Jankee Clip	Set	tile	butt
Contest Clab	No.	53 October	1984
		KIKI	203-673-542
President	Tom Frenaye	RIKI	
President VP-Activities Manager	Tom Frenaye John Dorr	KIAR	617-663-345
President VP-Activities Manager Secretary-Treasurer	Tom Frenaye John Dorr Charlotte Richardson	KIAR KQ1F	617-663-345 617-562-581

Captain's Cabin Tom Frenaye, KIKI

ASK NOT WHAT YCCC CAN DO FOR YOU.

YCCC Badges Tom Frenaye, KIKI

If you missed the meeting at Boxboro, you missed

ASK WHAT YOU CAN DO FOR YCCC!

Funny you should ask. Just happens that CQWW is in your future. With the NCCC getting ready to whip the pants off the ARRL Sweepstakes competition, and the FRC losing KN3O, we just may be able to put together the effort needed to win the CQWW Club Competition this year.

In order to win, we need to have contributions from a larger number of club members than we did in 1983. Only 26 club members contributed to the YCCC club scores in both weekends of CQWW and the ARRL DX Contests during the 83-84 season. Let's try to improve upon that this year! This doesn't mean that you are facing four 48-hour weekends but that you should try to put in an effort in each weekend. Dust off the key (or microphone) and make a few hundred QSOs on a mode or band you don't normally like. Try to resist any urge to try a single band effort (or QRP). seeing the new YCCC badges. They are made for anyone who has YCCC club QSL cards printed and look like a small version (40% reduction) of the club card in laminated plastic (with clip).

If you weren't at the meeting and have YCCC cards, send a blank card to K1KI and pick up your badge at the next club meeting. If you <u>don't</u> have club cards, contact K1AR first!

Badges are already made up for KA1R, K2EK, K1TR, N1ACU, KZ2S, AB1U, and KC1X, and can be picked up at the next meeting. Blank cards are on hand from K2RD, KQ1F, and W2NC, and badges will be ready for the next meeting.

The badges are pretty inexpensive to make (75 cents or so each). Thanks to those who gave \$1.00 each to KQ1F to cover costs. Continued from Page 1

Help us tabulate the scores afterwards by checking in on 3830 when the contest ends - even if you don't have the multipliers counted. Even if you are disappointed by the results send in the score making sure to check for duplicates and noting that the score is for YCCC!

Don't forget to pay your YCCC dues - we don't want to lose you!

Floating

Paul Young, KIXM

Congratulations! You have just received your personalized issue of the YCCC Scuttlebutt. On the mailing label, on the back page, is your membership status. You should check it, as it will tell you your eligibility status for the coming contests. If it says *meligible*, you are eligible for both the CQWW and the ARRL DX contests. If it says *pay dues*, you must pay dues to be eligible for *any contest*. And if it says *make 1 meeting*, or *make both meetings*, that is what you must do to be eligible for the ARRL DX test. The dates of the next three meetings are also on the back page. At this time, K3UA is the only member who cannot be eligible for both contests.

DXpedition and Contest Rumors Charlotte Richardson, KQ1F

Here is a list, culled from the various DX newsletters and other rumor mills, of stations to listen for during CQ WW SSB:

Thailand

Look for club station HS0A, possibly multioperator. They have large antennas, including a 3 element Telrex on 40.

Zone 2

K8AQM/VE2 is expected to be active.

Montserrat

VP2MW will be operated by a British group. Macao

XX9 single-band 75 and either 20 or 40 by K0CS. W8TN, and WB0UXI.

Liechtenstein

HB0BHA and/or HB0AON by a German group. Wallis

ZLIAMO is active as FW0BX. Of course, he may skip the contest and operate only CW!

British Virgin Islands

Look for VP2VCW by N6CW. K1RX, and friends.

Hong Kong

A big multi-op is planned, as VS6DX.

China

BY5RA will be on with the special callsign

As anyone who has been in contesting for a while knows, an ARRL director can, when he wishes, overrule even the ARRL awards committee. Yes this is a plug for Tom, and no, I don't think he would stoop so low. If you live in New England, and are an ARRL member, you should have received a ballot for division director. If you have not filled it out, consider doing so - Tom will need all our votes to get elected.

I am hoping to get the Scuttlebutt out more frequently this winter. To do so, I will need articles. Please write something! I am especially looking for simple contest construction articles, as we have not had any in quite a while. I will also print letters, opinions, whatever. With only four meetings per year, the Scuttlebutt is the most significant medium of communications within YCCC.

BT5RA.

Mellish

The folks who activated VK2LHI are going for Mellish this year, as a multi-op. They are hoping for callsign VK9MR; if not they will be using a VK9Z callsign.

Ecuador

HC1A is a special callsign for the 25th anniversary of the foundation of CIESPAL - Centro Internacional de Estudions Superiores de Communicacion Para America Latina) by Quito Radio Club.

Costa Rica

Expect TIIC or TEIC by a Costa Rican group. Madeira

W6TEX expects to be active from CT3.

South Cook Islands

Look for ZK1XC and ZK1XD, probably, by PA3BFM and PA3DHH

Bonaire

Our illustrious president, Tom, K1KI, will be operating from P44A. Make sure you work him on 6 bands.

Conditions expected: better than first expected, but below normal for this point in the sunspot cycle.

SECRETARY'S REPORT YANKEE CLIPPER CONTEST CLUB

The fall YCCC meeting was held on 29 September 1984 at the ARRL New England Division Convention at the Sheraton Boxboro, Boxboro, Massachusetts, with 90 members and 12 guests attending.

Mike Lamb, N7ML, talked on AEA's "Doctor DX" CQ WW CW contest simulation game, which connects to a Commodore 64, and answered many questions.

K1KI has small plastic badges made from reduced club QSL cards. Those wanting one should send him a blank QSL card and \$1 to KQ1F. and pick up their badges at the December meeting.

K1KI collected a list of people wanting tower work done before contest season.

Mark Pride, K1RX, will be operating at the VP2VCW multi-multi for CQ WW SSB. P44A will be K1KI.

N2AIF is handling club QSL cards for NY-area members.

The club welcomed ten new members: AI3E, Dwight Sipler KQ2M, Bob Shohet WB8TDA, Kitty Hevener KA1CB, David Gerns K1TXH, Betty Ann McCarthy (XYL of W1BK) KA1XN, Bob Wilson KE1Z, John C. Olapurath KA1KRT, Jay M. Gaudette (son of W1GG) KV1Y, David Goonan KY2J, Bob Michie

Ed Kritsky, KA2MXO, who was born in Leningrad and recently returned from Europe, talked about amateur radio in the USSR.

John Dorr, K1AR, talked about the Contest Advisory Committee.

Doug Grant, K1DG, talked about his trip to Japan.

The meeting adjourned for Chinese food, beer, etc.

Respectfully submitted,

Charlotte L. Richardson, KQ1F Secretary/Treasurer 2 October 1984

A Look at Last Year Tom Frenaye, KIKI

A total of 101 of 144 YCCC members contributed scores in at least one of the four DX Contest weekends during the 1983-84 contest season. Most popular was CQWW SSB with 72 people either submitting scores or involved in a multioperator effort. CQWW CW was second with 64, ARRL SSB had 56, and in ARRL CW 54 members contributed.

While we had a reasonably good year, we could have done better! Number 3 in CQWW and number 2 in ARRL just doesn't reflect the talent of the YCCC. With a little extra effort this year we can make a run on the number 1 position in both CQWW and the ARRL DX Contests.

YCCC Hono	r R	oll				
(contributed	to	all	four	DX	contest	weekends)

KIAR	K1VR
KM1C	WIWEF
KIDG	KA1X
KC1F	K1XM
KQ1F	KIZM
WIGG	KA2AEV
WIIHN	N2AIF
KIKI	N2EK
WIKM	W2NC
AK1L	K2QF
KR1R	K2VV
KIRX	W2XL
KITR	AA2Z

YCCC Top Ten

(total points contributed in 4 weekends)

KIDG	8.552M *
K1AR	8.457M
KIRX	7.785M *
KIKI	6.565M *
K2VV	5.631M
KC1F	4.619M
WIKM	4.290M
KIZM	4.287M
K2WR	3.739M *
K2RD	3.138M
K2XA	3.040M

* DXpedition help

Stonehenge and DX

Matt Power, KAIR

Was the ancient monument at Stonehenge built as a guide for predicting optimum DX conditions? Perhaps not, but it remains true that some of the information obtained from this structure can be of great value to today's contest operator. As you will see, you won't even have to arrange five ton boulders in your backyard in order to improve your station's DX performance.

Back as far as 3000 B.C., the paleolithic Britons understood that the apparent direction of sunrise and sunset varied during the course of the year. They knew that on one day in the summer, the sun would be as far north as it would ever get at sunrise, and on one day in the winter, it would be as far south as it would ever get. We refer to the former day as the summer solstice, or midsummer day, and to the latter day as the winter solstice, or midwinter day. From the center of the circle of stones at Stonehenge to the large stone outside the circle (the "Heelstone"), the direction happens to be 49.5 degrees. Is it simply coincidence that the direction of midsummer sunrise, as observed from Stonehenge, also is 49.5 degrees? Note that Stonehenge is not the only ancient structure aligned to a sunrise azimuth. The prehistoric monument Sarmizegetusa, located in Gradiste, Romania, contains a horseshoe-shaped arrangement whose central axis exactly coincides with the direction of midwinter sunrise, as observed from Romania. It won't be necessary to travel to Europe to verify these A simple equation can be used to alignments. calculate the approximate direction of sunrise on any day of the year, as observed from anywhere in the world.

Some of you may be wondering what the direction of sunrise has to do with working DX. There are two applications that I can think of. First, it has been suggested that the high bands (10 and 15, and 20 during low sunspot years) will first open in the morning toward the direction of sunrise. For example, for the northern U.S., the direction of sunrise during late October and mid-February is about 109 degrees. It does seem that stations in that direction (e.g. South Africa) are among the first we hear on the high bands in the morning. Thus, aiming your antenna in the direction of sunrise prior to the band opening might be a good idea. This isn't a universally held belief, however. In Scuttlebutt 38, KR2Q suggests that one should beam south to work the first part of the morning 10 meter opening (to Europe).

The other application involves the low bands. As we all know, the terminator (or gray line) is the imaginary circle which separates the half of the earth in sunlight from the half in darkness. At our sunrise and sunset, the terminator crosses our location and also crosses the antipodal point (the point in the Indian Ocean 12429 miles away). Two "gray line paths" can be traced from here to the antipodal point: one traverses the terminator circle clockwise: the other, counterclockwise. Since the terminator is a great circle, these two directions along the circle correspond to two possible great circle beam headings. One beam heading is generally north; the other is generally south. The exact headings change from day to day, but one thing always remains true: each of the headings differs from the direction of sunrise by 90 degrees.

The location of the terminator on a particular day can be quite important to those wishing to utilize the "gray line" propagation mode. From the W1/W2 area, the areas of the world we want to work via gray line lie mainly in Asia. If we, for example, look at the position of the terminator on a map of Asia at our sunrise, the areas on one side of the terminator will be those whose sunset came before our sunrise; the areas on the other side will be those whose sunset comes after our sunrise. Sunset always crosses Asia from east to west, so we can call the former areas "east Asia" and the latter areas "west Asia". A particular location in Asia may be in east Asia on some days of the year and in west Asia on other days. The following terminology will be useful: a "sunrise east Asia day" for a particular Asian location is a day on which its sunset precedes our sunrise, a "sunrise west Asia day" for a particular spot is a day on which its sunset follows our sunrise, and a "sunrise gray line day" for a point in Asia is a day on which its sunset is at the same time as our sunrise. Α parallel terminology may be developed for our sunset. A "sunset east Asia day" for a point in Asia is a day on which its sunrise precedes our sunset, a "sunset west Asia day" for a particular spot is a day on which its sunrise follows our sunset, and a "sunset gray line day" is a day on which sunrise at a particular Asian location is at the same time as our sunset.

If you want to work a certain Asian location at sunrise, it will generally be much easier to do on a sunrise east Asia day (for that location) than on a sunrise west Asia day (for that location). To work it at sunset, choose a sunset west Asia day in preference to a sunset east Asia day. Now, if the

short path beam heading from W1/W2 to a certain location in Asia is northwest, we'll consider that country to be in "northwest Asia". If the short path beam heading to there is northeast, we'll consider it to be in "northeast Asia". If the short path heading is north (i.e. exactly 0 or 360 degrees), then that point is in "north Asia". Obviously, none of these new designations will change during the course of the year. The general principle of Asian gray line DX is as follows: northwest Asia has sunrise gray line days in the fall and winter, and sunset gray line days in the spring and summer; northwest Asia has sunrise gray line days in the spring and summer, and sunset gray line days in the fall and winter. Remember that a gray line day for a location marks the transition of that location from east Asia to west Asia, or from west Asia to east Asia. The second general principle is this: in the winter and spring, sunrise east Asia days and sunset west Asia days will both precede gray line days: in the summer and fall. sunrise east Asia days and sunset west Asia days will both follow gray line days. Thus, when you identify the gray line days using the equations given below, you will know whether to look for openings before or after the calculated days.

The following equations will tell you the gray line days in terms of their "day numbers". The day number is the number of the day numbered consecutively starting at January 1 (e.g. Dec. 31 is day number 365). The sunset gray line day for an Asian location whose short path beam heading from W1/W2 is H, is, for a W1/W2 station at latitude L:

day number = $1.014 \operatorname{Sin}^{-1}(\operatorname{sin}H/(.3978/\cos L)) + 80$

The expression .3978/cosL will always be the same for your location, so you need only find it once. For example, for the YCCC center, it's equal to .5356. To find sunrise gray line days, use the above equation with "-sinH" substituted for "sinH". Thus, for north asia, sunrise gray line days are the same as sunset gray line days. For most locations outside north Asia, two sunset gray line days and two sunrise gray line days will occur each year because of the principle of "day equivalency". If a gray line day occurs on day number N, another gray line day will occur on day (344 - N). If (344 - N) is a negative number, the other gray line day will occur on day (709 - N). Incidentally, if the magnitude of (sinH/(.3978/cosL)) is greater than one, no gray line days will occur for locations at beam heading H. For example, from the YCCC center, no gray line day will occur for a location whose beam heading is greater than 32 degrees or less than 328 degrees. Locations at 32 and 328 degrees will have gray line days on the solstices. Notice that day equivalency demonstrates that each solstice is equivalent only to itself.

Clearly, the previous equations will be of little use to you unless you are interested in working gray line DX outside of contests. In order to find east Asia, west Asia, and gray line locations, at both sunrise and sunset, on a particular contest day, a different procedure is used. First, find the sun's longitude on that day. The sun's longitude is defined to be 0 at the spring equinox, 90 at the summer solstice. 180 at the fall equinox, and 270 at the winter solstice. Thus, one approximation for S, the sun's longitude, is:

S = .9863 (day number - 80)

Using this, the direction of sunrise on any day is given by:

direction = $\cos^{-1}(\sin S(.3978/\cos L))$

The ".3978/cosL" factor is, of course, the same one used in the gray line day equation given previously. Also, it can be shown that the direction of sunset on any day is equal to the direction of sunrise subtracted from 360.

The gray line beam headings, discussed in paragraph 4, can now be easily found. At sunrise, the northerly gray line heading is 90 degrees north (counterclockwise) of the direction of sunrise: the southerly gray line heading is 90 degrees south (clockwise) of the direction of sunrise. At sunset, the northerly gray line heading is 90 degrees north (clockwise) of the direction of sunset; the southerly gray line heading is 90 degrees south (counterclockwise) of the direction of sunset. In most cases, the southerly gray line heading is the actual beam heading used to work gray line DX on the low bands. On any day, the sunrise gray line locations are those places in Asia whose short path beam heading is equal to the northerly sunrise gray line heading on that day; the sunset gray line locations are those places in Asia whose short path beam heading is equal to the northerly sunset gray line heading on that day.

To determine whether a certain Asian location is in east Asia or west Asia, at sunrise or sunset, on a particular day, the relationship between the short path beam heading and the gray line heading must be known. If the northerly gray line heading is east of north, we will consider all beam headings counterclockwise (i.e., farther north, or northwest) from this heading to be "less". If the northerly

gray line heading is west of north we will consider all beam headings clockwise (i.e., farther north, or northeast) to be "more". Otherwise, "more" and "less" refer to the numerical value of the beam Sunset east Asian countries are those heading. whose short path headings are less than the northerly sunset gray line heading; sunset west Asian countries are those whose short path beam headings are more than this. Sunrise east Asian countries are those whose beam headings are less than the northerly sunrise gray line heading; sunrise west Asian countries are those whose beam headings are more than this. Of course, it is possible that a country will be partially in east Asia and partially in west Asia; in this case consider the beam heading to the country to be the beam heading to the desired low band DX station located in that country.

There are many possible applications. Suppose you need zone 26 on 80 meters for 5BWAZ. The beam heading to Thailand is 10 degrees; thus the sunset gray line day is day 99 (April 9) and equivalency day 245 (September 2). The sunrise gray line day is day 61 (March 2) and equivalency day 283 (October 10). The winter and spring days are March 2 and April 9, so Thailand can be worked before March 2 (at sunrise) and before April 9 (at sunset). The summer and fall days are September 2 and October 10; therefore HS can be contacted after September 2 (at sunset) and after October 10 (at Thus, Thailand is in sunrise east Asia sunrise). from October 10 until March 2; it is in sunset west Asia from September 2 until April 9. Those planning an HS Dxpedition might want to avoid going during June.

Suppose you are planning to operate CQ WW CW and want to know what countries will be in sunrise east Asia and sunset west Asia on November 24. The sun's longitude will be about 244.6, so the direction of sunrise will be about 118.9 degrees. and the direction of sunset will be 241.1 degrees. The sunrise gray line will be at 28.9 and 208.9 degrees, whereas the sunset gray line will be at 334.6 and 154.6 degrees. Thus, sunrise east Asia will include all of northwest Asia and northeast Asian locations with beam headings less than 28.9 degrees. Thus, you probably can't work a UJ8 (beam heading 30) at sunrise. The sunset west Asia areas will include all of northeast Asia and northwest Asian locations with beam headings greater than 334.6 degrees. It will probably be difficult to work a JD1 on Ogasawara (beam heading 330 degrees) For stations in the midwest with at sunset. latitudes around 42 degrees, the problem is more serious. For them, the beam heading to Japan is somewhat less than 334.6 degrees. so JAs will be in the hard-to-work sunset east Asia area for them. However, UJ8 will be part of their sunrise east Asia area and they may be able to work one on 40 or 80.

For the Radiosport contest in July, the situation is different. The direction of sunrise is 50 degrees, so the gray line at sunrise is at 150 and 330 degrees; at sunset it's at 30 and 210 degrees. Sunrise east Asia will therefore include countries with beam headings less than 330 degrees -- for example, KH2 (Guam). Sunset west Asia includes areas with beam headings greater than 30 degrees --UH8 for instance.

This article has described a very simple method for predicting low band DX possibilities. The equations used are obviously all approximate, but should be adequate for most purposes. To use this method. you need a list of beam headings from your location, the value of your own latitude, and the time of your own sunrise and sunset. Other sunrise/sunset tables, maps, charts, terminator drawings, etc., are not needed. The various commercially available DX operating aids are, however, very useful in determining the position of the terminator at times other than your own sunrise and Neither this article nor any commercial sunset. product that I know of will tell you which of the various sunrise east Asian and sunset west Asian locations will be the easiest to work on a given day. The question of optimum dates and optimum times to work various Asian countries is an interesting one, and perhaps will be the subject of a future Scuttlebutt article. For further information on gray line DX, see CQ, September 1975, p. 27, and QST, December 1966, p. 53. For further information on Stonehenge, see Fred Hoyle's On Stonehenge (San Francisco: W. H. Freeman. 1977).

Top 10 Forecast

Tom Frenaye, K1KI

Here's a pre-season guess at what you have to do to make the Top Ten in the USA:

	SSB	CW
Band	Q/Z/C	Q/Z/C
160	20/7/15	20/8/16
80	70/15/40	75/17/45
40	75/20/45	275/28/70
20	600/32/105	500/33/90
15	250/25/80	250/22/65
10	75/18/40	50/15/30
Total	1090/117/325	1170/123/316

about 1.4M points each

YCCC (Unofficial) Achievement Levels

Category	Q/Z/C	Points	
Clipper	800/120/290	900K	
Yacht	400/85/200	300K	
Motorboat	250/50/100	100K	
Rowboat	100/40/70	25K	
Rubber Duck	0/0/0		
	(don't even th	ink of it!)	

(Q/Z/C is QSOs/Zones/Countries)

Errata

A few bugs crept into Matt's article, Propagation Predictions, in the previous issue of the Scuttlebutt:

- The word "waveangle" appears four times as "wavelength".
- 2. The equation for maximum waveangle should read:

Wm = $\cos^{-1}(1.047 * \text{ sqrt} (1 - ((Fc^{**2})/(Fo^{**2})))))$

- The phrase "if we do not accept this propagation to Africa" should read "if we do accept this propagation to Africa".
- 4. The word "unfortunately" is spelled wrong.
- 5. The maximum waveangle becomes greater as the operating frequency decreases, not increases.

Also, somehow, W2PV was listed as James L. Watson, instead of James L. Lawson.

Finally, the phone numbers for K1MM were both wrong. I don't know what the work phone rings, but the number listed for the home phone is actually the Framingham number for Westboro State Hospital! There is <u>no</u> proof that DXing causes insanity (however, possibly insanity causes DXing). and Bill is <u>not</u> in Westboro State Hospital (or at least so he says)!

Excess Cargo

12-foot K2RIW design dish, 1296 MHz feed horn, unassembled, \$70. Cushcraft 3-element 20-meter beam, 18' boom, 35' elements, \$40. Pair 4-400As. plate caps, Johnson ceramic sockets, \$50. Bob Clarke, N1RC

Telrex DBM1015 - 10 & 15 duobander. Up only 3 months, \$150. Jim Dionne, K1MEM, home: 617/443-2345 work: 617/577-4145

Contest Soup Charlotte Richardson, KOIF

It used to be, in the "good old days", before I was licensed, that K1XM (and often K1PR, and sometimes other folks as well) would come over to my place every contest to provide weekend entertainment for me (and themselves) in return for my cooking them whatever they wanted to be served (within reason! We all know Paul's weakness for seafood...). This was in the days of sunspots (remember them?), no tower, etc. Since then, I've been seduced by the hobby myself, and the sunspots have retreated. However, even with the chief cook operating and the bands dead, the contest team needs to be fed, preferably something besides sandwiches and cokes, during those 48-hour marathon sessions. This dilemma led to the invention of "contest soup", one or another rib-sticking concoction that could stand up to sitting on a hot plate for several hours without becoming inedible. If this idea appeals to you, maybe you can persuade your own chief cook, or yourself, to try the simplest variant of the recipe, below. This makes about 6-8 bowls of soup, depending on how hungry you are. If you keep kosher or are on a low-sodium diet or just don't *like* ham (maybe you feel like you are eating a friend?), it is equally good made with chicken instead (just poach it in the soup).

Lentil Contest Soup

1 c dried lentils (no need to soak them)

Chop in your food processor, or this soup takes a while to make:
1 c or so chopped onions
2 cloves of garlic, minced (less if it is a phone contest!)
4 ribs of celery, chopped
4 peeled carrots, chopped
2 T chopped parsley (use scissors for this job)
1 large can College Inn chicken broth (or three small ones)
3 c water

2 bay leaves (don't eat them!)
some cumin, at least 1/2 t
some turmeric
garlic powder (avoid if it is a phone contest!)
pepper
2 T lemon juice
1 c or so chopped boiled ham (or chicken)

Combine everything and simmer for an hour, then leave on low heat on hot plate with the lid on. Good with roast beef sandwiches.

The Scuttlebutt is the newsletter of the Yankee Clipper Contest Club and is mailed about nine times per year to all paid up members. Dues are \$10 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 Yankee Clipper Contest Club (an ARRL Affiliated Club) holds four official meetings per year, on Saturday afternoons in March/April, October (at the New England Division Convention when possible), November/December, and January/February. The next meetings will be on Dec. 1, 1984, in Springfield, and on Feb. 9, 1985 and Apr. 6, 1985. Attendance at an official meeting is <u>required</u> in order to become a member. Club members congregate on 3830 Khz Monday evenings; many routinely monitor this frequency other evenings as well.

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	K1RX	Mark Pride	(203) 271-3096	(203) 265-8825
EMass	WIFJ	Al Rousseau	(617) 598-3744	(617) 599-7500x171
WMass	K1RQ	Dana Cobb	(413) 655-8096	(413) 655-2797
VT/NH	KM1C	Bill Pedersen	(603) 673-1678	
ME	K1SA	Bernie Cohen	(207) 773-6589	(207) 797-3585
NNY	K2RD	Ira Stoler	(518) 439-5804	(518) 445-8474
SNY/NJ	K2EK	Bill Gioia	(914) 221-1672	(212) 888-2102

YCCC 11 Michigan Drive Hudson MA 01749

Contest Cookbook Issue