# ARRL 10 GHz and Up Contest Rules

# **Introduction and How to Operate**

**Contest Objective:** For North American stations to contact each other from as many different North American locations as possible on bands from 10 GHz through Light.

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 ARRL contest calendar):

August: Third full weekend September: Third full weekend

Each weekend begins 0900 UTC Saturday and runs through 0759 UTC Monday. Participation is limited to 42 hours of operating time in each of the two contest weekends. Participants are reminded to log all contacts in UTC time.

**Log Deadline:** Upload your log at <u>contests.arrl.org/arrl10gscoresubmission.php</u> no later than **THIRTY (30)** days after the contest is over at 0759 UTC. Paper log forms are available via the <u>ARRL Contests</u> web page.

**Bands and Modes**: Use any amateur band from 10 GHz through Light. Contacts may be made using any mode. See the Station and Equipment Restrictions rules for restrictions on contacts made above 300 GHz.

**Entry Categories:** The two entry categories are 10 GHz Only and 10 GHz and Up. There are no power sub-categories.

**Contacts**: Contacts with a station may be made via terrestrial means (no Earth-Moon-Earth (EME), aeronautical mobile, or satellite contacts allowed) on each band over a distance of at least 1 km. Stations may be contacted again on the same band if either station has moved to a new location, defined as a straight-line distance of at least 16 km or 10 miles. Duplicate contacts with both stations in the same location may not be made on both weekends.

**Exchange**: Send 6-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 EM48jw Answer: EN50jp 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:** Each contact counts for distance points which are the distance in km between the centers of the station grid locators. (Use a map and ruler or software to determine distance.) Distance points are then multiplied by a Band Factor (see the Special Rules for the contest below). Each unique call sign (not including portable designators) on each band counts for 100 QSO points. Total score equals distance points plus QSO points.

Scoring example: On the first weekend, W9JJ operating from Mt Greylock, MA works W1VD (distance 97 km x1) and W1LJ (distance 107 km x1) on 10 GHz; and W1LJ (distance 107 km x2) on 24 GHz. On the second weekend, W9JJ operating from Pack Monadnock, NH works the following stations: W1VD (154 km x1), W1VT (205 km x1), and W1LJ (157 km x1) on 10 GHz; K1RO (147 km x2) on 24 GHz; and K1RO (147 km x3) on 47 GHz.

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Distance points = 97 + 107 + 214 + 154 + 205 + 157 + 294 + 441 = 1669

QSO points = 100 X 6 = 600 (10 GHz: W1VD, W1LJ, W1VT; 24 GHz: W1LJ, K1RO; 47 GHz K1RO)

Final Score = 1669 + 600 = 226
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#### 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 10 GHz and Up Contest Rules**

- 1. Operating Period: 0900 UTC Saturday and runs through 0759 UTC Monday. Participation is limited to 42 hours of operating time in each of the two contest weekends.
- 2. Contacts
  - 2.1 North American stations contact any other station located in North America.
  - 2.2 Use any band above 10 GHz and any mode.
  - 2.3 Contacts may be made via terrestrial means only; Earth-Moon-Earth (EME), aeronautical mobile, and satellite contacts are prohibited.
  - 2.4 Stations may be contacted for contest credit once per band from each specific location.
- 3. Categories
  - 3.1 10 GHz Only
  - 3.2 10 GHz and Up
  - 3.3 There are no Single Operator, Multioperator, or Rover categories.
  - 3.4 There are no power sub-categories.
- 4. Contest Exchange the required exchange consists of:
  - 4.1 6-character Maidenhead grid-square locator (www.arrl.org/grid-squares).
  - 4.2 A signal report is optional.
- 5. Scoring

Each contact counts for distance points multiplied by a Band Factor and QSO points as follows:

- 5.1 Distance points:
  - 5.1.1 The distance in km between the center of the grid locators for each station multiplied by the Band Factor below.
- 5.2 Band Factor:

Band	Band Factor
10 GHz	1
24 GHz	2
47 GHz	3
75 GHz	4
122 GHz and Up	5

- 5.3 QSO points:
  - 5.3.1 Each unique call sign worked per band counts for 100 QSO points. **QSO points are not multiplied by the band factor.** Portable indicators added to a call sign are not considered as making the call sign unique.
- 5.4 Final score:
  - 5.4.1 Total distance points plus total QSO points.
- 6. Operating Restrictions
  - 6.1 There are no band-change restrictions on stations in any category.
  - 6.2 Contacts should be made over a distance of at least 1 km
  - 6.3 Stations may be contacted again on the same band if either station has moved to a new location, defined as a straight-line distance of at least 16 km or 10 miles.
  - 6.4 Duplicate contacts with both stations in the same location may not be made on both weekends.
  - 6.5 Scheduling contacts is both permitted and encouraged.
- 7. Awards
  - 7.1 Online certificates will be available in recognition of exceptional operating efforts by eligible participants.

## 8. Log Submission

- 8.1 Logs are due THIRTY (30) days after the event is over at 0759 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 ARRL 10 GHz and Up Contest.

## **Rules for Entry**

Version 1.06a - 19 Jul 2023

#### **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. Not applicable to the 10 GHz and Up Contest.

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. Not applicable to the 10 GHz and Up Contest.

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. All equipment should be capable of communications at a range of at least 5 km. Contacts made between non-fixed stations, for example portable and/or rover stations, should be made over a distance of at least 5 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. Misrepresenting contact times ("rubber clocking") to meet band change or off time rules.
- PROH.4. Claiming excessive unverifiable contacts or multipliers ("log padding").
- PROH.5. Transmitting signals with excessive bandwidth (e.g., spurious emissions) or harmonics.
- PROH.6. Failure to identify transmissions in a timely manner (i.e., for longer periods than 1 minute).

PROH.7. 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 (<a href="www.of.org/cabrillo">www.of.org/cabrillo</a>).

  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 <a href="www.b4h.net/cabforms">www.b4h.net/cabforms</a>.
- 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 1.06 - 15 Jul 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):

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/QSO Finding Assistance:** Use of any technology that provides call sign or multiplier identification of a signal to the operator. This includes PSKReporter, Telnet, DX spotting websites or bulletin board systems, automated multi-channel decoders, etc. This also includes operating arrangements with other individuals, DX alerting nets, chat rooms, social media, live video streaming, etc. 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. 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.)