



Scuttlebutt

February 1994

Issue 109

It's a Multi-Dimensional Hobby; Don't be a One-Dimensional Ham

Rich Gelber, K2WR

Uh-oh: "Another two months have passed, and here comes WR with his soapbox again!" That's right, and I make no apology — some things need to be said. This time I intend to examine the dangerous question of what we contesters get out of amateur radio — and what we put back in....

As I've indicated several times in this space, amateur radio is not one hobby but many. Everyone starts out with the same books and study guides, and the same trip(s) to the VE session (or, for us O.T.'s, the FCC office in New York or Boston), but once that ticket arrives in the mail, we head off in 15 or 20 different directions, guided by chance as much as our own disparate personalities. Some of us contest, some work DX, some pass traffic, some build equipment, some dedicate themselves to public service, some like satellites, RTTY, e.m.e., a.m. (!), etc., etc. Many of us are actively engaged in two or three of these; a few are involved in four or five; a very few in six or more; and sadly, far too many in just one.

Now, obviously, I like to contest — otherwise I wouldn't be writing in this publication. Contesting has been the principal focus of my amateur radio activity for practically the entire 28 years I've been a ham. But a few contesters take this too far. It's the only thing they do in ham radio. They don't belong to the local clubs. They don't know their ham neighbors or local ARRL officials. They don't

read the magazines except for the score listings. What's wrong with this? Plenty.

Contesters are among the most visible of amateur radio operators, both within the hobby and towards the general public. We have the biggest antennas, the biggest amplifiers (well, some of us), the loudest signals. We occupy the most spectrum, although fortunately during limited periods of time. If a member of the public has an RF-susceptible telephone or VCR, guess who he's going to hear? Right: the contesters, for the contesters generate the most RF!

So what's my point? We don't exist in a vacuum. Sooner or later you're going to need help with a tower raising, a TVI case, or a zoning appeal. There are only a limited number of other contesters who can help you. There are however, a great number of other hams, who are into other things, who might be glad to help YOU with YOUR problems if you don't act aloof and superior, participate in local activities, and help out THEM with THEIR problems. You may well find that you are uniquely qualified and equipped to help in many areas. If you eat, drink and sleep only contesting, you are a member of a very esoteric group of a few thousand hams who are resented, or at least misunderstood, by a fair number of the others. It's much better to belong, and act like you belong, to a much larger group of over half a million hams who have a lot more in common with each other than it might appear at first glance. It's not only the right way to behave, but on a pragmatic basis, it benefits us all in the long run.

February Meeting

Paul Young, K1XM

The next meeting of the Yankee Clipper Contest Club will be on Saturday, February 5, at the Sturbridge Host Hotel, beginning at 1 pm.

The program will include N6BV on ARRL DX Contest propagation, WZ1R on the contest recognition program, and a showing of the CQ tape "Getting Started in Contesting".

The Hosts Hotel is located on Route 20 in Sturbridge, Massachusetts, 1/2 mile West of I-84 (first exit off I-84 when coming South from the Mass. Turnpike).

To get to the Host Hotel, exit I-84 on to Route 20 West. You will pass through two sets of stoplights while noticing several motels on your right. Make a right turn just prior to the Burger King sign. This is the entrance to the Host Hotel. There is plenty of parking in front of the hotel.

The meeting dates for 1994 are:

DATE	DAY
February 5, 1994	Saturday
April 9, 1994	Saturday
June 5, 1994	Sunday
August ?, 1994	Saturday
October 1, 1994	Saturday
December 4, 1994	Sunday

The August meeting is the club picnic. The October meeting is at the ARRL division convention in Boxboro, MA.

Secretary's Report December, 1993

Club President Rich, K2WR, called the meeting to order with introductions of the 73 members and visitors in attendance. Then he passed out certificates: to K1DG for first place in the ARRL DX Contest SSB in 1993, K1ZM for first place in the ARRL DX Contest CW in 1993, and to himself operating as GJ/K2WR for first place in Jersey in the CQ WW CW contest for 1992. The treasurer's report showed a balance of \$1874.49. Rich called for a moment of silence for NI2B, founder and long-time president of the Western Connecticut DX Association, who became a Silent Key the previous week.

The club welcomed seven new and returning members: Andrea Preciado, WS1C, Warren Rothberg, WB1HBB, Barry Kuehl, N1NQD, Joe Rich, N1OCX, Dan Fegley, W1QK, Krassimer D. Petkov, N1QQO, and Dennis McAlpine, K2SX. It should be noted that Warren, who was seated near the door anyway, is the first new member candidate who actually left the room during the voting in process, so far as anyone can recall.

Charlie, WZ1R, club scorekeeper for domestic contests, talked briefly about the reported score totals to date, and encouraged people to submit their DX contest scores to Kurt, W1PH.

The theme for the program portion of the meeting was low-band operation. The first speaker was Fred, K2TR, discussing his 4-element 80m delta loop array. Fred has two 115' towers spaced 260' apart. He originally installed two full-wave delta loops hung side-to-side between the towers, peak down, constructed of #12 insulated copperweld wire. These antennas provided a 50-ohm load with 6 dB of gain, low noise, and no high-voltage points. They survived many ice storms, but he wanted better performance. Fred converted the antennas to a four element array of loops, spaced 40' apart. This array provides more gain and directivity, with a switch box on the ground. He went through several versions of the direction switching box to solve various problems.

Next, John, W1FV, spoke about 80/160 vertical arrays. John believes that verticals give a low angle of radiation, especially if you have a good ground. A good ground is necessary for low ground loss and high radiation efficiency. He recommends at least twenty quarter-wave radials if you have average soil. The length of the radials is not critical, and he recommends against burying them. For raised radials, four quarter wave radials are about optimal, installed 10-15 feet above ground level. To resonate short verticals (less than quarter wave), use a base loading coil, top loading (capacitive hat), or a center loading coil. Top loading is the most efficient. Examples of top-loaded 160m antennas are the inverted L, the T antenna, and the top-hat. He then covered phased vertical arrays and mutual coupling. Then he spoke about the advantages of a W8JK vertical array: tight spacing, broad-banded, low radiation resistance, but requires a good ground system. To construct a steerable W8JK array, add a third element to form a right triangle. Drive the center element and one of the two other elements, while opening the base of the other element at the bottom. To produce a good ground system for a phased vertical array, tie the radials to a bus wire where they overlap between the antennas.

After the break, it was time for announcements. Charlie, WZ1R, relayed the latest score totals from Kurt, W1PH, for CQ WW: 118M collected so far for SSB and 116M for CW. Jack, W1WEF, had lodging for Dayton: contact N8BHT for rooms at \$70/night (maybe as low as \$60 if the block of rooms is filled). Jack also had CT interfaces for sale. Randy, K5ZD, talked about team entries in both CQ WW contests. On SSB, the team made 23.5M, and 23M on CW. The club was then graced by a mysterious visitor from the East, the great and powerful Eimac the Magnificent!

The low-band program resumed with a talk by Dave, KY1H, on Beverage receiving antennas. Dave runs double wire Beverages separated by a foot. Each has two transformers at the feed end, for differential and common mode to provide bidirectionality. He supports the wires every 150' or so, using insulating posts

and clamps made for electric fences. One wire of each pair is grounded while the other is open (since you want signals to reflect).

Rich, K2WR, then noted that the next meeting is February fifth, which is a Saturday, not a Sunday as listed in the 'Butt. Activities Manager Saul, K2XA, is still working on getting Frank, W3LPL, to speak on solar propagation effects.

Respectfully submitted,
Charlotte L. Richardson, KQ1F
Secretary/Treasurer, YCCC
8 December 1993

Movers and Shakers

New address for Bob, NQ1R:

Bob Inderbitzen, NQ1R
6221 Town Ridge
Middletown, CT 06457
home phone: (203)635-8373
work phone: (203)666-1541

New address for Dave, WB1H:

Dave Meldrum, WB1H
287 South Main Street
Andover, MA 01810
home phone: (508)474-8700
work phone: (617)238-6188

Maximizing Single-Operator Contest Productivity: The State of the Art in Unassisted Competition Today

Part 1

Jeff Briggs, K1ZM

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Forward...

After a self-imposed hiatus to low-band and single-band Dx contesting for a number of years, the urge returned at the end of 1991 to try single-operator/all band contesting once again. A relatively poor "Europe" location, coupled with only minimal hardware for the high bands, had created just enough "inertia" to find excuses for staying on the sidelines in the single-op wars!

Listening on the bands, though, and hearing about the exciting things Jeff Steinman, KR0Y, was doing with two radios at WM5G and the advent of the capabilities of the Yaesu FT-1000 radio, sparked my interest anew and I was "hooked" and ready to test the waters once again.

Over the past two years, I have managed to generate some competitive single-op/unassisted scores in some novel ways and, in the interest of "pushing the envelope" just a bit, I thought I would share my experiences at this time, hoping to raise the level of existing competition.

I do believe that much of what I have been doing lately is not new at all. However, there has been very little written down on the subject and I thought I might take the time to do so now.

A Historical View of What It Takes to Win...

The historically-accepted challenges to breaking into the very top scores in single-op/all band DX contests are many and well known. They are almost axioms and can be summarized as follows:

- You must have the necessary contest experience, know enough about propagation, know when to change

bands and know the basics of when to be running vs. when to be searching and pouncing for contest multipliers.

- You must have very good antennas for all the various bands or at least good enough antennas on enough bands to compensate for those bands where antennas may be marginal.
- You must have a well-designed layout inside your station that allows you the flexibility to execute all of the techniques required to win.
- You must be able to change bands efficiently in order to QSY rapidly during "run" periods or to be able to pass multipliers from band to band.
- You must keep your overall rate as high as possible throughout the contest.
- You must be able to keep off-times and sleep times to the absolute minimum required.
- You must have a strong desire to win.

Essentially, you have to be able to do *many* things very well in order to break into the top ten and all of the above exceptionally well if you ever hope to actually win a national championship!

From a tactical point of view, execution of the above usually required having a station comparable to the following:

- A no-tune exciter and some well-marked amplifiers to make band changes efficiently. For some, this meant having one or two exciters with no-tune amplifiers such as the new Alpha 87. Two such stations side by side produces a very "hot" lineup indeed.
- Multiple stations and amplifiers set up "multi-multi" style for each of the various bands.
- "Stacked" arrays for running Europe from the East coast coupled with *high* antennas for opening the band and for gathering multipliers during "search and pounce" periods.
- At least a 2 element 40 meter beam, respectable antennas for the low-bands and, of course, the ubiquitous "beverages" for receive on 80/160 meters.

Historically Accepted Winning Operating Practices...

As for an operating gameplan, most of us on the East coast of the USA usually focus on running Europe, when possible, and always attempt to do so on the highest band open, assuming a respectable "run rate" can be garnered. At some point, usually during band "transition" periods in the afternoon, we might look for multipliers using "search and pounce" techniques. We might also even have attempted to pass the "rarer" multipliers from band to band as the "multi-multis" often do to raise their scores.

During these or any other "runs", working the "pile" and keeping up the rate would be the principal focus of operation. During such periods, if rates were slow, we might even occupy our minds by watching television with the volume turned down (KC1F), reading the Sunday NY Times (K1ZM), eating/drinking (SOME) or perhaps planning operating strategy in our minds for the balance of the contest (ALL).

Some Observations/Comments...

While the latter comments are intended to be somewhat humorous, there is a more subtle, underlying message being conveyed here. If I may go out on a limb just a bit, let me make what may appear to be a questionable observation:

It is my belief that in many respects (especially if practiced as above), *run time*, while very important, is also highly *unproductive* time. More precisely, perhaps, it is certainly *underutilized* time.

What could possibly be more unproductive than staring out the window while your memory keyer or your voice recorder is calling CQ over and over ad nauseum while, at the very same time, *multipliers* are available for the asking not only on your "run band" but on all of the other bands?

Once the "opportunity cost" implications regarding wasted time had settled themselves in my mind, I decided to attempt to focus nearly all my efforts in my station toward resolving this dilemma. For me anyway, this became a high priority station design and operating issue at

the end of 1991 and I have spent the last two years attempting to refine what I am doing. While there is always room for improvement, enough on-air experience has now been logged to at least talk about what I am doing with some degree of clarity. And that, then, is my principal reason for writing this article - to talk about what can and is being done, in my station at least, to solve the productivity issues facing all of us as we operate our radios.

Solving the Station Design Issues...

You may chuckle about this next comment, but some of my recent conceptual ideas about station functionality grew out of a visit to my local McDonalds. These folks are masters at maximizing productivity. Every move undertaken working on the grill or at the fry counter or even at the milkshake machine, is undertaken according to a system. The company has a procedure for *everything* in order to maximize efficiency and it pays off if you can master it and execute it. The recommended systems which are followed are even taught in something called "Hamburger University".

Every Manager or Assistant Manager is required to study and learn these procedures in order to avoid wasted time on the job. The next time you drop by your local outlet for some fries and a shake, take a few moments to observe how production is handled. You will observe, especially in peak periods, that major emphasis has been placed on *multiprocessing*. After one part of an operation has been set in motion, other related or even unrelated processes are started, to fill slack time and, as a result, boost productivity!

We contesters can actually apply some of these same principles, in a different way of course, to discipline our efforts on the air, in order to reduce wasted time and in order to increase our point production as we operate in a contest. For me, it started with station design.

In the next issue of the Scuttlebutt we will explore the practical application of these principles within an actual contest environment. I call the technique *time multiprocessing* because it maximizes point production during a contest by improving the efficiency of on-air operating time. See you then!

Joe Marcin, K1ETT, Silent Key

Doug Grant, K1DG

I regret to report that Joe Marcin, K1ETT, died on October 21, 1993, of a heart attack. He was 41. Joe was one of those hams whose path crossed mine numerous times over a 20-year span. We used to talk on 75 meters with the gang on 3870/3885, then lost touch as he got more involved in VHF and I got more into contesting. About 10 years ago, our paths crossed again, when Mrs. DG discovered that one of the other nurses she worked with was married to a ham - it was Joe. Lots of hams wives work at the same place - Mrs. K1MM and Mrs. K1KG work there, too. We saw each other at various hospital social events. A couple of years later, Joe contacted me about employment - his company was experiencing some layoffs, and he was looking. I got him an interview, and he got the job.

Over the years, Joe proved himself to be one of the more reliable and dependable guys in the department - not a superstar, but one of the guys who got the job done regardless of the circumstances. When he and Maryanne moved from a crowded neighborhood out to North Andover, he got the urge to get active on HF again.

One fine day, after much planning and preparation, K1AR and I helped him install a Classic 36 and Cushcraft 2-element 40 at 90 feet. Joe was a happy guy. I heard him a lot crashing pileups on 40 CW, and he would often drop by my office to talk about his latest conquest on the bands. I encouraged him to join YCCC and try contesting.

Joe liked contesting, but decided that family responsibilities took priority over the effort required to get to the top. He dabbled in contests from home, and participated in multi-operator activities from my station, usually as the Sunday morning relief operator in CW contests. His normal routine was to arrive shortly after sunrise, come around to the shack window at the back of the house, and knock on the window to get someone to let him in, since he didn't want to wake the family up by ringing the doorbell. He would then proceed to run guys all day

Sunday at 40-50 per hour, and even mastered the arts of using CT and passing multipliers on CW. He also helped fix all the things that routinely break in a multiop station.

Much has been written about some of the superstar contesters that have died in the last few years - G3FVB, W3GRF, N6RJ, and others. In the well-written N6RJ obituary in the NCJ, K7JA commented that they now have enough operators in the hereafter to put on a heck of a multi-multi. I'd add that when the big guns get tired on Sunday morning, Joe will be there to take over.

Please remember Maryanne and the kids in your prayers.

New Crew

Andrea Preciado, WS1C
8 Bicentennial Ave.
Leominster, MA 01453
home phone: (508)534-9311

Warren Rothberg, WB1HBB
35 Drew Road
Derry, NH 03038
home phone: (603)432-6011

Barry Kuehl, N1NQD
42 Paramount Ave.
Hamden, CT 06517
home phone: (203)288-9406
work phone: (203)288-3388

Joe Rich, N1OCS
30 Kodaya Rd.
Newton, MA 02168-2306
phone: (617)964-5454

Dan Fegley, W1QK
121 Candlewood Lake Rd.
Brookfield, CT 06804
home phone: (203)775-9525
work phone: (203)761-5025

Krassimir D. Petkov, N1QQO
42 Hemlock St.
Arlington, MA 02174
home phone: (617)648-1253
work phone: (617)354-9678

Dennis McAlpine, K2SX
901 Lexington Ave.
New York, NY 10031
home phone: (212)288-0605
work phone: (212)907-4075

THE CLUB RESOURCES PAGE

The Place to Find Club Information

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

FAMILY MEMBER 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. Being a family member is currently free.

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

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

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

CLUB BADGES are available from WZ1R. Send two dollars, Your callsign, name, and mailing address to WZ1R-YCCC Badge, P.O. Box 9106, Pawtucket R.I. 02862

CLUB JACKETS Len, KB2R coordinates group purchases of club jackets.

CLUB QSL CARDS are ordered through John Dorr, K1AR, 8 Anchor Lane, Mt. Sinai, NY 11766.

PACKET NET information is available from Charlie Carroll, K1XX, Candlelight Rd, Ringe NH 03461.

CONTEST SCORES are sent to the club scorekeeper, Kurt Pauer, W1PH.

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

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

CT CONTEST LOGGING SOFTWARE is available from K1EA Software, 5 Mount Royal Avenue, Marlborough MA 01752 for \$69.95 plus sales tax. Telephone (508)460-8873, FAX (508)460-6211, BBS (508)460-8877.

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. W1 QSL Bureau - YCCC, PO Box 216, Forest Park Station, Springfield, MA 01108.

ARRL LIAISON For ARRL matters, contact Tom Frenaye, K1KI, PO Box 386, West Suffield CT 06093, home phone (203)668-5444.

Dues are \$15 per year, payable 1 April. 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 \$10 towards dues.

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The Yankee Clipper Contest Club (an ARRL affiliated club) holds six official meetings per year, on the Saturday or Sunday afternoon of the first full weekend of every even month, usually in the Sturbridge, Massachusetts area. The deadline for article submission to the Scuttlebutt is usually three weeks before the next meeting date. The next meeting will be on Saturday, February 5, 1994. Attendance at an official meeting is required in order to become a member. Club members congregate on 3830 after contests. The packet frequencies for DX spotting are 144.95, 145.69, 144.93, 144.97 and 144.99 MHz.

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

Officers:

President	Rich Gelber	K2WR	212-580-1075
VP-Activities Manager	Saul Abrams	K2XA	518-439-5700
Secretary-treasurer	Charlotte Richardson	KQ1F	508-562-5819
Editor	Paul Young	K1XM	508-562-5819

Area Managers:

Area	Call	Name	Home	Work
CT/RI	K1RU	Gene Frohman	203-393-1772	203-386-6137
EMass	N1AU	Bill Santelmann	617-862-1753	508-692-6000
WMass	W1GG	Gary Gaudette	413-443-3404	
VT/NH	K1GW	Glen Whitehouse	603-673-6290	603-627-7877
ME	N1AFC	Peter Archibald	207-767-2169	207-797-8931
NLI	NQ2D	Jim Metcalf	516-744-9422	516-467-4800
NNY	K2TR	Fred Lass	518-355-4813	518-346-6666
SNY/NJ	K2EK	Bill Gioia	914-221-1672	914-697-3250

YCCC
11 Michigan Drive
Hudson, MA 01749

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