

NORTH AMERICAN SHORTWAVE ASSOCIATION

HEADQUARTERS AT,
HEARTS CONTENT
NEWFOUNDLAND, CANADA

PRES: STERLING PIKE
SECT. TRES. RICHARD D. ROLL

VOL.

1

March 1, 1962

NO. 4

HEADQUARTERS: 265 STILWELL ROAD, HAMBURG, NEW YORK

KEN BOORD WILL PRESENT EASTER DX RECITAL FROM ELWA

Ken Boord of Morgantown, West Virginia, U.S.A., will present a half hour organ recital of Passion Week and Easter Melodies in a special DX program from ELWA, Box 192, Monrovia, Liberia, according to the following schedule, Wednesday, April 18, 0130- 0200 GMT in the Weekly Beam To North America, over 11, 825 and 9, 655 (the time being subject to slight change); Sunday, April 22, at 1000- 1030 GMT over 11, 975 and 21, 535 and also on the same day at 1500- 1430 GMT over 710 kcs. and 3,226. Reception reports should be sent directly to ELWA or Ken himself.

We hope all members will tune in on this special broadcast and send their reception reports to the station or Ken. Would someone like to listen in for the club and make a special report to us on it? - Ed.

MESSAGE FROM THE EDITOR

I want to take this chance to thank all those who sent get well messages to me while I was in the hospital. I am very sorry that I can't thank all personally, but this would be impossible. I am now back at home and at work again, and I mean work, as soon I returned I found quite a pile of letters waiting to be answered. And as I look at the pile now, I notice that it is going down very slow, but sure.

I want to make an appeal to all members. I am now alone at the job of editor. I have no assistant, so what I need is help. Anyone is interested in giving me a hand, drop me a line and we will see what we can work out.

Alan L. Anderson, 7908 Main St., Ralston, Nebraska, writes - I have a Halliarafter 8-108 receiver and "S" meter attached. The antenna is 50' n-s outside and 20' e-w inside. The walls are filled with maps and more than anything else---cards. I collect SWL/QSL cards. I also collect state map post cards. If anyone would send me one from their state, I would appreciate it very much. And gas station maps of states are also a thing I collect. I'm QSL manager for DL8PELAB, SM4-EG4, HA-8-5586 and HZ-SWL/DK.RA.1081. So if you know of anyone who is interested in swapping cards with one or more of these fellows they can do so by sending SWL c/o WPE/BLD at above QTH.

YOUR PERSONALITY BELONGS IN YOUR LETTERS

The writing of gracious and effective letters is rapidly becoming a vanishing art. The lack of time for the thoughtful cultivation of the written word as a means of self-expression is a genuine loss. And yet in our constant effort to convey our thoughts and messages to our friends, aren't we short-changing this medium? The busy and harried individual might well consider closing his door and sitting alone with his thoughts for awhile before composing an important letter aimed at building good will as well as generating friendship. Once mailed, the letter is there for all time; the writer must stand or fall on the record. Given adequate time to think, the individual will realize that no letter should be written in anger; that humor and irony in a letter should be used only by those who have mastered subtlety in the use of words; that the central thought or idea must not be vague or ambiguous, but expressed compactly in the language of the man it is intended for. Above all the writer must be himself and not be afraid to let his individuality show through.

RESULTS OF JANUARY QUESTIONNAIRE

We were indeed pleased with your response to the questionnaire which appeared in the January bulletin, in more ways than one, not only did we have a large turn out, but almost everyone seemed satisfied, here are a few of your reactions. So you will know what the questions were we have listed them before each reaction.

1. Is there anything you think should be in the bulletin that isn't, and vice-versa? I think everyone that sent the sheet in said that they would like to see a card-swapping section in the bulletin. We are happy to inform you that we have done some work on this, and if you will take a peak at the last page of the bulletin, you will find the results!! BCB was mentioned too, see a little further along for BCB announcements!!!
2. Are you glad you joined WASA? Why or why not? Everyone said yes to this question, and that makes us all feel very good.
3. What type of awards program are you in favor of? It was surprising how much the same you answered this question. It came out the same each time, an awards program that is not too hard to earn, but yet not too easy, see the announcement of the program a little further along here and pick the award you want, AND VOTE, with a small club like ours, your single vote could make the difference.
4. Are you satisfied with the club as being run? Everyone agreed that things were being run well.

B. FOR VERIFYING SHORTWAVE BROADCAST STATIONS

- X 1. Heard All Continents
2. Heard All Red- Plus Pink. One card required from each of the following, Russia, China, Poland, Hungary, North Korea, North Viet Nam, Albania, Rumania, Bulgaria, Cuba, Czechoslovakia, East Germany.
3. Heard the Basicest- (*) QSL cards from the following stations, Voice of America, BBC, CBC (Int. Service), Radio Moscow, Voice of the Andes, -HCJB, and a station of your choice.
4. Heard any Five- (*) QSL cards from any five shortwave stations, International type only.

C. FOR WORKING/VERIFYING CITIZENS BAND STATIONS

1. Heard 15 CB stations
2. QSO'd 15 CB Stations- For CB'ers who have worked 15 CB stations and have cards to prove it.
3. QSO'ed Three Members- For CB'ers that have talked with three members of NASA, and have QSL cards to prove it.

D. Misc. AWARDS

1. Heard 10 Different- QSL's from 10 different stations of a different type. For example, one ham, one s/w station, one radio-telephone, one marine, one Army, one Navy, one Coast Guard, one CB, one SWL, and one ECH. You need not need use these type of stations, what ever you wish as long as they are all different.
- X → 2. Swapped all States
- X → 3. SWL Unusual AWARD- Same as under Ham, except SWL-QSL cards required.
4. Swapped 15 Countries- SWL-QSL cards from 15 countries.
5. Swapped 15 Members

There you have it, quite a number of awards, you will agree. Be sure to cast your vote as soon as possible, use the voting form enclosed with your bulletin. Vote for any two in the program, if you check any more than two, we will take the first two that appear on your ballot.

AWARDS PROGRAM PREVAILING RULES

1. In that these awards are rather easy to earn, we are going to be very strict in issuing them, so when you apply for one make sure you fulfill the award perfectly.
2. All these awards marked (*) are for those people who own receivers costing less than \$75.00 only. You may not vote for one of these if your receiver is worth more than this.
3. This awards program is for members of NASA only.
4. A fee of \$.25 will be charged for each certificate issued.
5. You should now mark all your QSL cards with the club letters, NASA, see CB #3 and Misc. #5.
6. QSL cards must be presented when applying for any award, we are not liable for any cards lost in the mails.

5. Which part of the bulletin are you mainly interested in? The shortwave section is the most popular section of the bulletin, with "all of the bulletin" running a close second.
6. Would you like to write for WASA? Everyone said they would like to write little articles for the bulletin, it will be very interesting to see who does now.

There you have it, our sincerest thanks to those who were thoughtful enough to help us out!!!!

NEW HEADINGS

You will notice the new way we are doing the first page of each section of the bulletin, we will do it in this fashion until we can afford to have them printed, or until we have time to do it ourselves. The first page will be done in red from now on also.

BROADCAST BAND SECTION

We are very pleased to announce the forming of a new section of our bulletin, the long awaited broadcast band section. It will be handled by the most capable Nehm P. Arthur, Box 390, RD 1, Endicott, New York. Let's give him a stack of reports for the next bulletin. We really want to make a go of this section so let's really ~~make~~ help John with your reports.

WASA ANNOUNCES--AWARDS PROGRAM

We have drawn up quite a list of awards (in the form of certificates) for you to pick from, look this list over and select two that you like, then find the half sheet of paper enclosed with the bulletin (to members only) and mark off the number of the award you would like to have us issue. Don't wait, the sooner you vote the sooner you will have your program established. There is no explanation after some awards as they need no explanation.

A. FOR VERIFYING RADIO AMATEURS

1. Heard All States
2. Heard All Provinces
3. Heard 10 Countries (*)
4. Heard 25 Countries
5. Heard 50 Countries
6. SWL Unusual Award- One QSL card from each of the following states.
 - a. Your home state
 - b. The biggest state- Texas
 - c. The smallest state- New Hampshire
 - d. Nearest state to you- pick any one of them
 - e. Futherest state from you- Hawaii
 - f. Your favorite state
 - g. The newest State- Alaska
 - h. One of the original thirteen

Duplicates will not be accepted, if your favorite state happens to be your home state you must submit two cards from that state, etc.

NEWS FLASH ----- Boston Record American, Wednesday, Feb. 21, 1962

RUSSIA GIVES BRIEF REPORT OF FLIGHT, JAMS US RADIO

MOSCOW (AP) - Moscow radio and television gave a terse running report of the flight and recovery of John Glenn's orbiting capsule. Radio listeners trying to get reports of the flight directly from America were bothered by Soviet radio jamming. The reporting on Moscow gave the essential details, most of them attributed to U.S. news agencies. At the dramatic moment of Glenn's descent through the atmosphere Moscow radio was broadcasting a condemnation of U.S. relations with Cuba. At the conclusion of the Cuban item the radio began an account of the flight quoting American agencies as saying Glenn's orbit was two months behind schedule and ten months after the flight of Yuri Gagarin. Just as the Voice of America announced that a special broadcast was coming, the jamming station in Moscow pounced on the waveband blotting out the news. This was the precise moment the Destroyer was drawing alongside Glenn's fleeing capsule. Despite the somewhat restrained account of the Soviet Agency Tass, the radio and television, Russians seemed genuinely pleased that the flight was shaping up. When it was over, several expressed complete delight. "Herefha, Herefha, (good, good)" said the policeman who stands the apartment house where the Associated Press is located. ©

There seems to be some argument over the jamming of VOA at the time of the Glenn Flight, see Broadcasting Highlights section of bulletin, some research is called for here!

A very interesting article appeared in this month's Canadian DX Club bulletin, and I hope that by passing it along to you it will be of some help to you, and possibly a little entertaining. I wonder why K3 has didn't QSL to ESGYN with??

The following AERL Radiogram was sent to a K3 ham by a W6 SWL last year. It is a prime example of "how not to get a QSL." Remember the best way to get a QSL is to politely ask, NEVER DEMAND!!

"It is advisable that you inform me if you are without sufficient funds to purchase a QSL card with. I will then send you a QSL card already filled out, ready for you to sign. If necessary a 3¢ postage stamp will be included. The reason you have received this communication, is because it has come to my attention that my SWL signal report of your 5th of March QSO with -----, -----, has undoubtedly reached you by this time, and no reply has come to this monitor station to date. A card from one WPE2--- has been received, but this station WPE6--- has no business with said person or said persons "SWL-QSL Bureau". Any further reports, and including these in the past, are and were to be sent direct to WPE6---. I shall be looking for your reply promptly.

Thank you,
Shortwave Monitor Station WPE6---

I think it needless to say that such a snide, sarcastic type of message would unlikely to bring a reply from anyone!!

SHORTWAVE

SECTION

NEXT DEADLINE
APRIL 5, 1962

EDITOR: Raymond LaPointe - 446 East Sixth Street - South Boston, Mass.

I wish to welcome two sections sent to me by Ken Boord, editor of "The World at a Twirl". I hope that more sections will follow for future bulletins. Many thanks Ken.

FROM THE PUBLISHERS.....BOOK REVIEWS BY.....KEN BOORD OF "WT"

World Radio-TV Handbook (16th Edition) Published by O. Lund-Johansen, Linderffsalle 1, Hellerup, Copenhagen, Denmark. Order directly from Gilfer Associates, Box 239, Park Ridge, New Jersey.

Virtually a complete picture of broadcasting and television throughout the world, the 1962 World Radio-TV Handbook contains current, complete information on broadcasting, (longwave, mediumwave, shortwave, AM) and also TV stations around the globe. Includes schedules, identification data (callsigns, interval signals, announcements by languages and slogans, ect.) -all arranged by continent and country, plus a running list, by frequency, of shortwave stations; informative and instructive articles on how to tune and verify international stations, and on many other pertinent subjects by internationally-noted experts. Profusely illustrated. Introduces the beginner to literally thousands of broadcasting stations, and affords the experienced listener an invaluable guide to program services of specific countries. Designed to aid the international radio listener to get the maximum enjoyment and benefit from his receiver. Truly a must for the serious DX'er!!!!

How to Listen to the World. Published by O. Lund-Johansen, available at Gilfer Associates, or see below.

Brand-new is this guide to international radio listening (shortwave, mediumwave, FM, and satellite), written by internationally known experts, including many of the world's top-notch listeners themselves. A great help for the beginner, an aid for the veteran, and a reference book of great value to the expert. Articles, many of them illustrated, cover a wide variety of topics, for example how to find and identify stations; the radio leg and how to write reports in various languages; reception reports in different parts of the world by the time of day and by seasons; a list of programs in English, French, German, Spanish, and Swedish; how to listen to amateur stations; how to select and operate a shortwave receiver; different types of antennas; and other equipment to improve your reception, and how to hear satellites from outer space. You'll get better reception and more DX by using the latest guide to shortwave listening.

Best of 73's to NASA members,
Ken Boord, Editor, "WT"

The book, How to listen to the World, is also available from Richard Jordan, the president of the DX UNLIMITED SHORTWAVE CLUB, if you are going to order this book, why don't you plan on ordering from Rich? The cost of the book is \$1.50 plus a dime for mailing. You had better order real quick as this is a first edition, and you will want to have one. His address, DX UNLIMITED SHORTWAVE CLUB, 7742 28th AVENUE NORTHWEST, SEATTLE 7, WASHING. (And thanks for your help too, Rich!!!)

CONTEST ## 3 - - - - - CONTEST ## 3

This is a much different contest than we have had in the past. But it will give all a chance to see what is going on up on 11 meters. I hope that all will enjoy it. This contest is for SWL's only.

FREQUENCIES: 26, 965 thru 27,265 Kcs.

TIME: No special time. Note: skips are usually on mornings or early afternoons. A total listening time of one hour should be observed.

SCORE: Two points for every station logged, 10 points for every state, 50 points for each country logged.

RESULTS: Send your results to Ray LaPointe, 446 East Sixth Street, South Boston, Mass.

This is a good chance to collect a new kind of QSL for your shack wall, as CB'ers QSL about 100%. I can furnish all members with the address of their catches (W's and Q's only) just send list and SASE and I will return address with your list. (10-20's)

Set up logs as follows: Example:

<u>Radio Stations</u>	<u>Channel</u>	<u>Time</u>	<u>Date</u>
<u>KBA0018 & 1Q5685</u>	<u>6</u>	<u>1800</u> -ST	<u>3/1/62</u>

Also please send a few channel reports to our CB editor so that he can print band activities around the states. This would be a great help to him. He does such a fine job, we should show him how much we appreciate it. Last month only two contest reports were received, so please this month let's have at least 20 reports, for the size of the club that isn't very many. Please drop me a line stating if you wish to have more of these contests.....Ed.

Here is the past list of the last few months contests score.

	<u>COUNTRIES</u>	<u>POINTS</u>
1. Terry Leder	16	215
2. Allan J. McBride	8	205
3. Richard Reil	5	40
4. Jack Kekak	7	35

The scoring will remain the same for all meter band contest (number of stations times the number of countries) the CB contest will remain the same as above.

SHORTWAVE STATION REPORTS

NEXT DEADLINE FOR THIS SECTION IS APRIL 5, 1962. All reports to me sent to Editor, Ray BaPointe, 446 East Sixth Street, South Boston, Mass. All times GMT, except where indicated. Will all members please use GMT!!!!

- AUSTRALIA:** Radio Australia news at 0845 on 9,570 Kcs. (Ren)
- BULGARIA:** Sofia Calling, 2330 on 9,700 Kcs. (Kocak)
- CAMEROON:** Radio Yaounde, 1430 CST on 9,657 Kcs. (Webber)
- CANADA:** CHNS, Halifax, N.S., 1225 in English on 6,130 Kcs. (Leder) CFRB, Toronto at 20:00 CST on 6,100 Kcs. (Hailey) CHU, Dominion Ob. All day but best after 1800 on 7,335 and 14,760 Kcs. (Fincher)
- CHINA:** Radio Peking, 1530 to 1605 EST, on 9,457 Kcs. news in English, political talks; Program "Opinion in Peking". (Lenk), Radio Peking on 9,800 Kcs., 1920 CST; (Hailey)
- COLOMBIA:** Bogota, HJKJ, 49MB at 2030 CST (Webber)
- CUBA:** Radio Habana, on 6,000 at 1000 CST (Hailey); R. Habana, news in English at 0500 on 5,990 Kcs. (Ren)
- DOMINICAN REPUBLIC:** Radio Caribe, 0810 on 2,210 Kcs. with Latin music, (Ren)
- ECUADOR:** HCJB, Quito, program, Back to the Bible, in English, 1530 on 17,990 Kcs. (Lodger)
- FRANCE:** (NO STATION GIVEN) News at 1300 on 17,765 Kcs. (Lodger)
- GERMANY:** Voice of Germany at 0900 on 6,200 with lessons in German. (Hailey)
- GHANA:** Accra at 1510 news in English on 21, 670 Kcs. (Leder)
- GUYANA, BRITISH:** Radio Demerara, 0525 to 0630 EST on 5,981, program music by the sunshine boys.
- HAITI:** News in English at 1215 on 6,178 Kcs. (Leder)
- HOLLAND:** Hilversum on 6,200 Kcs. at 1940. (Hailey)
- ITALY:** Rome at 17,800 Kcs. at 1540 with news. (Leder)
- IRELAND:** Dublin, 2300 to 2400, not sure but it could have been a test. On around 6,000 or 6,100 Kcs., this is one of the newest stations on the shortwave bands in which their broadcasts are loud and strong enough for E. N. America and are interesting. They also beam signals to Africa for the Irish signal corps. Would someone please give me a hand in getting more info. and reports on this station?
- JAMAICA:** Kingston, Test station testing on 6,000 Kcs. at 2025. (Hailey)
- JAPAN:** JOA/BI7 in English at 2315 on 17,795. (Leder)
- JORDAN:** Amman, Hashemite Broadcasting Service at 1916 to 1945 on 9,560. (Fincher)
- MOROCCO:** Rabat, Moroccan Broadcasting Corp. 1830 to 1845 on 11,735. (Kocak)
- LIBERIA:** Monrovia, ELWA, 11, 825 KCS. 0100 - 0200 GMT, EXCELLENT SIGNAL! (WOOD)
- NETHERLAND:** Hilversum at 2130 to 2230 on 9,590. (Fincher)
- NORWAY:** Oslo, program, "Norway this Week" at 1715 on 17,825 Kcs. (Leder)
- PORTUGAL:** Lisbon News in English at 1740 on 17,995 Kcs. (Leder)
- SWITZERLAND:** Berne, HER4 at 2215 on 6,300 Kcs. (Hailey)
- SPAIN:** Voice of Spain at 0800 on 9,336 and 6,010 Kcs. in English. (Leder)
- U.S.S.R.:** Petropavlevsk in Russian at 1750 on 17,822 Kcs. (Leder). Radio Moscow at 2400 on 7,200 Kcs. (Ren) Radio Moscow teaches Russian on all of their frequencies from 2337 to 2356 on Sundays. (Kocak)

FAITHFUL MEMBERS

Ren- Is this you Ronald Geise?
Jack Kocak
Terry Leder
Tom Fincher

Walter E. Lenk
Dersey E. Wood
David Hailey
Curt Webber

VOICE OF AMERICA BROADCASTING TRANSMITTERSU.S.A. TRANSMITTERS

<u>LOCATION</u>	<u>CALL SIGNS</u>	<u>TRANSMITTER POWER (KW)</u>
1. BETHANY, OHIO	WLWD 1-2-3-4-5-6	110
2. BOUND BROOK, N.J.	WBOU 1-2-3-4-5-6	50
3. BRENTWOOD, L. I., N. Y.	WDSI 1-2-3	50
4. SCHENECTADY, N.Y.	WGEO-1	100
"	WGEO-2	50
"	WGEO-3	25
5. WAYNE, N.J.	WDSI 5-6	50
6. DELANO, CALIF.	KCBR-1	200
"	KCBR 2-3	50
"	KCBR 4-5	100
7. DIXON, CALIF.	KNBH-1	200
"	KNBH 2-3	50
"	KNBH 4-5	100

OVERSEAS TRANSMITTERS

<u>LOCATION</u>	<u>DESIGNATION</u>	<u>TRANSMITTER POWER (KW)</u>
MUNICH, GERMANY	Munich A (1196 KC/S)	500
	Munich C (173 KC/S)	1000
	Munich 1-2	75
	Munich 3-4	100
	Munich 5-6-7	5
"COURIER", RHODES, GREESE	Courier A (1259 KC/S)	150
	Courier 1-2	35
TANGIER, MOROCCO	Tangier 1-2-3-4	100
	Tangier 5-6-7-8	35
	Tangier 9-10	50
Thessaloniki, GREESE	Thessaloniki A (791 KC/S)	50
	Thessaloniki 1-2-3-4	35
WOOLFERTON, ENGLAND (Leased from BBC)	3 Transmitters	50
COLOMBO, CEYLON (Leased from Ceylon)	Colombo 1-2-3-4	35
	Colombo 5	10
HONOLULU, HAWAII	Honolulu 1-2	100

OKINAWA, RYUKYU IS.

Okinawa A (1180 KC/S)	1000
Okinawa 1-2	35
Okinawa 3	15
Okinawa 4	5
Okinawa 5	100

MALOLO, PHILIPPINE IS.

Malolos A (920 KC/S)	50
Malolos 1-2	50
Malolos 3	7½

SAN FERNANDO, PHILIPPINE IS.

Philippines B (1140 KC/S)	1000
Philippines 1-3	35
Philippines 3	5
Philippines 4	15
Philippines 5-6	100

The frequencies of medium and long wave transmitters are indicated. Other transmitters are shortwave.

CB

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NEXT DEADLINE:
APRIL 5, 1962.

SECTION

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EDITOR: Robert "Bob" McAfee - 2 Euclid Ave. - Quincy 89, Mass. - 1Q3885/WPE1BTW

Omnidirectional Antennas

This month we will talk about the importance of a good antenna system, without which your CB transceiver is worthless. In shortwave listening the antenna isn't as critical, but when you are transmitting (not necessarily CB) you need a good antenna. An Omnidirectional antenna (one which can transmit and receive equally well in all directions) is used for general all around use. You have a wide choice of such antennas for base or you can make your own simple doublet antenna from a piece of 72-ohm twin lead as shown in figure 1.

A full size ground plane antenna for CB is shown in figure 2. It consists of a vertical whip about 9 feet long. At the bottom are three or four drooping rods, (which protrude from the hub where the vertical radiating element is attached.) which are connected together, but insulated from each other. Some of these antennas have telescoping rods which are extended when in operation.

Another type of omnidirectional antenna is the coaxial antenna. It does not have horizontal or drooping elements. It looks like two pieces of vertical pipe of which the upper section is generally of smaller diameter than the lower section. For the class D band, a coaxial antenna is about 18 feet long, see figure 3.

Directional Antennas

When communication in all directions is not required, a different type of antenna is used, this is called a directional antenna. It will transmit and receive better in one direction (unidirectional) or two (bidirectional) directions than in all other directions. Not only does a directional antenna increase the strength of the signal, and range, but it also reduces radiation and reception in other directions.

For concentrating most of the energy in one direction a yagi antenna can be used, see figure 4. This is also called a three-element beam antenna. More complex yagi arrays may have as many as five arrays. One such array, consisting of two yagi antennas, side-by-side, has a rated gain of 13db in the forward direction. This means that the effective radiated power is twenty times as great as the power fed into it by the transmitter! Thus a class D transmitter which has a output of about two watts (for a five watt maximum output) can be as effective as a forty watt transmitter connected to a conventional antenna.

Mobile Antennas

The most commonly used mobile antenna is the quarter-wave vertical whip, about nine feet long. It is mounted by means of a spring assembly to the bumper cowl, or fender of a vehicle. The body of the vehicle serves as the ground plane, and it is part of the antenna system. Because the body of the vehicle shields the antenna in some directions, it is more effective in some directions than in others. Ideally, the antenna should be mounted in the center of the metal roof of the vehicle, but there it would be both cumbersome and unsightly, to say nothing of the damage it does to the top of the car. More attractive are the base-loaded whip antennas which are much shorter than a full quarter wave whip. At the base of the shorter whip is a coil, called a loading coil. This coil, which is part of the antenna, makes it possible to use a much shorter whip as an antenna. The shorter whip, without the coil has too little inductance at the operating frequency but the coil provides the proper inductance, raising the standing inductive reactance of the antenna high enough to

cancel out the capacitive reactance of the antenna, so the antenna looks like a resistance at the operating frequency. While a base loaded is not as efficient as an ideally located quarter-wave whip, it often works as well, if not better, when installed in the center of the roof on the vehicle, see figure 5.

Transmission Lines

The transmitter and the antenna should be connected together with coaxial-cable only, not microphone cable or twin lead wire. The kind you should depends upon the length of transmission cable you wish to use. Always get your cable in one piece; don't attempt to splice coaxial-cable. If two pieces must be used join them at the break with the proper coaxial connectors. For runs of 50 feet or less, you can use RG58/U (50 ohm) or RG59/U (75 ohm) cable. RG58/U cable should be used for groundplane antennas and coaxial antennas while the RG59/U cable should be used for dipoles. For runs of 50 feet or more, use RG8/U cable because it has a lower loss per foot than the RG58/U or the RG59/U cable. If you want to get maximum range, and cost is not a consideration, you can use extra heavy RG17/U or what is known as hollow transmission line.

Figure 1.

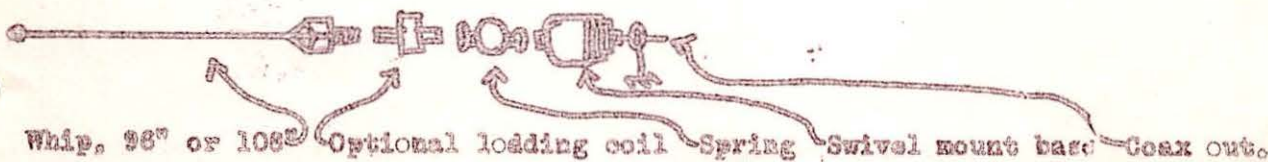
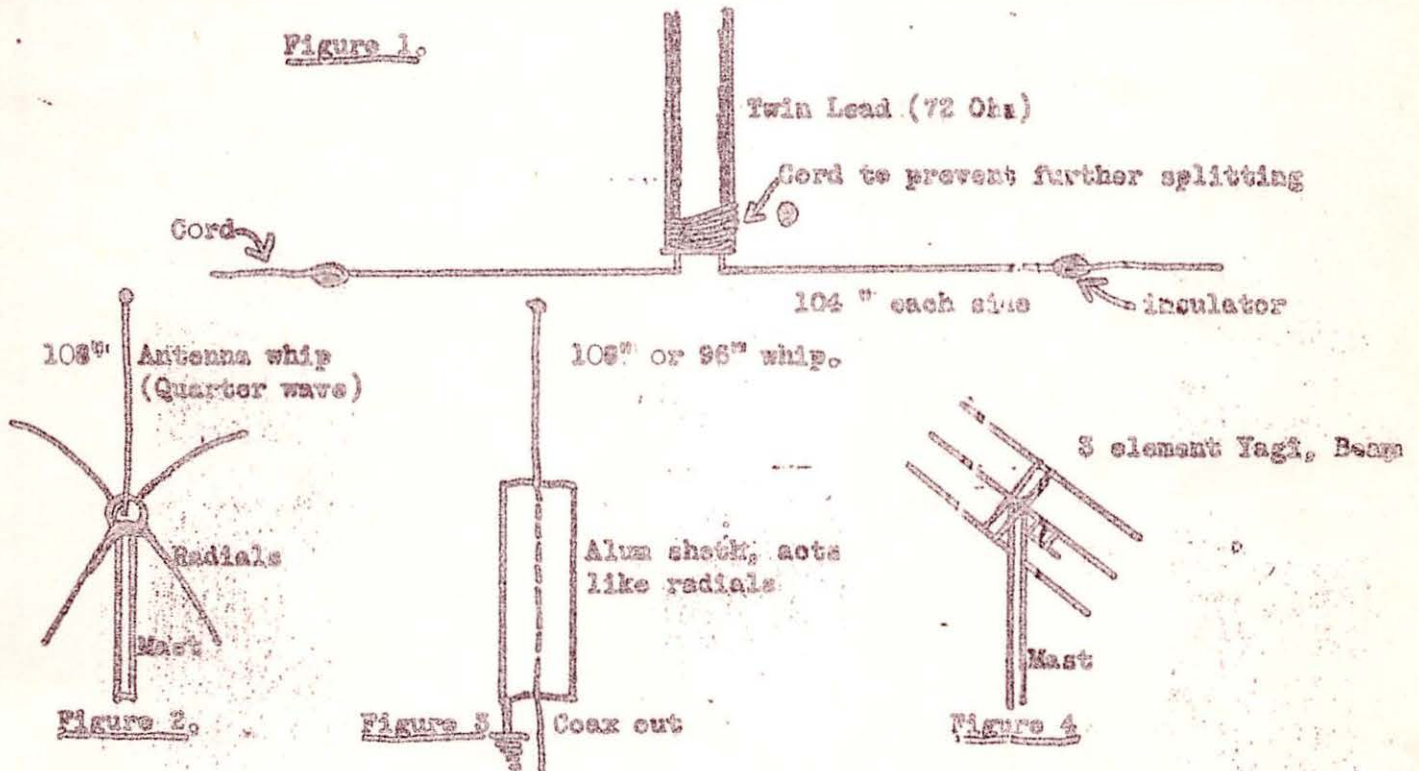


Figure 5.

This month I would like to thank the Antenna Specialists Co., Cleveland 8, Ohio, for their pamphlet on the new magnax 27 antenna. I bought one of these a couple of weeks ago, and just like the pamphlet states, this $\frac{1}{2}$ wave ground plane will out-perform any ordinary groundplane, coaxial, or collinear antenna, but, it has the advantages of radiating it's energy in all directions equally well, while a beam antenna must be rotated to obtain maximum performance. I know a few other CB'ers who are using this antenna with equally good results. It seems like an excellent buy for the money.

In last month's bulletin it was stated that the CB call prefixes for 1962 would be R's and in 1963 they would be S's and so on. The FCC in Washington has changed all that now. It is now handing out what is known as the "K" system of call prefixes. The following is a list of the new call letters in the U.S. and Puerto Rico, these will all be followed by four numbers.

Zone Number	1. KBA and KBS	Vermont, Maine, N.H., R.I., Mass., and Conn.
	2. KBG and KBH	New York, New Jersey
	3. KCC	N.J., N.Y., Del., and Penna.
	4. KCF	W. Va., Md., Del., and Va.
	5. KCI	N. Carolina, Virginia
	6 $\frac{1}{2}$ KDB and KDC	S. Car., N. Car., Tenn., Ga., and Ala.
	7. KDE	Florida
	8. KEA	Miss., Ark., La., Fla.
	9. KED	Texas
	10. KEG	Texas, Oklahoma
	11. KEV	Calif., Nev., Ariz.
	12. KFC	Wash., Oregon, Idaho
	13. KFF	Wash., Montana, Idaho
	14. KFI	N.M., Utah, Colo., Wyo., S.D., and Dak.
	15. KGB	Minor Wisc., S.D., N.D.
	16. KGE	Kansas, Neb., Mo., Iowa
	17. KGH	Wisc., Ill., Ky., W. Va.
	18. KHA and KHB	Mich., Ohio, Ky.
	19. KHE and KHF	Mich., Ohio, Ky., and W. Va.
	20. KIC	N.Y., Penn., and Maryland
	21. KIF	Hawaii
	22. KII	Puerto Rico
	23. KJB	Alaska
	24. KJE	Wash. D.C., Va., and Md.

The latest word from the FCC on the use of single side-band transmissions is that they are legal under part 15 of the rules but they must not interfere with the other 99.999% of the people using the conventional AM transmissions. No manufacturer yet has produced a SSB transceiver. If your transmitter has the full five watts input to the final, and if it's well matched to a good antenna system, SSB will increase your transmitter's power by approximately eight times, so if you have watts output to the antenna (AM) using SSB transmission you will be transmitting approximately forty watts of energy!! Some have been using SSB for years with excellent results over the conventional AM system. TV stations use what is known as vestigial side band transmissions which are a cross between AM and SSB. SSB consists of both an upper and a lower sideband. All of either the upper or lower sideband is removed and added to the other sideband. In vestigial sideband part of one sideband is added to the other and the other part of that sideband is just dropped, and is not transmitted. TV stations do this to cut down on the amount of bandwidth they need (6 Mc.), while a CB transmitter has only 4 kc. bandwidth. All CB transmitters using SSB will only need 4 kc.

bandwidth, thus instead of the 25 channels now allotted to it, using SSB you can effectively transmit on 46 channels. Since the CB channels are all overcrowded now this may be a good solution.

In the next issue of the bulletin we will have a special report on the forthcoming Canadian CB'ers.

Well until next time-

75's

CB -B O B

BROADCASTING

Next DEADLINE:
APRIL 5, 1962

HIGHLIGHTS

EDITOR: Richard D. Roll - 265 Stillwell Road - Hamburg, New York

RADIO MOSCOW PONDER'S REPLY

DALLAS, Tex., Feb. 8 (NASA)--The press secretary of the Russian Embassy in Washington said Thursday that Radio Moscow may want to reply to a week of broadcast by six Radio stations in the United States. The stations are WYSL in Buffalo and five others owned by the McLendon Corp. of Dallas. The Week of broadcasting Radio Moscow news in place of regular news ended at 11 PM Wednesday. Oleg Scholev, press secretary of the Russian Embassy, telephoned Joe Long, news vice-president of the corporation. "We are thinking now in terms of giving a reply through Radio Moscow to your broadcasts" he said. He asked Mr. Long to send them tape recordings of the news casts by the McLendon stations and clippings from American newspapers, so he could determine how much publicity the broadcasts were given and how the press reacted. Since the McLendon stations did not comment on Radio Moscow news or try to interpret it Mr. Long said he is not sure what sort of reply Radio Moscow plans. He said he thinks the Russians may want to reply to an "editorial" presented by the stations to promote the broadcasts before they started. It accused Radio Moscow of spreading a red stain of lies over the English-speaking world and of broadcasting "a constant stream of lies and invective." Mr. Long offered the Russians equal time after the editorial was broadcast. He said the reaction to the McLendon broadcasts was 80% favorable. *

BBC RAISES SPENDING

LONDON, Jan. 24 (NASA)--The government will spend \$12.5 million for improvements in the transmission of British Broadcasting Corp. overseas programs, particularly in Asia and Africa, it was announced today. *

FCC WANTS LAW

WASHINGTON, Jan. 12 (NASA)--The federal COMMUNICATIONS Commission plans to ask congress to enact a law requiring that all new television sets be equipped to receive ultra-high frequency broadcasts as well as very high frequency UHF signals. FCC chairman Newton Minow told the National Press Club on the 11th that the action was needed to remedy a shortage of TV stations. He said most of the 55 million receivers now can receive only VHF channels 2 to 13, while most 70 UHF channels were not being used.

INQUIRY GOING WELL FCC SAYS

Washington, Jan. 31 (NASA)--Federal Communications Commission chairman Newton Minow taking a break from hearings into television programming, said today the networks are cooperating and the inquiry is "progressing well." The FCC recessed the hearings until the first of February when NBC will resume testimony. The FCC held a regular meeting today on regular matters also. Mort Wagner, NBC vice president for programs, testified on the 30th that the entertainment programs "where public issues are set at stake, we have always gone

on the theory that the man who pays the bills has a right to voice on the product. But he said changes made by the sponsors are not "significant as far as basic content is concerned, and cited examples such as an automobile manufacturer who doesn't want a car wreck on his program. Another witness, James A. Stabile, NBC vice president and associate general attorney, said the network does not select programs . . . on the basis of financial interest which it has been able to obtain in the property. In fact, he said, NBC shows a net loss on the programs it helps produce and partly owns and must "look to its revenues from time sales to offset it's program losses and provide a profit." *

FCC ENDS PROBE ON TV PROBLEMS

WASHINGTON, Feb. 8 (NASA)--Chairman Newton Minow said Thursday the Federal Comm. Com. "has a lot of studying to do" after nearly three years of hearings on TV problems. Until then, he said, the FCC will make no further recommendations to congress. However, Mr. Minow said, "it seems to me that government regulation is here to stay." ABC, on the 7th, ended the final three week phase on network TV programming by joining NBC and CBS in opposing government regulation of the networks. *

TWO-WAY RADIO INSTALLED

SPARTA, N.Y., Jan. 31--(NASA) Three two-way radio units on the citizens band have been installed in the trucks of the Town of Sparta highway department, according to Milton Hynes Hynes, superintendent. The units, approved by the town board, cost about \$200 each. Sparta is the second town in Livingston County to install radio communications in highway trucks. The town of York has radio units connected with the Livingston highway depart. *

SECOND EFFORT TO ORBIT WIRE NEEDLES IS PLANNED

NEW YORK, Feb. 2- Plans are underway for a new attempt to girdle the earth in a donut shaped ring of copper "hairs." The original attempt was unsuccessful last October. A spokesman for the Lincoln Labs. of Massachusetts Institute of Technology, which devised and directed the experiment has confirmed that a tentative date and plans for a new attempt are in preparation. The goal is to see if a belt of metal wires can be used as a reflector for military radio communications during a time of crisis. Military men hope the hairs may provide a means of communication immune to jamming and free from other forms of interference. The project has been strongly opposed by astronomers in many lands and has been the subject of many resolutions by the International Astronomical Union and the International Scientific Radio Union. It has been feared that the metallic fibres would reflect back a chaotic jumble of man made radio signals that, to date have radiated harmlessly into space. This, it has been felt, would partially cut the world off from the rest of the universe. Because of such fears several reviews were carried out by U.S. scientists, including a special panel of president Kennedy's science advisory committee. This panel reported that the experiment could be done without danger to science. However the loss, the launching caused dismay. Sir Bernard Lovell, British Radio Astronomer, called it a strain on the U.S. space program. Leading U.S. astronomers found themselves in uncomfortable position of defending, before foreign colleagues, a project for which they had little enthusiasm. The crux of the objection is the belief that the experiment, if successful, will lead to serious pollution of space surrounding the earth. If further experiments were not projected, they reason, there would be no reason to worry out this one. They feel that assurances to the contrary, military considerations, will prevail.

BOYS WITH RADIOS CAUSE PERIL

HAMBURG, GERMANY,- Radios operated by schoolboys may have caused major air crashes, a statement issued by the German post office declares. These illegal radio transmitters have on three occasions prevented Hamburg, airport radio operators from contacting planes in the air. Boys are using their stations to transmit inside info. on questions on forthcoming school examinations. And to broadcast records it declared. * (36)

VOICE OF AMERICA GETS THROUGH MOST OF RED JAMMING

WASHINGTON, Feb. 20--The Soviet Union used some 200 transmitters in attempts to jam about one-third of the VOA broadcasts, a study by the U.S. Information Agency indicates. The jamming is selective, the survey shows, and tries particularly to drown out Voice reports on such subject as friction and unrest in the communist bloc and Soviet actions abroad. The U.S. has 87 broadcasting and relay transmitters beaming 4 1/2 of programs in 17 languages to the USSR and its European satellites. According to Lowell Bennet, the agency's public information director the jamming is quite effective in some small areas of certain large cities where the jammers are concentrated, but as ineffectual in the countryside-- and in some cases the countryside begins right outside the city limits, for instance, Voice broadcasts are "consistently intelligible" just 20 miles from the heart of Moscow. The study was made of 2874 "units" broadcast. Each "unit" was made up of news, a feature and a commentary item, on one of the 20 major topics studied. The Soviets jammed 833 of the units. Three of the topics apparently intentionally not jammed, through some selective jamming on specific occasions was practiced. *

LITTLE JAMMING OF GLEN SHOR

WASHINGTON, Feb. 20 (NASA)--The Voice of America Broadcast live American first orbital shot on Feb. 20, 1962, in five different languages to the peoples of the world. They were Mexican, English, German, Russian, and Spanish. The Soviet Union jammed little, if any of these transmissions, it was reported today, by VOA officials. *

US. TO PICKUP ENGLISH TV

LONDON, Feb. 20 (NASA)--The first live TV pictures from Britain to The U.S. may flash across the Atlantic from a bleak but historic site on the Cornish coast. From a satellite to be launched on May 22, the signal will be picked up by a newly erected ground station in Maine, and the picture will appear in American homes across nation. The feat already is being heralded as significant as Marconi's first radio signal, across the Atlantic 61 years ago. *

CUBAN TV EXPANDS

HAVANNA, Feb. 23 (NASA)--Cuba's western most province of Pinar de Rio has gotten its first TV station. The Fidel Castro Regime has installed a tower at El Tejar de Canaricobal to pick up and relay to the station the signal of Havana two government controlled stations. *

FCC PUTS EM OFF THE AIR

FALLS CHURCH, VA. (NASA)--Bruce Wahl, 13, in his bedroom at Falls Church Va. and ohun David Lester, 14, with their neighborly radio station have been transmitting illegally to homes in this area. Needless to say they have been closed by the FCC. They built the neighborly transmitting system with old TV parts. Afternoons after school, they broadcast news, weather, and music. FCC prober told them unlicensed stations could be fined \$10,000 or jailed! The call of the station was a composite of the boys last names, and it operated on 1/10 of a watt. It was in operation for one month, and the range was about nine homes. they were closed by a prober one day after about 45 minutes on the air, they first saw him pointing to a gizmo on the bedroom window, upon which their antenna was connected. * (38)

We had some interesting articles on Radio Astronomy, but as we are late, we will skip it until next month. Here are the credits for this section...

15. Charles Curry
7. Jack Kosak
8. Tom Fisher
11. Bob McAffe
12. Terry Leader
13. Ronald Geise
18. Tom Mann
22. Bill Eddings
26. Jack Elias
28. Al Anderson
30. David Hailey
34. Craig Kleinfeld
35. Jezz Cull

My personal thanks to those who send in articles for this section each month,

73,
RUR

SWAP — SELL — STEAL

By the members of NASA

This is a new section this month. We hope very much that you will patronize it with your ads. There is no charge for NASA members. We hope to include, from time to time, commercial ads that would be of interest to you. Anyone interested in commercial advertising in this section may write to us at headquarters, see front page of bulletin.

To start the ball rolling we have a notation from Bill Eddings.

FOR SALE OR SWAP....Recordio Mono Hi-Fi 2 track tape recorder, 3.75 and 7.50 speeds, all size reels. Pushbutton operated. Will sell for cash or swap for shack equipment....make me an offer, write for details. Bill Eddings, 1521 Fifth Ave., Altoona, Pa. (713) 22