RICHARD BUTTON ANDY KALNINS MIKE SHERBA VE3RJB VE3LCZ VE3DKW 725-7150 668-0805 723-7674 PRESIDENT PROGRAM DIRECTOR VICE\_PRESIDENT REGISTRAR PETER JOHNS VE3WHZ MARGARET JEFFERY KEITH WYARD-SCOTT VE3BNN VEJGDE REGISTRAR
SPECIAL EVENTS COORD.
GET HELL CARDS
2-HETER NET CONTROL
LIST AND LABELS
INSTRUCTION COORD. 576-8738 723-7842 852-5447 434-6741 RALPH DAY VE3CRK COLIN BELL ROY HILLER PAUL DALE RICK GIBSON VEJCEU VEJAAF VEJLIIZ VE3ASH 434-2886 HARRY WESTWOOD EDWIN H. TAYLOR AUDITOR VE3FRH 985-3790

CLUB STATION...... VE3NSR
CLUB REPEATER..... VE3OSB . 147.72mc IN ... 147.12mc OUT
HARRY'S REPEATER..... VE3NAA . 448mc IN ... 443mc OUT

2-meter NET CONVENES EVERY THURSDAY AT 7:30 pm ON THE CLUB REPEATER, VEJOSH. AS PART OF THE NET, CODE PRACTICE IS PROVIDED BY BERNIE VEJATI BEGINNING AT 8:30pm.

10-metor NET - A GROUP OF LOCAL HAMS MEET SUNDAY ON 28.200 mc USING CW FROM 9:00am TO 10:00am, THEN SWITCH TO SSB PHONE UNTIL EXHAUSTED OR HUNGRY.

#### CO-ORDINATORS

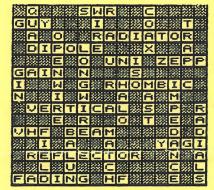
NONQUAN CANOE RACES RIDE FOR THE HANDICAPPED

SANTA CLAUSE PARADE FLEA MARKET CLUB INVENTORY VE3CNE & FIELD DAY GLEN GOSLIN, VE3LIZ 725-1545
RAY ZAMBONELLI, VE3OUB 723-2467
RALPH DAY, VE3CRK 576-8738
GORD HCCUALG, VE3MZS 683-4054
DOUG BARNES, VE3MJR (705)
GREG SCHATZMANN, VE3GJS 576-4655

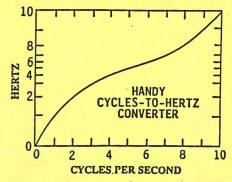
Last meeting: Mike VE3DKW gave a very good presentation about antenna tuners. Next meeting; To follow up on the theme of last month's meeting, Peter has arranged for Farney LeGresley, VE3BHQ to give us a talk on antennas. This will prove to be a very interesting evening, so come on out, bring a friend too! Same time, same place. Monday, February 11th, 1991, 8:00 PM at the Green Room of the Arts Resource Centre, Center Street South, Oshawa. (behind city hall). Terry Sulivan, where are you? Terry's snoozeletter was returned. Does anyone

Thanks to all the members who contributed this month. It sure makes my job a lot easier. Speaking of jobs, I sure have been around the country this month. Ottawa, Montreal, Newington Conn., Mineapolis Minnesota and I still got the old snoozeletter out on time! Next month I will be down in Fort Meyers soaking up some sun, so I may be a little late. CHARLIE, VE3EII has for sale, a Yaesu FT209RH 5 watts complete with charger, two antennas and manual. Best Offer! Charlie Phillips, VE3EII, Phone 416: 852-3506. (Uxbridge).

Below is a chart which I use to convert Hertz to cycles. You may find it help-ful too! I keep it right next to my Celsius to Farenhight conversion chart.



know of Terry's new QTH?



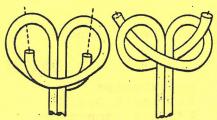


Fig. 5. The U.L. knot, named for Underwriters' Laboratories, has an interesting characteristic. The harder you pull on the line cord, the tighter the knot becomes. Therefore, it makes an excellent strain relief.

.FEE ENCLOSED:. .

#### Answers to Antenna Mania

MEMBERSHIP CLASSIFICATION:.

LAST CALL FOR RENEWAL !!!!!!

Full membership - \$15.00 - Includes full voting privileges and monthly news letter for one calendar year. (Jan. to Dec., July&Aug excl.)

ASSOC. MEMBER \_ \$10.00 - News Letter only, welcome to any meetins attended.

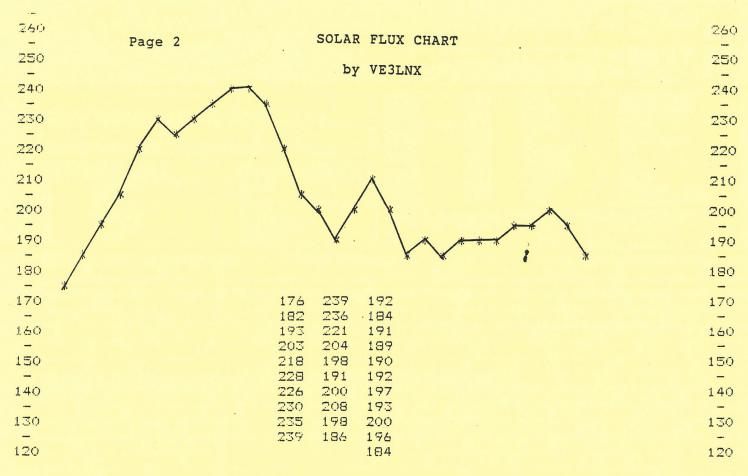
2nd FAMILY MEMBER-\$ 5.00 - Full voting privileges but no news letter.

TO JOIN SEND CHEQUE OR MONEY ORDER TO THE REGISTRAR AT HIS HOME:
298 Dover Street, Oshawa, Ontario, L1G 6G6. (preferably) or...............
N.S.A.R.C., Box 171, Oshawa, Ontario, L1H 7L1

PHONE NUMBER

QTH:......ZIP:....

DONATIONS FOR REPEATER FUND (if you desire) AMOUNT:.......



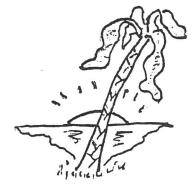
AVERAGE SOLAR FLUX NUMBER FOR THE MONTH OF DECEMBER IS 203.8 DE/VE3LNX

#### NORTH SHORE AMATEUR RADIO CLUB INC.

Audited Financial Statement - January 1st 1990 to December 31st 1990.

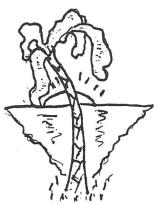
INCOME	EXPENSE							
Memberships       \$1721.01         Raffles & Draws       \$70.50         Repeater donations       \$125.00         Coffee Sales & Crests       27.00         Misc. Interest etc.       \$588.57         Flea Market       \$3240.36         I.A.T.V.       \$8.00         TOTAL       \$5780.44	Bulletin \$1117.73 Repeater operation \$863.93 Field Day \$133.84 Corn Roast \$240.26 Sermon on the Mount \$96.42 Christmas Party \$151.01 Rent, Insurance, etc. \$1152.53 Flea Market \$436.05 I.A.T.V. \$108.00 TOTAL \$429977							
Cash on hand and in bank, Jan. 1/90. Total income to Dec. 31/90.  Total expenses to Dec. 31/90.	\$ 5360.52 \$ 5780.44 \$11140.96 \$ 4299.77							
Add outstanding cheque #101	\$ 6841.19 \$ 521.34 \$ 7362.53							

BANNED COUNTRIES LIST - Jan. 18/91: Iraq, Saudia Arabia, Ethiopia, Ghana, Burma, Angola, Thailand, Zaire, Suriname



## REPORT FROM THE SUNNY SOUTH KA2KNZ

So far, this winter season has been very interesting what with Bill VE3FOF here for the winter. We have had several contacts with the fellows in Ontario, Medina New York and Ray 30UB (EX1ENE) when he was able to join us from Mexico. We have have a weekly net that is on every monday and have a very good turnout with Russ 3ATT, 3LLZ and others.



The conditions are good at this time of year and QRM is not too bad. Don Amis WA2ACN is generally there and the odd time we have a chat with Dave, KA6RLP. It has been a good winter so far with many weekly contacts.

On tuesdays I have skeds with Glen 3AEQ, Ron 3AIY and 3AGF George. Sometimes Ray 30UB checks in from Mexico. As far as other activities, DX has been good but that is not my cup of tea.

Another fun thing was the visit of Bob 3LLZ to see Bill Baker. I was able to get down there to also have a good visit with Bob. We had a very interesting contact from Bill's QTH with WA2ACN. My wife Ann had a cake for Bob's birthday and Norma provided the other fancies. So a good time was had by all. There are several other VE3s down this way and we hear them on other frequencies in the area

Well I have blown my whistle and say cheerio for now and good hunting. Enjoy the club paper.

Your Southern Correspondent, Dick Richards, KA2KNZ.

# Antenna Mania

***	1	***		*	2	3		***	***	4	***	***	***	
5				**	***		***	***	***		***	***	6	***
**		*	7		***	8						•		
**	9				10		***	***			***	*		
				***		***	11		12	***	13			·
14				***			***					***		
							15	16		17		18		***
								-						***
	19									·				201
	***		1											1
21		22		23			24		***		***		***	;
									***		25			3
	26				-									
27						***	28		**					

#### Across Clues

- 2. Standing-wave ratio
- 5. Type of holding wire
- 8. Main element
- 9. Half-wave antenna
- 11. One direction antenna
- 13. Type of antenna (Z --)
- 14. Output versus input
- 15. Big gain wire antenna
- 19. Popular DX antenna
- 21. Two meter spectrum
- 23. Multi-element horz. antenna
- 25. Type of beam
- 26. Back element of beam
- 27. Weakening signal
- 28. High frequency

#### Down Clues

- 1. A four-sided antenna
- 3. A simple antenna
- 4. Feedline

Say You Saw It In CO

- 6. A small antenna element
- 7. A simple feedline
- 10. A long antenna
- 12. All direction radiator
- 14. Type of pole
- 16. Round antenna
- 17. Vertical holder
- 18. Property of antenna
- 20. Ground wires
- 22. Electric or magnetic
- 23. A matching device
- 24. Equal impedances

#### Sleeve Balun for VHF

Ken Grant VE3FIT

This design is a variation of the traditional sleeve balun which has appeared for many years in the Amateur handbooks. Its purpose is to decouple a coax-fed balanced antenna such as a dipole, Yagi or quad from its feedline, thus preventing antenna currents from flowing down the feedline and upsetting the radiation pattern (not nice if the antenna is being used on a "fox-hunt"!).

The sleeve balun is actually a stub, shorted one quarter wavelength down from the antenna feedpoint (see diagram). Normally, the stub is made from a piece of copper pipe, separated from the coax feedline by an air dielectric. This is mechanically awkward and, of course, inflexible.

The design presented here uses a product called Panduit Spiral Wrap as the dielectric. It is made of clear polyethylene, the same material used as the dielectric of RG-58 coax cable and, as its name suggests, is used to spiral wrap wiring bundles.

The dielectric constant of polyethylene is .66 and thus the length of the sleeve (for a design frequency of 147 MHz) is:

 $300 \times 1 \times .66 = .337 \text{ Metres} = 13 1/4 \text{ inches}$ 

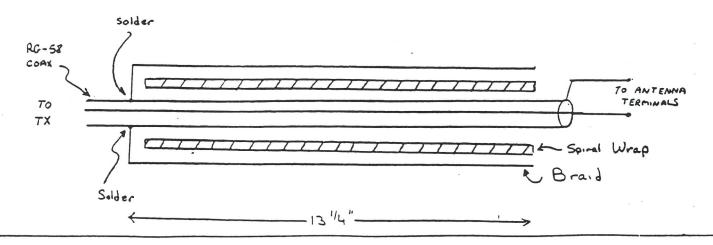
Construction is quite simple. Firstly remove about 20" of braid from a piece of RG-58. Slide this over the feedline which you wish to decouple. This will be used as the sleeve.

Prepare the cable ends with whatever cable terminations you require. From the point where the coax shield and centre conductor diverge, remove about 13 1/2" of the cable jacket. Use Spiral Wrap to completely cover the exposed shield (wind tightly).

Solder the sleeve to the feedline shield as shown. Then, pull the sleeve tightly over the Spiral Wrap dielectric. Trim it to a length of 13 1/4" and wrap with electrical tape. This completes construction.

Attach the feedline/sleeve combination to the antenna and you're in business.

This balun could be scaled for other frequencies. It is inexpensive, easy to build and eliminates the need for a cumbersome coiled transmission line "choke".



		ANT	ENNA LENG	TH CHART	BY K5KG				
FREQUENCY	W	AVELENGTH	- FEET	WAVELENGTH - METERS					
(MHZ)	1/4	1/2	1/2+5%	FULL	1/4	1/2	1/2+5% FULL		
1.8 1.825	129.87 128.09	259.75 256.19	272.73 269.00	519.49 512.38	39.58 39.04	79.17 78.08	83.13 158.33 81.99 156.16		
1.85	126.36	252.73	265.36	505.45	38.51	77.03	80.88 154.05		
1.9	123.04	246.08	258.38	492.15	37.50	,75.00	78.75 150.00		
3.5	66.79	133.58	140.26	267.17	20.36	40.71	42.75 81.43		
3.6	64.94	129.87	136.37	259.75	19.79	39.58	41.56 79.17		
3.7	63.18	126.36	132.68	252.73	19.26	38.51	40.44 77.03		
3.8	61.52	123.04	129.19	246.08	18.75	37.50	39.38 75.00		
3.9	59.94	119.88	125.88	239.77	18.27	36.54	38.37 73.08		
4	58.44	116.89	122.73	233.77	17.81	35.63	37.41 71.25		
7	33.40	66.79	70.13	133.58	10.18	20.36	21.38 40.71		
7.05	33.16	66.32	69.63	132.64	10.11	20.21	21.22 40.43		
7.1	32.93	65.85	69.14	131.70	10.04	20.07	21.07 40.14		
7.2	32.47	64.94	68.18	129.87	9.90	19.79	20.78 39.58		
7.3	32.02	64.05	67.25	128.09	9.76	19.52	20.50 39.04		
10	23.38		49.09	93.51	7.13	14.25	14.96 28.50		
10.5	22.26	44.53	46.75	89.06	6.79	13.57	14.25 27.14		
14	16.70	33.40	35.07	66.79	5.09	10.18	10.69 20.36		
14.1	16.58	33.16	34.82	66.32	5.05	10.11	10.61 20.21		
14.2	16.46	32.93	34.57	65.85	5.02	10.04	10.54 20.07		
14.35	16.29	32.58	34.21	65.16	4.97	10.04 9.93 7.32	10.43 19.86		
18	12.99	25.97	27.27	51.95	3.96	7.32	8.31 15.83		
18.5	12.64	25.27	26.54	50.55	3.85	7.70	8.09 15.41		
21	11.13	22.26	23.38	44.53	ن.39	6.79	7.13 13.57		
21.1	11.08	22.16	23.27	44.32	3.38	6.75	7.09 13.51		
21.25	11.00	22.00	23.10	44.00	3.35	6.71	7.04 13.41		
21.45	10.90	21.80	22.89	43.59	3.32	6.64	6.98 13.29		
24.89	9.39	18.78	19.72	37.57	2.86	5.73	6.01 11.45		
24.93	9.38	18.75	19.69	37.51	2.86	5.72	6.00 11.43		
24.99	9.35	18.71	19.64	37.42	2.85	5.70	5.99 11.40		
28	8.35	16.70	17.53	33.40	2.54	5.09	5.34 10.18		
28.5	8.20	16.41 16.12	17.23	32.81	2.50	5.00	5.25 10.00 5.16 9.83		
29	8.06	10.12	16.93	32.24	2.46	4.91	3.10 3.83		

#### FORMULAS USED

1 METER = 3.21 FEET

LENGTH OF 1/2 WAVELENGTH ANTENNA (METERS) =

(300 \* \*.95 \*.5)/FREQ(MHZ = 142.50/FREQ(MHZ)

LENGTH OF 1/2 WAVELENGTH ANTENNA (FEET) =

(300 \* .95 \* .5 \* 3.281M/FT)/FREQ(MHZ) = 467.54/FREQ(MHZ)

NOTE: 1/2 WAVELENGTH + 5% IS USED FOR INVERTED VEE ANTENNAS

### NORTH SHORE AMATEUR RADIO CLUB

### EQUIPMENT AND AVAILABILITY FOR EMERGENCY SERVICE

EQUIPMENT RF POWER POWER 8						SUPPLY MOD			ODE			
VHF	BASE MOBILE HT			110AC 110AC 110AC	12DC	BATTERY BATTERY BATTERY	SSB	CW CW	FM FM FM	PACKET PACKET PACKET		
UHF	BASE MOBILE HT			110AC 110AC 110AC	12DC	BATTERY BATTERY BATTERY	SSB SSB	CW CW	FM FM FM	PACKET PACKET PACKET		
HF	BASE MOBILE			110AC 110AC		BATTERY BATTERY	SSB SSB	CW	FM FM	PACKET PACKET		
ANTI	ENNAS											
BATT	RATOR	AM AM AM AM AM AM AM POWE	WIRE WIRE WIRE WIRE WIRE		TO TO TO TO	THER THER THER THER THER THER						
EMER	GENCY A	VAI	LABILIT	-	NEVER ANYTIM	EVENIN E	IGS WE	EEKDA	AYS	WEEKENDS		
NAM	E:						CALL:	_				
ADD:	RESS:					-	PHONE:			-		
	_											

Send completed form to: NSARC P.O. Box 171 Oshawa, Ont., L1H 7L1 c/o Andy Kalnins, VE3LCZ