

ARRL International EME Contest Rules

Introduction and How to Operate

Contest Objective: To work as many amateur stations as possible via the earth-moon-earth (EME) path on any authorized amateur frequency above 50 MHz.

Your [ARRL membership](#) 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](#)):

Four full weekend 48-hour periods:

Weekends 1 and 2: 2.3+ GHz

Weekends 3 and 4: 50-1296 MHz

Contest begins at 0000 UTC Saturday and runs through 2359 UTC Sunday of each weekend.

Log Deadline: Upload your log at contests.arrl.org/arrlemescoresubmission.php no later than **THIRTY (30)** days after the final weekend of the contest is over at 2359 UTC. Log submissions must contain your **complete log from all weekends** operated during the event. Paper log forms are available on the [ARRL EME Contest](#) web page.

Bands and Modes: Use any amateur band in the designated range for the contest period. Any combination of CW, phone, or digital modes may be used.

Entry Categories: Single Operator, All Mode, Single Band or Multiband; Single Operator, CW/Phone Only, Single Band (144, 432, and 1296 MHz) or Multiband; Multioperator, All Mode, Single Band or Multiband; Multioperator, CW/Phone Only (144, 432, and 1296 MHz) or Multiband.

Contacts: Stations may be worked for credit only once per band, regardless of mode. All contacts must be via earth-moon-earth (EME).

Exchange: Send 4-character Maidenhead grid-square locator (www.arrl.org/grid-squares). Stations who operate from multiple grid squares must indicate in their log submission the grid in which they operated from. Analog stations may optionally send a signal report in any mutually understood format if station size or propagation prohibit grid squares from being exchanged.

Scoring: Each complete EME contact counts for 100 QSO points. Multipliers are each unique four-digit Maidenhead grid locator on each band. Final score equals the total QSO points times the sum of multipliers worked from each band.

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 EME Contest Rules

1. Operating Period: Four full weekend 48-hour periods (0000 UTC on Saturday through 2359 UTC Sunday).
 - 1.1 Weekends 1 and 2: 2.3+ GHz
 - 1.2 Weekends 3 and 4: 50-1296 MHz
2. Contacts
 - 2.1 Use CW, phone, or any digital mode
 - 2.2 Use only the bands designated for the contest period
 - 2.3 Stations may be worked for credit only once per band, regardless of mode.
3. Categories
 - 3.1 Single Operator All Mode: Any combination of CW, phone, or digital modes. Available for all bands.
 - 3.2 Single Operator CW/Phone Only: 144, 432, and 1296 MHz bands and Multi band logs.
 - 3.3 Multioperator All Mode: Any combination of CW, phone, or digital modes. Available for all bands.
 - 3.4 Multioperator CW/Phone Only: 144, 432, and 1296 MHz bands and multi band logs.
4. Contest Exchange
 - 4.1 Each station must send and receive 4-character Maidenhead grid-square locators. Analog stations may optionally send a signal report in any mutually understood format if station size or propagation prohibit grid squares from being exchanged.
5. Scoring
 - 5.1 QSO points: Count 100 points for each complete EME contact.
 - 5.2 Multiplier: Each 4-character Maidenhead grid-square locator worked via EME on each band.
 - 5.3 Final Score: Multiply QSO point total by the sum of multipliers worked from each band.
6. Operating Restrictions
 - 6.1 There is no specified minimum terrestrial distance for contacts, but all communications must be copied over the EME path, regardless how strong (or weak) a nearby station's terrestrial signal may be.
 - 6.2 Commercial Equipment: Stations using equipment that is not amateur owned (such as a dish antenna or lab equipment owned by an institution or government agency) are ineligible for awards.
 - 6.3 A Multioperator entry may be made up of neighboring amateurs within one state, province, or non-US/Canadian DXCC entity, but with EME facilities for different bands on different team members' premises, as long as no two are more than 50 km (30 miles) apart.
 - 6.3.1 Multioperator neighborhood groups may use the same call signs at each location if permissible under national licensing rules and regulations. If not permissible, separate callsigns may be used for the multioperator neighborhood entry.
 - 6.3.2 When operating under this neighborhood provision, all logs must be submitted together as a single entry or in a single envelope with a single summary sheet showing the combined operation, designating the principal callsign for the entry.
 - 6.3.3 All multioperator callsigns will be shown in the results.
7. Awards
 - 7.1 [Online Certificates](#) will be available in the following categories:
 - 7.1.1 Single operator, Multi-band, All Mode

- 7.2.2 Single operator, Multi-band, CW Only
 - 7.1.3 Single operator, All Mode, for each single band.
 - 7.1.4 Single operator, CW/Phone Only, for each of the single bands 144, 432, and 1296 MHz.
 - 7.1.5 Multioperator, Multi-band, All Mode
 - 7.1.6 Multioperator, Multi-band, CW/Phone Only
 - 7.1.7 Multioperator, All Mode, for each single band.
 - 7.1.8 Multioperator, CW/Phone Only, for each of the single bands 144, 432, and 1296 MHz
 - 7.1.9 Multiband entrants will also be listed in the single band tables of the results and are eligible for those awards.
8. Log Submission
- 8.1 Logs are due **THIRTY (30)** days after the final weekend of the contest is over at 2359 UTC. All entries received or postmarked by the deadline are displayed on the [Logs Received](#) page.
 - 8.2 Log submissions must contain your **complete log from all weekends** operated during the event. Stations who operate from more than one location must include the grid square operated from on each QSO line in the Cabrillo log, or indicate which grid they operated from on their paper log.
 - 8.2 Send paper logs to the ARRL, addressed to International EME Contest.
 - 8.3 Electronic logs must be submitted via contests.arrl.org/arrlemescoresubmission.php

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. Log contents used to determine final score and awards will be available to the public.
- COND.3. Entrants agree to follow the regulations of their operating licenses and station licenses at all times.
- COND.4. Entrants agree to be bound by the decisions of the ARRL Awards Committee.
- COND.4. 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 per band is permitted at any time, not including signals for the purposes described in OPRG.8.

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. 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 (www.arrrl.org/cabrillo).

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 www.b4h.net/cabforms.

ELOG.2. Electronic logs must be submitted via contest-log-submission.arrl.org 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 1.04 – 01 Jan 2022

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 (CYØ). 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

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.)