

2014 ARRL International DX CW Contest Results

Records fall — is this Solar Cycle 24's last hurrah?

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There really isn't any better opportunity for the American or Canadian "little pistol" to work a lot of DX than the oldest of all contests — the ARRL's International DX Contest. Originally named the International Relay Party when it was announced in 1927, the idea was to exchange messages with other stations around the world directly, without any intervening stations.¹ CW and superheterodyne receivers were new and exciting technology on the short waves in those days — could we do it? You bet! Thus the idea of DX contesting was born in radiosport.

Although Solar Cycle 16 was on its way out, there were still enough sunspots generating ionizing ultraviolet for the ionosphere to redirect the outbound CW signals earthward. Even the ionosphere was a new concept in 1928, having only been discovered a few years earlier and still bearing the name "Kennelly-Heaviside Layer." Amateurs had played a key role in the receiving experiments of the early 1920s that established the ionosphere's existence and here they were exploiting it as a playing field for an international wireless competition!²

Today, we find Solar Cycle 24 also about to begin its slide into the between-cycle minimum but just as the poor fellow pleads at the beginning of *Monty Python and the Holy Grail*, our sunspot cycle exclaims, "I'm not dead yet!" And dead it most certainly was not. In the preceding fall, the somnolescent cycle that was snoozing its way through a languid and bittersweet farewell suddenly began producing sunspots in abundance. The 2013 CQ World Wide contests were madhouses of band-packing activity.

¹Handy, F.E., 1BDI, "Coming — An International Relay Party," *QST*, March 1927, page 28.

²Kruse, S., "Bureau of Standards — ARRL Tests of Short Wave Radio Signal Fading," *QST*, November 1920, p 5.

Category Abbreviations

SOHP/LP/QRP — Single Op, All Band

SOUHP/LP — Single Op Unlimited

SOSB — Single Op, Single Band

MSH/L — Multiop, Single Transmitter

M2 — Multiop, Two Transmitter

MM — Multiop, Multi-Transmitter



Does this look familiar? Larry, K5OT, operated with George, K5TR, to place fourth in the Multioperator, Single Transmitter, High Power category from South Texas. George's station is well laid out for comfortable, undistracted operating. [George Fremin, K5TR, photo]

The November Sweepstakes weekends saw Clean Sweepers vacuuming up every contact, and December's 10 Meter Contest was another for the record books. A solar hiccup produced some geomagnetic heartburn for January's RTTY Roundup...would conditions hold up for the ARRL DX Contest on February 15th and 16th?

Leading up to the contest, life was looking pretty rosy on the HF bands. With just 10 days to go, the solar flux hit 194 and stayed above 160 all the way up to contest day. Aside from a mild disturbance the weekend before, the A and K indexes were also low, leading to giddy anticipation in the shacks of HF operators across the land. (You can find archives of both solar and geomagnetic data online at www.swpc.noaa.gov/ftpmenu/indices/old_indices.html.) There were thunderheads on the horizon, however.

The ARRL Propagation Bulletin ARLP007, released on Friday, February 14, read, "At 2351 UTC on February 12, the Australian Space Forecast Centre released this geomagnetic warning: 'INCREASED GEOMAGNETIC ACTIVITY EXPECTED DUE TO CORONAL MASS EJECTION FROM 13 – 15 FEBRUARY 2014.' They predict a minor geomagnetic storm on Saturday, February 15. Too bad that is the first day of the ARRL International CW DX Contest." Yeah, too

bad! Why does it *always* seem to happen just before a contest?

So we held our collective breath and waited. Friday afternoon came in North America, the starting bell went off and, as it always seems at 0000 UTC, there were pileups with swarms of callers. Solar flux was 162, the A index was 11, and the K index was 0. The contest was off to a fast start.

In the middle of the North American night, things began to change.

Accuracy Index Leaders

W-VE	Call	Category	QSOs	Error %	Index
SO	N2IC	SOHP	4440	0.4	13.607
SOU	K11G	SOUHP	5168	0.6	13.653
MO	K3LR	MM	9378	1.1	13.862
DX	Call	Category	QSOs	Error %	Index
SO	6Y2T (VE3DZ, op)	SOHP	5680	0.3	13.724
SOU	YN2NC (AA4NC, op)	SOUHP	4500	0.6	13.593
MO	PJ2T	MM	8860	0.8	13.867

At sunrise on the East Coast, the K index jumped to 3 as the charged particles slammed into the Earth's magnetosphere, held steady through the day, and then hit 5 at the halfway mark. On Sunday, while solar flux held steady at 164, the A index had doubled to 22 and K dropped to a desultory 2 or 3, leaving the polar paths somewhat muddy at best. If you weren't one of the Big Guns, Sunday was a lot less fun than Saturday.

Well, was it awful? No! From the following week's bulletin, ARLP008, Jeff Hartley, N8II, recollected, "It was quite a fun weekend in the ARRL DX contest. Despite solar flares, conditions allowed for many QSOs. Conditions were so good that N1UR claims a new low power all-band record, one which has stood since 2002, near the peak of Solar Cycle 23 when solar activity was much higher than now." Actually, N1UR's new SOLP record of 4.429 Mpts edged by the old all-time mark of 4.236 Mpts set in 2001 by N2NL operating at K4XS's station.

In fact, here on the US-Canada side, K1IG pushed his all-time SOUHP (Single Op Unlimited, High Power) record up by 1.3 Mpts to 8.9 Mpts. K1LZ and W2FU both exceeded the high-water mark for MSH (Multi Single, High Power) and K3LR added another 850 kpts to the MM record. Across the various ponds and borders, none of the all-time marks fell.

And as is usually the case, numerous records got the pants scared off of them by various close calls and near misses. For a more complete look at the records, browse to the contest's full results at www.arrrl.org/contest-results-articles and the records archive at www.arrrl.org/contest-records, which are maintained by Bob Schreibermeier, K3PH.

When you have a good look at the scores across all of the bands and around the world, you'll find that overall, conditions were pretty good! The disturbance from the CME certainly could have been a lot worse and there was enough solar flux to open all of the bands for everyone. I hope you enjoyed it because we won't have too many of these years left before the sunspots return to their slumber.

Here at Home

I'm sure the Top Ten and leader tables the first thing you look at in a contest writeup! These are all solid efforts from the best operators around and they tell the tale of propagation and perseverance.

While the northeastern divisions are always well-represented by top scores (Take a look at the slugfests in the SOHP and SOUHP

Top 10 — W/VE

Single Operator, High Power	Single Operator Unlimited, High Power	Single Operator, 40 Meters	Multioperator, Single Transmitter, High Power
N2NT 6,679,248	K11G 8,923,164	W3BGN 483,084	K1LZ 9,975,189
N2IC 6,056,136	K0DQ 8,385,762	KD2RD 362,586	W2FU 9,442,368
VY2TT (K6LA, op) 5,418,363	AA3B 7,204,080	N4UA 353,100	K2QMF 5,631,600
K1ZZ 5,344,704	K3WW 6,927,327	N4WWW 327,240	K5TR 5,455,296
XL3A (VE3AT, op) 5,173,872	K5ZD 6,474,960	W0UO 247,641	AA9A 4,822,200
AA1K 4,958,064	VA2WA 5,948,964	NX6T (N0DY, op) 239,844	K5RT 3,764,436
NN3W (KL2A, op) 4,526,991	N3RS 5,743,296	N6MA 159,858	K6LL 3,338,442
WX0B (AD5Q, op) 4,313,610	K1AR 5,468,937	K3NK 113,796	VE3YAA 2,941,920
K4RO 4,193,850	N1EU 4,803,768	K3STX 93,366	N4CW 2,775,780
K3EL 3,972,900	N3RR 4,683,030	K2UF 87,312	N3BNA 2,698,041
Single Operator, Low Power	Single Operator Unlimited, Low Power	Single Operator, 20 Meters	Multioperator, Single Transmitter, Low Power
N1UR 4,429,668	W1MSW 2,554,656	N2MF 761,838	K2PO 2,674,638
N8II 3,359,304	W6AAN 2,523,936	K4XS 734,706	K3PH 2,594,241
N4TZ 3,226,719	KE7X 2,262,729	W8TA 517,149	VE9ML 2,203,521
N5AW 3,162,588	N1EN 2,182,245	KT9T 445,500	K9XD 1,776,024
NA8V 3,072,720	K9OM 2,158,740	K7KU (K0KR, op) 361,296	VA7DZ 1,118,520
N9CK 2,459,148	W3KB 2,143,245	N9CO 224,070	WA3OFC 535,626
K3AJ 2,071,440	WD4AHZ 2,077,104	N4IJ 180,780	W1TM 221,487
WJ9B 1,861,986	WW3S 2,056,560	N8AGU 152,061	W9FZ 105,300
KU8E 1,776,096	W1NT 1,713,156	W9ILY 151,470	K1FIR 11,760
K7SV 1,652,490	N5DO 1,687,560	K0PK 147,060	Multioperator, Two Transmitters
Single Operator, QRP	Single Operator, 160 Meters	Single Operator, 15 Meters	K8AZ 11,140,950
W9WI 1,060,656	VE3PN 9,348	KU2M 678,870	NY4A 10,498,950
N1IX 958,995	W2MF 7,080	NQ4I 669,900	N0NI 9,111,141
N7IR 767,496	N7GP 6,993	(VE7ZO, op) 669,900	W1VE 8,914,122
W9OP 672,714	N2CEI 6,720	K3RV 661,548	K0RF 8,857,566
W6JTJ 620,100	K2UR 6,000	K5RX 513,246	VE3JM 8,705,340
AA1CA 616,209	AG4W 5,700	VE6WQ (@VE6JY, op) 491,280	W7RN 7,185,795
VE3VN 611,328	N0TT 4,725	N1LN 487,350	KB1H 6,704,307
N1TM 383,496	K4EJQ 4,182	N2WQ/VE3 487,104	W9JP 6,572,097
KU7Y 364,800	KM1R 3,813	K0LUZ 483,183	K1RX 6,427,080
W6QU (W8QZA, op) 293,661	WD5COV 3,150	W7WA 477,651	Multioperator, Multiple Transmitters
	Single Operator, 80 Meters	N7DD 476,406	K3LR 18,892,848
	N4TB 71,928	Single Operator, 10 Meters	W3LPL 17,318,520
	K9FY 70,551	VY2ZM 561,456	WE3C 15,771,483
	W1XX 37,236	N9NC 525,204	W1UE 13,777,344
	N4DU 29,748	K2SSS 503,754	W4RM 11,064,168
	NN4MM (K9MUG, op) 26,688	N4PN 479,205	AA2A 9,680,310
	VE3OSZ 23,490	WC1M 399,840	K0TV 7,629,300
	K4FJ 23,427	K8IA 386,052	K1K1 6,518,160
	K4CC 22,479	K9BGL 381,924	NE3F 4,276,845
	K1PQS 21,168	N4OX 375,915	K1KP 4,074,030
	W4DD 18,810	W3EP 353,400	
		VE9AA 340,362	

boxes!) having favorable conditions leaves plenty of room for winners all across the continent. For example, it's nice to see N8II in West Virginia challenging for the top SOLP spot and chased by stations all the way out to the fifth district. SOUHP is another cross-continental cioppino starting with New England's W1MSW, and hitting all four corners of the US. The same "up for grabs" geography is replayed in the SOSB tables beginning at 40 meters all through through 10 meters.

The multioperator competition is drawing a variety of new stations to the game with competitive efforts in every district: K8AZ's crew tops the M2 list from Ohio and K2PO grabbed the MSL title from Oregon. The WE3C team has moved into third place for MM, keeping K3LR and W3LPL looking over their shoulder. If you like Field Day, why not give multiop a try during a regular contest? You can have all of the camaraderie and fun without the bug spray and rainouts!

Around the World

Very interesting...the difference in where the winners reside. It's obvious that for the top single ops in either high or low power categories, the winning strategy is to head for the Caribbean, Central America, and the northern shores and islands of South America. Unlike CQ World Wide with QSO point values that vary by continent, all QSOs in this contest count the same. Why add extra miles between you and the target population?

Once away from the single op, all-band categories, the situation is quite different and the focus swings back to Europe. Mostly. The SOQRP title went west instead of east as KH6ZM (at KH7M) took first place with a convincing win. Hawaii is an obvious "sweet spot" for any Oceania category, but as the Continental Leaders table shows, the wealth was spread all around the Pacific; KH2/N2NL and ZL3GA took the SOU High Power and Low Power titles, respectively. Single-band winners were calling from KH6

Top Ten — DX

Single Operator, High Power		Single Operator Unlimited, High Power		Single Operator, 40 Meters		Multioperator, Single Transmitter, High Power	
6Y2T (VE3DZ, op)	5,965,245	SN7Q	3,445,305	CR2X (OH2PM, op)	303,909	P40L	5,807,160
T15W (CT1ILT, op)	5,909,760	IR2C (IK2PFL, op)	2,984,214	HK3TU	223,155	KP2M	5,661,000
ZF35A (K6AM, op)	5,396,238	HB9FAP	2,574,168	OM2VL	221,328	PJ4X	5,451,264
J38XX (DL5AXX, op)	5,289,060	OT2A (ON6CC, op)	2,503,044	9A6XX	221,073	VP5S	5,358,300
CS2C (OK1RF, op)	5,067,810	WL7E	2,500,680	CE1/K7CA	201,072	TM6M	5,239,080
V26M (N3AD, op)	4,816,680	EF5F (EA5FV, op)	2,487,372	HA8JV	177,132	PJ5W	4,937,400
KH7XX (KH6SH@KH6YY)	4,004,436	ES5Q (ES5RY, op)	2,351,349	S57Z	169,803	E7DX	4,025,085
ED1R (EA4TX, op)	3,205,713	SP9LJD	1,678,686	CO8ZZ	167,922	KL7RA	3,908,358
NP2P (N2TTA, op)	3,083,184	M2A (G3ORY, op)	1,439,250	LZ5K (LZ1GL, op)	167,214	IR4M	3,879,840
P40LE (K2LE, op)	3,052,503			XE2S	163,017	VP2EZZ	3,677,508
Single Operator, Low Power		Single Operator Unlimited, Low Power		Single Operator, 20 Meters		Multioperator, Single Transmitter, Low Power	
KP4KE (DK8ZB, op)	4,666,215	YN2NC		FY5KE (F6FVY, op)	391,524	V31TP	4,964,700
P40W (W2GD, op)	4,648,770	(AA4NC, op)	4,428,270	9A2NA	278,598	NP2N	3,374,520
VP9/W6PH	3,451,008	EI5KF	1,748,760	OH8L (OH8LQ, op)	277,008	OL1C	3,316,250
KP2B (WP3A, op)	2,744,217	OK2PAY	1,303,155	SM5INC	249,570	YJ0OU	1,213,824
EF8USA (EA8AY, op)	2,623,824	KP4EJ	1,286,376	UA5C	239,304	LZ7A	614,457
YS1YS (JA6WFM, op)	2,564,289	EC4TA	1,257,048	OG8N (OH8WW, op)	232,638	RT4S	91,416
S53F	1,585,395	UX4U	1,214,640	HA7GN	231,768	JH1OES	65,178
PS2T (PY2NY, op)	1,332,954	GI0RQK	1,198,107	C6AZZ (KQ8Z, op)	220,284	SP3YOR	44,694
EA8CN	1,159,785	HI3LFE	1,185,201	PT5T (PY2BK, op)	218,718	US2E	43,788
JH4UYB	1,060,041	SP1NY	864,432	HA8MD	204,624	OO9O	21,948
Single Operator, QRP		Single Operator, 160 Meters		Single Operator, 15 Meters		Multioperator, Two Transmitters	
KH7M (KH6ZM, op)	662,904	S51V	20,265	LX7I (DL3BPC, op)	282,750	HK1NA	8,215,809
HB9BMY	365,925	M5O		ZY5M (IV3NVN, op)	270,570	CN2AA	7,860,132
HG3M	284,874	(G3LET, op)	14,070	E71A	231,594	CR3L	6,970,914
G3SXW	264,438	HC2AO	13,908	9A1UN	230,028	ED7P	5,227,647
ON6AB	246,012	V31YN		OK8NM (OM6NM, op)	223,938	IR1Y	4,708,353
UA1AFT	220,320	(DJ4KW, op)	11,433	E73W	218,022	DL1A	4,111,695
JH1OGC	217,152	DL2SAX	9,603	SN5X (SP5GRM, op)	217,848	SK3W	4,095,441
JR4DAH	163,620	HB9LCW	8,019	LW5HR	213,498	ZM90DX	3,492,693
DL4CW	160,896	UT5EO	4,758	SN2M	212,454	YU5R	3,379,320
EF7AAW (EF7AAW/QRP, op)	154,056	XE1AY	2,622	(SP2XF, op)	211,584	SO9Q	3,112,725
		Single Operator, 80 Meters		Single Operator, 10 Meters		Multioperator, Multiple Transmitters	
		C6AKQ (N4BP, op)	202,362	6W/G3TXF (G3TXF, op)	367,806	PJ2T	9,131,286
		CO2JD	134,676	CR2A (OH2BH, op)	363,204	KH6LC	6,599,313
		YV4YC	105,966	EA8AH (OH0XX, op)	334,254	EC2DX	6,313,716
		LX9DX (HB9CVQ, op)	97,854	LU1FAM	309,372	9A1A	5,608,320
		F5CQ	70,272	CT9/R9DX	305,856	OL7M	4,808,142
		SP3GEM	64,416	PY2EX	297,714	HG1S	4,124,208
		DR4A (DK5PD, op)	57,960	NP3A	293,016	LZ9W	3,867,444
		DM7C (DL6CX, op)	53,988	ZW5B (PY2LSM, op)	284,316	ZM1A	3,440,892
		DJ0MDR	52,008	MW5A (G3WVG, op)	241,605	JE1ZWT	1,898,316
		9A1CCY (9A3LG, op)	50,526	DL6FBL	237,336	IR2T	630,873

to DU to VK7 and there were multiop winners in 9M6, YJ0, and KH6, too. Given how large this “continent” really is, such a wide geographic distribution of winners indicates that conditions, while shaky at times, were actually pretty good.

In the DX Top Ten, there are a variety of surprises tucked away. How about S51V there atop the SOSB-160 pileup and a fellow Slovene, S53F, in the SOLP Top Ten? That the polar paths were strong is in evidence by the appearance of Alaskans KL7RA and WL7E in MSH and SOUHP, respectively. And while the SOSB-10 leaders hailed from tropical climes or somewhere with north-south transequato-

rial propagation, both MW5A (G3WVG, op) and DL6FBL bucked the trend from their northern European latitudes.

Accurate Operating

Among operators vying for the Top Ten scores, much is made of accurate operating. The same should be true for casual participants and those learning contesting skills! After all, contesting is really a training program to learn how to exchange information quickly and accurately. Why not take advantage of what contests have to offer?

“Accurate” operating means copying call signs and exchanges, sending calls correctly, speaking clearly, and so forth. There are three

basic types of errors that are detected by log-checking:

- Busted calls — miscopying a call sign, such as N1AX for N0AX.
- Busted exchanges — miscopying any part of the exchange, such as 599 MN for 599 MO or 599 100 for 599 1000.
- Not-In-Logs (NILs) — a contact for which a corresponding contact can’t be found in the log of station with which the contact is claimed.

Duplicate contacts with other stations are not counted as errors if you submit your log electronically by emailing it to the ARRL. Similarly, “uniques,” or call signs found only in your log, are not counted as errors. These may very well be busted calls, and most are, but they are not counted as errors if they can’t be shown to be busted with a high degree of confidence.

Once a contact has been shown to contain one of the three errors, it is removed from your log’s total of QSO points and, if the contact was the only one with a specific multiplier, from the multiplier total as well. No additional penalty is assessed. (CQ World Wide contests assess an additional penalty of three QSOs worth of QSO points for each bad QSO.)

It should be noted that removing a QSO from your log or even assessing a penalty is most emphatically *not* an accusation of cheating. It’s simply accounting for your error, just like an offsides call results in a five-yard penalty in football or stepping out of bounds results in a turnover in basketball. That’s all. Disqualification, or the dreaded “DQ”, is quite rare. For a DQ to occur, there must be a judgment that there was consistent and repeated intent to break one or more contest rules. Look at it this way — be glad that that logs are checked carefully enough that you can be confident in the final order-of-finish, whether you lost or not.

How do you find out about your own accuracy? Easy — there is a report generated for every “electronic” log emailed to the ARRL. It’s called an “LCR” or “Log Checking Report.” It contains a complete list of every error found in your log from cross-checking with other logs. It’s free and completely private. All you have to do is download it from the ARRL website.

Measuring Accuracy

The basic measurement of operating accuracy is error rate, which is the percentage of contacts in your log with an error. (Duplicate contacts are removed from the totals before

Continental Leaders

Class	Call	Score			
Africa			North America		
Single Operator, High Power	3V8BB (KF5EYY, op)	2,132,055	Single Operator, High Power	6Y2T (VE3DZ, op)	5,965,245
Single Operator, Low Power	EF8USA (EA8AY, op)	2,623,824	Single Operator, Low Power	KP4KE (DK8ZB, op)	4,666,215
Single Operator Unlimited, Low Power	ZR9C (ZS6WN, op)	819,084	Single Operator, QRP	C02CW	92,214
Single Operator, 20 Meters	CN8KD	128,856	Single Operator Unlimited, High Power	WL7E	2,500,680
Single Operator, 15 Meters	EA8AVK	65,988	Single Operator Unlimited, Low Power	YN2NC (AA4NC, op)	4,428,270
Single Operator, 10 Meters	6W/G3TXF (G3TXF, op)	367,806	Single Operator, 160 Meters	V31YN (DJ4KW, op)	11,433
Multioperator, Two Transmitters	CN2AA	7,860,132	Single Operator, 80 Meters	C6AKQ (N4BP, op)	202,362
Asia			Single Operator, 40 Meters	CO8ZZ	167,922
Single Operator, High Power	UA0ZAM	900,516	Single Operator, 20 Meters	C6AZZ (KQ8Z, op)	220,284
Single Operator, Low Power	JH4UYB	1,060,041	Single Operator, 15 Meters	CO8LY	45,396
Single Operator, QRP	JH1OGC	217,152	Single Operator, 10 Meters	NP3A	293,016
Single Operator Unlimited, High Power	JE1LFX	1,139,307	Multioperator, One Transmitter High Power	KP2M	5,661,000
Single Operator Unlimited, Low Power	JA1BJI	757,890	Multioperator, One Transmitter Low Power	V31TP	4,964,700
Single Operator, 160 Meters	JH2FXK	1,560	Oceania		
Single Operator, 80 Meters	JA6GCE	17,052	Single Operator, High Power	KH7XX (KH6SH@KH6YY, op)	4,004,436
Single Operator, 40 Meters	JR8VSE	119,700	Single Operator, Low Power	KH6CJJ	950,400
Single Operator, 20 Meters	UN9GD	93,987	Single Operator, QRP	KH7M (KH6ZM, op)	662,904
Single Operator, 15 Meters	JA7FTR	181,431	Single Operator Unlimited, High Power	KH2/N2NL	1,630,074
Single Operator, 10 Meters	JH3AIU	122,094	Single Operator Unlimited, Low Power	ZL3GA	24,366
Multioperator, One Transmitter High Power	JA0QNJ	1,843,572	Single Operator, 80 Meters	KH6/WB4JTT (WB4JTT, op)	48,750
Multioperator, One Transmitter Low Power	JH1OES	65,178	Single Operator, 40 Meters	DU1EV	324
Multioperator, Two Transmitters	RT0C	2,457,837	Single Operator, 20 Meters	VK7GN	94,770
Multioperator, Multi Transmitters	JE1ZWT	1,898,316	Single Operator, 15 Meters	NH2DX (KG6DX, op)	187,074
Europe			Single Operator, 10 Meters	VK4LAT	360
Single Operator, High Power	CS2C (OK1RF, op)	5,067,810	Multioperator, One Transmitter High Power	9M6SDX	16,200
Single Operator, Low Power	S53F	1,585,395	Multioperator, One Transmitter Low Power	YJ00U	1,213,824
Single Operator, QRP	HB9BMY	365,925	Multioperator, Two Transmitters	ZM90DX	3,492,693
Single Operator Unlimited, High Power	SN7Q	3,445,305	Multioperator, Multi Transmitters	KH6LC	6,599,313
Single Operator Unlimited, Low Power	EI5KF	1,748,760	South America		
Single Operator, 160-Meters	S51V	20,265	Single Operator, High Power	P40LE (K2LE, op)	3,052,503
Single Operator, 80 Meters	LX9DX (HB9CVQ, op)	97,854	Single Operator, Low Power	P40W (W2GD, op)	4,648,770
Single Operator, 40 Meters	CR2X (OH2PM, op)	303,909	Single Operator Unlimited, High Power	PY4RGS	590,352
Single Operator, 20 Meters	9A2NA	278,598	Single Operator Unlimited, Low Power	PY1NX	700,812
Single Operator, 15 Meters	LX7I (DL3BPC, op)	282,750	Single Operator, 160 Meters Only	HC2AO	13,908
Single Operator, 10 Meters	CR2A (OH2BH, op)	363,204	Single Operator, 80 Meters	YV4YC	105,966
Multioperator, One Transmitter High Power	TM6M	5,239,080	Single Operator, 40 Meters	HK3TU	223,155
Multioperator, One Transmitter Low Power	OL1C	1,316,250	Single Operator, 20 Meters	FY5KE (F6FVY, op)	391,524
Multioperator, Two Transmitters	ED7P	5,227,647	Single Operator, 15 Meters	ZY5M (IV3NVN, op)	270,570
Multioperator, Multi Transmitters	EC2DX	6,313,716	Single Operator, 10 Meters	LU1FAM	309,372
			Multioperator, One Transmitter High Power	P40L	5,807,160
			Multioperator, One Transmitter Low Power	ZW8T	12,285
			Multioperator, Two Transmitters	HK1NA	8,215,809
			Multioperator, Multi Transmitters	PJ2T	9,131,286

calculating error rate.) The lower your error rate, the more accurate you are.

Does anyone turn in a perfect log? Yes! Sometimes they do, and even if the log contains unique calls, they are recognized as having submitted a *Golden Log* that contained no detectable errors. You might be surprised at how large these logs can be — accuracy is really taken seriously! The table of Golden Logs shows that PV8ADI submitted a really large one at 1408 QSOs — congratulations on that achievement!

Error rate doesn't tell the whole story, though. Log size also needs to be taken into account. After all, which would you think is more difficult — making 100 QSOs with no errors or making 1000 QSOs with no errors? Or making 1000 QSOs with an error rate of, say, 0.3%? That's where the

Top 10 Golden Single Op Logs

Call	QSOs	Category
PV8ADI	1408	SOHP
AA8OY	702	SOLP
K0RC	690	SOUHP
K5LY	603	SOLP
S57C	600	SOHP
N6MU	572	SOLP
YL2CV	568	SOLP
K4MX	535	SOLP
DK2OY	514	SOUHP
W7MEM	506	SOHP

Accuracy Index comes in. A discussion of the index is included in the full online results of this article. If you are interested in the details, the online table shows this year's accuracy leaders in all-band categories.

How Do I Get Into the Box?

"Making the box" for the first time is one of contesting's most treasured moments! Here's how — practice, practice, practice.

Start by working on the operator: learn all you can about propagation, study logs and techniques of the top operators, and make your operating practices as efficient as possible. Focus on accuracy in every single QSO: don't guess at a call or exchange, never ever rely solely on information from the spotting network, and avoid letting a database fill in the contact information for you — copy what you

hear. Download your LCR and study your errors. Optimize your station layout and equipment within whatever means you have. You would be surprised at how well a skilled and motivated operator can do from a modest station.

The traditional HF contest season is about to begin. Pick your battles, prepare yourself physically, make a plan, and dive in! Now is the time to put 21st and 22nd of February in 2015 on the calendar. We'll expect to hear you in the pileups!

Full Results Online

The full results of the contest are available online at www.arri.org/contest-results-articles. You'll find more analysis, graphs, ARRL Division winners, and Regional leaders, along with the full Line Scores and your Log Checking Report, too!