome. That is the reason for many of the bulletins being somewhat repetitive.

If any readers can query a group (or individual) of scouts or citizen band operators or short wave listeners about when they do listen I would appreciate having the information.



1975 Annual RDXA Meet

by Bruce Kelley, W2ICE, Club Historian

Once a year members of the Rochester DX Association and their friends meet, have dinner and enjoy an old time program. The Association was formed in 1947 and for several years was one of the top DX groups in the country. Dwindling interest, silent keys and re-location has lowered their effectiveness in DX competition but interest still remains with Ray Leigh, W2SNI, gathering the group together periodically. RaRa now uses RDXA's P. O. Box 1388 which the DX club acquired 27 years ago.

FOR SALE: RRRR Synthesizer kit w/ ENSIGN crystals, Clegg 66 - 6 M-AM, Gonset IV - 6 M-AM, Midland 13-520 2M-FM Portable w/ AC-PS, Nicads, Mobile Antenna, Flex Antenna, 6 channel 2W., case, Highgain 6 & 2 Combo Beam. "WA2ZNC", Len, 381-7328.



... WISHING YOU A MERRY CHRISTMAS AND A HAPPY NEW YEAR ...

CQ

ONE YEAR

\$ 7.50

The magazine that
does more for you

- Contests
- Propagation
- Antennas
- DXing
- Awards

The Radio Amateur's Journal

14 Vanderventer Ave. Port Washington, N. Y. 11050

Front row 1. to r.: WA2KND, W2ICE, W2CSK, WA2HUV, K2ISP. Center row: W2QY, W2PHT, WB2HYG, W2SNI, W2MG, W2GB, W2SOV, K2WW, W2BWK. Back row: W2TTQ, W2QJM, W2UPH, K2OUS, W2CNT, WA2EOQ, W2SAW, W2TEX, W2AXR. (Photo by W2BWK)

General Licensing Course Starts February 16th

Bob Lauzon, WB2NSD, licensing course director has announced the start of the general course for Monday, February 16.

The group will meet at the Monroe County Office of Emergency Preparedness (formerly called Civil Defense), every Monday at 7:30 p.m. The facility is located at the corner of Westfall and East Henrietta Roads.

There is no charge for the course, but RaRa membership is required. The course is NOT intended to make anyone an Electronic Engineer. It is intended to enable you to take and pass the General Class FCC licensing test.

**ELECTRONIC
SURPLUS COMPONENTS**

GLENWOOD SALES COMPANY

594 HAGUE ST. (off 560 Lyell)

Resistors - Capacitors - Switches

Phone: 328-1600

9-5 Monday thru Friday
9-1 Saturday

Participate in S.E.T.

- - - January 24-25th

by Jim Collinworth, WB2EDT

The SET (Simulated Emergency Test) is the major effort each year aimed at improving our usefulness in handling emergency communications.

In the first section and first paragraph of FCC regulations dealing with amateur radio, the basis and purpose stress emergency communications. In the beginning it was written: 97.1 Basis and purpose. "(a) Recognition and enhancement of the value of the amateur service to the public... particularly with respect to providing emergency communications." And, "(d) Expansion of the existing reservoir within the amateur radio service of trained operators ..."

All hams are interested in providing emergency service and most of us have justified some of our purchases and time expended on the basis of the emergency value it represented.

One exercise per year certainly doesn't make a ham skilled in handling emergency communications and traffic--but if enough of you participate, use some imagination in generating traffic and in providing simulated responses to the problems you hear, you can get a lot of realistic experience in a typical crisis.

We need to adapt to changing technology--particularly to making good use of our VHF repeaters and the volume of mobile and portable FM rigs. With the combination of local and wide-area repeaters available in Western New York, as well as a host of operators, we can respond effectively to many local emergencies or "disasters."

In any emergency, we find needs for radio links to fill in for unavailable or overloaded phone service. It is usually grossly inadequate to just make our services available for two parties to converse. Officials are usually super busy and they actually need written records of requests, reports, and responses. These require names and titles as well as organization names. We need both formal traffic handling and point-to-point radio circuits that can serve for discussions, follow up, clarification, etc.

A need exists for interfacing local emergency nets to NTS (National Traffic System) nets operating on 75/80-meters and above. As many HF operators as possible should also have 2-meter capability since this is where we can be most effective today.

The purpose of the SET are:

1. To drill during heavy communications needs to find our strong points and limitations.
2. To maintain contact and working relationship with organizations we serve--hospitals, Office of Emergency Preparedness, Red Cross, Salvation Army, local officials, etc.
3. To demonstrate to the public the value of a amateur radio--particularly in time of crisis.

MESSAGE HANDLING

Everyone should try to develop a working knowledge of message format and traffic handling procedures. We recommend the standard ARRL form shown in this issue. However, I am convinced that any message--in good form --from any of the several accepted formats such as used by different MARS groups or State C. D. can be understood and used successfully.

In order to aid you in developing comfort with traffic handling, we have arranged to conduct traffic training nets on both the 28/88 and 19/79 repeaters until the SET. The nets will be conducted at 9:00 p.m. local time on Sundays and Wednesdays. As you know, the information net alternates between these two repeaters on Sundays at this time. The training will follow the net--on the same frequency and will be on the same repeater the following Wednesday. The schedule is as follows:

Date	Freq.	Date	Freq.
Dec 28	88	Jan 11	88
31	88	14	88
Jan 4	79	18	79
7	79	21	79

If you are not on 2 meter FM, try to meet as many NTS nets on HF as possible. Even if you are on FM, try to meet some HF nets and provide liason with the local net. Some valuable nets include:

NYSPT&EN, 3925KHz, 6:00 p.m.

NYSCW, 3675KHz, 7:00 p.m. & 10:00 p.m.

NYSPON, 3913KHz, 3:45 p.m.

WNYEN, 3915KHz, 11:30 a.m. (normally Sundays)

These should be operating on an expanded schedule during SET. They provide a good opportunity to learn or brush up on traffic handling before the SET. These HF nets will need extra coverage this year because we expect a heavy influx of oncoming participation reports to the Rochester area.

If you are active, or in a leadership capacity, in one of the MARS groups, you are encouraged to plan drills and liason to interface with this annual exercise.

CALLING FREQUENCY

We plan to use the 28/88 repeater as a calling and coordinating frequency, with 19/79 as a back up. However, traffic and point-to-point discussions will be moved to simplex or other repeaters. The wide area repeaters should serve admirably for community-to-community communication. In this area, these include Ithaca, the new Weathersfield (Warsaw) 04/64, and Bristol 34/94.

The specific times of local SET problems are not usually provided in advance so as much as possible, be sure to keep an ear on the repeaters throughout the January 24-25 weekend.

REPORT PARTICIPATION

As a part of the exercise, originate a message to WB2EDT indicating that you are par-

(Continued on page 6)

FOR SALE: Drake 2-C receiver (mint) with 2-CS matching speaker (new). \$220. Irv, WB2WCE. 671-4430.

Participate in S.E.T.

(Continued from page 5)

Participating. Any of the liason stations or K2JD should accept the following higher priority traffic. After the SET submit your critique also. All Net Control Stations should submit reports indicating:

- Calls of stations in net
- Liason stations to NTS nets
- Traffic totals by message precedence
- Accumulated time in session
- Number of stations in emergency-power only sessions
- Forward copies of all "TEST EMERGENCY" precedence
- Forward copies of all messages originated for agencies served.

Originate Simulated Emergency Traffic

In order to make the exercise as realistic and valuable as possible, generate simulated problems and messages early in the exercise. Construct your messages so that they require a response or an answer. Direct them to various agencies represented or to other local amateurs. Not all traffic should be directed to Headquarters for an answer. Remember we will have hospitals, Red Cross, fire departments, ambulances, Salvation Army, county department including Sheriff etc. all represented.

Message Forms

Standard message forms are available from ARRL (check prices but they used to be 3 pads for \$1) or from Ed Holdsworth on Monday evenings at E. P. Headquarters during licensing

classes. The form is a convenience, but you can make your own using the one shown here as a guide. Remember to include the phrase "TEST MESSAGE" on all simulated traffic -- and be sure to include name and title -- always! Simulate a title for the exercise if necessary.

More Information

More information on the SET is contained in two articles in the December QST. Also, you may wish to request these aids from ARRL (but do it now). Include a large SASE.

- 1976 SET instructions
- Public Service Communications
- Op Aid 9B
- Op Aid 13
- Net Directory (CD50)

Remember the following points and get ready for this important activity.

- Check out generators, batteries and equipment.
- Listen during the SET weekend January 24-25.
- Check into nets, listen, participate, but avoid unnecessary transmissions, comments and too much unsolicited assistance.
- Send message to WB2EDT indicating your participation.
- Prepare several messages -- requiring replies -- related to the simulated emergency.
- Put all messages in good form. (Preferably ARRL format although military forms are acceptable locally.)
- Remember to include name and title of officials (real or simulated).
- Send reports and comments to WB2EDT after this exercise.

THE AMERICAN RADIO RELAY LEAGUE RADIOGRAM

NUMBER 69	PRECEDENCE TEST P	HX B	STATION OF ORIGIN WALFCM	CHECK 16	PLACE OF ORIGIN JAY MAINE	TIME FILED 2213Z	DATE JAN 24
--------------	----------------------	---------	-----------------------------	-------------	------------------------------	---------------------	----------------

To
FRANKLIN WARDLEY
NATIONAL DISASTER COORDINATOR
606 SOUTHERN AVENUE
ARLINGTON VA

THIS RADIO MESSAGE WAS RECEIVED AT	
AMATEUR STATION _____	PHONE _____
OWNER _____	
STREET ADDRESS _____	
CITY AND STATE _____	

TEST MESSAGE X SIMULATED BLIZZARD BEGAN 0400 UTC TODAY X

ADVISE ARRIVAL TIMES OF RELIEF UNITS

STERLING PETERS
CHAIRMAN JAY CHAPTER
AMERICAN RED CROSS

<p>REC'D</p> <p>SENDER'S ADDRESS AND PHONE NUMBER FOR REFERENCE</p> <table style="width: 100%;"> <tr> <td style="width: 30%;">FROM</td> <td style="width: 30%;">DATE</td> <td style="width: 40%;">TIME</td> </tr> </table> <p><small>THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION, DIRECT OR INDIRECT, PAID OR PROMISED, CAN BE ACCEPTED BY A STATION OWNER. FOR THE SAME REASON, NEITHER EVENTUAL DELIVERY NOR ACCURACY OF COPY CAN BE GUARANTEED. ANY REPLY MAY BE FILED WITH THE STATION DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM A.R.R.L. HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CONN. 06111.</small></p>	FROM	DATE	TIME	<p>SENT</p> <p>TO _____</p> <p>DATE _____</p> <p>TIME _____</p> <p><small>THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHER OF QST MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATIONS AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED AN AMATEUR RADIO PUBLIC SERVICE CORPS (ARRPC), CONSISTING OF THE AMATEUR RADIO EMERGENCY CORPS (AREC) FOR WORK DURING EMERGENCIES, AND THE NATIONAL TRAFFIC SYSTEM (NTS) FOR DAILY NATION-WIDE MESSAGE HANDLING. THE TWO DIVISIONS SUPPLEMENT EACH OTHER IN DAILY OPERATION. MORE INFORMATION IS AVAILABLE FROM A.R.R.L. HEADQUARTERS, LITHO "U.S.A."</small></p>
FROM	DATE	TIME		

Obliquities of Judgement Heard on Two Meter FM

by W2DNY in "The Gazorche" via "QST/WR2ABS"

Obliquities of judgement ensue from extrapolation (?). It is infelicitous to proffer as unequivocal a dogmatic judgement. There, now that that's clear, let's go on. I'm talking about stating as fact what is only opinion. Or, worse yet, repeating what someone else erringly said.

How many times have you heard, whenever the repeater squelch is opened and mostly only noise is heard, "Sounds like the Rochester repeater is getting into our machine again." For starters, a repeater on standard channels can not get into any other repeater on standard channels. The Rochester repeater transmits on 146.88 MHz, what you are hearing in all probability, is a weak 146.28 MHz signal that is not quite making the machine. Granted, it might be a Rochester station working through the Rochester repeater. It's still a 146.28 MHz signal that you're hearing and not a repeater signal. It might also even be a 146.31 MHz signal from the Syracuse repeater. This "31" interference does not open our machine's squelch, but is heard as splatter on weak signals.

How about, "You sound like you're off frequency, OM". This invariably is followed by, "Have you any way of checking your frequency? - don't." Or by, "When did you check your frequency last?" How can one tell frequency just by listening? Our machine has a broad band receiver and I can get into it from my base station, approximately 20 air miles away, anywhere from 146.265 to 146.30 MHz. That's -15 KHz to +20 KHz. I've often operated plus or minus 10 KHz for test purposes and no one was wiser. A weak signal could sound off frequency. Let's face it, trying to make the machine with a HT using a "rubber-ducky" from inside a car or from down in your basement is a no-no, especially with the antenna at an angle or even horizontal, and may sound off frequency. Incidentally, I've measured the gain of a "ducky" and got a figure of minus 6 db over a quarter-wave. That's why I call it a "rubber ducky attenuator" instead of a rubber ducky antenna. The same situation applies to a piece of wire "stuck into the back of the set". All you can say is that you sound noisy and/or distorted, but certainly not on or off frequency. Some stations over-deviate and may squelch-clip your receiver and distort. Try asking him to back off from the mike instead of saying he sounds off frequency.

Then there are those who, after being told that they are full quieting, using 1 watt will ask, "let me flip up to 10 watts (or whatever his hi-power is) and tell me how it sounds." If one is full quieting with 1 watt or 1/10 of a watt, 10 watts or 100 watts or 1000 watts can't sound any better. Full quieting is the best there is.

How many times have you heard someone say, "Wait 'til I turn my beam towards you, you're kinda noisy." Remember, you're not listening

to his signal, but to the repeater's signal. Head your beam towards the repeater and "lock on".

I've heard every kind of interference on 2 meters but inter-mod (intermodulation). Inter-mod interference is rare. I haven't heard any in the last 40 years. Most every other type of interference is common, eg., adjacent channel, harmonic, overload, shock excite, metal to metal contact arcing, etc., to mention only a few, and it's called inter-mod by many. Inter-mod may come about as follows: If you have a bad joint (constituting a non-linear conductor) anywhere in your rf system (from antenna to detector) and an interfering signal is also present at this junction (with enough amplitude) to result in a modulation product matching the pass-band, this may be heard as inter-modulation interference. With this many prerequisite variables, little wonder that it is rare.

Another fallacy is accusing the other station of being noisy into the machine when it is you that are receiving the machine noisily. One should be especially careful when a mobile is talking to a base. The base knows if he should be full quieting into the machine, and probably is, but the mobile may not.

Just as bad is accusing one of having low deviation if your receiver is wide-band. A narrow band station (plus or minus 5 KHz) will and should sound low on deviation if you're using a wideband receiver (plus or minus 15 KHz).

Most of these anomalies would not exist if we would not rely on the repeater to do all the heavy work. Most of the time our equipment is not doing it's fair share of the work. Commercial mobile antennas (Larsen, ASP, Hy-Gain, etc.) are intended to be pruned. This can make all the difference in the world. Get your VSWR down, down, down. Is your transmitter putting out at optimum or just putting out? How about receiver sensitivity? Do you need a preamp? Each of us should do more to get the most out of 2 meter FM.

FOR SALE: Heath HM-2103 R.F. Load Wattmeter, mint condition, \$60. Charlie Rosenberg, WB2YXZ, 473-3267 (evenings).

FREE: Multi-voltage low voltage supply module. Selectivity and stability mods for the FTdx560 transceiver. Contact Jim Gordon, W2HLF, 247-7139.

**ham
radio**

**your most interesting
amateur publications**

hr REPORT

Greenville, NH 03048

K2JD ENGRAVING

P.O. Drawer G PITTSFORD, N.Y. 14534


Call Sign Badges

Call Sign Badges - Many Colors

3/4 X 3	One Line	\$1.00
1 1/4 X 3	Two Lines	\$1.50
2 X 3	Two Lines	\$2.00
2 X 4	Two Lines	\$2.50
Pocket	Two Lines	\$2.50
ARRL Diamond	(extra)	\$.50
Additional Lines	(each)	\$.50

RUBBER STAMPS

50¢
Extra



WB2RED
Hank O'Hare
153 45TH STREET
BALDWUN, N.Y. 10097

\$2.50

\$3.00

Mail Orders with check and exact layout for badge or stamp.
Three Day Service

ALLIED TV & RADIO, INC.

142 LYEELL AVE.

454-7116

— Sales & Service —

Television * Bearcats
Stereo * CB Radio
Auto Sound * Marine Radio

Wally Kincaid, WB2HZG, Pres.

NEW 2 METER FM RIGS

Regency HR-2B	reg. \$229	special \$189
Regency HR-212	reg. \$259	special \$209
Regency HRT-2		
handi-talki	reg. \$179	special \$149
Tempo/fmh		
handi-talki	reg. \$199	special \$179
Touch-Tone pads-for autopatch	special \$11.99	

For other gear, call or write for quote

RAMCOMM COMMUNICATIONS
2383 West Side Drive North Chili, N.Y. 14514
Phone: (716) 594-8114



ADIRONDACK RADIO SUPPLY, INC.

ESTABLISHED 1936

INDUSTRIAL ELECTRONIC COMPONENTS · TELEVISION · RADIO · AMATEUR EQUIPMENT

185-191 WEST MAIN STREET · P. O. BOX 88 · AMSTERDAM, N.Y. 12010
TEL. (518) 842-8350

NOW READY WITH THE LATEST EQUIPMENT TO SERVE
THE NORTHEAST AREA

YAESU

FT-101E	\$749.00	FT-101EE	\$649.00	FT-221	\$689.00
FL-2100B	\$359.00	FT-401B	\$599.00	FR-101D	\$659.00
FR-101S	\$499.00	FL-101	\$554.00	YC-355D	\$289.00
200R	\$449.00	FT-620B	\$449.00	FT-224	\$249.00

Atlas 210X \$649.00 Kenwood TS-520 \$629.00 Triton IV \$699.00

ICOM IC-22A \$249.00 ICOM IC-21A \$449.00 ICOM IC-230 \$489.00
ICOM DV-21 \$389.00

Mastercharge

BankAmericard

or in store financing available on purchases over \$50.00