



ARRL International DX Contest - Phone

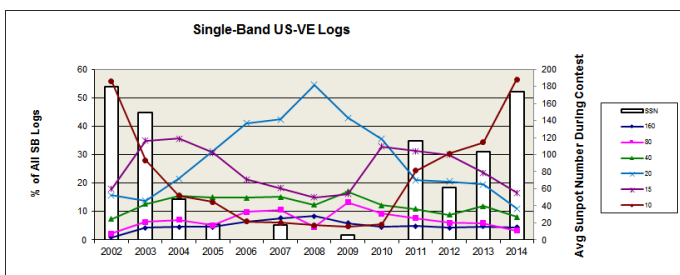
2014 Results

By Drew Vonada-Smith, K3PA

Solar cycle 24 has officially reached its “mini-max”, but there was nothing mini about record breaking ARRL DX Phone activity levels this year!

After the marginal conditions in ARRL DX Phone last year, hopes were high that Sol would come through on March 1st and 2nd, providing good 10 and 15 meter openings for those of us at higher latitudes. Even given the infamously low “mini-max” sunspot peak of Cycle 24, our fusing friend did not disappoint. Solar flux was in the 160s, coinciding almost exactly with this cycle’s peak. Participants were blessed with a wonderfully calm A index of 7 on Saturday and an even better 5 on Sunday.

Deserving DXers around the world consistently reported excellent high band conditions. KC8IMB reported, “Ten was wall-to-wall all weekend. WOW!” On the other hand, what is gained on 10 meters is sometimes lost on the low bands. KM1R asked, “Did someone turn off the 160m band on the first night?” Nevertheless, a few stations reported increasing their country total on 160 meters.



Single-band log totals from the U.S. and Canada versus the Average Sunspot Number during the contest.

As you can see from the chart, contesters took full advantage of conditions on 10 meters, largely abandoning the 15 and 20 meter categories, despite all three being almost equally excellent bands this year. The 40 through 160 meter categories tend to show fairly constant activity over the sunspot cycle, possibly due to being entered by “specialists” who compete well on that particular band.

Such good conditions provided a lot of fun. Who wouldn’t enjoy two days of six-band DX? The soapbox comments were filled with quotes including words like “blast,” “fantastic,” “great,” “exciting,” “super,” “hot,” and many instances of the phrase “first time for...” On

the other hand, there are also down sides to great conditions around the clock. W7MEM sums it up well; “Oh, my rear is sore!” We hear you, OM.

2014 also smashed the participation record with a new record of 4131 logs - 586 more than last year! (2053 W/VE logs, and 2078 DX logs for an increase of over 10% in both groups.) 1,136,632 QSOs were reported by DX stations for an increase of almost 261,000 over 2013. That’s up by an amazing 29%! W/VE logs contained 898,279 (691,336) QSOs for a similarly impressive increase. Be part of it all; claim your fifteen minutes of fame and send in that log!

Since hams never tire of discussing propagation, here is some comparison data. As shown in the table of propagation index history these conditions were a bit worse than those in 2002 (lower flux with similar A and K indices) and better than any year since; certainly far better than the last two years.

Year	Solar 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
2013	111	112	12	7	2.5	2.0
2014	165	161	7	5	2.0	1.3

Propagation indices for ARRL DX Phone for the past 13 contests. (Data from www.swpc.noaa.gov/ftpmenu/indices)

Low band enthusiasts didn’t always share the thrill, reporting mixed results.

AF5Q (OK) - “Basically dead here on 160 and 80...”

W1TJL (CT) – “The 160 meter antenna worked well too, and we managed 33 countries and 42 QSOs.”

Statistics, being the final arbiter, note that 160 meter veteran W2MF made four more QSOs than last year, but two fewer multipliers. Let’s call that a draw.

But this year was a sunspot peak, so the big topic has to be 10 meters. Master contesteer W3BGN took W/VE

Single Op, Single Band honors on 10 meters last year with 247k. (Bravo, Golf November!) This year, an amazing 22 entries bettered Steve's score, peaking at 825k. Some fun, eh?

For DX, the top three Single Op, Single Band 10 meter scores, starting at 718k, beat last year's winner of 557k. More significantly, the top four 10 meter scores last year were all in South America. This year, the top four, respectively, were from South America, Europe, North America, and Europe. Now that's a solid indicator of good propagation!

How about new 10 meter records? Sorry, not for W/VE. Even at this sunspot maximum, top stations could not quite compete with overall 2000/2002 records. But things were great in the northeast, with new district highs set in W1, W2, and W3. In DX land, only the top European entrant set a continental record on 10 meters. Let's look forward to smashing more of these figures in Cycle 25.

But let us not forget 15 meters. The winning W/VE 15 meter score of 811k and the next three competitors easily beat last year's 527k. For DX entrants, 15 meter scores were very similar to last year with the winner at 665k, down slightly from last year's 673k. Clearly, 15 meter scores are not as sensitive to magnitude of the sunspot peak.

Since we are discussing single-band operation, there are many good reasons to try these categories. If you have limited time to operate, you can choose a band with propagation that best matches your available time, and thus be more competitive. Perhaps you can target an all-time record for your division that is an achievable goal for your station and experience. Additionally, this is a great way to learn propagation on a band; you can be present as the band opens, and then follow as the opening moves around, watching for long path, skew path, gray line and other multiplier providing phenomena you might miss while operating another band.

Remember, that with these excellent conditions, you just never know what unusual opening might be underway. We have all heard seemingly dead bands suddenly come alive at the start of a contest. Don't wait for a DX Cluster to report activity. If no one is there, it won't happen. Get on the band and call CQ!

As we go through the rest of writeup, here are the abbreviations that refer to the different categories. You can find the rules that apply to all of the categories at arrl.org/contests.

Category Abbreviations for ARRL Contests

HP/LP/QRP	High Power, Low Power, QRP
SOHP/LP/QRP	Single Operator, All Band
SOSB	Single Operator, Single Band
SOU	Single Operator Unlimited
MSHP/LP	Multioperator, Single-Transmitter (HP/LP)
M2	Multioperator, Two-Transmitter
MM	Multioperator, Multiple Transmitters

Record Breaking Efforts

As one would expect at a sunspot peak, this was a banner year for breaking records. The tables below show all of the record-setters by category, district, and continent. **Bold** indicates a new all-time W/VE or DX record for the category.

W/VE Records Set This Year

Category	Dist	Call	New Record	Old Record	Held By	Year Set
SOHP	VE	VY2ZM	6,949,614	6,586,785	KQ2M	2002
SOHP	4	K1TO	5,253,930	5,198,226	K4ZW	2002
SOHP	3	K3CR	4,445,289	4,346,364	K3ZO	2001
		(LZ4AX, op)				
SOLP	1	N1UR	4,708,275	3,186,945	K4XS	2001
SOLP	9	W9RE	2,502,984	1,374,744	N4TZ	2002
SOLP	5	NA5NN	2,502,927	2,326,608	N5TJ	1999
		(N5BO, op)				
SOLP	8	NA8V	2,355,240	1,375,998	N8II	1993
SOQRP	1	W1MR	654,678	514,600	KA1LMR	2005
SOSB-10	1	K1LZ	825,084	816,660	NX1H	1992
		(K3JO, op)				
SOSB-10	2	K2SSS	629,391	355,740	KE2C	1982
SOSB-10	3	N3OC	592,710	517,140	N3HBX	2002
SOSB-20	3	KB3WD	610,854	526,350	K3ZJ	1992
SOSB-20	8	W8TA	537,810	518,256	N18L	1996
SOSB-40	4	W4AAA	398,718	283,710	W7WA	2012
		(KK9A, op)				
SOSB-40	1	W1XX	176,880	147,882	K1UO	1993
SOUHP	4	K4XS	7,160,103	5,790,720	K1IG	2000
SOUHP	3	K3WW	6,066,816	5,128,524	K3WW	2002
SOUHP	VE	VY2TT	5,221,392	3,013,644	VY2TT	2009
SOUHP	0	W0GJ	2,200,608	1,738,335	K0KX	2004
		(N0KK, op)				
SOUPL	3	W6AAN	2,291,769	1,304,478	VE2XAA	2011
SOUPL	4	KT4ZB	2,069,949	1,119,492	WB4OMM	2013
SOUPL	2	N2WKS	1,759,914	935,022	KA2D	2013
SOUPL	1	KS1J	1,238,541	1,228,857	W1NT	2013
SOUPL	9	WE9R	1,193,976	1,064,496	WE9R	2013
SOUPL	8	K8LY	645,621	524,700	K8LY	2013
SOUPL	7	N7FLT	442,818	227,688	K7JE	2012
MSHP	4	WW4LL	5,589,657	4,458,640	W4MR	2002
MSLP	1	N1BA	2,598,174	2,256,384	NR4M	2013
MSLP	VE	VE9M	2,574,936	13,608	VE7NA	2012
MSLP	5	N5DO	1,473,120	1,008,780	N5DO	2013
MSLP	3	W3ZGD	892,038	612,978	W3ZGD	2013
MSLP	9	K9LA	596,700	none	none	n/a
MSLP	8	KC8IMB	190,629	35,802	W8LRC	2012
MM	3	K3LR	19,435,230	18,015,732	W3LPL	2000

An aging record from Cycle 21 was broken this year, with K2SSS smashing the 2nd district Single-Band 10 meter record set in 1982. No fewer than five cycle 22 records were also broken. Of course, the relatively new low power category records fell like dominos.

Congratulations to the participants breaking their own district records. Repeat records were set by VY2ZM, N1UR, W1MR (formerly KA1LMR), K3WW, VY2TT, WE9R, K8LY, N1BA, N5DO, and W3ZGD. Fine business!

DX Records Set This Year

Cat	Cont	Call	New Record	Old Record	Held By	Year Set
SOSB-10	EU	CR2X (OH2BH,op)	667,401	583,965	CT1BOP	1991
SOUHP	EU	OK7K (OK1BN,op)	4,033,320	2,781,300	OM3GI	2010
SOULP	AS	BG2AUE	161,568	91,884	HSØZJU	2012
SOULP	OC	YE1NZ (W7NZ,op)	75,621	32,724	AH6NF	2011
MSHP	EU	TM6M	6,937,245	6,912,948	CR2X	2012
MSLP	NA	PJ6A	6,083,181	5,498,106	P4ØV	2011
MSLP	AF	ZR9C	771,630	173,628	ZS6WN	2013
M2	SA	P4ØL	13,938,144	13,061,412	PJ2T	2003
M2	AF	CN2AA	11,667,084	8,372,304	D4C	2010
M2	OC	KH6XX	8,602,440	8,036,280	KH6LC	2012

New All-Time Records

Particularly noteworthy are the seven all-time records set this year:

- VY2ZM – W/VE SOHP
- N1UR – W/VE SOLP
- W4AAA (KK9A, op) – W/VE SOSB-40
- K4XS – W/VE SOUHP
- W6AAN – W/VE SOULP
- N1BA – W/VE MSLP
- PJ6A – DX MSLP

Low band aficionado VY2ZM set a new record in the prestigious SOHP category. Jeff broke his own VE record from 2004, and the overall W/VE record, with a score only 3% less than the Single-Op Unlimited category winner. His multiplier of 49 on 160 meters certainly helped. If you think you need a DX spotting network to make big points, think again!

Low power champion N1UR also set a new SOLP mark, breaking his own 2013 1st district record, and the overall W/VE record set by K4XS in 2001. He noted, “*Most amazing ARRL DX SSB Conditions experienced here for 12 years here. It was a thrill to be part of it.*” Ed, if I made 3,590 QSOs without an amplifier, I’d be thrilled too!

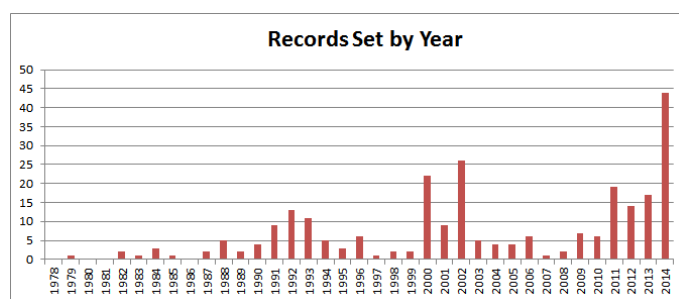
W4AAA, with contest veteran KK9A operating, smashed the 40 meter single band record. John topped it by 40%, moreover, during a part of the sunspot cycle not usually associated with 40 meter excellence. Amazing job, John.

Super-scoring regular, K4XS, apparently did not take the loss of his SOLP record lying down. Bill took the big SOUHP crown this year with a record-setting 7.16M. Bill broke a record standing since 2000 by an impressive 24%! In fact, Single-Op Unlimited veteran K3WW also broke the previous record with 6.06M. It’s great to see such strong efforts being made in the SOU categories.

Joining the surge of big SOU scores is W6AAN, who obliterated the SOULP record set in 2011. Also joining Vasily in breaking the previous mark were KT4ZB with 2.07M, N2WKS with 1.76M, and N2SQW with 1.74M. Well done, Vasily!

N1BA rounds out the trifecta of stations breaking their own district records and the all-time figure. Lee and his team’s 2.6M edged out the score set last year by NR4M in the Multi-Single, Low Power category. In this very close race, VE9ML and team also beat the previous record with their 2.57M. Rock on, gentlemen!

Last but certainly not least is the PJ6A team, who topped the 2011 DX Multi-Single, Low Power record set by P4ØV. It certainly will not be easy to top their 6.08M, but the Caribbean is never short of strong efforts. Who wouldn’t want to go there in March?



The effects of the solar cycle and new categories are easy to discern in this chart that shows the year in which current records were set.

As the figure above shows, this is a record year for records! 44 new records were set in 2014, 17 of which were in either in SOULP or MSL. 34 were set in W/VE and 10 by DX stations.

All of the ARRL contest records are available online at arrl.org/contest-records. More than 400,000 scores are included in the K5TR Contest database, too. (kkn.net/~k5tr/scoredb) The best way for you to show your admiration of a record is to break it. Give it a try!

There are many categories and many records to challenge. Many are within reach of a modest station and a good operator. Care to give it a try? (Hint: Antarctica looks like a particularly easy mark.) You are guaranteed at least one year of fame and glory!

Close Calls

Category	Dist/Cont	Call	Score	Existing Record	Set By	Year Set
MM	W/VE	K3LR	19,435,230	19,610,580	KC1XX	2000
MM	AS	JA3YBK	3,454,908	3,531,590	JA3YBK	2002

There were very few close calls this year, possibly due to the large number of records broken altogether. Most noteworthy is superstation K3LR, whose team missed the all time Multi-Multi record set by KC1XX in 2000 by less than 1%. Get him next time, Tim! Asian champion team JA3YBK also narrowly missed breaking their own 2002 record. I think we will see them back for another try!

Do It Again

The active winning streaks of three or more consecutive wins of the same category are shown in the next table. Intense competition around the world makes winning a category a Herculean effort, so you have to admire the stations that manage to hold a title year after year. Of course, the best way to admire and respect these winners is to challenge them!

Active Winning Streaks (3 or More Wins)

W-VE

Call	Number	Category
N1UR	6	SOAB-LP
K3LR	5	MM

DX

Call	Number	Category
8P5A (W2SC, op)	5	SOAB-HP
KV4FZ	4	SOSB-160 (new)

The two W/VE stations that made the trilogy are N1UR with the longest winning streak of all; six #1 finishes in SOLP, and the K3LR team with a fifth top finish in MM over arch-rival W3LPL. Both of these stations would have even longer streaks except for a single-year's interruption. On the DX side, W2SC ran his SOHP win streak as 8P5A to five in this extremely competitive category. 160 meter maven KV4FZ made a fourth straight win on Top Band. Hats off to these stations for their superb consistency and endurance.

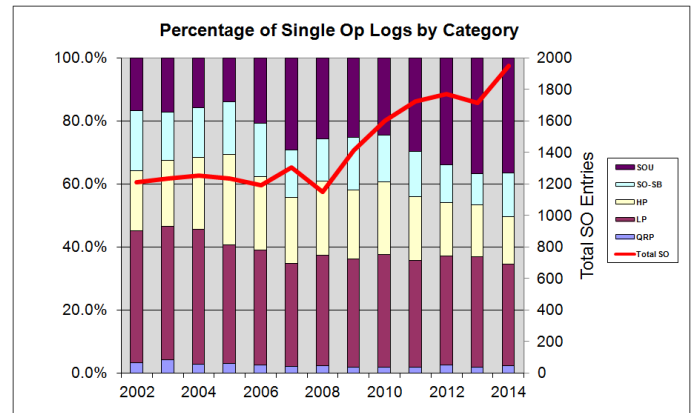
Break It Down

10 meters was the place to be this year. K1LZ made 2,273 QSOs to secure the SOSB-10 championship. But 15 was not far behind. VE3EJ logged 2,229 Qs to take the SOSB-15 title. The towers-of-power at the K3LR MM managed 2679 Qs on 10 meters and 2417 Qs on 15. Very few of us manage that many contacts on all bands combined!

On the DX side, PX5E set the SOSB-10 bar with 3882 Qs. FY5FY managed 3581 Qs to grab the SOSB-15 gold. LP1H took the MM silver, but set the mark with 2927 QSOs on 10.

Nine DX stations were able to log 62 states and provinces, the maximum achieved this year. For W/VE,

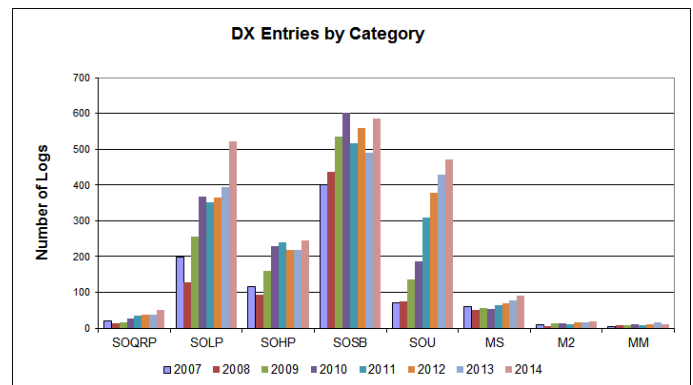
the K3LR 20 meter team was the multiplier champs, with 147 DXCC entities.



Relative levels of activity among W/VE single-op categories

Single-Op Unlimited categories continue to grow in popularity. SOU logs are strongly dominated by high power operation, while low power is more popular for traditional Single-Op. This suggests that significant numbers of smaller stations not using DX spotting are working the contest casually and sending in logs. That is great, exactly what we want for a healthy, growing sport!

For DX logs, the combined single-band categories were the most popular. However, 2014 showed a sharp growth spurt in SOLP entries as you can see in the following chart.



Relative levels of activity in the various DX categories

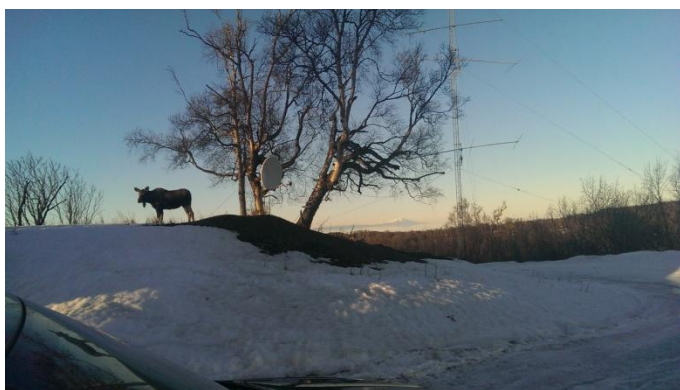
Why are SOULP and SOUHP growing so quickly? Because it's fun! Having a well-stocked pool of DX to choose from by just clicking on a spot is just too good to pass up. With all the improvements in station automation, much of the drudgery of Search and Pounce operation is behind us, and a contester can reel in exotic callsigns in short order. This doesn't have to replace traditional operation for those who enjoy it; that is why we have multiple categories. Do your own thing and have a blast!

Many will also note that this capability has also created opportunities for poor operating procedures. The operator is still responsible for correctly copying the call sign and exchange! How many bad call signs do you see spotted every contest? Please don't spot a call sign unless you are 100% sure it is correct. And for goodness sake, don't spot a busted call yet again with /BUST or a note that it is wrong! This just adds to the problem; leave it be and good operators will figure it out. Remember, there are QSO point penalties for bad calls, so do your best to get them right.

This is noted every year, but let's say it again. DX stations should give their call signs frequently enough that callers don't have to guess at it. Skipping this may make your rate higher but at the expense of everybody else's wasted time. And they are likely to be back and dupe you later. Some of the top stations ID with every QSO so there is no excuse for not giving a call sign at least every few QSOs.

It is only natural to focus on Big Guns and other contest winners, but that does not do justice to the real nature of the event. A review of the logs will show you that the majority of participants had modest scores and limited hours of operation. These folks are the life blood of the event, how else would the Big Guns work thousands of stations? You don't need 48 hours, and you don't need a big station to have a lot of fun. It's great for your DX totals and your operating skills. Try it!

For those of you that don't think a partial effort can generate big scores, note that N2WKS does not operate contests on Saturday due to his observance of the sabbath. Zev was only able to put in 24 hours during ARRL DX Phone. You may recognize that call, as N2WKS smashed the SOULP record for the 2nd call district this year. Mazel tov!



This KL7RA guest operator (MØOSE?) seemed to agree that 10 meter conditions were great – and hung around the 10 meter tower in the background for most of the weekend! (Photo by KA1NCN)

ARRL Affiliated Club Competition

Another great way to have fun is to complete as part of a club. Whether you are part of one of the powerhouse Unlimited clubs or a casual operator in your own Local club, there is no better way to compete, share the experience, and perhaps tell a few tall tales. For beginners, joining a club is a great way to get started. You say there is none in your area? Why not start one?

Club activity continues to grow, with 2071 club logs submitted from 84 clubs this year. Note that CW and SSB contests are combined in the overall club totals.

Starting in the Local Club category, the Iowa DX and Contest Club ran away with the title, making 11 Meg and propelled by the huge 9M+ CW score at NØNI. The Delara Contest Team earned a very respectable 6.2M for the silver, followed by the Central Virginia Contest Club reaching 5.8M for the bronze. Nice job!

Next up the scale are the Medium Clubs where the North Coast Contesters achieved 83.2M, and repeated for the win over the Hudson Valley Contesters at 32.6M. The Central Texas DX and Contest Club captured third at 30.4M, just squeaking past the Carolina DX Association at 30.1M. This category is quite a race for second place, so expect to see some fights next year.

But what about the major league pennant? Predictably, it was a giant struggle between the Yankee Clipper Contest Club, Frankford Radio Club, and the Potomac Valley Radio Club. Final results look a lot like last year, scaled up a bit due to the excellent conditions. The New England champs at YCCC prevailed for the third year in a row, with an amazing 309M over 225 logs. The Philadelphia powerhouses at Frankford Radio Club managed second place with 275M and 145 logs. You might note the outstanding points-per-log figure for FRC. (Disclosure; your author is an FRC member.) Placing third is the high voltage DC effort of Potomac Valley Radio Club, with 211M over 194 logs. But watch out for the Minnesota Wireless Association and others, they are growing fast!

Affiliated Club Competition

	Score	Entries
Unlimited Category		
Yankee Clipper Contest Club	309,313,344	225
Frankford Radio Club	274,550,130	145
Potomac Valley Radio Club	211,298,259	194
Minnesota Wireless Assn	73,479,519	119
Florida Contest Group	61,845,312	100
Society of Midwest Contesters	48,590,538	108
Contest Club Ontario	43,355,826	69
Northern California Contest Club	40,386,816	99
Tennessee Contest Group	27,241,215	53
Arizona Outlaws Contest Club	25,992,876	68

Medium Category

North Coast Contesters	83,227,824	31
Hudson Valley Contesters and DXers	32,621,709	36
Central Texas DX and Contest Club	30,367,659	25
Carolina DX Association	30,100,296	50
DFW Contest Club	28,626,342	40
Southern California Contest Club	25,347,537	46
Mad River Radio Club	25,247,256	25
Alabama Contest Group	20,103,351	28
South East Contest Club	17,647,536	28
Maritime Contest Club	16,692,306	20
Order of Boiled Owls of New York	16,062,111	16
CTRI Contest Group	15,819,768	11
Willamette Valley DX Club	12,518,019	26
Contest Group Du Quebec	12,449,646	18
ORCA DX And Contest Club	11,395,245	31
Georgia Contest Group	10,857,801	15
Louisiana Contest Club	10,293,270	9
Grand Mesa Contesters of Colorado	8,901,399	27
North Texas Contest Club	7,250,163	10
Western Washington DX Club	7,222,296	33
Kansas City Contest Club	6,776,478	11
Rochester (NY) DX Assn	6,048,792	21
Niagara Frontier Radiosport	5,989,530	11
Northern Rockies DX Association	5,621,709	5
Mother Lode DX/Contest Club	4,943,211	23
Mississippi Valley DX/Contest Club	4,767,492	12
Bergen ARA	3,365,940	17
Spokane DX Association	3,060,033	20
Bristol (TN) ARC	3,021,285	10
Kentucky Contest Group	2,497,506	7
Utah DX Assn	2,445,000	16
Allegheny Valley Radio Association	1,871,583	3
Saskatchewan Contest Club	1,763,442	6
Metro DX Club	1,626,945	12
West Park Radiops	1,258,434	14
Texas DX Society	896,310	7
Radio Club of Redmond	761,619	7
Oklahoma DX Assn	668,532	3
South Jersey Radio Assn	407,493	3
Nacogdoches ARC	158,733	3

Local Category

Iowa DX and Contest Club	11,005,815	3
Delara Contest Team	6,222,639	10
Central Virginia Contest Club	5,815,893	5
599 DX Association	3,669,753	6
Kansas City DX Club	2,315,898	8
Paducah Amateur Radio Association	2,139,354	3
Meriden ARC	1,570,572	6
Hilltop Transmitting Assn	1,263,252	3
Portage County Amateur Radio Service	853,491	7
St Louis ARC	780,294	4
Salt City DX Assn	766,716	3
Loudoun ARG	739,290	3
Blue Ridge ARC	700,449	5
New Mexico Big River Contesters	687,735	4
Fort Wayne Radio Club	683,184	5
All Amateur Radio Club	629,580	3
Fort Smith Area ARC	573,096	3
Sterling Park ARC	552,057	7
Lincoln ARC	532,494	5
Laird Campbell Memorial HQ	498,351	3
Wireless Association of South Hills	477,507	3
Badger Contesters	423,816	5
Brazos Valley ARC	403,473	8
Great South Bay ARC	391,293	7
Milford (OH) ARC	342,144	5
Northern Illinois DX Assn	299,250	3
Skyview Radio Society	270,870	4
Northeast Maryland Amateur Radio	270,525	4
Boeing Employees ARS - St. Louis	221,622	4
Ventura County Amateur Radio Society	169,692	3

South Texas DX and Contest Club	160,314	3
Southern California DX Club	153,066	4
Nanaimo Amateur Radio Association	88,446	3
Pueblo West Amateur Radio Club	84,300	3

Whether you belong to a DX club, a contest club, or the local general interest group, give the club competition a try. What better way to engage the spirit of radio-activity?

Accuracy

Hams are communicators and few of us would deny that accuracy is key. Getting the call and exchange right is important. The simple recognition that it matters and that the operator should try his or her best makes a big difference. Make the extra effort and ask for a fill when you need it. Penalties are assessed for errors to reward good operating habits. So boost your score by getting the call sign right!

Error Rate and Accuracy Index

Error rate is defined as the ratio of “bad” QSOs to “good” QSOs (all duplicate contacts are removed before cross-checking). Bad contacts are listed in your Log Checking Report as “busted” calls (B) or exchanges (X) or those that are “Not In Log” of the other station (N). Note that contacts with Unique (U) call signs, those with which yours is the only contact reported in the entire contest, are not counted as bad. Error rate ranges from 0.0 (no detected errors; a Golden Log) to 1.0 (every contact was bad, perhaps consider a new hobby?).

To clarify, “error rate” should be understood to include *only* those errors for which log checking could identify the correct call sign or information that was mis-copied. Unique call signs, for example, are often just call signs that are so busted that the log checkers couldn’t identify what the correct call sign really was. Without “hard evidence,” the QSO is allowed to stand. For example, the K3LR multiop team’s 9430-QSO log with no detected errors, while amazing and by far the largest Golden Log ever submitted, undoubtedly got credit for a few of the 377 unique calls (a typical amount for the bigger multi-op stations) that were actually bad calls. Nevertheless, the same process is applied to every log and so remains a valid method of assessing a station’s relative copying accuracy.

The following tables list the top five Accuracy Indexes achieved by HP and LP single- and multi-op stations this year along with the corresponding all-time records.

Accuracy Leaders
(*Bold indicates a new record*)

W-VE

Single-Op

Call	Category	QSOs	Error %	Index
K1TO	SOHP	4037	0.4	13.566
VY2ZM	SOHP	4762	1.3	13.548
N1UR	SOHP	3590	0.7	13.485
K3CR (LZ4AX, op)	SOHP	3292	0.7	13.447
XL3A (VE3AT, op)	SOHP	3086	0.6	13.429

Single-Op Unlimited

Call	Category	QSOs	Error %	Index
K4XS	SOUHP	4607	0.6	13.603
VY2TT	SOUHP	3769	0.6	13.516
AA3B	SOUHP	3409	0.6	13.473
K3WW	SOUHP	3952	1.6	13.437
KN2M	SOUHP	3138	1.0	13.397

Multi-Op

Call	Category	QSOs	Error %	Index
K3LR	MM	9430	0.0	13.822
W3LPL	MM	8464	1.0	13.776
WE3C	MM	8092	0.9	13.621
W2PV	MM	6505	1.0	13.567
W4RM	MM	5473	1.5	13.518

DX

Single-Op

Call	Category	QSOs	Error %	Index
8P5A (W2SC, op)	SOHP	8969	0.3	13.923
KP2M (N2TK, op)	SOHP	7136	0.3	13.823
YN5Z (K7ZO, op)	SOHP	6722	0.3	13.797
V26M (N3AD, op)	SOHP	6336	0.7	13.732
KH7M (NA2U, op)	SOHP	5727	0.6	13.698

Single-Op Unlimited

Call	Category	QSOs	Error %	Index
P4ØP (W5AJ, op)	SOULP	5472	0.5	13.688
OK7K (OK1BN, op)	SOUHP	4658	0.5	13.618
IR4M (IK4MGP, op)	SOUHP	4466	0.4	13.610
EC2DX	SOUHP	4752	1.2	13.557
SP8R (SP8BRQ, op)	SOUHP	3943	0.7	13.526

Multi-Op

Call	Category	QSOs	Error %	Index
P4ØL	M2	13236	0.3	14.092
PJ4G	M2	11533	0.4	14.022
CN2AA	M2	11575	0.7	13.994
KH7XX	M2	9310	0.0	13.969
VP5H	MSHP	8957	0.5	13.902

Accuracy Index Records (All-Time)

Bold indicates the record was set this year

W/VE	Call	Category	QSOs	Error %	Index	Year
SO	K1TO	SOHP	4037	0.4	13.566	2014
SOU	K4XS	SOUHP	4607	0.6	13.603	2014
MO	K3LR	MM	9430	0.0	13.975	2014
DX						
SO	8P5A	SOHP	8969	0.3	13.923	2014
	(W2SC, op)					
SOU	PJ4G	SOUHP	6706	1.1	13.716	2012
	(K2NG, op)					
MO	P4ØL	M2	13236	0.3	14.092	2013

The accuracy index noted in the table rewards lower error rates for large logs. For two logs with equal error rates, the log with more verified contacts has a higher index. For the mathematically adept:

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

Here are the Top Ten Golden Logs; the largest Single-Op logs that incurred no log-checking penalties. This year's Golden Log Award goes to N1MD. Congratulations Mike!

Top Ten Golden Logs

Call	QSOs
N1MD	536
ZM4T	457
KBØEO	434
SM5DJZ	401
KK4HEG	386
WØZF	341
UR5IFB	340
AK4QR	334
W8BFX	327
EA1WX	274

How did you fare this year? Experience shows us that most logs are pretty good, with more than half of the logs accomplishing an error rate of 2% or better, and more than 80% of logs have an error rate at least as good as 5%. But there is always room for improvement.

Here are some good operating habits that will also increase your score, without a single new antenna:

- Accuracy – don't guess, do your best to get it right
- Efficiency – no extra words or comments
- Consistency – find your groove and hold the rhythm
- Full calls – use them on transmit and pull them out when called
- High-quality audio – you want us all to hear you clearly
- Identification – give your call frequently and be sure that others log it correctly

DXing

There are even more achievements to celebrate. The top multiplier totals keep growing with lots of activity from around the world from difficult DXCC entities on the air. And of course, 10 meter operators were especially happy this year. Can Five-Band DXCC in a weekend be far off? Just a little more 80 meter activity and this dream will come true.

The best DXCC entity totals acquired by a Multi-Op and Single-Op entry are listed below

- 160: K3LR – 60 (MM)
VY2ZM – 49 (SOHP)
- 80: W3LPL – 90 (MM)
K4XS – 68 (SOUHP)
- 40: K3LR – 116 (MM)
W4AAA (KK9A, op) – 102 (SOSB-40)
- 20: K3LR – 147 (MM)
W8TA – 130 (SOSB-20)
- 15: K3LR – 139 (MM)
VE3EJ – 122 (SOSB-15)
- 10: K3LR – 136 (MM)
K1LZ (K3JO, op) & W6YI – 123 (SOSB-10 & SOUHP)

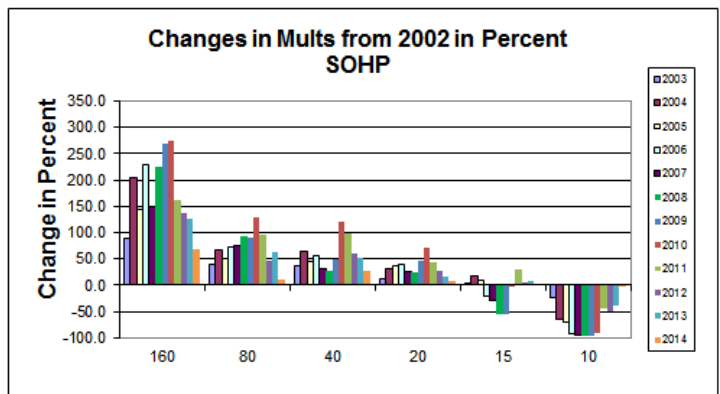
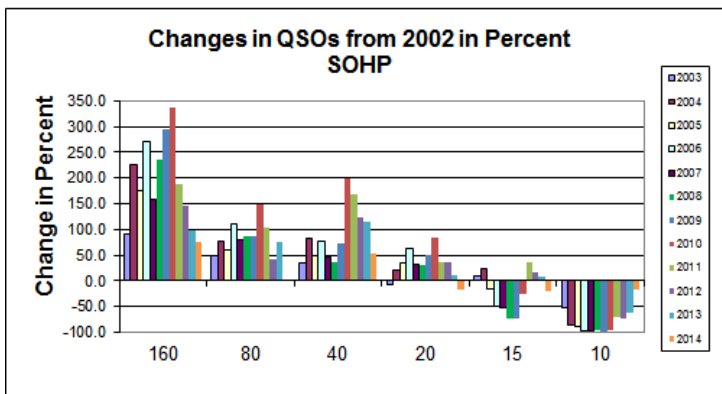
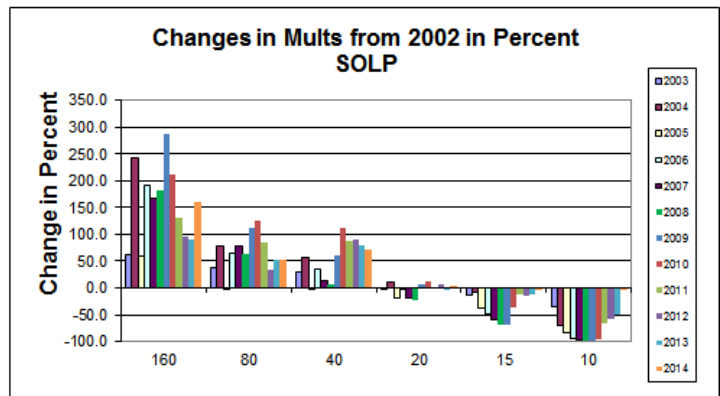
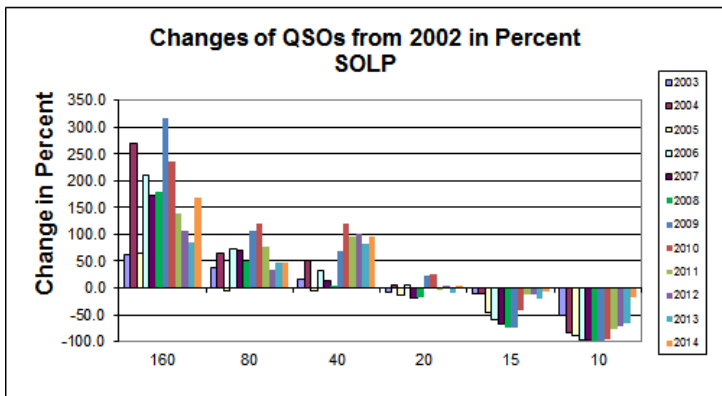
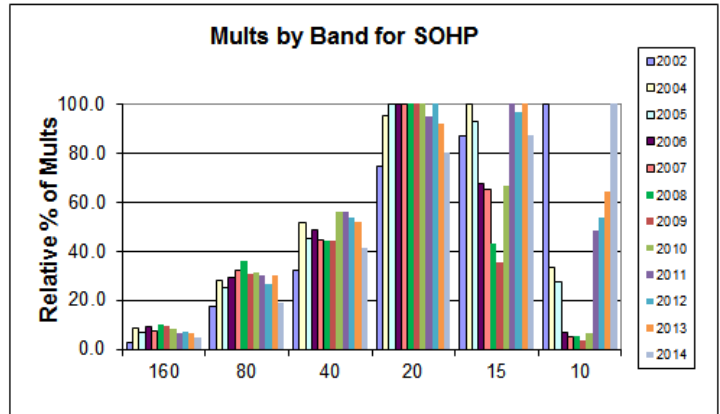
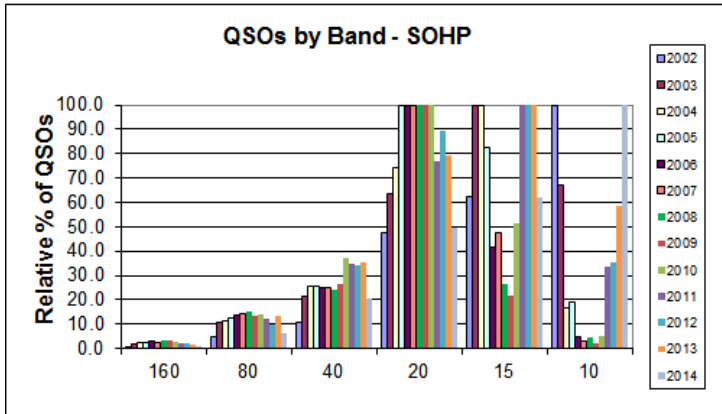
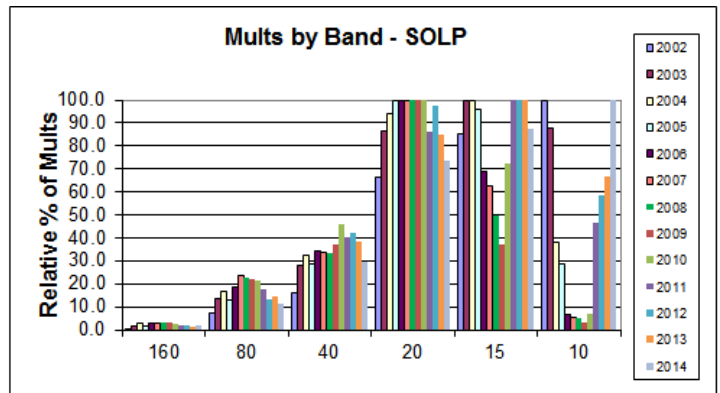
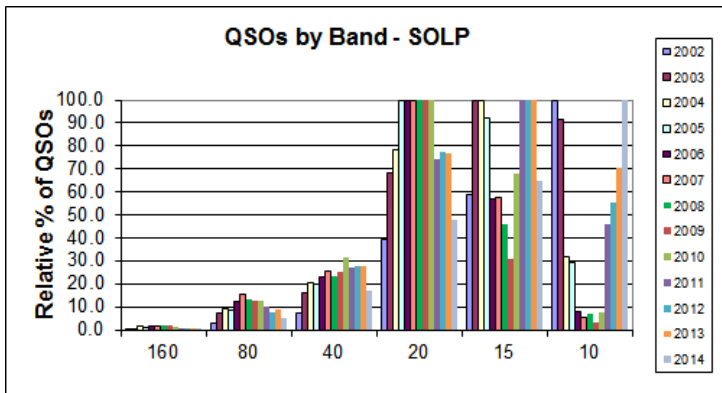
The top four DX multiplier champions were a repeat from last year, with P4ØL joining the list: HK1NA (363), PJ2T (357), PJ4G (356), VP5H (352), P4ØL (352). That's a lot of states and provinces!

Comparison to 2002

The year 2002 is widely considered to have been the best year for overall conditions during the previous sunspot cycle, Cycle 23. Your previous author found it interesting to keep track of how the each contest compared to 2002, and your current author agrees.

The first set of four charts on the following page show which band had the most QSOs or Multipliers and the other bands as a percentage of that. For example, if 20 meters had the most QSOs, 20's bar is set to 100% and all the other bands are some fraction of that.

The second set of four charts shows how much the absolute number of QSOs and multipliers have varied from 2002 in percent.



The Top Ten

Now, for this year's winners. May I have the envelope, please? Let's present our Top Ten this year. With the prevalence of Internet publication of reported scores (www.3830scores.com is an excellent site), we have a good view of the front runners. However, there are always a number of tight races that depend on the results of the log checking process. And then, there are the occasional Big Guns who did not post a score. Let us end the suspense and announce winners in each category.

While the Top Ten tables are often populated by geographically favored stations, there is plenty of contest action from everywhere in the world. To recognize this fact equitably, the Regional Leaders table notes excellence among competitors from each geographical area.

W-VE Winners – Single-Op Single Operator, High Power

SOHP traditionally has been the most intense Top Ten category, and the crown of single operator competition. Big stations and top operators from across the continent compete in a battle of the bands, logging huge scores. Let's take a look:

Call	Score	QSO	Mults	Section
VY2ZM	6,949,614	4762	481	MAR
K1TO	5,253,930	4037	435	WCF
K3CR (LZ4AX, op)	4,445,289	3292	453	WPA
XL3A (VE3AT, op)	3,648,348	3086	396	GTA
NR5M	3,629,304	3217	379	STX
AA1K	3,476,400	2931	400	DE
K4AB	3,272,904	2786	393	AL
K3ZJ	2,985,285	2566	391	WV
K3ZO	2,798,640	2409	390	MDC
KØTT	2,281,686	2116	362	MN

As noted previously, VY2ZM set a new all-time record and took the category for the 11th year out of the past 12th. He comfortably passed frequent high-flyer K1TO, who in turn prevailed over K3CR (LZ4AX, op). XL3A (VE3AT, op) and NR5M made a close showing for fourth and fifth place, respectively. The domination of the northeast is just a bit less apparent this year, thanks to excellent conditions.

Call - QSOs	SEC	160	80	40	20	15	10
VY2ZM	MAR	91	307	536	854	1258	1716
K1TO	WCF	17	66	366	1093	619	1876
K3CR (LZ4AX, op)	WPA	38	119	444	744	757	1190
XL3A (VE3AT, op)	GTA	22	65	404	729	1135	731
NR5M	STX	15	51	588	599	696	1268
AA1K	DE	22	65	252	951	955	686
K4AB	AL	25	73	159	771	554	1204
K3ZJ	WV	28	68	162	698	403	1207
K3ZO	MDC	22	121	404	459	491	912
KØTT	MN	22	49	129	274	681	961

Call - Mults	SEC	160	80	40	20	15	10
VY2ZM	MAR	49	67	81	100	98	96
VE3EJ	ONS	16	48	76	98	91	106
VB3E (VE3AT, op)	GTA	32	57	77	97	88	102
W2RE	NNY	20	43	68	87	93	85
VY2TT (K6LA, op)	MAR	13	32	75	78	83	98
N5DX	AR	18	42	61	101	97	81
W9RE	IN	22	44	64	95	82	86
NC1I (K9PW, op)	WMA	23	43	55	95	81	94
K1ZR	NH	20	50	75	79	83	83
K3ZO	MDC	19	33	53	71	90	96

The Delaware Destroyer AA1K continued to pass out multipliers to deserving DX stations to place sixth. K4AB made a strong showing from AL for seventh, and K3ZJ brought WV into the box for eighth place. The very familiar call sign of K3ZO filled the ninth spot, and KØTT made the box at tenth from the up and coming contest state of MN.

In the table of score breakdowns above, red text shows which station turned in the top QSO or Mult total and bold shows the strongest competitors. Now, where do you think you should travel to work the low bands?

Single Operator, Low Power

The SOLP category has become increasingly competitive in recent years, and this year exploded the trend. The top eight scores would have reached 2nd place or better in 2013!

Call	Score	QSO	Mults	Section
N1UR	4,708,275	3590	439	VT
W9RE	2,502,984	2008	418	IN
NA5NN (N5BO, op)	2,502,927	2271	369	MS
N5AW	2,453,802	2137	386	STX
NA8V	2,355,240	2079	380	MI
N4TZ	2,069,613	1738	399	IN
N8II	2,057,544	2109	328	WV
W4IX	2,021,370	1861	365	SC
VA3SWG	898,776	1339	228	GTA
W2TF	887,364	965	314	WNY

As we saw in the record listings, N1UR (VT) continues to dominate SOLP with a sixth straight win; the longest in the contest. Ed's score would have placed third in the SOHP Top Ten. That is truly an amazing achievement! The next four spots were placed quite closely, representing IN (W9RE), MS (NA5NN - N5BO, op), STX (N5AW), and MI (NA8V), all of whom would have made the SOHP Top Ten box this year!

Sixth through eighth place were very close shaves, represented by N4TZ, N8II and W4IX. Ninth and tenth place were filled by VA3SWG and W2TF, who nearly broke the big 1M barrier.

Single Operator, QRP

Next, we have the real underdogs. Your author has a enough trouble running EU stations from Kansas at a KW, and can not imagine trying the same at 5 watts. But these brave souls do it, and the scores below say that they do it rather well.

Call	Score	QSO	Mults	Section
W1MR	654,678	1005	222	NH
NDØC	443,466	701	213	MN
N1TM	437,760	643	228	CT
W6QU (W8QZA, op)	295,086	532	187	SDG
NT4TS	256,620	478	188	SFL
KA8SMA	203,634	427	162	MI
KKØQ	175,050	412	150	CO
N4IJ	172,845	355	167	OK
N8HP	107,352	256	142	OH
N8XA	96,558	242	133	OH

Again, it is clear that a New England location doesn't hurt, and indeed W1MR placed first. But trust me, being in NH does not make 1000 QSOs at 5 watts easy! Congratulations, Chris. But second place comes from the rather inland location of NDØC in MN. Back to New England with N1TM placing third, and off to the West Coast with W6QU (W8QZA, op) placing fourth. To the south was NT4TS placing fifth from SFL.

Good results from throughout the country continued with KA8SMA (MI), KKØQ (CO), N4IJ (OK), N8HP (OH), and K3TW (NFL) in sixth through tenth, respectively. Let's also note that the sixth district's only appearance in any SO category Top Ten comes from W6QU (W8QZA, op), a consistent champ representing the west.

Single Operator, Single Band

As you saw earlier in the article, single-band operation clearly rises and falls with the solar cycle, particularly on 10, 15, and 20 meters. Last year's contest looked like it might be the solar peak, but 10 meter results were a bit disappointing. We can say now that it is this year that best represents the solar peak, with an average solar flux of 163 versus last year's 111. Still, this was not quite the 187 figure of 2002. Accordingly, 10 meters easily had the largest SOSB representation this year (153), followed by 15 (45) and 20 (30) meters. In fact, 10 meter log totals even topped of 2002's total (128). Remember, a single-band effort is a great way to enjoy the contest, learn a band, and get some sleep!

W-VE Winners – Single-Band

Let's sweep the bands, starting at the "top".

W-VE Top Single Operator, 160 Meters

Call	Score	QSO	Mults	Section
W2MF	11,868	87	46	SNJ
W3LL	10,212	75	46	MDC
KM1R	6,552	55	42	CT
W2VO	3,960	41	33	WNY
K3UL	3,420	40	30	EPA
WB4WXE	3,306	38	29	AL
WD5COV	2,349	31	27	NM
K1HAP	2,175	30	25	NH
N1SZ	918	18	17	MDC
K7CW	390	13	10	WVA

Repeating as Top Band's Top Man this year is W2MF. Manuel has placed first or second on 160 for the past seven years. This year, W2MF had some stiff competition from W3LL, who tied in multipliers with just a few less QSOs. I wonder how long it takes them to regain their hearing after the contest.

W-VE Top Ten Single Operator, 80 Meters

Call	Score	QSO	Mults	Section
K1KNQ	23,607	131	61	NFL
W4QNW	20,355	119	59	SC
W4DD	16,380	107	52	GA
WA4TII	14,040	93	52	GA
K4CC	10,212	75	46	WCF
K9IDQ	3,510	41	30	IL
WD8E	429	13	11	OH
NØTA	390	14	10	CO
N6DZR	330	11	10	SV

80 meter totals were dramatically down compared to 2013, possibly due to propagation favoring the higher bands, but also no doubt due to the lack of New England entrants. Still, the top five stations all bordered the Atlantic. Winning this category was K1KNQ, up from a third-place finish last year. Not far behind was W4QNW, with more solid finishes from W4DD and WA4TII, all of whom also placed Top Ten last year. As sunspots fade along with high band propagation, we can at least look forward to better 80 meter conditions. (All nine stations that entered SOSB-80 are listed here.)

W-VE Top Ten Single Operator, 40 Meters

Call	Score	QSO	Mults	Section
W4AAA (KK9A, op)	398,718	1313	102	NC
W1XX	176,880	676	88	RI
W1FQ	85,878	372	78	EMA
AG4W	66,597	285	79	AL
VE3FU	48,762	260	63	ONE
K8DJC	41,412	208	68	OH
W6RKC	39,015	291	45	SV
KE3X	35,376	180	67	MDC
WDØBGZ	24,660	144	60	NE
W8FR	20,736	172	54	MS

On 40 meters, W4AAA (KK9A, op) simply outgunned all comers with 1313 QSOs and a better-than-DXCC multiplier total. In the process, he smashed the all time 40 meter record set by W7WA last year. Fantastic, John! In 2nd place, W1XX, QSYed from his 80 meter spot last year, outdistancing everyone else by a good margin to set

a first district record. W1FQ and K8DJC repeated their Top Ten showing of last year. Congrats to all!

It's great that so much of the world is more active on 40 meters, but the band does bring challenges. With the lower part of the band used extensively by Region 1 stations, US operators spend a lot of time exercising the VFO B knob. Please remember to transmit on the correct VFO, gents! And watch those band limits: The U.S. bottom edge of 7125 kHz means that an LSB display frequency below 7128 kHz places your sidebands out of the band! Of course, similar issues apply to the other bands as well. Given this, if you can configure your logging software or rig to not allow transmissions out of band on voice, why not do so?

W-VE Top Ten Single Operator, 20 Meters

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Section</i>
KB3WD	610,854	1684	122	MDC
W8TA	537,810	1392	130	MI
W7WA	475,068	1304	122	WWA
VE9HF	363,852	1131	108	MAR
WA8UEG	339,066	976	117	EPA
W1AVK	102,120	379	92	CT
K6HNZ	83,853	371	77	SCV
VE3CR	65,016	254	86	ONE
K4TRH	59,778	248	81	TN
W4RRE	59,049	250	81	TN

Now, let's look at the big 20 meter band. Year after year, during any part of the sunspot cycle, 20 supplies big, reliable numbers of DX contacts to W/VE. KB3WD took the title this year with 1600+ QSOs, breaking the third district record in the process. W8TA brought home the silver, breaking the eighth district record. W7WA moved from 40 meters to 20 meters this year, earning a bronze in the process. W1AVK, K6HNZ, K4TRH, and W4RRE were all Top Ten repeats from last year. Bravo!

W-VE Top Ten Single Operator, 15 Meters

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Section</i>
VE3EJ	811,422	2229	122	ONS
K1DG	774,360	2162	120	NH
KU2M	749,322	2205	114	NNJ
K5RX	580,116	1680	116	NTX
AB4B	320,832	1143	96	AL
WA7LT	226,596	831	92	EWA
K1JB	199,320	762	88	ME
N9TGR	195,738	654	101	IL
N2UN	193,011	714	91	NLI
W8JGU	166,161	577	97	OH

15 meters is not as consistent across the solar cycle as 20, but is also not quite as fussy as 10. Here, you can see the results of stations changing categories from year to year, betting on where their best chances lie. One sees fewer SOSB-15 specialists, and more recognizable Big Gun calls looking for the best place to park. No records were set this year and only one station, N9TGR, was a repeat in the Top Ten from 2013.

In the end, VE3EJ came out on top with 2200+ QSOs. K1DG and KU2M had a close race for 2nd and 3rd, respectively. K5RX and AB4B represented the South for 4th and 5th place. A very fine job by all!

W-VE Top Ten Single Operator, 10 Meters

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Section</i>
K1LZ (K3JO, op)	825,084	2273	123	EMA
N4PN	707,616	2033	117	GA
K1ZR	651,309	2038	107	NH
K2SSS	629,391	1780	119	WNY
K5TR (K5OT, op)	594,720	1777	112	STX
N3OC	592,710	1729	115	MDC
VE9AA	553,446	1667	111	MAR
VE3DZ	520,866	1527	114	ONS
K9BGL	516,660	1585	109	IL
W3EP	457,065	1471	105	CT

Now, our star performer in the battle of the bands this year, 10 meters. As discussed earlier, the top 22 scores in this category would have placed above last year's winner. The 10th place score was seven times that of 2013. Thank you, Sol!

The big winner was K1LZ (K3JO, op) with 2273 QSOs and 123 multipliers for a first district record. N4PN placed 2nd from GA, and K1ZR 3rd from NH, both breaking the 2000-QSO mark. K2SSS was a repeat Top Ten inhabitant from last year, scoring 4th and breaking the second district record. K9BGL and W3EP also repeated their Top Ten performance from 2013, with 'EP breaking the third district record. Super! All this, and you get to sleep a little, too.

Single-Op Unlimited

SOU continues to grow, and records continue to fall. My distinguished predecessor referred to this category as "Single-op Distracted". I tend to favor "Single-op Overwhelmed". But there's plenty of action here, and as a famous NNJ op once said, "But mama, that's where the fun is..."

W-VE Top Ten Single Op Unlimited, High Power

Call	Score	QSO	Mults	Section
K4XS	7,160,103	4607	521	NFL
K3WW	6,066,816	3952	518	EPA
VY2TT	5,221,392	3769	464	MAR
AA3B	4,930,992	3409	484	EPA
N2NT (W2GD, op)	4,704,768	3095	512	NNJ
KN2M	4,444,575	3138	475	WNY
N2MM	3,872,451	2752	473	SNJ
W1UE	3,590,028	2569	468	CT
K3PP	3,195,360	2231	480	EPA
K3MD	3,138,585	2405	445	EPA

Let there be no doubt, this is a category dominated by contest clubs. Perhaps this is a holdover from when contest clubs ran the only big cluster networks. Or perhaps it represents club competition pressure for the largest possible point score. In any case, six of the Top Ten SOUHP winners belong to Frankford Radio Club. (Go FRC! Oops, was that out loud?) But there is a surprise in the table. Outside of the usual DC, Philadelphia and Boston circles is an interloper from North Florida. It was K4XS, this year's SOUHP winner and holder of the new SOUHP W/VE record. Wow, way to go, Bill!

Following K4XS, it is easy to identify the "usual suspects". In 2nd place is contest Hall-Of-Fame member K3WW. Chas has been 1st or 2nd for 8 times out of the past 13 and in the Top Ten for the category 12 out of the past 13 years. And 13 years is as far back as your author can easily check! Another very familiar call, VY2TT shifted from SOHP last year and placed 3rd from MAR. In 4th place is another EPA regular, AA3B, who has also been a Top Ten station for 12 out of the past 13 years. These stations are on the air in many, many contests and deserve our respect for consist excellence.

There are many other familiar calls in this table. N2NT operated by contest Hall-Of-Famer W2GD are both regular placers and nailed #5 this year. KN2M, the lone "No Club Affiliation" placer in the group, repeated on the Top Ten to hit the #6 mark. What club wouldn't want his skills on board? N2MM placed 7th from SNJ having made the Top Ten last year, too. W1UE, K3PP, and K3MD all made the grade at the 8th, 9th, and 10th positions. We salute you all! You'll find these frequent flyers in the Top Ten History available on the ARRL Contest website (arrl.org/contests).

W-VE Top Ten Single Op Unlimited, Low Power

Call	Score	QSO	Mults	Section
W6AAN	2,291,769	1717	447	MDC
KT4ZB	2,069,949	1694	409	GA
N2WKS	1,759,914	1423	414	NNJ
N2SQW	1,743,948	1514	386	ENY
KS1J	1,238,541	1329	313	RI
WE9R	1,193,976	1244	322	WI
W3KB	1,154,340	1220	318	EPA
AA4R	1,136,364	1134	337	NC
KA2KON	1,116,297	1140	329	NH
NA4EA	844,560	829	345	NC

Just as competitive as SOUHP, SOULP saw seven district records broken plus the all-time record. Congratulations to PVRC's W6AAN for placing first, and setting a new all-time bar for others to follow. Not very far behind, KT4ZB placed 2nd and set the fourth district record. N2WKS placed 3rd for the second district record, barely sneaking by N2SQW who placed 4th. KS1J managed the #5 spot from RI and set a first district record.

And it continues...WE9R placed sixth and also set a record for 9-land. W3KB (EPA), AA4R (NC), KA2KON (NH), and NA4EA (NC) rounded out the Top Ten. Kudos to all the top scoring operators in this rapidly growing category.

Multioperator

If you like to contest, why not do it as a team? A multioperator effort is an opportunity to contribute your skills, learn the craft, or maybe just get some sleep after your shift! Let's take a look at these categories.

Multioperator, Single Transmitter

W-VE Top Ten Multioperator Single TX, High Power

Call	Score	QSO	Mults	Section
WW4LL	5,589,657	3756	501	GA
N1RR	5,085,762	3404	502	WMA
W1TJL	4,531,563	3110	489	CT
W3MF	3,318,975	2486	447	EPA
AD4ES	2,729,610	2387	390	SFL
W8PR	2,569,560	2295	380	OH
K5UA	1,838,025	1598	389	LA
VA2EN	1,687,359	1695	337	QC
WN2O	1,440,000	1259	384	NLI
K7ZS	1,287,072	1331	328	OR

We have some new faces in MSHP for 2014. On top of our chart is WW4LL placing #1 from GA, setting a new fourth district record in the process. N1RR (WMA) tied in multipliers but fell just a bit short in QSOs to place 2nd. W1TJL (CT) took the third position. W3MF (EPA), our only Top Ten repeater from 2013, managed 4th with a score about a million greater than last year. The good conditions led to a nice geographical

distribution, Northeast to Southeast, Midwest, and even a Northwest leader. Very fine work by all!

W-VE Top Ten Multioperator Single TX, Low Power

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Section</i>
N1BA	2,598,174	2050	426	NH
VE9ML	2,574,936	2203	393	MAR
N4XL	1,577,616	1450	368	SC
N5DO	1,473,120	1381	360	WTX
W3ZGD	892,038	956	317	EPA
K9LA	596,700	804	255	IN
KC8IMB	190,629	363	177	OH
AJ4DT	188,784	347	184	SFL
W3WN	142,809	269	181	WPA
W3KWH	110,625	302	125	WPA

This year, MSLP was topped only by SOULP in number of new records set. Ultimately, N1BA prevailed from NH by a slim margin over VE9ML in MAR. Both topped the previous all-time record set last year, with N1BA now holding that honor, and VE9ML holding the VE record. Now that's a growing category!

N4XL (SC) and N5DO (STX) also had a close battle for 3rd and 4th place, with N5DO setting a new 5th district record. W3ZGD (EPA), K9LA (IN), and KC8IMB (OH) also all set records in their respective districts. Expect to see even more new records here in future. Congratulations to all our Top Ten MSLP teams!

Multioperator, Two Transmitter

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Section</i>
KB1H	6,657,732	4301	519	CT
W6WB	4,573,050	3573	430	EB
K2AX	4,034,880	2834	480	SNJ
WA3EKL	3,873,936	2831	464	MDC
W2YC	3,707,721	2626	477	SNJ
KU2C	3,187,002	2405	449	NNJ
NØIJ	3,132,576	2421	438	WI
W4ML	2,436,822	1999	409	VA
W1QK	2,090,943	1856	379	CT
NØMA	2,071,380	1784	395	IA

For those that love to build big stations, there is the M2 category. The challenge of making two stations play nicely together is not for the faint of heart.

After the electrons cleared, KB1H (CT), last year's #2 participant, came out on top. W6WB (EB), also in last year's Top Ten, placed second to represent the west. The bar set by K1AR in 2000 (11.4M) is going to take quite some time to top! This is a mature category and there were no big records set this year. K2AX (SNJ) put in another repeat Top Ten performance for 3rd. WA3EKL (MDC) and W2YC (SNJ) finished out the top five. Two times the applause for all our M2 winners!

Multioperator, Multitransmitter

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Section</i>
K3LR	19,435,230	9430	687	WPA
W3LPL	16,890,030	8464	670	MDC
WE3C	15,637,536	8092	648	EPA
W2PV	11,310,783	6505	583	WMA
W4RM	8,731,800	5473	539	VA
N6RO	5,196,030	3857	454	EB
KØTV	5,185,440	3626	480	NH
K1KP	4,475,310	3553	422	EMA
WØAIH	3,747,810	2845	451	WI
NE3F	3,360,168	2425	472	EPA

If building an M2 station is a challenge, building a MM must be a bit like creating the Pyramid of Giza. The complexity of required switching, combined with the performance necessary to eliminate inter-station interference is staggering. And yet, these engineering marvels exist and turn out unfathomable scores every year. We salute you! So, let's take a look at the LR-LPL err, I mean Multi-Multi challenge.

The intense yearly competition between the teams at W3LPL (MDC) and K3LR (WPA) leads to ever growing scores, and this year is no exception. This year, K3LR prevailed and took the top spot while setting a third district record at 19.4M. 'LR came very close, but fell 1% short of the KC1XX all-time record of 19.6 M set in 2000. We may have to wait another eleven years to see this figure challenged again. Perhaps 10,000 QSOs is possible in 2025?

But team LPL was hardly lying down. Their #2 score of 16.9 M would have been the winner last year. And they continue their low-band dominance, as shown in the charts below. As conditions change, expect the balance of power to change as well!

But what about this newcomer, WE3C (EPA), at #3? Hardly a newcomer, WE3C has been building his superstation since 2003. But big MM stations aren't built in a day, and WE3C is clearly reaching maturity. 8% behind behemoth W3LPL is nothing to sneeze at. Look for more big things from this team.

For a veritable who's who of contesting, look at the rest of the list. W2PV (WMA) at #4, W4RM (VA) at #5. N6RO (EB) represents the west at #6. KØTV (NH), K1KP (EMA), WØAIH (WI), and NE3F (EPA) for #7-10. Google a few of these stations and drool. Not your grandfather's contest stations! Now let's look at the Qs and Ms.

<i>Call - QSOs</i>	<i>Sec</i>	<i>160 Q</i>	<i>80 Q</i>	<i>40 Q</i>	<i>20 Q</i>	<i>15 Q</i>	<i>10 Q</i>
K3LR	WPA	133	457	1498	2246	2417	2679
W3LPL	MDC	139	492	1343	1801	2173	2516
WE3C	EPA	132	398	1276	2042	2092	2152
W2PV	WMA	72	365	855	1735	1800	1678
W4RM	VA	48	162	896	1297	1549	1521
N6RO	EB	22	156	821	461	1161	1236
KØTV	NH	28	143	345	940	915	1255
K1KP	EMA	9	80	340	900	942	1282
WØAIH	WI	32	69	286	665	759	1034
NE3F	EPA	31	128	167	559	578	962
<i>Call - QSOs</i>	<i>Sec</i>	<i>160 M</i>	<i>80 M</i>	<i>40 M</i>	<i>20 M</i>	<i>15 M</i>	<i>10 M</i>
K3LR	WPA	60	89	116	147	139	136
W3LPL	MDC	60	90	111	138	136	135
WE3C	EPA	59	83	109	139	129	129
W2PV	WMA	44	80	98	122	120	119
W4RM	VA	38	65	88	126	111	111
N6RO	EB	15	38	79	93	112	117
KØTV	NH	24	61	78	109	102	106
K1KP	EMA	9	43	68	99	97	106
WØAIH	WI	27	45	75	99	96	109
NE3F	EPA	27	59	68	104	99	115

As you can see, W3LPL's more southerly coastal location has its benefits. But the high bands made the numbers, and this year, the gods of propagation favored K3LR. But it all changes with sunspots, so I see some serious three-way races developing here!

This year's win also provided K3LR with the repeat of a long sought feat, sweeping the Big Four: ARRL DX Phone, ARRL DX CW, CQ WW SSB, and CQ WW CW. Tim and team, take a bow. You've earned it.

DX Winners

Single Operator, High Power

Our first DX category might be named 'Single Op, Air Travel'. Six of the Top Ten travelled from the U.S. or Europe to remote locations for sun and radio glory. Do they give points for frequent QSO miles?

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
8P5A (W2SC, op)	9,338,580	8969	348	NA
KP2M (N2TK, op)	7,046,820	7136	330	NA
V26M (N3AD, op)	6,156,510	6336	326	NA
YN5Z (K7ZO, op)	5,933,040	6722	295	NA
KH7M (NA2U, op)	5,027,400	5727	294	OC
TO5A (F5VHJ, op)	4,344,084	5022	292	NA
OA4SS	3,557,952	4567	261	SA
S54ZZ	2,883,072	3794	256	EU
3V8BB (KF5EYY, op)	2,795,118	3926	241	AF
EA5DFV	2,793,991	3614	259	EU

8P5A (W2SC, op) is our repeat SOHP winner, surpassing his 2013 score. This is Tom's fifth win in a row and seventh out of the past 13 years. 8P5A managed 9.3M, 2.3M greater than the 2nd place finisher. Well done, OM!

Our #2 finisher is KP2M (N2TK, op). Tony is a Frankford RC contesting veteran and repeats his Top Ten placement of last year. As does #3, V26M (N3AD, op), another FRC DXpedition veteran. YN5Z (K7ZO, op) places #4 and is another repeat placer. KH7M made the #5 mark, still surpassing the 5M mark. TO5A (F5VHJ, op), OA4SS, S54ZZ fill 6th through 8th, and 3V8BB (KF5EYY, op), slides past EA5DFV by barely a whisker to finish the list. Your author recommends that the ARRL send him to one of these operations next year for further detailed study. (*We'll get back to you, Drew - Ed.*)

Single Operator, Low Power

In contrast to SOHP, only one of our SOLP Top Ten was a repeat placer from last year. Good propagation rewarded the low power competitors with scores up about 1M from last year.

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
VP2MLL (K1XX, op)	4,844,301	5189	313	NA
VP9/W6PH	4,792,560	5270	304	NA
J75Y (K1LI, op)	4,107,996	4926	279	NA
V31MA	1,598,544	1975	272	NA
PJ7AA	1,268,703	2069	207	NA
KH6CJ	1,241,625	1932	215	OC
KP2DX (KP2BH, op)	1,065,213	1679	213	NA
PY2NY	1,059,060	1875	190	SA
XE1XOE	921,015	1470	211	NA
8P6EX	798,252	1476	182	NA

VP2MLL (K1XX, op) takes the gold in this category with VP9/W6PH only 1% behind to claim silver. Being close to the East Coast, VP9/W6PH dominated 40 and 20 meters, but the better 15 and 10 meter scores at VP2MLL ultimately won the day. J75Y (K1LI, op) was not far behind and earned the bronze.

While North America dominated as usual in SOLP, KH6JJ and PY2NY were able to bring Oceania and South America onto the board. Congratulations to all!

Single Operator, QRP

With only 5 watts to work W/VE, I would expect this category to attract mostly North American DX call signs. Yet, this category seems to be consistently dominated by Europeans. Your author has no explanation!

Call	Score	QSO	Mults	Cont
F5BEG	168,504	415	136	EU
IK6FWJ	103,320	286	123	EU
SP6JOE	86,670	272	107	EU
CT1BXT	81,432	264	104	EU
IK1BBC	55,335	217	85	EU
JH1APZ	46,968	208	76	AS
F4GVZ	46,899	196	81	EU
IV3DDN	46,452	199	79	EU
JR4DAH	45,576	212	72	AS
JH1OGC	44,712	218	69	AS

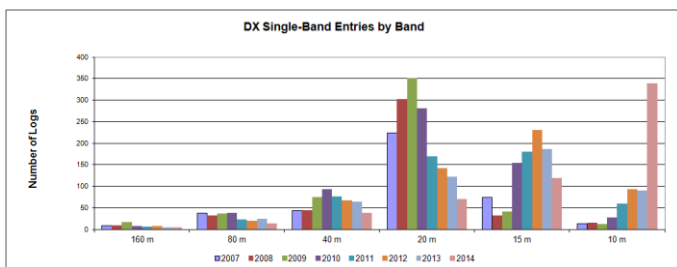
F5BEG, last year's 2nd-place finisher, came out on top this year, driven by good 10 meter totals. Gerard has been in the Top Ten for the 13 years reviewed. C'est formidable!

IK6FWJ also focused on 10 meters to place 2nd. SP6JOE made nearly the same QSO count, but fell behind in multipliers to place 3rd.

In a great show of skill and good propagation, three QRP stations from Japan made the Top Ten this year. Sasuga!

Single Operator, Single Band

The SOSB category is particularly popular outside the U.S. and Canada because the DX stations can pick a band with good propagation to North America from their part of the world and be on the air during those hours.



As with North American logs, conditions have dramatically shifted the focus of DX stations to 10 meters. Will this shift back to 15 meters next year? Who can say?

DX Single Operator, 160 Meters

Call	Score	QSO	Mults	Cont
KV4FZ	59,976	398	51	NA
XE2X	31,878	232	46	NA
CU2CE	30,240	252	40	EU
SP3GTS	3,363	60	19	EU
SO8L (SQ8JLU, op)	720	22	12	EU
DL2SAX	189	9	7	EU

Congratulations to KV4FZ for putting together a fourth win on Top Band – his 8th out of the past ten years and 4th in a row! XE2X (2nd) and CU2CE (3rd) also logged some very nice scores this year. And kudos to the other three stations that toughed it out to give the deserving some needed 160 meter QSOs. (All six stations that entered SOSB-160 are listed here.)

DX Top Ten Single Operator, 80 Meters

Call	Score	QSO	Mults	Cont
CR2A	236,619	1299	61	EU
FM5DN	110,055	681	55	NA
CO6CAC	85,350	581	50	NA
YT4A (YT1AA, op)	31,635	291	37	EU
ED7P	22,560	188	40	EU
SN7V (SP7VC, op)	12,948	175	26	EU
OM7RU	4,221	69	21	EU
UT7E (UV5EOZ, op)	3,960	76	20	EU
7Z1SJ	1,224	27	17	AS
IT9EWR	630	21	10	EU

In an impressive showing, CR2A passed two nearby North American stations to win on 80 meters by a large margin: 1300 QSOs, from Europe, on 80. Zowie! FM5DN and CO6CAC also produced good totals from North America to place 2nd and 3rd.

DX Top Ten Single Operator, 40 Meters

Call	Score	QSO	Mults	Cont
TM9R (F5FLN, op)	280,545	1595	59	EU
9A2NA	238,056	1426	56	EU
US1I (UX2IO, op)	128,232	841	52	EU
OA4/XQ3SA	116,232	682	58	SA
CE3EEA	113,796	668	58	SA
KP4BD	110,880	683	56	NA
9A9R	102,300	693	50	EU
EA3CI	94,446	601	53	EU
XE1OGG	54,927	367	51	NA
SQ9HZM	47,799	347	47	EU

2014 brings the 40 meter crown back to Europe after three years to the south. On 40, there can be good propagation anywhere.

All three top spots were in Europe this year. TM9R (F5FLN, op) took 1st place, with 9A2NA not too far behind for 2nd. US1I placed third to complete the EU domination. The 4th and 5th spots returned to South America again, with OA4/XQ3SA and CE3EEA.

DX Top Ten Single Operator, 20 Meters

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
6Y3M (VE3NZ, op)	621,285	3412	61	NA
OZ7X	468,348	2535	62	EU
PJ4D	459,846	2610	59	SA
EB3CW	425,292	2333	61	EU
HK3C	404,064	2222	61	SA
FM5FJ	402,120	2249	60	NA
ZY5M (IV3NVN, op)	351,912	1898	62	SA
TM4L (F8ARK, op)	288,408	1591	61	EU
PX2F (PY2PT, op)	260,898	1488	59	SA
YT1A	245,892	1353	62	EU

Similar to last year, the 1st-2nd-3rd place race was conducted across three very different locations. The winner from Jamaica (6Y3M, VE3NZ, op) was close to the U.S. mainland. OZ7X, however, chilled the competition from Denmark for 2nd. 3rd came back to South America via PJ4D in Bonaire. The rest of our Top Ten list bounced between EU, NA, and SA.

DX Top Ten Single Operator, 15 Meters

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
FY5FY	664,578	3581	62	SA
EE8T (EA8MT, op)	635,004	3425	62	AF
LX7I (LX2A, op)	490,806	2687	61	EU
CR6T (CT1ESV, op)	483,852	2664	61	EU
CQ8X (OH8NJ, op)	448,899	2472	61	EU
PX2B (PY2LED, op)	443,520	2489	60	SA
CE3/OZ1AA	433,161	2371	61	SA
PW5G (PP5WG, op)	428,172	2325	62	SA
9A1UN	395,829	2179	61	EU
EF7X	387,228	2133	61	EU

FY5FY tops the SOSB-15 list this year. That's two in a row for an FY station! However, demonstrating the shift in single-band selection this year, no SOSB-15 Top Ten station was a repeat from last year. EE8T brings 2nd place to Africa, another big 15 meter hot spot. LX7I represents Europe for third. The rest of the list shows a tight spread of QSO count and almost the same multipliers, so this was a competitive band indeed!

DX Top Ten Single Operator, 10 Meters

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
PX5E	717,960	3882	62	SA
CR2X (OH2BH, op)	667,401	3649	61	EU
NP2P (N2TTA, op)	575,820	3256	60	NA
MWØZZK	557,418	3066	61	EU
CE3CT	519,903	2849	61	SA
ZV2K (PY2SHF, op)	491,580	2769	60	SA
PJ4DX	475,434	2608	61	SA
TMØT	464,628	2522	62	EU
9A9A	409,320	2282	60	EU
9A8WW (S55M, op)	378,180	2113	60	EU

Yet another thanks to Sol, as sunspots brought 10 meter conditions so good that Europe filled half the Top Ten list. However, South America took the trophy, with PX5E again proving that there are more sports than soccer in Brazil.

But CR2X (OH2BH, op) came in 2nd to bring 10 meter glory to Europe, and a new EU record along with it.

Way to represent, Martti! Martti was also in the Top Ten last year at CR1Z. NP2P (N2TTA, op) came in 3rd to give North America a spot. The rest of the list was split between SA and EU, again with close spacing and similar multipliers. What will next year bring?

Single Operator Unlimited

Numbers of SOU logs and SOU scores both continue to grow. DX stations in the SOU category are only second to SOSB logs. In the next few, it's likely that SOU will become the most popular category worldwide!

It is interesting to note that the Top Ten SOHP stations still had higher multiplier totals on average than the Top Ten SOUHP stations. Perhaps we are still learning how to best to operate this category and deal with information overload?

DX Top Ten Single Op Unlimited, High Power

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
P4ØP (W5AJ, op)	5,210,865	5472	319	SA
OK7K (OK1BN, op)	4,033,320	4658	290	EU
EC2DX	3,900,708	4752	276	EU
IR4M (IK4MGP, op)	3,763,854	4466	282	EU
ED7W (EA7OT, op)	3,429,540	4417	261	EU
EA5KA	3,295,596	4130	268	EU
NP2X (K9VV, op)	3,064,068	3508	294	NA
SP8R (SP8BRQ, op)	3,020,778	3943	257	EU
EI1Y (EI3KG, op)	2,993,250	4019	250	EU
EA6FO (EA3AIR, op)	2,957,172	3798	263	EU

The top score this year was again from South America, with a dominating effort from P4ØP (W5AJ, op). But OK7K (OK1BN, op) placed 2nd, and set a new EU SOUHP record! Europeans also place 3-4-5 as EC2DX, IR4M (IK4MGP, op) and ED7W (EA7OT, op). From 2nd to 10th, this was indeed a tight race. Congratulations DX champions!

DX Top Ten Single Op Unlimited, Low Power

<i>Call</i>	<i>Score</i>	<i>QSO</i>	<i>Mults</i>	<i>Cont</i>
8P2K (8P6SH, op)	1,042,320	1735	202	NA
YV8AD	988,380	1955	170	SA
DF2SD	826,233	1436	193	EU
EF1A (EA1XT, op)	724,845	1285	191	EU
UR5AS	588,468	1120	178	EU
DF7ZS	460,824	854	182	EU
3G1D (XQ1FM, op)	404,016	900	152	SA
GI4SJK	391,524	836	158	EU
NP4RA	386,409	862	151	NA
OM5XX	279,705	649	145	EU

This year brought the medal back to North America, with a win by 8P2K (8P6SH, op). YV8AD managed nearly two hundred more Qs but fell short on multipliers to take 2nd place. DF2SD placed 3rd, with 4th through 6th place also coming from Europe.

Not placing in the Top Ten, but worthy of mention, were two new SOULP records; BG2AUE in Asia, and YE1NS (W7NZ, op) in Oceania. Fine work by all!

Multioperator, Single Transmitter

DX Top Ten Multioperator Single TX, High Power

Call	Score	QSO	Mults	Cont
VP5H	9,417,408	8957	352	NA
PJ2T	9,357,327	8783	357	SA
HK1NA	8,793,675	8147	363	SA
C6ANA	7,597,395	7280	351	NA
TM6M	6,937,245	7367	315	EU
XE7S	6,535,230	6509	338	NA
CS2C	5,921,676	6412	309	EU
T48K	5,862,672	6018	328	NA
TO22C	5,240,550	5704	310	NA
PI4DX	4,101,300	4602	300	EU

MSHP certainly had a battle of titans this year! The epic struggle between PJ2T and VP5H of last year reversed itself, with VP5H prevailing for the win this year. PJ2T came in 2nd, topping VP5H on multipliers. HK1NA, last year's multi-multi winner, was not far behind, placing 3rd.

Strong finishes continue down the list, with C6ANA in 4th and TM6M taking 5th, while setting a new MSHP record for EU. I look forward to another big battle here next year!

DX Top Ten Multioperator Single TX, Low Power

Call	Score	QSO	Mults	Cont
PJ6A	6,083,181	6251	327	NA
PY1GQ	1,856,475	2796	223	SA
HI3K	1,672,668	1963	291	NA
T42R	1,630,950	2108	262	NA
WP3DX	1,601,760	2290	235	NA
ZW8T	1,177,416	1937	207	SA
ZR9C	771,630	1522	170	AF
PY5FO	538,005	1163	155	SA
PY2ZR	281,952	722	132	SA
RT4S	114,345	392	99	EU

PJ6A absolutely ran away with the category this year, placing first, and setting a new all-time MSLP record. The PJ6A score would have placed 7th in the MSHP category. Outstanding!

PY1GQ placed 2nd. HI3K repeated last year's Top Ten finish, placing 3rd in a tight race over T42R and WP3DX, also a repeat in the Top Ten. Although not a Top Ten score, ZR9C set a new record from Africa this year.

Multioperator, Two Transmitter

Call	Score	QSO	Mults	Section
P4ØL	13,938,144	13236	352	SA
PJ4G	12,264,912	11533	356	SA
CN2AA	11,667,084	11575	338	AF
TI8M	8,798,973	8916	331	NA
KH7XX	8,602,440	9310	308	OC
KL7RA	7,244,517	8562	283	NA
KH6LC	6,338,736	7309	292	OC
S57UN	3,716,979	4762	263	EU
YU5R	2,909,808	3705	264	EU
LU8YE	2,554,911	3909	223	SA

PJ4G had a super score and repeated from last year but was bumped for the #1 spot by P4ØL, setting a new South American record in the process. Number two station PJ4G still made an amazing 12.3M. CN2AA was not very far behind at 11.7M, and also set a new African record. TI8M repeated for 4th. KH7XX made an Oceania appearance to place 5th, also setting a new record.

The M2 category was packed with superb scores, with #10 still making almost 4000 QSOs. Note that every M2 Top Ten placer this year would have also made multi-multi Top Ten. Fantastic, gents! I anticipate that a few of these stations may try a run at MM soon.

Multioperator, Multitransmitter

Call	Score	QSO	Mults	Section
II9P	7,466,391	7688	354	EU
LP1H	6,049,953	7605	267	SA
HG1S	5,431,968	6354	288	EU
JA3YBK	3,454,908	4568	254	AS
C6ANM	3,015,699	3651	277	NA
KL2R	1,439,955	2924	165	NA
JE1ZWT	1,091,196	1815	204	AS
LI5O	581,544	1195	164	EU
9A5BWW	339,465	1882	61	EU

The big multi-multi category was won this year by II9P, moving up from last year's M2 and scoring 7.5M. Check out their video at www.qrz.com/db/ii9P. The AC/DC soundtrack seems appropriate for such a high power operation!

LP1H brought 2nd place to South America, repeating last year's Top Ten showing. HG1S captured 3rd, repeating from last year's placing as HG3ØS.

Asian calls are rare in the DX Top Ten, but consistent powerhouse JA3YBK is again the exception, placing 4th. C6ANM rounded out the top five from the Bahamas, also repeating from last year. Thanks to all these teams for their hard work handing out thousands of QSOs!

Continental Leaders

Call Score Category

Africa

3V8BB (KF5EYY, op)	2,795,118	SOHP
7X5QB	387,918	SOLP
CN8WW	9,000	SOUHP
EA8BZH	43,803	SOULP
EE8T (EA8MT, op)	635,004	SOSB-15
EA8TX	221,154	SOSB-10
ZR9C	771,630	MSLP
CN2AA	11,667,084	M2

Asia

JAØJHA	2,354,400	SOHP
JH4UYB	410,733	SOLP
JH1APZ	46,968	SOQRP
JS3CTQ	1,319,025	SOUHP
BG2AUE	161,568	SOULP
7Z1SJ	1,224	SOSB-80
JH9URT	43,215	SOSB-40
RK9QWM	86,130	SOSB-20
JR1CBC	261,873	SOSB-15
J11LET	168,777	SOSB-10
RTØF	2,053,278	MSHP
BY1CQ	756	MSLP
JK1YMM	1,995,480	M2
JA3YBK	3,454,908	MM

Europe

S54ZZ	2,883,072	SOHP
CT1ETK	418,110	SOLP
F5BEG	168,504	SOQRP
OK7K (OK1BN, op)	4,033,320	SOUHP
DF2SD	826,233	SOULP
CU2CE	30,240	SOSB-160
CR2A	236,619	SOSB-80
TM9R (F5FLN, op)	280,545	SOSB-40
OZ7X	468,348	SOSB-20
LX7I (LX2A, op)	490,806	SOSB-15
CR2X (OH2BH, op)	667,401	SOSB-10
TM6M	6,937,245	MSHP
RT4S	114,345	MSLP
S57UN	3,716,979	M2
I19P	7,466,391	MM

North America

8P5A (W2SC, op)	9,338,580	SOHP
VP2MLL (K1XX, op)	4,844,301	SOLP
KP3BR	270	SOQRP
NP2X (K9VV, op)	3,064,068	SOUHP
8P2K (8P6SH, op)	1,042,320	SOULP
KV4FZ	59,976	SOSB-160
FM5DN	110,055	SOSB-80
KP4BD	110,880	SOSB-40
6Y3M (VE3NZ, op)	621,285	SOSB-20
KP4RV	212,580	SOSB-15
NP2P (N2TTA, op)	575,820	SOSB-10
VP5H	9,417,408	MSHP
PJ6A	6,083,181	MSLP
TI8M	8,798,973	M2
C6ANM	3,015,699	MM

Oceania

KH7M (NA2U, op)	5,027,400	SOHP
KH6CJJ	1,241,625	SOLP
ZM2IO	3,330	SOQRP
VK4QH	757,701	SOUHP
YE1NZ (W7NZ, op)	75,621	SOULP
YD9RWY	744	SOSB-40
VK7GN	21,720	SOSB-20
NH2DX (KG6DX, op)	199,578	SOSB-15
YC9WIC	46,011	SOSB-10
VK2BD	15,624	MSHP
DX1PUP	2,400	MSLP
KH7XX	8,602,440	M2

South America

OA4SS	3,557,952	SOHP
PY2NY	1,059,060	SOLP
PY2BN	4,680	SOQRP
P4ØP (W5AJ, op)	5,210,865	SOUHP
3G1D (XQ1FM, op)	404,016	SOULP
OA4/XQ3SA	116,232	SOSB-40
PJ4D	459,846	SOSB-20
FY5FY	664,578	SOSB-15
PX5E	717,960	SOSB-10
PJ2T	9,357,327	MSHP
PY1GQ	1,856,475	MSLP
P4ØL	13,938,144	M2
LP1H	6,049,953	MM

Signing Off and Clear

The 2014 ARRL DX Contest was a real thrill, a perfect storm of good conditions and lots of activity. I hope this encourages others to give the contest a try. It really is a lot of fun and is a terrific way to enjoy ham radio. Tell your friends!

It now seems clear that the 2014 contest season represented the peak of Cycle 24. However, what is not known is how quickly the cycle will decline. It is entirely possible that next year will also feature excellent 10 and 15 meter conditions. The only way to tell is to turn on your radio during the weekends of 21/22 February and 7/8 March.

The ARRL Soapbox web pages (www.arrl.org/soapbox) contain more photos and stories, too. Please send your contest stories and photos next year and I promise to use more of them. Your suggestions for what to put in next year's article are always welcome.

I'd like to thank Ward, NØAX for an entire solar cycle of superb results article authorship. Ward, my sincere appreciation for such good material to borrow from! And thanks to the ARRL for this opportunity to talk contesting with you all.

73, Drew K3PA

2014 ARRL DX Phone Contest

Regional Leaders by Category

Boxes list call sign, score, and category (M SHP/LP-Multi-Single HP/LP; M-2-Multi-Two; M-M-ulti-Multi; QRP-Single-Op, QRP; LP-Single-Op, Low Power; HP-Single-Op, High Power; SUH/L - Single-Op, Unlimited HP/LP)

Northeast Region		Southeast Region		Central Region		Midwest Region		West Coast Region						
New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections		Delta, Roanoke and Southeastern Divisions		Central and Great Lakes Divisions; Ontario Section		Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections		Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections						
VY27M	6,949.614	SOHP	K1TO	5,253.930	SOHP	XI 3A (VE3AT. op)	3,648.348	SOHP	NR5M	3,629.304	SOHP	N9RV	2,059.668	SOHP
K3CR (I 74AX. op)	4,445.289	SOHP	K4AB	3,272.904	SOHP	KRAO	1,272.326	SOHP	K0TT	2,281.686	SOHP	K5RR	1,233.440	SOHP
AA 1K	3,476.400	SOHP	K3ZJ	2,985.285	SOHP	K8GL	1,217.430	SOHP	WD5K	1,921.995	SOHP	N6A A	686.06	SOHP
K3ZO	2,798.640	SOHP	NR3X (N4YDU. op)	2,232.048	SOHP	K9ZO	916.575	SOHP	VE4VT (VE4EAR. op)	1,530.009	SOHP	N6NF	661.710	SOHP
W2XL	2,030.625	SOHP	WA2VYA	1,115.856	SOHP	VE3OI	721.926	SOHP	KM5VI	1,260.936	SOHP	VA7ST	436.260	SOHP
N1UR	4,708.275	SOLP	NA5NN (N5BO. op)	2,502.927	SOLP	W9RE	2,502.984	SOLP	N5AW	2,453.802	SOLP	N7IR	800.745	SOLP
W2TF	887.364	SOLP	N8II	2,057.544	SOLP	NA8V	2,355.240	SOLP	W5GFI	784.680	SOLP	N6RV	747.486	SOLP
WX1S	849.024	SOLP	W4IX	2,021.370	SOLP	N4TZ	2,069.613	SOLP	N1CC	755.595	SOLP	K7ACZ	472.230	SOLP
W1IO	772.632	SOI P	AC4G	762.852	SOI P	VA3SWG	898.776	SOI P	N7WY	637.488	SOI P	K6GHA	331.296	SOI P
WA2JOK	771.120	SOI P	W8DVS	693.600	SOI P	W8TKO	871.332	SOI P	AA0MZ	518.817	SOI P	WB7OXU	258.456	SOI P
W1MR	654.678	SOQRP	NT4TS	256.620	SOQRP	K8SMA	203.634	SOQRP	ND0C	443.466	SOQRP	W6QU (W8QZA. op)	295.086	SOQRP
N1TM	437.760	SOQRP	K3TW	74.100	SOQRP	N8HP	107.352	SOQRP	KK0J	175.050	SOQRP	K2GM Y	34.632	SOQRP
K2OO	46.458	SOQRP	N4ZAK	42.588	SOQRP	N8XA	96.558	SOQRP	N4IJ	172.845	SOQRP	KG7RZ	32.832	SOQRP
W1CEK	46.350	SOQRP	K8MR	37.392	SOQRP	A19K	115.20	SOQRP	KF0F	62.217	SOQRP	N6HI	14.691	SOQRP
W2IX	45.582	SOQRP	W1S	24.174	SOQRP	AF9J	9.588	SOQRP	WB0WVG	17.442	SOQRP	K67LI	8.307	SOQRP
K3WW	6,066.816	SOIHP	K4XS	7,160.113	SOIHP	N8TR	2,559.738	SOIHP	AR5K	3,082.134	SOIHP	KA6RM	1,755.549	SOIHP
VY2TT	5,221.392	SOIHP	NA4ZC	3,123.861	SOIHP	W8MJ	2,153.334	SOIHP	K5LLA	2,200.626	SOIHP	KG7H	1,583.469	SOIHP
AA3B	4,930.992	SOIHP	K9LUZ	2,188.809	SOIHP	K9MM	1,842.675	SOIHP	W0GJ (N0KK. op)	2,200.608	SOIHP	N6QQ	1,262.751	SOIHP
N2NT (W2GD. op)	4,704.768	SOIHP	K3IE	2,117.408	SOIHP	N2BJ	1,744.512	SOIHP	K0MD	1,699.716	SOIHP	N6JV	1,135.440	SOIHP
KN2M	4,444.575	SOIHP	K5EK	2,035.125	SOIHP	W09Z	1,265.481	SOIHP	K3PA	1,588.980	SOIHP	W6TK	913.920	SOIHP
W6AAN	2,291.769	SOULP	KT4ZB	2,069.949	SOULP	WE9R	1,193.976	SOULP	WA8ZBT	723.330	SOULP	VA7BEC	532.014	SOULP
N2WKS	1,759.914	SOULP	AA4AR	1,136.364	SOULP	VE3TW	821.526	SOULP	N0HJZ	713.775	SOULP	N7FLT	442.816	SOULP
N2SOW	1,743.948	SOI I P	NA4FA	844.560	SOI I P	N9UA	789.342	SOI I P	AA0AI	705.942	SOI I P	K3WYC	194.922	SOI I P
KS1I	1,238.541	SOI I P	W0PV	738.720	SOI I P	K8I Y	645.211	SOI I P	K0AD	565.245	SOI I P	NG2O	183.768	SOI I P
W3KB	1,154.340	SOULP	WA4AO	595.080	SOULP	N4LR (@ K9XD)	613.035	SOULP	VE4EA	505.890	SOULP	WN6K	134.640	SOULP
W2MF	11.868	SO-160	WB4WXE	3.306	SO-160	K9IDQ	3.510	SO-80	WD5COV	2.349	SO-160	K7CW	390	SO-160
W3LL	10.212	SO-160	K9NO	23.607	SO-80	WDBE	429	SO-80	N5JDT	45	SO-160	N6DZR	330	SO-80
KM1R	6.552	SO-160	K9KN	23.607	SO-80	VE3FU	48.762	SO-40	N0TA	390	SO-80	W6RKC	39.015	SO-40
W2VO	3.960	SO-160	W4QNW	20.355	SO-80	K8DJC	414.12	SO-40	WD0RGZ	24.660	SO-40	WA2RFW	3.168	SO-40
K3UL	3.420	SO-160	W4DD	16.380	SO-80	KAC	11.212	SO-80	VA3XH	13.524	SO-40	N3I GA	7.50	SO-40
W1XX	176.880	SO-40	WA4TI	14.040	SO-80	ADRC	13.884	SO-40	W9QL	13.095	SO-40	W65SW	4.452	SO-20
W1FQ	85.878	SO-40	K4CC	11.212	SO-80	VA3XH	13.524	SO-40	W0DN	12	SO-20	KC5SB	900	SO-20
KE3X	35.376	SO-40	W4AAA (KK9A. op)	398.718	SO-40	W8TA	537.810	SO-20	W0DN	12	SO-20	W7WA	475.068	SO-20
VO1X	20.664	SO-40	AG4W	66.597	SO-40	VE3CR	65.016	SO-20	K5RX	580.116	SO-15	K6HNZ	83.853	SO-20
KB3WD	610.854	SO-20	W8FR	20.736	SO-40	W9WJ	53.130	SO-20	N5M V	131.970	SO-15	W7PU	26.934	SO-20
VE9HF	363.852	SO-20	W4JKC	13.818	SO-40	W8GOC	36.936	SO-20	AA5B	60.264	SO-15	K87OFE	9.417	SO-20
WA8UEG	339.066	SO-20	WB6RAB	10.836	SO-40	W09S	35.244	SO-20	K80Z	29.754	SO-15	WA6FXT	1.596	SO-20
WA1VK	112.120	SO-20	K4TRH	59.778	SO-20	VE3FJ	811.422	SO-15	K5TR (K5OT. op)	594.720	SO-10	WA7IT	226.596	SO-15
K2HN	16.560	SO-20	W4RRF	59.049	SO-20	N9TGR	195.738	SO-15	W0EWD	428.064	SO-10	W6AFA	133.875	SO-15
K1DG	774.360	SO-15	K4DES	39.342	SO-20	W8JGU	166.161	SO-15	K7UA	316.575	SO-10	N2NS	65.490	SO-15
KU2M	749.322	SO-15	AK4PE	22.680	SO-20	W8RCN	143.100	SO-15	NN7ZZ	192.240	SO-10	NU6S	60.162	SO-15
K1UB	199.320	SO-15	K4RJP	8.775	SO-20	KC8ZMN	63.525	SO-15	WS5H	135.360	SO-10	K7XE	38.784	SO-15
N2UN	193.011	SO-15	AB4B	320.832	SO-15	VE3DZ	520.866	SO-10	WC7WB	1,264.344	M SHP	W7RN (K5RC. op)	405.240	SO-10
W3GVX	40.986	SO-15	NS4SS	9.585	SO-15	K9RGI	516.660	SO-10	K0JA	865.920	M SHP	W7ZR	366.903	SO-10
K1Z (K3JO. op)	825.084	SO-10	KV1P	8.514	SO-15	VE3JTT	270.270	SO-10	KF0L	354.594	M SHP	AA7V	355.740	SO-10
K1ZR	651.309	SO-10	NY4S	2.193	SO-15	W9OP	224.523	SO-10	K0UK	228.690	M SHP	W6AFA	301.938	SO-10
K2SSS	629.391	SO-10	WT4BT	17.16	SO-15	VE3PN	224.406	SO-10	K07X	177.840	M SHP	N5CR	294.048	SO-10
N3OC	592.710	SO-10	N4PN	707.616	SO-10	W8PR	2,569.560	M SHP	N5DO	1,473.120	M SLP	K7ZS	1,287.072	M SHP
VE9AA	553.446	SO-10	K9FY	422.241	SO-10	WW8OH	581.400	M SHP	WV1USA	77.436	M SLP	W6DR	316.744	M SHP
N1RR	5,085.762	M SHP	K4WI	420.189	SO-10	K9LA	596.700	M SLP	W5UNT	264	M SLP	K6MM M	179.376	M SHP
W1TJL	4,531.563	M SHP	W4TTT (WB2REM. op)	364.509	SO-10	KC8MR	190.629	M SLP	KB5FNP	190	M SLP	N7KQ	163.326	M SHP
W3MF	3,318.975	M SHP	K2PS	218.268	SO-10	W8AI	98.670	M SLP	N0MA	2,071.380	M 2	VF7SAR	114.660	M SHP
VA2FN	1,887.359	M SHP	W8AI	5,589.657	M SHP	KB9DFE	35.119	M SLP	W5CSC	18.482	M 2	W6BB	507	M SLP
WN2O	1,440.000	M SHP	AD4ES	2,729.610	M SHP	N9MT	13.869	M SLP	KK0SD	5.724	M 2	W6WB	4,573.050	M 2
N1BA	2,598.174	M SLP	K5UA	1,838.025	M SHP	N10J	3,132.576	M 2	W6BF	724.950	M 2	W6FI	724.950	M 2
VE9ML	2,574.936	M SLP	N4SVC	311.121	M SHP	W8BI	546.561	M 2	N6RO	5,196.030	MM			
W3ZGD	892.038	M SLP	W4BFB	307.998	M SHP	K9IU	43.953	M 2						
W3WN	142.809	M SLP	N4XL	1,577.616	M SLP	W0AIH	3,747.810	MM						
W3KWH	110.625	M SLP	AJ4DT	188.784	M SLP	ACRIF	169.320	MM						
KB1H	6,657.732	M 2	WA4NZD	43.605	M SLP									
K2AX	4,034.880	M 2	WA1F	417.30	M SLP									
WA3EKL	3,873.936	M 2	W4ML	2,436.822	M 2									
W2YC	3,707.721	M 2	N4DX	73.809	M 2									
KU2C	3,187.002	M 2	W4RM	8,731.800	MM									
K3LR	19,435.230	MM	K4VV	2,513.260	MM									
W3LPL	16,890.030	MM	W4AAZ	251.400	MM									
WE3C	15,637.536	MM												
W2PV	11,310.783	MM												
K0TV	5,185.440	MM												

Division Winners

<i>Division</i>	<i>Call</i>	<i>Score</i>	<i>Division</i>	<i>Call</i>	<i>Score</i>
Single Operator, High Power			Single Operator Unlimited, High Power		
Atlantic	K3CR (LZ4AX, op)	4,445,289	Atlantic	K3WW	6,066,816
Canada	VY2ZM	6,949,614	Canada	VY2TT	5,221,392
Central	K9ZO	916,575	Central	K9IMM	1,842,675
Dakota	KØTT	2,281,686	Dakota	KØMD	1,699,716
Delta	AG5Z	1,002,240	Delta	K3IE	2,187,408
Great Lakes	K8AO	1,222,326	Great Lakes	N8TR	2,559,738
Hudson	W2XL	2,030,625	Hudson	N2NT (W2GD, op)	4,704,768
Midwest	NØIS	298,566	Midwest	WØGJ (NØKK, op)	2,200,608
New England	W1GD	1,832,226	New England	W1UE	3,590,028
Northwestern	N9RV	2,059,668	Northwestern	KA6BIM	1,755,549
Pacific	N6NF	661,710	Pacific	N6JV	1,135,440
Roanoke	K3ZJ	2,985,285	Roanoke	N4ZC	3,123,861
Rocky Mountain	WØOVM	253,935	Rocky Mountain	KC6R	788,655
Southeastern	K1TO	5,253,930	Southeastern	K4XS	7,160,103
Southwestern	K5RR	1,123,440	Southwestern	N6QQ	1,262,751
West Gulf	NR5M	3,629,304	West Gulf	AB5K	3,082,134
Single Operator, Low Power			Single Operator Unlimited, Low Power		
Atlantic	W2TF	887,364	Atlantic	W6AAN	2,291,769
Canada	VA3SWG	898,776	Canada	VE3TW	821,526
Central	W9RE	2,502,984	Central	WE9R	1,193,976
Dakota	NAØN	246,483	Dakota	NØHJZ	713,775
Delta	NA5NN (N5BO, op)	2,502,927	Delta	K5UQ	173,217
Great Lakes	NA8V	2,355,240	Great Lakes	K8LY	645,621
Hudson	WA2JQK	771,120	Hudson	N2WKS	1,759,914
Midwest	N7WY	637,488	Midwest	AAØAI	705,942
New England	N1UR	4,708,275	New England	KS1J	1,238,541
Northwestern	WB7QXU	258,456	Northwestern	N7FLT	442,818
Pacific	K7ACZ	472,230	Pacific	K6AAB	120,513
Roanoke	N8II	2,057,544	Roanoke	AA4R	1,136,364
Rocky Mountain	KA7PNH	343,674	Rocky Mountain	KØRI	417,384
Southeastern	N9DFD	420,177	Southeastern	KT4ZB	2,069,949
Southwestern	N7IR	800,745	Southwestern	K3WYC	194,922
West Gulf	N5AW	2,453,802	West Gulf	WA8ZBT	723,330
Single Operator, QRP			Single Operator, Single Band, 10 Meters		
Atlantic	K2QO	46,458	Atlantic	K2SSS	629,391
Canada	VA3RKM	4,995	Canada	VE9AA	553,446
Central	AI9K	11,520	Central	K9BGL	516,660
Dakota	NDØC	443,466	Dakota	NØMHL	65,124
Delta	W6CSA	15,549	Delta	W5HD	118,938
Great Lakes	KA8SMA	203,634	Great Lakes	KB8UUZ	136,710
Hudson	W2IX	45,582	Hudson	W2AW (N2GM, op)	331,179
Midwest	KFØF	62,217	Midwest	WØEWD	428,064
New England	W1MR	654,678	New England	K1LZ (K3JO, op)	825,084
Northwestern	KG7RZ	32,832	Northwestern	W6AEA	301,938
Pacific	K2GMY	34,632	Pacific	W7RN (K5RC, op)	405,240
Roanoke	N4ZAK	42,588	Roanoke	K4EU	174,993
Rocky Mountain	KKØQ	175,050	Rocky Mountain	K7UA	316,575
Southeastern	NT4TS	256,620	Southeastern	N4PN	707,616
Southwestern	W6QU (W8QZA, op)	295,086	Southwestern	W7ZR	366,903
West Gulf	N4IJ	172,845	West Gulf	K5TR (K5OT, op)	594,720

Division	Call	Score
Single Operator, Single Band, 15 Meters		
Atlantic	W3GVX	40,986
Canada	VE3EJ	811,422
Central	N9TGR	195,738
Delta	NY4S	2,193
Great Lakes	W8JGU	166,161
Hudson	KU2M	749,322
Midwest	KIØEO	7,752
New England	K1DG	774,360
Northwestern	WA7LT	226,596
Pacific	N2NS	65,490
Rocky Mountain	AA5B	60,264
Southeastern	AB4B	320,832
Southwestern	W6AFA	133,875
West Gulf	K5RX	580,116

Single Operator, Single Band, 20 Meters		
Atlantic	KB3WD	610,854
Canada	VE9HF	363,852
Central	W9WJ	53,130
Delta	K4TRH	59,778
Great Lakes	W8TA	537,810
Hudson	KA2HZP	14,229
Midwest	WA5SWN	4,452
New England	W1AVK	102,120
Northwestern	W7WA	475,068
Pacific	K6HNZ	83,853
Roanoke	AK4PE	22,680
Rocky Mountain	WØDN	12
Southeastern	K4DES	39,342
Southwestern	WA6FXT	1,596
West Gulf	KC5SB	900

Single Operator, Single Band, 40 Meters		
Atlantic	KE3X	35,376
Canada	VE3FU	48,762
Central	W9QL	13,095
Delta	W8FR	20,736
Great Lakes	K8DJC	41,412
Midwest	WDØBGZ	24,660
New England	W1FQ	85,878
Northwestern	WA2BFW	3,168
Pacific	W6RKC	39,015
Roanoke	W4AAA (KK9A, op)	398,718
Southeastern	AG4W	66,597

Single Operator, Single Band, 80 Meters		
Central	K9IDQ	3,510
Great Lakes	WD8E	429
Pacific	N6DZR	330
Roanoke	W4QNW	20,355
Rocky Mountain	NØTA	390
Southeastern	K1KNQ	23,607

Single Operator, Single Band, 160 Meters		
Atlantic	W2MF	11,868
New England	KM1R	6,552
Northwestern	K7CW	390
Rocky Mountain	WD5COV	2,349
Southeastern	WB4WXE	3,306

Division	Call	Score
Multioperator, Single Transmitter, High Power		
Atlantic	W3MF	3,318,975
Canada	VA2EN	1,687,359
Dakota	KØJA	865,920
Delta	K5UA	1,838,025
Great Lakes	W8PR	2,569,560
Hudson	WN2O	1,440,000
New England	N1RR	5,085,762
Northwestern	K7ZS	1,287,072
Pacific	W6DR	315,744
Roanoke	W4BFB	307,998
Rocky Mountain	WC7WB	1,264,344
Southeastern	WW4LL	5,589,657
Southwestern	N7KQ	163,326

Multioperator, Single Transmitter, Low Power		
Atlantic	W3ZGD	892,038
Canada	VE9ML	2,574,936
Central	K9LA	596,700
Great Lakes	KC8IMB	190,629
Midwest	WW1USA	77,436
New England	N1BA	2,598,174
Pacific	W6BB	507
Roanoke	N4XL	1,577,616
Southeastern	AJ4DT	188,784
West Gulf	N5DO	1,473,120

Multioperator, Two Transmitter		
Atlantic	K2AX	4,034,880
Canada	VE6FI	724,950
Central	NØIJ	3,132,576
Dakota	KKØSD	5,724
Great Lakes	W8BI	546,561
Hudson	KU2C	3,187,002
Midwest	NØMA	2,071,380
New England	KB1H	6,657,732
Pacific	W6WB	4,573,050
Roanoke	W4ML	2,436,822
Southeastern	N4DXY	73,809
West Gulf	W5CSC	118,482

Multioperator, Multitransmitter		
Atlantic	K3LR	19,435,230
Central	WØAIH	3,747,810
Great Lakes	AC8JF	169,320
New England	W2PV	11,310,783
Pacific	N6RO	5,196,030
Roanoke	W4RM	8,731,800
Southeastern	W4AAZ	251,400
		19,435,230
		3,747,810
		169,320
		11,310,783
		5,196,030
		8,731,800
		251,400