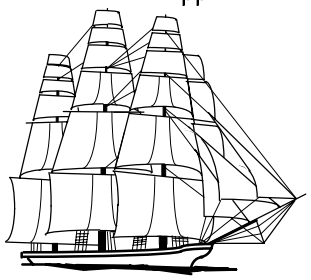
Yankee Clipper



Contest Club

Scuttlebutt

April 1997 | Happy 20th Birthday, YCCC! | Issue 128

Captain's Cabin

Tom Frenaye, K1KI

Wow! What an effort we had in the ARRL DX Contest this year! We're at 135m points and counting, with about 165 entries - compare that to our 1996 effort that resulted in 77m points from only 104 entries. Your hard work in station building and operating is beginning to pay off in points for the YCCC club competition entry. It'll be late September when the final results come out in QST but we know that we gave a real shot at top spot this time!

This may get to you before the CQ WPX SSB Contest on the weekend of March 29-30 - please plan to get on the air and earn some points for the YCCC. We almost beat the club record in last year's WPX contest so let's see if we can grab the record and the win this year.

It's hard to believe it has been a year since I walked into the April 1996 YCCC meeting a bit late, found out I'd been elected President and listened to a passionate debate over how to get club members focused on winning the CQ and ARRL DX Contests. I think you'll agree that it has been an extraordinary year for the YCCC, with the addition of a large number of new members, a lot of old faces turning up at meetings again, and the addition of regional meetings.

It has all been possible because of the many people who stepped forward and contributed. I'm looking forward to the next year, with the expected return of long lost sunspots and the continuation of the YCCC tradition of winning DX Contests!

There are a few things that remain unfinished from the past year that I'd like to suggest we concentrate on during the 1997-98 contest season:

1) Getting every YCCC member on the air during the major contest weekends - and on both modes if at all possible.

2) Fielding a lot more DXpeditons, especially during CQWW where they are very important to the final score.

3) Continuing the effort toward electronic publishing of the Scuttlebutt and other YCCC material - two-thirds of our budget goes to printing and mailing the newsletter.

One new goal to think about for this coming year (or 1998) is for YCCC to put on some kind of event like a convention/dinner with programs and presentations that focus on our common interests of contesting, DXing and station building. We have the people and resources to be able to do it - is anyone interested in exploring the idea to see if it might be viable? ❑

April Meeting Agenda

Dean Straw, N6BV

1. A short business session conducted by Tom Frenaye, K1KI, President

2. "How'd We Do in the ARRL DX Contest?" by Dave Hoaglin, K1HT, YCCC Scorekeeper

3. Coffee Mug Presentations! Come and get 'em -- you earned 'em!

4. "YCCC: 20 Years Young and Getting Better Every Day" by Jeff Briggs, K1ZM

5. "What's New and Exciting at Cushcraft?" by YCCCer Art Hambleton, K1ART, Product Manager for HF Products at Cushcraft

As usual, there will be ample time to rub shoulders and socialize with fellow YCCCers!

Come on out to Sturbridge April 6 at 1 PM. It should be a great meeting! ❑

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The Yankee Clipper Contest Club (an ARRL affiliated club) holds six general meetings per year in Sturbridge, MA and various special meetings throughout club territory. Attendance at a meeting is required to become a member.

Articles in the **Scuttlebutt** (except for those separately copyrighted) may be reprinted, provided proper credit is given. The editorial deadline for the Scuttlebutt is the 10th of every odd month.

For any club-related questions, contact your area manager or any officer.

Beverage Notes

Glenn Swanson, KB1GW

After convincing (bribing?) Peter Budnik, KB1HY, to host a first-time multi-single effort from his Burlington, Connecticut, QTH for the '97 ARRL DX SSB contest, I offered to help him with some antenna work, with an eye toward beefing things up on the low bands. Peter's antenna farm sits on nearly six acres at roughly 900 feet above sea level and looks over *miles* of sloping terrain--and in the "right" direction--towards Europe! It looked like Peter's place might have enough room to support a short (550-foot) Beverage, so I educated myself a bit using the second edition of *Antennas and Techniques for Low-Band DXing*, by John Devoldere, ON4UN. Among other things, John provides useful advice about using transmission-line transformers to match coaxial feedlines to Beverages.

Posts on the Top-Band Reflector mentioned a matching-transformer kit available from Carl, KM1H, who runs Radioworks in New Hampshire. He supplied me with a couple of ferrite cores along with winding information. KM1H specifies the use of an FT-114-61 core with 16 quadrifilar windings. His design offers the ability to separate the Beverage ground connection from the feedline shield. Alternatively, with the addition of a jumper, you can tie these two "grounds" together. The ON4UN design specifies trifilar windings for a variety of cores, with all ground lines in common (more on this later).

I decided to roll a couple of my own, using both ON4UN's and KM1H's design information. After building one of each type, I asked Dave Sumner, K1ZZ, if he could give 'em a "test drive." While his investigation was neither exhaustive nor scientific, K1ZZ used the two designs on his 550-foot terminated Beverage. He compared them using the same antenna, both with and without a matching transformer. Dave reported that the ON4UN design seemed to add "several dB" on receive--but he was reluctant to further quantify his observation without measuring. Dave also noted that it didn't make that much difference in his ability to hear signals, since both external noise and signals came up by the same degree. Not big news, but the experience convinced Dave to get three more of the ON4UN-design matching transformers for use with other Beverages.

Tests made with the KM1H-designed transformer resulted in less-than-spectacular results. As I mentioned, the KM1H design uses separate grounds--for the antenna ground and for the feedline shield. In fairness to KM1H, I could have done more work in this area--for example, putting the two "grounds" together and testing it that way. (ARRL antenna guru Dean Straw, N6BV, advises that he'd prefer to see all grounds tied together in such a system.) Since the ON4UN design seemed to work well right from the start, I decided to stick with it.

Building the transformers

Antennas and Techniques for Low-Band DXing says, "A 9:1 impedance transformer [using a high permeability ferrite core] will give a more than acceptable match for both 50 ohm and 75 ohm [feed] lines." And, "A transmission line transformer using trifilar winding is well suited to this purpose." Such a transformer should match the 450 to 600-Ω (nominal) impedance of a Beverage to either type of coax you might use.

John also relates that Victor Misek, W1WCR, has found that using the same winding information--and using a *stack* of two ferrite cores (made of the same material or "mix"), results in a transformer that yields "a 0.4 dB improvement in insertion loss." For example, W1WCR found that a stack of two (MN-8-CX) cores resulted in an insertion loss of 0.21dB on 160 meters, as opposed to an insertion loss of 0.51dB with a single core.

To wind my transformers, I used nine trifilar turns of #24 enameled wire over a stack of two Amidon FT-50-75 ferrite cores. (These cores are pretty small, with an inside diameter of 0.28-inches and an outside diameter of one-half inch.) Such a transformer has a "minimum design frequency of 1.8 MHz," according to ON4UN.

Putting nine "trifilar" turns of wire on a stack of two ferrite cores is easy. Just cut off three separate three-foot-long lengths of #24 enameled wire from a roll of the stuff. Place the three lengths of wire side-by-side and give them a twist every inch or so along their length. Now pass this little cable through the two cores nine times, and you're done (each pass of the wire through the doughnut hole counts as a "turn," including the first pass). Cut the resulting pigtails to the lengths you require and sand or scrape the enamel finish off the ends of the wires (so the wire shines). Use an ohmmeter to identify the windings and label the end of each wire per the diagram in *Low Band DXing* (Figure 7-11, page 7-12.) Other types of ferrite core material also will work (two tables on the same page show you how to determine how many turns of wire you'll need for each type of ferrite material). You can coat the finished transformer (cores and windings) with a couple of coats of low-loss coil coating (I used liquid polystyrene or "Q-Dope"), or simply wrap the transformer with some good-quality electrical tape (like Scotch 88).

To house each transformer, I used small plastic box (1x 2x 4 inches HWD) from Radio Shack (part number 270-220). Drill a 5/8-inch hole (to house an SO-239) in the center of the box (and drill four 4/40 holes to mount the SO-239's flange). Then drill a 10/32-inch hole at each end of the box. The SO-239 accepts the coaxial feedline leading back to the shack from your Beverage. At one end of the box a 10/32 stainless-steel nut and bolt are used for the antenna connection. The ground-rod wire attaches to the same type of bolt at the opposite end of the box. Be sure to waterproof any thru-the-box connectors that will be exposed to the elements and you should be all set. One caution: Don't transmit into your Beverage via the matching system described here. While folks can, and do, transmit into Beverage antennas, this matching system--and the terminating resistor at the "far" end of your Beverage--will likely go up in smoke if you do!

What's it cost?

If you're resourceful, you should be able to build these matching boxes for around $10 to $15 a pop. The plastic boxes are about $2 from Radio Shack. I ordered the cores, enameled (magnet) wire, SO-239s and Q-Dope from Ocean State Electronics in Rhode Island (800-866-6626). The FT-50-75 cores cost me $0.75 each; the #24 magnet wire was $4.25 for 1/4 pound; the SO-239s were $1; a bottle (2 fl oz) of Q-Dope was $3.75, plus a $5 shipping charge. Add the stainless 10/32 hardware, 4/40 hardware, and lug connectors (for internal connections), to the total cost.

Purchasing Transformers

If you're not interested in scrounging the parts, winding the cores, and doing a bit of soldering to brew one of these yourself, then you can order a ready-made box from Industrial Communications Engineers (ICE), Box 18495, Indianapolis IN, 46218; tel, 317-545-5412.

ICE offers a Model 180A matching box for $39 (plus $4.50 for shipping). The 180A has taps to select 50 or 75-Ω coax feedlines. There are also taps to match 300/450/600 or 800-Ω Beverage antenna loads. The 180A has dc blocking capacitors and a gas-discharge lightning protection system. ICE also sells a Model 181A ($39), which allows you to apply a dc voltage into your Beverage for remote switching. Like the 180A, the '181A has a gas-discharge protection system. Finally, they offer a Model 185A "resistive load" to terminate your Beverage with. It has same high-impedance taps as the Model 180A and it costs $34. These units are rated for 10 W of continuous RF and 100 W on peaks. (I was told that these ratings are not specified for transmitting into the boxes. Rather, they are what the boxes can withstand when your Beverage picks up energy from nearby transmitting antennas.) All of these boxes are made of 1/8-inch extruded aluminum (milled and tapped). And, if you're looking to buy American, they're all made in the USA. (Prices, model numbers and telephone number were valid as of February 5, 1997.)

Transmitting, Terminating and Wire

Another Burlington, Connecticut, resident who has a nice location is YCCCer John Larson, NQ1K. Sitting on an average terrain of 670 feet above sea level, John has a panoramic view of the surrounding countryside. And he's got a 550-foot Beverage that he's managed to transmit into a time or two. However, he used #18 wire for his transformer windings. In addition, John's Beverage is not terminated (with a resistor) at its far end, so this allows him to apply some power to the system. The lack of a terminating resistor also makes his Beverage bi-directional (receives best off each end of the antenna).

Speaking of terminating resistors, Dave, K1ZZ, originally used a variable carbon resistor to set up his Beverage. He eventually found that terminating his 550-foot Beverage with a 200-Ω, non-inductive resistor provided the best front-to-back ratio.

The "500-foot" roll of wire John, NQ1K, purchased (from Home Depot) turned out to be not quite 500 feet long. He ended up splicing on another 60 to 70 feet of wire for his 550-foot Beverage. (Which means the "500 foot" roll was closer to 480 or 490 feet.) John used electric-fence insulators nailed to convenient trees to keep his Beverage an average of 12 feet above ground. The electric fence insulators are pretty cheap, too. John paid three bucks for 40 of them!

RF Feedback?

Dave, K1ZZ, recently observed that if he switches his Beverage [in line] while transmitting, "my keyer goes crazy." He speculated that there's some kind of transient he never noticed before. "It's probably easier for me to remember not to switch the Beverage while transmitting (why would you want to, anyway, except to burn off nervous energy) than to figure out what's causing it," he said. "Perhaps it's the sort of effect that Carl's design was intended to avoid."

I suspect Dave's "transient" may be a result of RF feedback. (Here's where some experimentation with the KM1H-design transformer, with its ability to isolate the feedline shield from the ground at the Beverage matching box, might be worthwhile. But, I'll leave this for others to explore).

(continued,next page)

Here's another idea

Gary Nichols, KD9SV, introduces a nifty-looking circuit you can build, in the February 1997 *CQ* (page 32-33). This QSK-compatible circuit is designed to protect your receiver from being overloaded (or possibly damaged) by RF that might be picked up by your Beverage while you're transmitting on another antenna. This project (it's offered both as a kit and as a finished product), might be worth a look--especially if your radio was not designed with a Beverage in mind. Homebrewers will appreciate that the article provides a schematic and calls out Radio Shack parts numbers for this project.

Ideal Beverage Lengths

What's the "right" length for a Beverage? Frank Donovan, W3LPL, posted the most succinct discussion on this subject that I've seen to date. You can find this, and other useful information, at the KA9FOX Web site. Surf to: http://www.qth.com/ka9fox/mail_summaries.shtml

Ideal Beverage Antenna Lengths [per W3LPL]

160M:	290 Feet	585 Feet	880 Feet	1160 Feet
80M:	150 Feet	295 Feet	440 Feet	580 Feet
40M:	75 Feet	150 Feet	225 Feet	295 Feet

Short Beverage antennas have a very broad main lobe, poorer response to low-angle signals and lower sensitivity. Of the four lengths listed above, the shortest length has a 3-dB beamwidth of almost 180°--not very desirable!

The second length has a 110° beamwidth (better, but still not good), the third length has an 80° beamwidth and the longest length has very desirable 50° beamwidth (but only 17 to 18-dB front-to-back ratio)."

In Closing

I consider chapter 7 of ON4UN's book required reading for those contemplating the deployment of a Beverage antenna system. When engineered properly, Beverage receiving antennas work great--and not just on the low bands. They can be used sucessfully on the higher bands too, like 20 meters, for example. Finally, if you want some exercise, you can always go out and "walk the Beverage," to see if the wire has been broken along its length. By the way, falling branches and deer seem to cause most broken-wire problems with Beverage antennas.

Happy (multiplier, not deer!) hunting. ❑

Flotsam & Jetsam

"Barnacle Jack" Schuster, W1WEF

Please send your experiences and ideas to share with fellow YCCCer's! Drop me a note or use packet.

- Just get your first ICOM rig and find that your Kenwood mic doesn't work? ICOM uses condenser mics, so it is necessary to put a blocking capacitor in series with your dynamic mic. A 6.8 µf polarized cap with + to pin 1 of the mic connector does the trick.
- IIX rotating sidearms have an upper sleeve that supports a short mast, with the lower end of the mast in the rotator on a lower shelf. The upper sleeve and the rotator supports mount on one tower leg, and can twist into misalignment under wind loading, and cause the mast to bind in the sleeve. When you go up the tower to realign the two halves, bring a short level to ensure that the mast is at least close to vertical. I intend to add an angle iron brace to another tower leg to prevent twisting.
- When cutting wire antennas to length using *insulated* wire, reduce the calculated length by 2% to account for difference in velocity factor between bare and insulated wire.
- AK1N uses a product sold in some hardware stores under the name Scotchkote 90 to seal and protect connections. It is a liquid plastic intended for applications like plasticising tool handles.
- When installing antennas on a Rohn tower with a flat top section, AB1U places a second rotor accessory plate above the rotor. When it is necessary to service the rotor, a clamp can temporarily be installed to rest on that plate, allowing the rotor to be removed. The thrust bearing alone cannot be counted on to support the antennas and mast without the rotor.
- When opening "sealed" enclosures used in antenna systems, W1BIH (PJ9JT) says be prepared for unexpected inhabitants. Wasps always manage to get into traps and inside elements, and in Curacao a scorpion crawled out of an R7 matching network.
- When calling a station in a huge CW pileup, timing is important, but intentionally calling off frequency by 300 Hz or so can *really* make the difference.In a split situation, don't call on exactly the same frequency as the last station that was worked, move off a bit.❑

CQ 160-CW Claimed Scores

Dave Hoaglin, K1HT

YCCC Scores in BOLD

(Other NE USA scores from the Contest Reflector - thanks to WA4ZXA)

CALL	SCORE	QSO'S	SEC	DX	
Single Op QRP					
N1TM	**19,240**	**230**	**34**	**3**	
K3WWP	6,300	117		25	
KD1IA	4,368	74	73	1	
N3ADL	2,596	53	22	0	
KD1IA	1,768	74	73	1	
Single Op Low Power					
K1HTV	166,605	726	56	31	
K2KQ	**81,326**	**419**	**49**	**25**	
AB1U	**80,676**	**314**	**49**	**32**	
WO1N	**62,766**	**350**	**45**	**21**	
W1TE	**60,014**	**270**	**47**	**27**	
W1CSM	**57,368**	**293**	**48**	**23**	
WA2DFI	49,029	353	52	7	
N2BIM	18,081	198	40	1	
W3CP	17,466	193	39	2	
N2VW	6,336	93	32	0	
K1EP	**3,496**	**76**	**23**	**0**	
K1WD	**1,536**	**45**	**16**	**0**	
Single Op High Power					
W3LPL (W4ZV)	513,798	1182	56	58	
AA1K	390,276	1034	57	54	
W3BGN	378,620	838	53	57	
N2NT (W2RQ)	369,304	1011	48	56	
K3UA (@K3LR)	355,500	740	55	56	
K2WK	267,500	631	52	48	
K5ZD	**246,574**	**590**	**52**	**45**	
KM3T	**243,360**	**702**	**54**	**42**	
K1VW	**181,056**	**640**	**53**	**39**	
WF3T	175,648	677	56	32	
K1ZZ	**128,054**	**362**	**47**	**39**	
K3JT	123,570	459	55	35	
K3SV	118,607	501	50	33	
AA1ON	**83,068**	**369**	**47**	**29**	
N4XR	**72,688**	**311**	**47**	**30**	
K2ONP	**59,283**	**281**	**43**	**20**	
K2XA	**49,038**	**175**	**34**	**32**	
KZ1M	**43,264**	**343**	**41**	**11**	
KA1DWX	**25,652**	**140**	**33**	**20**	
Multioperator					
WW2Y	807,000	1363	57	73	
W2GD	696,000	1391	57	68	
N1BB	**555,960**	**1080**	**54**	**59**	
+ W1FJ W1KM NB1B WT1O N1BB					
K3WW	406,339	1045	56	56	
K3CR	366,660	1090	56	49	
N3OC	361,140	991	57	53	
W3GH	249,736	827	57	49	
AA3B	143,376	627	55	32	
K3KO	81,011	435	45	26	
N1RR	**79,265**	**273**	**50**	**33**	**+ NET**
W1JCC	**75,862**	**240**	**43**	**40**	**+ NET**
AA2MF	**56,372**	**312**	**48**	**20**	**+NT2X WJ1R**
K2BM	56,137	225	43	30	
K2BX	**8,316**	**105**	**36**	**0**	**+ NET**

CQ 160 Phone Claimed Scores

Dave Hoaglin, K1HT

YCCC Scores in BOLD

(Other NE USA scores from the Contest Reflector - thanks to WA4ZXA)

CALL	SCORE	QSO'S	SEC	DX	
Single Op QRP					
N1TM	**22,532**	**240**	**38**	**5**	
Single Op High Power					
W3GH	245,820	1210	56	29	
AA1AA	**228,463**	**1033**	**56**	**33**	
N3HBX	189,672	943	56	28	
K1VW	**181,192**	**816**	**55**	**33**	
W2SF	**41,259**	**366**			
KA1DWX	**27,657**	**142**	**45**	**18**	
W1AA(K1VV)	**12,987**	**156**	**35**	**2**	
N1BB(chklog)	**938**	**32**	**14**	**0**	
Single Op Low Power					
AB1U	**35,868**	**247**	**49**	**12**	
WO1N	25,599	208	44	9	
AA2GS	24,728	257	41	3	
W1TE	**24,700**	**218**	**42**	**8**	
W3CP	12,246	145	36	3	
N1IO	**11,895**	**135**	**36**	**3**	
N1RJF	2,178	56	18	0	
Multi-Op					
W2GD	458,480	1541	58	52	
K1NG	**311,564**	**1120**	**56**	**41**	**+KI1G K1SD**
AA2MF	**162,180**	**704**	**57**	**33**	**+NT2X**
K2WK	124,066	547	53	29	
K3MD	123,075	711	57	18	
K3IXD	109,512	550	56	25	
K1MUJ	**55,000**	**436**	**49**	**7**	**KZ1M K1ZE**
AA3B	36,057	323	46	5	

ARRL DX CW Claimed Scores

Dave Hoaglin, K1HT

YCCC Scores in BOLD

(Other NE USA scores from the Contest Reflector - thanks to WA4ZXA)

YCCC raw total: 89.4 million !!

CALL	SCORE	Q	C
Single Op QRP			
AA2U	363,156	571	212
N1TM	**184,800**	**385**	**160**
K2PS	158,625	375	141
N1AFC	**157,320**	**380**	**138**
K1RC	131,109	319	137
Single Op Low Power			
VP2V/K1DW	**1,208,400**	**1900**	**212**
P4/K2LE	**1,060,668**	**1708**	**207**
K2SG	1,260,285	1495	281
WS1E	**775,500**	**1100**	**235**
NA2U	710,424	1012	234
WT1O	**596,700**	**884**	**225**
K1VUT	558,888	803	232
K1VW	**530,565**	**815**	**217**
W1SA	390,897	771	169
W1ZZ	**345,462**	**559**	**206**
K1NO (K5FUV)	**268,068**		
W1EQ	**246,753**	**481**	**171**
K1EFI	**205,452**	**439**	**156**
K1ZE	**203,175**	**387**	**175**
N1RJF	181,770	415	146
K3PP	161,352	324	166
K1HT	**153,900**	**342**	**150**
W3CP	142,728	318	152
N1SNB	**130,680**	**330**	**132**
KD1YN	**108,927**	**273**	**133**
K1OA	**92,569**	**259**	**121**
K1EP	**62,160**	**185**	**112**
K2JL	56,430	171	110
WB2VVV	**52,155**	**183**	**95**
N2OC	47,736	156	102
AB1U	**45,510**	**185**	**82**
K1VSJ	**31,005**	**159**	**65**
WU1F	23,664	116	68
W1OHM	**15,753**	**89**	**59**
KB2R	**13,920**	**80**	**58**
K1WD	**10,488**	**76**	**46**
N1SMB	**10,206**	**63**	**54**
NJ1F	**5,040**	**48**	**35**
Single Op High Power			
MJ/K2WR	**615,000**		
W1KM	**3,200,000**	**2915**	**366**
K5ZD (W2SC)	**3,123,750**	**2975**	**350**
KQ2M	2,710,000	2699	335
N6BV	**2,518,452**	**2591**	**324**
K3ZO	2,428,056	2498	324
KT3Y	2,050,000	2270	306
NJ2L	1,529,898	1802	283
K3MD	1,258,752	1416	298
K1AM	**1,255,188**	**1630**	**257**
K1ZR (@KB1SO)	**1,071,036**	**1692**	**211**
AA1ON	**1,056,320**	**1335**	**264**
KV1W (K1MBO)	**780,678**	**1098**	**237**
K5MA	**532,140**	**980**	**181**
KA1DWX	**517,608**	**728**	**237**
K3SA	370,872	608	208
K1ZM (total)	**339,264**	**608**	**186**
AA1HB	**218,790**	**429**	**170**
N2UN	**210,195**	**405**	**173**
K1BV	**189,891**	**541**	**117**
W1RH	**184,824**	**408**	**151**
K1MO	**141,636**	**319**	**148**
W2GDJ	**124,581**	**317**	**131**
NZ1Q	**93,534**	**262**	**119**
K1VV	**76,935**	**223**	**115**
K1TH	**39,216**	**152**	**86**
Single Op Assisted, High Power			
K1NG (KI1G)	3,334,548	2597	428
K3WW	2,871,255	2423	395
AA1K	1,976,688	1776	371
K2WK	1,835,928	1780	344
AA3B	1,708,854	1769	322
W2UP	1,522,410	1637	310
N4XR	**1,319,880**	**1294**	**340**
K2TE	**1,267,728**	**1372**	**308**
N2TX	**1,155,777**	**1171**	**329**
K2XA	**1,152,744**	**1117**	**344**
KS1L	**1,139,562**	**1347**	**282**
K2ONP	**1,112,859**	**1249**	**297**
K3KO	1,107,078	1227	301
KZ1M	**844,074**	**1078**	**261**
W1RZF	**704,925**	**975**	**241**
KF2O	**566,892**	**724**	**261**
KG1D	**558,420**	**820**	**227**
AA1V	**476,766**	**654**	**243**
W3HVQ	411,450	650	211
K1RM	**404,586**	**798**	**169**
W2SF	**344,421**	**501**	
K1SM	**338,928**	**614**	**184**
N1CC	**329,157**	**501**	**219**
W1TE	**311,688**	**468**	**222**
WA4VKD	**281,160**	**568**	**165**
N1DG	**253,989**	**409**	**207**
N6RFM	**230,202**	**406**	**189**
N1SP	**187,935**	**335**	**187**
K3AR	167,904	318	176
KA1O	**161,175**	**307**	**175**
W1UK	119,928	527	76
WA4VKD	**281,160**	**568**	**165**
KB2HUN	**92,880**	**215**	**144**
K2BX	**71,529**	**211**	**113**
K2EP	**69,165**	**265**	**87**
K1AJ	**56,430**	**198**	**95**
KS9Z/1	**50,616**	**152**	**111**
Single Op Assisted, Low Power			
AA2GS	258,264	408	211
N3ADL	207,270	331	210
W1XK	**160,200**	**356**	**150**
K1RV	**119,472**	**304**	**131**
W2XX	**79,788**	**218**	**122**
KE4GI	**71,904**	**224**	**107**
Single Band			
K1ZM	**56,280**	**268**	**70** **160**
W1MK	**278,733**	**1021**	**91** **80**
W1UK	**119,928**	**526**	**76**
N1RR	**5,796**	**69**	**28**

WS1M	**230,175**	**775**	**99**	**40**
WF1L (LP)	**102,051**	**493**	**69**	**20**
WA1FCN (LP)	**26,280**	**146**	**60**	**15**
W1CU	**15,729**	**107**	**49**	

Multi-Single

PJ9C	**5,602,896**	**5694**	**328**
W3BGN	3,469,200	2800	413
K1AE	**2,027,550**	**1931**	**350**
NA2N	1,624,428	1602	338
N3DL	1,523,475	1670	305
W1IA	**1,471,554**	**1603**	**306**
N2LBR	**423,120**	**656**	**215**
W1NR	**324,276**	**443**	**244**

Multi-Two

KC1XX	**5,899,275**	**4178**	**471**
K1AR	**5,824,125**		
K1ZZ	**4,392,654**	**3283**	**446**
K1RX	**3,263,571**	**2811**	**387**
K1KP	**2,877,420**	**2635**	**364**
KB1H	**1,993,410**	**1926**	**345**
N3AD	1,846,440	1787	345

Multi-Multi

W3LPL	7,326,720	4788	512
N2RM	7,117,416	4292	498
K1KI	**6,101,739**	**4211**	**483**
N3RS	6,457,620	4423	487
K3LR	5,990,868	3979	502
W1VE	**4,965,144**	**3736**	**443**
W3EA	4,848,238	3639	445
K1TI	**4,206,804**	**3288**	**427**
K1GW	**1,445,400**	**1606**	**300**
N1AU	**907,326**	**1137**	**266**
W1QK	**463,353**	**739**	**209**

Band Breakdowns

CALL	160	80	40	20	15	10	SCORES
Single Op QRP							
N1TM	**10/10**	**38/ 28**	**114/ 44**	**178/ 51**	**47/ 27**	**0/ 0**	**184,800**
K2PS	0/ 0	22/ 17	65/ 32	216/ 54	70/ 37	2/ 1	158,625
Single Op High Power							
W1KM	**126/51**	**507/ 73**	**733/ 78**	**1300/ 95**	**240/ 65**	**9/ 4**	**3,200,000**
K5ZD	**102/46**	**460/ 65**	**834/ 87**	**1432/ 92**	**145/ 58**	**2/ 2**	**3,123,750**
K3ZO	51/31	518/ 71	704/ 80	1058/ 84	162/ 56	5/ 2	2,428,056
NJ2L	48/32	276/ 56	303/ 67	1108/ 84	67/ 44	0/ 0	1,529,898
K1AM	**0/ 0**	**336/ 61**	**476/ 68**	**660/ 71**	**155/ 55**	**3/ 2**	**1,255,188**
K1ZR	**18/16**	**250/ 50**	**326/ 51**	**1061/ 77**	**40/ 19**	**0/ 0**	**1,083,105**
Single Op Low Power							
K2SG	45/30	145/ 52	408/ 73	738/ 71	153/ 52	6/ 3	1,260,285
WT1O	**16/15**	**134/ 44**	**189/ 48**	**424/ 66**	**117/ 50**	**4/ 2**	**596,700**
K1VUT	18/16	155/ 46	180/ 61	349/ 62	96/ 46	5/ 1	558,888
K1VW	**68/36**	**84/ 39**	**351/ 60**	**260/ 52**	**56/ 29**	**1/ 1**	**530,565**
W1ZZ	**15/14**	**77/ 37**	**160/ 57**	**233/ 59**	**74/ 39**	**0/ 0**	**345,462**
W1EQ	**0/ 0**	**50/ 30**	**75/ 35**	**257/ 62**	**98/ 43**	**1/ 1**	**246,753**
K1EP	**0/ 0**	**34/ 23**	**51/ 30**	**70/ 37**	**30/ 22**	**0/ 0**	**62,160**
Single Op Assisted, High Power							
K1NG	108/55	351/ 78	711/104	1117/ 97	297/ 85	13/ 9	3,334,548
K3WW	83/51	364/ 79	662/ 95	1116/ 93	193/ 73	5/ 4	2,871,255
K2WK	70/45	160/ 61	290/ 81	1100/ 91	157/ 63	3/ 3	1,835,928
W2UP	31/30	237/ 57	368/ 69	845/ 88	154/ 64	2/ 2	1,522,410
N2TX	**42/32**	**210/ 66**	**258/ 82**	**538/ 85**	**116/ 62**	**7/ 2**	**1,155,777**
K2XA	**71/48**	**268/ 71**	**347/ 79**	**320/ 82**	**111/ 64**	**0/ 0**	**1,152,744**
K2ONP	**45/34**	**218/ 67**	**340/ 76**	**589/ 79**	**57/ 41**	**0/ 0**	**1,112,859**
N1CC	**5/ 5**	**63/ 38**	**90/ 55**	**273/ 76**	**70/ 45**	**0/ 0**	**329,157**
Single Op Assisted, Low Power							
AA2GS	14/13	50/ 32	126/ 47	155/ 73	63/ 46	0/ 0	258,264
W2XX	**0/ 0**	**0/ 0**	**38/ 28**	**96/ 48**	**83/ 45**	**1/ 1**	**79,788**
Multi-Single							
W3BGN	87/55	473/ 79	804/ 97	1237/104	191/ 75	8/ 3	3,469,200
N3DL	28/24	264/ 71	492/ 81	774/ 80	112/ 49	0/ 0	1,523,475
W1IA	**40/31**	**154/ 56**	**399/ 80**	**923/ 84**	**92/ 55**	**0/ 0**	**1,471,554**
Multi-Two							
KC1XX	**129/60**	**852/ 94**	**1002/112**	**1739/104**	**441/ 92**	**15/ 9**	**5,899,275**
K1RX	**85/48**	**408/ 75**	**780/ 91**	**1346/ 98**	**187/ 73**	**7/ 2**	**3,263,571**
KB1H	**54/32**	**235/ 70**	**356/ 80**	**1096/ 92**	**182/ 67**	**4/ 4**	**1,993,410**
Multi-Multi							
W3LPL	262/68	1053/ 96	1172/119	1758/120	513/ 97	32/ 12	7,326,720
N2RM	226/73	912/ 89	1327/116	1672/112	625/100	16/ 8	7,117,416
N3RS	174/62	807/ 93	1164/116	1859/113	402/ 97	17/ 6	6,457,620
K1KI	**242/65**	**818/ 94**	**1124/114**	**1689/112**	**336/ 90**	**16/ 8**	**6,101,739**
K3LR	171/64	757/ 94	987/123	1624/114	414/ 92	26/ 15	5,990,868
W1VE	**127/54**	**700/ 84**	**951/103**	**1574/103**	**379/ 90**	**15/ 9**	**4,965,144**

Multi Operators

Call	Ops
Multi-Single	
PJ9C	W1BIH W1WEF
K1AE	K1XM KQ1F N1RWM K1AE
W1IA	K1TWF W1IA W1TQ N1TT W1ES WO1N K1WD
N2LBR	N2LBR WA1KKM
W1NR	W1NR W1BK AI3E
Multi-Two	
KC1XX	KC1XX KM3T KC1F K1DG K1LZ
K1AR	K1AR K1EA K1GQ K5ZD
K1ZZ	K1ZZ K1RO N1RL
K1RX	K1RX KF1V K1EPJ
K1KP	K1KP WA1S N1RD NB1B K1OA KM1D
KB1H	KB1H K1EBY AA1CE WA1RLV NB1U N1RR W3TB
Multi-Multi	
K1KI	K1CC K1KI K1PI K2KQ KM1P NQ1K W1RM W2EQ
W1VE	W1VE KB1W N1BB W1FJ WG9L NS1M W1IX NU1P WA1ZAM
K1GW	1GW K1ART W6PH
N1AU	K1HQ WC1D N1DS N1AU
W1QK	AA1MY N1GS K2ZZ W1QK
K1TI	K1TI K1TR K1CA K1FWE K1BG

ARRL DX Phone Claimed Scores

Dave Hoaglin, K1HT

YCCC Scores in BOLD

(Other NE USA scores from the Contest Reflector - thanks to WA4ZXA)

YCCC total from CW: 87.8 million
Phone: 55.2 million

YCCC Total ⇒ 143 Million!!
FRC Claimed Total ⇒144 Million
It's awful close!!

CALL	SCORE	Q	C
Single Op QRP			
N1AFC	**112,014**	**295**	**127**
K2PS	103,044	277	124
N1TM	**76,935**	**223**	**115**
Single Op High Power			
PJ9JT	**2,678,580**	**3235**	**276**
K5ZD (W2SC)	**2,284,848**	**2214**	**344**
N6BV	**1,694,628**	**1989**	**284**
K3ZO	1,544,103	1733	297
K4AB	1,208,004	1379	292
AA1ON	**1,062,864**	**1342**	**264**
KS1L	**809,160**	**1226**	**220**
W1WEF	**512,652**	**718**	**238**
AA4NC (KS4XG)	426,492	718	198
NZ1Q	**247,530**	**446**	**185**
KD1YN	**243,408**	**461**	**176**
K5MA	**241,605**	**455**	**177**
KA1DWX	**230,895**	**435**	**177**
W1RY	**230,184**	**417**	**184**
W1OJ	**205,500**	**500**	**137**
W1VT	194,460	463	140
K1EFI	**180,600**	**430**	**140**
W2GDJ	**126,888**	**311**	**136**
KK1L	117,504	295	136
K8BK	102,600	285	120
K1NYK	**89,262**	**261**	**114**
K1BV	**63,360**	**240**	**88**
K1TH	**58,656**	**208**	**94**
W8PT	16,146	78	69
K1SD	**15,453**	**101**	**51**
Single Op Low Power			
VP2V/K1DW	**496,470**	**1273**	**130**
NA2U	290,265	523	185
AA2GS	258,264	408	211
K1NO (K5FUV)	**170,316**		
K1VSJ	**167,634**	**417**	**134**
N1PGA	**149,628**	**337**	**153**
K1HT	**142,749**	**311**	**153**
W1ZZ	**116,946**	**268**	**146**
W1TE	**116,352**	**303**	**128**
KD2TT	114,681	301	127
N1RT	100,188	253	132
N1RJF	58,092	206	94
W3CP	35,904	136	88
W4ZW	34,419	149	77
W1OHM	**32,319**	**133**	**81**
K1OA	**30,960**	**129**	**80**
WU1F	23,520	112	70
N1SMB	**19,080**	**106**	**60**
N2RMZ	17,568	96	61
AB1U	**855**	**19**	**15**
Single Op Assisted High Power			
K1ZM	**1,830,000**	**1732**	**354**
W1MD	**1,754,772**	**1678**	**349**
KE3Q	1,658,580	1551	359
K3WW	1,562,880	1480	352
AA1K	1,505,898	1422	353
N4ZC	983,547	1061	309
N8TR	746,415	874	285
K1AM	**746,334**	**813**	**306**
K1MY	**700,416**	**1024**	**228**
AA3B	675,360	804	280
W1RZF	**628,224**	**818**	**256**
K2TE	**517,032**	**668**	**258**
K3AR	492,288	641	256
N3ZA	454,119	589	257
N1CC	**444,108**	**622**	**238**
AA1V	**353,439**	**519**	**227**
K1MO	**330,084**	**519**	**212**
N1DG	**306,234**	**477**	**214**
N1NQD	**230,280**	**380**	**202**
K3IXD	214,230	370	193
W2UP	213,840	440	162
K3KO	203,904	384	177
N1SP	**201,453**	**371**	**181**
KB2HUN	**179,712**	**384**	**156**
KF2O	**159,705**	**273**	**195**
K2EP	**149,730**		
W1JCC	**141,588**	**276**	**171**
KD1NE	**125,730**	**330**	**127**
K1RM	**77,814**	**262**	**99**
N2UN	**61,311**	**191**	**107**
K1VV	**45,045**	**165**	**91**
K1EU	**19,494**	**114**	**57**
N1RR	**12,700**		
Single Op Assisted Low Power			
AA2GS	148,044	292	169
WO1N	**16,632**	**88**	**63**
K1RV	**62,784**	**192**	**109**
Single Band			
20 METERS			
WF1L (LP)	**58,275**	**259**	**75**
15 METERS			
WA2QNW	44,712	216	69
WA1FCN (LP)	**21,450**	**143**	**50**
Multi-Single			
KY2J	1,432,782	1414	338
WA2VUY	1,198,224	1265	318
N8NR	719,901	822	293
AJ1I (@KB1HY)	**551,661**	**803**	**229**
N2SA	538,098	683	263
K3MD	469,404	666	236
W1BK	**326,616**	**439**	**248**
WR1X	**265,950**	**450**	**197**
N2LBR	**217,743**	**401**	**181**

Multi-Two

KC1XX	**3,924,000**	**3003**	**436**
W2PV	**3,120,000**	**2624**	**398**
N2NT	2,936,500	2289	428
K1NG	**2,940,690**	**2362**	**415**
N3RS	2,900,520	2305	420
W1FJ	**2,794,302**	**2317**	**402**
W2XX (@KE2NL	**2,791,308**	**2468**	**377**
K1ZD	**1,956,768**	**1744**	**374**
K8AZ	1,800,000	1692	364
K1RX	**1,385,100**	**1350**	**342**
K8LX	1,353,024	1394	324
KV1W	**1,351,080**	**1390**	**324**
KB1SO	**1,317,600**	**1525**	**288**
KB1H	**1,301,157**	**1287**	**337**
W3PP	1,151,955	1219	315
AA3JU	1,064,574	1216	294
K2KV	836,304	1054	266
W1QK	**667,233**	**833**	**267**

Multi-Multi

W3LPL	5,069,670	3485	487
K1KI	**4,333,659**	**3203**	**451**
K3LR	4,007,568	2883	464
W3EA	1,928,070	1740	370
N1TU	**1,862,580**	**1678**	**370**
K3EST	1,543,122	2002	259
K3ANS	1,317,528	1265	348
K3II	1,299,000	1323	328
K1KP	**1,062,936**	**1197**	**296**
N1AU	**868,185**	**981**	**295**
K1GW	**411,930**	**690**	**199**

Band Breakdowns

Single Op QRP

CALL	160	80	40	20	15	10	SCORES
N1AFC	**0/ 0**	**0/ 0**	**41/ 23**	**160/ 62**	**86/ 38**	**8/ 4**	**112,014**
K2PS	0/ 0	9/ 8	18/ 16	157/ 60	87/ 36	6/ 4	103,044
N1TM	**3/ 3**	**11/ 10**	**25/ 20**	**109/ 46**	**61/ 31**	**14/ 5**	**76,935**

Single Op High Power

K5ZD	**45/29**	**253/ 64**	**288/ 72**	**1466/114**	**127/ 55**	**35/ 10**	**2,284,848**
K3ZO	21/18	151/ 52	208/ 61	1175/105	156/ 53	22/ 8	1,544,103

Single Op Low Power

NA2U	3/ 3	22/ 19	69/ 40	276/ 72	121/ 44	32/ 7	290,265
W1ZZ	**0/ 0**	**9/ 8**	**41/ 27**	**140/ 64**	**69/ 43**	**9/ 4**	**116,946**

Single Op High Power Assisted

W1MD	**41/30**	**213/ 61**	**100/ 54**	**1063/112**	**212/ 80**	**49/ 12**	**1,754,772**
KE3Q	34/26	95/ 51	215/ 72	836/108	279/ 83	92/ 19	1,658,580
K3WW	43/35	126/ 58	133/ 63	926/107	214/ 77	38/ 12	1,562,880
AA1K	52/37	77/ 50	181/ 70	905/105	179/ 77	28/ 14	1,505,898
N3RR	31/25	86/ 48	127/ 63	521/ 93	251/ 74	73/ 20	1,054,272
K1AM	**34/30**	**80/ 47**	**114/ 59**	**403/ 95**	**143/ 63**	**39/ 12**	**746,334**
AA3B	14/14	100/ 49	105/ 51	344/ 85	190/ 69	51/ 12	675,360
K3AR	8/ 8	37/ 32	71/ 47	316/ 89	169/ 66	40/ 14	492,288
N3ZA	16/15	55/ 39	69/ 47	282/ 85	142/ 62	62/ 9	454,119
N1CC	**19/16**	**35/ 27**	**56/ 38**	**344/ 88**	**143/ 57**	**26/ 12**	**444,108**
W2UP	2/ 2	66/ 33	45/ 28	229/ 56	64/ 35	34/ 8	213,840

Multi-Single

KY2J	44/34	214/ 64	145/ 61	810/ 99	166/ 69	35/ 11	1,432,782
WA2VUY	30/21	109/ 55	150/ 61	745/100	198/ 71	33/ 10	1,198,224
AJ1I	**34/24**	**63/ 41**	**81/ 44**	**536/ 75**	**76/ 35**	**15/ 10**	**551,661**
N2SA	16/14	75/ 48	118/ 57	329/ 86	125/ 49	20/ 0	538,098
WR1X	**0/ 0**	**46/ 34**	**58/ 36**	**221/ 72**	**118/ 48**	**8/ 7**	**265,950**

Multi-Two

KC1XX	**54/35**	**370/ 75**	**398/ 86**	**1706/127**	**412/ 96**	**63/ 17**	**3,924,000**
N2NT	83/42	206/ 65	310/ 85	1257/122	337/ 93	96/ 21	2,936,500
N3RS	56/37	245/ 66	367/ 85	1108/115	440/ 94	89/ 23	2,900,520
W1FJ	**64/37**	**371/ 77**	**245/ 73**	**1238/112**	**346/ 89**	**58/ 14**	**2,794,302**
W2XX	**44/33**	**247/ 66**	**303/ 73**	**1555/118**	**268/ 73**	**59/ 14**	**2,791,308**
KV1W	**31/23**	**202/ 61**	**165/ 63**	**719/ 94**	**213/ 68**	**63/ 15**	**1,351,080**
KB1SO	**6/ 5**	**108/ 46**	**148/ 57**	**1101/109**	**144/ 66**	**11/ 5**	**1,317,600**
KB1H	**33/28**	**100/ 56**	**154/ 61**	**724/101**	**218/ 77**	**59/ 14**	**1,301,157**
W3PP	25/20	76/ 50	205/ 68	614/ 97	213/ 71	26/ 9	1,151,955

Multi-Multi

W3LPL	80/44	437/ 88	489/ 96	1903/134	451/ 99	125/ 26	5,069,670
K1KI	**88/44**	**375/ 79**	**409/ 85**	**1826/133**	**379/ 93**	**126/ 17**	**4,333,659**
K3LR	55/32	351/ 86	469/ 94	1564/138	352/ 95	92/ 19	4,013,136
W3EA	45/33	147/ 59	201/ 67	968/108	301/ 86	78/ 18	1,928,070
K3EST	24/14	150/ 39	567/ 56	851/100	408/ 50	2/ 0	1,543,122
K3ANS	43/31	168/ 59	175/ 68	563/ 97	244/ 77	72/ 16	1,317,528

Multi Operators

Call	Ops
N2LBR	N2LBR WA1KKM
WR1X	WR1X KE1FO N1IPG
W1BK	W1BK W1NR AI3E N1TXH
AJ1I	KB1HY KB1GW N1JBH N1RL

Multi-Two

W1QK	AA1MY N1GS W1QK K2ZZ
KB1H	KB1H AA1CE K1EBY W3TB
KB1SO	KB1SO K1ZR
K1NG	K1NG KI1G K1VR AA1AA K1SD
KV1W	KV1W W1CSM N6RFM
K1RX	K1RX KF1V K1OZ N1SD K1EPJ
K1ZD	K1RO K1ZZ N1RR KA1ZD
W2XX	W2XX N2TX W2SF KE2NL
W1FJ	W1FJ N1BB K1XM W1KM WA1QGC NB1B
W2PV	K2TR K2XA KD2RD K2XW NQ1F K2ONP
KC1XX	KC1XX KM3T KC1F K1LZ K5ZD

Multi-Multi

K1GW	K1GW W6PH
N1AU	AA1IZ K1EP NY1L W1RV N1AU
K1KP	K1KP K1OA KB2R WA1S
N1TU	WT2Q KB1W W1VE WA1ZAM N1NYD K2WR NU1P K1TTT AA1OK
K1KI	K1CC K1KI K1PI KM1P KQ2M NQ1K

The Open Logger Project

David Robbins, K1TTT

It started like this:

Date: Sun, 03 Nov 1996 12:27:35 +0000
From: ky1h@BERKSHIRE.NET (David Robbins)
To: cq-contest@tgv.com

I have a dream.... a logging program that is extendible, user configurable, and is supported across various platforms....

'Not another logging program!' you may say. Yes, another logging program. But this one is a bit different, not only in how it will work, but mostly in how it is being designed. It is not starting out as a personal project that happens to grow into a commercial product. This program is being designed from the ground up to use state of the art technology. It is also being run as an open project where we welcome input and assistance from the potential user community. The design will be public domain, so anyone will be able to customize it or add to it's capabilities.

History

A step back in time is appropriate before we continue into the future. [flashback time!] In the beginning....[fade out to black and white picture of a TRS-80 Model I] Computer memory was small, the programming languages were simple, and the processors were slow. This meant that in order to do something in real time you had to write programs that were small and efficient. To do this many programs used a mix of assembly and basic languages. This satisfied the early needs of doing dupe checking and multiplier checking as you entered contacts.

Of course as the computers got faster and memory capabilities expanded [switch to grainy color shot of an original IBM PC, in the BIG case] the program writers started adding more features to use up those spare clock cycles and kilobytes of RAM. (As dictated by someone's law... 'Computer programs expand to consume all available memory and computer time') And of course since it was the same programmers that wrote the programs in the first place all they did was add more stuff to their existing programs. And with each bigger and faster computer [morph the PC to XT to AT to 386 to 486 to Pentium to Pentium Pro...] there was more and more added to each of the programs. And as many of us learned from the user side, some of these programs have reached the breaking point. That is, "the point where fixing one bug creates one or more seemingly unrelated bugs". ("It's not pointers that kill programs, its programmers with pointers that kill programs." I forget where I read that recently, but it seems to fit here.)

Also since these programs were designed mostly in the heads of one programmer there was no way for anyone else to step in and help when that person didn't have time or the inclination to add new features.[quick shot of programmer at computer pulling hair out as screen flashes ERROR] And of course if you had an idea for a nice new feature first you had to convince the owner of the program that you liked that it was a good idea. Then you had to wait and hope that how he thought it should work was close enough to your idea that you would still like it when it came out in the next version..... maybe.

Today's Loggers

Lets look at the current state of technology, and think for a bit about where it may be in a couple years. [rapid sequence of a Pentium, Mac, and Sun Workstation all running hi-res graphics demos on super size screens] A Pentium Pro running your coffee pot, Java based network computers selling used for $20, dual fiber cables straight to your videophone/computer /tv/radio/entertainment center/home controller/web server/microwave oven that's built into your recliner armrest. Well, maybe that's a year or two too far into the future; lets try for something like late next year.[end flashback, return to reality]

Now many of the radios have more computer power than the early computers did(and some actually plug into your computer mother board), the desktop computers run faster than the mainframes used to, and network cards that are faster than the early Internet backbones are under $20. And yet most contest loggers still run under MS-DOS, use serial ports for simulated local networks(if they network at all), and are tied to one computer type. Been there, done that.

Some advanced logging programs run under windows, and a few experimenters have written programs for Linux, Motif, Sun workstations, Macs, and other types of platforms. But most of them have a small user base and lack many of the features in the older programs. Plus they require more system resources than the DOS based ones.

A New Paradigm?

Lets break that mold and start fresh with a program that is:

1. Upgradeable with our hardware without re-writing.
2. Configurable for new contests or rule changes without re-writing.
3. Be able to add new features without re-writing.
4. Able to leap tall networks in a single datagram.
5. Runs on different platforms and under different operating systems.

Well, that may be nice, but what does it really mean? Note that the key phrase repeated in 1,2, 3, and 5 above is 'without re-writing'. This points to a modular design that allows the addition and replacement of components without changing the basic framework that lets the pieces communicate with each other. This is something that is hard or impossible with many older languages and operating systems. And the implementations of this in native code differs between operating systems, which requires at least rebuilding and at worst completely rewriting programs to run on different platforms. Java supports this directly, on any platform that it runs on. (see Sidebar: 'Java, WHY?')

I know many of us have been calling for real network support for contest logging for years. Using serial ports can be difficult due to their problems with RF. And just getting enough ports available to talk to radios, rotors, TNCs, and other computers can be a real problem. Network cards are about the same price (or cheaper in some cases) than serial ports, are generally less susceptible to RF, and are easier to connect and configure, and are coming built in or easily added to laptops frequently used on expeditions. As an added bonus they can be used directly from Java programs.

When can I buy it?

No, it won't be available for Dayton 1997. This project is so far in the early planning and high level design stages. I don't expect anything that really looks like a logging program to be available for at least a year. Some prototype code is available now but it is only some basic proof of concept work and testing out capabilities of Java. So far it looks encouraging and some of the prototype code is available on the WWW.

Java: WHY?

Sun Microsystems designed Java in such a way that programs written in it will run on any platform 'without re-writing'. This is done by hiding the details of how to talk to the hardware from the program in a set of pre-defined libraries. These libraries and the Java interpreter do have to be supplied for each target machine, but the programs that use them can be written once and then run on any of the supported platforms without even re-compiling.

Consider this example: I wrote a propagation prediction tool for contests that ran under MS-DOS for years. Then I spent several months converting it to run under MS-Windows 3.x. It works OK under Windows-95, but by changing some stuff and re-building it I could make it faster and add some more of the new neat features.... and then have 3 different versions to support that all run on PC clones but with different operating systems. I have done some of the Win95 port and it is faster, but has other problems because I don't have 32 bit libraries for everything I need. But now someone want to run it on a Sun Workstation, or a Mac PC, or a PowerPC running Windows NT.... ARG!

I spent 1 week converting it from C/C++ to Java, now it can be run on all of those and more with the exact same user interface and *no rewriting* of code to change platforms.

The next generation of Java is something they are calling Java Beans. The documentation for Java Beans almost perfectly describes the modular design that will be needed for the OpenLogger. In fact some of the demo code that comes with the Beans Development Kit looks very much like some of my prototype code that is now on the OpenLogger web page.

So what do we need to do now? Well, I am looking at the over all design and the framework to tie it all together, and there are some on going discussions of the basic data design. But there are several areas that need more research:

1. The collection and organizing of features that are desired. The 'Wish List' so to speak. I think this is actually fairly important since if we miss a critical relationship needed in the data it could be much harder to add it later. Think of this as the 'Requirements Definition' part of theproject. While the object oriented approach we are taking makes adding things later easier it is still much better to get a full set of requirements earlier than later.

2. The design of the basic object components. Part of this means figuring out the basic types of information and what can be done with it. A while ago there was an effort to define a common log file format that may have some good information. Does anyone know the results of that effort? This also includes figuring out how to represent contest rules, generic hardware objects, describing geo-political entities(counties, states, countries, continents, zones, etc), etc.

3. A database that supports saving the necessary objects. I have some implementation ideas based on a recent class I took on the POET Object Database system, but there is still lots of basic research and design that needs to be done in this area.

4. The definition of an interface that can be used on different platforms to control native code that actually talks to the hardware. This is for such things as sending CW via serial or parallel ports, talking to accessories via serial ports, controlling DVP or other sound devices, etc. For this it would be nice to have knowledge of various hardware platforms since Java doesn't support this type of interface it will take someone knowledgeable on each platform to essentially expand the Java libraries to fill this gap.

5. Internationalization. The design and translation of user interface components that need to be customized in various languages. Again, this is something that Java (starting with JDK 1.1 anyway) supports directly. But coming up with all the different translations and organizing them so its not hard to add to them needs to be looked at.

And all that before we really get down to writing a lot of code!

For more information and to keep up with the current status check out the OpenLogger web site at:

http://www.berkshire.net/~robbins/logger

and the message board that KK5ZX is running at:

http://www.dtx.net/~foggie/wwwboard. ❑

The 'Butt-10 And 20 Years Ago

Leonard Kay, KB2R

[With this issue, I am inaugurating a new column - a quick look back on our first 20 years. Hope you enjoy it - '2R]

April 1977 (Issue 1) - YCCC is formed on April 9th, with 75 charter members. The Scuttlebutt logo shows sinking ships NCCC, PVRC, FRC, and MM in YCCC's wake. K1ZM(P), W4SYL(VP), K1XX(S), K1RQF(AM) and WA1TAI(T) comprise the first slate of officers. Mondays at 7:30 ET on 3900 kHz is the club meeting place.

Initally there are 4 general meetings scheduled per year, and K1ZM points out even back then that making two meetings a year "should not be an unreasonable requirement for anyone genuinely interested in being a part of the club".

An unidentified quote presumably heard at an NCCC social gathering reads: "Yeah, you guys have all the big stations out there…. but how come you aren't winning club competition anymore?" Boy, things don't really change, do they? Think the club is too splintered now? No less than **14** Area Managers are listed in Butt #1!! Mass has 5 alone!

But enthusiasm is very high, and claimed scores for 1977 ARRL DX indicate that had YCCC existed in time, the combined club score would have been about 50 Million points, with W2PV taking top honors in both modes - 4.7M on CW and 6.9M on Phone.

April 1987 (Issue 68) - An article by K1GQ discusses the weighty subject of how - and if - to deal with a friend you know is running way too much juice. K1XM and KQ1F are off again, this time to the West Carolines as KC6MX and KC6IF.

N1AU's *Captain's Cabin* talks at length about the ineffectiveness of the Area Manager system [where do I remember that recently?]. His suggestion is that perhaps the new-fangled PacketCluster nodes could serve as focal points for Area events [wow, it's easy to forget how comparatively recent a development packet is, huh?].

K1DG gives a CAC report. Among the items: the FRC petition to move ARRL DX CW up by one week - to separate CW and SSB more - is approved, and the Awards Committee is considering a QRP category for Sweepstakes. K1AR has QSL cards for $35/2000. ❑

Secretary's Report

Charlotte Richardson, KQ1F

The February, 1997, meeting of the Yankee Clipper Contest Club was held on Sunday, February 2, 1997, at the Sturbridge Host Hotel in Sturbridge, Mass. Club president Tom, K1KI, called the meeting to order with introductions of the 114 members present and their guests. Tom then extended his thanks to all the club officers and volunteers, area managers, packet sysops, and W1 QSL BURO volunteers for 1996. Len, KB2R, had a new shipment of club jackets and shirts. Ric, KV1W, had callsign bages and took many orders for new badges for all the members who changed calls in recent weeks.

Tom announced several upcoming local meetings: February 8th in Hanover, MA, a joint meeting with Murphy's Marauders on February 11th in Wetherfield, CT, on March 8th in Scarboro, ME, tentatively on February 8th on Long Island, and a Contest University during the ARRL SSB contest on March 1st in West Mass. Contact your area manager for more information.

The club financial statement showed a balance of $2525.52.

The club welcomed ten new members (see New Crew for details: Lynn Dee Benjamin, KE1CT, Ed Parish, K1EP, George Slater, N1GS, Laura A. Lyman, AA1PK, Scott Porter, N1SP, Edward W. Midura, KA1TFU, Bob Crews, K1VA, Ernie Popp, K2EP, James Noble, WA2MKJ, and Richard Serafine, K3UU.

Tom then asked for updates on Sasha, WK1O, and Bob, N1TZ, both of whom have been hospitalized recently. Several members were looking for additional ARRL contest operators for both modes; interested people should talk to their area managers. Tom then passed out some certificates: to John, K1AR, for first place YCCC in the 1996 ARRL DX Contest SSB, to Dean, N6BV, for first place YCCC in the 1996 ARRL DX Contest CW, and to Brian, NJ1F (operating from K1RQ), for first place YCCC in the 1995 SS SSB. Dean, N6BV, then read an article from the FRC newsletter by Charlie, K3WW, on optimizing scores in the ARRL DX Contests.

Tom announced that several club members were planning ARRL DX Contest DXpeditions: K2LE to P4, W2AX/MM on the QEII (counts for QSO credit only, no multiplier), W1WEF and W1BIH at PJ9C, K1DW from VP2V, and K2WR from GJ.

Tom and club scorekeept Dave, K1HT, then presented the most current CQ WW club score information. There were 170 SSB logs submitted and 155 CW logs submitted. 120 members submitted logs for both modes, compared to 35 members last year. Club certificates will be presented to members who made at least 300 QSOs on a mode, and club mugs (not yet arrived) will go to those who made at least 600 QSOs or 500K points on a mode. Similar certificates and mugs will go to members participating in the ARRL DX Contests, except that to reflect the differences in scoring, the mugs will go to those who contribute at least 600 QSOs or a score of 450K.

After the break and introductions of some late arrivials, Dean, N6BV, spoke about the history of our arch-rivals, the Frankford Radio Club, now celebrating their 70th year (this is our 20th year). We have never quite beaten them in the CQ WW, and have beaten them only twice in the ARRL DX Contests, and only once officially, during the administration of Bill, N1AU, as Club President, although they have been beaten by PVRC. For the past few years in the CQ WW contests, they have beaten us by 30% in 1990, by 15% in 1991, by 29% in 1992, by 45% in 1993, by 80% in 1994, by 28% in 1995, and 3% (projected) in 1996 *(see graphs, next page).* Clearly, we are well-positioned to clobber them next year. FRC sends out many SSB DXpeditions, while YCCC is known as a CW club. Dean's conclusion is that FRC beats us in the CQ WW mainly due to their SSB DXpedition scores.

Now, what does this mean for the ARRL DX Contests under the new rules which count DXpedition scores? Looking at the historical data, they beat us by 50% in 1990, by 21% in 1991, by 19% in 1992, by 15% in 1993, by 55% in 1994, by 60% in 1995, and by 31% in 1996. Since then, we have a lot more new members with our active membership roll over three hundred, and lot more motivated people. Dean analyzed the probable effect of DXpeditions. Because of the small number of multipliers available for non-W/VE operators in these contests, you can only make about half the score for the same effort as you would for the CQ WW, even if you were able to work the same number of QSOs. The percentage is even smaller for very large multiops, again due to the relatively small number of multipliers available. Dean's conclusion is that DXpeditions are worth a lot less to the club in the ARRL contest. We should be able to win this year by a concentrated effort from our home stations.

Dean's strategies for improving scores: 1) Call CQ (you are louder into Europe than you think). 2) "Swarm" up the band in s&p mode, calling CQ on any clear frequency. 3) For rare multipliers, look at Dean's propagation charts and know when to look for the rare ones. 4) Operate with a friend or two (keeping in mind the 2/3 rule for ARRL club competition) as a two-transmitter multi, for more fun and more points. 5) Run your amp - it keeps the rate up. At least run it on all clean bands.

After the second break, Paul, K1XM, annoucned a Chinese New Year party the following Sunday at his QTH. Paul, KF2XK, has extra Dayton rooms available. Several members wanted to organize a Rom's run after the meeting.

Kurt, W6PH (ex-W1PH), gave the ARRL Contest Advisory Committee update. Kurt is the New England Division representative. The most important actions this past year were the change to the ten-minute rule for multi-single operations (to six band changes per clock hour) which becomes effective in 1998, and a proposal to change the 160m contest exchange to require DX stations to send their power level, which failed to pass. Now under consideration: a replacement for the Novice Roundup. The current proposal is for a one day 12 or 24 hour contest instead of the old two-week event. Another current agenda item is a proposal to add six meters to the ARRL DX contest in the future to attract Technician-class licensees. Kurt noted that you can email the CAC at cac@arrl.org.

Rich, K2WR, the Hudson Division CAC representative, then gave some additional details. Rich replaced JP, W2XX, who also chaired the committee, which is now chaired by Tim Duffy, K3LR. Rich noted that the Membership Services Committee of the ARRL Board refers topics to the CAC for study. Also, the CAC can request permission to put items on its agenda. Rich noted that Frank, N2FF, the Hudson Division Director, sits on the Membership Services Committee. Rich said that the Directors, Vice Directors,

CAC Representatives, and DXAC Representatives for both the New England and the Hudson Division are all YCCC members. If you have a topic for the CAC, see Rich, Kurt, or your Director or Vice Director.

Dean, N6BV, then presented questions for the CQ WW Contest Committee on behalf of Doug, K1DG, who was unable to attend the meeting. The hot topic concerns remote controlled stations, controlled remotely over telephone lines. The current rules only state the antennas must be within a 500 meter radius or on the onwer's property, whichever is larger. This subject generated much heated debate with opinions on both sides. Send your ideas to Doug at k1dg@contesting.com. Doug is also collecting nominations for the CQ Hall of Fame.

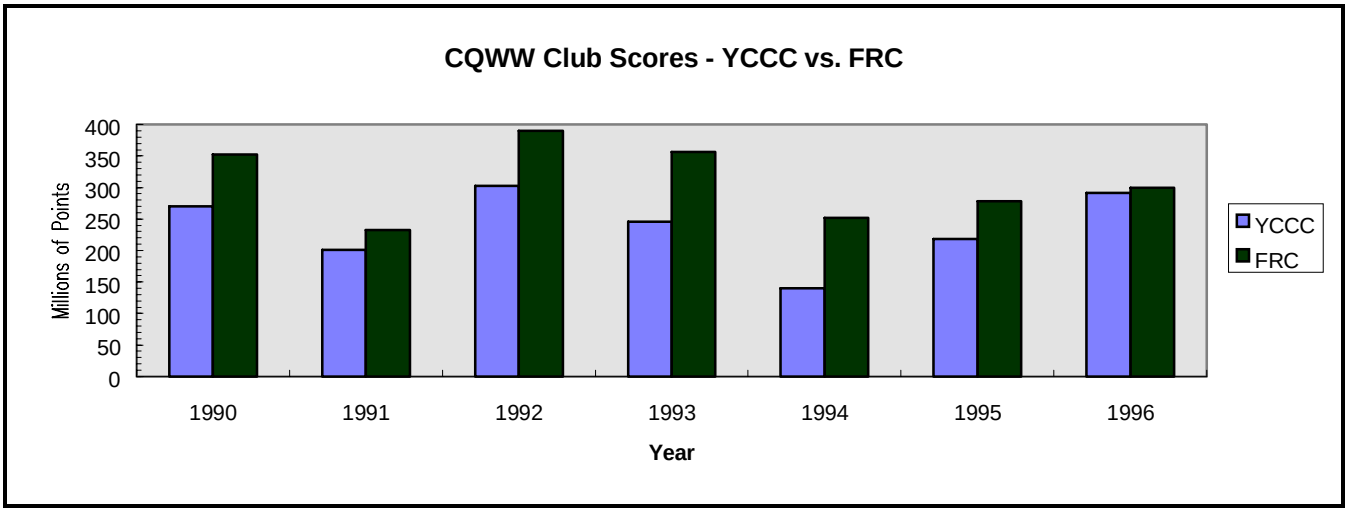
Tom, K1KI, then discussed splitting up the club officers, to separate the Vice President and Activity Manager jobs. Tom noted that the Club constitution does not combine the Secretary and Treasurer positions anyway. The motivation to have more officers is to divide up the increasing workload, particularly since a club officer normally attends each regional meeting. Also, Tom would like to have one person focused only on programs for the central club meetings.

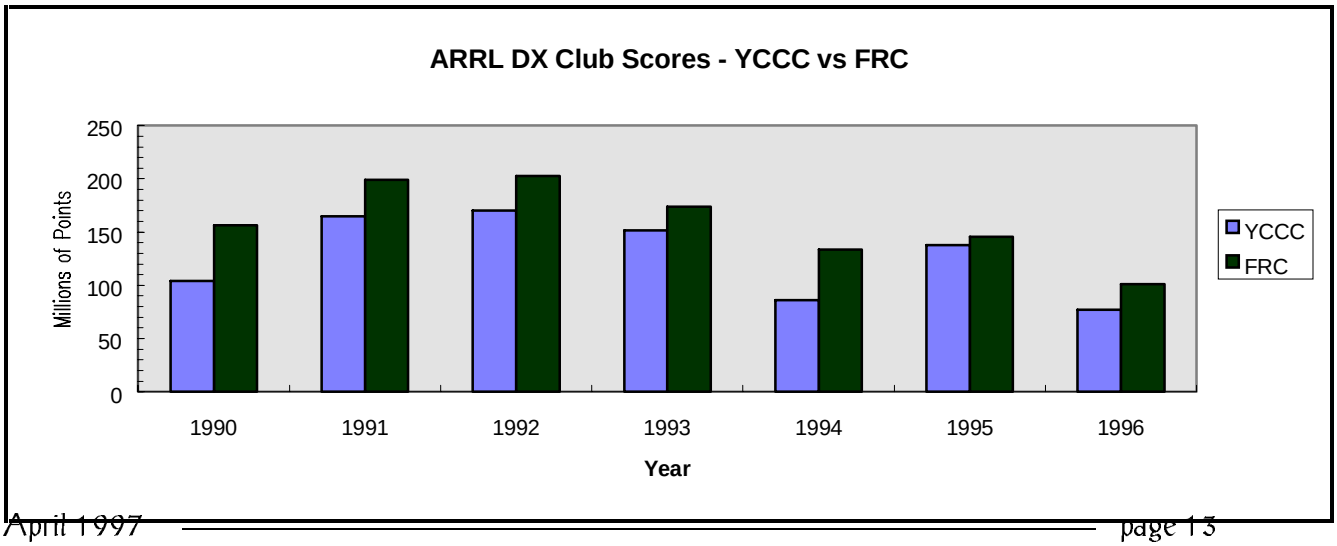
Tom then held the drawing for a weekend for two at the Yankee Clipper Inn in Rockport, Massachusetts, for members contributing 600 QSOs or 500K points in the CQ WW contests. Sixty members qualified for three chances by qualifying on both modes. Luigi, AA1AA, was the lucky winner.

Tom is looking for ideas for the club's 20th anniversary.

To end the meeting, Bill, N1AU, spoke about Everett, AJ1I, and his contributions to YCCC.

The meeting adjourned at 5 pm. ❑





Poop Deck

YCCC Elections!

Tom Frenaye, K1KI

The April YCCC meeting is when club officers are elected or re-elected for the upcoming year. After consultation with the current group of officers, here is the slate of officers being proposed for the 1997-98 contest season:

President	R Dean Straw, N6BV
Vice President	Tony Brock-Fisher, K1KP **
Activities Manager	Glen Whitehouse, K1GW **
Secretary	Charlotte Richardson, KQ1F
Treasurer	Ric Plummer, KV1W

** These depend on your approval of the proposal to split the current Vice President/Activities Manager job into two parts.

If you'd like to hold club office and want one of these jobs, don't be shy about it, put your name in nomination at the April meeting. We all enjoy contests!

Len Kay, KB2R, says he will be happy to continue as the Scuttlebutt editor for the next year, and Mark Wilson, K1RO, has volunteered to be the YCCC Awards Manager. A large number of others help to run the YCCC - Area Managers, Packet Sysops, W1QSL Bureau volunteers, scorekeeper, badgemaker, apparel guru, webmaster, web programmers, QSL card maker...

New Area Manager

K1KI is pleased to announce that George Wilner, K2ONP, will be taking over as Area Manager in NNY (Albany area). Fred Lass, K2TR, is retiring as Area Manager after nine years in the job - and hopes to concentrate on making even bigger scores this year. ❑

More New and Old YCCC Callsigns

thanks to Tom, K1KI, and Len, KB2R

[updates from Gate 2… send corrections/additions to KB2R for next issue]

KA1CB	is now	K1LD	AG7T	was	WT1T
WT1T	is now	AG7T	K1LD	was	KA1CB
KV1P	is now	K1OP	K1OP	was	KV1P
NA2M	is now	W2UD	K2XW	was	NQ2D
NQ2D	is now	K2XW	N1NY	was	WW1O
WW1O	is now	N1NY	N6HB	was	KA1XN
KA1XN	is now	N6HB	W2UD	was	NA2M

On the club scene…. Not to be outdone by YCCC, the Mad River Radio Club club callsign is now K8MAD, and the North Texas Contest Club is NT5CC.

The YCCC wants YOU -

- To be a volunteer.

See Tom's election article above.

Proposed change to the YCCC Constitution

Tom Frenaye, K1KI and Dean Straw, N6BV

YCCC has grown into a very big club during the past few years and we think it is important that the number of club officers be expanded. In the early days of the YCCC the Vice President and Activities Manager were two separate positions but they were consolidated at some point quite a few years ago. We hope you'll support this change at the April meeting!

Current wording

ARTICLE II

Sec. 1 - The officers of this club shall be: President, Vice President/Activities Manager, Secretary, and Treasurer.

Sec. 2 - The Vice President/Activities Manager shall assume all the duties of the President in the absence of the latter, and he shall plan meeting programs and similar activities.

ByLaw 4

ELECTIONS. Elections shall be scheduled pursuant to Article II of the Constitution. Nominations, properly seconded, shall be received by the President from the floor. Upon close of nominations, a secret ballot shall be conducted by the Secretary; this ballot shall be repeated, the nominee receiving the least votes being dropped from the ballot, until a nominee has received a majority of votes cast. This process shall be repeated until the offices of President, Vice President/Activities Manager, Secretary, and Treasurer are filled.

Proposed wording

Sec. 1 - The officers of this club shall be: President, Vice President, Activities Manager, Secretary, and Treasurer.

Sec. 2 - The Vice President shall assume all the duties of the President in the absence of the latter, and the Activities Manager shall plan meeting programs and similar activities.

ByLaw 4

ELECTIONS. Elections shall be scheduled pursuant to Article II of the Constitution. Nominations, properly seconded, shall be received by the President from the floor. Upon close of nominations, a secret ballot shall be conducted by the Secretary; this ballot shall be repeated, the nominee receiving the least votes being dropped from the ballot, until a nominee has received a majority of votes cast. This process shall be repeated until the offices of President, Vice President, Activities Manager, Secretary, and Treasurer are filled.

Poop Deck continued

New Crew

Please welcome the following new new and returning members who joined at the indicated meetings:

January 28 local meeting in Elmsford, NY:

Bob Stewart, W2SF
1743 Ashard Ken Lane
Bay Shore, NY 11706
home phone: (516)666-6316
work phone: (516)376-4066
email: w2sf1@juno.com

February 2 general meeting at Sturbridge, MA:

Lynn Dee Benjamin, KE1CT
36 Merrill St.
Springfield, VT 05156
home phone: (802)885-3099
email: lynndee@vermontel.com

Ed Parish, K1EP
9 Spoon Way
North Reading, MA 01864
home phone: (508)664-1771
work phone: (508)446-6345
email: eparish@netcom.com

George Slater, N1GS
4 Richter Drive
Danbury, CT 06811-3453
home phone: (203)798-9422
email: cqdx@worldnet.att.net

Laura A. Lyman, AA1PK
36 Merrill St.
Spingfield, VT 05156
home phone: (802)885-3099
email: lynndee@vermontel.com

Scott Porter, N1SP
RFD 1 Box 78A
Fitzwilliam, NH 03447
home phone: (603)585-3330
email: wa1ytw@top.monad.net

Edward W. Midura, KA1TFU
528 Old Warren Rd.
Palmer, MA 01069
home phone: (413)283-6625
work phone: (413)436-7704

Bob Crews, K1VA
PO Box 577
Brookline, NH 03033
home phone: (603)672-8478
work phone: (603)884-3045
email: crews@niops.enet.dec.com

Ernie Popp, K2EP
640 Co. Rt. 7
Nassau, NY 12123
home phone: (518)477-9581
email: ka2htu@aol.com

James Noble, WA2MKJ
6 Hazel Terrace
Renselaer, NY 12144
home phone: (516)286-3586
email: jimwa2mkj@juno.com

Richard Serafin, K3UU
35E Stony Brook Rd.
Westford, MA 01886
home phone: (508)692-1434
work phone: (508)250-1110
email: k3uu@tiac.net

February 8 special meeting in Southeast Massachusetts:

Al Stewart, N1SMB
325 Ward St.
Manchester, NH 03104
home phone: (603)622-4712
email: NONSMB@aol.com

Jeff Demers, N1SNB
287 Holt Ave.
Manchester, NH 03109
home phone: (603)623-7312
email: Jdemers@sprynet.com

Ernie Guimares, Jr., KA1VY
PO Box 1262
Lakeville, MA 02347
home phone: (508)947-4444

February 11th meeting with Murphy's Marauders in Weathersfield, CT:

Rich Cady, N1IXF
6 Grimes Brook Place
Simsbury, CT 06070
home phone: (860)658-6147

Rick Casey, AB1U
8 Nancy Lane
North Haven, CT 06473
home phone: (203)239-1466
email: AB1U@SNET.NET

January 20 meeting at K1GW's in New Hampshire:

Randy Lake, N1KWF
73 Gunn Rd.
Keene, NH 03431
home phone: (603)352-6990
work phone: (603)352-9122
email: RLake@monad.net

Jim Francis, K1PTF
PO Box 1168
14 Old Coach Lane
Amherst, NH 03031
home phone: (603)673-3737
work phone: (508)658-5600 x 5195
email: francis@agfa.com

Dale Drake, AA1QD
513 Sixth St.
Dover, NH 03820
home phone: (603)749-2512
work phone: (207)438-5729
email: aa1qd@aol.com

Doug Scribner, K1ZO
52 Manchester St.
Keene, NH 03431
home phone: (603)352-5832
work phone: (603)352-7020
email: thecomshop@monad.net

Movers and Shakers

New address for **Gerry, W1VE** (ex-AK4L):
Gerry Hull, W1VE
PO Box C
Greenfield, NH 03047
home phone: (603)547-2216
work phone: (603)547-8327
email: w1ve@inetmarket.com

New Email for **Dave, K1NYK:**
dmalley@pipeline.com

Poop Deck continued

Proposed Guidelines for use of Club Callsigns

Glenn Swanson, KB1GW and Leonard Kay, KB2R

Thanks to the efforts of several people, YCCC has two great club call signs - AJ1I and W2PV - chosen in memory of two of our Silent Keys. Recently it has been discussed among the club staff that it might be a good idea to have a clear set of guidelines for using these calls.

Below is a proposal for these guidelines, to be added to the YCCC Bylaws. The proposed text is already the result of a week-long discussion on the YCCC Reflector. Please come to the meeting ready to discuss and vote. While it may seem overly wordy, the intent is to offer all YCCC'ers an equal opportunity to use the club calls.

NOTE: The proposed text below is in **bold**. Explanatory notes appear in (*italics)* and are not part of the text.

Bylaw #?? (TBD)

The following rules shall govern the use of the club callsigns W2PV and AJ1I.

I. Definition of terms.

- **A) 'Big 6' contest: Any one of CQWW CW, CQWW SSB, ARRL DX CW, ARRL DX SSB, WPX CW, WPX SSB.**
- **B) 'Minor contest': Any contest other than a 'Big 6' contest.**
- **C) 'Contest year': The stretch of time which begins with CQWW SSB, and ends with WPX CW.**
- **D) 'Multi-operator group': A group of amateurs that worked a contest under a single callsign and submitted a valid log in a multi-operator category.**
- **E) 'Big gun' station: A multi-operator group that has submitted at least 1 valid log of 2.0 Meg points or greater, in any of the 'Big 6' contests of the previous contest year.**
  *('big gun' status is dependent only on operating results and must be renewed each year***)**
- **F) 'Coordinator': The YCCC member responsible for processing the applications and granting the use of the club callsigns.**

II. Rules for use of W2PV and AJ1I:

- **A) Only 'Big gun' stations may apply for use of W2PV for use during a Big 6 contest.**
- **B) Any multi-operator group may apply for AJ1I for any contest, or for W2PV for a minor contest.**
- **C) A multi-operator group is ineligible for use of W2PV/AJ1I for a given contest if they used that call in that same contest in the previous year.**
  (Can't hog the same call for the same contest 2 years in a row).
- **D) The trustees of the club callsigns are ultimately--and legally--responsible for their "proper" use. However, the representative requesting use of the call sign will be responsible, in the view of the club, for using the call sign within the bounds of FCC and contest rules. Misuse of a club callsign shall render a group ineligible for either call for one year.**

III. How to apply:

- **A) A request can be made by a representative of a multi-operator group to the coordinator 3 months before the desired contest. The requests are handled first come, first serve.**
- **B) If the requesting multi-operator group meets the criteria in (II) above, and the call is still available, then the request must be granted.**
- **C) Once notified, the coordinator must respond to a written or verbal request within 7 calendar days.**

1997 Massachusetts QSO Party Rules

Steve Olivieri, N1TYH

The 1997 Mass QSO Party is organized by the Framingham Amateur Radio Association.

Contest Period: 1800Z Sat May 3 to 0400Z Sun May 4 and 1100Z to 2100Z Sun May 4.

Classes: Outside MA, MA single op, MA multi op, MA portable, MA team (5 MA single ops), MA Nov/Tech, MA Club

Exchange: RS(T) and QTH (State/Province/DXCC Country/MA County)

Scoring : QSO: Count 1 point for Phone, 2 for CW/Digital/Video. Multipliers are MA counties (max 14 per band), plus States & Provinces & DXCC Countries per band for Massachusetts stations. Final score is total QSO points times total multipliers.

Frequencies: Any authorized amateur bands except 30, 17 and 12 meters.

Suggested frequencies: CW - 1810, 3550, 7050, 14050, 21050, 28050, 144.070, and 432.090 MHz. SSB - 1850, 3890, 7290, 14270, 21390, 28390, 144.220 (SSB), 146.550 (FM), 432.150 (SSB), and 446.000 (FM) MHz. Novices - 3705, 7130, 21130, 28130.

Awards : Certificates awarded for highest scores in each contest class, State, Canadian Province and DXCC Country and to entrants working all 14 MA counties.

Log Submission: Postmark entries by June 6th. Send logs to FARA, Box 3005, Framingham MA 01701, or electronically (ASCII or CT bin format only) to n1tyh@aol.com. For full copy of QSO Party rules send an SASE to above address, packet KA1USL@K1UGM, e-mail n1tyh@aol.com, or visit our website at http://www.ultranet.com/~fara.

Maine Meeting
Peter Archibald, N1AFC

A meeting of the Maine section was held on March 8, 1997. 14 people showed up. It was snowing. approx 3 inches. Fnally, some winter! Present were: KB1U, NY1E, K1EU, KA1PRD, N1RJ, K1MV, W1EL, K1RQ, W1OO, K1KI, K1OW, KA1T, NJ1F, N1AFC. We started with a film of the 3Y0PI DX-pedition. We then had a DX quiz, again won by Tom, K1KI. Tom gets to make up the next one. His name is once again added to the famous HOLA award.

We continued with discussions about the scores contributed to YCCC from the group, the club boundary, and contesting rules. We ate enough pizza to fill the best of them.

I thank everyone for coming. Our next meeting, we hope, will be in the summer. ❑

ENY Meeting
Hank Kiernan, KF2O

A Special Meeting was held on January 28, 1997, at Nat's Place in Elmsford, NY. The meeting was attended by members KF2O, WB2VVV, WR2I, W2XX, K8CH, K2WR, W1WEF, N6BV, W1XF, K2KQ, K5FUV, W2LK, and N2TX, and by visitors K2WE and W2SF. W2SF applied for membership and to no one's amazement was unanimously elected. W2SF formerly was KW2P, and Bob has been a DXer, contester and expeditioner...most recently to CY0 last summer.

The informal topic of the night was "Bring your problems, we'll work on solutions". Several poor souls, including the author, were saved by the assembled masses! Several people also offered their "tricks of the trade". K5FUV then gave us all a rundown on the hot DX topics of the day, covering P5, BS7, A5, VU4 and several other most needed spots and the prospects for each. Bill feels it is highly likely there will be a major expedition to BS7 this spring. The other places are much more problematical. Rich Gelber then discussed CAC topics, especially the brewing discussion of multiple club entries by a single station.

Nat's Place served its usual fine fare, and the meeting was another success in getting members together informally and socially...esprit de corps to BEAT FRC! . ❑

Connecticut Meeting
Glenn Swanson, KB1GW

We had a nice gathering of Murphy's Marauders and YCCCers in Wethersfield, Connecticut on Tuesday evening, February 11, 1997.

We gained two new members of the YCCC and after they were "voted in," Tom, K1KI gave a short speech, imploring those in attendance to get on the air this weekend to whip the FRC. We talked about antenna's, who's planning what for the contest, and in general, had a pleasant time enjoying the company of our comrades in arms, otherwise known as radio contesters.

In attendance were: Tom K1KI, Dean N6BV, Glenn KB1GW, Vin K1RM, Mark K1RO, Chuck K8CH, Bill K5FUV, Pete W1RM, & YL: Bobbie, WB1ADL, Dick KB1H, Joel AK1N, Rick AB1U (joined at the meeting), John NQ1K, Rich N1IXF (joined at the meeting), Stan W1XK, Stan Jr. N1NEO, and Tom N1MM.

The sign-in sheet and two applications, along with dues paid, will be mailed to Charlotte. . ❑

E Mass Meeting
Tony Brock-Fisher, K1KP

The Hanover, Mass YCCC Local meeting was a great success! The following YCCC members were in attendance: K1KP K1VV K1RV K1TH AA1V W1KM WA1QGC K1SM K1AJ

In addition, the following 'new crew' joined YCCC and will be immediately eligible for the upcoming ARRL contests: Ernie KA1VY, Al N1SMB, and Jeff N1SNB Jeff and Al are already signed up to work at N1AU in the CW weekend - Thanks, Guys for helping Bill make the 2/3 quota!!

There was lively conversation as the Contester Sized Breakfasts were consumed - Many comments about how convenient it was to have a meeting in the SE Mass Area. . ❑

W Mass Meeting
Bob Tublitz, WT2Q

The following operators were present for the West Mass YCCC Contest University at the QTH of K1TTT: Ed WA1ZAM; Len KB1W; Rich K2WR; and Bob WT2Q, who are members, as well as K1TTT, NU1P, AA1OK,WB2VVQ, W2FK, and K2PQV. Tony, N1NYD and W1VE were operators for the contest but left prior to the Contest U. Tony also called me last night and expressed his delight in participating in the contest. I will send along to Charlotte those members who were at the Contest U, I also passed out application forms and copies of the Scuttlebutt for those who attended.❑

PJ9 Perspective

Jack Schuster, W1WEF

It doesn't matter if you're in a contest or not; you sign your call a couple times and start a pileup. Of course you need a Classic 33 at 50 ft, an inverted L for 160 spaced 2 ft from the tower, a Delta loop off the tower on 40 with the bottom 5 ft off the ground, and a sloping dipole off the tower on 80 with the lower end tied off on an Organpipe cactus. A 900 ft beverage along the edge of the coral cliff 40 ft above the emerald waters, directed towards the West Coast of the US sure helps to hear well on 80 and 160.

In ARRL CW it's nice to be the only station active from Curacao. Once you find a frequency to sit on...not always easy among the CQing W's... you go back to the stations that call you 200 or 300 Hz higher in frequency than the rest of the pileup, because their signals really stand out while the others battle it out. You do copy the guy with good timing who drops his call just as the rest of the din subsides. His two letter suffix and short call seems to cut through best with a "K"," N", or "W" prefix. You can't believe how many stations have trouble sending their own call and how their prefix comes across as an unassigned letter combination. It's apparent that everyone isn't using computers and contest software with a W1WEF CW Interface!

When you're serious about winning, you can't stop to say hello to everyone who calls in, so you hope they understand why you just say TU after the exchange and go on to the next contact. You don't always sign your call, because you know there were others who called before and that they are waiting so you work four or five in a row at times before you sign PJ9C again. If you hear one "?", you sign sooner, because you know the guy who works you without hearing your call will be a dupe, and there's a delicate tradeoff as to whether to chance the dupes in exchange for a higher rate or not. It's a real thrill to see the last ten Q rate go over 300, but no way can you sustain it for long. Over 240 on the last 100 is good too, but you're not really watching the rates continually so you don't know where you peaked. You can run a utility program that you've heard about, after the contest.

The dupes stay in the log, rather than say "dupe" and then hear the call or exchange repeated again anyway! It's really exasperating when all you copy from a puny signal is a loud and clear "/QRP". You could have copied the call in the window when "/QRP" came through, but the puny guy comes back again and you again are only sure of the "/QRP" part. You don't really care if he's QRP although you know YOU don't have the patience to attempt that yourself. You never heard AA2U waste time signing "/QRP", but you can usually guess a station is QRP when you hear one. Under the right conditions at times however, the QRPer could say "/10KW", and you could believe it!

Your competition stops by during a lull, and asks how you're doing. Although you don't like doing this you exchange notes, but you don't know if he's trying to psych you out or not. Either way, if he's ahead of you, it makes you work harder, because it ain't over 'til it's over. If he's behind you, you know he'll work harder so you can't let your guard down and relax!

Before the contest, you studied past results, both your own and the competitions. You know where you were weak, and where you feel you have to improve, but you know you have no control over conditions so it may not be as easy as it looks. You know you have to move some of the rare sections, but you again discover that although the station came back at the same 36WPM you were sending, when you ask him to "QSY 7055 NOW", he doesn't understand. In your excitement at having VY1JA come back to your CQ, you forget all about moving him and let him get away! You never expected to have propagation to him anyway this year.

You know you have to watch for a ten meter opening. Last year you worked 3 stations and two mults on ten, but you spent 30 minutes doing it! As a multi-single, you have to stay for ten minutes when you listen on another band, but next year that rule changes. You catch an opening at 2200Z the second day, and stay there for the rest of the contest. Although your rate might have been better on 20 where you might have equalled your 15M Q total had you stayed there, you did the right thing because you picked up 25 more multipliers. You watched the opening shift all over the USA, with signals from a whisper to S9+.

The contest is over and you feel good that you bettered last year's winning effort, and you may have even set a new M/S record. On 75M you find out that you beat the boys on Aruba, but you don't know if there were other M/S entries you should be concerned with. "It ain't over 'til it's over".

Thanks once again to my great friends, Mary and John Thompson, W1BIH (aka PJ9JT), for inviting me back for my ninth contest from Curacao. John and I split the operating time pretty evenly this year, and I can only hope that I'll still be enjoying contesting as much as him when I'm 82! ❑

YCCC CLUB RESOURCE INFORMATION

DUES AND MEMBERSHIP STUFF Dues (currently $20) are payable as of the April election meeting, which begins our club "contest year", with a grace period until the end of June, at which time your membership lapses if dues are not paid up. In order to rejoin, a lapsed member must attend a meeting, like any new member, or may simply 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 February meeting are credited with dues for the year beginning the following 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. ***Mail your dues*** to the club secretary, Charlotte Richardson, KQ1F, 11 Michigan Dr., Hudson, MA 01749. ***FAMILY MEMBERS*** Members of the same family living at the same address may elect to receive only one copy of the Scuttlebutt. One member of the family must pay full dues, enabling the rest of the family to join as family members, which is free. ***STUDENT MEMBERS*** Full-time students are eligible for dues at half the regular rate.
SCUTTLEBUTT SUBSCRIPTIONS Anyone may subscribe to the club newsletter, the *Scuttlebutt*. The subscription year begins in April. Subscribers who sign up between December and April are considered paid-up for the upcoming year. 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, Leonard Kay, KB2R, preferably by E-mail at **lkay@tiac.net**,or on 3½" disk (in MSWord format or text file) by snail mail to YCCC Scuttlebutt, Box 1297, Burlington, MA 01803. The deadline for each issue is the 10th of the preceding month. **CONTEST SCORES** should be sent to the club scorekeeper, Dave Hoaglin, K1HT, preferably by packet or by E-mail at **dave_hoaglin@abtassoc.com** . Please include details such as numbers of QSOs, QSO points (if appropriate), and multipliers (all types); entry category; and power.

CLUB GOODIES ***BADGES*** YCCC badges are available from Ric, KV1W. Send $2, name and call desired on the badge, and your mailing address to: Ric Plummer - YCCC Badge, 195 Highland Street, Berlin, MA 01503. ***APPAREL*** Len, KB2R, coordinates group purchases of club jackets and polo shirts. Contact Len for price info or see the order form below. T-shirts are available at meetings. ***QSL CARDS*** are ordered through John Dorr, K1AR. To order, send John packet mail, or E-mail at **k1ar@contesting.com**, detailing exactly what you want the card to say. There are 2 lines of text available for awards, etc. You will receive a proof by return mail. Approve the proof, making any corrections, and return to John *with payment* (make checks out to John, not YCCC). Current price is $54 for 2000 cards. Normal turnaround is 30 days after approving proof. ***MEMBERSHIP ROSTER*** is mailed annually with the August issue of the Scuttlebutt, and to new members when they join. Updates are published in 'Movers and Shakers' when members move or change callsigns. If you want a new copy of the club roster, contact the Scuttlebutt editor, Len, KB2R. ***INTERNET REFLECTOR*** There is an Internet mailing list for YCCC members. To subscribe, send mail to **yccc-request@yccc.org.** Include the words "subscribe yccc" in the body of the mail message.

CT CONTEST LOGGING SOFTWARE is available from Matt, KC1XX. Orders: 603-878-4600. Support: 603-878-4200 CT-BBS: 603-878-1900 (28.8k, 8,N,1). As of this writing there is no E-mail address, but Matt says something is coming. There is an Internet mailing list for CT users. To subscribe, send mail to **ct-user-request@ve7tcp.ampr.org** , and include the single word SUBSCRIBE in the body. The CT reflector is also the best way to get CT country file updates. These updates may also be obtained from the CT BBS, or send a blank formatted disk and $1.00 for postage to Jim Reisert, AD1C, 181 Littleton Road #324, Chelmsford, MA 01824.

W1 QSL BUREAU is sponsored by the YCCC. Keep your account up to date with SASEs, or send a check. Stamps are sold at face value, envelopes are 10 cents each. Address: W1 QSL Bureau, YCCC, PO Box 80216, Springfield, MA 01138. Email address: **w1qsl@yccc.org**.
ARRL LIAISON is none other than our fearless leader, Tom, K1KI. **PACKET NETWORK** information is available from Charlie Carroll, K1XX, Candlelight Rd., Ringe NH 03461.

YCCC Apparel Order Form

Don't be fooled by low-quality apparel from *other* contest clubs costing *twice* as much! This is the *real, original* contest clothing line!

Show your contesting pride! Order a YCCC Polo Shirt or 'Starter' Jacket! Copy the form below, circle your choices, and mail with payment in full (checks payable to Len) to: Leonard Kay KB2R, Box 1297, Burlington, MA 01803, or send Len a packet or Internet message with all the needed info.

Polo shirt (100% cotton) Color: White(with blue stitching) Royal Blue (with white stitching)

Clipper ship and 'YCCC' embroidered on breast — Size: S (34-36) M (38-40) L (42-44) XL (46-48) XXL (50-52) (add $2)

Price: $24.00

_____ Name and Call? Add $5, print on left as you want them to appear.

'Starter' Jacket: (NOTE new prices for Fall 1996) Type: Satin/Quilted lining $65 Satin/Cotton lining $60 Nylon/cotton lining $60

Large clipper ship and 'Yankee Clipper Contest Club'' embroidered on back; Size: S (34-36) M (38-40) L (42-44) XL (46-48) XXL (50-52) (add $2) XXXL (54-56) (add $4)

Name/Call embroidered on breast Color: Royal Blue Navy Blue Black

Name/Call (included): _____

For both: add $4 if you want it shipped to your QTH (instead of picking it up at a meeting)

Upcoming Meetings

Date	Type	Place
Apr. 6 (Sun)	General	Sturbridge, MA
June 8 (Sun)	General	Sturbridge, MA
July - Aug	Special	Various BBQs
Sep. 29 (Sun)	General	Sturbridge, MA
Dec. 7 (Sun)	General	Sturbridge, MA

For more information about a special meeting, contact the Area Manager of the indicated section.

The next general meeting of the Yankee Clipper Contest Club will be held on Sunday, April 6
at 1:00 PM at the Host Hotel in Sturbridge, MA, near the intersection of I-84 and I-90. To get there, exit I-84 onto Route 20 West. Go through two sets of stoplights and turn right just before the Burger King into the hotel parking lot. C U there!

Inside: Lots of Claimed Scores and other stuff!
There's elections and proposals at the April meeting! Come and vote!

The YCCC Scuttlebutt
Box 1297
Burlington, MA 01803

FIRST CLASS MAIL