**Doc. 29** 

## Contest Advisory Committee Semi-Annual Report

For the American Radio Relay League Board of Directors Meeting

January 2009

Submitted by Dick Green, WC1M Chairman, CAC 190 Lyme Rd Hanover, NH 03755 <u>wc1m@msn.com</u> 603.643.4451

#### Summary

Since the July 2008 Board meeting, the CAC has received one task, which was to study CW Skimmer. A tasking document was received on July 21, 2008 and the tasking was completed on November 20, 2008. The CAC's final report on CW Skimmer is attached.

On August 5. 2008, the CAC submitted an unsolicited recommendation to amend the rules for the ARRL 10m Contest. A copy of the recommendation is attached.

There was no other formal business before the CAC during the period, and there is no business currently before the CAC.

#### Administrative Notes

Long-time Northwest Division CAC Representative and former Chair, Ward Silver, NØAX, announced his retirement from the CAC effective with completion of the CW Skimmer tasking. I would like to take this opportunity to bring Ward's outstanding contributions and accomplishments to the attention of the ARRL Board. I would also like to thank Ward for his many years of service to the CAC, as well as for his excellent leadership as Chair. Ward provided invaluable assistance and advice to me when I took the Chair position, and has been the strongest contributor to the group during two of the most complex and important taskings we've received in recent years, Remote Operating and CW Skimmer. We will miss Ward and wish him all the best in his future endeavors.

Please note that NØAX's position as Northwest Division Representative has not yet been filled.

There have been no other changes in CAC membership since July, 2008.

Respectfully submitted, Dick Green CAC Chair New England Division Representative

### **Contest Advisory Committee**

#### January 5, 2009

Atlantic – Mike Gilmer, N2MG 4600 State RT 26, Vernon, NY 13476-3706

Central – Greg W. Clark, K9IG 3700 W CR 100 S, Franklin, IN 46131

**Dakota** – Al Dewey, KØAD 14800 38<sup>th</sup> Pl N, Plymouth, MN 55446-3341

**Delta** – Ted L. Bryant, W4NZ 9217 Charbar Circle Chattanooga, TN 37421-5306

**Great Lakes** – Dave Pruett, K8CC 2727 Harris Rd., Ypsilanti, MI 48198

**Hudson** – Dr. George Wilner, K2ONP 336 Bulson Road, Troy, NY 12180

**Midwest** – Jim Cochran, KØRH 3600 W 77 N, Valley Center, KS 67147

Chairman New England – Dick Green, WC1M 190 Lyme Road, Hanover, NH 03755-6602

Northwestern – TBA

**Pacific** – Michael J. Gibson, KH6ND Box 31193, Honolulu, HI 96820

Roanoke - Don Daso, K4ZA

(P) 315-829-5291 Email: n2mg@contesting.com

Email: greg@k9ig.com

(H) 763-550-0529(W) 952-828-3112Email: aldewey@aol.com

(H) 423-894-1773 Email: w4nz@comcast.net or w4nz@arrl.net

(H) 734-481-0755(W) 313-493-2168Email: k8cc@comcast.net

Email: k2onp@aol.com

Email: k0rh@cox.net

(P) 603-643-4451 Email: wc1m@msn.com

(H) 808-487-8173(C) 808-722-7973Email: kh6nd@hawaii.rr.com

(H) 704-594-9853

515 Withershinn Drive, Charlotte NC 28262

**Rocky Mountain** – Robert Neece, KØKR P.O. Box 3159, Boulder, CO 80307-3159

**Southeastern** – Charles T. Wooten, NF4A P.O. Box 4183, Panama City, FL 32401

**Southwestern** – Bruce Horn, WA7BNM 4225 Farmdale Avenue, Studio City, CA 91604

West Gulf - Joe Staples, W5ASP 10031 Meadow Lake, Houston, TX 77042

**RAC** – Dave Shipman, VE7CFD 1013 Sinclair Street, West Vancouver BC V7V 3W1 Canada

**Board Liaison** – Tom Abernethy, W3TOM 1133 Apple Valley Road, PO Box 73 Accokeek, MD 20607

Staff Liaison – Sean Kutzko, KX9X 225 Main Street, Newington, CT 06111

Administrative Liaison – Sharon Taratula 225 Main St., Newington, CT 06111 cell/work 704-408-7948 Email: k4za@juno.com

(P) 303-830-7000 Email: rneece@bwsm.com

(H) 850-265-1249(C) 850-896-8076Email: nf4a@knology.net

(P) 818-502-5180 Email: bhorn@hornucopia.com

Email: w5asp@earthlink.net

(P) 604-926-8170 Email: davidshipman@shaw.ca

Email: w3tom@arrl.org

(P) 860-594-0232 Email: kx9x@arrl.org

(P) 860-594-0269 Email: staratula@arrl.org

# ARRL Contest Advisory Committee Report on CW Skimmer

November 20, 2008

Submitted by Dick Green, WC1M Chairman, CAC 190 Lyme Rd Hanover, NH 03755 <u>wc1m@msn.com</u> (603) 643-4451

## ARRL Contest Advisory Committee Report on CW Skimmer

## November 20, 2008

#### **Executive Summary**

Multi-channel decoders, such as CW Skimmer, allow the operator to receive information about the identity and frequency of stations operating in a contest. The effect is similar to the use of packet spots. Current ARRL contest rules do not address the use of multi-channel decoders.

On July 18, 2008, the CAC received a tasking on CW Skimmer from the Programs and Services Committee. The tasking is attached to this report as Appendix A. The CAC has voted to make the following recommendations regarding CW Skimmer:

- 1. Multi-channel decoders should be allowed in ARRL contests.
- 2. Multi-channel decoders should *not* be allowed in the Single Operator category.
- **3.** Use of information gathered by multi-channel decoders during off times should not be permitted.
- 4. The Single Operator Assisted category in ARRL contests should be renamed Single Operator Unlimited.
- 5. Rules for remote receivers apply to remote multi-channel decoders, including the exception for spotting nets.
- 6. Multi-channel decoder spots should not be banned from spotting networks.
- 7. Robot QSOs (contacts made by automated means independently of a human operator) should not be permitted.

In addition, the CAC recommends the following wording be incorporated into the rules defining the Single Operator and Single Operator Assisted/Unlimited categories:

<u>Single Operator</u>: One person performs all control, transmitting, receiving, and logging functions. Use of spotting information obtained directly or indirectly from any source other than the station operator, such as from other stations or automated tools, is prohibited.

<u>Single Operator Unlimited/Assisted</u>: One person performs all control, transmitting, receiving, and logging functions. Use of spotting information is permitted. Exception: spotting information obtained from any source outside the station boundary via a closed or dedicated communication link may not be used.

Examples of sources of spotting information include: Operating arrangements involving other individuals, DX-alerting nets, PacketCluster(tm), Internet spotting network servers, CW Skimmer, etc.

The CAC also recommends that the following definitions be incorporated into the rules or published in the FAQ:

Spotting Information: Information specifying the transmit or receive frequency *and* any portion of the call sign, identity, exchange information, or location of another station with which a contest QSO could be made.

# Automated: Functioning independently of the operator's direct control and participation at the time the function is carried out.

The remainder of this report discusses the tasking and recommendations in detail.

#### Discussion

On July 18, 2008, the ARRL Contest Advisory Committee received a request from the Programs & Services Committee to study CW Skimmer in contests sponsored by the ARRL. The request was received in the form of a tasking document, attached as Appendix A to this report. Please refer to the tasking for a description of multi-channel decoders and CW Skimmer. The CAC was invited to comment on several specific questions about CW Skimmer.

#### Expedited Recommendations for 2008 November Sweepstakes

The CAC was also asked to expedite one-time recommendations on CW Skimmer for the 75<sup>th</sup> running of the ARRL November Sweepstakes CW in November of 2008. On July 30, 2008, the CAC delivered recommendations to the P&SC on three key questions:

- 1) Should CW Skimmer be banned from all categories in the 2008 November Sweepstakes CW contest? (recommendation: No)
- 2) If your answer to #1 is No, then should CW Skimmer be allowed in all categories? (recommendation: No)
- 3) If your answer to #1 and #2 are No, then should CW Skimmer be disallowed in the Single Operator category only? (recommendation: Yes)

The Chair thanks the members of the CAC for their prompt and thoughtful response to the questions. Given the time constraints, debate on the three questions for Sweepstakes

was limited, and a number of issues were deferred until the CAC began work on the tasking.

#### **Evaluation Process**

To keep the debate focused, the questions in the tasking were divided into three groups presented separately to the CAC membership. Members were asked to respond to each question with comments supporting their position. Members were free to consult with individuals in their respective ARRL Divisions.

#### Should Skimmer be Allowed?

There was very little debate about two of the key questions, whether CW Skimmer should be allowed in ARRL contests, and whether it should be allowed in the Single Operator category. Consistent with our recommendations for 2008 Sweepstakes, the membership voted overwhelmingly to allow use of CW Skimmer in ARRL contests (unanimous), but to prohibit its use in the Single Operator category (14- 2.)

#### Are Additional Categories Needed?

There was considerable debate on the question of whether additional categories were needed to accommodate CW Skimmer in ARRL contests. A proposal was made to add a new Single Operator category that would effectively allow CW Skimmer but not packet spots. However, in the end the membership voted 14-2 not to change or add to the existing categories. The general feeling was that CW Skimmer should be allowed in any category where packet spots are allowed.

#### CW Skimmer During Off Times

Members voted 11-4 to recommend that use of information gathered by CW Skimmer during off times be disallowed. Quite a few members noted that there is no explicit prohibition on the use of packet spots generated during off times. The rules only state that time spent listening counts as operating time. The Chair's interpretation of the discussion is that an explicit prohibition isn't necessary, but the FAQ should be updated to make it clear that neither packet spots nor CW Skimmer spots gathered during off times should be used.

#### Renaming the Assisted Category

Proponents of allowing CW Skimmer in the Single Operator category have often insisted that CW Skimmer is not "assistance" because it's not performed by another person. To counter this somewhat specious argument, it has been suggested that the Assisted category be renamed. A majority of CAC members was in favor of doing so, but the recommendation that the Assisted category be renamed to Unlimited barely received a majority of those responding: 8 members favored Unlimited, 6 members favored retaining Assisted and 1 member favored Single Op Plus.

The Chair adds that it would be desirable to have a single, consistent name for the category in all ARRL contests.

#### Is a Remote CW Skimmer a Remote Receiver?

With 15 members responding, 10 voted that spots from a remote CW Skimmer violate the remote receiver prohibition, but that such spots should be allowed over spotting nets. In essence, CW Skimmer spots should be treated the same as packet spots. Four members felt that a remote CW Skimmer station should not be considered a remote receiver. One member felt that no exception to the remote receiver prohibition should be made for a remote CW Skimmer station.

In retrospect, the wording of this question wasn't clear. The motivation for the question was the scenario where an operator sets up a remote receiver running CW Skimmer to feed spots over a dedicated communications link. Is this disallowed by the 500m rule (i.e., is it a remote receiver)? If so, would CW Skimmer feeding spots to a PacketCluster be a remote receiver?

During the discussion, it was pointed out that the 500m rule has an explicit exception for packet spots for Multioperator and Single Operator Assisted. However, the exception relies on the undefined term "spotting nets". There was general agreement that the concept is to allow spots that are generally available to other stations, but to disallow spots if they are available only to a single station or a group of stations over a closed or dedicated network. Accordingly, this concept was incorporated in the recommended rule text for Single Operator Assisted/Unlimited.

Given that spots coming from dedicated or closed communications links shouldn't be allowed in the Multioperator categories, either, it may be advisable to amend those rules or clarify the term "spotting nets" in the FAQ to make it clear that the spots must be generally available to qualify for the exception.

#### Should CW Skimmer be Banned from PacketClusters?

This question was not part of the original tasking, but one of our members proposed that we consider it. The argument is that with hundreds or even thousands of stations sending CW Skimmer spots to the network, huge pileups will develop almost instantaneously, making it virtually impossible to tune for a new station or multiplier that hasn't been found yet.

A strong majority of the CAC, 13 members, voted not to ban CW Skimmer spots from PacketClusters. Two members voted in favor of the ban. Several members cited the fact that software has already been developed to send CW Skimmer spots to PacketClusters, and that it would be difficult or impossible to enforce such a ban because CW Skimmer and packet spots can't be distinguished. Others felt that if a problem develops, we can revisit the question. Still others felt a dramatic increase in the number of spots might slow some packet networks to the point of decreasing or eliminating usage (i.e., the problem might correct itself.)

#### Should Robot QSOs be Allowed?

It seems clear that CW Skimmer is only the beginning of a new wave of broadband decoding technology. It's not hard to imagine future enhancements that would allow completely unattended or robot QSOs, both on-frequency (running) and across a band (searching and pouncing.) The CAC voted 14-1 to ban robot QSOs from ARRL contests. It was pointed out that FCC rules may prohibit unattended operation, but that this may not be the case in other jurisdictions.

Although the CAC did not address whether an explicit rule against robot QSOs is required, the overwhelming nature of the vote suggests the prohibition should be incorporated in the rules or the FAQ. However, we did not consider wording for such a prohibition.

#### New Wording for the Single Operator Categories

Considerable time and energy were devoted to developing revised wording for rules governing the Single Operator and Single Operator Assisted/Unlimited categories. The task was arduous and not without some spirited debate. The Chair would like to thanks the members who directly participated in this work, especially Ward Silver, NOAX, who argued for wording that could stand up to future changes in technology, isolated and defined the essential information provided by CW Skimmer-like tools, and did the lion's share of the wordsmithing and editing.

Note that the revised wording permits the use of single-channel decoders, such as CW readers and RTTY programs, as well as band scopes. This is consistent with current rules and practice.

Although the recommended wording is not intended to be an exact replacement for the current rule text, the CAC worked very hard to create terminology and syntax that embodies the CAC's recommendations, does not prohibit long-established practices, and will be effective for the long run. We therefore recommend that no changes be made to the substance and intent of the wording beyond what's necessary to integrate the text with the existing rules.

Further, the definitions and examples are a critical part of the revised rules. Ideally, both should be included in the main rule text, but at a minimum the examples should be included with the rules (definitions could be put in the FAQ.) We believe that a participant should be able to read the rules and determine whether or not CW Skimmer or a similar technology is permitted, without referring to external sources.

#### Consistency with CW WW

As mentioned in our report on Remote Operating, the CAC has established communications with the CQ WW Contest Committee, with Doug Grant, K1DG, acting as liaison. The Chair was kept informed of the direction the CQWWCC was heading with CW Skimmer, and found it to be consistent with the CAC's direction. New rules published for CQ WW are similar in intent to the CAC's recommendations, though the wording is somewhat more specific.

## Appendix A

## **Proposal for Study: CW Skimmer**

Multi-channel signal decoding software and hardware technology is now available. The software, called CW Skimmer, can decode multiple signals simultaneously, extract call signs, and send spots to the local contest log program for display in its band map, or to a spotting network node for broadcast. If desired, spots can be limited to stations calling CQ or TEST, and can be optionally verified against a Super Check Partial database. CW Skimmer can also decode call signs responding to the host station's CQ.

CW Skimmer can perform its job automatically, while the operator uses the same radio or another radio to call CQ or tune for new stations. It can also take place while the operator is in an "off time" break.

Stations have already been built with dedicated wide-band CW Skimmer receivers for each amateur band that are capable of decoding call signs for all open bands simultaneously and feeding spots to the logging program.

CW Skimmer is capable of providing nearly the same information as is currently provided by the spotting network, but without the help of another operator.

Current ARRL contest rules permit use of CW Skimmer, co-located with all other station equipment, in all categories, including Single Operator. The ARRL Contest Branch announced in June 2008 that CW Skimmer would be allowed in the Singe Operator category for the 2008 IARU Radio Championship. Several stations using CW Skimmer finished in the top ten in the Mixed and CW categories.

CW Skimmer has sparked intense controversy within the contest community, with some advocating for the technology to be allowed in all categories, some advocating for the technology to be allowed only in Assisted or Multi-Operator categories, and some advocating for a complete ban of the technology. Debate has been spirited and at times overwhelming in quantity.

The Contest Advisory Committee is asked to study the CW Skimmer technology, become familiar with current and anticipated future configurations and capabilities, and respond to the questions listed below.

#### Questions

- 1. Should multi-channel signal decoders (referred to as "CW Skimmer" in this task) be allowed in ARRL contests?
- 2. If CW Skimmer is allowed, can it be accommodated within the existing category structure? If so, how?
- 3. If CW Skimmer requires new categories, what category structure is required to accommodate CW Skimmer?
- 4. In contests that limit operating time to a portion of the contest period, should CW Skimmer be allowed to generate operating information during non-operating periods?

#### Related issues

- 5. Should the Assisted category be renamed to avoid semantic confusion over the word "Assistance"? If so, what label should be used instead?
- 6. Under what circumstances is a CW Skimmer operating at a station outside the 500m station radius considered to be a remote receiver?
- 7. It is possible that future versions of CW Skimmer, or similar programs, will be able to automatically complete contest QSOs. Although they are not allowed under FCC rules, should automated or "robot" operation by non-US stations be allowed in ARRL contests?

## ARRL Contest Advisory Committee Recommended Rule Change for ARRL 10m Contest

## August 5, 2008

(emailed to the PS&C on 08/05/08)

Gentlemen,

From time to time, CAC members discuss issues related to ARRL contests that are not part of a formal tasking from the P&SC. Occasionally, this may result in an unsolicited recommendation from the CAC. Such is the following:

With 15 of 16 representatives responding, the ARRL Contest Advisory Committee unanimously recommends that the following rule be deleted from the ARRL 10m contest:

"Eight points for CW QSOs with US Novice or Technician Plus stations signing /N or /T (28.0 to 28.3 MHz only)."

The following comments from our Great Lakes representative, Dave Pruett K8CC, provided additional information considered by the CAC:

"Current FCC rules for frequency ranges by license class make this rule unnecessary as everyone has the same allowable spectrum on the 10M band. There have also been cases where inconsistent application of adding the "/N" and "/T" to entrants call signs has required hand-editing of results by the log checkers. As the volunteer log checker for the 10M contest, this deletion would make my life easier, and I don't think it will significantly impact activity. CW contacts already get double points, and the original intent of the rule was to get higher class licensee to go above 28.100 to work the Novices/Techs, who now have access to the regular part of the band."

Respectfully submitted, Dick Green NE CAC Representative, Chair