# IARU HF World Championship Rules

### Introduction and How to Operate

**Contest Objective:** To support amateur self-training in radiocommunications including improving amateur operating skills, conducting technical investigations, and intercommunicating with other amateurs around the world, especially IARU member society headquarters stations.

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)

Second full weekend in July

**Contest Period:** Begins 1200 UTC Saturday and runs through 1159 UTC Sunday. There is no operating time restriction for stations in any category.

**Log Deadline:** Upload your log at <u>contest-log-submission.arrl.org</u> no later than **SEVEN (7)** days after the contest is over at 1159 UTC. Paper log forms are available at the <u>IARU HF Championship</u> web page.

**Bands and Modes**: Use only the 1.8, 3.5, 7, 14, 21, and 28 MHz bands. Both phone and CW may be used. Contact stations only once per band and mode.

**Categories:** Single Operator and Single Operator Unlimited stations in any power category can also enter as Mixed-Mode, CW-Only, or Phone-Only. Multioperator stations may only enter as Mixed-Mode. See the Special Rules and Entry Categories sections for details.

**Contacts:** All stations may contact any other station. Stations may be contacted once per band on each mode.

**Exchange**: All stations send a signal report and ITU zone. Headquarters stations operated by an IARU National Society send the abbreviation for their society instead of zone. (i.e. W1AW sends ARRL) Stations operated by the IARU Administrative Council and the three IARU regional Executive committees send "AC," "R1," "R2," and "R3" as appropriate. A link to the ITU zone maps and a table defining the borders of US and Canadian zones are provided below.

This is a typical contest contact:

CQing Station: CQ test from W9JJ Answering Station: G3BJ

CQer: G3BJ 59 8 Answer: 59 27

CQer: Thanks, CQ test from W9JJ

Or

CQing HQ Station: CQ TEST DE W1AW

Answering Station: N1SFE HQ station: N1SFE 599 ARRL

Answer: 599 8

HQ station: TU N1SFE

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:** The QSO point value of a contact depends on the location of the station — see the special scoring rules for complete information. To calculate your final score, multiply the total QSO points by the number of ITU zones and official IARU stations as described in the Special Rules.

#### 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.

#### **Additional Resources:**

**ITU Zone Map from EI8IC** 

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

### ITU Zone Borders in the United States and Canada

ITU Zone	Prefix	Location
06	W-K-N-A	U.S.A. (Washington, Oregon, California, Nevada, Idaho, & that part of Montana, Utah & Arizona west of 110 Deg. W.)
07	W-K-N-A	U.S.A. (N. Dakota, S. Dakota, Nebraska, Wyoming, Colorado, New Mexico, Texas, Oklahoma, Kansas, Iowa, Minnesota, that part of Utah & Arizona East of 110 Deg. W., & that part of Michigan, part of Montana Illinois, Missouri, Arkansas, Tennessee, Mississippi, Louisiana & Wisconsin west of 90 Deg. W.)
08	W-K-N-A	U.S.A. (Indiana, Alabama, Georgia, Florida, Virginia, Kentucky, N. Carolina, S. Carolina, West Virginia, Maryland, Delaware, Ohio, Pennsylvania, New Jersey, New York, Maine, Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, & that part of Michigan, Illinois, Missouri, Arkansas, Mississippi, Tennessee, Louisiana & Wisconsin east of 90 Deg. W.)
01	KL7	Alaska (West of 141 Deg. W.)
02	KL7 VE6,7,VY1	Alaska (East of 141 Deg. W.) Canada (South of 80 Deg. N. and West of 110 Deg. W.)
03	VE3,4,5,8	Canada (South of 80 Deg. N. and between 90 Deg. and 110 Deg. W.) Includes western area of Ontario North section
04	Pieces of VYO VE2,3,4,8	Canada (South of 80 Deg. N. and between 70 Deg. and 90 Deg. W. including Baffin Isl.) Includes Ontario East, Ontario South & Greater Toronto Area sections and eastern part of Ontario North section
09	FP VE1,2 VY2,VO2, VO1 Pieces of VY0	East of 70 Deg. W., including Labrador, Newfoundland, Nova Scotia, but excluding Baffin
75	VE8	Isl.) Canada (80 Deg. N. to 90 Deg. N., North Pole)

### Special IARU HF Championship Rules

- 1. Operating Period: 1200 UTC Saturday through 1159 UTC Sunday
  - 1.1 There are no operating time restrictions in any category.
- 2. Contacts
  - 2.1 Use only the 1.8, 3.5, 7, 14, 21, and 28 MHz bands.
  - 2.2 Any station may be contacted on each band.
  - 2.3 Mixed-Mode entrants may contact stations for contest credit on phone and on CW.
- 3. Categories
  - 3.1 See the Entry Categories section for power sub-categories.
  - 3.2 Single-Operator and Single-Operator Unlimited stations may enter as Mixed-Mode, CW-Only, or Phone-Only in any power sub-category. Single-Operator and Single-Operator Unlimited stations may enter in the Youth overlay category if the operator is 25 years old or younger.
  - 3.3 Multioperator stations may only enter as Mixed-Mode.
  - 3.4 IARU Society HQ Station
- 4. Contest Exchange

The required exchange consists of:

- 4.1 Signal report (RS or RST)
- 4.2 ITU Zone, IARU Society Abbreviation, or IARU Official
  - 4.2.1 IARU Member Society HQ stations send the abbreviation for their <u>national society</u>. IARU International Secretariat club station NU1AW counts as an HQ station and sends "IARU".
  - 4.2.2 Members of the IARU Administrative Council and the three IARU regional Executive committees send "AC", "R1", "R2", and "R3" as appropriate.
  - 4.2.3 All other stations send their ITU Zone.
- 5. Scoring
  - 5.1 QSO points:
    - 5.1.1 Contacts within your own ITU zone count one (1) point.
    - 5.1.2 Contacts with an IARU HQ or IARU official station count one (1) point.
    - 5.1.3 Contacts with a station in the same ITU zone but on a different continent count one (1) point.
    - 5.1.4 Contacts within your continent but in a different ITU zone count three (3) points.
    - 5.1.5 Contacts with a different continent and ITU zone count five (5) points.
  - 5.2 Multipliers:
    - 5.2.1 The total number of ITU zones worked on each band (not mode), plus IARU member society HQ stations worked on each band (not mode). IARU officials represent a maximum of four multipliers per band (AC, R1, R2 and R3).
    - 5.2.2 IARU member society HQ stations and officials do not count for zone multipliers.
    - 5.2.3 To qualify as the special multiplier, Administrative Council and Regional Executive Committee stations must only be operated by the individual station licensee as a Single Operator entry or as a Multioperator, Single transmitter entry with significant participation by the licensee.
  - 5.3 Final score equals the total QSO points times the total multipliers contacted.
- 6. Operating Restrictions
  - 6.1 For Phone-Only or CW-Only entrants, only contacts on the designated mode for count for contact credit.

- 6.2 A station may only be worked for credit in the portion of the band that is generally accepted for the mode used.
- 6.3 Where contest-preferred segments are incorporated into regional band plans, participants must observe them.
- 6.4 Multioperator, Single Transmitter stations must remain on a band and mode for at least 10 minutes before changing bands or modes. The 10-minute period begins when a contact is logged. Violation of this rule may result in the entry being reclassified as a checklog.
- 6.5 Alternating CQs on two or more frequencies on the same band is not permitted.
- 7. IARU Member Society HQ Station Requirements
  - 7.1 May have only one transmitted signal per band and mode (160 CW, 160 Phone, 80 CW, 80 Phone, 40 CW, 40 Phone, 20 CW, 20 Phone, 15 CW, 15 Phone, 10 CW, 10 Phone) at the same time.
  - 7.2 All stations involved in an HQ operation must be in a single ITU zone.
  - 7.3 Only one HQ station callsign per member society per band mode is permitted (160 CW, 160 Phone, 80 CW, 80 Phone, 40 CW, 40 Phone, 20 CW, 20 Phone, 15 CW, 15 Phone, 10 CW, 10 Phone).

#### 8. Awards

- 8.1 Online certificates will be available to all eligible participants. This includes:
  - 8.1.1 The highest scoring entry in each category in each ITU zone, each DXCC country, and each ARRL Section.
  - 8.1.2 A certificate of participation will be awarded to all IARU member society HQ stations.
  - 8.1.3 Achievement level awards will be issued to those making at least 250 contacts or having a multiplier total of 75 or more.
- 8.2 Additional awards may be made at the discretion of each country's IARU member society.
- 9. Log Submission
  - 9.1 Logs are due SEVEN (7) days after the event is over at 1159 UTC. If an extension of the log deadline is needed, contact the ARRL Contest Program Manager. All entries received are displayed on the Logs Received page.
  - 9.2 Send paper logs to ARRL HQ addressed to ARRL Contest Logs IARU International Secretariat.

### Entry Categories for IARU HF World Championship

Version 1.1 – 21 Apr 2022

## Category Summary

(See Special Rules for Mode-based Categories)

Categories	QRP <sup>1</sup>	Low Power (LP) <sup>2</sup>	High Power (HP) <sup>3</sup>	Band Change Restrictions	Spotting Assistance	Number of Simultaneous Signals <sup>4</sup>
Single Operator (SO)	Yes	Yes	Yes	None	No	One
Single Operator Unlimited (SOU)	Yes	Yes	Yes	None	Yes	One
Multioperator, Single Transmitter (MS)	No	No	Yes	See rule 6.4 under Special Rules section	Yes	One
Multioperator, Two Transmitter (M2)	No	Yes	No	Not Applicable	No	Two
Checklog		n/a	1	n/a	n/a	n/a

<sup>1 — 5</sup> watts PEP output or less

#### HCAT.1. Single Operator (SO)

- HCAT.1.1. Use of spotting assistance is not permitted.
- HCAT.1.2. Only one transmitted signal is permitted at any time
- HCAT.1.3. Power sub-categories include QRP (SOQRP), Low Power (SOLP), and High Power (SOHP).
- HCAT.1.4. Stations may enter as Mixed-Mode, CW-Only, or Phone-Only in any power subcategory.
- HCAT.1.5. Single Operator stations may enter in the Youth Overlay category if the operator is 25 years old or younger.

#### HCAT.2. Single Operator Unlimited (SOU)

- HCAT.2.1. Use of publicly available spotting assistance is permitted. Spotting information must be obtained from a public spotting network.
- HCAT.2.2. Only one transmitted signal is permitted at any time, not including transmissions on a spotting net or network.

<sup>2 — 100</sup> watts PEP output or less

<sup>3-1500</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.

<sup>4 —</sup> Multiple signals are not allowed on the same band, regardless of category or mode.

HCAT.2.3. Power sub-categories include QRP (SOUQRP), Low Power (SOULP), and High Power (SOUHP).

HCAT.2.4. Stations may enter as Mixed-Mode, CW-Only, or Phone-Only in any power subcategory.

HCAT.2.5. Single Operator Unlimited stations may enter in the Youth Overlay category if the operator is 25 years old or younger.

#### HCAT.4. Multioperator

HCAT.4.1. Multioperator, Single Transmitter (MS)

HCAT.4.2.1. Only one transmitted signal is allowed at any time.

HCAT.4.1.2 Use of publicly available spotting assistance is permitted. Spotting information must be obtained from a public spotting network.

HCAT.4.1.3. Stations must remain on a band and mode for at least 10 minutes before changing bands or modes. The 10-minute period begins when a contact is logged. Violation of this rule will result in the entry category being changed to Checklog.

HCAT.4.1.4. There are no power subcategories. All entrants are classified as Multioperator, Single Transmitter, High Power.

HCAT.4.2. Multioperator, Two Transmitter (M2)

HCAT.4.2.1. Only two transmitted signals are allowed at any time and must be on different bands. No second in-band receivers are allowed.

HCAT.4.2.2 Use of spotting assistance is not permitted, including the use of any external call sign databases and Super Check Partial.

HCAT.4.2.3. There are no band change restrictions in this category.

HCAT.4.2.4. Participants are limited to 100 W PEP output power (Low Power)

HCAT.4.2.5. Both transmitters may contact any station. A station may only be contacted once per band per mode regardless of which transmitter is used.

HCAT.4.2.6. The submitted log must indicate which transmitter made each contact.

### **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 HF contests: Individuals and stations may submit multiple entries per contest under different call signs.

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.6. Only one transmitted signal per band is permitted at any time.

#### 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.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. Arranging, soliciting, or confirming any contacts during or after the contest by use of any non-amateur radio means such as telephone, text messaging, websites, email, or social media.

PROH.4. Spotting your own station ("self-spotting") or asking to be spotted by another station.

PROH.5. Misrepresenting contact times ("rubber clocking") to meet band change or off time rules.

PROH.6. Claiming excessive unverifiable contacts or multipliers ("log padding").

PROH.7. Transmitting signals with excessive bandwidth (e.g., spurious emissions) or harmonics.

PROH.8. Failure to identify transmissions in a timely manner (i.e., for longer periods than 1 minute).

PROH.9. 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 1.04 - 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 (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

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.)