



# the **RARA RAG**

Published by

**ROCHESTER AMATEUR RADIO ASSOCIATION, INC.**

VOL. 45

MARCH 1993

No. 7

## **RaRa Meeting**

**March 5, 1993**

**3129 East Henrietta Road  
(Corner Lehigh Station)**

**Henrietta Fire Hall No. 1**

**Meeting starts 8:00 P.M. Sharp**

Did you always want to see some real power in a transmitting station? Have you had golden dreams topped with gallons of RF power fed with lossless, water main size coax? If you have, perhaps, just perhaps, you are just a little bit psychic. You have guessed some of the content that our guest speaker will share with us at our upcoming meeting.

Our guest speaker, Tim Stoffel (NS9E), a broadcast engineer with WXXI TV will present a tour in words and pictures of a state-of-the-art TV station. (I'll bet you'd have never guessed we'd have such luck here in sunny Rochester.) You will see six foot tall transmitting tubes and coaxial lines as big around as water mains!

You will also meet "ELMO", WXXI's automated video management system. (I know I want to find out what "ELMO" stands for.) Also, there will be great inside information about the future of high definition TV (HDTV). You won't want to miss this fascinating presentation. Who knows, maybe we'll all get some free electrons!

See you there.

*Keith Freeberg, N2BEL*

## **NOTICE**

Any member that has not received a 1993 RaRa Directory can pick one up at the March meeting.

**Hold The Date**

**RaRa Annual**

***Old - Timers Nite***

**May 7, 1993**

**3129 East Henrietta Road  
(Corner Lehigh Station)**

**Henrietta Fire Hall No. 1**

**Meeting starts 8:00 P.M. Sharp**

## **STATE WIDE WEATHER EXERCISE**

Jim Reinhold,

Monroe County Office of Emergency Preparedness

The 5th annual state wide Severe Weather Awareness Drill is scheduled to be conducted on March 22 and 23. Communications exercises make up a significant portion of the activities designed to enhance both public and community response to severe weather.

Amateur radio operators provide a network of volunteer severe weather spotters through a program called SKYWARN. These dedicated people operate radio communications from weather offices during severe weather to receive reports from trained spotters in the field. For more information contact Ed Holdsworth, N2EH, Monroe County Emergency Coordinator; Gerald English or Patrick O'Hara, National Weather Service Office, Rochester or Jim Reinhold, Monroe County Office of Emergency Preparedness.

Look for information on the simple steps that you can take to be prepared for severe weather during Hazardous Weather Awareness Week March 22 - 28 or contact your local Emergency Management or Red Cross Office.

# the **RARa RAG**

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**ROCHESTER AMATEUR RADIO ASSOCIATION, INC.**  
P.O. Box 93333, Rochester, NY 14692-8333

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## PRESIDENT'S CORNER

by Lloyd R. Caves, WB2EFU

During the month of February, Rochester had three important visitors that most of us were not aware of. These gentlemen were visiting from Cracow, Poland, as part of the Sister Cities program. They were here for about three weeks to get training in certain areas of government. One of these important people was Piotr (Peter) Nitecki, SP9BWJ. Peter is the President of The Telecommunications Department in Cracow and was here training on the systems that are used in Rochester for emergency communications, which of course included amateur radio.

I met with Peter a couple of times to talk to him about amateur radio in Poland and the US. Peter was first licensed in 1962 and has been active whenever the restrictions allowed. He told me that during the earlier days of being a ham operator that there were so many restrictions that it was difficult to get on the air. A station could only be operated at the exact location to which it was registered and only during certain hours. The operators were also monitored as to what was said. If any rules were broken they had all their equipment confiscated and may have even been arrested. Things have changed greatly in the past three years. Amateur radio is looked upon as a technical resource for the country. Amateurs are now given the right to use all modes and to experiment. Digital communications are being experimented by a lot of hams and packet radio is gaining momentum in Poland as it is here today. This loosening of control has let the city of Cracow grow from 100 amateurs to 300 in the past three years and Peter sees this growth being even faster in the future. There is one home brewed 2 meter repeater on the top of a mountain that covers around 150 kilometers and is in use most of the time. A digipeater for packet is in the works.

The major change causing the above growth is that the government of Poland is going to a Democracy. Peter was elected to the City Council of Cracow two years ago and will serve a four year term. As President of the Office of Telecommunications he is responsible for all emergency networks and how they work together, including the telephone system. He has been very impressed with our 911 system and Office of Emergency Preparedness. I am sure that the future of amateur radio in Cracow will have an important part to play as a part of their emergency network. Anyone wanting to work Cracow or Poland there is a group that is on the air daily, especially on the weekend, on 14.273 around 2:00 p.m. our time.

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Amateur Radio News Service

The awards committee of the Rochester Hamfest is accepting nominations for Amateur Of The Year; The Grand Ole Ham; and Technical Achievement award. Every year, an "*Amateur of the Year*" award for the ARRL Atlantic Division is presented at the Division Convention, held in conjunction with the Rochester Hamfest. The Awards Committee may also present a "*Grand Ole Ham*" award to an OM or YL who deserves recognition for lifetime contributions to Amateur Radio. The "*Technical Achievement*" award recognizes an individual or group for outstanding technical contributions. If you have anyone that you would like to nominate for any award please contact Richard Goslee, K2VCZ, for the forms. Copies of the forms may also be received by contacting myself. The dead line for nominations is April 1, 1993. The awards are announced at the hamfest banquet and commemorated by handsome plaques. Publicity about the winners is sent to major Amateur Radio publications. If you know of anyone deserving of any of these awards take the time to nominate them.

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## THE DICTIONARY OF REALITY

by Charlie, KA8OQF

(Editor's Note: Earlier this year we ran a few excerpts from Charlie's dictionary. Here we have the first part of the entire article.)

**Adapters** – those things you always have too many of when you don't need them.

**Alternating current** – alternates between "on" and "off", usually because of a bad connection somewhere.

**Amplifier** – an oscillator just waiting for you to turn your back for a minute.

**Amtor** – how they refer to hams in Texas.

**Antenna Gain** – a figure representing the difference in price between the original idea and the finished product.

**ATV** – method by which others can determine if you look as silly as you sound.

**Bandwidth** – something that's always sized wrong for your chosen mode of operation.

**Battery** – electrons "to go".

**Baudot** – sound made by a very chirpy CW transmitter.

**Beam** – wooden roof structures that crack and splinter when you install a rooftop mount that's just a little too heavy.

**Capacitance** – quantity usually measured by how serious the electronic problem is and how much it's going to cost to fix (see Homebrew).

## MARCH CALENDAR

5 - RaRa Meeting - 8:00 p.m.  
3129 East Henrietta Road

20 - RaRa VEC Testing Session - 8:30 a.m.  
111 Westfall Road

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**Code** – the illness that stuffs up your node.

**Computer program checksum** – a figure which, if ever discovered by your spouse, could lead to divorce proceedings.

**Digital communications** – those signals, given by hand, to the idiot who just cut you off on the highway.

**Distortion** – the difference between what the person on the other end of the contact said and what you thought they said.

**Dummy load** – what you thought was a bargain in the flea market, as you try to haul it half a mile to your car by yourself.

**Duplex** – a bad house for a ham to live in; the neighbor invariably claims your radios are interfering with everything including his toilet.

**Fax** – what your spouse expects when you try to explain why you bought another boat anchor.

**FCC** – hard-working dedicated public servants or lazy no-good bums with nothing better to do, depending on whether they are after the local repeater jammer or you.

**Feedback** – the phone call from next door that occurs when you switch on the amplifier.

**Field Day** – that time of the year when you get to do with a radio in a tent what your spouse won't let you do in the house.

Tnx RF Carrier

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## WANTED

Old Call Books and ARRL Handbooks for the AWA Museum Library. The books will be available to RaRa members when researching early call letters or for reference to old equipment. Please give book(s) to either Ed Gable, K2MP, or Bruce Kelley, W2ICE.



# PERINTON ANTENNA ZONING REGULATIONS

These following rules are being proposed by the Perinton Town Board.

They are proposing changes in 148-32 and also changes in 148-11.

The changes are proposing to make are adding a paragraph F which reads as follows:

F. Amateur radio installations are permitted in any district. Amateur radio antennas and antenna support structures are permitted provided that:

- 1. The structure support structure or antenna is within or on a previously approved structure, or within the rear yard area and meets the applicable setback.
- 2. The total height of the antenna and antenna support structure above grade does not exceed sixty (60) feet.
- 3. There is no more than one (1) antenna support structure on the property, unless the antenna support structure is used exclusively for the support of a single wire, or dipole type antenna, in which case two (2) support structures may be utilized
- 4. A building permit is obtained.
- 5. The proposed antenna and antenna support structure will not by reason of its location or nature create a hazard of any kind to the public or any adjacent owner or occupant.
- 6. A single wire or dipole antenna may exist on the property if supported by naturally occurring features. ie: trees.

All amateurs in the Town of Perinton are asked to attend the meeting on March 10th at 8:00 p.m. at the Perinton Town Hall. They may contact me for details W2YGW, 223-4353.

# THE ROCHESTER AREA SKYWARN NETWORK

SKYWARN is a national program of volunteer, trained, severe weather spotters. SKYWARN networks are designed and organized through the local servicing National Weather Service Office. Originally, SKYWARN volunteers were trained for early detection of tornadoes threatening Mid-west towns and cities. The program was very successful. It expanded geographically with more networks participating across the country and the program expanded to include severe as well as tornadic storms.

Each National Weather Service Office tends to organize its SKYWARN program differently dependent on the primary type of weather hazard threatening its area of responsibility and the volunteers involved with the network. Amateur Radio is used as an integral part of National Weather Service Office (NWSO) Rochester's SKYWARN reporting system. Reports are integrated with radar information from Weather Service offices Buffalo and Binghamton, New York and the National Lightning Detection system to initiate and update warnings and statements to the public.

A good SKYWARN network is composed of two basic groups of people. First are those with a strong interest in the weather. Many have amateur weather stations and keep weather reports as a hobby. The second group are those interested in public service. Amateur Radio operators tend to be very public service oriented. Many Amateur Radio operators also have a strong interest in the weather and some also have amateur weather stations.

Organizing a SKYWARN network across a multi-county area (Monroe, Orleans, Wayne, Genesee, Wyoming, Livingston, Steuben, Ontario, Seneca) is not a simple task. NWSO Rochester has been fortunate in that it has gained the interest and cooperation of both the Rochester Amateur Radio Association (RaRa) and the Monroe County Office of Emergency Preparedness. Ed Holdsworth (N2EH), Emergency Coordinator - ARES, RACES Radio Officer for Monroe County and RaRa Public Service Coordinator, works with NWSO, Rochester organizing the SKYWARN Amateur Radio net which includes recruiting amateur radio observers, training net controllers, design and upkeep of a net controller's operations manual and organizing controllers to man Amateur Radio Station K2JD located within the NWSO, Rochester. Chet Albrecht (WB2MDO), Don Taylor (KB2CU) and Mike McNamara

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(KB2CHP) are the net controllers most likely to be found in the weather office during severe weather. Steve Gulack (N2DZS), Monroe County Office of Emergency Preparedness Communications Officer provides technical assistance and personal amateur radio equipment and through his Office Monroe County has also provided amateur radio equipment. The hard work of all these HAMS has been critical to the success of the SKYWARN program at NWSO, Rochester. K2JD at NWSO, Rochester consists of two omni-directional antenna, a 2-meter packet station and a 2-meter FM radio.

SKYWARN is activated at NWSO, Rochester for short fuse, thunderstorm related events, such as tornadoes, flash floods, large hail and strong winds. The SKYWARN Net Manager, Holdsworth (N2EH) is first called for activation. If the Net Manager is not available, calls are made to Albrecht (WB2MDO), Taylor (KB2CU), McNamara (KB2CHP) and Gulack (N2DZS) in turn until someone responds. That amateur radio operator is then briefed on the severity of the situation, how fast it is developing and how quickly NWSO, Rochester needs volunteers detailed to the office to operate K2JD, how long the event is expected to last and any other special services that may be needed from Amateur Radio operators such as back-up communications with NWSO, Buffalo, NWSOs Binghamton and Syracuse, Red Cross or Emergency Management Offices or detailing to particular sites as in the case of river and stream flooding.

SKYWARN reports reach NWSO, Rochester through the amateur radio network and over a phone line dedicated to severe weather reports. Reports are quickly logged and passed to the forecaster detailed to write weather statements and issue warnings. Amateur Radio operators are briefed on the weather situation when they arrive and given copies of the latest statements and warnings. SKYWARN reports are incorporated into statements and warnings and read over NOAA Weather Radio Station KHA-53 and amateur radio.

SKYWARN training consists of a "Basic Training Class". This class will consist of an overview of the SKYWARN program, how NWSO, Rochester operates during severe weather, what to report and how to report it, three videotapes: "Terrible Tuesday", "Severe Storms: A Spotter's Guide", and "The Awesome Power" and over 100 slides depicting severe and tornadic thunderstorm characteristics and how to spot funnel clouds, wall clouds, downburst potential and tornadoes. Each attendee will be given a folder containing class notes and National Weather

Service brochures including a "Spotter Guide". Spotter training attendees will be given a SKYWARN ID which adds credibility to their reports.

In the future NSWO, Rochester hopes to conduct optional SKYWARN classes to increase spotter's knowledge of winter storms, flash floods, hurricanes and more in-depth information on thunderstorms and tornadic storms. SKYWARN spotters are encouraged to take a refresher class every two years, but are welcome to attend as often as they like. Updates to reporting procedures and other training tidbits will be included in a bi-monthly newsletter prepared by Patrick O'Hara (KB2MZO), Storm Spotter Program Leader at National Weather Service Office, Rochester.

*Gerald E. English (KB2DVV)  
Meteorologist-in-charge  
National Weather Service Office  
Rochester, New York*

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## LICENSE EXAM TESTING

by Barbara, AA2CX, and George, AA2FO

CONGRATULATIONS ... to eleven members of the amateur radio community who either got their licenses, upgraded, or passed exam elements at the recent RaRa testing session of January 16. They are: Harold Kohl, William Butler, Melvin Loder, Rodenick Roth, Dela Wlodarczyk, James Longuillo, Wayne Foster, Chris Bridenbaugh, Adam Herzik, Brian Landry, and Paula Zack.

Enjoy your new privileges.

Our next session will be on March 20th, at 111 Westfall Road, starting at 9:00 a.m. Registration begins at 8:30 a.m.

See you there.

---

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## THE RaRa RAG YEARS AGO

by Ed Gable, K2MP

20 YEARS AGO – MARCH 1973:

Jim Collinworth, WB2EDT, reports that plans are being made to participate in the *Hike for Hope* fund raiser again. Gene, W2FZJ; Randy, WA2AGE; and Dave, WB2ZEA; are making the plans. Jim also reported on the S.E.T. where 58 amateurs participated in a simulated truck crash simultaneously with a downed aircraft at the airport. RaRa Prez Ed Holdsworth, WA2EKR, reports that the K2JD van had plenty of use at an all night road rally in Bath, NY, and at the just completed S.E.T. In a bi-annual report, Seymour Hearless, KNOCKS, reported on successful Novice class graduates including Phil Young, WN2MLK; Harvey Samuals, WN2LUE, Gene Molter, WN2MKB; and Bob Becker, WN2MMX. Ed Mahar, WB2ZJY, reports that the RVHFG's 114 logs were good for 295,234 points in the ARRL VHF SS contest. After six continuous months the Rochester Radio ad on the back page still reports the all new Regency HR-212 as the 2 meter FM radio of choice.

40 YEARS AGO - MARCH 1953:

March is Auction night with Vic ("No use to cry") LoTempio, W2RIS, as auctioneer. Lee, W2VBH, urges everyone to plan on attending the summer picnic and Field Day outing at South Hill. The RaRa truck, with it's 10KW generator, will easily handle the KW rigs planned. The Mobile Club reports having a mini-hamfest in Orv Bauer's (W2TEX) basement. (Smaller cars back then - Ed) Wes Jackling, W2YUT, is installing an 813 rig in his car! In the NYS Legislature was Bill 429 providing for distinctive Amateur number plates. The 40 meter band was opened to phone operation at 3:00 a.m. February 20, 1953. First on the band were locals: W2BLP, W2UTH, W2QQA, and W2GUY. The Rag Editor at this time was Bob Wetherald, W2CZT.

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# 100 YEARS OF TELEGRAPH

(Ed: John Chipps spent 10 years on the Santa Fe railroad as a railroad telegrapher and line operator during the days of steam trains and telegraph.)

An American inventor, Samuel F. B. Morse, and his assistant, Alfred Vail, while experimenting with electric magnetism, discovered a charged electromagnet would pull down a piece of metal attached to a spring with a resounding "snap". Therefore, he reasoned, by using a series of delayed snaps – dots and dashes, that a code could be developed that could easily translate a message into a language that could be sent across the country.

In 1844, the first telegraphic message was transmitted in Morse code for a distance of 40 miles. *'What Hath God Wrought'*. This message, no doubt, conveyed Morse's recognition of the possibilities what future communications would hold.

From 1844 until the 1960's the telegraph chattered. The telegram was the main source of rapid communication until the late 1930's when the telephone was arriving in more American homes.

There were three main classes of telegraphers using Morse's continental code. News telegraphers, Western Union telegraphers and railroad telegraphers.

UPI and other news wire services had the "hot" operators. They worked the news bureaus sending messages from the East coast to the West coast, and visa versa. They were fast, efficient, and full masters of the art of telegraphy. Telegraphers sat where teletypes now sit. Each newspaper had its telegraphy department, constantly filling the room with dot and dash cacophony.

All telegraphic news items received would be gathered by a copy boy and taken to the desks of the news editors. Here it was edited then rushed to the linotypes in the composing room to be set in hot lead type. The presses would roll and people would receive their morning newspaper, all the current national news presented, being received by the telegraph, thus the saying, *"Hot off the wire"*.

Some telegraphers did nothing but send the news during their shift. Others did nothing but receive the news, typing each individual letter as the coded dots and dashes clicked from the telegraphic sounder. A good operator would usually copy five words behind the message he was receiving and carry on a conversation with anyone standing beside him. His sending and receiving speed could be approximately 35 words a minute.

At sports events, there was a special press box where telegraphers sent the plays as they happened directly to the newspaper. This is how an eye witness description of a baseball game would be transmitted.

Johnson	RFH	1st B
Smith	CFH	1st & 2nd L.
Jones	SO	
Smith	SO	
Cahill	RCF FLY	
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This information would be immediately passed to the sport desk so a reporter could write a play by play description.

Western Union and Postal Telegraph telegrams were sent across the country to central receiving stations where they were routed to operators who transmitted them to cities and nearby towns. This would mean a towns railroad station, where the agent was also a telegrapher.

Western Union and Postal Telegraph had a contract with all railroads, where the railroad agents would receive and deliver their telegrams. Larger cities had their own telegraphic offices.

At a small town railroad depot, the telegraph party line chattered endlessly. The agent ignored this chatter. Each station had its own two letter call.

When the agent heard his call repeated over and over, he would immediately become aware of it, sit down to his key, and receive messages for the townspeople. On completion, he would acknowledge their receipt by giving his initials, then stuff the message into envelopes, and personally deliver them, unless he had an apprentice who did the job.

Telegraphy started to disappear when the "fast" 300 baud teletypes made their debut. No longer do bicycle messengers appear at your door saying, "Telegram for .....".

The telephone took over. The Morse code telegraph and the bicycle telegram messenger went the way of the iceman. It is a past era.

*Tnx Metroplex*

## DUCKIE IN YOUR CAR IS A NO-NO...

Give me a noisy signal, dropping in and out of the repeater, and the person on the other end acting like he hears the repeater fine, and you have someone who is trying to work the repeater with a rubber duck from within the car.

You hear it every day, someone trying to make autopatch calls with a signal so bad it's hard to read on another radio, much less through a telephone.

Keep in mind, today's handi-talkies have receivers with sensitivities approaching that of the big mobile rigs, but they have less than a 5-10% of the power output.

Then add a rubber ducky to the H/T, which is a LOSS when you compare it with a quarterwave antenna, which is the one you used for a standard of measurement. A duck may be as much as 15 dB below ZERO gain of a quarter wave. Then

you put this duck inside a metal car shell, which probably has 30 dB of suppression, and you see what kind of signal you're radiating into the repeater antenna.

The biggest boost you can give an H/T in an automobile is to place it on an outside antenna. Even putting the rubber duck antenna on an outside mount will greatly improve performance over working from the inside. But you can get up to 12 or 15 dB of gain over your outside duck inside the car, by just hooking it up to a mobile 3/8 wave antenna.

So remember, you CAN make a big gun out of your HT, merely by hooking it on an outside antenna on your automobile.


*"The Coach's Corner"*

*Tnx the SERA Repeater Journal - 220 NOTES*

*via Ham News Outlet*

## Rochester HAMFEST

MAY 21, 22, 23, 1993

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