# January, June, and September VHF Contest Rules

# Introduction and How to Operate

**Contest Objective:** To contact amateur stations in different 2 degrees x 1 degree grid squares on the amateur bands above 50 MHz.

Your <u>ARRL membership</u> helps support the ARRL Contest Program – the world's largest with many different events from HF through microwave. Along with your membership, you'll get free access to the National Contest Journal, the ARRL's online archive of QST articles, and the Technical Information Service. Contesting builds skills and understanding – come join the fun!

**Contest Period** (All dates are maintained in the <u>ARRL contest calendar</u>):

January: Third or fourth full weekend in January as announced, 1900 UTC Saturday through 0359 UTC Monday

June: Second full weekend in June, 1800 UTC Saturday through 0259 UTC Monday. September: Second full weekend in September, 1800 UTC Saturday through 0259 UTC Monday. There are no operating time restrictions in any category.

**Log Deadline:** Upload your log at <u>contest-log-submission.arrl.org</u> no later than **TEN (10)** days after the contest is over at 0259 or 0359 UTC. Paper log forms are available via the <u>ARRL Contests</u> web page.

**Bands and Modes**: Use any amateur band above 50 MHz. Contacts may be made using any mode. Contact stations only once per band.

**Categories:** Single Operator (High and Low Power); Single Operator Portable; Single Operator, 3-Bands, and Single Operator, FM-Only. Classic, Limited, and Unlimited Rover. Limited and Unlimited Multioperator. Single Operator (High and Low Power); Single Operator Portable; and Single Operator, 3-Bands entrants may enter in either All Mode or Analog Only mode sub-categories.

**Contacts**: W/VE stations may contact any other station. DX stations may only contact W/VE stations.

**Exchange**: Send 4-character Maidenhead grid-square locator (<u>www.arrl.org/grid-squares</u>). A signal report is optional.

This is a typical contest contact:

CQing Station: CQ test from KOØZ

Answering Station: W9SZ

CQer: W9SZ EM48 Answer: EN50 CQer: Thanks KOØZ As the answering station, it is not necessary to send the CQing station's call before the exchange unless you think there might be some confusion about which station you are responding to.

**Scoring:** Contacts count for different points based on band:

Count one point for each complete 50- or 144-MHz QSO.

Count two points for each 222- or 432-MHz QSO.

Count four points for each 902- or 1296-MHz QSO in January and three points in June/Sep Count eight points for each 2.3 GHz (or higher) QSO in January and four points in June/Sep

**Club Competition:** You can contribute your score to your ARRL Affiliated Club by selecting the club name when you upload your log. Club Competition rules are available here: <u>Affiliated Club Competition Rules</u>.

#### Feedback about the contest:

Send us your stories and photos! Tell us what fun you had, how you did, and what challenges you faced at the ARRL Contest Program's "Soapbox" page.

All contest queries should be directed to contests@arrl.org or 860-594-0232.

# Special ARRL Jan/Jun/Sep VHF Contest Rules

- 1. Operating Period:
  - 1.1 January: 1900 UTC Saturday through 0359 UTC Monday.
  - 1.2 June and September: 1800 UTC Saturday through 0259 UTC Monday.
  - 1.3 All stations may operate the entire contest period.
- 2. Contacts
  - 2.1 Use any band above 50 MHz and any mode.
  - 2.2 Stations may be contacted for contest credit once per band from any specific grid square.
    - 2.2.1 Rover stations using the same call sign may be contacted from more than one grid square.
  - 2.3 W/VE stations contact any station. DX stations may only contact W/VE stations.
- 3. Categories
  - 3.1 Single Operator stations
    - 3.1.1 Single Operator, Low Power (SOLP) and High Power (SOHP)\*
    - 3.1.2 Single Operator Portable (SOP)\*
    - 3.1.3 Single Operator, 3-Bands (SO3B)\*
    - 3.1.4 Single Operator, FM-Only (SOFM)
      - \* Includes All Mode and Analog Only mode sub-categories.
  - 3.2 Rover stations
    - 3.2.1 Classic Rover (R)
    - 3.2.2 Limited Rover (RL)
    - 3.2.3 Unlimited Rover (RU)
  - 3.3 Multioperator stations
    - 3.3.1 Unlimited Multioperator (UM)
    - 3.3.2 Limited Multioperator (LM)
- 4. Contest Exchange the required exchange consists of:
  - 4.1 4-character Maidenhead grid-square locator (www.arrl.org/grid-squares).
  - 4.2 A signal report is optional.
- 5. Scoring
  - 5.1 QSO points for January contest:
    - 5.1.1 Count one point for each complete 50- or 144-MHz QSO.
    - 5.1.2 Count two points for each 222- or 432-MHz QSO.
    - 5.1.3 Count four points for each 902- or 1296-MHz QSO.
    - 5.1.4 Count eight points for each 2.3 GHz (or higher) QSO.
  - 5.2 QSO points for June and September contests:
    - 5.2.1 Count one point for each complete 50- or 144-MHz QSO.
    - 5.2.2 Count two points for each 222- or 432-MHz QSO.
    - 5.2.3 Count three points for each 902- or 1296-MHz QSO.
    - 5.2.4 Count four points for each 2.3 GHz (or higher) QSO.
  - 5.3 Multipliers:
    - 5.3.1 The number of different grid squares contacted from each band. Each grid square counts as a multiplier on each band.
  - 5.4 Final score:
    - 5.4.1 Fixed stations: total QSO points from all bands times the total multipliers.
    - 5.4.2 Rover stations: total QSO points from all bands times the sum of unique grid squares worked per band (regardless of the grid square in which the contact was

- made) plus one additional multiplier for every grid square from which a contact was successfully completed.
- 5.4.3 Rover station scores will be listed in the Division from which the most contacts were made.
- 5.4.4 Rovers submitting scores for the Club Competition must submit a second summary sheet reporting QSOs and score from any contacts made outside of the club territory. Indicate clearly on the summary sheet and in log if the entry is the complete entry or only that portion of a score to be counted for a specific club.

#### 6. Operating Restrictions

- 6.1 There are no band-change restrictions on stations in any category.
- 6.2 Multioperator stations may not include QSOs with their own operators except on frequencies higher than 2.3 GHz. Even then, a complete, different station (transmitter, receiver and antenna) must exist for each QSO made under these conditions.
- 6.3 Non-rover (fixed) stations may not change locations.

#### 7. Awards

- 7.1 Online certificates will be available to all eligible participants. This includes:
  - 7.1.1 Top Single Operator entrant in each ARRL/RAC Section for High and Low Power in All Mode and Analog Only mode subcategories.
  - 7.1.2 Top Single operator on each band (50, 144, 222, 432, 902, 1296 MHz and 2.3 GHz-and-up) in each ARRL/RAC Section where significant effort or competition is evident. (Note: Since the highest score per band will be the award winner for that band, an entrant may win a certificate with additional single-band endorsements.)

For example, if KA1RWY has the highest single-operator all-band score in the CT Section and her 50- and 222-MHz scores are higher than any other CT single operators, she will earn a certificate for being the Single-operator Section leader and endorsements for 50 and 222 MHz.

- 7.1.3 Top Single Operator, Portable entrant in All Mode and Analog Only mode subcategories in each ARRL/RAC Section where significant effort or competition is evident. (Single Operator Portable entries are not eligible for single-band awards.)
- 7.1.4 Top Single Operator, 3-Band entrant in All Mode and Analog Only mode subcategories in each ARRL/RAC Section where significant effort or competition is evident. (Single Operator, 3-Band entries are not eligible for single-band awards.)
- 7.1.5 Top Single Operator, FM Only entrant in each ARRL/RAC Section where significant effort or competition is evident. (Single Operator, FM Only entries are not eligible for single-band awards.)
- 7.1.6 Top Rover, Limited Rover and Unlimited Rover entrant in each ARRL Division and Canada where significant effort or competition is evident. (Rover entries are not eligible for single-band awards.)
- 7.1.7 Top Unlimited Multioperator score in each ARRL/RAC Section where significant effort or competition is evident. (Multioperator entries are not eligible for single-band awards.)
- 7.1.8 Top Limited Multioperator in each ARRL/RAC Section where significant effort or competition is evident. (Limited Multioperator entries are not eligible for single-band awards.)
- 7.1.9 Top DX stations where significant effort or competition is evident.

# 8. Log Submission

- 8.1 Logs are due TEN (10) days after the event is over at 0259 or 0359 UTC. All entries received or postmarked by the deadline are displayed on the <u>Logs Received</u> page.
- 8.2 Send paper logs to the ARRL, addressed to January, June, or September VHF Contest.

# **Entry Categories for VHF+ Contests**

Version 1.03 – 21 Apr 2022

Category Summary (See Special Rules of each contest for Mode-based Categories)				
Categories	QRP	Low Power (LP) <sup>1</sup>	High Power (HP) <sup>2</sup>	Bands
Single Operator (SO) <sup>3</sup>	No	Yes	Yes	All bands
Single Operator Portable (SOP) <sup>3</sup>	10 W PEP	No	No	All bands
Single Operator, 3-Band (SO3B) <sup>3</sup>	100 W PEP on 50 and 144 MHz, 50 W PEP on 432 MHz			50, 144, and 432 MHz
Single Operator, FM- Only (SOFM)	100 W on all bands			50, 144, 222, and 432 MHz
Classic Rover (R)	No power subcategories			All bands
Limited Rover (RL)	Single-Operator, Low Power category limits			Four lowest- frequency bands for the contest
Unlimited Rover (RU)	No power subcategories			All bands
Multioperator, Limited (ML)	No power subcategories			All bands
Multioperator, Unlimited (MU)	No power subcategories			All bands
Checklog	n/a			n/a

1 — 50 MHz and 144 MHz bands: 200 watts PEP output or less 222 MHz and 432 MHz bands: 100 watts PEP output or less 902 MHz and above: 50 watts PEP output or less

3 – Includes all All Mode and Analog-Only (CW/SSB/FM) mode subcategories.

<sup>2 — 1500</sup> watts PEP output or the maximum allowable power level established by the national licensing authority issuing the operator and/or station license, whichever is less.

## **Category Definitions**

## VCAT.1 Single Operator (SO)

- VCAT.1.1. Power sub-categories include Low Power (SOLP) and High Power (SOHP).
- VCAT.1.2. Both Single Operator, High Power and Low Power stations compete for all-band and single-band awards.
- VCAT.1.3. Overall and single-band winners are recognized both in final results and awards.
- VCAT.1.4. Mode sub-categories include All Mode and Analog Only (CW/SSB/FM).

## VCAT.2. Single Operator Portable (SOP)

- VCAT.2.1. Output power is limited to 10 W PEP or less.
- VCAT.2.2. Stations must use a portable power source, equipment, and antennas.
- VCAT.2.3. Stations must operate from a location other than a permanent station location.
- VCAT.2.4. Stations may not change locations to outside of the original station's 500-meter circle during the contest period.
- VCAT.2.5. Mode sub-categories include All Mode and Analog Only (CW/SSB/FM).

#### VCAT.3. Single Operator, 3-Band (SO3B)

- VCAT.3.1. Stations are restricted to the 50 MHz, 144 MHz, and 432 MHz bands.
- VCAT.3.2. PEP output power is restricted to 100 W on 50 and 144 MHz, 50 W on 432 MHz.
- VCAT.3.3. Mode sub-categories include All Mode and Analog Only (CW/SSB/FM).

# VCAT.4. Single Operator, FM Only (SOFM)

- VCAT.4.1. All QSOs must be made using Frequency Modulation (FM) voice or equivalent.
- VCAT.4.2. Stations are restricted to the 50 MHz, 144 MHz, 222 MHz, and 432 MHz bands.
- VCAT.4.3. PEP output power is restricted to 100 W on all bands.

#### VCAT.5. Classic Rover (R)

# VCAT.5.1. Rover Stations

- VCAT.5.1.1. A Rover is a station that moves beyond the limits of a fixed location during the course of a contest. Rover stations may be worked from each four-character grid locator in which they operate.
- VCAT.5.1.2. Rover vehicles may transport only one station using a single call sign except as in rule STTN.1
- VCAT.5.1.3. Rover vehicles must transport all equipment, power supplies, and antennas used at each operating site.
- VCAT.5.1.4. If more than one contact on a given band is made between stations in a specific four-character grid locator, only one contact is counted for scoring purposes, with no additional scoring penalty assessed.
- VCAT.5.1.5. In distance scored contests in which rovers are allowed, if more than one contact on a given band is made between stations in specific four-character grid locators, then the contact with the longest path distance will be counted, with no additional scoring penalty assessed.

#### VCAT.5.2. Rover Operators

- VCAT.5.2.1. Rovers are limited to no more than two operators.
- VCAT.5.2.2. Drivers may not also operate while driving. Drivers may be switched out during the event.
- VCAT.5.2.3. Single occupants of a rover are allowed to perform all rover functions.

VCAT.5.2.4. Any number of observers are allowed but may not perform any rover function at any time.

#### **VCAT.5.3 Rover Operating Restrictions**

VCAT.5.3.1. There are no power sub-categories for rovers.

VCAT.5.3.2. Rovers must sign "rover" on Phone and /R on CW and digital modes after their call sign.

VCAT.5.3.3. Rovers are encouraged to adopt operating practices that allow as many stations as possible to contact them. (i.e. "captive rovers" that contact only one fixed station are discouraged.)

VCAT.5.3.4. Rover operators may submit a separate entry as a Single Operator (fixed station) in addition to their rover entry.

VCAT.5.3.5 Rovers submitting a score for a club total must also include a secondary summary sheet indicating the portion of the score that counts for the club score if any of the QSOs submitted take place outside of their club's territory.

VCAT.5.3.6. A rover may not make more than 100 QSOs with any other specific rover.

VCAT.5.3.7. Aeronautical mobile stations are not allowed.

## VCAT.6 Limited Rover (RL) – Classic Rover rules plus:

VCAT.6.1 May operate only on the four lowest-frequency bands available in a contest. For example, 50 through 432 MHz during the June VHF Contest.

VCAT.6.2 Power is limited according to the Single Operator, Low Power category rules.

## VCAT.7 Unlimited Rover (RU) – Classic Rover rules plus:

VCAT 7.1 May have more than two operators.

VCAT 7.2 Exempt from rules VCAT 5.1.3 (transport of equipment) and VCAT 5.3.6 (100-QSO limit with another specific rover).

VCAT 7.3 Unlimited Rover scores may not be contributed to a club score for the Club Competition.

## VCAT.8. Unlimited Multioperator (UM)

VCAT.8.1. Multioperator stations may operate on any contest band.

VCAT.8.2. There are no power sub-categories for Multioperator stations.

VCAT.9. Limited Multioperator (LM) – follows Unlimited Multioperator rules plus the following: VCAT.9.1. Entry may include logs from up to four bands. Operation is permitted on all bands. Logs must be submitted from all bands on which contacts were made.

# **Rules for Entry**

Version 1.04 – 01 Oct 2021

## **Conditions of Entry**

COND.1. By submitting a log, entrants agree to be bound by the contest rules. Violation of the contest rules or engaging in prohibited conduct may result in disciplinary action at the discretion of the ARRL Awards Committee up to and including disqualification.

#### COND.2 Multiple entries

COND.2.1 In VHF+ contests: Individuals and stations are limited to one entry per contest. Rover operators may submit one separate entry as a Single Operator (fixed station) in addition to their rover entry.

- COND.3. Log contents used to determine final score and awards will be available to the public.
- COND.4. Entrants agree to follow the regulations of their operating licenses and station licenses at all times.
- COND.5. Entrants agree to be bound by the decisions of the ARRL Awards Committee.
- COND.6. All entries become the property of the ARRL and are not returnable.

# Operating and Entry Restrictions

- OPRG.1. Call signs and exchange information must be sent, received, acknowledged, and logged correctly for a complete contact.
- OPRG.2. An operator may not use more than one call sign from any given location during the contest period.
- OPRG.3. Alternating CQs on two or more frequencies using the same band and mode is prohibited.
- OPRG.4. Each contact must include contemporaneous direct initiation by both operators making a contact. Initiation of a contact may be by either local or remote control.
- OPRG.5. Aeronautical and Maritime/Marine Mobile stations
  - OPRG.5.1. In contests in which DX stations may be worked by W/VE stations, contacts with aeronautical mobile and maritime mobile stations outside the US and Canada count for contact credit only.
  - OPRG.5.2. In VHF+ contests, contacts with aeronautical mobile stations do not count for contest credit.
  - OPRG.5.3. In VHF+ contests, Maritime/Marine mobile stations will be listed separately as "Marine Mobile" in the listings and compete separately for awards.
- OPRG.6. 50.110 MHz is the DX SSB calling frequency and W/VE stations are expected to only answer CQs from DX on that frequency. W/VE stations can call CQ DX on SSB from 50.100 to 50.125 MHz with 50.125 MHz being the current calling frequency for W/VE stations. If contest activity is present, W/VE stations should move higher in the band from the calling frequency. CW activity is concentrated from 50.080 to 50.100 MHz with no specific calling frequency. 50.313 MHz is the current carrier frequency for FT8 AFSK signals and 50.318 MHz for FT4.
- OPRG.7. Only one transmitted signal (or data stream) per band is permitted at any time, not including signals for the purposes described in OPRG.8. Multi Streaming (eg. using WSJT-X Dxpedition Mode) is prohibited.
- OPRG.8. Spotting Assistance in VHF+ contests
  - OPRG.8.1. All entrants, regardless of category, are permitted to use spotting assistance or nets including but not limited to DX-alerting nets, internet chat rooms, APRS and other packet, reverse beacon networks and repeaters to identify stations available for contacts and to announce (self-spot) their availability for contacts.
  - OPRG.8.2. Announcements shall be limited to call sign, location, band or frequency, mode and if applicable transmitting sequence and listening direction.
  - OPRG.8.3. These methods of spotting assistance may also be used to coordinate antenna peaking prior to initiation of the contact and to explain contest rules, such as the exchange required, for those who need clarification.
  - OPRG.8.4. Such assistance may not be used to facilitate the completion of any contact once the contact has commenced. This means such assistance may not be used to convey receipt or non-

receipt of any required element of a contact or to request a repeat of any required element of a contact.

#### Station and Equipment Restrictions

STTN.1. A transmitter used to contact one or more stations may not be subsequently used under any other call sign during the contest period, except

- a) for family stations where more than one call sign has been issued, and then only if the second call sign is used by a different operator.
- b) for remote stations used by individual amateurs that have limited or no access to their own stations.

This rule does not permit any operator to use multiple call signs at the same station to manufacture contacts to another station in the contest.

STTN.2. All transmitters and receivers must be located within a 500-meter diameter circle, excluding antennas.

STTN.3. Remote receiving installations outside the 500-meter circle are prohibited. Stations remotely controlled by radio link may use necessary equipment at the control point. This does not allow using the control point as another receiving location.

STTN.4. A station located precisely on a dividing line between grid squares must select only one as the location for exchange purposes. A different grid-square location cannot be given without moving the complete station (including antennas) at least 100 meters.

STTN.5. Above 300 GHz, contacts are permitted for contest credit only between licensed amateurs using mono-chromatic signal sources (for example, laser and LED) and employing at least one stage of electronic detection on receive. Laser usage is restricted to ANSI Z136 Class I, II, IIa, and IIIa (i.e.; output power is less than 5 mW).

STTN.6. While no minimum distance is specified for contacts, equipment should be capable of communications at a range of at least 1 km.

# **Prohibited Conduct**

Examples of prohibited conduct include, but are not limited to:

PROH.1. Claiming cross-band contacts.

PROH.2. Use of systems such as repeaters, gateways, or digipeaters to relay on-the-air signals. Satellites may be used only if permitted by the contest rules. This does not apply to the remote control of a station.

PROH.3. Spotting your own station ("self-spotting") or asking to be spotted by another station.

PROH.4. Misrepresenting contact times ("rubber clocking") to meet band change or off time rules.

PROH.5. Claiming excessive unverifiable contacts or multipliers ("log padding").

PROH.6. Transmitting signals with excessive bandwidth (e.g., spurious emissions) or harmonics.

PROH.7. Failure to identify transmissions in a timely manner (i.e., for longer periods than 1 minute).

PROH.8. Repeater input or output frequencies may not be used without the permission of the repeater owner.

#### Log Checking Penalties

Logs are cross-checked using custom software and human judgment.

- LGCK.1. Duplicate contacts are removed with no additional scoring penalty.
- LGCK.2. Contacts with call sign errors ("Busted") or that are not found in the corresponding log ("NIL") are removed from the log and an additional scoring penalty of the QSO point value of that contact is assessed.
- LGCK.3. Contacts with an incorrectly received exchange are removed with no additional scoring penalty.

# **Disciplinary Actions**

- DSCP.1. Disqualified entries will be listed in the published results, are not eligible for an award, and are not eligible to submit an entry in the next running of that contest.
- DSCP.2. Notification of Award Committee actions will be sent by email to the address provided with the log submission. The entrant has five days to appeal the decision to the Contest Program Manager. If there is no response, after that time the decision is final.
- DSCP.3. The Awards Committee reserves the right to change the category of any entry based on its examination of the log or other information.

# Log Submission Rules

Version 1.01 - 30 April 2020

# **Electronic Log Submission**

- ELOG.1. The official ARRL format for electronic logs is the Cabrillo format (<u>wwrof.org/cabrillo</u>).

  ELOG 1.1. A paper printout of an electronic log file is not an acceptable substitute. A utility for converting log files in non-Cabrillo format to Cabrillo is available at <u>www.b4h.net/cabforms</u>.
- ELOG.2. Electronic logs must be submitted via <u>contest-log-submission.arrl.org</u> with the exception of Field Day, Straight Key Night, 10 GHz and Up, ARRL EME, Rookie Roundup, and School Club Roundup.
- ELOG.3. Electronic logs are assumed to be signed as complying with all contest rules and conditions when they are submitted.
- ELOG.4. Multioperator logs must include the complete list of operators in the Cabrillo OPERATORS: field.
- ELOG.5. Multioperator, Two Transmitter (M2) category logs must indicate which transmitter makes each contact in the log.

#### Paper Log Submission

- PLOG.1. Entrants must use the most current official contest forms or an acceptable facsimile, as scoring rules, ARRL sections, etc., do change periodically. See the ARRL website for downloadable forms.
- PLOG.2 Paper logs may be mailed to ARRL, 225 Main St, Newington CT 06111, USA. Each paper log entry must be accompanied by a Summary Sheet listing all scoring information, the category of competition, and the entrant's name.
- PLOG.3. Paper entries with 500 or more contacts must include an official dupe sheet for the contest.

#### Log Submission Deadline

- LGDL.1. Entries must be sent to the ARRL by the log deadline published in the rules for each contest. For electronic submissions, the submission date and time is determined by the app confirmation. For paper entries submitted by mail, submission date and time is determined from the postmark.
- LGDL.2. Submitted entries will be listed on the Logs Received page until final results are published.
- LGDL.3. Logs not submitted or postmarked by the contest deadline are not eligible for awards.
- LGDL.4. Entries received at the ARRL after the contest submission deadline may not be included in the contest results.

# **Definitions and Glossary**

Version 1.05 – 21 Apr 2022

**All Mode:** Contacts may be made using any mode.

**Analog Mode:** Contacts may be made using CW, SSB, AM, or FM Only.

**Automated Multi-Channel Decoder**: Device such as *CW Skimmer* software that provides information about the identity and frequency of contest station transmissions while functioning independently of the operator's direct control and participation. Software that displays multiple decoded signals at the same time is considered to be a multi-channel decoder.

**Band Changes:** A band change consists of two consecutive contacts on different bands. For example, making a contact on 20 meters then on 40 meters and then on 20 meters counts as two band changes.

**Clock Hour:** A clock hour is from zero to 59 minutes on the clock, not any 60 consecutive minutes.

**Digital** (mode): Any mode defined as "data" in the FCC Part 97 rules (§97.3(c)(2)).

**Dupe Sheet:** An alphanumerically sorted list of all contacts made during the contest, sorted by band and mode as appropriate. A list of duplicate contacts does not meet this requirement.

**DX Stations:** Any non-W/VE station. This includes US possessions and territories in the Caribbean and Pacific and St. Paul Island (CY9) and Sable Island (CY $\emptyset$ ). Exceptions such as the status of Hawaii (KH6) and Alaska (KL7) are stated in the Special Rules for each contest.

**DXCC Entities:** defined by ARRL DXCC List

**Electronic Log or Entry:** consists of any log submitted by electronic means.

**High Power (HP):** 1500 watts PEP output or the maximum allowable power level established by the national licensing authority issuing the operator and/or station license, whichever is less.

#### Low Power (LP):

Below 30 MHz: 100 watts PEP output or less 50 MHz and 144 MHz bands: 200 watts PEP output or less 222 MHz and 432 MHz bands: 100 watts PEP output or less 902 MHz and above: 50 watts PEP output or less

**Maritime Mobile:** For the purposes of ARRL contests, maritime mobile is defined as shipboard operation, outside of the territorial waters of the country (defined for these purposes as 12 miles offshore).

**Maximum Number of Signals:** This Maximum Number does not include a signal necessary to provide spotting assistance, i.e. 2m packet connection. Other than that exception, it is the maximum number of signals that a station may emit at any time.

**Multioperator:** More than one person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments.

**Off Time:** A period during which no contacts are logged. Unless otherwise specified, to count as off time, there must be at least 30 consecutive minutes in the log without a contact. During off time, operators may not listen to contest activity.

**QRP:** 5 watts PEP output or less (10 watts PEP or less in VHF Single Operator Portable category)

RTTY (mode): Any mode defined as "RTTY" in the FCC Part 97 rules (§97.3(c)(7)).

**Single Operator:** One person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments.

**Spotting Assistance:** Use of any operating arrangements involving other individuals, DX-alerting nets, packet, Internet, automated multi-channel decoders, chat rooms, etc. Generating spotting information for use by other stations is not considered to be spotting assistance.

**W/VE stations:** stations operating in the United States and District of Columbia with the exception of Alaska and Hawaii, and stations operating within the Canadian provinces and territories with the exception of the DXCC entities St Paul Island and Sable Island. (Exception – See the Special Rules for Sweepstakes and the 160 Meter Contest regarding US possessions and territories.)