

FM BULLETIN

REPORTING ON AMATEUR FM ACTIVITIES

Vol.1 No.1

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1967**

LETTER FROM THE EDITOR

Due to the increased activity on the VHF FM frequencies, it was thought that this bulletin, unprofessional as it maybe, might aid to unite the stations on these FM frequencies for the benefit of all of us. Thanks to Marion Stoner W8VWY we have had a list of active stations on 146.940 mhz since 1/1/61 in Southerstern Michigan. This publication will be sent out to all the stations on the above list and any other F M station that we know of. Please show your interest in this bulletin by donating one buck a year to cover the postage and required material. This bulletin is intended soley for FM activities & related subjects, which we hope to help our hobby. Any suggestions, articles or criticisms will be well received.

ONE FM RECEIVER DOES ALL THE WORK

For those who have difficulty in obsaining F M receivers to cover the active frequencies it is a simple matter to build converters to come out at the 1st IF frequency of your present F M receiver and coupling to the 1st IF of your present rig. Converters of the type described in the ARRL Handbook (nuvistor type). or for those who do not like to build, Vanguard Electronics makes a transistorized converter that sells for \$18.95. Montering six frequencies simultaneously with l receiver is no problem using this method. The converters can be controlled by grounding the cathode of the oscillator in the tube converters and an On-Off switch for the 12 volt-power supply on the transistorized converters. In doing so you can monitor any one time. The input frequency does not matter so-long as the output is that of the 1st IF of your receiver.

2 METER FM VIA NAVY MARS

As we have all seen the rapid growth of our FM frequencies, so has Navy MARS. The prime frequency being 148.41 Mc. Active areas in the Great Lakes area include Waukean, Ill., Bedford, Ind. Benton Harbor, Mich. & various parts of Wisconsin.

Two meters is being used for local nets and repeaters are working in conjunction with six meter FM frequencies for cross county traffic.

Nets on 148.41 Mc.

<u>QTH</u>	<u>DAYS</u>	<u>TIME</u>
Ill.	Mon-Fri	1300z to 2100
Ind.	Continious	
Mich.	Sat	0130z
Wisc.	Tue & Thu	0130z

With the vast amount of activity in Southeastern Michigan on the 2 meter FM frequencies, it is surprizing to see the MARS portions of the band asleep in this area. The lower bands and AM VHF are quite active BUT FM is the ideal way to deliver the traffic picked up on the other nets for local distribution .

If anyone would be interested in handling some of this traffic via MARS either by phone, cw or by RTTY, nets for this area can be started by conacting the area coordinator or myself for info WA8UTB

The Navy MARS coordinator for this area is Raymond T. Decker NØRIO-K8GIT 22852 Sharrow St. , The net control for Michigans only two meter FM net in operation is Julius W. Fantaski NØRMZ-W8EYO RR#1 Box 726-S Stevensville, Mich.

NØHIC - WA8UTB

FM FOR MARINE

In addition to the 2-3 mhz MF marine band, pleasure craft and commercial vessels may operate in the VHF marine band which is divided into 16 channels. On these channels, broad band FM (plus or minus 15 khz) is used and frequency tolerance requirement is only 0.002%. Hence, mobile radio equipment that meets these standards, and which aren't narrow banded (plus or minus 5 khz) and do not have 0.0005% frequency stability, as required for land commercial mobile use, can be used on boats under a part 83 license.

New wide band FM equipment is also available, which has been type accepted for part 83 use, by several manufacturers, including RCA, Lorain, COMCO, Outercom and Aerotron.

Only single channel set is required when the user wants telephone service only on VHF marine channels 26 or 28. The transmitter is equipped for operation on 157.30 mhz (channel 26) or 157.400 (channel 28). The receiver is equipped for 161.90 mhz (channel 26) or 162.00 mhz (channel 28).

The use of a selective signaling decoder is optional. The user may monitor either channel aurally for incoming calls. All communications with other boats or shore points are via a VHF Public Coast Station on a toll basis.

Narrow band FM, single channel equipment can be used in areas where there is no VHF Public Coast Station within range, but there is a mobile telephone service station authorized to serve ships. The equipment must be type accepted and licensed under Part 21.

For direct boat-to-boat communication and for contacting the Coast Guard, a two-channel set is required (broadband FM), equipped for single-frequency simplex operation on both channels (6) & (16) Channel 6 (156.3 mhz) and channel 16 (156.8) are for intership communication on 6 and for safety & calling on 16. The equipment must be type accepted and licensed by Part 83.

A multi-channel, broadband FM set can be used to provide additional services. For instance, a 3-channel set can be equipped for channel 6 and 16 plus channel 9 (156.45 mhz). The latter for direct communication with Yacht Clubs and public moorage facilities.

FM sets designed specifically for marine use are generally equipped for operation on several channels. One such example, the MARICOM produced by COMCO, is available in various combinations to provide operation from one to a dozen or more VHF channels.

W8RRE Talks On His RTTY Converter

Harry W8RRE a well known figure on 2 meter F M frequencies from Rodchester, Mich. explained the guts of his RTTY converter T U Main Line TT/L to the Michigan Six Meter Club. The club had a very nice display of different models of RTTY equipment at the January meeting, mostly brought by its many members that are very active on RTTY. Harry made sure that everyone knew that 2 meter F M RTTY is very active and most desirable for local activities. A good number of the F M boys were present for the meeting and more interest appeared to be generated.

A R E C

Amateur Radio Emergency Corps.

TRI COUNTY A R E C TWO METER NET
Detroit, Mich.

Net meets every Thursday at 2000EST on 146.940Mc wide band FM

Number: 1-R
Station of Origin: W8MPD
Check: 26
Place of Origin: Trenton, Mich.
Timed Filed: 0057Z
Date: 1/6/67
To: All AREC members

Text- I am Happy to announce that John Gurfy W8LPA has been appointed assistant emergency coordinator to establish and coordinate 160 meter net activities in Wayne county

Signed Stan Briggs W8MPD
EC Wayne County AREC

Number: 2-R
Station of Origin: W8MPD
Check: 39
Place of Origin: Trenton, Mich.
Timed Filed: 0001Z
Date: 1/13/67
To: All AREC Members

Test- All members please check to see if you have copies of operating an amateur radio station and the public service communications manual on hand x if not please notify me by standard message form and I will supply them

Signed Stan Briggs W8MPD
EC Wayne County AREC

Number: 3-R
Station of Origin: W8MPD
Check: 28
Place of Origin: Trenton, Mich.
Timed Filed: 0100Z
Date: 1/20/67
To: All AREC Members

Text- The Oakland County AREC banquet will be held February Twenty Five x program on the Antarctic Frontier will be presented by Father Birkenhourer obtain tickets from W8JXU

Signed Stan Briggs W8MPD
EC Wayne County AREC

AMMUNITION ON MOBILE NOISE

Higher voltage levels in present day engines, plus more sensitive receivers, make two-way radio interference a growing problem. Here are suppression techniques which not only improve reception but may add extra miles to your radio range and working area.

"ELECTRONIC FIRE WALL"

To greatly reduce the amount of ignition interference being transferred to the car's entire wiring system, install a coaxial 0.1 mfd. capacitor as close to the coil primary terminal as possible (not the coil-dist. primary terminal). Do not use a conventional bypass capacitor but a filter type, feed-through coaxial design. Ordinary bypass types are effective within an extremely limited frequency (3 to 5 mc) range when installed in the primary circuit.

"TAKE POWER FROM BATTERY"

Also important in two-way suppression is connection of your receiver-transmitter voltage directly to the battery. Do not tap into the accessory - ignition switch. Feedback & interference between the car's electrical system and the radio circuit. Always establish a clean radio ground at the vehicle frame. Ground battery to the frame! engine ground does not suffice.

"TIP ON ANTENNAS"

In addition to picking up the radio signals, the antenna should deliver these signals interference free to the receiver. Make certain the coaxial lead-in shield is firmly grounded at both ends. Insulation should be inspected and all connections clean and

tight. Here are three ohm meter checks you can make on an antenna

- (1) On lowest scale, touch prods to antenna rod and coaxial plug. Resistance should not exceed 5 ohms.
- (2) On highest scale, touch prods to antenna & vehicle ground. You should read open circuit.
- (3) On lowest scale, touch prods to outside of socket and ground. You should get zero resistance.

FROM CHAMPION SPARK PLUGS



