



B-VARC BULLETIN

The Monthly Publication of the
BRAZOS VALLEY AMATEUR RADIO CLUB
Serving Fort Bend and Harris Counties

Editor in Chief: Vincent Orlando, WA5ETS 774-7651 (0800-2100 hrs)

About the Brazos Valley Amateur Radio Club . . .

Organized in 1977, the club has been growing steadily. It is a gathering place for HAM radio operators in Fort Bend and Southwest Harris Counties, and surrounding communities. It is a general-purpose type of HAM club offering a variety of activities open to all interested persons. Membership is open, not only to licensed HAM operators, but also to anyone interested in the hobby. In addition to regularly-scheduled membership meetings, the club each year conducts classes leading to amateur radio licenses, and each month sponsors a volunteer-examiner team that offers examinations in all levels of HAM licenses.

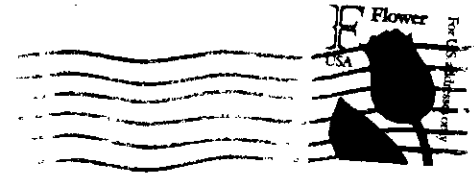
For information about the club and any of its activities, please call Stu Lamkin, WB5IGG, (713) 777-3345.

Volume: 14 Issue: 4

April 1991

ADDRESS CORRECTION REQUESTED

From: Brazos Valley Amateur Radio Club, Inc.
P. O. Box 1630
Missouri City, Texas 77459
Telephone: (713) 777-3345



B-VARC MEETING SCHEDULE

Thurs, April 11 General Meeting
7:30 pm Missouri City Fire Station
Covered Dish (Is this a weather-proof satellite antenna?) Supper

Thurs, May 2 Board Meeting
7:30 pm Missouri City Fire Station

Allen Mattis N5AFV
5314 Wigton
Houston, TX 77096

April 1991

B-VARC CALENDAR OF ACTIVITIES

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
7 1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	1 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	2 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146. 82	3 8:00pm B-VARC RAG- CHEW 3.960 (Busy?) + 3 KHz)	4 6:30pm RACES AMTOR Net 7.090 7:30pm Board Meeting: Missouri City Fire Station #1	5 Lunch Bunch -- Talk-In 442.5/145.47	6 7:30am B-VARC Breakfast 9:00am Houston Emergency Management Net 146. 84 8:30pm C.W. 147.32
8 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	9 7:00pm Amateur Exams (Strike Jesuit College Prep) 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146.82	10 8:00pm B-VARC RAG- CHEW 3.960 (Busy?) + 3 KHz)	11 7:30pm General Meeting: Missouri City Fire Station #1	12 Lunch Bunch -- Talk-In 442.5/145.47	13 7:30am B-VARC Breakfast 9:00am Houston Emergency Management Net 146. 84 8:30pm C.W. 147.32	
14 1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	15 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	16 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146. 82	17 8:00pm B-VARC RAG- CHEW 3.960 (Busy?) + 3 KHz)	18	19 Lunch Bunch -- Talk-In 442.5/145.47	20 7:30am B-VARC Breakfast 8:00am Sidewalk Sale 9:00am Houston Emergency Management Net 146.84 8:30pm C.W. 147.32
21 1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	22 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	23 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146. 82	24 8:00pm B-VARC RAG- CHEW 3.960 (Busy?) + 3 KHz)	25 7:30pm West Side Social	26 Lunch Bunch -- Talk-In 442.5/145.47	27 7:30am B-VARC Breakfast 9:00am Houston Emergency Management Net 146. 84 8:30pm C.W. 147.32
28 1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	29 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	30 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146. 82				

Notes From The President . . .

by Al Mattis, N5AFV

meetings to you again. I am happy to report to you that the 1991 B-VARC membership now stands at 150 members — the largest number of members our club has ever had this early in the year. We are off to a good start, and 1991 promises to be another great year for the Brazos Valley Amateur Radio Club. I know the officers and directors join me in thanking you for your support, and we look forward to another year of exciting activities.

One of our next big activities will be ARRL Field Day on June 22nd and 23rd. Randy Pollard, AK5G, Jack Van Demark, WN5A, and Earle Herbert, WB1CCH, have already begun work on this year's event. Watch for announcements, and be sure to plan to participate. Based on what I've heard from the Field Day Committee so far, this year's B-VARC Field Day may go down as the largest and best planned Field Day in the club's history. You will not want to miss this one, so make plans now to participate.

Attendance at B-VARC's Saturday morning breakfast continues to be strong. The group meets at approximately 8 am at the Denny's located on Highway 59, a round service road just east of Gessner. Talk-in is on the MERA repeater, 145.47 MHz. For the last six weeks, attendance has ranged from 20 to 25 persons. Come join the fun, and participate in this long-time B-VARC tradition. Steve Gottlieb, WA5OEN, has acted as unofficial chairman of this activity, and kept it going for many years.

The club will also have a number of public service activities in the next few weeks. Listen for announcements on the Monday evening B-VARC Public Service Net at 9 pm on the MERA repeater, 145.47 MHz, or contact Steve Dunkelberger, N5JBL, for information or to volunteer to help at future events.

Before I close for this month, I want to recognize the exceptional program we had at the March meeting. Andy MacAllister, WA5ZIB, gave one of the most interesting presentations I have seen at an amateur radio club meeting in the 13 years that I have been an amateur. Thank you Andy, and thank you Bill Todd-Brown, N5MPN, for arranging the program and for coordinating the contributions of the many club members who helped make the meeting a success.

That's it for this month. Hope to see you at the April meeting. 73 de N5AFV

B-VARC RAG CHEW CHECK-INS

3.960 MHz 8:00 pm Wednesdays

Compiled by Melvin Thatcher KB5ION

February 27, 1991

KB5ION NCS, KB5IIL, AA5OA, W5IHY, N5MPN, N5SNA, AK5G, WN5A, N5KXU, KB5DNT, N5AFV

March 6, 1991

KB5ION NCS, KB5IIL, KA5OAI, KG5KV, N5AFV, WA5SCE, WN5A, WD5CVK, KB5LFU, W5IHY, N5MPN, WA5PWL, KB5DNT

March 13, 1991

KB5ION NCS, N5SNA, N5ECP, KB5IIL, KG5KV, KB5LFU, N5AFV, N5MPN, WN5A, W5IHY, WB5SRN, WB5JGG, AK5G, N5PRP, WA5SCE, N5PRC, N5JBL

March 20, 1991

KB5ION NCS, N5MPN, KB5DNT, N5PRP, KB5LFU, W5IHY, KG5KV, WN5A, N4ULP, N5QCE, N5KXU, KB5IIL, WA5SCE, W6NEG, AK5G

March Meeting Recap

by Steve Shirk, N5SDL

Well gang, I must say, as the new Program Chairman, I have a hard act to follow. Bill Todd-Brown (N5MPN) has done a great job and left some big shoes to fill (about size 28).

The speaker at the March meeting, Andy MacAllister (WA5ZIB) was one of those speakers that keeps a crowd entertained and informed. I do not think I saw anyone sneak out early! He not only had the payload from the first balloon launch with a video tape of the launch, the flight, and the recovery, but he also had a demonstration of the package for the April/May balloon launch. (We'll try to let you know when that launch date will be.) Later I will have more on this second helium balloon experiment that will carry aloft an ATV camera with digitized voice on 434.0 MHz, packet telemetry on 147.435 MHz FM and a CW beacon on 28.322 MHz.

We thank Andy and the numerous people who helped make this project get off the ground! Hopefully, Andy will come back and tell us how this flight went. We would also like to thank Dot, Lucy and Doug for the extra tables and chairs. We certainly had a full house. I know I should thank others that I left out, but I do appreciate everyone's help in making every meeting fun. Please call me with any comments or suggestions.

73's Steve (N5SDL)

Results of the March 12th Exam

by Harold Parker, ND5F

B-VARC again sponsored and administered the ARRL's Amateur radio Examinations that were held on Tuesday evening, March 12, 1991, at Strake Jesuit College Preparatory in Houston.

The V.E. Team

Harold Parker, ND5F
Tony Stevens, N5LSQ
Mike Strong, KT5H

Assistants

Carl Albrecht, AA5JW
Irene Gordon, K5AYX
Stu Lamkin, WB5IGG

A total of twenty-eight (28) exams were administered during the evening to sixteen (16) applicants. Three (3) unlicensed candidates received the "new" Technician License. Six (6) other candidates upgraded their licenses with a total of twenty (20) elements passed. The overall "pass rate" for the evening was seventy-one (71%) percent.

Congratulations to all the following who upgraded and/or passed exams:

John Ashmore, KB5OTQ — Element 3B
Joseph Bly, KB5NUS — General
Robert Brigham, Call Pending — Advanced
John Brzovskis — Technician
John Bumgardner, KB5MVG — Advanced
Marion Chambers, KB5PAJ — Technician
Ron Haynie — Technician
Gil Lappay, N5RZX — Advanced
Max North — Technician
Michael O'Toole, N5QJB — Element 3B
Robert Petmecky, N5RGQ — General
Richard Slate, N5RZJ — Element 3B & 4A
Keith White, N5RVZ — Element 3B

Many thanks to all the Team Members and Assistants who volunteer their valuable time and effort each month.

All of us at B-VARC again thank Vincent, WA5ETS, and everyone at Strake Jesuit College Preparatory for making these excellent classroom facilities available to us for our exams each month.

73's ... ND5F

1991 B-VARC

PUBLIC SERVICE HONOR ROLL

Compiled by Stephen Dunkelberger N5JBL

- A. Houston Tenneco Marathon
- B. Woman's Hospital 5K Classic

Borg, Gerry	N5APW	A
Chambers, Marion		B
Chambers, Michael	N5QCE	A,B
Cheek, Ralph	N5DNT	A,B
Dunkleberger, Steve	N5JBL	A
Edwards, Glenn	WB4LZG	A
Edwards, Susan	KB5ICO	A
Fredenberg, Henry	N5HF	A
Garland, Trey	KB5OEE	A
Gordon, Hy	NC5A	A
Gordon, Irene	N5AYX	A
Hagerman, Dick	WB5SRN	A
Mattis, Allen	N5AFV	B
Morrison, Henry	W5RIY	A,B
Nance, Herb	N5GZW	A
Orlando, Vincent	WA5ETS	A
Parker, Harold	ND5F	A
Pokladnik, Roger	KB5LFU	B
Shirk, Steven	KB5OLF	A
Stanley, Tim	N5PHM	A
Van Demark, Jack	WN5A	A
Wade, Don	WB5IBT	A,B
Warden, Mike	WB3HZP	A
White, Bob	KF5ZL	A
Winford, Clem	WB5SHU	A

Please report corrections or additions to N5JBL

Volunteer for Public Service

by Stephen Dunkelberger, N5JBL

Do you enjoy providing communications for races, rides, and other types of events? B-VARC has earned a reputation around Houston as being able to provide reliable and responsible radio communications for these events. Sometimes, event directors call us at the last minute asking the club to provide communications.

As Public Service Events chairman, I am developing a callup list of amateur radio operators that enjoy working public service events and would like to be solicited on a regular basis to work these events, sometimes on short notice. By placing yourself on the callup list, you are not automatically volunteering

for an event but rather telling us that you would like to be considered for an event.

If you are interested, please give me a call, Stephen Dunkelberger, at home at 781-6703, drop me a letter, or see me at the B-VARC club meetings.

Some of the upcoming B-VARC sponsored public service events for 1991:

May 5, Sun	American Lung Association Clean Air Challenge Ride
Oct 12, Sat	GAAC Marathon Warmup Series 20K run
Nov 9, Sat	GAAC Marathon Warmup Series 25K run
Dec 7, Sat	GAAC Marathon Warmup Series 30K run

B-VARC Board of Directors Meeting Action & Comments, March 7, 1991

by Dick Kruse, N5OUT, Recording Secretary

Cash on hand in the club treasury is \$2,679.27.

A suggestion to list our club in World Radio magazine and use it as a club fund-raising project was tabled until next month so additional information could be obtained.

The ARRL Special Service Club renewal sticker was received.

A letter was sent to ARRL to see what they could do to help us celebrate our club's 15-year anniversary next year.

To help improve communications between local Amateur Radio Club newsletter editors, a letter was sent to the NARS club editor offering to exchange newsletters.

A letter was sent to Gateway Electronics thanking them for the Call Book that was donated as a prize.

Three items are being considered by the Award Rules Committee:

- (1) Writing formal rules for the Dr. Bill award.
- (2) Changes in the Order of the Key award.
- (3) Changes that will make the Loop and Zepp award conform to the other awards.

There was an average of thirteen and one-half check-ins to the Rag Chew net during February.

It was determined that the Buy/Sell/Swap portion of the B-VARC Public Service Net was in compliance with part 97 of the FCC Rules and Regulations.

Area race/run directors will be contacted to determine if they want B-VARC to provide communications. This will keep from having to organize communications for a race at the last minute.

A notice from B-VARC to a select list of area running publications, running clubs, and race directors was mailed informing them that our Board of Directors must approve their event before it is sanctioned as an official B-VARC club event.

The board approved B-VARC providing communications for the Woman's Hospital 5K Classic, the three Marathon Warm-Up Series races, and the Alamo Challenge Bike Tour.

A group of B-VARC members will be organized that want to work and chair the various races and special events.

There are 136 paid members to date in 1991; 129 B-VARC *Bulletins* were mailed out.

Thirty-four people have signed up to date for the next Novice class which begins March 11th.

During the upcoming weeks while the Novice class is in session, various club members will be calling the Monday night Public Service Net at 9 pm on 145.47.

April Meeting to be a Feast

by Steve Shirk, N5SDL

If there is one thing hams love to do as much as talking on the radio, it is eating (it is certainly one of my hobbies). So naturally, putting the two together is twice the fun. So, at the April meeting, we will have a covered dish supper. I always like to try a little bit of everything!

If you would be able to participate by bringing something, please call me at 933-4737 or Bill Todd-Brown (N5MPN) at 723-0130 and let one of us know. The more the merrier! We need main courses, desserts, drinks, and utensils. We will start the meeting promptly at 7:30 pm and thus have plenty of time to eat and talk.

73's Steve, N5SDL

Oops... My Apology!

The following article was inadvertently left out of last month's *Bulletin*. (The Editor)

The February Meeting

by Al Mattis, N5AFV

We had a nice turn out for our first regular membership meeting of the year (January was the Banquet). No one could seem to agree on the number of persons present; I counted 56, but only 48 persons signed the attendance sheet. Attendance would probably have been greater if it hadn't been Valentine's Day.

There were plenty of chairs and tables thanks to the folks at the Missouri City Parks and Recreation Department. We had no sound system, but made do without.

Our speaker, Bob White, KF5ZL, was one of our own members, and he told us about the world of RACES, ARES and emergency communications. Because of the various RACES groups in the area, many people who are not familiar with this subject find it confusing. Bob cleared up a few misconceptions, explained how RACES and ARES function, and ended up answering numerous questions from the floor. If these questions didn't show how interested many B-VARC members were, the crowd of people who gathered around Bob to pick up RACES applications after the program certainly did.

Thank you to everyone who helped make the meeting a success. Special thanks to Mel, KB5ION, for the coffee, and to the many volunteers who helped set up and take down the chairs.

Weather Spotter Awareness Seminar

April 23, 1991 — 7 to 8:30 pm
7 AM

Wharton County Junior College
500 Julie Rivers Road
Sugar Land, Texas

Instructor:

Ron Stagno of the National Weather Service

Contact:

Ron Bolyard at 341-4430 to register or for questions



**Kronberg's
Flags and
Flagpoles**

7106 Mapleridge • Houston, Texas 77081 • (713) 666-2371

Lou Kronberg
Chairman of the Board
W5IHY

The Final Solution for TVI

by Gene F. Jackson, W0UU

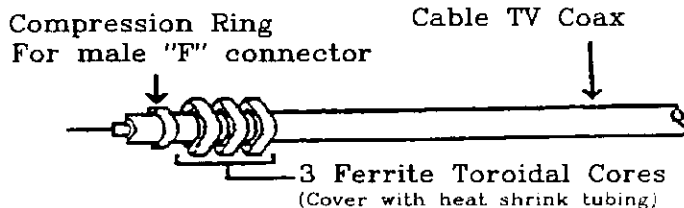
(reprinted from the *Peanut Whistle* club magazine, St. Louis)

Some time back I sold the house and moved to a condo. It's a two-story building, and we live on the second floor and have cable TV service. In the shack, a 100-watt transceiver sits at normal desk height, and the color television is centered just three feet above the transceiver. A dipole antenna (in the attic) is just eight feet directly above the television.

All the normal care was taken to avoid problem with my neighbors: a brute force filter for the power line cord, high-pass filter for the television set, and low-pass filter for the coax to the attic dipole.

When transmitting into the dummy load my television picture was perfect. When transmitting into the dipole on RTTY, the picture was perfect. On CW however it was different story: horizontal bars in the raster on make and break. I noticed that the severity of the interference varied as I moved the incoming TV coax cable.

On a trip to the local "peak and poke" electronics store, I found a package of ferrite toroidal cores, \$2.35 for a pack of three, *Amidon Associates part number FT50-75*. These cores are just the right size to slip over the cable TV coax. No more CW TVI for my color television. . .



**1991 ATTENDANCE ROSTER
B-VARC GENERAL MEETINGS**

		F E B	M A R
KB5???	Darlene Bowman	✓	
	Marion Chambers	✓	
	Kathy Edwards	✓	
	Susanna Friedman		✓
	Carl Hacker	✓	
	Eddie Heikkila	✓	
	Michael Howard	✓	
	Harry Levine		✓
	Clifton King		✓
	Terri McRae	✓	✓
	Matthew Pollard		✓
	Stuart Ross		✓
	Gene Russell		✓
	Lawrence Whitehead	✓	
	Jack Van Demark	✓	✓
	Al Mattis	✓	✓
WN5A	Tom Morton	✓	✓
N5AFV	Gerry Borg	✓	
KB0AP	Dave Hammer		✓
N5APW	Emmett Jackson	✓	✓
WJ5B	Elton Kytte	✓	
N5BZN	Bill Kemp		✓
NO5C	Earle Herbert		✓
KG5CB	Larry Stenger	✓	✓
KB1CCH	Ken McAninch	✓	✓
KG5CE	Ralph Cheek	✓	
KA5DKS	Sam Wilson		✓
KB5DNT	Dick Bigelow	✓	
N5CPA	Ralph Cheek		✓
WD5CTQ	Robert Bengert	✓	
KB5DNT	Vincent Orlando	✓	✓
WA2EJO	Irv Smith		✓
15ETS	Harold Parker	✓	✓
5EXM	Terry Onda		✓
ND5F	Ron McDonald		✓
KI5FO	Clint Gilliland	✓	
WB5FFD	Terry Onda	✓	
N5FNA	Randy Pollard	✓	✓
KI5FO	Herb Nance	✓	
AK5G	Mike Strong	✓	✓
N5GZW	Gary Garrison		✓
KT5H	Don Wade		✓
KB5HSP	Susan Edwards	✓	
WB5IBT	Stu Lamkin	✓	✓
KB5ICO	Lou Kronberg	✓	
WB5IGG	Melvin Thatcher		✓
W5IHY	Stephen Dunkelberger		✓
KB5ION	Carl Albrecht	✓	✓
N5JBL	Fred Juch		✓
AA5JW	Don Brown, Sr.		✓
N5JXO	Charles Prochaska	✓	✓
KB5KLY	Bill Dessens	✓	
KG5KV	Steve Moynihan		✓
N5KXU	Roger Pokladnik	✓	✓
AA5LF	Glenn Edwards		✓
KB5LFU	Bill Todd-Brown	✓	✓
WB4LZG	Mark Fields		✓
N5MPN	Eddie Runner, Jr.	✓	
KE5MY	Steve Gottlieb		✓
KB5OBB	Stephen Shirk	✓	
WA5OEN	Dick Kruse		✓
KB5OLF	Ron Shorthose	✓	
N5OUT	Steven Deaktor	✓	
N5PHL	Eddie Runner, Sr.	✓	
43PMT	Michael Chambers	✓	
PNX	Jim Gilmore		✓
5QCE	Jordan Kossack	✓	✓
N5QQJ	Sharon Grimes	✓	
N5QVI	Richard Bearden	✓	
N5RQO	Kelvin Lyons	✓	✓
N5RYZ			
N5SAX			

WA5SCE	Ron Grimes	✓	
N5SDL	Stephen Shirk		✓
WB5SHU	Clem Winford		✓
N4SKR	Garlen Marshall		✓
KA5TOQ	Don Schexnaider		✓
WB5TTS	Steven Garrett		✓
WB5VYR	Chuck Taylor	✓	✓
KF5VZ	Brenson Abbott	✓	
KA5YSL	Rick Meyer	✓	
WA5ZIB	Andy MacAllister		✓
KF5ZL	Bob White	✓	
	TOTAL:	48	52

Need Better Coverage?

As an Independent Insurance Agent, I can provide you with the specific coverage you need at a very competitive price from the more than 25 major companies I represent.

PERSONAL	BUSINESS
HOMEOWNERS	GENERAL LIABILITY
LIFE	WORKERS COMP
AUTO	PRODUCT LIABILITY
HEALTH	LIFE
PERSONAL UMBRELLA	AUTO
FLOOD	AVIATION
FIRE	MARINE
FARM AND RANCH	HEALTH

Mike Eason - N5KRU
Danvers Eason Gentle Insurance Agents, Inc.
3723 Westheimer, Houston, 77027
(713) 552-1215

Beltone® BELTONE
HEARING AIDS
AND AUDIOMETERS

Better Hearing Through Professional Care

LAWRENCE COX, BC, NBC-HIS
CERTIFIED AUDIOPROSTHOLOGIST N5OUZ

BELTONE HEARING AID CENTER

2410 AVENUE H
ROSENBERG, TEXAS 77471
713/342-1205

5708 FONDREN
HOUSTON, TEXAS 77036
713/977-8781

May Bulletin Deadline

Articles and other material destined to be printed in the May issue of the B-VARC *Bulletin* should be submitted by no later than April 26th. Please give such to Vincent Orlando WA5ETS; 8900 Bellaire Boulevard; Houston, Texas 77036-4699 or FAX (713) 774-6427.



ELECTRONICS, INC. OF TEXAS

9890 WESTPARK DR. • HOUSTON, TEXAS 77063

We stock Larsen & Hustler antennas,
MFJ tuners & keyers, Ramsey kits,
toroids, and much more!

(713) 978-6575

10% Discount to Hams

CITY ELECTRONIC SUPPLY

7015 Atwell

Houston, Texas 77081

(713) 663-6066

Alex - WA5UHT

Serving the Electronic Community with a wide variety of small parts: plugs, connectors, wire, boxes, chassis, toroids, RF chokes, etc.

Now stocking Larsen antennas!

(713) 587-1064

HAMMER COMMUNICATIONS

DAVE & CINDY HAMMER

2407 QUIVER DR.

HOUSTON, TX 77067

WJ5B & N5LXE

RADIO CONSTRUCTION, REPAIR, INSTALLATION
BROADCAST & TOWER SERVICES

Help Save the Ham Bands

by Vincent Orlando, WA5ETS

Over the years amateur radio has been assigned frequencies, has been re-assigned various parts of bands, and has had frequencies and entire bands revoked by the FCC. *The Lord giveth and the Lord taketh away.* Now is your chance to stand up and make your voice as a citizen and/or as a ham be heard to protect amateur privileges from further loss of the frequency spectrum.

Congressman Jim Cooper of Tennessee, with the full support and encouragement of the ARRL, has introduced into Congress the Amateur Radio Spectrum Protection Act of 1991. This piece of legislation, which is known as *House Resolution 73*, would propose to amend the Communications Act of 1934 so that the FCC "shall not diminish existing allocations of spectrum to the amateur radio service" and "shall provide equivalent replacement spectrum ... for any frequency reallocation" made. The bill also goes on to praise and reaffirm the many services the radio amateur community has rendered over the years to our country and its citizens. The full text of H.R. 73 may be found in the March 1991 issue of *QST*.

Ham or not, you can help by writing a letter or sending a QSL card to your representative and letting him or her know of your support for this proposal. Congress has a lot more important issues preoccupying it especially at this time, so this resolution could die without the support of many sponsors. So speak up now, or don't gripe when the bands are slowly given away to commercial interests.

Do you have experience in sales, management, human resources, management training, personnel, teaching or coaching? Then you owe it to yourself to investigate the opportunities available with our company. We are a young, expanding local management development firm looking for individuals with the above experience. High income potential, performance bonuses and advancement. Will train. Full-time and part-time positions available. Send your resumé to:

David (AA5GA) or Karla (N5LGS) Dyer

The Performance Leadership Group

10910 W. Bellfort, #102

Houston, Texas 77099

EPO

ELECTRONIC PARTS OUTLET INC.

2815 FONDREN, HOUSTON, TEXAS 77063 • (713) 784-0140

FAX (713) 784-9740

Components, test equipment,
computers, cable, meters,
surplus bought and sold.

Mon-Fri 9-6, Saturday 9-5

A Multiband Zepp with Coax Feedlines

by Bill Hickox, K5BDZ

you've been listening to the B-VARC group on the Experimenters' Net (Tuesday nights at 0300Z) you might have heard Charley Prochaska, KG5KV, Lou Kronberg, W5IHY, and me discussing antennas fed with open wire. Open wire is the most efficient feedline known. Open wire, however, must be kept clear of surrounding objects and cannot be run just anywhere. How do we get it into the house to the tuner?

Many good antennas are ignored just because they require balanced feedlines, and most of our installations today require coax or shielded feed lines into our houses (and indoor antenna tuners).

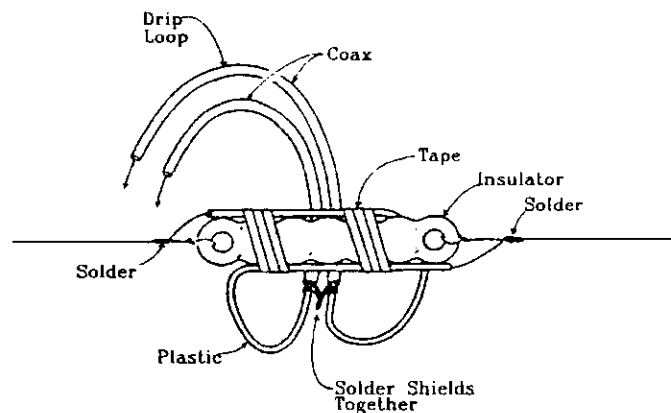
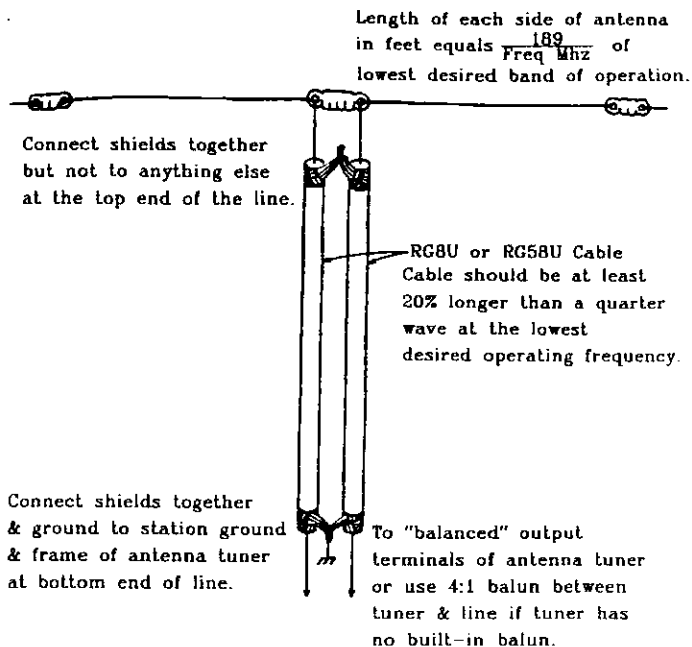
Why not use two pieces of coax for balanced feedlines? Coax can be run anywhere ... underground, through or around metal, in the open, or any other place. No detuning caused by surrounding objects. Impedance of twin feedlines made from coax is simple: two pieces of 50-ohm coax, your feedline impedance is 100 ohms. 75-ohm coax makes 150-ohm twin feedline, etc. Just double the coax impedance for twin line coax impedance. If you "mix and match", you're on your own!

As good luck will have it, Lou, W5IHY, gave me an article from the February 1984 issue of *73 Magazine*, and I'll steal from that for this column. The article uses 52-ohm coax. I'm using 93-ohm coax; mine was free. Try the RG58U (100 watts) or RG8U (1 Kilowatt) initially.

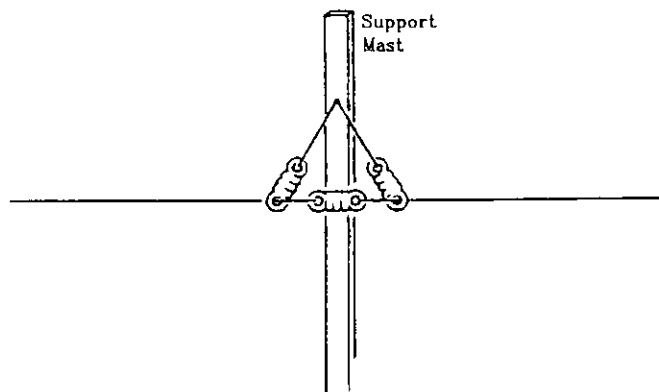
Note the diagrams, and remember that the inner conductors of the coax cables are tied to each leg of the antenna wire at the top of the line, and at the bottom end of the coax, they are connected to each of the balanced output terminals of the antenna tuner (remember the jumper wire on some tuners). There is only one precaution that must be observed: cut both runs of the feed cable exactly the same length. The length of the feedline should be at least one-quarter wavelength of the lowest operating frequency of operation. (The article says about 55 feet for 80-10 meter operation.)

Desired Bands of Operation	Length of Each Side of Antenna From Center to Each End
160-10 meters	108 feet
80-10 meters	54 feet
40-10 meters	27 feet

This multiband antenna can be used almost anywhere. Use your imagination to make it fit your needs. If you have a built-in coax-only antenna tuner in your rig, make a 4:1 balun and put it between the transmitter and the coax feedline. Try it and let me know what you think.



Method of supporting coax cables.



Method of supporting antenna at the center.

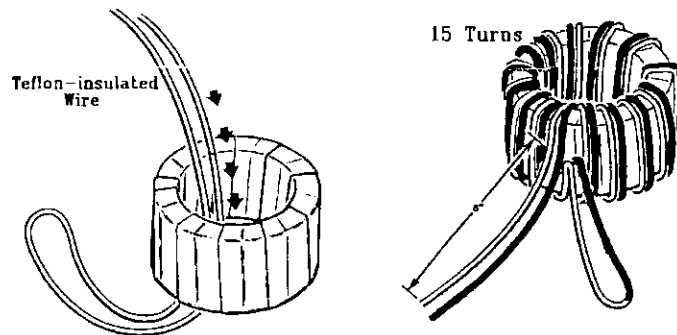
Here's how to make the 4:1 balun, by the way:

Winding the balun is easy, as you can see in the steps below. Please look at the diagrams. They were stolen from my Heath tuner manual, and doctored up just for you.

The balun core (for 1-30 MHz) is an Amidon T-200-2 (red color) for power up to 1KW input, and two of them stacked (or a T-200A-2, which is red and double thickness) for power levels of 1KW to 2KW input.

Wire is #14 stranded teflon covered. All materials are available from Gateway Electronics or other favorite Houston electronic stores.

Cut a piece of this wire 11 feet long and fold it in the middle forming a double wire, as in the diagrams. Wrap a piece of black tape around one side of the fold, and follow that part of the wire to its end, wrapping another piece of tape two inches from that end (this will be the "black wire"). Push the folded end through the center of the core assembly and wind one turn onto the core. Adjust the two free ends until you have a length of about 6" from the cores to the wire ends. Pull the wires firmly against the cores.

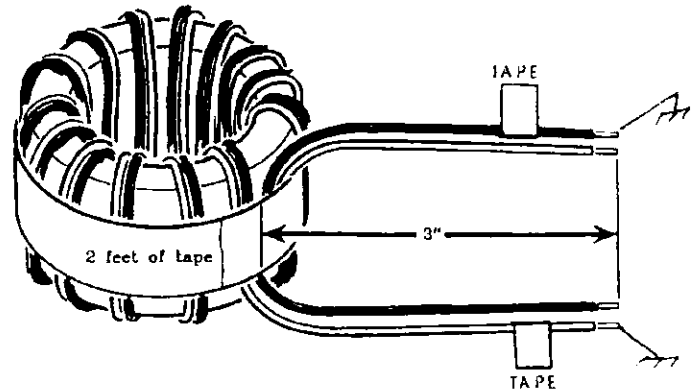


Continue to loop the folded end of the wire around the core assembly until you have a total of 15 turns (double wire turns) wound on the core. (Actually, anything from 11 to 15 turns is acceptable.) Make sure you pull the wires snug for each turn you wind. Also make sure the wires do not twist or overlap the other wires. Wrap the circumference — the outer edge — with two layers of electrical tape to hold all in place neatly.

The balun consists of two separate windings wound parallel. Complete the next steps carefully to insure you connect the proper wire ends.

Cut the loop of the folded wire, giving you a total of four wires coming from your newly-wound coil. (To better illustrate, I have colored one of the wires dark to represent the "black" wire with the taped ends.) Strip 1" of insulation from the ends of each wire.

Twist the "white" wire from one end of the winding together with the "black" wire from the opposite end of the windings. Solder these together. These will be connected to ground.



Connect the remaining white wire to one of the ceramic insulators, and connect the remaining black wire to the other ceramic insulator. These will be your connections to the open wire or balanced wire feeders to your antenna.

Connect a wire from one of the ceramic insulators to the center conductor of a SO239 connector and solder to the ground winding the outer portion of the SO239 connector. Solder any remaining connections.

