



Scuttlebutt

No. 78 December 1988

President	Fred Lass	K2TR	518-355-4813
VP-Activities Manager	Bill Shaheen	N1CQ	413-467-9075
Secretary-Treasurer	Charlotte Richardson	KQ1F	508-562-5819
Editor	Paul Young	K1XM	508-562-5819

Captain's Cabin Fred Lass, K2TR

CQ WW Phone Best Ever!

What a weekend! Conditions in the CQ WW Phone were the best that I have seen for any contest - ever. The K-index was zero for the entire 48 hours. At K2TR we broke the old N2AA Multi-Multi record with 6 fired-up operators, and were only a little behind W3LPL.

My compliments go out to everyone who worked to build up the packet 220 backbone. The speed at which things were relayed to everyone was very impressive. Once I stayed and listened after a spot I put in. Many club members who called showed up within a minute - even those in Eastern Massachusetts. Thanks to Dave, KY1H, Ken, K1EA, Dick, KB1H, and Pete, W1RM, and many others for their efforts. We must be careful about relying on packet too much. Everyone was running so often that we sometimes neglect tuning around the band. My personal thanks go out to everyone who helped by announcing the many nice countries we all worked.

A big welcome to all of the new members who joined YCCC in Boxboro. While active participation in contests is what drives our club to greatness, the camaraderie of members strengthens the club. Remember, ARRL requires attendance at two meetings each year to be eligible to participate in ARRL club competition. New members require one meeting in six

months.

Due to an unfortunate error by ARRL the 1988 DX club scores are being revised. FRC has argued for accountability of the ARRL club scores for two years. Now they may get it. Each of you should verify that your score is listed in QST.

CQ WW CW is almost here. Don't expect conditions as good as phone, but still the high bands could really play. Go for it!

Floating Paul Young, K1XM

I hope you were all active in the CQ WW SSB. Conditions were phenomenal! Even starting the weekend with a cold and sore throat I still had a blast. And working 3W8DX for a brand new country wasn't bad either!

But the best is yet to come. By the time you get this Scuttlebutt, I will be in Curacao. KQ1F, K2WR, KD2HE and I will be operating PJ2X multi-single in the CQ WW CW contest. The score will be 100% YCCC. Please work us on six bands, and if you hear our multiplier station trying to break a pile-up, feel free to call the DX station and let him know we are there. And of course, put us out on packet if we haven't been announced, especially on 160 meters.

There will be lots of other YCCC activity in the code

contest too. I've been told of four multi-multi stations, several multi-singles, and a bunch of single-op and single plus packet operations. I expect that YCCC members will win single op and multi-single, and will set new records in the process.

With so many multi-ops, the packet system should be overflowing with goodies. Five band DXCC may almost be possible in one weekend!

Please be careful with the packet system. Don't hesitate to report something good, but remember it will take only one user reporting all the YU stations on 15 meters to overload the whole thing.

I'm starting to hunt for articles for next year's Scuttlebutt, particularly operating and technical articles. If you haven't written in the last six months, or if I think you know about something you haven't already written about, you are fair game.

Rich, K1CC, requested that we send the contest questionnaire with this issue. If you did not answer one at Boxboro, please fill it out and send it to him or bring it to the December meeting.

Next Meeting

Paul Young, K1XM

The next meeting of the Yankee Clipper Contest Club will be on Sunday, December 4, 1988, at the Sheraton Sturbridge, beginning at 1 pm. The program includes a discussion of his 4-element 80m vertical array by Bruce Clark, KO1F, and a lecture on time-harmonic electromagnetic fields by Dave Jordan, KC1Q.

The Sheraton Sturbridge Resort and Conference Center is located on Route 20 in Sturbridge, Massachusetts, $\frac{1}{2}$ mile West of I-84 (first exit off I-84 when coming South from the Mass. Turnpike). Directions to the Sheraton are easy: Exit I-84 on to Route 20 West. You will pass through two sets of stoplights while noticing several motels on your right. Make a right turn just prior to the Burger King sign. This is the entrance to the Sheraton, and there is plenty of parking in front of the hotel.

The meeting dates for 1988-89 are:

DATE	DAY
December 4, 1988	Sunday
February 5, 1989	Sunday
April 2, 1989	Sunday
June 17, 1989	Saturday
August 6, 1989 (picnic)	Sunday
October 1, 1989	Sunday
December 2, 1989	Saturday

Secretary's Report Yankee Clipper Contest Club

The October YCCC meeting was held at the ARRL

New England Division Convention in Boxboro, Massachusetts, on October 1, 1988. A standing-room-only crowd of 120 members, their families, and many guests attended. Club President Fred, K2TR, discussed the reversal in the ARRL contest results, which appears to have given the gavel to FRC after all, by only 120K points! It appears the both logs and eligibility lists were not checked as carefully as they should have been, resulting in an effective tie, since the margin of error is much larger than the small difference in club scores. Bill, N1CQ, reported that the meeting dates for 1989 have been set, and should appear in the December 'Butt. Ed, NT2X, took orders for club jackets, to be delivered at the December meeting. Club scorekeeper Jeff, NK1F, handed out **Contest Cookbooks**; the remaining ones not picked up will be mailed out. Rich, K1CC, who could not attend the meeting due to a trip to SP-land, provided a Contest Advisory Committee questionnaire for members to fill out and mail to him. The treasurer's report showed a balance of \$995.78, with \$58.25 in postage for Scuttlebutt 75 still to be refunded by Rivendell. The club welcomed 24 new and returning members:

Bob Melvin, N1ATN (ex-KA1CMI)
 Roger Corey, W1AX (ex-W1JYH)
 Stephen A. Smith, W1CB (ex WB2KMK, WB6JGM, WA4GFV)
 Dana W. Atchley, Jr., W1CF (ex-W1HKK)
 Paul Terwilliger, N1ELN
 Ray Ortgiesen, KB1EM (ex KA1CFD, N1BXS)
 Michael Rukin, K1EUF (ex-K2LTI)
 Frank McInnis, K1IXX
 Mike Perry, KA1LSZ
 Robye Lahlum, W1MK (ex W1EEF, W0GBQ, K1JEP)
 Ray Sylvester, NR1R (ex-WA1AER)
 Eric Wagner, KB1RI (ex WN2STJ, WA2STJ)
 Chek Titcomb, W1SD (ex W1GKU, K6BPR, W6DQ)
 Thomas A. Bell, W1XS (ex W1HCO, K2SEL, W6IKA)
 Victor Carnuccio, KD2HE (ex WB2MOQ)
 Allen Singer, N2KW (ex-WA2WFW)
 Rich Sellentin, NR2L (ex-KA2DZA)
 Don Lewine, WB2UMF
 Kenneth D. Stein, KD2WQ (ex KB2BJB)
 David Stein, KD2ZE (ex KB2BJA)
 Samuel A. Millar, W3WDX (ex CN8GL, WN3WDX)
 Victor Paounoff, N4XR (ex W1EDB, K2HK, also HH2VP)
 Gary Grebus, K8LT (ex-WB8IBZ)
 Dennis Mitchell, K8UR (ex WB3BUU, WA8ROJ)

Following the business meeting, Eimac the Magnificent amazed and astounded the crowd with his great feats of mental prowess!

Then John, K1AR, handed out CQ awards to a long and impressive list of members. He also awarded the Club a plaque, for the 1986 CQ WPX club competition.

Steve, K1ST, announced that he was chairing the 1988 New England DXCC banquet, on Saturday, November 5, 1988, in Concord, MA, and had handouts on the dinner available. He looked sheepish when reminded that the DXCC banquet falls during CW Sweepstakes

this year.

After the break, Jim Curran, N1DUB, spoke on audio systems, including a demonstration of many sorts of microphones. Then Dave, KY1H, updated us on the packet system. Bob, KQ2M, is planning a packet hookup between the club system and P40V during CQ CW. Then Bill, N1CQ, spoke on physical phenomena for transmitting systems, discussing materials, corrosion, vibration, and soil conductivity.

Following the meeting, many club members adjourned to a pizza party at the nearby QTH of Ken, K1EA.

Respectfully submitted,

Charlotte L. Richardson, KQ1F

Secretary/Treasurer

3 October 1988

Score Rumors:

Jeff DeTray, NK1F, YCCC Scorekeeper

CQ WW SSB:

Single-Op:

Call	Qs	Zs	Cs	Score
W1AX	433	58	174	290232
KA1DWX	559	89	230	507848
KC1F	3791	146	460	6.6M
W1GIH	947	113	306	1117054
K1HI	1600	117	330	2M
W1JR	237	61	164	149400
N1RC	225	45	109	95K
K1RU	2450	135	424	3.85M
K1VR	1887	130	392	2.83M
W1WEF	?	?	?	2.6M
N2AU	640	39	110	271K
N2IC/0	2400	146	375	3.6M
KR2Q/qrp	950	101	254	1M
N2RM	3590	160	544	7M
AI3E	191	40	105	80K
K3TUP	3343	155	482	6.1M
NM3U	?	?	?	1M
W3WDX	56	11	26	1512
WX4G	2629	?	?	4.2M
K4XS	2050	115	35	850K
N4XR	247	69	146	145K
K5ZD/3	2482	151	462	4.4M
N6BV/1	2906	122	423	4.5M
W9RE	2655	145	433	4.4M
N1OE	1463	38	130	1.5M
WB0O	1240	103	260	1.5M
K0RF	2410	147	376	3.6M

Single-Op Single-Band:

Call	Band	Qs	Zs	Cs	Score
VE2ZP	?	2800	39	143	1.3M
W2DI	10	2568	32	102	980K
K4XS	10	2040	35	115	872K
K1UO	15	1820	38	125	845K
W2HPF	15	1446	39	124	671K
K2VV	15	2200	38	142	1.12M
K2WK	15	1227	35	122	549K
W0ZV	15	2302	39	141	1.18M
W1RR	20	677	34	105	271K

Multi-Single:

Call	Qs	Zs	Cs	Score
AK1A (+packet)	1111	108	300	1.32M
K1AR (+packet)	2797	157	538	5.67M
KC1BG (K1BG+packet)	432	84	223	367K
W1BK	705	99	254	691K
WB1DGV (+packet)	361	78	150	228K
KC1EO (+packet)	642	88	270	646K
KQ1F (+K1XM, packet)	1066	132	377	1.5M
W1GG (+packet)	337	100	195	273K
K1GW	750	96	287	808K
NO1I (+packet)	753	122	320	941K
K1IU (+packet)	947	134	326	1.23M
K1KA (+packet)	?	?	?	1M
AK1L	1247	105	327	1549584
KT1O (+packet)	618	95	219	550K
W1RM (+packet)	443	40	108	182K
K1RX	2678	151	548	5.14M
K1SF (+packet)	?	?	?	200K
K1TR (+packet)	740	93	261	753K
N1TZ (+packet)	?	?	?	500K
NB1Y (+packet)	444	64	170	307K
WG2E (+packet)	175	49	92	65K
K2EK	?	?	?	.5M
N2MG	2729	143	510	5.02M
N2RM	3590	160	544	7M
K4VX	3096	171	548	6.2M
W5WMU	3042	173	530	5.9M
K8CC	?	?	?	6M
W9RE	2655	145	433	4.4M
VE1ZJ	4716	140	432	6.5M

Multi-Multi:

Call	Qs	Zs	Cs	Score
KY1H	3875	161	547	7.87M
NB1H	5249	164	576	10.8M
K2TR	6601	167	624	14.35M
W3LPL	7014	179	675	17M
N4RJ	4425	181	636	9.8M
N5AU	6117	185	680	14.8M
WM5G	5061	178	626	11.6m
KP2A	19000	?	713	40.1M
P40V	21024	189	750	54M

*CQ WW SSB Score Breakdowns:

P40V Multi-Multi:

band:	Qs	Zs	Cs
1.8	369	17	45
3.8	1637	25	95
7	2217	32	125
14	5192	39	167
21	6154	38	158
28	5455	38	160
TOTAL	21024	189	750 = 54M

ARRL SS CW:

Call	Qs	Ss	Score
K1AR	602	75	90300
W1AX	200	62	24800
K1CC (A)	912	76	138624
K1DH	107	?	?
KQ1F (A)	258	68	35088
K1IU	576	74	85248
K1VSJ (A)	329	71	46718
W1WEF	983	76	149416
K1XM (A)	141	61	17202
K1ZX/4	950	76	144400
W2GD (A)	976	75	146400
N2IC/0	1122	76	170544
W2LYL	635	76	96520

WB2Q	1063	75	159450
W2RQ (A)	740	75	111000
KZ2S	1049	75	157350
KD2SX	317	67	42478
K2ZJ (A)	912	75	136800
K3LR	1141	76	173432
KE3Q	950	75	142500
KM3T/1	99	73	14454
W4MYA (Q)	536	74	79328
NX4N	376	63	47376
N4RJ	1128	76	171456
WM4T	1001	74	148148
K4VX (A)	990	75	148500
K4XU (A)	888	75	133200
N5AU	1136	76	172672
KC5DX	767	76	116584
WM5G	1137	76	172824
K5GA	1137	76	172824
K5ZD/3	1111	75	166650
K8CC	1063	74	157324
K8MR	800	76	121600
KW8N	1036	76	157472
N8NA	880	76	133760
AC9C (A)	863	75	129450
KC0G	1049	75	157350
KV0I (Q)	676	75	101400
KM0L	886	75	132900
WB0O	925	75	138750
K0RF	1178	75	176700

Hashing

David Clemons, K1VUT

Here's another helpful concept for those who like to write their own programs for contest operation.

Have you ever been in a contest, called a station and heard the following - "K1VUT...wait...(about 5 seconds)...OK, this is a good QSO - 59 Mass, go ahead."? I did, and was I ever surprised to find out later that the operator was using a computer! Do I hear someone say that their handwritten dupe sheet is faster? Right you are, but if you approached the problem the same way the computer did, you'd have given up contesting long ago!

The way people first learn to store large numbers of similar datatypes is to use an array. In this case, each call is entered into the array as it is worked. A dupe search therefore has to check every call previously worked before it can verify the new call as being good. A test dupe check program run on my computer timed a search through a 1000 call array and took 5 seconds. This is clearly unacceptable for high speed contest work. What we need here is a faster algorithm to make use of the computer's speed.

Let me introduce an algorithm known as hashing. The idea of hashing is to give a numerical value to each piece of data, then use that value to determine which array spot to insert or search for the data. The obvious way to do that is to make use of the ASCII values of the characters in the call.

There are several considerations to make hashing more

efficient. Sometimes there will be more than one call with the same numerical ASCII value. This will cause a "hit" when insertion is attempted. The program must not insert over another call but continue down the array until a blank spot is found. Obviously, the number of "hits" must be kept relatively low in order to maximize speed. The way to do that is to make the array larger than expected and also to multiply the ASCII values by appropriate numbers in order to spread out the distribution of the values.

Below is the code for my hashing program segment. It is written in GW-BASIC because it is readily available for MS-DOS machines. The code was tested using the first 1000 calls from my 1986 Phone Sweepstakes operation. I made the array 70% larger than needed and found the multiplier numbers (83,61,43) to work the best out of the 30 combinations I tried. (593 hits were recorded in entering the 1000 calls.) No dupe search or call entry took more than one second.

Lastly, it should be noted that different contests will give different call letter distributions. I used the last three letters in my program, which takes care of the redundantly appearing K and W type prefixes. Even so, other contests may require different multipliers to spread out any common distributions. This is best taken care of by testing the numbers with a data file of actual calls worked in a recent version of the contest.

```

10 CLS
20 REM * THIS PROGRAM SEGMENT DEMONSTRATES THE USE OF
  HASHING *
30 REM * B$ IS NAME OF ARRAY OF CALLS
40 REM * N IS LOOP COUNTER *
50 REM * A$ IS THE INCOMING CALL *
60 REM * X IS THE ARRAY SUBSCRIPT WHERE THE CALL WILL
  BE INSERTED *
70 DIM B$(1700)
75 REM * NOW INITIALIZE THE ARRAY TO ALL SPACE *
80 FOR N = 0 TO 1700
90 B$(N) = " "
100 NEXT N
110 PRINT "NEXT CALL"
120 INPUT A$
130 GOSUB 510
140 WHILE B$(X) <> " " AND B$(X) <> A$
150 IF X = 1700 THEN X = 0 ELSE X = X + 1
160 WEND
170 IF B$(X) = " " THEN B$(X) = A$ ELSE PRINT A$,"
  IS A DUPE"
500 REM * THE FOLLOWING SUBROUTINE DOES THE HASHING
  COMPUTATIONS*
510 X = 0
520 X =61 *(ASC(RIGHT$(A$,1))) +
53 *(ASC(LEFT$(RIGHT$(A$,2),1)))
530 X = X + 43 *(ASC(LEFT$(RIGHT$(A$,3),1)))
540 X = X MOD 1700
550 RETURN

```

Murphy's Law of Ham Radio

Yuri Baltin, chief of at UQ1GXX

Translated by Ed Kritsky, NT2X

1. All DX you hear upon installation of a fixed antenna will be coming from the opposite direction.

2. Great propagation normally occurs two days prior and one day after the contest. Exception: Absolutely the best propagation occurs on the days when you have to go on a business trip or your rig goes up in smoke!

3. All DXpeditions tend to operate on the lower bands when it is daytime at your QTH and on the higher bands when it is night.

First amendment to the rule #3: Since all DXpeditions operate according to the best propagation and common sense, see exception to the rule #2.

Second amendment to the rule #3: Since most expeditions also operate when the European QRM are the strongest, see the rule #3 itself.

Amendment to the amendment #1: Who says that expeditions must operate according to the common sense?

4. After the test most testers boast they weren't prepared for it.

5. Contest winner always compliments the competition, especially their antennas and equipment.

6. A DXer who missed a rare expedition invariably says it was the country he didn't need.

7. Effectiveness of any station (QRV-factor) is constant: When you install a new effective antenna, your amplifier will blow up. When you fix it, all bands will be 'clogged' by wide-band QRM of unknown nature. When QRM disappear you rejoice briefly only to find out that someone had cut your antenna coax.

8. Axiom of QSL exchange: Confirmed are only and only those QSO that you are not sure of.

9. Axiom of diploma chasing: As soon as you receive all the cards for particular award, you find out that its requirements became more complex just about a week ago. If you managed to send in an application for award, you shall soon find out that it was eliminated two years ago.

10. If while tuning antenna the SWR becomes 1:1 you're connected to a dummy load.

11. The best antenna you've ever had was the one blown down by the wind last week.

12. He who knows frequencies of all DXpeditions never works more than a 150 countries in his lifetime.

13. When you don't have time to send in a contest

log, everyone's scores will be lower. if you send it in as a 'check log', you are going to find out about it the day after.

14. If the new antennas works better, you are connected to the old antenna.

15. Personal qualities of one's correspondents are in direct relation with the power of one's transmitter; if you cannot get through, they are 'lids', if you can - 'best friends'.

Copyright ©1988 Russian text by Yuri Baltin

Copyright ©1988 English text by Edward Kritsky

An Amateur Radio Tower

Marvin Wilson, VE7BJ

(reprinted from **The Ontario Amateur**)

Why do people get upset when one puts up a radio tower? A few things in its favor...

IT DOESN'T

Squeal its brakes

Screech its tires

Blow its horn

Roar its motor

Slam its doors at ungodly hours

Shine its headlights in your bedroom window

Nor does it backfire.

IT DOESN'T

Drop leaves that you have to clean up

Grow branches over your house

Drop fruit or nuts which block your downpipes

Block your view like a tree or building

Grow roots that damage your walk or driveway

Nor do its roots plug your drains.

IT DOESN'T

Bite you

Bark or meow

Leave deposits on your property

Dig up your garden

Scratch on your door

Widdle on your trees

Nor does it dig up and scatter your garbage.

IT DOESN'T

Have boisterous parties

Or play loud music

Or have swimming parties through the night

It doesn't ring your phone (accidentally?)

Nor does it ride bikes across your lawn.

It's just quiet and has nothing to say...

New LX8 Prefix for CQ WW CW Bernd Och, DL6FBL (NF1T)

The Bavarian Contest Club (BCC) will operate LX8A November 26-27 during the CQ WW DX CW Contest, the first use ever of the "LX8" prefix, in a multi/multi effort. Frequencies: 1833/1850, 3505/3533, 7007/7033, 14033, 21033, and 28033. There is a free special award for contacting this station on 5 bands (European stations 6 bands). QSL via DL7MAE. Comments, questions, etc. to DL6FBL, Bernd Och, Backerweg 16, 6000 Frankfurt 1, FRG.

Movers and Shakers

Please update your club roster to include the following changes:

New work phone number for Bill, K2EK, is (914)697-3250.

John K1FWF, has moved:

John Allen, K1FWF
93 Spectacle Hill Road
Bolton, MA 01740
Home phone: (509)779-6189.

New work phone number for Dick, AK1A, is (508)490-8706.

David Berthiaume, ex-KA1GQW, is now NS1I. Also, his home telephone number is (401)333-2662.

New Crew

Please welcome the following new and returning members who joined at the last meeting:

Bob Melvin, N1ATN
3K Hartford Lane
Nashua, NH 03063
Home phone: (603)595-7136
Work phone: (603)885-2473

Roger Coery, W1AX
60 Warwick Drive
Westwood, MA 02090
Phone: (617)329-4676

Stephen A. Smith, W1CB
290 Powder Mill Road
Concord, MA 01742
Home phone: (508)369-6988
Work phone: (508)369-8780

Dana W. Atchley, Jr., W1CF
18 Granville Road
Lincoln, MA 01273
Phone: (617)259-8510

Paul Terwilliger, N1ELN
11 North Shore Road
Chester, NH 03036
Home phone: (603)887-4346

Work phone: (603)742-7363

Ray Ortgiesen, KB1EM
35 Hornet Road
North Kingstown, RI 02852
Home phone: (401)885-1364
Work phone: (401)521-9100 x 2378

Michael Rukin, K1EUF
188 Beacon Street
Boston, MA 02116
Home phone: (617)236-1385
Work phone: (617)272-7910
His station location is Moultonborough, NH.

Frank McInnis, K1IXX
162 Woodland Drive
Marlboro, MA 01752
Home phone: (508)481-8882

Mike Perry, KA1LSZ
24 Grassland Street
Lexington, MA 02173
Home phone: (617)861-0759
Work phone: (617)641-3918

Robye Lahlum, W1MK
Brookview Road
Boxford, MA 01921
Home phone: (617)887-5755
Work phone: (617)681-6565

Ray Sylvester, NR1R
20 Gardner Road
Reading, MA 01867
Phone: (617)944-7543

Eric Wagner, KB1RI
RFD 1 Box 4763
East Douglas, MA 01516
Home phone: (508)476-7750

Chek Tiltcomb, W1SD
Shore Road
Sebago Lake, ME 04075
Home phone: (207)787-2021
Work phone: (207)787-2442

Thomas A. Bell, W1XS
64 Scout Lane
North Attleboro, MA 02760
Home phone: (508)699-8195
Work phone: (508)490-3536

Victor Carnuccio, KD2HE
547 Broadway
New York, NY 10012
Phone: (212)226-0643 or (212)219-0651

Allen Singer, N2KW
Box 382 Village Station
New York, NY 10014-0382
Home phone: (718)428-6459
Occasional 4U1UN operator.

Rich Sellentin, NR2L
Box 355, Roses Grove Road
Water Mill, NY 11976
Home phone: (516)283-2775
Work phone: (516)537-3200

Don Lewine, WB2UMF
40 MacLean Drive

Sudbury, MA 01776
Home phone: (508)443-2187
Work phone: (508)870-9008

Kenneth D. Stein, KD2WQ
David Stein, KD2ZE
8 Hights Cross Road
Chappaqua, NY 10514-2907
Home phone: (914)238-5899
Work phone (Kenneth): (212)753-8900

Samuel A. Millar, W3WDX
39 Collonwood Drive
Hudson, NH 03051
Home phone: (603)883-2453
Work phone: (617)275-2500
Formerly CN8GL.

Victor Paounoff, N4XR
New Sweden Road
RR1 Box 112A
Woodstock, CT 06281
Phone: (203)974-3378
Also holds HH2VP.

Gary Grebus, K8LT
16 North Mason Road
Brookline, NH 03033
Home phone: (603)673-8299
Work phone: (508)264-5789

Dennis Mitchell, K8UR
1 Cider Mill Lane
Upton, MA 01568
Phone: (508)529-3416

Manchester, NH 03103

New Products from ComTek

ComTek RCB-5 Remote Coaxial Control Box

- 1) Switches up to 5 different antennas from one coax line
- 2) Connects to one or all five at once. Great for stacked array switching.
- 3) Low VSWR from DC to UHF (<1.5Hz to 450 MHz).
- 4) Handles up to 5KW.
- 5) Lower cost than using 5 separate coaxial lines for most systems.
- 6) Price \$129.95 US (foreign add 10% S&H + \$20).

ComTek ACB-4 Phased Array Switch

- 1) Provides the correct Power Division and Phasing for 4 element "4 SQUARE" or 2 element phased vertical arrays on 160 meters, 80 meters, or 40 meters (specify band when ordering).
 - 2) Covers whole band, both phone and cw, while providing gain (5.74dB) and 15-25 dB f/b (four element array setup).
 - 3) Handles >5KW.
 - 4) Includes instructions for using with 1/4 wave ground mounted, 1/4 wave ground-plane, or 1/2 wave center fed arrays.
 - 5) Simple to install. You supply the antennas, four 1/4 wave 75 ohm coaxial cables and the ACB-4 will do the rest.
- Price only \$195 kit or \$260 finished. (foreign add 10% S&H + \$20).

For more information, contact the manufacturer, ComTek, P. O. Box 202, Hopkinton, MA 01748

Excess Cargo

All IBM PC software: Microsoft WPRD 4.0 \$75. Lotus Measure 1.0 \$75. Lotus Manuscript 1.0, \$75. Lotus Symphony 1.2, \$75. Generic Bus Mouse, \$25. Wordstar 4.0, \$75. Burr Brown PCI Software, \$25. Rbase 5000, \$25. Airus Detente, \$25. Rightwriter 2.0, \$25. BV Engineering PDP (plotting software), \$25. BV Engineering XFER (filter design software), \$25. Contact Bob, N1RC, at (617)639-0536.

Help Wanted

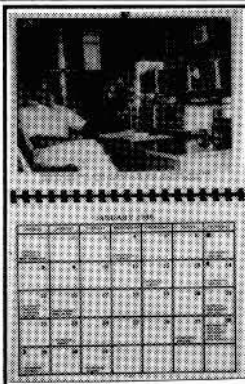
Exciting Opportunities at Cushcraft Sales

Cushcraft, Amateur Radio's innovative manufacturer, is looking for a qualified inhouse salesperson. A working knowledge of communications and Amateur Radio is required. Good verbal skills and a proven sales track record with two to four years experience are a must.

Lab Technicians

Cushcraft is also expanding its Product Development Lab. Experienced technicians with a good working knowledge of RF are needed. A degree is not required if the applicant has equivalent experience. Mechanical experience would be helpful.

Cushcraft Corporation
48 Perimeter Road



1989 Amateur Radio Calendar & Op. Aid

Great for shack, office, or as a gift

Now, a calendar and operator aid combined. Over 100 operating events and over 30 radio history dates, plus 10 pages of contest data:

- CQ & ITU World Zone maps & DXCC Pref's
- ARRL US & VE Sections Map • VHF Grid Loc.
- Russian Prefixes/Oblasts/Zones List
- US Amateur Bands/Modes/Power Limits
- Moon phase, meteor shower, eclipse data
- 7" x 9" b/w photo each month, incl. DX personalities, contesters, some rare photos:

Armstrong, early days of FM and TV broadcasting. Calendar is 11" x 17" (unfolded), 36 pps, two color printing, spiral bound for flat wall hanging.

Send \$9.95 (US,VE,XE) ea. (\$10.95 ea. overseas). Add \$2.00 for priority mail + handling, up to 9. Clubs call 603-673-4100 for quantity discounts.

KB1T, Box 1015-S, Amherst, NH 03031

YANKEE CLIPPER JACKETS

There will be a group order for the Yankee Clipper Contest Club jackets. The jackets will be navy blue, with white striped cuffs, collar, and waistband. They will have the club logo as well as the picture of a clipper on the back; optional call and name sewn on the front.

The jackets are "the original baseball style" made of a Dupont 66 nylon shell, kasha lining, striped knit collar, cuffs, and waistband. Features comfortable raglan style sleeves, slash pockets, 7 snap front closing. Fabric is machine washable and water repellent.

Anyone interested please return the forms **ASAP**. I will place the order on **December 19, 1988**, so I can bring the jackets to the next club meeting. If I don't have your order by December 19 - no jacket.

Price: \$ 26.00 per jacket
\$ 2.00 Name sewn on the front
\$ 3.00 Call sewn on the front

These prices are dependent on an order of 12 jackets or more. If we have more orders the price will be less and I'll refund the excess.

Sizes:

Adult: S(34-36), M(38-40), L(42-44), XL (46-48), XXL

Child: S(6-8), M(10-12), L (14-16)

ORDER FORM - PLEASE PRINT

Name

Call

Address

City/State/Zip

Telephone

JACKET INFORMATION:

The sewn name and call is optional on the front. Please indicate how you want your name spelled, i.e., Name vs. Nickname.

Jacket (indicate size)	\$26.00	Return to:
Name (Optional)	\$2	Ed Kritsky, NT2X
Call (Optional)	\$3	P. O. Box 715
TOTAL:		Brooklyn, NY 11230

Make checks payable to: Edward Kritsky

THE CLUB RESOURCES PAGE

THE Place to Find Club Information

DUES are due at the April election meeting, which begins our club "contest year", with a grace period until the end of June. Membership in the club will lapse at the end of the grace period if dues are not paid up. In order to re-join the club, a lapsed member must attend a meeting, like any new member, and be welcomed back into membership, or may become a subscriber to the **Scuttlebutt** by paying up (see below). Club members who move out of club territory and so are not eligible to contribute to club aggregate scores automatically become subscribers. New members who join at the last meeting of the club's contest year (February) are credited with dues for the following year (that is, the contest year beginning that April). You can tell if you owe dues by checking your **Butt** mailing label. Only paid-up members are eligible to contribute to the club score in contests.

FAMILY MEMBERS Members of the same family living at the same address may elect to receive only one copy of the **Butt**. One member of the family must pay full dues, enabling the rest of the family to join as family members. Being a family member is currently free.

STUDENT MEMBERS Full-time students are eligible for dues at half the regular rate.

SCUTTLEBUTT SUBSCRIBERS Anyone may subscribe to the club newsletter, the **Scuttlebutt**. A subscription currently costs \$10 per year. At the present time, overseas subscriptions cost the same as domestic (we have very few overseas subscribers). The subscription period begins at the beginning of the club year, in April. New subscribers who begin their subscriptions after the December issue are considered to have paid for the following year (that is, they receive as many issues as new members joining at that time do). You can tell if your subscription is current by checking your **Butt** mailing label. The grace period for late subscriptions is the same as for late memberships.

SCUTTLEBUTT ARTICLES should be sent to the **Scuttlebutt** editor, Paul Young, K1XM, 11 Michigan Drive, Hudson, MA 01749, home phone (508)562-5819. The deadline for each issue is three weeks before the next meeting.

CLUB JACKETS are available through Ed Kritsky, NT2X, 580 East 17th Street, Apt. 2F, Brooklyn, NY 11226, home phone (718)284-4493.

CLUB QSL CARDS are ordered through John Dorr, K1AR, 2 Baldwin Street, Windham, NH 03087, home phone (603)434-5661.

CLUB QSL CARD BADGES are available from Tom Frenaye, K1KI, 23 Pinehurst Road, Box 62, Unionville, CT 06085, home phone (203)673-5429, by sending him a club QSL card. The cost is \$1 payable to the club treasurer on receipt of your badge.

PACKET NET information is available from Dick Newell, AK1A, 8 Golden Run Rd., Bolton, MA 01740, home phone (508)779-5198, or Dave Robbins, KY1H, Baumann Road, Peru, MA 01235, home phone (413)655-2714.

CONTEST SCORES are sent to the club scorekeeper, Jeff Detray, NK1F, P. O. Box 524, Troy, NH 03465, home phone (603)242-7995.

CLUB ROSTER appears in the summer issue of the **Scuttlebutt** every year. Updates are published when members move or change call signs. If you want a new copy of the club roster, contact the club secretary/treasurer, Charlotte Richardson, KQ1F, 11 Michigan Drive, Hudson, MA 01749, home phone (508)562-5819.

CONTRIBUTIONS The YCCC welcomes your contributions, be it money to help offset the cost of the **Scuttlebutt** and club operations, scores for the club aggregate score, time spent helping other members, articles for the **Scuttlebutt**, or presentations at club meetings.

DXCC LIST The club maintains a one-page version of the ARRL DXCC Countries List. To get a copy, send an **SASE** to the club secretary, Charlotte Richardson, KQ1F, 11 Michigan Drive, Hudson, MA 01749. Complete DXCC rules are only available from the ARRL.

ARRL LIAISON For ARRL matters, contact Tom Frenaye, K1KI, 23 Pinehurst Road, Box 62, Unionville, CT 06085, home phone (203)673-5429.

The **Scuttlebutt** is the newsletter of the **Yankee Clipper Contest Club** and is mailed six times per year to all paid up members. Dues are \$15 per year, payable 1 April with a grace period through 30 June. Non-members may subscribe to the **Scuttlebutt** by sending \$10 to the Treasurer: Charlotte Richardson, KQ1F, 11 Michigan Drive, Hudson, MA 01749. Subscribers who subsequently become members will be credited as having paid dues.

The **Scuttlebutt** may be reprinted in whole or in part, except for separately copyrighted articles, provided proper credit is given.

The **Yankee Clipper Contest Club** (an ARRL Affiliated Club) holds six official meetings per year, on the Saturday or Sunday afternoon of the first full weekend of every even month, usually in the Sturbridge, Massachusetts, area. The deadline for article submission to the **Scuttlebutt** is three weeks before the next meeting date. The next meeting will be on Sunday, December 4, 1988. Attendance at an official meeting is required in order to become a member. Club members congregate on 3830 KHz after contests. The packet frequency is 144.95 MHz.

Rosters are mailed to all paid members each summer. For more information and/or assistance, contact the area manager nearest you on the following list:

Area	Call	Name	Home	Work
CT/RI	K1RU	Gene Frohman	(203) 393-1772	(203) 386-6137
EMass	N1AU	Bill Santelmann	(617) 862-1753	(508) 692-6000
WMass	KY1H	Dave Robbins	(413) 655-2714	(413) 494-2023
VT/NH	K1GW	Glen Whitehouse	(603) 673-6290	(603) 627-7877
ME	K1SA	Bernie Cohen	(207) 773-6589	(207) 797-3585
NNY	K2TR	Fred Lass	(518) 355-4813	(518) 346-6666
SNY/NJ	K2EK	Bill Gioia	(914) 221-1672	(203) 964-3554

YCCC
11 Michigan Drive
Hudson MA 01749

FIRST CLASS