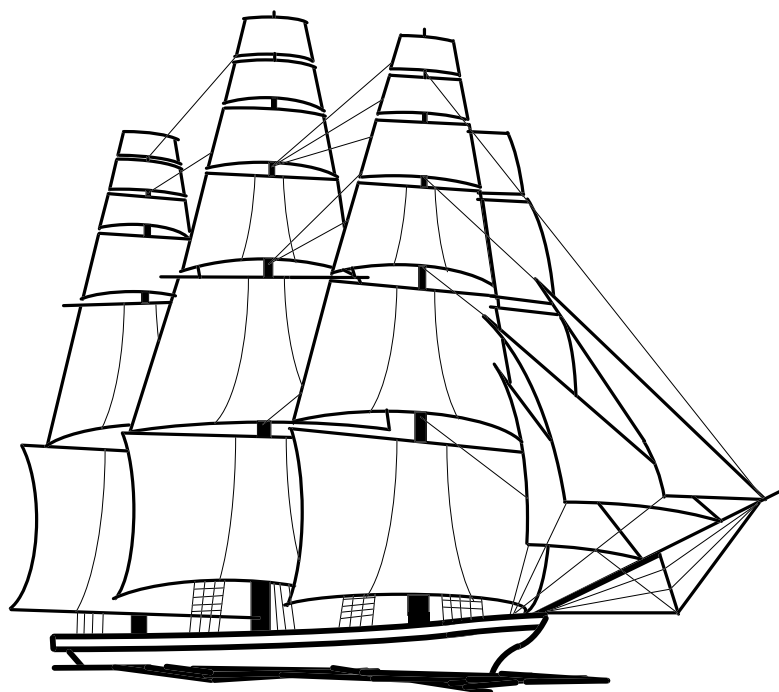


# Yankee Clipper Contest Club



## 1998 Contest Cookbook

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## Introduction

Doug Scribner, K1ZO

Welcome to the 1998-99 YCCC Contest Cookbook! There's a chill in the morning air, the trees in New England are taking on their fall colors and the baseball playoffs are well underway...Contest Season Is Here!

And what a season this promises to be. Ten meters is getting better every day and 15 is open later and later each night. Twenty continues to be great and the European regulars are starting to show up in the 75 meter "window". Even the Topband is starting to produce some packet spots.

Again this year the YCCC Awards program offers certificates, pins and the coveted Top Gun Pin for your efforts. In addition the Team Challenge has a wealth of "goodies" available as well as great bragging rights!

In this year's Cookbook we welcome new and returning contributors...K1ZM, K5ZD, K1ZR and AD1C. Thanks guys, for your time and effort...and a very special thanks to Dean, N6BV and Tom, K1KI for their work on the Propagation Predictions.

Please enjoy this issue. Now get on the air and I'll see you in the pileups. 73

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## Tips for Little Guns & Ops With Little Time

Jeff Briggs, K1ZM

So you don't have a lot time to get into the contests or you have a small to medium station - no need to get on in the contests right? WRONG!

It is a fact (proven over and over) that it is not the K1AR's and K1KI's of contest clubs who enable a club to win it all. Sure they are a necessary part of the mix, but it is the LITTLE GUNS who enable a club to win a contest at the super-club level. The small and medium guns and stations with limited amounts of operating time are an equally important part of the mix - and YCCC will never win a major contest without getting nearly ALL of its members - large and small on the air this contest season.

If you have a small station.....

If you don't have a powerhouse station or if you have only dipoles and wires, contests can still be fun by picking your shots and strategically selecting times and bands where you can maximize your contribution to the club.

### Here are a few DO's and DON'T's:

DON'T expect to call CQ very often and expect answers...  
DON'T expect to crash through big pileups easily, if at all....

DON'T expect too much out of 20M at sunrise on Saturday morning....

DON'T work too hard at sunset on the low bands - you will not likely be heard

DO expect far better results SUNDAY morning as 20 and 15 open into Europe...

DO push hard on 10m (even CQ high in the band) if 10 opens to Europe either day...

DO answer CQ's anywhere on Sunday after most stations have worked most of the larger stations...

DO check the lowbands, 80/40 and even 160M on Saturday night from 0300Z-0800z AFTER they have worked the big guns on Friday night...

DO chase all the Caribbean multi's and expeditions on Sunday afternoon when they will be begging for Q's and are likely to be listening for any signal they can hear.....

You will be surprised what you can do if you follow this game plan. And remember the old adage "There is no meters like 10 meters - if it opens you will do very well by CQ'ing high in the band - even up as far as 28.900Mhz. Good luck and please do the best you can to help YCCC this time out!

### If you have little time.....

If you are limited by time but have a good signal, then these suggestions will help you maximize your score to help the club score points:

#### 4 hours operating time

Plan on hitting 20M and 15M each day for an hour each morning. Check 20M at around 1200z and switch to 15M around 1300z. You will work bunches of Q's and multipliers.

On Sunday, hit 20M at 1300z and 15M at 1400z. On both days, check to see if 10M is open at all around 1300z.

#### 6 hours operating time

Do the above but also check 20/15/10 each AFTERNOON around 2000z for an hour each day to look for multipliers from South America and the Pacific on the high bands. This will add tons of mults to your score in a hurry - especially if you employ packet spots to help you find guys.

### **8 hours operating time**

Do the same as the above but also check EU sunrise at 0600z on Friday night and Saturday night. You should work 40M the first night and 80m the second night - or 1/2 hour of each each night to grab additional mults.

### **10 hours operating time**

Add an hour each day to either 20m or 15m in the morning running Europeans - make sure to select the band you get out BEST ON - and milk it for all it is worth.

### **12 hours operating time**

Begin nightly operations on the low bands at 0500z each night and go for two hours instead of just one.

### **14 hours of operating time**

Add an additional hour of operating time to European chasing/CQ'ing each morning bringing this up to 3 hours each morning.

### **16 hours of operating time**

Add an additional hour each afternoon to chasing mults on 20/15/10.

### **18-24 hours of operating time**

Extend all of the above as you see fit according to where you think your station plays best. Do hit 160M at European sunrise as this will be the time when it will be easiest to work people - even in the Caribbean - and even with modest antennas and power levels.

So the word is simple, GO FOR IT and do your best to help YCCC! Hope to Cu in the pileups!

## **160 Meters**

Jeff Briggs, K1ZM

160M is always a tough band in the contests but my guess is that it will be pretty rough sledding this Fall in CQWW Phone - for two reasons. First, the sunspots have gone up increasing the absorption on 1.8Mhz. Second, the activity will gradually shift back to the higher bands as it always does as we approach a sunspot maxima.

Nevertheless, 160M will add to your score and I suspect the CQWW CW and ARRL DX Contests (both modes) will be more productive than CQWW.

As always, expect activity to be concentrated between around 1.820 - 1.850. On CW, this may extend all the way down to 1.812 or so at European sunrise.

This is a band where you generally CALL stations rather than CQ'ing which usually isn't productive for anything but the multi's who can afford the time spent "braying into the ether" all night long with minimal replies!

The band starts to get lively around 0300z and can be really hot between 0500z-0700z each night. Check 160M on the hour after 0800z for the multi's who make skeds and a KH6/ZL or VK may be possible from around 20 minutes BEFORE your local sunrise until 5 minutes AFTER your sunrise each morning.

Again, 160M can yield quite a few mult's for the hopper - and usually not all that many Q's, but if you have an amp and an inverted L for an antenna, then you will be able to work just about all that you can hear on 160M.

## **75 and 80 Meters**

The strategy for these two bands (separated only by 300Khz) is quite different, so please be guided accordingly.

80CW is a similar strategy to 40M - work Europe anytime you can between 0z and around 0730z. The European signals will be loudest as sunrise moves across Europe beginning around 0500Z for the UB5 stuff and ending up around 0730z for GI/GM/GW/CT.

There will be EU stations CQ'ing right up to around 3570Khz, so keep tuning up high in the band from time to time. It will not likely be possible for a LOW power station to run EU stations on 80CW, so answer calls - especially on Saturday night when the competition is less keen.

If you have a KW and even an inverted vee at 70 feet, you will find you can run stations if you get a clear frequency, preferably up above 3520Khz.

Once Eu dies on 80, check 20 briefly, and then get up on 40M to work the remaining EU stations that are there for an extra hour. There will be tons of G's/DL's and Western Europe still coming through on 40M.

80 will be open into South America and the Pacific from 0600-1000z so look for a VK/ZL and KH6 during this period. The Caribbean stations will be loud at this time also. Don't get stuck in huge pileups into the Caribbean EARLY the first night if you have a modest station - these same guys will be BEGGING the second night after they have worked all the bigger guns.

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Remember, don't get fooled into playing Pacific on 80 as 20M opens into Europe at 10z. Go to 20m as soon as you can work signals there - doing so will raise your score (relatively speaking) and is the smarter move!

### 75 Phone

75 phone is a totally different animal from 80CW and must be approached with a PLAN. There will be wall to wall QRM in Europe the first night so unless you have a rock crusher signal like W1KM or W1MK, don't get fooled into calling LOUD Europeans between 3750-3800 the first night.

Concentrate INSTEAD on answering the LOUDER Eu stations that will be CQ'ing BELOW 3750 and listening QSX above 3800. This means you will work them split and they will announce where they are listening (just like on 40M phone.)

Pickings will be best from 0400z-0730Z each morning - and competition will be less severe the SECOND morning (eg: Saturday night our time). IF you have a KW and at least a 70 foot inverted vee, you should try your hand at CQ'ing above 3830 from 0600-0730z. Find a clear spot down below 3750 (even to as low as 3600Khz) and see if you can get a 75 phone running going into Europe. You may be surprised with what you can work. If you hear stations calling on your QSX frequency that appear out of synch with your calls and at ODD times, then someone else is probably listening on the same frequency as you are down below - and you had better find a new listening frequency. It happens a lot on 80 - it is part of the game!

When 75 SSB dies into EU, head to 40M to work the remainder of the sunrise opening into EU there for another hour. Also check 20m to see if it has opened to Europe.

If not, then look out to ZL/KH6 and VK plus South America until 20M opens around 10Z. Also do a lot of band changing between 40m and 80m to optimize your multiplier total during this period. Band changes at 15 minute intervals will yield a very large multiplier on BOTH 40 and 80 if you discipline yourself to do so.

## 40 Meters

Randall A. Thompson, K5ZD

Forty meters is probably my favorite contesting band. It offers worldwide propagation throughout the sunspot cycle. Openings are every bit as good as 20m, although often not as long. And when one end of the path is at sunrise or sunset, anything is possible!

There's just one little problem... the rest of the world also uses the band for commercial broadcasting. Throw in a mismatch between our allocations on Phone and it also becomes one of the most challenging bands. Unfortunately, many people hurt their contest scores by letting the band intimidate them. Since Phone and CW have completely different "personalities", I will discuss them separately.

Phone Success and effort on forty-meter phone is critical for building a winning multiplier total. The propagation in late October is usually excellent, but the split frequency operation and broadcast QRM make it difficult to generate big QSO totals except for those with large antennas. It will test your ability to tune and react rather than just sit and call CQ.

Expect propagation to Europe from the start of the contest until 08Z. Look for the loud Caribbean stations all night and certainly after 06Z. The early morning hours are often very slow with a few loud KH6, VK, and ZL stations to call. Be happy if you work one or two JA stations just to get the multiplier. The band opens to Europe again about 22Z or 23Z. If you are going to have a chance to call CQ and get answers, the 23Z hour is usually one of the best.

Here are a few additional tips that will help your Phone score:

- Get a computer controller radio! Working split is easy when you just have to type in the frequency the DX is saying and then call.
- Make it easy for the DX station to recognize you. I always say the call of the DX station once when I am calling. With many stations listening on the same frequency, this will help them lock in on you. Send both calls when you give the exchange as well. This will help prevent costly Not-In-Log QSOs.
- Tune slowly and listen carefully. With so little room, stations are often stacked 2 or 3 deep. Since QSOs may take longer in all the QRM, you are more likely to tune across a needed multiplier while he is listening. Or while covered up by a loud Italian!
- Don't be afraid to call CQ. Pay attention to the frequencies the Europeans are listening on. If you hear one of them clear, try a few CQs listening down. It's tempting to listen down very low in the band to find a clear spot. But many Europeans respect the IARU recommended phone allocation and will not call you below 7040. I have had my best luck CQing early (2200-0000z) and late (after 0700z). CQing is often the only way to get some of the "second tier" multipliers which don't ever call CQ themselves.
- Don't forget to listen up above 7150. A quick scan of the band will sometimes uncover a South American or VK station working transceive. And if all of the bands fold

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during a solar storm, try 40 meters transceive and beg for VE QSOs (in CQ WW they are worth 2 points each!).

· Finally, remember to be sure and work an USA station for the country multiplier, and zone 03, 04, and 05 for the zone multipliers!

### CW

In a CW DX contest, 40 meters is a 'volume' band. At this point in the sunspot cycle, it offers two opportunities each day for rich European runs. For a single-op, or multi-single, 40m will probably be the band to start the contest. With some luck, we will have excellent propagation for the first hour or more. After this, the MUF to Europe may drop below 7 MHz and it is time to look for multipliers in the rest of the world. But keep an eye on 40, as it is the rate band of the dark hours.

The band recovers as the sun moves across Europe. The band really quiets down and some good runs can be expected from around 0600z to 0930z. It is amazing how late the UK stations will come in after their sunrise. After this time, it's back to multiplier hunting.

At our sunrise, the band offers a short opening to JA. Sometimes direct path, but more often via skew path beaming west. After sunrise, long path possibilities exist to VS6, YB0, DU, and the rest of Southeast Asia. The multi-multi's and multi-single's will love it, but the competitive single op should keep an eye on 20m for more productive action.

The real advantage for New Englanders occurs in the afternoon well before sunset. European QSOs are possible as early as 1900z, but the real action gets underway during the 21z hour. This is still well before our sunset, but the band has lengthened out in Europe so that all they can hear is loud W1's calling CQ. We have an "exclusive" into Europe for awhile and this is the time to secure a good run frequency.

Don't forget to check for long path openings at our sunset. The CQ WW CW often has workable JA's and other Asians mixed in among the loud Europeans and W's calling CQ. This is also the place to find those zone 24, 26 and 29

multipliers. But you have to listen hard as they are often very weak compared to the loud USA and Europeans calling CQ.

The big guns always seem to work their way into the bottom 10 kHz of the band. But don't forget about the upper ranges. It's a lot easier to hear, and be heard, if you pick a CQing frequency up above 7030. Plus, when tuning for multipliers, check all the way up to 7070. I found a number of juicy multipliers last year above 7050 (that's the only place many low power DXpeditions can get a spot).

Good luck in your 40-meter contesting efforts this season. Anyone with a 2-element Yagi should be able to take full advantage of the above tips. With less antenna, plan on working a little harder, but with an equally positive impact on your score.

## 20 Meters

14Mhz will be the MONEY band again this year. It will be open SOMEWHERE nearly all 48 hours but you will need to balance your time properly between the LOW BANDS at night and 15M vs. 20M as soon as 15 gets really going into Europe each morning.

Remember, as soon as runs are possible into the USA from Europe on 21Mhz, all the EU boys will leave 20M for 15M and you, of course, should do the same.

At the start of the contest, it is usually a good idea to work 20 for a couple of hours before moving down to the low bands for the night. It is also a good idea to take a tune across 20M once an hour during the night at a minimum in order to work additional mults in Africa, South America and the Pacific.

Check for an opening at 0700Z into Europe - it may get hot for an hour and then close prior to the LATER real opening around 1000z. You should plan on being on 20M from around 10z-12z each day before moving to 15m as soon as it opens.

In the afternoon, once 15M has closed, it is time to return to 20M for several hours to work what remains in Europe. Look for JA's on 20m around our sunset time and for about 2 hours thereafter. If 15m is HOT into JA, you will want to be there for the JA runs, but if 15 is poor, you definitely will want to be on 20M instead.

20M is also quite good into Africa from around 0200z-0600z so keep your yagi spinning to make sure you don't miss the easy multipliers that will keep appearing throughout the nighttime hours.

Of course, 20m will be the MOST CROWDED band in the contest - so try CQ'ing high in the band above 14.300 if you cannot find a hole down below.

It is possible to work almost all 40 zones on 20M in CQWW phone - so you can expect to garner at LEAST 30 zones on this band even with a tribander.

Don't forget to check ASIA over the pole from 1400Z-1600Z as the band will produce a zone 26 and zone 24 during this period. Just before and after our sunrise time 20m can also produce LONG PATH openings to ASIA on a 220 degree heading, so keep an ear out for the 9M8, YB0 and V85 type stuff that may appear out of these headings as well.

You can expect TONS of qso's out of 20M (like over 1,000 along with 36-38 zones and over 100 countries) if you pay close attention to 14Mhz during the contest. Just don't get caught on 20M when either 15 or 10 is open to Europe! That's a beginner's mistake to avoid!

## 15 Meters

Shane Mattson, K1ZR

I love 15 meters...The highest rates for me in any DX contest usually come from this band. If you are one of those stations that run low power (100w or less) with a tribander you can still produce great rates on 15 during the peak opening to EU. During peak hours everyone should be focusing on Q's, Q's, Q's and more Q's. If you're a smaller station, the best place to run is above 21.350 on Phone and above 21.035 on CW. If your going to operate down around 21205 or 21005 be prepared to compete with the big multi- multi's like KC1XX, K1KI, N2RM, K3LR, W3LPL, etc.....sound like fun?

At the start of the contest look for SA, JA, Deep Asia and Pacific openings. While running on 40, 80, or 160 keep popping needed mults and Q's on 15 looking for long path and skew paths to different areas between 03:30-08:30z. Openings to EU typically start between 11:00 and 12:00z during the fall and winter months. At the start of the opening look for juicy multipliers to the north. If you are running a stack, take 5-10 minutes every hour or so and point one antenna north. While running EU on one VFO, look for juicy mults like HS, 3W8, DU, HL, P29 and YB on the other VFO (or radio). If you only have one antenna for 15, break away from your EU run for a few minutes, point your antenna 345 degrees, start from the beginning of the band and look for mults. While scanning the band for needed mults work everything you hear calling CQ to help keep the rate up. By doing this every hour or so, your multiplier total on 15 will drastically improve. Keep checking that second radio or VFO for openings on 10 as well as needed Q's and multipliers on 20. Remember that every minute you spend operating should be focused on working more Q's and new multipliers.

At around 16:00z really look at your rate meter! If you feel as if your rate to EU is losing it's consistency then it's time to move to 20. Keep checking 15 in the afternoon for multipliers from Asia and Africa. At our sunset it's pretty much (Note: PRETTY much) a repeat cycle of conditions as previously mentioned. Use the propagation charts included in this issue of the cookbook by N6BV and K1KI to get a feel of how 15 will play this year.

Never miss an opportunity to work a new multiplier on this band. Prevent yourself from saying, "I'll wait until Saturday night to get 'em". Work them NOW! Try to work

every multiplier you hear the first night to insure the QSO in the log. Don't bank on the rare multiplier being there the second night! The winners are the ones that focus on working multipliers that show up for a few minutes as casual operators. Look when others aren't normally looking! Who would think of leaving a current rate of 170+/hr to go look for multipliers? Take a chance and go for it! If you ever want to come close to beating K1AR you must mimic the master...

## 10 Meters

28Mhz is going to be a real wild card this Fall. It may be only slightly better than last season - OR - we could get lucky and get some direct path Eu openings - especially for CQWW SSB. By November, the solar flux may drop a bit from the October highs - but you never know.

Check 10M hourly starting at about 13Z. It may open skew path over Africa (about 100 degrees beam heading) or it may go nuts right at the start each morning.

10M also has a way of fooling you around European sunset. Starting about 16Z, it can open LATE to Europe on a skew path and then yield a bunch of Southern European multipliers like YU/S57/I/HA/DL/F/EA and CT as sunset moves across Europe. Watch for it because it can get away from you if you are not looking out for it.....

At a minimum, we can expect the band to open to all of Africa this year starting just after our sunrise time and there will be DOZENS of South American LU's to chase all day long.

As our sunset approaches, watch for a Pacific opening and maybe even a flicker into JA if the solar flux is HIGH and the absorption is very LOW. Check the last minute A/K indices for an inkling as to what may occur.

At a minimum, zones 14/15 - all of Africa, all of South America and a great deal of the Pacific - zones 30/31/32 are all possible. Also don't forget to look over the long path just after sunrise (beam at 5R8) for a possible long path opening into Asia.

With 10M at this time of the cycle, you just never know. If it does open to Europe, gather those MULTS in a hurry because 10m may NOT open up the next day. Work what you can quickly - don't stay too long any one time if the band is poor - and scoot back to 15 for more EU runs if 10M is not really that productive!

## Single-Operator Assisted

Jim Reisert, AD1C

The single-operator assisted (or unlimited) category is perhaps the most overlooked category in the YCCC. It's hard to understand, because no other single-operator category gives you access to so much camaraderie and so many ways to make points! Besides the multi-op categories, in which other category can you operate with 300 people all helping each other? On packet, there are lots of people to TALK to when the going gets slow just after EU sunrise.

In the SOA category, your goal should be to maximize your score, the same as in all the other categories. The twist is that while you are working stations at a good clip on your run frequency, packet spots are taunting you into giving it up! Finding the proper balance between running and chasing packet spots is the secret to this category. No one has the definitive answer, but stations like K1ZM, KI1G, K3WW and N3RR certainly are doing something right. They even occasionally beat the winning Single-Op station, a feat that should not be as rare as it is (except when K1AR is operating).

First, some essentials for the SOA station:

1. Computer logging, tied into PacketCluster. CT and other software will filter multipliers through your log, showing you only the ones you need. No more searching for that mult sheet! You do not actually have to be connected to PacketCluster as long as you can monitor the spots. Of course, it helps to be able to announce spots too!
2. Computer-controlled radio. It's tremendous how fast you can work packet spots and return to your run frequency when you only have to hit a couple of key strokes and not turn a dial. An amplifier like the Alpha 87A, automatic antenna switching and a computer-controller rotor may mean you never have to leave the keyboard! Of course, none of this is necessary, but it all helps.
3. Awareness of the value of a multiplier to your score. Two important metrics here, both of which are available on your logging screen: QSOs per Mult, and Minutes per Mult. QSOs per Mult indicates the number of equivalent QSOs you have to work to attain the same point gain as a single multiplier. This should be based on your FINAL score, not necessarily your real-time score. For example, in the beginning of a contest, multipliers are worth less because you have so few QSOs to "mult"iply them against. At the end of the contest, however, they are worth much more. In CQWW, if your final score is 2000 QSOs and 500 multipliers, then a multiplier is worth 4 QSOs, and this should be the number use to make the decision. It's amazing how

many people start off a contest by picking multipliers off of packet, when if they were running instead, the multipliers would call THEM.

The other measure is Minutes per Mult. This is a measure of how much TIME a multiplier is worth (how long you should stay in the pileup). In other words, if you work the mult in that many minutes, it is the same score increase as running at your current rate for the same number of minutes. In many cases, you can work the multiplier faster than this, but in many cases you can't. That leads to...

4. An understanding of the capabilities of your station and knowledge about the stations putting out the spots. For example, you're calling CQ on 15 meters on Saturday morning and KC1XX spots E21CJN on 10 meters. Should you chase the spot? How well do you get out into that part of the world? Where is Matt located compared to you? What kind of antenna is Matt using? Is he single or multi-op? In CQWW, multi-ops (and especially M/M) have lots more time to tune around and spot stations, or to kill time sitting in packet pileups. And remember, everyone sees the same spots at more or less the same time. Can you work it before the big guns do? If not, you may have lost 15 minutes of valuable run time.

5. Patience, patience, patience. It's hard to resist going after every spot you need. If it's one of the big DXpeditions, like PJ9B or 5V7A, chances are they will be around all weekend, and will be spotted again. If it's Sunday afternoon and the first TG9 of the weekend has been spotted, chances are there will be a lot of big guns in the pileup first, but you might get lucky. Remember, if you're running at a good rate, you can make the same score increase by working QSOs. Work the multipliers that are spotted on your run band, and keep a mental list of the number spotted on other bands. They may indicate time to switch bands. Work a few multipliers on the new band, then find a run frequency, more may call in.

6. Practice, practice, practice. If you're using a computer controlled radio (your are, aren't you?), you should be able to move around keys like CTRL->, ALT-F4 and ALT-F5 like they are second nature. Practicing on a laptop computer at work Friday afternoon isn't the same as sitting in front of a real radio pulling real spots off of a real PacketCluster. Practice grabbing spots in the morning or at night when you're just tuning around the bands, then return to your tuning frequency. Watch out for those ICOM radios, if you were in SPLIT mode on your run frequency, CT will return you to TRANSCEIVE mode when you return from the packet spot. It's the radio's fault, not the software. Just be aware of it so you're not calling CQ in the European phone band in October!

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Now some do's and don'ts to make your life a little easier:

DO verify the callsign of the station you're working. S52PK and 5C8N are not real callsigns. Don't log them that way. You will be penalized MORE by having a busted call in your log than if you had not worked it at all (yes, there are penalties for wrong answers). Always HEAR the callsign that the DX station is signing and log it correctly.

DON'T solicit help on packet during the contest. Don't ask what a station's callsign was that you just worked, or whether GJ has been spotted on 10 meters recently. Don't spot yourself on packet with a comment like "WORK ME". This is forbidden by the rules.

DO learn how to put out spots correctly, especially when operating SPLIT. For the most part, your radio hookup and logging software will facilitate this. However, there are still those pesky ICOM radios. Make sure to type QSX then the transmit frequency into the spot's COMMENT field so the spot looks something like the following:

DX JY9QJ 7048 QSX 7216

Remember to include the word QSX, otherwise other stations who pick up the spot from packet may not have both VFOs set correctly.

DON'T forget to search and pounce yourself! Not everything gets spotted, and it's always easier to work the rare multipliers when you're the only one calling. When you finally work it, put out the spot, then sit back and listen for a few seconds to the chaos that ensues. Smile to yourself, then move on.

DO put out lots of spots, it helps all the multi-op stations in the club. If you have a fairly high QSO total, and you tune across even a new station you haven't worked, put it out! Chances are someone else may need it too! It can get REAL slow at the multi-ops on Sunday afternoon.

DON'T claim you operated Single Op if you even used just ONE packet spot. You're either Single-Op Assisted or Multi-Op. It's unfair to the people who are operating without assistance. The log checkers can detect this kind of cheating nowadays.

DO read the DX bulletins and various contest and DX reflectors the week before the contest. Know who's going to be on, what category they're in, and assess your chances of working them ahead of time. Then when they are spotted during the contest, you will already be prepared to make the decision to pass or play. There's no need to work P40V in the first 5 minutes of the weekend, but if you read that IV3TAN/IG9 is mono-band 40M and

you see it spotted on 15, go for it! Remember, the DX single-ops and multi-singles can sometimes be hard to work on all 6 bands, especially those in Zone 8. They only need to work the USA 3 times to get zones 3, 4 and 5, so they won't run the USA very much if there are higher-point QSOs or other multipliers to be had. This can be especially true on 160 and 80 meters, or on bands like 15 when the conditions are very good and everyone is on 10 meters all weekend.

Some closing notes:

In general, CW run frequencies are easier to come by than frequencies on phone, so spend a little more time on CW chasing packet spots, and a little less on phone.

Remember to run as much as possible. When the rate starts to drop, it might be a good time to work a few multipliers from packet, or start tuning the band looking for your own.

There is no bad time to run, but there are bad times to be multiplying. In the morning, when 20 or 15 (maybe even 10!) is open to Europe, you should be running as much as possible, not chasing packet spots. In the afternoon when 20 has slowed down, but 40 hasn't opened yet, it's a better time to work multipliers. If you only have a limited number of hours to operate, definitely use packet to maximize your score, but don't forget that if your QSO total is low, there won't be a lot of points to multiply!

In 1998, I finished 2nd place in W1-land with just a 35' high G5RV and an R7 vertical. Where were the rest of you with your tri-banders and 160/80/40 wire antennas? The FRC has continually used their participation in the SOA category to beat YCCC, and 1997/98 was no exception. This year MAKE it be our turn!



### Oct. 1998, MA (Boston), for SSN = High, Sigs in S-Units. By N6BV, ARRL

UTC	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							UTC	
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA		
0	8	-	9+	9	5	-	9+	9+	1	9+	9+	8	-	9+	9+	9	9+	9+	9	9+	9	9+	-	8	9+	-	6	9	9+	-	-	9	-	-	2	9+	0
1	9	-	9+	9+	3	-	9+	9+	1	9+	9+	8	2	9+	9+	9	9+	9	9+	9	9+	9+	-	7	9+	-	-	7	9	-	-	5	-	-	-	5	1
2	9	-	9+	9+	6	-	9+	9+	1	9+	9+	8	6	9+	9	8	9+	9+	9	9+	9+	9+	-	1	9	-	-	2	9	-	-	-	-	-	2	2	
3	9	-	9+	9+	1	1	9+	9+	1	9+	9+	8	8	9+	8	8	9+	9+	9	9	9+	9	-	-	8	-	-	-	4	-	-	-	-	-	2	3	
4	9+	-	9+	9+	-	3	9+	9+	1	9+	9+	7	9	9+	4	8	9+	9+	9	7	9+	9	-	-	9	1	-	-	4	-	-	-	-	-	2	4	
5	9+	-	9+	9+	-	5	9+	9+	2	9+	9+	5	9	9+	-	8	9+	9+	8	5	9+	9	-	-	8	-	-	-	3	-	-	-	-	-	2	5	
6	9+	-	9+	9+	-	6	9+	9+	5	9+	9+	5	9	9+	1	8	9+	9	8	5	9+	9	-	-	7	-	-	-	-	-	-	-	-	-	2	6	
7	9	-	9+	9	-	6	9+	9+	7	9+	9+	6	9+	9+	-	8	9+	9	6	8	9+	9	-	-	2	-	-	-	1	-	-	-	-	-	2	7	
8	8	1	9+	8	-	6	9+	9	8	9+	9+	6	9+	9+	1	6	9+	8	5	8	9+	9	-	-	-	-	-	-	-	-	-	-	-	2	8		
9	6	3	9+	5	-	5	9+	9	8	9+	9	6	9+	9+	9	3	9+	9+	2	-	9+	9	-	-	-	-	-	-	-	-	-	-	-	2	9		
10	2	5	9+	1	1	6	9+	8	8	9+	7	6	9	9+	9+	3	9+	9+	8	-	9	4	-	4	9	-	-	-	-	-	-	-	2	10			
11	-	5	9+	-	-	9	9+	6	8	9+	4	7	9	9+	9+	8	9+	9+	9	2	9+	9	-	9+	9+	3	-	-	1	-	3	9	-	-	2	11	
12	-	-	6	-	-	7	9+	4	5	9+	-	6	9	9+	9+	9	9	9+	8	9+	9	9+	9+	4	9+	9+	9	-	9+	9+	-	9+	9+	3	-	2	12
13	-	-	-	-	-	-	9+	2	4	8	-	3	8	9+	9+	8	9+	8	9	9+	9+	9+	9+	8	9+	9+	9+	1	9+	9+	-	9+	9+	7	-	9	13
14	-	-	-	-	-	-	9+	1	3	4	-	2	5	9+	9	8	9+	8	9	8	9+	9	9+	8	9+	9+	9	5	9+	9+	1	9+	9+	6	-	5	14
15	-	-	-	-	-	-	9	1	2	-	-	1	1	9+	9	7	9	6	9	9	9+	9	9+	6	9+	9+	9	2	9+	9+	-	9+	9+	4	-	6	15
16	-	-	-	-	-	-	7	2	1	-	-	1	-	9+	9+	6	9	9	8	9	9+	9	9+	7	9+	9+	9	9	9+	9+	-	9+	9+	4	-	7	16
17	-	-	-	-	-	-	7	5	1	-	-	2	-	9+	9+	6	9+	9	9	8	9+	9	9+	7	9+	9+	8	9+	9+	9+	-	9+	9+	-	9	4	17
18	-	-	-	-	-	-	8	6	1	1	5	2	-	9+	9+	8	9+	9+	9	6	9+	9	9+	6	9+	9+	6	9	9+	9+	-	9+	9+	-	7	3	18
19	1	-	-	-	-	-	9	8	1	6	7	4	-	9+	9+	7	9+	9+	9	6	9+	9	9+	5	9+	9+	-	9	9+	6	-	9+	9+	-	9	8	19
20	4	-	-	3	-	-	9+	9	2	9	8	6	-	9+	9+	8	9+	9+	9	8	9+	9	9+	1	9+	9+	-	9	9+	-	-	9+	9+	-	9	9	20
21	5	-	7	5	1	-	9+	9	4	9+	9	7	-	9+	9+	9	9+	9	8	9+	9	9+	6	7	9+	9+	1	9	9+	-	-	9+	8	-	9	9	21
22	7	-	9+	8	2	-	9+	9+	5	9+	9+	8	-	9+	9+	9+	9+	9	8	9+	9	9+	-	9	9+	9+	1	9	9+	-	5	9+	-	-	8	9	22
23	8	-	9+	9	3	-	9+	9+	2	9+	9+	8	-	9+	9+	9+	9+	9	8	9+	9	9+	-	9	9+	6	3	9	9+	-	5	9+	-	-	4	8	23

**Nov. 1998, MA (Boston), for SSN = High, Sigs in S-Units. By N6BV, ARRL**

UTC	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							UTC
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	
0	9	-	9+	9+	5	-	9+	9+	3	9+	9+	9	-	9+	5	9	9+	9+	9	9	9+	-	7	9+	-	-	9	9+	-	-	7	-	-	-	8	0
1	9	-	9+	9+	6	-	9+	9+	2	9+	9+	9	3	9+	5	9	9+	9	8	9+	9+	-	2	9	-	-	3	8	-	-	1	-	-	-	2	1
2	9	-	9+	9+	5	-	9+	9+	2	9+	9+	9	7	9+	7	8	9+	9	8	9	9+	-	-	8	-	-	-	8	-	-	-	-	-	2	2	
3	9	-	9+	9	5	1	9+	9+	3	9+	9+	8	8	9+	6	8	9+	9	9	9	9+	-	-	6	-	-	-	3	-	-	-	-	-	2	3	
4	9+	-	9+	9+	1	4	9+	9+	4	9+	9+	7	9	9+	5	8	9+	9+	9	3	9+	-	-	5	-	-	-	2	-	-	-	-	-	2	4	
5	9+	-	9+	9+	-	5	9+	9+	5	9+	9+	6	9	9+	-	8	9+	9+	9	4	9	-	-	2	-	-	-	1	-	-	-	-	-	2	5	
6	9+	-	9+	9+	-	6	9+	9	6	9+	9+	7	9	9+	-	8	9+	8	9	5	9+	-	-	2	-	-	-	-	-	-	-	-	-	2	6	
7	9+	1	9+	9	-	6	9+	9	8	9+	9+	7	9+	9+	-	8	9+	3	7	8	9	-	-	1	-	-	-	-	-	-	-	-	-	2	7	
8	9	2	9+	8	-	7	9+	9	8	9+	9+	7	9+	9+	-	8	9+	2	-	8	9	-	-	-	-	-	-	1	-	-	-	-	-	2	8	
9	7	3	9+	6	1	7	9+	9	8	9+	9	8	9+	9+	8	5	9+	9+	-	7	9+	-	-	-	-	-	-	-	-	-	-	-	-	2	9	
10	4	5	9+	2	2	8	9+	9	8	9+	8	8	9	9+	9+	-	9+	9+	4	-	9	-	-	1	9	-	-	-	-	-	-	-	-	2	10	
11	1	5	9+	-	2	8	9+	7	8	9+	5	7	9	9+	9+	5	9+	9+	9	-	9+	7	-	9+	9+	3	-	-	-	2	9	-	-	2	11	
12	-	1	8	-	1	9	9+	6	6	9+	1	6	9	9+	9+	9	9	9+	5	9+	9+	9	-	9+	9+	9	-	9	9	-	9+	9+	1	-	2	12
13	-	-	-	-	-	2	9+	4	5	9	-	5	9	9+	9+	9	9	9	9+	9+	9+	9+	9+	9+	9	-	9+	9+	9	9	8	-	9+	9+	13	
14	-	-	-	-	-	-	9+	2	4	5	-	4	7	9+	9+	8	9+	9	9	9	9+	9+	9	6	9+	9+	9	6	9+	9+	9	4	-	8	14	
15	-	-	-	-	-	-	9	3	4	-	-	3	4	9+	9+	8	9+	8	8	7	9+	9+	7	9+	9+	8	2	9+	9+	1	9+	9+	1	-	9+	15
16	-	-	-	-	-	-	9	5	2	-	1	3	1	9+	9+	7	9+	9	9	9	9+	9+	6	9+	9+	3	5	9+	9+	1	9+	9+	-	-	9+	16
17	-	-	-	-	-	-	9	6	2	-	4	4	-	9+	9+	6	9+	9+	9	9	9+	9+	5	9+	9+	-	9+	9+	9+	-	9+	9+	-	9	9+	17
18	1	-	-	-	-	-	9	7	3	4	6	5	-	9+	9+	7	9+	9+	9	8	9+	9+	3	9+	9+	-	9	9+	6	-	9+	9+	-	9	9+	18
19	3	-	-	2	-	-	9+	8	4	7	8	6	-	9+	9+	7	9+	9+	8	8	9+	9+	1	9+	9+	-	9	9+	-	-	9+	9	-	9	9+	19
20	5	-	4	5	-	-	9+	9	4	9	9	7	1	9+	9+	8	9+	9+	9	8	9+	1	-	9+	9+	-	9	9+	-	-	9+	8	-	9	9+	20
21	7	1	9	7	1	-	9+	9+	5	9+	9+	8	1	9+	9+	9	9+	9+	8	9	9+	-	6	9+	9	-	9	9+	-	-	9+	5	-	9	9+	21
22	8	-	9+	9	3	-	9+	9+	6	9+	9+	8	1	9+	8	9+	9+	9+	8	8	9+	-	9	9+	9	-	9	9+	-	1	9+	-	-	9	9+	22
23	9	-	9+	9	5	-	9+	9+	5	9+	9+	8	-	9+	4	9+	9+	9+	8	9	9+	-	8	9+	3	-	9	9+	-	1	9+	-	-	2	8	23