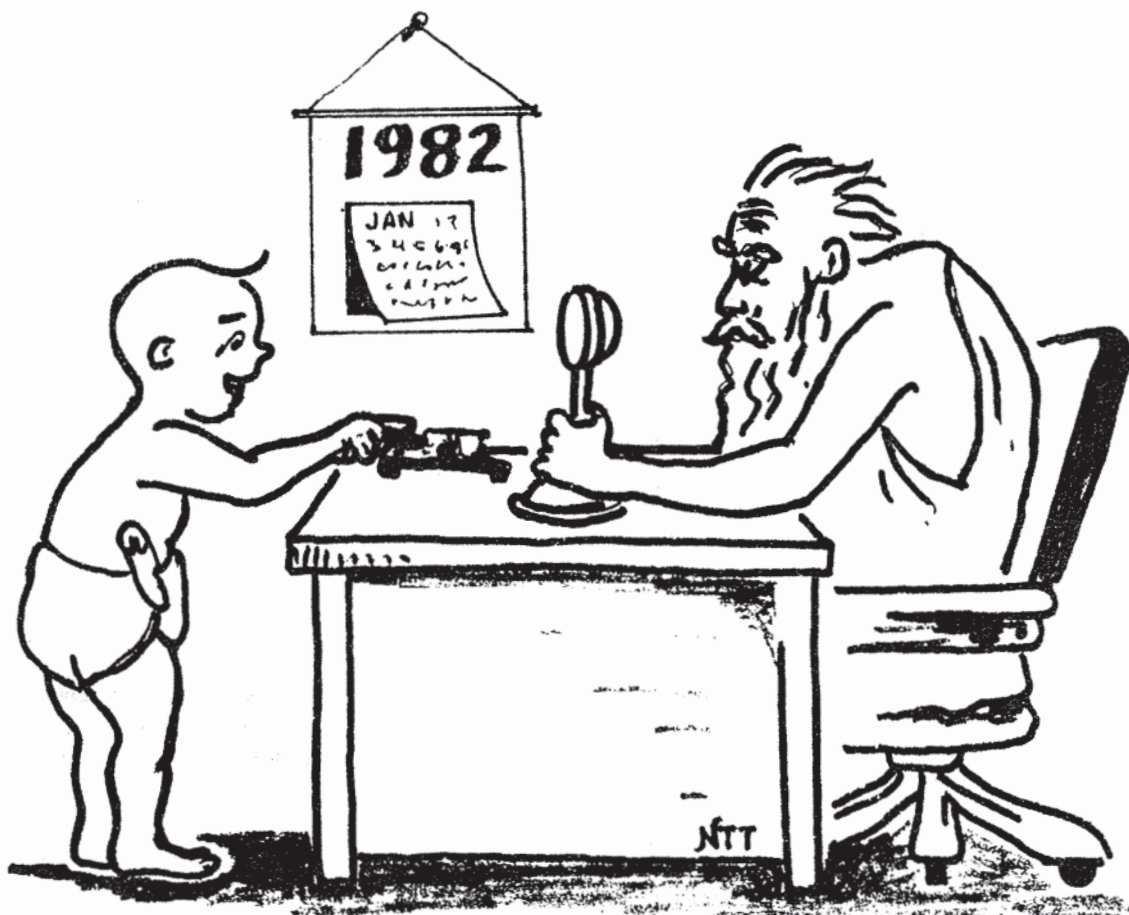


Ham Rag

Rockford Amateur Radio Association
January, 1982



President's Log

Post seasons greetings to everyone. I hope you all had a joyous holiday season and that good old St. Nick filled your shack with all kinds of goodies to play with. Just think of all the *QRM* you will be adding to the bands.

I would like to extend a "*well done*" to Bruce-KB90W and his crew for their fine effort this past year. At this stage of my term, I can only guess the number of hours spent on club affairs. I also would like to thank him for having Father Moran-9N1MM. It was unfortunate that more hams could not have heard his talk; a very interesting speaker to say the least. I'm sure we all wish Bruce continued success in recovering from his heart attack. We need fearless monkeys to go up those towers.

Well *RARA* begins a new year with much work to be done in a relatively short time. I look forward to the challenge and in some small way, continuing the good effort by those in the past. As in any organization, the success is not what can a few do but to what extent the membership ships in and lends a helping hand. Your ideas, suggestions, and constructive criticism will help me in this effort.

Your new regime pledges to put a great deal of effort in making *RARA* a worthwhile club. So when we ask for your help, and we will ask, try to lend a hand. Cooperation is the word.

We would like to see better attendance at monthly meetings, such as license classes and Field Day. In order to accomplish these goals, we propose to have monthly drawings of amateur related items. Tickets may be purchased at the meetings (*somewhere between 50¢ & \$1.00*), as many as you wish, with a drawing at the end of the business portion. January's draw will be for a 1982 Handbook plus 2 others. Monies so collected will be used to acquire the next month's drawing.

We intend to obtain interesting program speakers. This month **Mr. Edward Polewarczyk of Rockwell International** will speak and show slides on the current space shuttle program. He has been with the program 14 years and can get as technical as you wish. Although not amateur related, per se, we thought that you electronic wizards would enjoy it. Maybe we could encourage them

to put some type of transponder or relay on board someday. "*QRZ COLUMBIA*".

We have also instructed (*presidential order*) our license class tutors to contact the local High Schools and who or what ever else to get a better attendance at our classes, and set up some type of follow up on Novices to give them a hand in setting up a station, antennas, or just answer their questions. This is where we could all give a hand, regardless of age.

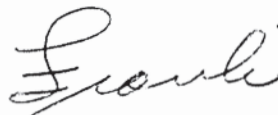
I also would like to get *RARA* on TV with some PR for the general public to see. Our last Field Day was a fine example, but we need to spread our image and inform them about the Marathon, Awareness Day, etc.

Field Day this year is the last weekend in June as usual. Our experiment with a 40 meter "*team*" of AK9N and A9AUZ was a success. This year we will be going with all teams. Russ-WD9FVI & Don-N9AWZ will be our overall shepherders. We would like to see a good deal of participation. If you work you will get a time slot to operate. We intend to score big! **NOTE:** If you want to work 40, bring a strong chair, a long whip, and a big orange and talk to the two animals who ran 40 last year.

We would also like to have our Hamfest back again. However, with the current Illinois Lottery Law and local raffle regs, some changes will be needed. I am currently talking with (*don't close your minds yet*) the Beloit and Belvidere clubs about a joint North Central Illinois Hamfest. I know about the past problems and the current obstacles may be too many to overcome. However, we will update you in the next **Ham Rag**.

Besides the above, we have several other as usual programs, such as Picnics, Breakfasts, Christmas Party, etc. to work on. Any other ideas would be welcome but be prepared to help.

Last but not least, I would like to before the fact express of the **Ham Rag** for one more year. He has done an outstanding job and anticipates an even more enjoyable year ahead.



-73, Frank, KB9KH
(el Presidente)

Editor's QRM

Snow and cold, wind and ice, Christmas bills and warped budgets, bulging post holiday waistlines and broken New Year's resolutions — yes it's January. Everyone has his or her own list of favorites that makes this time of year so special and the **Ham Rag** is now different.

The **Ham Rag** list of little wrinkles for January began with the loss of Sharon Harlan-WB9SFT as the writer of Potpourri. After three years of this insanity, she gave notice in November. She will be (*already is*) greatly missed.

Filling page 11 just in the nick of time is someone who I was very pleased to get, but also someone I can not tell you about. He or She is another of those anonymous Henry Choke types. So be careful and watch yourselves as your conversation may make the **Rag**.

Next came a phone call from Frank-KB9KH asking, "*HOWMUCHISENOUGH???*" After a short description of a very short article, Frank discovered the hardest part of his new position. A quick look at page 2 will show how fast he caught on to the idea of sentence stretching. (*actually he writes very well*).

The Christmas Party came and went with the start of another race against the clock to get the pictures finished. After the Father Moran-9N1MM one day foot race in December, Carol KI9G had lots of room — I

gave her three this trip. On both occasions she handled the photo layouts herself, a job she has now agreed to taker on permanently. THANKS!

On the other hand, January is not all bad. With this issue the **Ham Rag** begins a new bi-monthly column called **Novice Corner** by **Gene-WB9MMM**. Although very basic to many of us, this feature is needed by our newer members to help get them off to a good start. Sharing page 9 will be the return on a more regular basis of an old favorite - Henry Choke. (*Questions for either column should be sent to: HAM RAG/PAGE 9, P.O. Box 1744, Rockford, Illinois 61110*)

Also returning on a more regular basis will be Awards by Dick-N9UN. He will be sharing page 8 with WD9FVF of Up Close & Personal and another new feature I am negotiating on. CQ Contest by Gene-AK9N and CQ DX by Gene-K9IKP will remain on pages 4 and 5, however the Baby feature has gone to the big wet diaper in the sky. Gertrude-KB9PC has begun a new project I hope you will like. A cartoon, it will be a regular each month but without an assigned page.

So that's the line-up for '82. I think it gives us a lot of variety. Comments are, as always, welcome.

Jim -73, KI9F

ATTENTION!!!

ATTENTION!!!

RARA'S NEXT CLUB MEETING IS ON JANUARY 8, 1982 AT 7:00 P.M.
AT ROCK VALLEY COLLEGE.

EARS NEXT CLUB MEETING IS ON JANUARY 17, 1982 AT 7:00 P.M.
AT W. A. WHITNEY.

CQ Contest

There are some new faces on the staff of the **Ham Rag** this year, but you fortunate readers have me to look forward to for another year. HI HI!

Club participation in **SWEEPSTAKES** was rather dismal last November. I sent in a list with only four names on it, so our club aggregate score will be down quite a bit for 1981. The February **FCC SPECIAL** is just around the corner. Complete rules appeared in the December **Ham Rag**. The trophies and plaques or whatever for the winners will be awarded at the club picnic in July. Dust off the mikes and keys and low band rigs and jump right in.

This year the **ARRL NOVICE ROUNDUP** will run from January 30th through February 7th. The purpose of the contest is the Novice and Technician class license to work as many other stations as possible during any 30 hours out of the nine day contest period. This is an opportunity for Novices to increase the CW speed for that upcoming trip to Chicago, to work stations to fill some of those needed states for **WAS**, and for other classes to give some QSO's to the Novices. The Novices and Technicians are allowed to work anybody while the rest of us are limited to working Novices and Technicians. The exchange consists of a signal report and **ARRL** section, which here in Rockford is Illinois. Complete rules are in the January *QST*.

Here is a special deal to all club members who participate: all (that is 100%) of your **Novice Roundup** contacts will count for the **RARA FCC SPECIAL COMPETITION**. Now that is an offer that will be hard to pass up.

Mention has previously been made here of the CW bulletins and practice sent by W1AW from ARRL Headquarters. For those who are not League members and do

not have access to *QST*, a condensed schedule follows:

CW BULLETINS: (18 WPM)- sent at 4, 7, and 10 p.m. daily. Good code practice while working toward 20 WPM and above. Also a way to keep current on regulatory changes. On Thursday nights DX bulletin is sent.

SLOW CW: (5 to 15 WPM) - 6 p.m. on Mondays, Wednesdays and Fridays. 9 p.m. on Tuesdays, Thursdays, Saturdays and Sundays.

FAST CW: (35 to 10 WPM) - 6 p.m. on Tuesdays, Thursdays, Saturdays and Sundays. 9 p.m. on Mondays, Wednesdays and Fridays.

For the fast and slow CW practice, excerpts from *QST* are transmitted. All times are CST until April 25, when they become CDT. The frequencies used are approximately 80KHz up from the bottom edge of each band (80 thru 10). On 80 meters the spot to listen to is 3580KHz.

For those who missed the Club Christmas Party, the final results of the October **RARA WAS COMPETITION** are as follows:

NOVICE/TECHNICIAN

KA9LTR Brad Ambro
KA9HHT Lars Larsen

GENERAL

WB9HPV Dave Larsen
WD9FVF Jim Ambruoso

ADVANCED/EXTRA

N9UN Dick Steinhauser
KB9PC Gertrude Kindell
K9LUX Larry Carlstrom
KB9OW Bruce Hamilton
KC9BN Dale Mather

The top call in each class received a very handsome trophy for their efforts. Everyone who sent in results was awarded a certificate.

Gene -73, Gene, AK9N

CQ DX

DX IS...

DX IS amateur radio. Ragchewing on 2 meters and on 75 meters may be enjoyable and meaningful, but DXing is what amateur radio is all about. The thrill and excitement of chatting with your fellow man on the other side of the world enhances the mutual understanding of one another in a day and age fraught with troubles and conflicts.

DXers go through stages like those in other endeavors. First there is the awe in the possibility of being able to communicate world wide. Then there is the excitement of a DX contact contact anywhere. Soon contacts with Europe and south of the border become old hat with the semi-rare taking precedence. Ultimately, the very rare become the primary goal of many DXers. The DX award chasing can also be all consuming. Unfortunately, getting to know another land and people by regular lengthy communication is something that some DXers never experience. Visiting or being visited by a DXer is an unforgettable eyeball QSO few experience.

QSL TIPS

Requesting a QSL card can be an exasperating, futile trauma. Just sending a QSL via the bureau to a rare station is generally a waste of time. Getting another QSL from Illinois is probably not only of no value to him but actually a nuisance. If you really really want a QSL from a rare station that has no QSL manager, by all means write him a personal letter with your QSL. Tell him why getting his QSL card is so important to you. Let him know a little about your station and yourself. Don't just automatically include a "green stamp." Try an ARRL decal or something else special, mint stamps from his own country, or U.S. mint stamps if he is working on awards himself (so he can get QSLs from U.S. QSL managers for DX stations elsewhere in the world). Also enclose a self-addressed, European style (square) envelope, not a U.S. □6 or □10. If you are having trouble getting a QSL from a Communist or other country unfriendly to the U.S., try enlisting the aid of a ham in a "neutral" country. They can work wonders with the censors that may impede mail with the U.S. stamps on the

envelope or U.S. bound, while hardly questioning "third world" mail.

DX Tips

Rumor is that OH2BH, Martim will be going to operate in ZA, Albania in August and BY, China in September.

Operation from VK0, Heard Island, is again being targeted, this time for last winter.

FB8WG, Crozet, continues to allude most local DXers, but W9SS and K9IKP managed to work him on 20 meters long path on May 16. Anyone speak French? (Calling a DX station in his native language is probably worth about 10 db!)

BY1PK, China continues to show on 15m and 20m CW.

Look for good early morning (6 am) opening to the Pacific this time of year on 20m.

Contests to pick up a few new ones in certain parts of the globe include All Asian Phone, June 19-20.

SM0AGD, Eric is going on a two year world tour on a 50 foot yacht. Operations are planned from ZK1, ZM7, T31, KH1, T30, FW8, and A35 this year.

Possible deletions to the ARRL DX country list includes 8Z4, KH0 (Baja Nuevo), and KS4 (Serrana Bank.) If operations ever take place from North Korea, there would be a net increase of one resulting.

"Good Ones" showing up on 20m recently included, VK9ZR, Mellish Reef; AP2, Pakistan; HF5, Thailand; & FR0FLO, MC for FB8WG.

Remember, building up your DXCC total amounts to two major things: longevity & perseverance! Good luck and good DX!

de, W9SS
DENNIS





PHOTOS & LAYOUT
CAROL, KI9G

Up Close & Personal

With the holiday festivities behind us, we now can sit back and take a breather. A well deserved one if I may say so. I extend my congratulations to RARA's 1981 club officers. Despite a few disappointments, (*Hamfest and short loss of the HAM RAG*) they did an outstanding job.

In past years our club has held together thru the efforts of all who assisted with club sponsored events designed to raise funds. Funds have over the years been spent towards a variety of events such as ARRL donations, publication of the **Ham Rag**, and numerous club sponsored happenings.

As you all know RARA club officers voted to increase membership dues from \$5.00 to \$10.00 a year. Now I'm sure you have a question, "**WHY INCREASE MY DUES?**"

Well for many years our **Ham Rag** editors had been able to make the publication available to its readers thru the efforts of a local business establishment. *Not so today!* Each issue of the **Ham Rag** has a \$50.00 printing bill attached to it. Taking the ten issues each year and adding \$250.00 in mailing costs plus a few dollars for miscellaneous expenses you can easily see the costs involved. I personally feel the mailing of the monthly **Ham Rag** issues are reason enough to merit a membership dues increase.

But it just doesn't stop there. RARA sponsors many events in which a small fee is required to get the ball rolling. Field Day, Awareness Day, Hamfests, Club Meetings, the Christmas Party, Pig Roasts to mention a few. All of these require an expenditure.

Speaking of memberships — RARA has lost over the years many fine club members. Whatever the reason they might have had, and I'm sure most were valid, I personally don't like to see this happen. These people all have a lot to contribute to this club. We need them in this organization. So if you know someone like this please invite them to a monthly club meeting. Make an effort to bring them back.

I have been told that the 1982 club officers have a big job ahead of them. In order for Frank-KB9KH and the other officers to tackle the job at hand, your support is needed. I know this has been mentioned several times before, but let's be realistic. A club's strength is directly proportional to its membership participation.

In closing, allow me to say a few words about our **Ham Rag** editor, Jim-K19F. Jim in my opinion has done an excellent job in bringing us, its readers, the most outstanding newsletter in the country.

Jim -73, WD9FVF

ROCKFORD AMATEUR RADIO ASSOCIATION, INC. P.O. BOX 1744, ROCKFORD, ILLINOIS 61110

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	Bob Davidson	WA9NTT	877-6274	I. M. Lippy	?????	??????
	Gertrude Kindell	KB9PC	963-4050	Henry Choke	?????	??????

Novice Corner

Thinking back to my novice days as to what I had questions about, I think most of them concerned antennas. In this column I will try to relate some thoughts on dipoles; putting them up, etc.

Everyone is familiar with the formula for calculating the length of the dipole: $468/\text{Frequency in MHz}$. Let's talk for a minute about an 80 meter dipole. How long are you going to make it? First you have to determine the frequency that you want to have the best SWR at. Because of the long wavelength of the 80 meter band, it's pretty hard to construct one antenna that will be usable on all frequencies available in the 80 meter band.

Our figure-A shows the calculated lengths for helping you choose the length depending on what frequencies you want to use most. Notice that from one end to the other there is a difference of 16.7 feet. Let's assume that you want to make the antenna for 3.7MHz. This would make the length 126.5 feet. However, I feel it is good practice to start longer, say 128 feet or a total of 64 feet on each side of the center insulator.

Now let's assume that we have assembled the antenna. How do we determine its final length? First raise the antenna to as close as possible to its final height. Apply power and check the SWR-B column which will give you data for plotting the Curve-C.

Now by looking at these charts you can tell about how much to trim your antenna. As you see we are most resonate it 3.6MHz. than 3.7MHz. If you look back at figure-A and compare the lengths you can see that we can trim off as much as 2.5 feet to move our SWR curve more toward the center of the band. (Remember we are talking about an 80 meter dipole. If we are making one for 10

meters, we could use the same procedures, but our lengths would be considerably different. In other words, when trimming a 10 meter dipole, don't cut off 2.5 feet!!!).

Now that we've trimmed the antenna (actually we've raised and lowered it several times taking a little off each time, and making another set of charts to prevent it from being too short) our final chart and curve might look like D & E.

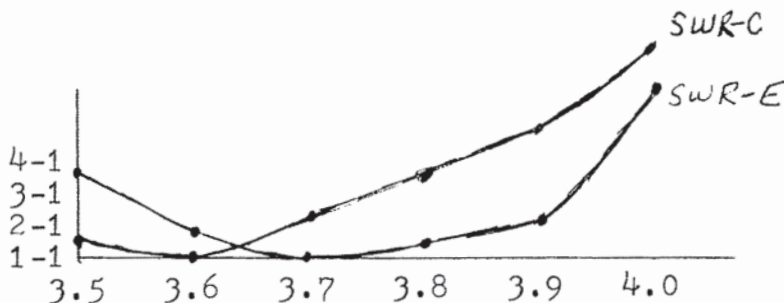
Not happy with the fact that you can't use the whole band? Some things that can affect your SWR are:

1. Height above the ground. The higher you go (recommended is at least 35 feet for 80 and 40 meters) the sharper the SWR curve.
2. Inverted "V" vs DIPOLE - this will not only change SWR but also your radiation pattern.
3. Size of wire - if it gets too small, the SWR curve will be very sharp. For 80 and 40 meters I would recommend No. 14 or No. 12 wire.
4. Coaxial Dipoles, because they use the shield as well as center conductor for the element, make the equivalent of a very large wire. Sometimes has a good enough SWR that the whole band is usable.

There are many things that I've not covered that are also important. A very good source for more information is the "ARRL Antenna Book". Now that winter is here, there should be a lot of antenna work going on. It's never done when it's nice out, you know.

Gene -73, WB9MMM, Gene

FREQ.	FIG-A	SWR-B	SWR-D
3.5MHz	133.7Ft.	1.3-1	3.5-1
3.6MHz	130.0Ft.	1.1-1	1.7-1
3.7MHz	126.5Ft.	1.7-1	1.1-7
3.8MHz	123.2Ft.	2.5-1	1.3-1
3.9MHz	120.0Ft.	3.5-1	1.7-1
4.0MHz	117.0Ft.	+4-1	3.5-1



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ED POLEWARCZYK IS RESIDENT MATERIALS MANAGER, SPACE SYSTEMS GROUP, ROCKWELL INTERNATIONAL, AT SUNDSTRAND CORPORATION, IN ROCKFORD, ILLINOIS.

IN HIS PRESENT ASSIGNMENT, ED IS RESPONSIBLE FOR THE SPACE SHUTTLE AUXILIARY POWER UNIT, RUDDER/SPEED BRAKE ACTUATION SYSTEM, AND THE BODY FLAP ACTUATION SYSTEM.

POLEWARCZYK JOINED ROCKWELL IN 1974 AS RESIDENT MATERIALS MANAGER AT THE HAMILTON STANDARD DIVISION OF THE UNITED TECHNOLOGIES CORPORATION IN WINDSOR LOCKS, CONNECTICUT WHERE HE WAS RESPONSIBLE FOR COMPONENTS OF THE ATMOSPHERIC REVITALIZATION SYSTEM AND THE FREON COOLANT LOOP, THE WATER SPRAY BOILER, AND THE FLASH EVAPORATOR SUBSYSTEM. DURING THAT TIME, HE ALSO WAS RESIDENT MATERIALS MANAGER AT UNITED TECHNOLOGIES POWER SYSTEM DIVISION WITH RESPONSIBILITIES FOR THE SPACE SHUTTLE FUEL CELLS.

A NATIVE OF CLINTON, MASSACHUSETTS, POLEWARCZYK GRADUATED CUM LAUDE FROM WORCESTER POLYTECHNIC INSTITUTE IN 1963 WITH A B.S. DEGREE IN ELECTRICAL ENGINEERING. HE RECEIVED HIS M.B.A. DEGREE FROM THE AMERICAN INTERNATIONAL COLLEGE IN 1973.

MR. POLEWARCZYK IS MARRIED AND RESIDES IN ROSCOE, ILLINOIS.



Cartoon from the "Rockford Register Star"

Potpourri

Hello!

I sure see what Sheri means by it being hard to fill up this page. Maybe our cartoonists can construct a mini-centerfold to assist me. I shall remain unknown for writing of this column. This principle of that being, "I don't want to be sued." HI HI!

Hearing super strong signals on 80 meters one evening, it turned out to be a new local ham, Jerry-KA9MCS. (MCS still means megacycles in my book) Jerry's son is Tal-KA9MEF. Congratulations to them both for their hard work. They are friends of Paul-WA9FFL.

KC9BN-Dale and his sidekick N9BZT-Nancy scorchted the hiways to Arizona and back recently. Didn't hear of any desert fires even though their after burners must have been on to make it so quickly.

I heard Pete-KA9LQY/CG upgraded to Technician. Also heard he could not make the Christmas Party as he was going South for some Vacation in December.

The FCC trip Moe-N9CCE had planned for the Friday after Thanksgiving was

cancelled as they were too full of turkey at the FCC office to open up. Some people call them turkeys!!!

WB9SFI-Tom McNeely is moving to the St. Louis area for a new job position. Sorry to see him leave the area, but I guess the real estate people may have been happy. \$\$\$\$ Good Luck Tom.

I see Duane-WB9LEF received a DX card from 2½ years ago. Don't ever give up ship, but "Pony Express" surely was faster.

Well I was at the Christmas Party and had some good eyeball QSO's. I even won a prize and that's a first for me. I think all had a good time even though the helpers of the meal dumped over 2 carts to keep everyone awake.

Don't forget the "Watering Hole" at the Rockford Plaza is still active every morning at 9:00 am. (Monday-Saturday) A good place to solve your problems and chew the fat. Bring your QSL card to display on the wall.

Well, this wasn't too hard to write. HI HI!! Only 9 more to go to finish the year. OUCH!!

-73, I.M. LIPPY

MIKE + Mc KEY



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