

The RARa RAG

Published by

The Rochester Amateur Radio Association
INCORPORATED

VOL. 26

MARCH 1974

NO. 7

Anywhere in New York State on 2-meter FM (almost) At the March 1st Meeting

by Joe Hood, K2YAH

If you've operated on 2 meter FM or attended the September program on the WR2ABF repeater, you're familiar with what a repeater is and have some appreciation for the technical problems encountered in putting and keeping a repeater on the air. Building and operating a repeater station is no easy trick but what about a system of trunked or linked repeaters intend to provide coverage over a statewide area? The New York State Air Force MARS repeater system of four linked repeaters providing consistent mobile to mobile coverage between such places as Rochester and Binghamton on a daily basis.

When one considers a multi-repeater system, some immediate questions come to mind. How is the system interconnected? How are signals routed through the system? How is station access to the various repeaters facilitated? Well, Bob Nezelek, W2CNS, an engineer for EDMAC Associates, an active participant in the Air Force MARS repeater system can and will answer these and other questions at the March 1st RaRa meeting. This is not surprising since few amateurs have Bob's knowledge of VHF-UHF radio technique.

Bob plans to describe the system in block diagram form, explain the access and control techniques and take us on a guided tour of the repeater site by 35 mm slide pictures. Of course, no such tour would be complete without a demonstration of the system capabilities and Bob has one planned.

The meeting gets under way on Friday, March 1st at 8 p.m. at the Farm and Home Center, 249 Highland Avenue. The program will be followed by the usual awards presentation and eyeballing over your favorite pastries from the RaRa kitchens. We'll be looking for you.

REWARD!

A Drake TR-22, serial number 620463 was stolen from the locked car of club president Bob Lauzon, WB2NSD. The rig was equipped with crystals for 28-88; 19-79; 94-94; and 46-07. A \$50 reward is offered for its recovery. Contact Bob if you have any information.

PRESIDENT'S LETTER

by Bob Lauzon, WB2NSD

Those of you who did not get to the Valentine's Day dance sure missed a good time. The food was good, the music excellent and Eddie Dunn was in his usual rare form. We should probably plan more affairs including our XYLs during the year as they all seemed to enjoy themselves - I know mine did.

Only three more meetings to go this spring - March, April and the annual meeting in May. The nominating committee for the 1974-75 slate is being selected to nominate the officers and Directors who will back up our new president, Joe Hood, K2YAH. I can only wish Joe as strong a group as I had, it made my year easier and very enjoyable.

Plans still progress for the Western New York Hamfest & VHF Conference. I visited the Monroe County Fairgrounds with General Chairman Harold Smith, WA2KND and we came away more enthusiastic than ever. The facilities are all we could want and I am convinced that in a few years we will have the number one event in the East. We would like to have more volunteer workers for the Hamfest - Ed Holdsworth, WA2EKR is Manpower Chairman so please make your availability known to him and he will see that you are kept busy. The larger quarters will require much more help.

The Members' Relations Committee has received a request for a General Theory Class to follow up on the almost completed Novice Course. The only thing keeping us from scheduling one is the lack of a theory teacher. After a thorough discussion at the last Directors' meeting it was decided to enlist a panel of volunteer teachers from the club and have each one present one or two phases of the course thus making the load a light one. So if you would like to participate as a member of the teaching panel please let us know at the next meeting when the call goes out for volunteers. The course would run about 12 weeks and one or two sessions would be the most each instructor would cover.

HR Report Feb. 14 - U.S. amateurs whose licenses expire during March 1974 will receive first mailing of HAM RADIO's new expiration warning service shortly. Warning packet will include everything needed (except renewal fee!) to apply for renewal.

The RARA RAG

Published by

The Rochester Amateur Radio Association
INCORPORATED

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VOL. 26 MARCH 1974 NO. 7

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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.



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THE RADIO AMATEUR'S JOURNAL

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

Repeater Problems - - - How To Solve Them

Both Rochester area two meter repeaters have recently experienced problems caused by an irresponsible person who derives some sort of pleasure out of jamming and making childlike noises in between transmissions. One's first reaction upon hearing this refugee from the 27 MHz band is to get on the air and read the guy out. However, if you stop and think for a moment, that is just what he wants you to do. The best action for all stations using the repeater is not acknowledge anything the interfering station says or does. Furthermore, don't even recognize that you even noticed him by saying anything about his presence. Make him frustrated in his efforts to upset you. Soon, the fascination will wear off and he will go away.

Finally, since these problems often arise when amateurs have their portable or mobile rigs stolen from unlocked vehicles, never leave your rig where it can be appropriated or turned on and used without unlocking something. FCC regulations specifically require that you make your equipment inaccessible to unlicensed persons. You are technically liable for FCC rules violation action if you don't lock up your mobile or portable rig when it is not in use. So, lock it up. You'll keep your radio, meet the regulations, and prevent your radio from becoming the source of a problem for your fellow amateurs and the area repeaters.

Estate Sale

FOR SALE - From the estate of Vince Cinanni, WB2QVC. Complete station - Hallicrafters SX88 all band general coverage receiver - excellent condition. Hallicrafters HT-32 transmitter AM and SSB - excellent condition. Astatic D-104 microphone with Atlas desk stand. Calrad SWR meter. U. S. Signal Corp "bug" old but usable. Above offered as package deal only - \$325.00 subject to acceptance by Mrs. Cinanni. On the air demonstration or 10 day trial will be arranged for interested purchaser. See Don Hassett, WB2QVD, 467-3915.

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DATES: Friday and Saturday, May 17 and 18.
PLACE: Monroe County Fairgrounds, East Henrietta and Calkins Roads, three miles north and east of Thruway exit 46.

ACCOMMODATIONS: Special reduced rates those attending at the Hilton Inn-On-The-Campus, 175 Jefferson Road, near R.I.T. Advance reservations required.

FRIDAY EVENING: Exhibits open at Fairgrounds for preview and get acquainted cocktail hour and entertainment at the Hilton.

GROUNDS OPEN: 7 a.m. Saturday. Registration required on entrance.

TICKETS: Write ticket chairman, Robert Lozen, WB2ERE, 1911 Gatestone Circle, Webster, N.Y. 14580.

PROGRAMS: Sent free to anyone requesting. Send a card or letter to WNY Hamfest, Box 1388, Rochester, N.Y. 14603.

Las Vegas Notes by Leo F. Connolly, KØJUI

(from Feb. '74 Ham-Hum)

As I mentioned at the January meeting, I attended several forums at the S.A.R.O.C. Ham Convention in Las Vegas on the first weekend of this month. Prose Walker was present and indicated that there were some revisions of the repeater rules coming out. He announced one of the forums that they have issued temporary authority to one repeater to operate without a designated control station in attendance and without continuous monitoring, provided that they use restricted access to the repeater, such as PL or Tone Burst entry. The theory being that each of the stations that would be equipped with this discrete frequency of Tone Burst or PL and would in effect be a control station. The temporary authority extends through until June of this year on the particular station involved and he indicated that if they had no problems the repeater rules would probably be revised so that we could operate with as we do now or have in effect a closed repeater with Tone Burst access or PL access, thereby eliminating the need for the continuous monitor.

Mr. Walker also stated that the repeater rules were being simplified and streamlined

and that processing of all back applications should be completed within 90 days. He stated the main problem was the fact there was no uniformity between applications and that the adoption of uniform applications by the ARRL has done much to speed up the issuance of repeater calls.

He also indicated there would be a complete restructuring of the amateur licensing system with some change in requirements. He said the CW requirement would not be dropped altogether, however the method of administering the CW portion of the test would be different in that the applicant would not be required to copy the CW material letter by letter but instead, could just sit back and listen and make whatever notes he might desire and at the conclusion of the CW portion of the test he would then be given a comprehensive examination on what was contained in the CW material. He said these exams in the future would in all probability be issued by Civil Service Examiners, thereby making it possible for the exams to be given either on a monthly or possibly even a weekly basis in various areas of the Country. The exams would not have to be given by an FCC examiner. The thought being that the examining points would therefore be more numerous and more accessible to the amateurs and the different method of giving the CW exam would eliminate the freeze up that some amateurs go through and also the handicap of some amateurs who are able to understand the CW but not able to get it all down on paper. You could of course still copy verbatim every letter if you wished.

He was specifically questioned on autopatch activity and 2 meter repeaters and stated that while autopatch has neither been allowed or disallowed by the rules, there is no change contemplated in this at this time unless the toll fraud problem causes difficulty.

It was the consensus of most of the people present that autopatch is primarily intended for the use of mobile stations and should only rarely be used by base stations.

WANTED - HyGain 6 & 2 meter antenna model DB62. H. G. Hogeboom, K2RZI, 381-6110.

WANTED - Blind Ham Radio Veteran wants NY State Ham Radio license plates. Will refund postage. Dean R. Townsend, 475 Sierra Vista Drive, Apt. #52, Las Vegas, Nev. 89109.

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"Radio Telephone Talk Heard From Airplane"

by W. H. DeWitt, W2DD

Today's sophisticated communication systems are so much a part of our every day lives that the above headline sounds like something right out of the wood-burning stove era. Well, not quite, but it is almost 48 years since the Radio Club of Rochester created a real FIRST in the broadcast field by broadcasting a description of an event from an airplane. This was a happening so new in concept that a new class of license was created to cover this use of radio communication! R. A. R. A.'s predecessor really made history.

Here's what happened, as recalled by yours truly who was a helper (Third class JG) in the affair--- with the aid of clippings saved by Club Historians and supplied to us by Bruce Kelley, current Club Historian.

In August of 1926, a group of club members including the late Gene Handler 8KT/W2LF, "Ducky" Dengler 8KS/W2LK, Gerry Hall 8AHK/W2AHK, Ken Gardner 8BGN/W2BGN and myself, became interested in the project of publicizing amateur radio in a spectacular way by broadcasting a description of the Rochester Exposition and Horse Show from an airplane flying over the showgrounds. The idea was to pick up the plane broadcast at the Radio Club booth at the Exposition and carry it to the attending crowd over loud speakers. The copious news coverage of our pre-Exposition test flight transmissions was more than any public relations exec could ask for! The (then) several newspapers ran pictures and stories about the intrepid amateurs and their "Airplane Broadcasting". It was exciting copy, just imagine, a RADIO TELEPHONE in an AIRPLANE! The newspapers and the public ate it up!

As a matter of fact, installing a radio telephone in an airplane back in the twenties wasn't exactly like picking up your handy-talkie and walking into today's airliner. The planes were open cockpit and rigs were not blessed with ICs and Nicads! Gerry Hall and Gene Handler built a very compact 50 watt rig that was powered by a storage battery and a dynamotor. Great care was used to ensure that the storage battery didn't go through the floor of the fuselage! The antenna was a trailing wire with a lead weight at the end. A hand operated reel side-mounted

on the fuselage controlled the antenna length. It seems to me that we decided on a frequency of about 1249 KHz. (240 meters!) to avoid QRming the hamband!

In addition to the publicity for ham radio, much news coverage was accorded the cooperative aviators, Spencer Punnett and Char Wethern. Nevertheless, Gene Handler, club president, and Ducky Dengler must have been super-salesmen to persuade these two gentlemen to commit their plane and their time to an untried venture master-minded by amateur radio operators! The Brighton area now known as Meadowbrook was the site of Buckland Flying Field where Punnett and Wethern held forth. As mentioned in the Times-Union articles, they had two modern planes. The R. C. of R. rig was installed in the cockpit of their Hispano Standard plane known for its short-run take off capability. But we are getting ahead of the story.

In early August of '26, the transmitter had been bench tested, the auxiliary gear was ready, and everyone was rarin' to go. Punnett and Wethern checked out the installation with eagle-eyes. That trailing antenna business was not well liked, and for good reason it later developed! Several local hams had been alerted to listen for our first test, so when the Hispano roared down the (grass) runway we telephoned the monitor hams to start searching for the aeronautical mobile signal. It wasn't long before word came back that the signals were "Very QSA" all around the city. Success! Incidentally, it was Gene Handler who made the first check-out flight.

But what about that special license bit? All of us had ham tickets and commercials too, but the first transmissions were made without benefit of any station license. The club secretary applied for an experimental license. That application must have really "shook" the Department of Commerce officials-- an AIRPLANE broadcasting station, a WHAT? But, as Ducky says, "We received a broadcast station license for two cents!" (That was the postage cost in the roaring twenties.) It was a very special license we received. Call letters, WKBK; designation, Commercial Airplane Broadcasting Station. The very first license issued for broadcasting from an airplane. Now we were legal, but it was still fun!

Dengler, Hall, and Handler made several
(Continued next page)

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Airplane

(Continued from page 4)

flights over the city in the days just prior to the "Expo". On one occasion, that trailing wire antenna just wouldn't reel in. Not wanting to risk injury to some earthly innocent, pilot Wethern decided against cutting the wire. As the plane landed, the weight caught on a shrub and the #14 wire zapped. Luckily the antenna did not snag the controls, but Wethern and Hall had a few jittery moments.

Many flights were made over the Exposition. Dozens of local listeners picked up WKBK's transmissions, and crowds gathered at the Club's booth to hear Handler's and Hall's excited description of the scene from the air. The project was so successful that further flights and broadcasts were made a few weeks later during the Radio Show (Yes, that's right-- Radio Show!) at Convention Hall. The Radio Club of Rochester also had a booth at this affair. The plane broadcasts again generated much interest. This time, Ducky Dengler was the announcer. WHAM re-broadcast some of the plane broadcasts and more news coverage followed.

Let's sample a few of those news stories and letters from listeners to get the true essence of public reaction to an exciting new use of a still new communications medium. The August 17, 1926 edition of the Rochester Times-Union carried this headline: "Radio Fans To Hear Airplane Broadcasting During Exposition Week". The two column story started off with, "Rochester Radio Fans are due for a new thrill during the week of the Rochester Exposition, when they will have their first opportunity to tune in a broadcast program from an airplane." In another paper a "Radio Fan's letter said that he tuned in a whirring noise mixed with a faint voice saying, "This is station WKBK located in an aeroplane flying over the city. We are taking some movies up here and we hope that they will turn out alright. Mr. Wethern, my pilot will talk to you now--" The letter went on to say that the radio fan knew that the broadcast was no fake because he went over to Buckland field and watched them land with the apparatus! Under the headline "Radio Amateur On The Air In A Different Way", a letter from Ducky Dengler to the paper told of receiving as well as transmitting while in flight. He said, "After talking for some time, the transmitter was turned off and the receiver tuned to the wave of a local

broadcast station while we enjoyed the wonderful music from the Radio Show." His letter ended with the comment, "The terrific roar of the motor and the wind is only one of the many difficulties encountered in this kind of work, but all were successfully overcome."

Well, there you are, a benchmark in the history of ham radio in Rochester. Everyone involved had fun and enjoyed every minute of it. We operated with and without a license, established a new class of license, communicated with broadcast stations and hams, took part in an early form of repeater operation, performed a broadcast "first", and actually accomplished what we set out to do--- publicize amateur radio in a favorable way. Spencer Punnett and Charles Wethern must have benefitted from all the publicity too, but they certainly deserved to-- for without their plane and their outstanding capabilities as pilots the project never would have gotten off the ground. Sorry about that, but it's the truth. And that's how it was in 1926.

SPECIAL OFFER

HR REPORT, a new timely publication is gaining popularity each day. HR REPORT is the first amateur radio newsletter offered on a wide national scale which reduces information lag time from weeks or months to days. It is airmailed to its subscribers twice monthly.

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