



NOARS Log



April 2018

K8KRG

Volume 54, Issue 4

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Prez Sez

Spring has sprung (hopefully); now it's time to prepare for the season. By that, I mean building or repairing and erecting antennas and cables that suffered this winter. You should be planning/preparing for Field Day. I expect greater NOARS participation this year from our members. Don't let LCARA outdo us at Field Day. Even if you can only be there during the daytime, be there. This year we will have proper signage at this major event, so everyone knows who we are and why we are there and what is occurring. So get your antennas ready and equipment ready. I would like to see all members in NOARS apparel on Field Day.

We hope to have more events during the summer to attract new members and let the community know *who* we are and *what we do*. The more participation the

better the event!

You are also invited to Antenna Day put on by ARES, on April 28th, also at Indian Hollow Reservation. You will see many antennas in use and see how well they perform in the field and the various equipment setups.

I want to compliment you all for the increased attendance at meetings. It's always good to see everyone attending, but many more need to make the effort to attend.

I do need to fill several committee vacancies, so think seriously about giving a little time and effort doing things to help the club, especially helping teach a licensing class. This can help increase our membership. I am a prime example. Well, have a good month.

73

Dave KY8OSU / President

April Meeting: Build a 20 M Bazooka Antenna with Clark, N8PZD

Message From the VP

It is now officially spring but as it goes with or without the ground hog involved, we got another zap from Mother Nature in the form of white powdered road grease. More radio play days!

The Hamfest report was good. Being able to bring hams together for some swap-n-shop was great. Thanks to those who stepped up there. I kinda felt lost without the smell of hotcakes but all good things come to an end and I don't have to clean up the kitchen.

The repeater upgrade plan will get us up ahead of many other groups, being able to combine digital for those who want to go that way, and still have the analog we

have been accustomed to with traditional equipment. Thanks to Carl, W8KRF for staying with this. Hopefully we can get a 20 meter bazooka antenna together at the next meeting. Field Day is approaching quickly. Use some of the contests to get familiar with your rig, speedy fix-it stuff, and build up your QSO speed. Get on the Rookie Roundup and see how far the signal goes out. Headphones are a must to keep ambient noise out of your signal-sniffing ears. For you first time CW testers, there is no comparison - doorbells, tv noise, phone ringing, kids fighting over favorite jelly just goes away. The Easter Bunny will soon add more things for the kids to trade – fight over.

Proposed Change in the Bylaws

A change in the bylaws will be voted on at the April meeting to change the start time of the meetings to 6:30 PM. Starting the meeting earlier and keeping the business part of the meeting to an appropriate length will allow for a longer program time.

Current Article IV Section 1

Regular business meetings will be held the third Monday of each month at 1900 hours at a place determined by the President with the consent of the board. Meetings may be changed due to holidays or special events.

Proposed New Article IV Section 1

Regular business meetings will be held the third Monday of each month at **1830** hours at a place determined by the President with the consent of the board. Meetings may be changed due to holidays or special events.

Remembering Richard Cervelli

A memorial service for Richard Cervelli, K8RWC SK will be held on April 21, 2018 at 11:00 AM at the Senior Center located at 11 Bennett Point Drive, Norwalk, OH

44857. More information can be found at <https://www.dignitymemorial.com/obituaries/cleveland-oh/richard-cervelli-7794570>

You Are Invited

Please join the Public Relations Committee in reviewing the new NOARS brochure. We will meet on Tuesday, April 3 at 7 PM at the home of the Wilkinsons (KC8FOS &

N8FDY). Our address is in the NOARS club roster. Anyone who wants to see this exciting development is more than welcome to attend.

Public Service Opportunity with Special Olympics

Tom, W8KYZ and Chet, K8KIZ, will volunteer at the Elyria Regional Special Olympics Track and Field Meet on May 11. They are looking for at least three more volunteers to participate in this public service opportunity. Operators will take one of several positions on the field, and relay event information to and from the press box. Bring a fully charged HT for simplex transmitting and receiving. You may want to bring a speaker mic and earphone. You will need to be there from 8:30am until

approximately 1:00 PM. FYI - Chairs may not be available during the event. You will probably receive a t-shirt and brown bag lunch. Bring your own coffee. Dress warmly, in layers.

Forms need to be completed and returned to the event's Volunteer Coordinator by Monday, April 9. For more information contact Tom, W8KYZ, Chet, K8KIZ, or Andrea Orr, Local Coordinator at orrandrea@elyriaschools.org

March 2018 NOARS Membership Meeting Attendance

Dave, W1AFC	Joe, W8GWD	Bob, W8OOT	Matt, KD8VTX
Fred, N8AHS	Harold, K8HRD	Dave, KY8OSU	Bill Sheehan, Jr., K2WJS
Dan, W8AJF	Bob, W8IMO	Tom, W1PDI	Tom Southan, W8WLI
Al, N8CX	Keith, K8KBZ	Patrick, K8PJS	Mark, K8WON
Bill, KE8DIF	Chet, K8KIZ	Clark, N8PZD	Leon, KB8WUA
Tom, N8FDY	Carl, W8KRF	Bob, W8RET	Visitors and Guests
Elaine, KC8FOS	Tom, W8KYZ	Joe, W8SSE	Allen Higgins
Russ, KE8GNX	Dave, KD8MXE	Stephanie, KD8TCZ	Barb Moriarty
Ted, W8GUH	Bob, W8NNC	David, KD8TJD	Mike Paotetta

April Birthdays - Happy birthday!

WD8CSP, Ned Jones
 KE8ALW, Tom Cole
 K8WRS, David Semanik
 KE8FTQ, John Sutter
 KW7XX, Dean Lioi
 K8KGX, Dan Stauffer



If your birthday doesn't appear here it's a good chance that it's not in our database. Please contact: Carl, W8KRF so we can wish you a Happy Birthday!

Heard on the Nets

W1AFC	KC8FQV	W8KYS	AC8SV
K8AGV	KE8GKO	W8KYZ	W8TGF
K8AGW	KE8GNX	KB8LBH	WB8UPA
N8AHS	W8GUH	WA8LGM	KD8VIQ
WD8BOU	W8GWD	KD8MEE	KD8VTX
KA8BPU	KD2HCE	KD8NGC	W8WLI
WA8CAC	K8IIT	W8OOT	K8WON
WD8CSP	KE8IXM	KB8ORE	N8WS
N8CWF	K8KBZ	KY8OSU	K2WJS
N8CX	K8KGX	W1PDI	NC8X
WA8ERA	W8KRF	N2PSV	N1XIO
N8FDY	K2KSU	W8RET	WA8YVF
KC8FOS	KD8KWO	K8RTR	



Thanks to March Net Controls

Al, N8CX
 Tom, W8KYZ
 Dave, KY8OSU
 Bob, W8RET
 Mark, K8WON
 Tim, NC8X

Darlene Ohman Special Life Membership

Darlene Ohman, KA8VTS, has served NOARS in various capacities for many years. She's been the NOARS Secretary, as well the perpetual Chair of Winter and Summer NOARS Hamfests. She's also been in charge of Sunshine Communications. "Dee" holds a General Class License. Darlene received her Novice License in



1985, became involved in NOARS, and has been active ever since. When she was the subject of the February 2016 Monthly Highlight, Darlene said, "I enjoy the friendship from the members. I enjoy the feeling of accomplishment that I get from doing a good job with the Hamfests."

Ohio Section ARES Conference

Hey Gang, the 2018 Ohio ARES conference will be held Saturday, April 7 at the Marion Technical College / OSU Marion campus! Doors will open at 8am and the meeting will start promptly at 9am.

We have a great venue with the use of 150 plus seating lecture facility with excellent audio / visuals, and a wide selection of lunch places nearby! This year's keynote speaker is already set, and it's perhaps the most important talk you'll hear all year: Great Lakes Division Director Dale Williams, WA8EFK, has been the chair of a committee working on BIG changes to ARES nationally.

The committee report was accepted at the January Board meeting. Some portions are already being

launched. While the report itself needs to go through staff and such, Dale will be telling us the important changes that will be happening to the ARES program. There will be some great opportunities for all of us! So, this is a benchmark year- one you'll be at the leading edge of for sure! We will also have a number of other great speakers that will be there as well! I know that you will find this meeting extremely valuable! You just can't miss it! And, it's FREE!!!

We're asking all of you coming to register so that we can properly prepare for how many will be coming. The link to register is: <http://arrl-ohio.org/SEC/form.html>

Welcome New and Returning Members

New Members

Dave, N8JNX, from Medina

Don, KC8REM, from Elyria

New Life Member

Jeff, KB8ZUN, from North Ridgeville

Complimentary Member renewed as a Full Member - Russ, KE8GNX, from Elyria

In attendance at the March 19 Membership Meeting were returning members Patrick Sweeney, K8PJS and David Waun, KD8TJD.

Welcome to all of you. It's nice to have you with us.

Member Highlight: Russ Graham, KE8GNX

Russ's Introduction to Amateur Radio

Russ has been interested in radio for many years. Decades ago, when CB radio was prevalent, and Russ was driving trucks, he always had a CB radio in his rig. When the character of CB radio and the community it served changed, Russ decided he needed to get out of it. He knew he needed radio that was a step up. Russ kept that need in the back of his mind and went on with his life. Years later, while online, a Facebook posting about Amateur Radio caught his eye. This was the step up he had been looking for! When the code requirement was removed from getting a license, Russ was hooked.

Involvement Continues

Russ became seriously involved in amateur radio in April 2017 when he received his Technician Class License. After passing his Tech Exam, Russ immediately got on the air and had a conversation with Mark from Elyria on 2M. Russ is a people person, and loves communicating with people of all different races, nationalities, ethnic origins, ages, and the like. That is what drew him to radio in the first place. Talk to Russ for just a few minutes, and you will find this to be true. Talking on the air to everyone comes naturally for him.

Life in NOARS

Russ knows Tom Dolan, N8CWF, through work. Tom introduced Russ to NOARS by going to the testing site where Russ passed the Technician Exam in April 2017. Tom invited him to a meeting, which was the very next night. Russ attended, was warmly welcomed, had a good time, and has stayed with it. He says he feels at home in NOARS.



Russ's Rigs

Russ has a TYT TH-9800, a quad band radio. He works 2M and 70cm with it. He claims the TYT TH-9800 is one of the best pieces of operating equipment. He also has a Baofeng UV 50X2. When asked if he was going to have Chet program it for him at the NOARS Winterfest, he said he didn't need to, that he figured it out himself. He told me he programmed his TYT, and "once you get the hang of one radio, you can do the same thing with another." Being radio savvy, programming them is easy for him.

On the Air

Russ can be heard on the Thursday night NOARS 2M net, as well as in conversations through other repeaters. He needs to get an HF antenna to work 6 and 10 meters. He is also working at setting up a base station. Until all that happens, he says, "I have fun with what I have."

Current Projects/What Russ would like to learn

Russ would like to know what to expect on each frequency. As he puts it, "What is it about 6 and 10 meters that would trip my trigger?"

Story from the World of Work

Russ worked 35 years, driving trucks and buses. He relates an interesting insight from his work life as a bus driver. On long bus trips, such as a 16-day drive to Canada's Maritimes, the first 8 days were beautiful. Headaches started on the trip back, when people realized they were on their way home. The bus driver turned into everyone's bartender and hair stylist - in short, a shoulder to cry on. With his ability to listen and be open with people, Russ undoubtedly provided a good shoulder.

NOARS Winter Hamfest Winners

1ST prize \$75.00 - K8HRD, Harold, Elyria

2nd prize \$50.00 - Mike, Berea

3rd prize \$25.00 - KC8FQV, Mark, Aurora

Door prizes

\$25.00 ARRL gift Certificate - KD8VIC, Richard, Willard, Oh.

\$25.00 ARRL gift Certificate - Denise, N. Ridgeville

\$10.00 gift certificate for RF Adapter Guy - KD8GXL, Keith, Elyria

50/50 winner - Amy, K2KSU, Medina

Mobile check-in winner - Fred, N8CPI, Cuyahoga Falls

Look for the latest Field Day information in AI's, N8CX, flyer on page 18 of this newsletter.

Other Ohio Hamfests Listed on the ARRL Website

04/14/2018 | Cuyahoga Falls ARC's 64th Annual Hamfest

Location: Cuyahoga Falls, OH

Type: ARRL Hamfest

Sponsor: Cuyahoga Falls Amateur Radio Club

Website: <http://www.cfarc.org/hamfest.php?festnow=2018>

04/28/2018 | 2018 JCARC Hamfest

Location: Jackson, OH

Type: ARRL Hamfest

Sponsor: Jackson County Amateur Radio Club

Website: <http://www.jacksoncountyarcc.org>

04/21/2018 | Portsmouth Radio Club Hamfest

Location: Portsmouth, OH

Type: ARRL Hamfest

Sponsor: Portsmouth Radio Club

Website: <http://www.facebook.com/groups/portsmouthradioclub/>

04/29/2018 | Athens Hamfest

Location: Athens, OH

Type: ARRL Hamfest

Sponsor: Athens County Amateur Radio Association

Website: <http://www.ac-ara.org/>

Repeater Corner

From Carl, W8KRF, "The DR-2X has been installed and it is working great. Measured 48 watts to the duplexer. I had to make a jumper for the receive antennas so the remote control option would work. There are separate receive antenna connectors for CH-A and CH-B. You can

connect CH-A and CH-B Tx connectors in the setup but not the Rx connectors. We do not have a separate antenna for 70cm so I had to use the same antenna for both CH-A and CH-B Rx."



Creation of Public Relations Committee

President Dave, KY8OSU, announced the creation of a Public Relations Committee, with himself, Thomas, N8CWF and Elaine, KC8FOS as members. This new committee, with the invaluable help of Tom, W1PDI, is developing banners, road signs, club brochure, and a

press release about Field Day. We have other initiatives in the works to increase the club's exposure and highlight what we are about. If you would like to be part of this exciting work, please let any of the committee members know.

Breaking Bread Together

As members of NOARS, we share an interest in amateur radio. We also share an interest in communicating with people. We are social animals. Sharing a meal together once a month at a restaurant would give us time to chat and get to know each other better. Please let any of the members of the Social Committee know a good time for you to meet with fellow club members for a monthly

meal. Which days of the week, and which meal? If you have an idea for a restaurant, please let us know that, also. Contact Elaine, KC8FOS at ewilkinson1951@gmail.com ; Dave, KY8OSU at ky8osu@yahoo.com ; Thomas, N8CWF at ke8cwf@gmail.com

April 2018

Sun Mon Tue Wed Thu Fri Sat

1	2	3 10M Net 8 PM	4 BRTN 9:30 PM	5 2M Net 8 PM	6	7
8	9	10 10M Net 8 PM	11 BRTN 9:30 PM	12 2M Net 8 PM	13	14
15 VE Testing 1 PM	16 NOARS Meeting 7 PM	17 10M Net 8 PM	18 BRTN 9:30 PM	19 2M Net 8 PM	20 LCARA Meeting 7 PM	21
22	23	24 10M Net 8 PM	25 BRTN 9:30 PM	26 2M Net 8 PM	27	28
29	30					

April Meeting

Monday April 16, 2018

The doors will open at 6:30 PM and the meeting will start promptly at 7:00 PM. Coffee and donuts will be available. North Ridgeville Public Library, 35700 Bainbridge Rd., North Ridgeville, OH. All are welcome. Program: Build a 20 M Bazooka Antenna with Clark, N8PZD

Nets

NOARS nets are Tuesday nights at 8 pm on 28.370 MHz, and Thursday nights at 8 pm. on 146.700 MHz. All licensed amateurs are welcome. Participation is encouraged and appreciated.

March 9, 2018 Meeting Minutes

Submitted by Elaine Wilkinson, KC8FOS

The meeting was called to order at 7:00 by President Dave Fisher, KY8OSU. Thirty-four members and guests were in attendance. Returning members, Patrick Sweeney, K8PJS and David Waun, KD8TJD, were recognized. Visitors Allen Higgins and Mike Paotetta were also recognized.

The Pledge of Allegiance was recited, followed by roll call by call sign.

A moment of silence was held in remembrance of Richard Cervilli, K8RWC, who is now a Silent Key.

Mark Lewis, K8WON made a motion to suspend reading of the minutes of the February 2018 meeting. Bill Sheehan, Jr., K2WJS seconded the motion. The motion passed.

Treasurer's Report – Tom Porter, W8KYZ, related recent expenditures and a current balance.

President's Report - Dave, KY8OSU mentioned the great success of the Winer Hamfest. It was decided that Carl and Tom, W8KYZ would give a more detailed account later in the meeting.

Standing Committee Reports

Parliamentary Committee – Bob Tome, W8RET No report.

Property Committee – Dave, KY8OSU highlighted the need for a Property Committee. He related the need to keep track of what the club owns. It is in various locations. Knowing who has what would be helpful. Tom, W8KYZ, explained that it is an issue of accountability. The Club Property Chairman does not need to keep all the property. Dave suggested that club members with property could report to the Club Property Committee what they currently have in their possession.

Program Committee – Clark Beckman, N8PZD. Suggested building a bazooka antenna next month.

Repeaters - Carl Rimmer, W8KRF. Will talk later since the program is about the repeaters.

Website – Carl, W8KRF. The website is up-to-date. Please let Carl know of any parts of it that don't work,

such as broken links, etc.

Membership – Carl, W8KRF. We currently have 79 members. Notify Carl of any changes that need to be made to your entry on the roster.

Field Day - Al Moriarty, N8CX reported that 75/80 M needs a Band Captain, as the previous captain can't do it. 10 M also needs a Band Captain. If there are no takers from the NOARS members, Al will open those bands to the LCARA membership, as they are anxious to participate. There was discussion of what equipment is available. Members made offers of equipment they can loan. The need to transmit through the night was mentioned, and an offer to do so made. Al will send out a Field Day update soon. There will be a Pre-Field Day meeting at the site on June 9 at 10 AM.

Social Committee – Elaine Wilkinson, KC8FOS. The Lorain County Sheriff's Department is building a new Communications Center. Once it's done, the Sheriff's Department will hold an open house sometime this spring or early summer.

K3LR tour date is Saturday, August 11, 2018. This will include a trip first to DX Engineering. We will arrive there at 9:00. We can shop at the Open Box Sale, then leave for K3LR at 10:30 or 11. We could have lunch together somewhere after the tour.

We are establishing a group meal, breakfast, lunch, or dinner, to see each other socially for longer than we have before or after meetings. Let me know which day and meal would be good for you. Contact me at ewilkinson1951@gmail.com, or let Thomas Dolan, N8CWF or Dave, KY8OSU know.

Public Relations - Dave, KY8OSU announced the creation of a Public Relations Committee, with himself, Thomas, N8CWF and Elaine, KC8FOS as members. Dave is the Chairman. Join us if you would like. Dave talked about the banners and signs being made, and mentioned submitting items such as meetings, Field Day, and NOARS hamfests to the Chronicle. An audience member suggested posting NOARS information in public libraries. Elaine, KY8OSU, publicly thanked Tom Miller,

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W1PDI for his generous offer of providing the banners, signs, and brochures free of cost. His professional guidance in their design is greatly appreciated. Dave Fisher, KY8OSU, announced a new address at which to contact him: ky8osu@yahoo.com.

Hamfest – Carl, W8KRF and Tom, W8KYZ. The Winter Hamfest was a winner. 155 tickets were sold, and there was a total of 28 paid tables. Interest in tables was so high LCCC staff had to set up a couple of extra. Financially it was the best we've had in ten years. Profit was \$920.80. Bob, W8RET and Bill Seiler, K8RTR, manned mobile check/talk-in. Benefits of using LCCC were highlighted. The price charged by LCCC is lower than what was paid to the Elyria VFW. They set up all the tables and are available the day of the event to help in any way they can, including taking down all the tables after the hamfest concludes. Chet Roberts, K8KIZ, was recognized for manning the Baofang programming table. Elaine, KC8FOS and Carl, W8KRZ were at the front table.

NOARS Summer Hamfest - Darlene Ohman (Dee Dee), KA8VTS, will remain as Chairman of the NOARS Hamfest in July, with Carl, W8KRF and Tom, W8KYZ serving as organizing assistants. Examples of Dee Dee's dedication, including her participation in Field Day throughout the years as well as organizing hamfests.

Special Recognition – In honor of her dedication to NOARS for 40 years, Carl, W8KRF made a motion to give Dee Dee a Special Lifetime Membership. The motion was seconded by Mark, K8WON. The motion passed. Chet, K8KIZ, suggested giving Dee Dee a microphone with a tag on it indicating it is from the club, thanking her. Clark, N8PZD will investigate what kind she can use.

Sunshine – report by Clark, N8PZD. Richard Cervelli, K8RWC passed away and is now a Silent Key. A sympathy card for his family was circulated among those present for signing. Carl, W8KRF advised Rich's memorial photo is on the website.

Nets – Bob, W8RET. Tuesday night 10M nets need more check-ins. Thursday night 2M nets are doing well, with increasing numbers. There were 30 check-ins on this past Thursday's net.

Other Reports

VE Testing – Tom, W8KYZ. This past Sunday there were three applicants. All passed. Tom provided them with information about NOARS.

Newsletter – Tom Wilkinson, N8FDY. Submissions for

the newsletter are needed seven days before the last day of the month. That gives time for formatting and editing the Log. Send suggestions to make it better, letters to the editor to express your opinion about Amateur Radio related things, etc.

Education Committee

President Dave brought forth the idea of an Education Committee that would be responsible for teaching License Classes, to be taught by club members with expertise. He noted that LCCC would provide us with a classroom. These classes would provide an intro to the hobby. One of our visitors said he had been looking for a club that teaches License Classes. The closest one is in Akron, which teaches Technician and General classes. There was discussion of License Classes of the past.

Apparel – Bob, W8RET reminded of the apparel that is available on the NOARS website. The link for apparel is found on the club's home page. If you want something other than what is available on the site, Pat Brush, the person who does the machine embroidery, can make you pretty much anything you want. Directions for how to contact her are on the apparel link. A suggestion was made to have her and her embroidery machine at a NOARS hamfest, to make what you want on the spot.

Special Repeater Report – Carl, W8KRF.

The 444.80 C4FM machine is what makes NOARS known. It is about the only WiresX repeater in north east Ohio. The machine is AMS, but access to WiresX is now only digital since interference from a repeater, apparently in Chardon, would at times tie up the network.

Carl made 2 proposals:

1. Put an amplifier on UHF. A Mirage is available for \$719.91. Power is 10 to 15 watts in, 100 watts out.
2. Our current repeaters are Yaesu DR-1X. All three are old and need to be replaced. Carl proposed we replace them with DR-2X machines. Tom, N8FDY explained the benefits of the newer repeaters, including a side channel which would allow Carl to get into and control the repeaters remotely. The repeaters have a new output amplifier design to prevent overheating and damage. They support the new WiresX version 2, as well as group and linking capabilities. There is a special current trade-in sale. MSRP is \$2000, but we can get them for \$300. The deal ends in June, so we need to move quickly on replacing them. Carl proposed we replace one repeater a month over the next three months. The cost for replacement, including shipping, is an estimated \$400

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each. Discussion ensued, including postponing putting an amplifier on the 444.80 repeater. The new DR-2X can run more power safely, so an amplifier is not needed, at this time.

Al Moriarty, N8CX, made a motion that the club replace the 444.8 DR-1X with a DR-2X at an estimated cost of

\$400. Bob, W8RET, seconded the motion. The motion passed.

Tom Southam, W8WLI made a motion to adjourn the meeting. The motion was seconded by Mark, K8WON. The motion passed.

The meeting adjourned at 8:20.

Contest Corner

By Clark, N8PZD

Contest	Time & Date
RSGB 80m Club Championship, CW	1900Z-2030Z, Apr 2
NCCC RTTY Sprint	0145Z-0215Z, Apr 6
SARL VHF/UHF Digital Contest	1000Z, Apr 7 to 1000Z, Apr 8
PODXS 070 Club PSK 31 Flavors Contest	1000Z, Apr 7 to 0400Z, Apr 8
Florida State Parks on the Air	1400Z-2200Z, Apr 7 & 1400Z-2200Z, Apr 8
Texas State Parks on the Air	1400Z, Apr 7 to 0200Z, Apr 8 & 1400Z-2000Z, Apr 8
Mississippi QSO Party	1400Z, Apr 7 to 0200Z, Apr 8
Missouri QSO Party	1400Z, Apr 7 to 0400Z, Apr 8 & 1400Z-2000Z, Apr 8
ARRL Rookie Roundup, SSB http://www.arrl.org/rookie-roundup	1800Z.-2359Z., Apr 15
OK/OM DX Contest, SSB	1200Z, Apr 14 to 1200Z, Apr 15
New Mexico QSO Party	1400Z, Apr 14 to 0200Z, Apr 15
North Dakota QSO Party	1800Z, Apr 15 to 1800Z, Apr 16
Georgia QSO Party	1800Z, Apr 14 to 0359Z, Apr 15 & 1400Z-2359Z, Apr 15
222 MHz Spring Sprint	1900 local - 2300 local, Apr 17
Holyland DX Contest	2100Z, Apr 20 to 2100Z, Apr 21
Worked All Provinces of China DX Contest	0600Z, Apr 21 to 0559Z, Apr 22
Michigan QSO Party	1600Z, Apr 21 to 0400Z, Apr 22
Ontario QSO Party	1800Z, Apr 21 to 0500Z, Apr 22 & 1200Z-1800Z, Apr 22

Tech Savvy

We will publish a year-long series of monthly technical articles, written by NOARS member Joe Cebula, W8GWD. They will concern antenna functions since, as he puts it, "...antennas are not well understood by many hams." Joe has 12 articles, covering subjects such

as SWR, impedance matching, velocity factor, antenna tuners, and so forth. Joe assures us "the articles are short, not highly technical, and the math is straightforward." Following is the second article.

ANTENNA BASICS

Query No. 2

Q. What is the power loss at a SWR of 3:1?

A. If the SWR is known, the power loss can be easily calculated by using the expression:

$$\% \text{ loss} = \frac{(\text{SWR}-1)^2}{(\text{SWR}+1)^2} \times 100$$

Example: SWR = 3:1

$$\% \text{ loss} = \frac{(3-1)^2}{(3+1)^2} \times 100 = \frac{2^2}{4^2} \times 100 = \frac{4}{16} \times 100 = .25 \times 100 = 25\%$$

What are the power losses at an SWR of 2:1 and 4:1?

The proof is left to the student. (I always wanted to say that!)

SWR is a standing wave on a transmission line. To be more precise, VSWR or Voltage Standing Wave Ratio. It is the ratio of the forward voltage wave to the reflected voltage wave and not a power ratio on a transmission line. It is also the ratio of the antenna impedance and the transmitter output impedance where the impedance is the ohmic value of the antenna feed point, a transmission line, or the output of a transmitter. Impedance can also contain a reactive component as well as the resistive component.

73

Joe, W8GWD

HFWIREANTENNAS.CO

Chris, KB8ZGO, was a vendor at the NOARS Winter Hamfest. Apparently, some attendees expressed interest in purchasing antennas after the weather warms up. Chris wants us to know he will be running a promo

of free shipping to the CONUS (Continental United States) for the next two weeks for the reopening of his web sales. You can get to the new website by going to <http://hfwireantennas.co/>

NOARS Apparel

Having your name, call sign, and NOARS logo on a piece of clothing is such a cool thing, especially at ham events. It identifies you as a member of the club, and makes you stand out. If you'd like something like that, go to the NOARS website at



www.NOARS.net, and click on NOARS Apparel. Email or call Pat Brush at Pat.Brush@PBConsulting.org or 440-724-1907 to let her know what you want.

The DX Engineering Retail Showroom

More products on the shelves—get hands-on with the newest radio gear!



Plus:

Friendly service
Expert tech advice from active Hams
Open-box deals
Free product brochures
Easy return processing

In-person customer support

9 am to 5 pm, Monday-Saturday

The DX Engineering Retail Showroom

Inside the Summit Racing Retail Super Store
1200 Southeast Ave., Tallmadge, Ohio

Open from 9 am to 9 pm, seven days a week



For Sale by Bob, W8RET, 440.365.6829

- Yaesu 857D 100W HF/6M/VHF/UHF. Original box/manual, starting \$750.00 OBO
- Icom 7000 100W HF/6M/VHF/UHF. Original box/manual, mobile mounting bracket (MB-62), starting at \$850.00 OBO
- LDG AT-7000 Tuner for 7000, starting at \$150.00 OBO
- Icom CT-17 convertor for 7000, starting at \$35.00 OBO
- LDG Antenna Tuner Z-11 PRO II . 160-6M. 125 W. Original box/Manual, starting at \$150.00 OBO
- Yaesu ATAS-120, Antenna system/Mobile/Portable/Balcony use. 7/14/18/21 MHZ, starting at \$200.00 OBO
- Icom IC-2820H, 2/440 D-STAR with Icom UT-123 Digital GPS unit. Original box/manual, starting at \$400.00 OBO

For Sale by Ted Neuhaus, W8GUH

Icom M5 marine radio handheld transceiver with case and charger. Excellent condition. Needs battery. \$50.00.

Contact Ten at 440-787-7225, or email him at xrayted10@aol.com

For Sale by Tom, W8KYZ, 440.930.9115

- Heil HC-5 headphones with mic. Use with or without hookup for TS-480. \$30.00
- Yaesu YSK-7800 transceiver separation kit. New \$25.00
- Tempo HM-5 mic. New. \$1.00
- Acco three-hole paper punch. \$1.00
- Larson mobile coil (NLA-220). New. \$5.00
- Larson mobile coil (LM-150) \$3.00
- MFJ-1712S 144/440 telescopic HT antenna. New. \$5.00
- New Cabelas multitool with nylon sheath. \$5.00
- 4 outlet power strip with surge protection. New. \$4.00
- Garmin GPS 11 Plus with car charger, BNC GPS antenna. \$25.00.
- Regency HR-2MS, with crystals, mobile bracket, mic, and manual. \$25.00

Drake 4 twins for sale by Sandy Whitney, W8KYS

Drake R4C and Drake T4XC pair for sale by Sandy, W8KYS. Very clean with money back guarantee, \$600. Call Sandy at 440-647-2255.



Ad Submission Guidelines

Electronic ads may be emailed to noarslog@noars.net. Printed ads may be sent to NOARS Log, 161 Herrmann Drive, Avon Lake, OH. 44012 The deadline for submissions is seven days before the first day of each month. All must include: asking price, sellers name, call sign and phone number. Only ads from current NOARS

members or paid advertisers will be accepted. If your items sell, please notify the Log editors at noarslog@noars.net so the ad can be removed. All ads will be removed (unless updated) after four months. NOARS reserves the right to refuse ads.

A Note from the Editors

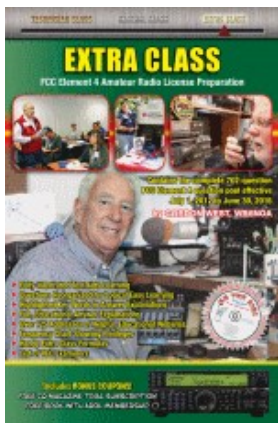
Tom, N8FDY, and I appreciate the opportunity of contributing to NOARS by editing the Log. Please let us know what you want in it. It's the club members' newsletter, and we want to include things you'd like to see. Maybe that would be fun facts, technical pieces, newsy bits, letters to the editor, etc. If you would like to

submit anything for publishing in the NOARS Log, please email it to noarslog@noars.net. The deadline for doing that is seven days before the first of the month. That gives us time to create and get the Log uploaded to the Website.

Elaine, KC8FOS

Ron, N8EGZ, has a free Extra Class license study manual and CD available for pick-up at a NOARS meeting.

Gordon West makes study for Extra Easy! Valid for Extra Class question pool July 1, 2016 until June 30, 2020. Gordo's new Extra Class study manual for the 2016-2020 Element 4 exam has a host of new features to make it easier to get to the top! The new Element 4 pool has 712 questions, up from the 702 the 2012 pool – fewer questions, but is a significantly updated and improved question pool. There are about 100 brand-new



questions, and the Q&A has been rewritten to dramatically improve the exam content to better reflect the Extra Class privileges, digital operation, digital equipment and modes. As in his Technician and General Class books, Gordo's reorganized Element 4 Q&A into logical topic groups follows the syllabus of his famous Radio School ham class – and KEY WORDS are highlighted in BLUE throughout the book. Contact Ron at myronbodman@gmail.com if you want him to bring it to a meeting.

Free Manuals from Tom, W8KYZ, 440.930.9115

- RCA Receiving Tube Manual (1940)
- RCA Receiving Tube Manual (1947)
- GE Receiving/TV picture tubes manual (1956)
- RCA Transmit Tubes Manual (1940)
- RCA Transmit Tubes Manual 1934)
- Howard Sams Tube Substitution Handbook (1960)
- Sylvania Tube Technical Manual (1959)

Ted Neuhaus, W8GUH, has Antique Radios Free to Good Home

- HealthKit 2M FM transceiver with manual.
- Yeasu FT 23R 2M handheld transceiver with charger and case.
- Motorola six-crystals-controlled 2M mobile FM transceiver, with manual and mounting bracket.
- Drake dynamic desk microphone.

All are cosmetically good.

Contact Ted at 440.787.7225, or email him at xrayted10@aol.com if you are interested

Murphy's Law

- Any instrument when dropped will roll into the least accessible corner.
- Any simple theory will be worded in the most complicated way.
- Build a system that even a fool can use and only a fool will want to use it.
- The degree of technical competence is inversely proportional to the level of management.

Tools Explained: (author unknown, but it could be any one of us!)

1. DRILL PRESS: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, denting the freshly-painted project which you had carefully set in the corner where nothing could get to it.
2. WIRE WHEEL: Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprints and hard-earned calluses from fingers in about the time it takes you to say, 'Oh Crap!'
3. SKILL SAW: A portable cutting tool used to make studs too short or electrical cords a smaller length. Name does not necessarily imply the intellect of the operator.
4. PLIERS: Used to round off bolt heads. Sometimes used in the creation of blood-blisters.
5. BELT SANDER: An electric sanding tool commonly used to convert minor touch-up jobs into major refinishing jobs.
6. HACKSAW: One of a family of cutting tools built on the Ouija board principle... It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your future becomes.
7. VISE-GRIPS: Generally used after pliers to completely round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.
8. OXYACETYLENE TORCH: Used almost entirely for lighting various flammable objects in your shop on fire. Also handy for igniting the grease inside the wheel hub out of which you want to remove a race bearing.
9. TABLE SAW: A large stationary power tool commonly used to launch wood projectiles for testing wall integrity.
10. HYDRAULIC FLOOR JACK: Used for lowering an automobile to the ground after you have installed your new brake shoes, trapping the jack handle firmly under the bumper.
11. BAND SAW: A large stationary power saw primarily used by most shops to cut good aluminum sheet into smaller pieces that more easily fit into the trash can after you cut on the inside of the line instead of the outside edge.
12. TWO-TON ENGINE HOIST: A tool for testing the maximum tensile strength of everything you forgot to disconnect.
13. PHILLIPS SCREWDRIVER: Normally used to stab the vacuum seals under lids or for opening old-style paper-and-tin oil cans and splashing oil on your shirt; but can also be used, as the name implies, to strip out Phillips screw heads.
14. STRAIGHT SCREWDRIVER: A tool for opening paint cans. Sometimes used to convert common slotted screws into non-removable screws and butchering your palms.
15. PRY BAR: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50-cent part.
16. HOSE CUTTER: A tool used to make hoses too short.

NOARS Information

Members of the Board of Directors

President: Dave, KY8OSU

Vice President: Clark, N8PZD

Secretary: Thomas, N8CWF

Treasurer: Tom, W8KYZ

Others: Carl, W8KRF; Tim, NC8X; Tom, N8FDY

Others

Net Manager: Bob, W8RET

Club Trustee for K8KRG: Al, N8CX

Repeater: Carl, W8KRF, and Tim, NC8X

NOARS Log Editors: Tom, N8FDY, and Elaine, KC8FOS

Membership

Membership is open to anyone interested in radio communication. Dues are: Full \$15, Associate (non-licensed) \$7, Family members of a full member are \$4 each. Membership forms are available at www.noars.net. Make checks payable to NOARS and mail them to: NOARS Membership Committee, 161 Herrmann Drive, Avon Lake, OH 44012.

Meetings

Meetings are held at 7:00 p.m. sharp on the third Monday of every month at the North Ridgeville Branch of the Lorain County Public Library, 35700 Bainbridge Rd, North Ridgeville, OH. The doors open at 6:30 PM for a social time with coffee and donuts.

Meetings are open to the public and all are welcome.

Committees

Parliamentary Committee: Bob, W8RET.

Repeater: Carl, W8KRF

Field Day: Al, N8CX

Hamfest: Dee, KA8VTS.

Sunshine: Tom, W8KYZ (temp)

Membership: Carl, W8KRF

Club Property Committee: Open

Program Committee: Open

Social Committee: Elaine, KC8FOS, Dave, KY8OSU, Thomas, N8CWF

Public Relations Committee:

Dave, KY8OSU, Elaine, KC8FOS, Thomas, N8CWF



Nets

NOARS nets are Tuesday nights at 8 pm on 28.370 MHz, and Thursday nights at 8 pm. on 146.700 MHz. All licensed amateurs are welcome.

VE Testing

VE Testing is offered the third Sunday of every month.

2929 West River Road
N. Elyria OH 44035,
from 1-3 PM.

Burning River Traffic Net

The Burning River Traffic Net uses the NOARS repeater (146.700 MHz) Wednesdays at 21:30.

- ! UPDATE ! -
as of: Sun, Apr 1, 2018

Pre-Field Day Meeting – Saturday, June 9th, 10 a.m. at Indian Hollow
NOARS / LCARA Field Day 2018 (Current Status)

When - Saturday, June 23rd and Sunday, June 24th

Where - Indian Hollow Reservation (Parsons Rd) – Grafton, OH

Setup on Saturday, June 23rd at 9:00 A.M. (many arrive earlier)

! Field Day means FUN for everyone !

Bring yourself - your family - fellow hams - friends and neighbors

! ALL ARE WELCOME !

Band Assignments

Our entry category will be 5A (as of now) with maybe a 'FREE' 6 meter OR a GOTA station-1 FREE station allowed

We still need a 10 meter station to become 6A

75 meters PH	K8PJS, Pat	NOARS
40 meters CW	N8AUC, Eric	LCARA
40 meters PH	KY8OSU, Dave	NOARS
20 meters PH	K8CSI, Bruce	LCARA
15 meters PH	N8PZD, Clark	NOARS
10 meters	GREAT for a daytime only operator	

6 meters **or** a GOTA station (one band, all bands or anything in between) – 'FREE' station

Bonus Points those that we usually get (checked) and those we would like to get (*asterisk)

- ✓ 100 points for each Tx using generator power – 5 Tx (at present)
- ✓ 100 points – setup in a public location – Lorain County Metroparks
- ✓ 100 points – news media publicity – Dave, KY8OSU, Tom, W8KYZ, and others
- ✓ 100 points – public information table – NOARS
- ✓ 100 points – visit by a 'served agency' representative – Lorain County Red Cross
Jim, WD8OCW (LCARA) or Al, N8CX (NOARS)
- ✓ 50 points – filing Field Day report on the ARRL website – Al, N8CX
- * 100 points – promoting club Field Day and location on Social Media – facebook, etc. – **open**
- * 100 points – copy the ARRL bulletin – RTTY printout preferred – **open**
- * 100 points – presenting a 30 minute educational activity: technical, public service, safety, etc. – **open**
- * 100 points – solar power contacts (5 QSOs required) – **open**
- * 100 points – satellite contact (1 QSO required) – **open**
- * 20 points each – youth operator (age 18 or under, 5 operators max)

Generator and Site Info

Generators: Mark, K8WON (NOARS), and Eric, N8AUC (LCARA) will have theirs on-site. Carl, W8KRF, will have his available as a backup.

The stations will be widely separated to reduce interference. If you are setting up a station, bring at least 100 ft. of power cord, in as large a gauge as possible (14ga or larger) and a multi-tap outlet as well. This will ensure that you can get a connection to a generator with minimal voltage drop over a longer distance. Additionally, we will need a power cord for the pavilion coffee maker, etc.

Food (PRELIMINARY)

Bottled water will be provided – Coffee will be available throught Field Day
Bring your own cooler, with your preferred water, soft drinks, snacks, food, etc.
some soft drinks and snacks may be provided as donated by members

Please remember that **no alcoholic beverages or foul language** are permitted in the park!

Dinner Saturday night, We will again plan on pizza.

Breakfast Sunday morning, Again we hope, will be cooked on-site. **Help will be available.**

Questions or comments;

Contact Al, N8CX, NOARS Field Day Chairman, n8cx@arrl.net Home 216-221-3682 **LEAVE A MESSAGE !**

THE "DOUBLE BAZOOKA - INVERTED VEE - HOCKEY-PUCK" ANTENNA

We were looking for a broad-banded HF antenna that could be set-up easily, such as for Field Day, yet would allow us to utilize most of the "band" that we would be operating on, without the need of a tuner. The broad-band dipole, or doublet, was what we were looking for. This antenna, at one time called a "Double Bazooka", was able to cover the entire 40-meter band, with less than 2:1 SWR, and gave us a perfect match of 1:1 at the center of the band. When cut for 20-meters, an even better match could be obtained. This antenna was originally developed by the staff at M.I.T. for radar use, and was later made popular to amateurs by W8TV (QST July 1968).

The antenna is actually a piece of RG-58/U coax, cut to approximately a half-wavelength. At the center, you slice the outer jacket about 2-inches, and once folded, pull the braided part out of the jacket. Being careful not to damage the center dielectric insulation covering, cut the braiding at the center point of the coax, so that the braid on the left half of the coax is completely disconnected from the braid on the right half. The feed line will be attached (at the center) to the two shields ends, thus making them a center-fed dipole. At the outer ends of the dipole, the center conductor is connected to the shield, and a section of open-wire feeder wire (or twin lead) is connected to the end of the coax to extend the length, for electrical resonance. The extension can also be made of ladder-line, 300-ohm twin-lead, or single-conductor wire. The former (wider) tend to increase the broad-banded characteristics.

The inside center-conductor (which does not radiate) becomes two quarter-wave shorted stubs which present a very high resistive impedance to the feed-point at resonance. As you shift above or below the resonant frequency, the stub reactance changes, complementing the antenna reactance and thereby increasing the total bandwidth. This antenna can be cut to operate on any amateur band from 160-meters through 10-meters. It can handle power levels as high as a kilowatt.

This antenna can be used as a dipole, or (as we prefer) it can be supported from a single center support and used as an inverted "V". Because the ends of the inverted "V" are usually close to ground, the various ground properties of different locations will have some effect on the resonant frequency of the antenna. Also the height above ground will affect the antenna match. Because of these factors the antenna length will have to be adjusted to compensate. (we actually adjust the height above ground, and the angle of the vee for best match) The formula given will be a good starting point. The best way to adjust the length is to temporarily "hang" the antenna, install an SWR bridge (or antenna analyzer) in the feedline, and prune an inch at a time off of each end of the "V" until the lowest SWR is obtained at your desired center operating frequency. The center feed point of the "V" should be as high as possible above the ground, and preferably at least a quarter wavelength or more at the operating frequency. The angle (for the vee) at the center point should be no less than 90 degrees and no greater than 120 degrees.

At the center and end junction points, you can sandwich the joint between two pieces of Acrylic sheet or similar material. The inside can be potted with silicone sealer or other material that will be of high dielectric (to keep out wet weather). In the center, I potted my connections in clear acrylic casting resin. I used an old plastic container from a roll of 3M electrical tape for the casting-form. Because of the shape of the container, the resulting center insulator looks like a clear hockey puck. Drill three holes, about midway distance in the walls of the tape

container for the coax to pass through. You can split the wall with a diagonal cutter for easy insertion and removal of the coax.

You will need to form a small piece of modeling clay around the coax on the outside wall of the container, to keep the resin from leaking out, before it hardens. Use the formula for hardener to resin ratio for casting a 1/2" thick block, or about five or six drops of hardener to one ounce of resin. My hockey puck took about five ounces of resin. Caution! This material has a strong odor, and should be mixed and stored outdoors for several days before bringing it into your home. I used twin lead for the end stubs. When assembling the joint of the coax and twin lead, slide two pieces of shrink tubing over the coax for later use. Lay the twin lead and coax down along side of each other with the stripped ends together, twisting all of the copper strands together from both, and soldering them all together well. Then bend the twin lead back over the top of the solder joint and straighten the entire length out. Slide the first piece of shrink tubing over the joint and shrink it, followed by the second piece over the shrunken first one, then shrinking it over all, for double strength. If you carefully drill (or punch) a small hole, (1/8") in the center, and about 1" from the outermost ends of the twin lead, you can thread some nylon cord through it, used to pull the ends the ends of the "V" out, and support them. I drilled a 1/4" hole through the center top-end of the hockey puck for hoisting the center of the antenna.

The Information on the basic antenna was obtained from the ARRL Amateur Radio Handbook of several year Editions. The calculated dimensions for constructing the Double Bazooka Inverted Vee Hockey-Puck antenna follow below.

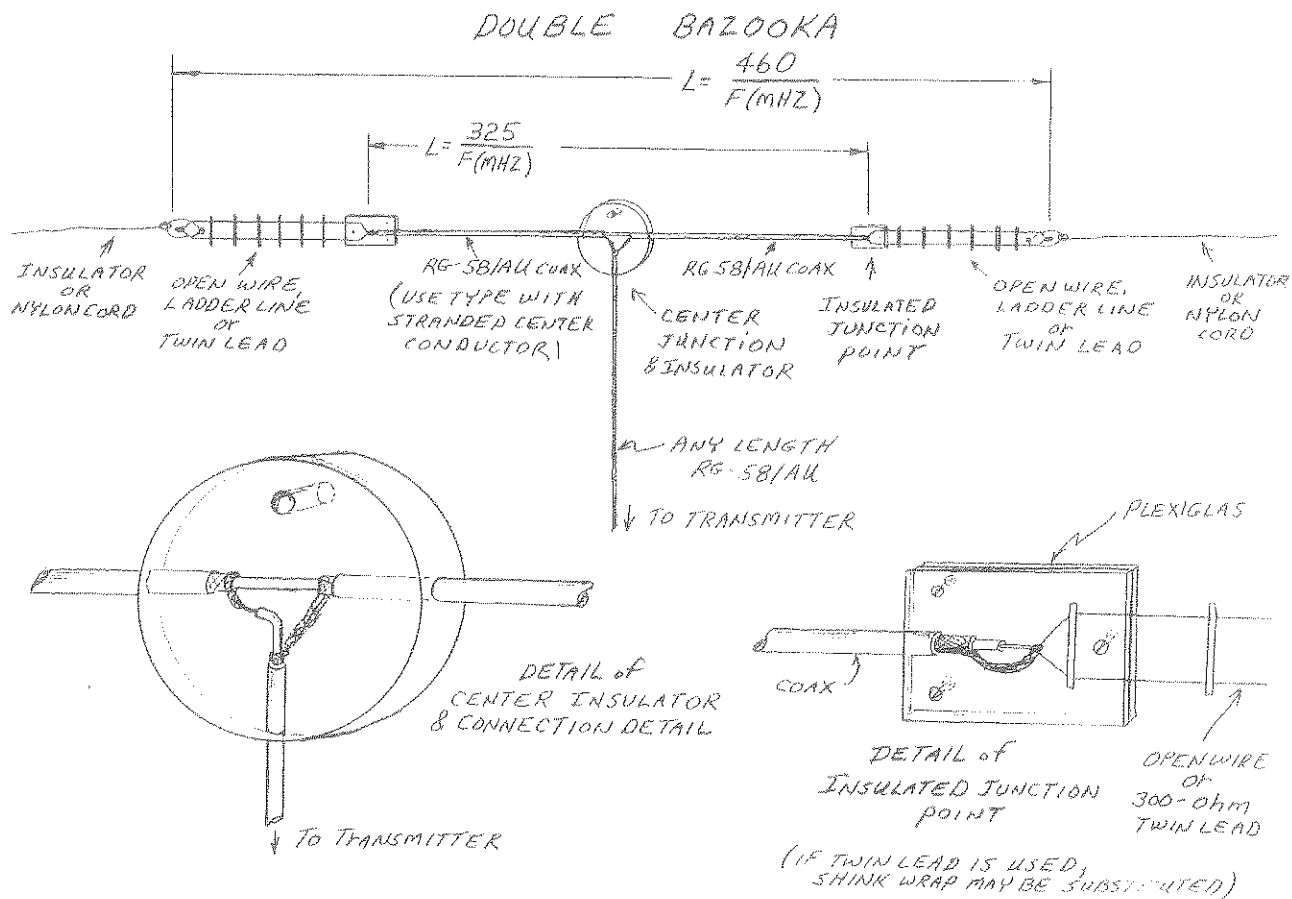
Good Luck & 73, Hank, WB8RNI

DOUBLE BAZOOKA CABLE LENGTH CHART				
RG58/U (POLYETH. DIEL.)				
BAND	MHZ	CUT		
		COAX LENGTH (FT)	TWIN LEAD TOTAL (FT)	TWINLEAD @EACH END
10M PH	28.5	11.4	4.74	2.37
15M PH	21.3	15.26	6.34	3.17
20M PH	14.25	22.81	9.47* (9.97)	4.735
40M PH	7.22	45.01	18.7	9.35
80M PH	3.85	84.42	35.06	17.53
160M	1.9	171.05	71.05	35.525
10M CW	28.15	11.55	4.8	2.4
12M	24.94	13.03	5.41	2.705
15M CW	21.1	15.4	6.4	3.2
17M	18.1	17.96	7.46	3.73
20M CW	14.07	23.1	9.59* (10.09)	4.795
40M CW	7.07	45.97	19.09	9.545
80M CW	3.6	90.28	37.5	18.75

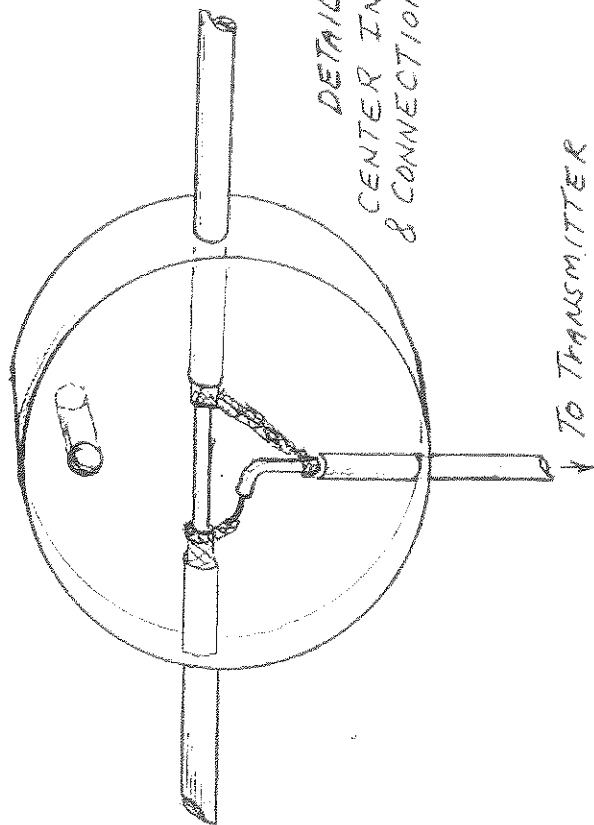
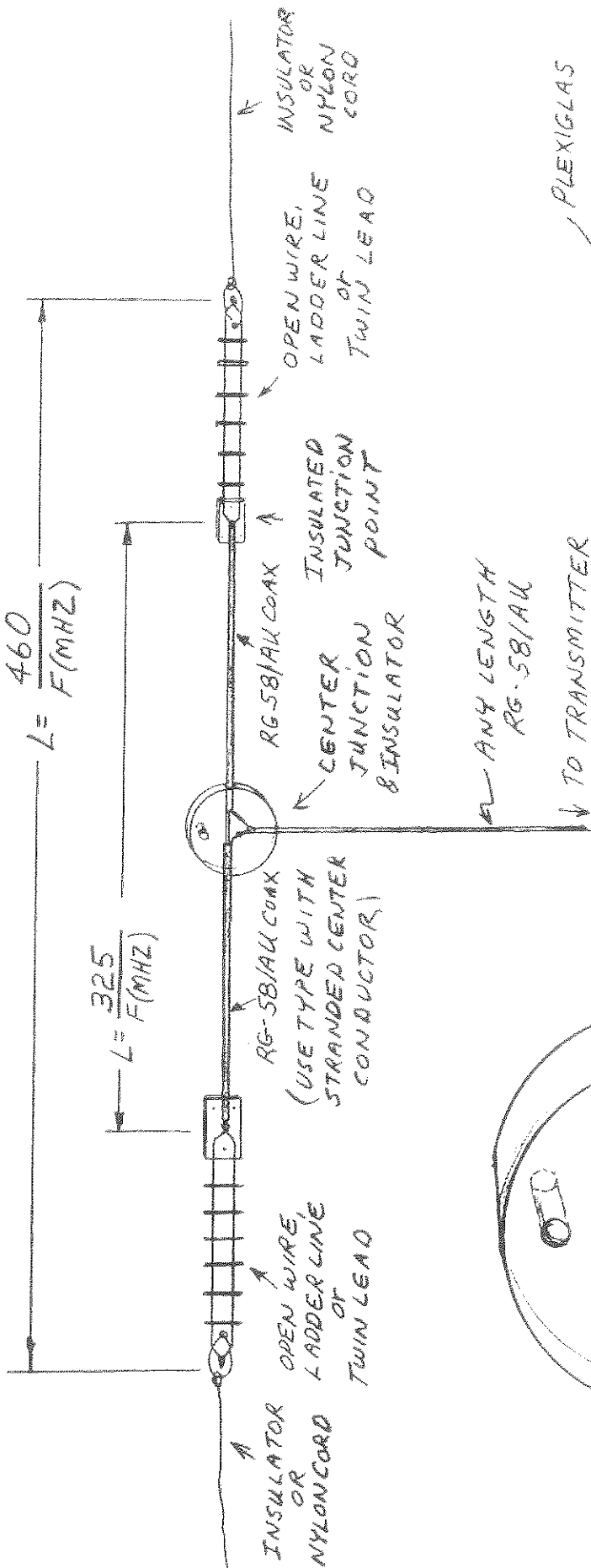
* lengthened due to actual field experience

DOUBLE BAZOOKA CABLE LENGTH CHART

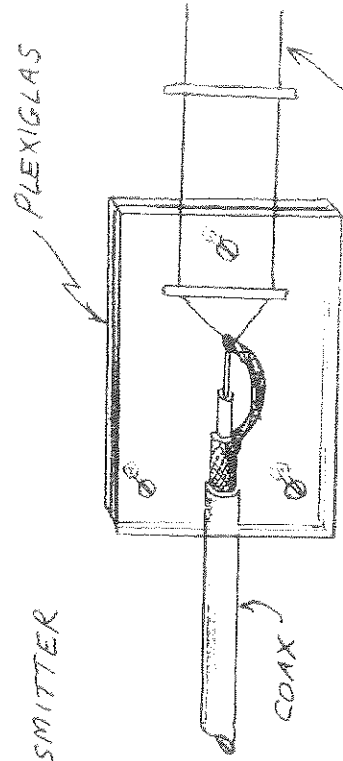
BAND	MHZ	RG58 (FOAM COAX)		CUT	
		COAX LENGTH (FT)	TWIN LEAD TOTAL (FT)	TWIN LEAD @EACH END	
10M PH	28.5		12.11	4.04	2.02
15M PH	21.3		16.2	5.4	2.7
20M PH	14.25		24.21	8.07	4.035
40M PH	7.22		47.78	15.93	7.965
80M PH	3.85		89.61	29.87	14.935
160M	1.9		181.58	60.53	30.265
10M CW	28.15		12.26	4.09	2.045
12M CW	24.94		13.83	4.61	2.305
15M CW	21.1		16.35	5.45	2.725
17M CW	18.1		19.06	6.35	3.175
20M CW	14.07		24.52	8.17	4.085
40M CW	7.07		48.8	16.27	8.135
80M CW	3.6		95.83	31.94	15.97



DOUBLE BAZOOKA



DETAIL OF CENTER INSULATOR & CONNECTION DETAIL



DETAIL OF INSULATED JUNCTION POINT

OPEN WIRE OF 300-OHM TWIN LEAD
 (IF TWIN LEAD IS USED, SHINK WRAP MAY BE SUBSTITUTED)

**DOUBLE BAZOOKA CABLE LENGTH CHART
RG58/U (POLYETH. DIEL.)**

BAND	MHZ	COAX LENGTH (FT)	TWIN LEAD TOTAL (FT)	CUT TWINLEAD @EACH END
10M PH	28.500	11.40	4.74	2.37
15M PH	21.300	15.26	6.34	3.17
20M PH	14.250	22.81	9.47 * (9.97)	4.74
40M PH	7.220	45.01	18.70	9.35
80M PH	3.850	84.42	35.06	17.53
160M	1.900	171.05	71.05	35.53
ENTER FREQ>	4.041	80.43	33.41	16.71
10M CW	28.150	11.55	4.80	2.40
12M	24.940	13.03	5.41	2.71
15M CW	21.100	15.40	6.40	3.20
17M	18.100	17.96	7.46	3.73
20M CW	14.070	23.10	9.59 * (10.09)	4.80
40M CW	7.070	45.97	19.09	9.55
80M CW	3.600	90.28	37.50	18.75

* lengthened due to actual field experience

**DOUBLE BAZOOKA CABLE LENGTH CHART
RG58 (FOAM COAX)**

BAND	MHZ	COAX LENGTH (FT)	TWIN LEAD TOTAL (FT)	CUT TWINLEAD @EACH END
10M PH	28.500	12.11	4.04	2.02
15M PH	21.300	16.20	5.40	2.70
20M PH	14.250	24.21	8.07	4.04
40M PH	7.220	47.78	15.93	7.97
80M PH	3.850	89.61	29.87	14.94
160M	1.900	181.58	60.53	30.27
10M CW	28.150	12.26	4.09	2.05
12M CW	24.940	13.83	4.61	2.31
15M CW	21.100	16.35	5.45	2.73
17M CW	18.100	19.06	6.35	3.18
20M CW	14.070	24.52	8.17	4.09
40M CW	7.070	48.80	16.27	8.14
80M CW	3.600	95.83	31.94	15.97