

2012 ARRL DX Phone Results

I exceeded last year's score so life is good. — AA6K

Ward Silver, NØAX, n0ax@arri.net

This year's phone weekend of the ARRL International DX Contest was eagerly awaited by thousands around the world after last year's oh-so-welcome return of the sunspots and the good conditions that graced the CW weekend fourteen days prior. Well, fourteen days is one-half of a solar spin on its axis and those good conditions were pointed somewhere else than Earth! Browsing Soapbox comments that came in with the logs, the strange and often-unexpected propagation was on the minds of many! 15 meter Single-Band competitor Mike, G4IUF wrote, "Weird day, struggled till one-half hour after sunset, then (the band) went mad for 45 minutes, then (it went) auroral, then died!"

What's the deal? After having a look at the solar and geomagnetic data from NOAA the answer is pretty clear — we were a little bit early...or maybe the bands were a little bit late. The very day after the contest (of course) the solar flux jumped a dozen points, staying above 130 for a week! Cycle 24 has been nothing if not erratic — the Sun can't quite make up its mind whether to make like the peak or the pits. This contest's conditions were very similar to those of 2004.

How did that play out on the bands? A lot of stations decided to spend the weekend fishing at 10 Meter Lake instead of on a lower band, hoping for breakthroughs that turned out to be far and few between. Comparing the Single-Band logs to 2004, the shift was from 40 meters (2004 was a post-peak year and many were anticipating lower MUF) to 10 meters.

The odd conditions manifested themselves in unexpected ways at stations large and small. Contest veteran John, K1AR relates his experience at super-station K3LR on 20 meters: "We were doing our usual 'waiting for EU to open' thing on Saturday...one unanswered CQ after another. Then, literally like someone turned on a switch, in the course of one CQ I had an instant pileup and a 225-hour after that. I've never heard anything like it. Usually, the rate builds over a 15-20 minute period, but this time it just started like someone turned on a light. Very strange indeed." Elsewhere, 10 meter operators report openings on Friday evening that heightened anticipation of bigger things to come but although the multiplier totals were good, the depth of the openings to large

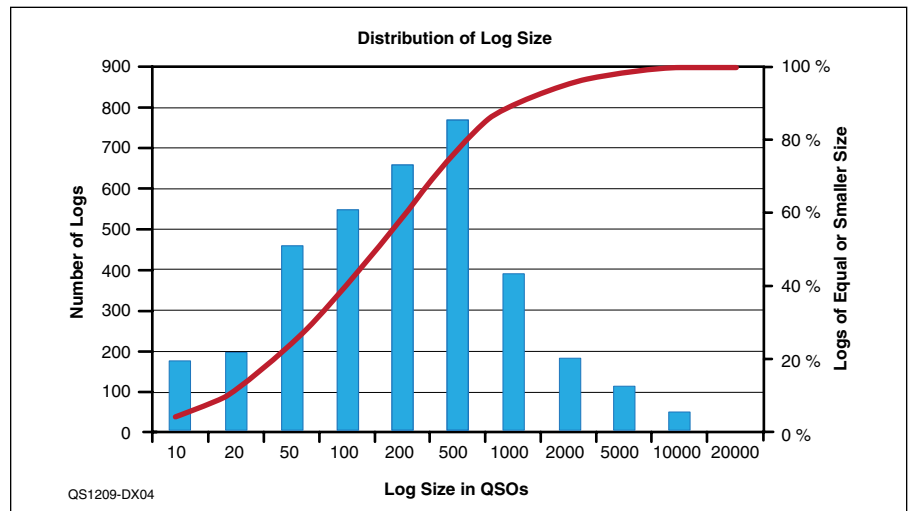


Figure 1 — The distribution of log sizes shows how important smaller logs are to a good contest. 58% of all logs have 200 or fewer QSOs, making up the majority of all contest entries.

numbers of stations just didn't materialize.

Participation was quite lively, regardless, with a record 3527 logs submitted (1869 W/VE logs and 1658 DX logs) that exceeded last year's 3343 logs by a few percent. No doubt this is at least partially an aftereffect of the awesome 2011 10 Meter Contest conditions that saw a surge to more than 5000 submitted logs. Well, as many stations found out, even if conditions aren't at their peak, just being on the bands is a lot of fun!

Error Rate and Accuracy Index

Error rate equals the total of "bad" QSOs in your Log Checking Report, those with a "busted" call (B) or exchange (X) or that are "Not In Log" (N) — divided by the number of good QSOs remaining.

The Accuracy Index rewards lower error rates for large logs. For two logs with equal error rates, the log with more verified contacts has a higher index.

Accuracy Index = $\log_{10}(\text{Good QSOs}) + 10 \times (1 - \text{Error Rate})$

The number of logs contributed to club totals in the ARRL Affiliated Club Competition was also up — to 2009 from last year's 1978. Overall, club log submissions jumped by about 12% with all of the increase in the rapidly-growing Medium and Local categories. The word must be getting around that contesting is a lot of fun and participating as a club makes it even more fun!

Yeah, yeah...but were we making more QSOs? Despite all of the propagational hand-wringing, DX stations logged 815,208 QSOs with us and we logged 669,554 with them. That's a little more activity on our side and a little less activity on their side — just 4000 QSOs below last year's totals. Once again, about 10% of the QSOs "went missing" between the log sheets and the log checking — a fraction we should work on reducing. Offering to help other club members send in a log is often a good way to help a potential tester become more active, whether they are new to HF or just haven't done it before.

Categorically Speaking

A good measure of the activity of different stations is to look at the top single-band QSO totals from DX and domestic stations. The 2011 10 Meter Contest's long coattails were in evidence as Sergio, PP5JR logged a whop-

W/VE Region Leaders

Table lists call sign, score, and power (A = QRP, B = Low Power, C = High Power).

Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)			Southeast Region (Delta, Roanoke and Southeastern Divisions)			Central Region (Central and Great Lakes Divisions; Ontario Section)			Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)			West Coast Region (Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)		
W2RE	4,246,440	C	K1TO	3,258,036	C	VE3EJ	4,374,360	C	N2IC	3,349,500	C	N9RV	2,966,301	C
VY2TT (K6LA, op)	3,902,121	C	N4RV (KE3X, op)	2,533,638	C	VC3A (VE3AT, op)	4,043,760	C	K5TR	2,830,449	C	K7RL	2,834,895	C
W3BGN	2,877,672	C	K4AB	2,294,784	C	W9RE	2,951,214	C	KU1CW	2,107,092	C	VE7CC	1,997,730	C
AA1K	2,847,960	C	W5WMU	1,230,552	C	VE3TA	1,817,091	C	K7KU			K6XX	1,700,460	C
NC1I (K9PW, op)	2,721,360	C	NR3X (N4YDU, op)	1,192,464	C	K8GL	1,619,085	C	(K0KR, op)	760,383	C	NC7M	843,453	C
N1UR	2,146,506	B	AD4Z	1,835,856	B	N4TZ	989,712	B	N5AW	1,186,500	B	K9JF	815,298	B
W2TF	485,685	B	N4XL	688,371	B	N8AA	697,248	B	NR9A	341,925	B	NN3V	329,640	B
WA2JQK	422,154	B	NA4K	555,894	B	NA8V	642,930	B	W5GFI	290,037	B	VE6EX	314,340	B
N1SV	314,682	B	W4PFM	400,803	B	KD9MS	484,962	B	K5ZCJ	262,971	B	N7IR	303,615	B
KD3HN	300,381	B	W4FT KP4KOE	352,350 44,541	B	VA3SWG	417,024	B	KY0K	239,259	B	K7ACZ	280,350	B
W2ID	423,360	A	NT4TS	167,322	A	VA3DF	320,100	A	ND0C	191,484	A	W6QU (W8QZA, op)	199,950	A
N1TM	273,936	A	KS4X	85,260	A	N8XA	115,773	A	KA5PVB	64,800	A	W7YAQ	66,150	A
W1MR	256,608	A	K9ES	82,404	A	KT8K	78,690	A	K0OU	53,295	A	N6LB	19,824	A
KO1H	246,024	A	K3TW	77,268	A	VA3WPV	30,996	A	N0UR	24,768	A	N6HI	11,400	A
W2WGK	26,265	A	KC5WA	71,757	A	AJ4A	29,889	A	KB7QOS	11,850	A	AE9F	8,568	A

ping 3888 QSOs on 10 meters as PX5E. In addition, HK1T logged 3449 stations on 20 meters and the gang at T15N pulled in 3412 different calls. From here at home, the K3LR 20 meter stack was able to hear 2323 different DX stations while the nearby 15 meter array at W3LPL found 2176 callers.

The top single-band DXCC hunters were once again at K3LR as the 20 meter team of K1AR and N2NT bagged 140 multipliers.

Single-Band log totals from W/VE stations were down from last year (214 compared to 247) but the 10 meter count was up to 65 — the only band to show an increase.

Recovering nicely from last year's single-band slump, 560 SOSB logs were received from DX call signs. As Figure 2 shows, the DX stations got busy on 15 and 10 meters. DXCC band-entity chasers, take note!

Another clear trend is the growing number of entries in the Single-Op, Unlimited (SOU)

Continental Leaders

Continent	Call	Score	Continent	Call	Score
Africa			North America		
Single Operator High Power	5H3EE	211,014	Single Operator High Power	8P5A	
Single Operator Low Power	EA8MT	1,169,136	(W2SC, op)		9,722,772
Single Operator Assisted, High Power	CT3BD	63,648	H13TEJ		5,039,685
Single Operator Assisted, Low Power	EA8BZH	36,000	V47JA		754,200
Single Operator 20 Meters	EA8LS	38,367	8P6NW		949,905
Single Operator 15 Meters	CT3DZ	237,858	KV4FZ		72,072
Multioperator, Single Transmitter, High Power	CR3L	2,884,260	CL8AKY		50,055
Multioperator, Multi Transmitters	EF8R	8,961,225	ZF2AH		394,710
			C6AZZ		
Asia			(K4IO, op)		325,620
Single Operator High Power	JA0JHA	1,918,938	KP2MM		
Single Operator Low Power	JH4UYB	348,984	(N2TTA, op)		497,943
Single Operator QRP	JH1APZ	24,624	HQ2GL		411,840
Single Operator Assisted, High Power	JA0FVU	365,442	VP5H		8,158,941
Single Operator Assisted, Low Power	HS0ZJU	91,884	H13K		4,805,097
Single Operator 80 Meters	JE1SPY	858	6Y1V		11,719,305
Single Operator 40 Meters	A65BP		T18M		7,285,140
(RV6LNA, op)		13,440			
Single Operator 20 Meters	RK9QWM		Oceania		
(RW9QU, op)		50,388	Single Operator High Power	VK7ZE	437,031
Single Operator 15 Meters	JR1CBC	227,136	Single Operator Low Power	KH6CJJ	459,576
Single Operator 10 Meters	JA7OWD	73,710	Single Operator QRP	DU1AJ	897
Multioperator, Single Transmitter, High Power	RU0FM	1,665,102	Single Operator Assisted, High Power	ZL3IO	1,311,177
Multioperator, Single Transmitter, Low Power	RK9CZO	6,720	Single Operator Assisted, Low Power	YB1ALL	31,248
Multioperator, Two Transmitters	JA1YPA	1,241,460	Single Operator 80 Meters	KH6QJ	1,302
Multioperator, Multi Transmitters	JA3YBK	2,340,831	Single Operator 40 Meters	DU9XO	20,160
			Single Operator 20 Meters	WH7GG	105
Europe			Single Operator 15 Meters	KH7Y	521,460
Single Operator High Power	CR6K		Single Operator 10 Meters	KG6DX	103,824
(CT1ILT, op)		5,119,821	Multioperator, Single Transmitter, High Power	KH7X	6,626,124
Single Operator Low Power	EA6AZ	217,251	Multioperator, Two Transmitters	KH6LC	8,036,280
Single Operator QRP	F5BEG	88,452			
Single Operator Assisted, High Power	G6PZ		South America		
(IZ1LBG, op)		2,750,814	Single Operator High Power	9Y4W	5,188,320
Single Operator Assisted, Low Power	IB1B		Single Operator Low Power	P40V	
(IW1QN, op)		565,728	(W5AJ, op)		5,295,528
Single Operator 160 Meters	GW0GEI	432	LU7HZ		136,479
Single Operator 80 Meters	GM3PPG		Single Operator QRP	PJ4G	
(G4BYB, op)		79,110	Single Operator Assisted, High Power	(K2NG, op)	6,471,075
Single Operator 40 Meters	TM9R	269,820	Single Operator Assisted, Low Power	P43E	1,035,567
Single Operator 20 Meters	TM6M		Single Operator 160 Meters	LU2DVI	468
(F1AKK, op)		505,263	Single Operator 80 Meters	YW5T	
Single Operator 15 Meters	F6KHM		(YV5JBI, op)		123,144
(F8DBF, op)		450,729	PR7AP		167,067
Single Operator 10 Meters	CR2T		HK1T		627,324
(CU2AF, op)		56,745	PR5B		
Multioperator, Single Transmitter, High Power	CR2X	6,912,948	(PY2LSM, op)		522,660
Multioperator, Single Transmitter, Low Power	EE5W	86,496	PX5E		
Multioperator, Two Transmitters	ED1R	4,455,360	(PP5JR, op)		673,554
Multioperator, Multi Transmitter	9A1A	3,743,250	PJ2T		8,998,236
			LU1UM		1,390,800
			PT5T		7,361,070
			LP1H		7,469,304

Affiliated Club Competition		
	Score	Entries
Unlimited Category		
Yankee Clipper Contest Club	245,487,258	201
Frankford Radio Club	214,570,917	150
Potomac Valley Radio Club	187,702,503	192
Florida Contest Group	82,517,496	113
Northern California Contest Club	60,067,215	103
Minnesota Wireless Assn	48,775,248	108
Society of Midwest Contesters	44,822,133	81
Contest Club Ontario	44,266,113	67
Tennessee Contest Group	28,268,769	61
Southern California Contest Club	27,449,376	56
Arizona Outlaws Contest Club	16,023,492	65
Medium Category		
North Coast Contesters	61,423,068	22
Hudson Valley Contesters and DXers	39,058,104	43
South East Contest Club	33,631,356	33
Carolina DX Association	23,932,758	47
Mad River Radio Club	21,296,601	24
Alabama Contest Group	18,482,925	41
Central Texas DX and Contest Club	18,391,008	17
Willamette Valley DX Club	14,726,088	35
ORCA DX and Contest Club	11,586,411	25
CTRII Contest Group	10,672,080	10
Western Washington DX Club	10,414,629	24
Rochester (NY) DX Assn	9,957,549	20
Northern Rockies DX Association	9,888,291	7
Maritime Contest Club	8,097,726	22
Order of Boiled Owls of New York	8,098,152	14
Lone Star DX Assn	7,999,125	10
Grand Mesa Contesters of Colorado	6,981,882	24
Louisiana Contest Club	5,838,624	9
Contest Group Du Quebec	5,179,047	13
Utah DX Assn	4,388,613	21
Mother Lode DX/Contest Club	4,354,866	16
Delara Contest Team	4,103,055	12
Western New York DX Assn	3,938,868	11
North Texas Contest Club	3,484,323	11
Bristol (TN) ARC	2,220,534	12
Spokane DX Association	2,124,741	20
Metro DX Club	2,104,005	14
Bergen ARA	2,035,602	15
Allegheny Valley Radio	1,912,527	10
Alberta Clippers	1,668,192	3
Eastern Iowa DX Assn	1,138,629	5
Saskatchewan Contest Club	1,072,644	8
West Park Radiops	1,063,446	18
Kentucky Contest Group	956,013	6
Mississippi Valley DX/Contest Club	923,952	6
Radio Club of Redmond	221,172	4
Texas DX Society	191,034	3
Mt Airy VHF Radio Club	127,338	3
Central Arizona DX Assn	50,151	3
Local Category		
Central Virginia Contest Club	6,687,126	10
Iowa DX and Contest Club	4,787,178	3
Hilltop Transmitting Assn	2,604,204	8
Southwest Ohio DX Assn	2,472,951	6
Blue Ridge ARC	1,902,990	6
Kansas City Contest Club	1,833,654	6
Kansas City DX Club	1,571,532	9
CorTek Radio Association	1,159,731	6
Sterling Park ARC	1,061,367	7
San Diego DX Club	1,013,304	3
Northern Arizona DX Assn	910,239	4
Salt City DX Assn	669,504	3
Meriden ARC	659,280	5
599 DX Association	509,736	5
DFW Contest Group	480,087	6
Hazel Park ARC	428,445	3
Wireless Association of South Hills	423,315	4
Skyview Radio Society	339,834	3
Granite State ARA	313,053	5
New Mexico Big River Contesters	312,093	5
Lincoln ARC	296,022	3
South Jersey DX Assn	280,035	4
Midland ARC	264,798	3
Fort Wayne Radio Club	263,286	4
10-70 Repeater Assn	257,697	4
Portage County Amateur Radio	201,111	4
Southern California DX Club	179,793	4
Brazos Valley ARC	176,715	3
Albuquerque DX Assn	162,366	3
Low Country Contest Club	156,738	3
Southern Berkshire ARC	152,547	3
Great South Bay ARC	150,081	5
Heartland DX Association	143,046	5
Long Island Mobile ARC	86,703	3
Saginaw Valley ARA	76,047	5
Fox River Radio League	28,794	4
Hays-Caldwell ARC	3,222	3

category both here in the US and Canada and around the world. The red line in Figure 2 shows that the total number of Single-Operator logs is steadily increasing and more of them are in the growing fraction of SOU logs. While SOAB-LP representation is holding steady, SOAB-HP and SOSB are not as more stations are moving to the online-based category to make use of information about the contest from other participants.

Little Pistols and part-time or casual operators are the often-unsung majority of contest activity. Figure 1 shows that almost 58% of all logs received contained 200 or fewer QSOs. This fraction is steadily increasing, which I believe is a healthy trend for radiosport in general. The operators sending in small logs represent the vital "new blood" that any competitive activity needs to stay healthy. Welcome!

Records

As in 2011, another pair of all-time records was set. Jeff, K1ZM decided to tackle 160 meters from his station on Prince Edward Island, VY2ZM. He was rewarded with not only the Canadian record but the all-time W/VE record for SOSB-160. Whatever he puts his mind to, the VY2ZM hardware is ready and able to contend...IF he can make it through the snowdrifts! Jeff owns five ARRL DX Phone records, including a second all-time record (SOAB-QRP in 2001), as either VY2ZM or K1ZM.

The other new all-time record reflects a really exceptional effort. Not only did Dan, W7WA win the SOSB-40 W/VE title, he set the all-time record for 40 meters and turned in a Golden Log (a log with no detected errors)! And not only that, at 965 QSOs, it's the largest Golden Log that I've seen in my ten years of writing up these contest results. When you consider how difficult 40 meter phone can be, the only response is, "We are not worthy!" Dan now owns the 15, 20 and 40 meter records from the 7th district.

Even though the new SOU-LP and MS-LP categories have generated a big pile of records in the past two years (28 records were set in both 2011 and 2012), the monstrously excellent year 2002 still holds the title as the best year for records with 32. The oldest record broken was an old-timer from 1982 as the KH7X team added some more walnut, overtaking the KH6XX MS-HP record by 37%. Patrick, K6AAX was sharing the VY2ZM station and used the 80 meter antenna farm to nearly triple the old SOSB-80 Canadian record set in 1996 by VE9ST. The venerable 1979 KØRF MM record for the 10th district is still the oldest on the books.

What would a table of records be without some close calls? These records may not have been broken but they were seriously challenged. The 1992 M2 record in the 8th district was within 7% of falling to an aggressive

Accuracy Leaders					
W-VE					
Single-Op (Non-assisted)					
Call	Category	QSOs	Error %	Index	
VC3A (VE3AT, op)	SOAB-HP	3260	0.4	13.473	
VE3EJ	SOAB-HP	3364	0.6	13.467	
VY2TT (K6LA, op)	SOAB-HP	3388	1	13.430	
K1TO	SOAB-HP	2804	0.4	13.408	
N2IC	SOAB-HP	2906	0.6	13.403	
Single-Op (Assisted)					
Call	Category	QSOs	Error %	Index	
K3WW	SOU-HP	2792	1.4	13.306	
AA3B	SOU-HP	2118	0.9	13.236	
N3RS	SOU-HP	1995	0.9	13.210	
W1GD	SOU-HP	1738	1	13.140	
N3RR	SOU-HP	2099	1.9	13.132	
Multiop					
Call	Category	QSOs	Error %	Index	
K3LR	MM	6536	0.9	13.725	
W3LPL	MM	6238	1.2	13.675	
WE3C	MM	5330	0.9	13.637	
KM1W	MM	3947	1.2	13.476	
W2PV	MM	3407	1	13.432	
DX					
Single-Op (Non-assisted)					
Call	Category	QSOs	Error %	Index	
8P5A (W2SC, op)	SOAB-HP	9367	0.6	13.912	
KP2M (N2TK, op)	SOAB-HP	6842	0.4	13.795	
V26M (N3AD, op)	SOAB-HP	7129	1	13.753	
P40V (W5AJ, op)	SOAB-LP	5620	0.7	13.680	
LT1F (LU1FAM, op)	SOAB-HP	5693	0.8	13.675	
Single-Op (Assisted)					
Call	Category	QSOs	Error %	Index	
PJ4G (K2NG, op)	SOU-HP	6706	1.1	13.716	
ZZ2T (PY2MNL, op)	SOU-HP	4156	0.6	13.559	
G6PZ (IZ1LBG, op)	SOU-HP	3822	0.9	13.492	
PR2X (PY2ADR, op)	SOU-HP	3579	1.6	13.394	
DR1D (PY2SEX, op)	SOU-HP	3162	1.2	13.380	
Multiop					
Call	Category	QSOs	Error %	Index	
6Y1V	M2	11416	0.9	13.968	
T15N	M2	10449	0.9	13.929	
LP1H	MM	9019	0.8	13.875	
P40L	MS-HP	8690	0.7	13.869	
EF8R	MM	9270	1	13.867	

challenge by the K8AZ group. As technology continues to improve, we'll see more of these records toppled before Cycle 24 decides to call it a day.

Club

They're up! They're down! They're up again! The knock-down, drag-out slugfest between the Frankford Radio Club (FRC) and Yankee Clipper Contest Club (YCCC) reversed again this year, scrambling the Club Competition table score card. YCCC was edged out of the top Unlimited club position by the slimmest of margins but jumped back up off the mat and delivered a slobber-knocker of 245 Mpoints to FRC's 214 Mpoints. YCCC's log totals jumped from 184 last year to 201 this year and those 17 extra logs made a lot of

difference. Congratulations to the Florida Contest Group as they jumped from 8th place to 4th by doubling their total score with only 4 additional logs. What will next year bring?

Among the Medium clubs, the North Coast Contesters looked a little vulnerable last year...but not in 2012 as they won the gavel going away. The Hudson Valley Contesters and DXers club put 50% more points on the board to overtake the competition and place second. Out west, the Orca DX and Contest Club made a big jump and more than doubled their totals — this will play well in the annual Pacific Northwest Challenge Cup competition (click “PNW Traveling Trophy” at www.wwdxc.org) as all three of the major Northwestern Division clubs are closely spaced.

Holy smokes, the Local clubs are coming out of the woodwork with 37 different entries this year — excellent! Last year’s winner, the Iowa DX and Contest Club was dethroned by the Central Virginia Contest Club’s strong surge in points and logs. The Hilltop Transmitting Association (love that name!) stole a march on everybody to place 3rd. Watch out for the Kansas City operators — the two KC clubs combined would have placed 3rd easily!

Down to the Wire(less)

Would you take a look at the W/VE SOAB-HP Top Ten! The race was decided by just 3% and the first four places were separated by a very competitive 12% top to



Dale Slater is 12 years old and took to contesting at KL2R like a snow goose to water. She’s being assisted here by Carl, WL7BDO. [KL7/N1TX photo]

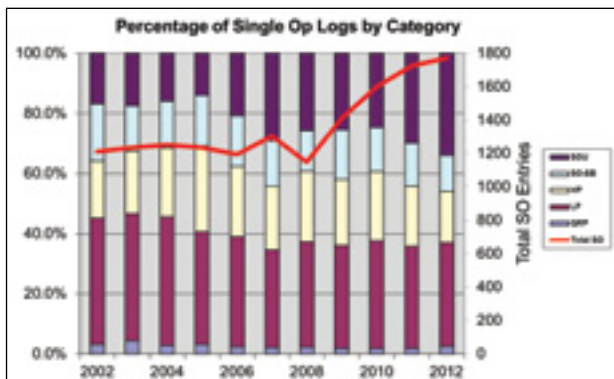


Figure 2 — The trend in Single-Operator logs shows a clear trend to the Unlimited category from the SO-HP and SO-SB categories.

bottom. In W/VE SOSB-20, the 2nd-3rd-4th race for place and show was extremely tight — all three stations were within 1% of each other and from opposite sides of the continent. The W/VE M2 Top Ten was also tightly packed with about 4% separating the first few places. K3LR and W3LPL roared through the entire race neck-and-neck with the K3LR team managing a slim 5% victory.

Down in the Caribbean, 2nd and 3rd place in SOAB-HP was decided by only 3% as N3AD piloted V26M ahead of N2TK at KP2M. The SOAB-LP race was just as tight — W5AJ at the P4ØV station eked out a 5% win over HI3TEJ. One of the tightest races in the whole contest turned out to be in the DX SOSB-10 category — 0.2% was the difference between competitors on nearly opposite sides of the planet as PR5B with PY2LSM at the mike broke the tape just ahead of KH7Y. The big DX multiop teams were just as competitive as here at home — PJ2T was only 1.3% ahead of P4ØL when the scoring was over and VP5H was hot on their tails.

Accuracy

Accurate operating — as the preceding section indicates — is deciding more and more races around the world. Highly prized, the skill of pulling an entire correct call out of the pileups is something to which we should all aspire — Big Gun and Little Pistol alike. With over 90% of all contacts being checked by software, being able to complete the QSO with all the information correct has never been more important. And isn’t that one of the reasons for having contests, anyway — to hone our operating skills for when more than a Top Ten finish is riding on accurate communication?

Take a look at the top five Accuracy Indexes and the Accuracy Records achieved by SOAB-HP/LP, SOU-HP/LP and MO stations. (See the sidebar for an explanation of the index.) Improving your own accuracy index from year to year is an excellent goal. Also note the Top Ten Golden Logs — the largest logs that incurred no log-checking penalties.

See the Records section for more about W7WA’s achievement.

I enjoyed the contest. U.S. is long distance....JA2HNP. DXing

We had a rare occurrence of a Single-Operator station out-multiplier-ing a Multioperator team as VY2ZM found another couple of multipliers on 160 meters from Prince Edward Island that Frank’s Maryland Beverages couldn’t pull in. Jeff’s son Patrick had the top entity total Single-Op on 80 meters, second to the K3LR squad. Conditions on 80 meters just weren’t good enough for any station to make the coveted 5-Band

DXCC in a weekend. I’m sure the 10 meter operators are not complaining, though, with a second straight year of high multiplier totals. The best DXCC entity totals by a Multiop and Single-Op entry are listed below:

- 160: VY2ZM (SOAB-160) 61, W3LPL (MM) 59
- 80: K3LR (MM) 88, K6AAX/VY2 (SOSB-80) 84
- 40: K3LR (MM) 112, W7WA (SOSB-40) 98, 3 stations made DXCC
- 20: K3LR (MM) 140, W8TA (SOAB-HP) 110, 41 stations made DXCC
- 15: W3LPL (MM) 128, N7DD (SOSB-15) 118, 49 stations made DXCC
- 10: W3LPL (MM) 93, W5PR (SOSB-10) 89

Once again in the DX multiplier leader list, all of the calls are from the Caribbean or north shore of South America. We do have an unusual achievement this year in that there is a tie between the PJ2T MS-HP team and W2SC operating at 8P5A (SOAB-HP) — nice work by a single operator to not only make all the QSOs but find as many multipliers as the leading Multiop station!

PJ2T	348
8P5A (W2SC, op)	348
6Y1V	345
P4ØL	343
VP5H	343

Under the Sun’s Thumb

What is it like to operate from one of the rarest of all domestic multipliers during a DX contest? Surely it must be non-stop pileup action with the DX rolling in! Well, not quite, as John, VE8EV writes online in “ARRL DX - The Best of Times, The Worst of Times...” (ve8ev.blogspot.com/2012/03/arrl-dx-best-of-times-worst-of-times.html).

Top Ten

W/E

Single Operator, High Power	
VE3EJ	4,374,360
W2RE	4,246,440
VC3A (VE3AT, op)	4,043,760
YY2TT (K6LA, op)	3,902,121
N2IC	3,349,500
K1TO	3,258,036
N9RV	2,966,301
W9RE	2,951,214
W3BGN	2,877,672
AA1K	2,847,960

Single Operator, Low Power

N1UR	2,146,506
AD4Z	1,835,856
N5AW	1,186,500
N4TZ	989,712
K9JF	815,298
N8AA	697,248
N4XL	688,371
NA8V	642,930
NA4K	555,894
W2TF	485,685

Single Operator, QRP

W2ID	423,360
VA3DF	320,100
N1TM	273,936
W1MR	256,608
KO1H	246,024
W6QU (W8QZA, op)	199,950
ND0C	191,484
NT4TS	167,322
N8XA	115,773
KS4X	85,260

Single Operator, 10 Meters

W5PR	166,608
W4SVO	120,978
K5KG	103,248
K5RR	87,750
NA4CW	62,568
K1WHS	60,279
W7RN (K5RC, op)	59,472
K2SSS	52,800
W3EP	52,428
K9BGL	37,026

Single Operator, 15 Meters

N7DD	612,066
K8PO	516,006
N4PN	431,310
KU2M	399,324
NA2U	338,451
N2PP	274,428
AG4W	232,098
N8BJQ	188,670
W4DXX	181,656
WB2REM	172,866

Single Operator, 20 Meters

W3FW	259,671
K6HNZ	154,704
VE9HF	153,120
K7AWB	153,090
WR2G	149,640
W1AVK	86,856
WF1G	61,200
KC2NB	55,350
NZ9Y	54,054
K4TRH	51,903

Single Operator, 40 Meters

W7WA	283,710
W6Y1	257,928
N4NW	42,402
K8DJC	36,186
VE3FU	28,500
AD8C	19,110
KJ4EX	16,200
VE3SWS	12,972
W6RKC	12,882
K3NK	11,781

Single Operator, 80 Meters

K6AAX/VY2	152,460
ND8DX	40,257
KM1R	19,032
KU1T	18,408
W4QNW	12,546
WA8UEG	12,240
K0KT	5,328
W8JMF	5,145
WI9H	4,320
W8TM	3,393

Single Operator, 160 Meters

VY2ZM	44,286
W2MF	12,126
W2VO	3,360
K5RX	3,108
K1HAP	2,700
W3GH	1,794
AC5O	714
WD8DSB	147
N5JDT	27

Single Operator Assisted, High Power

K3WW	3,839,136
N3RR	2,799,357
AA3B	2,772,540
N3RS	2,594,469
N2MM	2,246,874
W1GD	2,177,412
N4ZC	2,051,322
W8MJ	1,895,820
W2IRT	1,720,488
N1DG	1,689,639

Multioperator, Single Transmitter, High Power

K1LZ	4,570,146
K1KI	3,774,378
K0RF	3,495,270
K9RS	3,447,900
N1MM	3,433,608
N1BA	2,823,246
W3MF	2,195,856
K3MD	1,874,964
W2MU	1,848,432
W4HZ	1,593,108

Multioperator, Two Transmitters

W4RM	4,611,963
KB1H	4,400,928
W6WB	4,244,448
K8AZ	4,071,858
K0TV	3,275,616
K9CT	2,937,768
W5RU	2,920,680
K2AX	2,726,844
W7IV	2,646,900
K1KP	2,629,536

Multioperator, Unlimited Transmitters

K3LR	11,762,118
W3LPL	11,210,844
WE3C	9,006,795
KM1W	6,031,341
K1RX	5,725,008
NR5M	5,645,184
W2PV	4,756,752
W0AIH	2,666,166
NE3F	2,652,507
AK7AZ	908,418

Multioperator, Single Transmitter, Low Power

W0UO	797,268
W2TZ	653,112
W6YX	534,540
W3ZGD	512,472
AB1OD	320,016
N6DZR	180,387
K5KDX	153,972
W3WN	116,130
NQ2J	103,875
W8LRC	35,802

Single Operator Assisted, Low Power

K0UK	1,016,565
KT4ZB	977,499
N5DO	974,133
W3KB	748,584
KA2KON	741,150
WE9R	609,150
N2KPB	578,160
W1KT	566,352
VA2SS	547,560
WN6K	525,930

DX

Single Operator, High Power

8P5A (W2SC, op)	9,722,772
V26M (N3AD, op)	6,676,425
KP2M (N2TK, op)	6,500,556
TO5A	5,764,011
9Y4W	5,188,320
CR6K (CT1ILT, op)	5,119,821
LT1F (LU1FAM, op)	4,425,516
OA4SS	3,675,951
LX7I (LX2A, op)	3,521,700
CO2GG	3,008,448

Single Operator, Low Power

P40V (W5AJ, op)	5,295,528
H13TEJ	5,039,685
J88DR	4,002,900
V31YK (DL2AYK, op)	2,925,252
J7Y (K1IL, op)	2,218,878
TG7/N6HD	2,151,279
EA8MT	1,169,136
V51YJ	1,132,509
E1XOE	1,220,290
8P6EX	1,118,988

Single Operator QRP

LU7HZ	136,479
F5BG	88,452
IV3AOL	28,539
JH1APZ	24,624
LU1VK	18,819
JA2MWW	18,669
DL8LJ	14,964
IK1BBC	14,553
PY2BN	13,221
PU5ATX	12,084

Single Operator, 10 Meters

PX5E (PP5JR, op)	673,554
LU5FC	585,162
PY2LED	419,580
HQ2GL	411,840
CE1DY	284,439
PU2LEP	271,695
XE1BY	260,010
LU8EOT	258,552
KP4JRS	245,268
LW7DUC	240,816

Single Operator, 15 Meters

PR5B (PY2LSM, op)	522,660
KH7Y (K2NG, op)	521,460
KP2MM (N2TTA, op)	497,943
F6KHM (F8DBF, op)	450,729
TM1W (F5HRY, op)	450,180
CE3CT (CE4CT, op)	434,625
WH7Z (W0CN, op)	363,912
E17M (E18IR, op)	348,480

CM8AKD	316,476
TM7F (F6GLH, op)	306,033

Single Operator, 20 Meters

HK1T	627,324
YW4D (YV1DIG, op)	538,752
TM6M (F1AKK, op)	505,263
PX5C (PY2BK, op)	352,458
C6AZZ (K4IIO, op)	325,620
WP3A	314,280
DL0WW	250,527
TG9ANF	245,220
OL9Z (OK2PVF, op)	214,659
OH0X (OH2TA, op)	213,480

Single Operator, 40 Meters

ZF2AH	394,710
TM9R	269,820
OK1FFU	230,040
PR7AP	167,067
CE3EEA	140,391
HC2AQ	138,168
IO6A	131,904
IR2C (HB9DUR, op)	113,886
XE2S	99,528
ED3B (EA3BOX, op)	98,784

Single Operator, 80 Meters

YV5T (YV5JBI, op)	123,144
4M5W (YV5MSG, op)	115,344
GM3PPG (G4BYB, op)	79,110
CL8AKY	50,055
EA7EU	32,760
UU7J (UU1AZ, op)	26,532
SP3GTS	5,772
UT2II	3,876
EA1AAW	1,920
G4IY	1,485

Single Operator, 160 Meters

KV4FZ	72,072
LU2DVI	468
GW0GEI	432
YV5IAL	192
EU3AR	12
EU2EU	3
SP5CJY	3

Single Operator, Assisted High Power

PJ4G (K2NG, op)	6,471,075
ZZ2T (PY2MNL, op)	3,063,294
G6PZ (IZ1LBG, op)	2,750,814
PR2X (PY2ADR, op)	2,419,308
DR1D (PY2SEX, op)	2,146,188
CE1TT	1,493,790

ZL3IO	1,311,177
EE7E (EA7RU, op)	1,148,295
HF8N (SP8BRQ, op)	980,958
PY5ARP (PY5ZD, op)	839,460

Single Operator, Assisted Low Power

P43E	1,035,567
8P6NW	949,905
3G1D (CE1VIL, op)	748,659
PY2VZ	602,832
IB1B (IW1QN, op)	565,728
HK3JJB	336,168
KP2BH	327,990
PY2ZR	319,422
EI/W5GN	263,451
EF1W (EA1WS, op)	204,702

Multioperator, Single Transmitter High Power

PJ2T	8,998,236
P40L	8,880,270
VP5H	8,158,941
CR2X	6,912,948
KH7X	6,626,124
TO11A	5,653,935
NP2B	5,386,605
CW5W	4,762,812
CS2C	4,348,050
LD1C	4,251,708

Multioperator, Two Transmitters

6Y1V	11,719,305
T15N	10,550,358
KH6LC	8,036,280
PT5T	7,361,070
ED1R	4,455,360
I19P	2,082,816
PI4DX	2,030,742
HG7T	1,612,995
JA1YPA	1,241,460
GM7R	1,143,990

Multioperator, Unlimited Transmitters

EF8R	8,961,225
LP1H	7,469,304
T18M	7,285,140
C6ANM	5,081,076
9A1A	3,743,250
JA3YBK	2,340,831
HG1S	1,942,920
JE1ZWT	1,098,279
S50XX	334,314
PY2PT	17,766

Multioperator, Single Transmitter Low Power

H13K	4,805,097
VP9I	4,483,800
T48K	2,402,529
LU1UM	1,390,800
ZV2K	735,504
KP4MM	659,088
CV5K	556,365
PR5A	447,447
PS2R	216,144
EE5W	86,496

Good Practices, Please

There is always room for improvement on our operating practices — maybe that's why they call it "practice"! Well, not really, but if you're wondering how to improve your score and how the Big Guns make so many QSOs, it's likely that the least expensive station accessory to improve is the one between your headphones.

- Efficiency — no extra words or comments
- Full calls — use them on transmit and pull them out when called
- High-quality audio — put your watts where they count

■ Identification — don't waste the time of others, give your call!

■ Accuracy — no guessing, get it right or don't log it

If you get a chance, watch for a Contest University (contestuniversity.com) or similar program coming to a convention or hamfest near you. These one-day package of courses are a focused way of gaining a lot of know-how very quickly — kind of like a contest!

A New Voice in the Pileups

It's always great to learn of a new operator making a splash on the bands. This year, we heard of a new voice from the far Northwest — Alaska, in fact, as related by Larry, KL7/NITX. "We were no match for Mother Nature this weekend, but the team refused to cave and spirits remained high throughout the ups and downs of propagation. KL1AZ's 12-year-old granddaughter, Dale, proved to be an incredible contester-in-the-making. She

Top Ten Golden Logs

Call	QSO
W7WA	965
K7UA	500
VA3DF	485
K3OO	454
ZS2NF	406
N6DZR	393
EA4YU	323
EA3NO	305
W8BFX	264
KS4X	245

Sponsored Plaque Winners

Thanks to the generous sponsorship of numerous clubs and individuals, we are pleased to announce the winners of a sponsored ARRL DX Phone plaque. The ARRL wishes to thank the plaque sponsors for their continued commitment to the ARRL Plaque Program. Without their support and dedication, the Plaque Program would not be possible. Un-sponsored plaques may be purchased by the plaque winner. If you wish to purchase an un-sponsored plaque or order a duplicate plaque, contact ARRL Contest Branch Manager Sean Kutzko, KX9X, at 860-594-0232 or by e-mail at kx9x@arrl.org. The cost for plaques is \$75 (includes shipping).

Plaque Category	Plaque Sponsor	Winner
W/VE Single Operator High Power Phone	Frankford Radio Club	VE3EJ
W/VE 1.8 MHz Phone	Butch Greve, W9EWC Memorial	VY2ZM
W/VE 3.5 MHz Phone	Jeffrey Briggs, VY2ZM	K6AAX/VY2
W/VE 7 MHz Phone	Charles Wooten, NF4A	W7WA
W/VE 21 MHz Phone	Northern Illinois DX Association	N7DD
W/VE 28 MHz Phone	Ralph Fontaine AF7DX	W5PR
W/VE Single Operator QRP Phone	Jeffrey Briggs, K1ZM	W2ID
W/VE Single Operator Assisted, High Power Phone	Pete Carter, K3VW Memorial	K3WW
World Single Operator High Power Phone	North Jersey DX Association	8P5A
World 1.8 MHz Phone	Fred Race, W8FR, In Memory of ZL2BT	(W2SC, op)
World 7 MHz Phone	Jim Rafferty, N6RJ Memorial - Cayman ARS	KV4FZ
World 14 MHz Phone	Don Wallace, W6AM, Memorial Award	ZF2AH
World 28 MHz Phone	North Shenandoah DX Association NS4DX	HK1T
Asia Multioperator Single Transmitter, High Power Phone	Yankee Clipper Contest Club	PX5E (PP5JR, op)
North America Multioperator Single Transmitter, High Power Phone	Nick Lash, K9KLR	RU0FM
World Multioperator Two Transmitters Phone	W6NL and K6BL	VP5H
Japan Single Operator Low Power Phone	Western Washington DX Club	6Y1V
Seventh Call Area Single Operator High Power Phone	Willamette Valley DX Club	JH4UYB
World Multioperator Unlimited Phone	Stanley Cohen, W8QDQ	N9RV
Asia Single Operator QRP Phone	Sean Kutzko, KX9X	EF8R
World Single Operator Phone Low Power	Arizona Outlaws Contest Club	JH1APZ
Canada Single Operator Low Power Phone	Contest Club Ontario	P40V (W5AJ, op)
Great Lakes Division Single Operator Unlimited, High Power Phone	Northern Ohio DX Association	VA3SWG
		W8MJ

Active Winning Streaks (3 or More Wins)

W-VE		
Call	Number	Category
N1UR	4	SOAB-LP
W5PR	4	SOAB-10
K1LZ	4	MS-HP
K3LR	3	MM (new)

DX		
Call (@ QTH)	Number	Category
W2SC (@8P5A)	3	SOAB-HP (new)

Category Abbreviations

- SO: Single Operator (SOAB — All Band, SOSB — Single Band, SOU — Unlimited)
- HP/LP/QRP: High Power, Low Power, QRP
- MS: Multioperator, Single-Transmitter
- M2: Multioperator, Two-Transmitter
- MM: Multioperator, Multiple Transmitters

Propagation Indices for ARRL DX Phone

Year	Flux		Planetary Ap		Estimated K	
	Sat	Sun	Sat	Sun	Sat	Sun
2002	191	183	5	10	1.6	2.5
2003	138	147	14.5	11	2.8	2.6
2004	105	106	5	6	1.8	1.8
2005	81	84	10	36	2.5	4.3
2006	75	74	2	1	0.9	0.5
2007	73	73	2	3	0.5	0.8
2008	69	69	19	8	3.3	2.0
2009	69	69	1	8	0.3	2.6
2010	78	77	3	4	0.8	1.0
2011	135	143	5	5	1.1	1.2
2012	116	120	8	11	2.0	2.6

Data from www.swpc.noaa.gov/ftpmenu/indices/old_indices.html.

quickly learned the ropes of running and Search-and-Pounce with Win-Test. She may end up being better suited for CW and RTTY contests, though, because her high-energy requires a lot of stoking. A mouth full of sun-flower seeds is incompatible with a phone contest...Larry, KL7/NITX."

Maybe there are other Dales near your contest club? Why not offer them some chair time and be prepared for a surprise!

Extended Results

Look to the online extended version of these

results (www.arrl.org/contest-results-articles) for more commentary and the following features:

- A PDF file of Top Ten call signs since 2002
- Changes in QSOs and multipliers as a percentage of the 2002 totals
- DX entries tracked by category from year to year
- Soapbox comments from W/VE

and DX logs

You'll find a Regional Analysis for your Division or Continent written by a volunteer author from the area. There's also a close look at the results from the Caribbean's annual festival of DXing frenzy.

The Soapbox comments are great fun to read. Some are a simple "thanks, had fun" and others are detailed observations about the contest and the equipment used to participate. The ARRL Soapbox web pages (www.arrl.org/soapbox) contain more photos and stories,



Two weeks after activating M5E during the CW weekend, Seppo, OH1VR and Kazu, JK3GAD traveled to California where they helped activate the W6NV station as W6WB. From left to right are Seppo, OH1VR; Kazu, JK3GAD, and AI, AD6E. Host Oliver, W6NV and Denny, KX7M are not in the picture. [OH1VR photo]

too. Even more Soapbox commentary is compiled by Dink, N7WA from the popular 3830 score posting website at www.eskimo.com/~mwdink/3830/. Browsing through all of these comments, you can find yourself thinking, "Were all of these people in the same contest?"

Concluding Remarks

Next year — even with a slowing solar cycle predicted — should be even better. Get the 2013 ARRL DX contests (February 18-19 and March 3-4) on your calendar now, polish up those high-band antennas and get ready for a healthy dose of radiosport! — 73, Ward Silver, N0AX

Accuracy Index Records

Bold indicates an all-time record

W/VE

Group	Call	Category	QSOs	Error Rate	Index	Year
SO	VY2ZM	SOAB-HP	4084	0.5	13.561	2010
SOU	W2RE	SOA-HP	3541	0.7	13.479	2011
MO	K3LR	MM	7894	0.6	13.837	2011

DX

Group	Call	Category	QSOs	Error Rate	Index	Year
SO	8P5A (W2SC, op)	SOAB-HP	9292	0.5	13.918	2011
SOU	PJ4G (K2NG, op)	SOU-HP	6706	1.1	13.716	2012
MO	PJ4G	M2	12197	0.6	14.026	2011