# "2010 ARRL DX Phone - Was That A SUNSPOT???"

By Ward Silver, NØAX <n0ax@arrl.net>

#### It looks like contests make conditions! PAØM

[Version 1.2 – Add KU1CW SOSB-20 record, correctly note N4PN's SOSB-20 record instead of SOSB-40, correct AA1NU to AA1BU in SOSB-80, correct QTH of TO5A to Martinque. All hyperlinks were restored, as well – Ed.] [Version 1.21 – Correct a corrupted W/VE SOA Top Ten table. Also note that T46A was omitted from the QST version of the Top Ten table for DX MS stations, but is shown correctly here – we regret that error – Ed.] [Version 1.22 – Add figures and summary for Oceania from VK2CZ – Ed.]

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#### PART I – Contest Overview

One might say that the weekend of March 6<sup>th</sup>-7<sup>th</sup> was a "busy" one on the HF bands as the ARRL International DX Phone contest pushed PTT switches and pulled final amplifier current. "Busy," though, doesn't hardly come close to the experience of trying to wedge a signal in edgewise, particularly on 20 or 40 meters! Activity was intense – and the trend of big increases in participation started last year just kept on rolling!

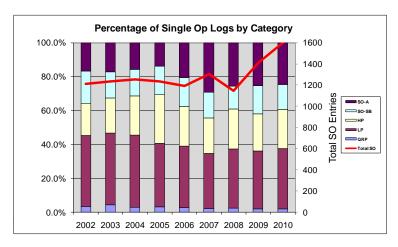
#### **Activity Summary**

Log submissions hit an all-time record of 3188 - up by 24% over 2009 - with 1697 from W-VE contesters and 1491 from DX stations. Not only were there more logs submitted, but they were fatter than last year's:

DX QSOs with W-VE: 695,243 – up by 34% W-VE OSOs with DX: 545.754 – 32%

Using the DX to W-VE total, that a rate of more than 14,000 QSOs per hour!

Another measure of participation is the maximum number of calls worked on one band by the big



stations. At first blush, the 3,246 QSOs on 20 meters by F6KHM (F8DBF, op) is down from last year's 3,805, but look at the 3,188 QSOs on 15 meters by ZX5J (PP5JR, op). The second-highest band is MUCH closer than last year's 2,786 as more operators were spread across both 20 and 15 meters. From here at home, the 2836 DX calls logged by the K3LR operators on 20 meters was 16% higher than last year.

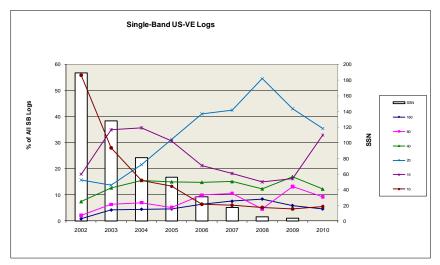
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On every band, W-VE operators had more entities to chase – the maximum logged was 145 countries on 20 meters at K3LR. You can see the increase in activity in **Figure 1** at left. The red line showing the total number of W-VE Single Operator logs is headed through the roof and shows no sign of slowing down. <u>Appendix A</u> shows a complete breakdown of QSOs and multipliers for the contest in each year since 2002. More hams, making more QSOs, in more places, on more bands, means more fun!

All this is occurring, even with a SSN still vanishingly small (as in "zero"), leading to the topic of our title. **Table 1** tells the solar tale and actually the answer is, "No! That wasn't a sunspot!" But solar flux was the highest since 2005 and even in that year, the ionosphere was quite a bit more disturbed. So conditions were quite good and everyone benefited.

	FI	Flux Planetary Ap Estimated I		Planetary Ap		ated K
Year	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

Table 1 - Propagation Indices for ARRL DX Phone



From **Figure 2** to the left, we can also see the importance of the 15 meter band to DX contest participation this year and probably in the future. Why is 15 meters so important and not 10 or 20 meters? For contesting, 10 meters is a peak-of-the-cycle band that is certainly fun to work, but will only have the really strong opening in the few years straddling the solar maximum. 20 meters, while a

rock-solid band with world-wide openings – however brief – even during the solar minimum, gets so crowded that the smaller stations have a hard time getting through. The band may be "propagationally open, but behaviorally closed." Thus part-time and casual participants tend to spend less time on the air or may just find something else to do that weekend.

When 15 meters is open, as it was more this year, smaller stations gain 250 kHz of potential spectrum, lessening "band pressure" for everyone. A smaller station is more likely to be effective for DX communications on 15 meters because a tribander is 33% higher electrically than on 20 meters, lowering the angle of radiation. Signal strengths on frequencies just below the MUF tend to be stronger, as well. All three of these – more space, lower angle, better propagation – make 15 meters a "money band" for HF DX contesting.

Elsewhere on the bands -160, 80, and 40 meters all show modest declines in the fraction of the single-band logs. This is probably due to better high band conditions. The actual total of single-band logs (237) is just about the same as 2009 (235), so the low bands are really holding their own. It's just the higher number of 15 meter logs depressing the relative fractions. 40 meter logs were down a bit from their historic high of 40 last year. Regardless of the distribution, interest in single-band contesting remains high and it's a wonderful way to learn a lot about a band by focusing on it exclusively for an extended period.

## **Solar and Ionospheric Conditions**

So even if the sunspots were as absent as a December swallow in Capistrano, there was still a slight up-tick in the solar flux. In 2008 and 2009, the flux levels were at rock bottom, but we got a nice present from Ol' Sol with an approximately 10% bump in the Solar Flux Index (SFI). That doesn't mean a 10% increase in activity, just a 10% increase in the SFI. Nevertheless, it was quite welcome and with enough stations actually calling CQ instead of giving the dial a quick spin and giving up – surprise! – 15 and 10 meters were actually open!

The ionosphere did its part during the contest by remaining calm, undisturbed, and in good shape to reflect radio signals. Planetary Ap and Estimated K (sounds like a couple of post-modern superhero characters) turned in their third quietest numbers since 2002. This was really crucial in making 15 as good as it was during the contest because it doesn't take much turbulence to shut down a weak-kneed polar path that's as wobbly as a newborn giraffe.

Cycle 24 has definitely started. The latest NOAA prediction is for a peak Smoothed Sunspot Number (SSN) of 58, but with an error of plus or minus 25! I'd rather have the latter, wouldn't you? Recent propagation talks I've attended show the tiny increase in sunspot numbers against three prediction curves. While it's really too early to tell which of the three paths the new cycle is following, by next year's writeup we should have a pretty good idea. Keep your fingers crossed and check in with me next year!

#### **Caveats**

Every year, I remind folks to play by the rules and an easy one to overlook, particularly for a new contest participant, is the use of "spots" from the world-wide spotting networks. Most logging software is "Internet-enabled" these days and logs on auto-magically. Remember to send in your log as "Single-Operator, Assisted" if you receive ANY information from the spotting network about the operation of another contest competitor. This includes announcements, schedules, and text messages or chat room conversations, for example. As always, posting spots or announcements about your activity ("self-spotting") is illegal in any category. (Posting spots from your station is OK if you do not receive them.)

While you're thinking about the rules, if you are operating a station by remote control (i.e. a "remote station"), you must identify based on the location from which you transmit, you must be fully licensed to transmit from that location, have full permission from the station owner, and all receiving and transmitting antennas must be located at a single site.

Another subject that I bring up now and then is that of "log massaging". The 30-day submission period is a holdover from the days of paper logging when it really did take a long time to clean up handwritten paper logs. I remember typing in the WØEEE logs (Missouri University of Science and Technology) during my college days – it took hours and hours!

These days, the computer is ready to email a log at any time at the press of a button, fully duped and scored. In fact, many logs do appear in the email robot's database within a few

minutes of the contest's finish. As a result, extended deadlines are unnecessary. ARRL Sweepstakes tightened up the deadline to two weeks and as a result, the writeup was available a month earlier!

In any event, resist the temptation to go back and "sanitize" your log. When the clock rolls over, the contest is finished. By all means, correct anything you've noted during the contest – either on paper or using a note function in the software. Export your data in Cabrillo format and use a text editor to confirm that your header information is correct – data on you and your station, your category of entry, etc. Every year, several contesters are dismayed to see their score in a category other than the one in which they operated. It happens because the log was submitted that way!

Scroll down to the QSO data and be sure the data in your log entry reflects what you actually sent. The log checkers will thank you for the effort – they get dozens of logs every year with data that doesn't match the header or for which the logging software didn't construct the output data properly. This makes a lot of extra work for the log checkers as they try to figure out what you *really* sent and do the right thing for everybody.

But...don't alter the information in your log because you "think" you might have entered the wrong thing. Mistakes happen and the place to correct them is during the next contest!

## **Writeup Notes and Features**

This year, I've concocted a "figure of merit" for logs – an *accuracy index*. For a long time, I've felt that the final score – while correctly assigning order of finish – doesn't tell the whole tale. It takes a whole lot of effort and skill to make thousands of QSOs at high speed and still keep your error rate to a fraction of a percent. The accuracy index is an attempt to combine log size and error rate in a way that recognizes top performers.

Once again this year, volunteers have delved the depths of data to create a Regional Analysis write-up for every Division and Continent, plus the Caribbean and Central America. This is available in Part IV of this writeup. Plus, look for these ongoing features at the end of this writeup:

- Top Ten for W-VE and DX since 2002
- Regional leaders table
- Sponsored plaque winners table
- Continental leaders table

A compilation of Soapbox comments is posted as a separate PDF document.

#### Records

Great contest, especially 40 metre band, just fantastic conditions here. VK3IO

What is a competition without records and record-keepers? A competition without a history, that's what! Records are one of the threads that stitch together the scroll, year by year, from the earliest contest in 1929 right down to 2010. New records are something we should all be proud of and strive for. **Figure 3** below shows the call district and continental record count by year including all the new ones from 2010. The mother lode of 2002 remains the biggest year for records. The oldest surviving record remains the MM Methuselah established by KØRF (CO) in 1979. While this section covers the district- and continent-level achievements, surely there are many more new records set in your section and in your club – your club *does* keep records of its members, *doesn't it?*?

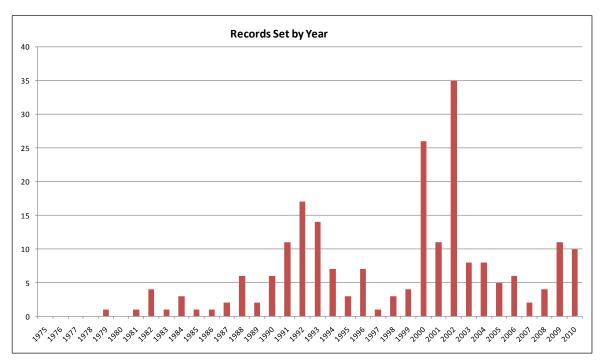


Table 2 - New Records for 2009

#### W-VE Records

Category	Call District	Call Sign	New Record	Old Record	Year Set
SOAB-LP	1	N1UR	1.717M	1.596M	1992
SOAB-QRP	Canada	VA3DF	294k	168k	2003
SOSB-20	4	N4PN	447k	380k	1999
SOSB-20	Ø	KU1CW	552k	544k	1990
SOSB-40	6	W6YI	207,648	207,603	2004
SOSB-160	2	W2MF	25,578	22,692	2009
SOSB-160	Canada	VE2DWA	4,416	1,596	1984

#### DΧ

Category	Continent	Call Sign	New Record	Old Record	Year Set
SOSB-40	EU	CR2X (OH2BH, op)	469k	257k	2004
SOSB-40	NA	ZF2AH	431k	366k	2005
SOSB-40	AS	JAØJHA	198k	99k	1992
SOSB-80	OC	KH6LC (NH6V, op)	211k	141k	1990
MS	AF	D4C	6M	8.37M	1992
MM	OC	KH7X (@ KH6YY)	7.88M	6.3M	2006

#### All-band Records

With Ol' Sol still not quite awake (Can somebody please fetch our parent star a cup of coffee...Bueller?) the all-band records are pretty much untouchable. Except that nobody told either N1UR or VA3DF! Table 2 shows the results as N1UR set a new 1st district SOAB-LP record with 1.717M points, eclipsing the old record of 1.596M points, set in 1992. VA3DF also has the new SOAB-QRP record for Canada with 294k points. The old record was 168k points, set in 2003. In case I wasn't clear – that is Hard To Do – Well Done!

Africa has a new Multi-Single record, too, smashed to bits after the team at D4C hoisted the 1992 standard from 6M points to 8.37M. Northwest Africa has seen a run of big scores over the years and we can expect big shoot-outs between EA8, CT3, and D4 as the sunspots return.

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Improving on their 2006 performance, the KH7X team at KH6YY raised the altitude of Oceania's Multi-Multi record from 6.3M to a lofty 7.88M total atop Oahu's Pupukea Ridge above surfing's famous Banzai Pipeline.

Take a look at the top DX Multioperator scores – 7.4, 8.4, 7.9 Mpts. These are all closely-spaced and the largest is actually the M2 score from D4C! This is an indication of very competitive categories, excellent operators and stations, and the ability to blanket the available band openings to North America. Good work! These scores should diverge in the coming years as more bands are open at the same time, requiring more operators to do an effective job of cleaning out the bands.

## Single-Band Records

A pair of twenty-year-old single-band records from 1990 fell this year, on 20 meters and 80 meters. KU1CW was able to hold his own on the wall-to-wall 20 meter band for a new record in the tenth district. On the "high bands", this record was the farthest to the north and west in the US. N4PN also set a new 20 meter record from the fourth district by a large margin. We'll see more 20 meter records fall in the years to come.

40 meters wasn't the only band on which increased activity paid off. On 80 meters from Oceania, the new record-holder is KH6LC (NH6V, op) with 211k points, besting the 1990 record of 141k points. In fact, I don't see another Oceania station in the Top Ten on 80 meters in any of the years since 2002 in which I've been tracking the contest!

Down on Top Band, the increased awareness of this band, better equipment and antennas, fewer frequency and power restrictions for DX hams – all helped W2MF eclipse his recordsetting 2<sup>nd</sup>-district effort from last year on 160 meters, raising the bar from 22,692 to 25,578 points. VE2DWA picked off the 1984 1,596-point Canadian 160 meter record with a new mark of 4,416 points.

#### 40 Meter Gold

At any time of the solar cycle an experienced operator can target the right band for conditions and make a run at a record. 40 meters was "gold" this year as more stations took advantage of the (relative) absence of broadcasters from the 7.100-7.200 MHz allocation. W6YI set a new record in the 6<sup>th</sup> district – and barely made it – his 207,648 points just squeezed by the old 207,603 points – that's only 45 points or 15 QSOs!

On the DX side of the ledger, *three* stations broke the 2004 European 40 meter record of 257k points; CR2X (OH2BH, op) with 469k; CT1ILT with a score of 345k; and EA7LL pouring it on with 279k. Showing why they're called the Grand Caymans, the North American 40 meter record was bumped from 366k to 431k by ZF2AH, taking ZF2CF's 2005 perch. JAØJHA overwhelmed the 1992 Asian 40 meter record of 99k with a big 198k score. I'd say the long, ongoing efforts of persuading the broadcasters to give hams some breathing room on 40 meters is paying off pretty effectively – another Well Done!

#### The Crowd Groans

VY2ZM (K1ZM, op) just missed a new Canadian SO-HP record with 5.436M points – the old record was 5.647M points. P4ØA (KK9A, op) came close to the old South American record of 5.91M points with 5.51M points of his own. KH7Y's 431,640 points on 15 meters came within a whisker of the 433k Oceania record. Likewise, AO8A (EA8AH, op) put 288,720 points on the board on 20 meters, but couldn't quite capture the 298k African record. As our JA friends say, "Mo ichi do!" (One more time!)

Thank you to my father PP5JR (operator of ZX5J) to give this opportunity. I'm 11 years old, my first contest alone. PU5FJR

I shared my father's station with my brother PU5FJR, great experience I'm 13 years old. PU5BIA [Both submitted SOSB-10 scores and their photos can be seen in the South American regional writeup – Ed.]

#### **Success Over Time**

One of the stories rarely covered in a yearly writeup is the history of the contest, particularly of operators and stations that do well year after year. If you search through the table of Top Ten stations since 2002 available with the on-line article, you'll see some calls that should be mighty familiar. (Another fun site to explore is the <a href="K5TR Contest database">K5TR Contest database</a> - more than 400,000 published scores have been entered by volunteers!)

**Table 3** shows the active winning streaks of three or more for both W-VE and DX stations. From the W-VE scores, K1ZM has run a pretty amazing string of eight consecutive SOAB-HP wins from Prince Edward Island. It's going to be hard to get any closer to Europe than Jeff, he's a good operator, and the station is second to none. Literally! You can learn more about VY2ZM at <a href="www.k1zm.com">www.k1zm.com</a>, including a video taken from the 170-foot level of one of the towers. There are four other back-to-back wins by single operators; N1UR (SOAB-LP), W5PR (SOSB-10), W2MF (SOSB-160), and W2RE (SOA). In the Multi-operator categories, WE3C's team has won M2 three times in a row and K1LZ is coming on strong with consecutive MS titles.

Table 3 - Active Winning Streaks

W-VE					
Call (@ QTH)	Number	Category			
K1ZM (@ VY2ZM)	8	SOAB-HP			
WE3C	3	MS			
DX					

<i>D</i> X					
Call (@ QTH)	Number	Category			
KK9A (@ P4)	6	SOAB-LP			
LU1HF	5	SOSB-10			
PP5JR (@ ZX5J)	4	SOSB-15			

Outside the borders of W-VE, KK9A is pushing K1ZM hard with a six-pack string in SOAB-LP from his Aruba (P4) station. The top scores on 10 and 15 meters have been pretty much locked up recently by a pair of South American operators; LU1HF has a full tally of five consecutive SOSB-10 titles and PP5JR has piloted the ZX5J station to four in a row on 15 meters. Winning any category just once is hard enough, but all of these operators have been able to stay the course and do it time after time – Well Done for a third time!

Table 4 looks beyond the winning streaks to see how many times an operator made the Top Ten. The table shows whose calls have visited the Top Ten at least five times since 2002, with at least one being in the tough SOAB-HP or SOAB-LP category. (Not to say the Single Band or Assisted categories aren't competitive – I promise to look at those categories next year!)

Table 4 - Top Ten Finishes Since 2002

(with at least one SOAB-HP or SOAB-LP)

#### W-VE

Call (@ QTH)	Number	Category
AA1K	9	SOAB-HP
N5AW	9	Various
W9RE	8	SOAB-HP
N1UR	7	SOAB-LP
N4TZ	7	Various
W3BGN	7	Various
VE3AT	7	SOAB-HP
K6LA (@ VY2)	6	Various
K2PS	5	Various
K3ZO	5	SOAB-HP
K8IA	5	Various
KU1CW	5	Various
LZ4AX (@ K3CR)	5	SOAB-HP
N1PGA	5	SOAB-LP
N1SV	5	Various
NN3W	5	Various
VE3EJ	5	SOAB-HP
VO1MP	5	Various

#### DΧ

Call (@ QTH)	Number	Category			
KK9A (Various)	8	Various			
N2TK (@ KP2)	8	SOAB-HP			
NH7A (@ FG,KH6)	8	SOAB-HP			
G3FBK (@ J8)	7	SOAB-LP			
HI3TEJ	7	Various			
W6PH (@ VP9)	7	SOAB-LP			
W2SC (@ 8P)	6	SOAB-HP			
8P6EX	6	SOAB-LP			
OK1RI	6	Various			
W5AJ (Various)	6	Various			
KH6ND	5	Various			
LU1HF	5	SOSB-10			
OH2BH (Various)	5	Various			

AA1K and N5AW share the limelight at nine Top Tens – in other words, for every year that I've authored the results, these two call signs appeared somewhere in a Top Ten box. All of AA1K's scores have been in the SOAB-HP category, competing against some pretty stiff challengers! Right behind is W9RE with eight Top Ten's, also in the SOAB-HP category and from the so-called "Black Hole" section of Indiana, too.

Over on the DX side of the equation, KK9A's winning streak of six is supplemented by two more big scores that give him eight Top Ten appearances, along with "Voice Of the Virgin Islands", N2TK, and world-traveler NH7A who scores well from both Martinique (TO) and KH6 in the SOAB-HP category.

It would be truly interesting to do an "all-time" sweep of the Top Ten scorers and the category winners. If some enterprising database delver would like to tackle this project, I'm sure the ARRL DX participants would be thrilled by such a compilation!

## **PART II – Results By Category**

Each set of category results also features the Top Ten for that category and one or more charts showing the distribution of scores. This helps identify great efforts and lets you evaluate your own personal score. The Searchable Database for the contest can be used to retrieve a table of scores from your category, Division, or Section. Plus, the Regional Analysis discussion in <a href="Part IV">Part IV</a> puts things in perspective from your contest QTH. Have fun!

### W-VE Results

## **Single-Operator Categories**

Single-Operator, High Power (SO-HP)

If you want to winplace-or-show in this category, your strategy had better include being on the right side of the US-Canadian border! For the third time in the past five years, Canada swept the top three spots, led by VY2ZM (a.k.a. Jeff, K1ZM) who continues to dominate SOAB-

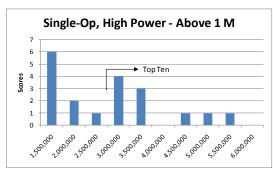
HP from Prince Edward Island.

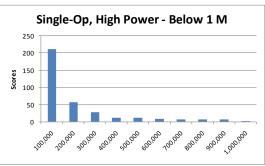
Call Sign	Score	QSOs	Multipliers	QTH
VY2ZM	5,436,120	4084	445	MAR
VX3AT (VE3AT, op)	4,534,959	3762	403	ON
VY2TT	4,147,332	3591	388	MAR
K3CR (LZ4AX, op)	3,344,841	2890	387	WPA
W9RE	3,149,784	2710	388	IN
AA1K	3,038,208	2772	368	DE
W3BGN	2,852,922	2644	362	EPA
K8PO	2,716,848	2682	342	ME
K1TO	2,686,602	2573	349	WCF
NC1I (K9PW, op)	2,621,949	2585	341	WMA

Every year, Jeff works to refine the station and position it to take advantage of the propagation. As you can see from the Top Ten breakdown, VY2ZM has some big numbers on all bands. VX3AT (operated by Ron VE3AT) has come close the top spot before, placing second in 2005. Take a look at Ron's QSO total on 20 meters – spectacular! That would have been the #3 QSO total in the MM category for 20 meters, plus Ron was racking up big totals on the other bands, too. Right behind is Ken, K6LA as VY2TT from the Maritimes. Ken was the category leader in

CALL - QSOs	SEC	160 Q	80 Q	40 Q	20 Q	15 Q	10 Q
VY2ZM	MAR	157	560	662	2016	661	28
VX3AT (VE3AT, op)	ON	32	233	748	2394	329	26
VY2TT	MAR	64	253	896	1693	665	20
K3CR (LZ4AX, op)	WPA	49	242	687	1240	643	29
W9RE	IN	35	138	800	1243	455	39
AA1K	DE	48	148	445	1600	510	21
W3BGN	EPA	53	231	687	1116	503	54
K8PO	ME	52	109	750	1289	466	16
K1TO	WCF	39	163	453	1140	738	40
NC1I (K9PW, op)	WMA	52	288	499	1263	454	29
CALL - MULTs	SEC	160 M	80 M	40 M	20 M	15 M	10 M
CALL - MULTs VY2ZM	SEC MAR	160 M 55	80 M 78	40 M 92	<b>20 M</b> 109	15 M 97	<b>10 M</b>
						_	
VY2ZM	MAR	55	78	92	109	97	14
VY2ZM VX3AT (VE3AT, op)	MAR ON	<b>55</b> 26	78 75	92 90	109 <b>123</b>	<b>97</b> 74	14 15
VY2ZM VX3AT (VE3AT, op) VY2TT	MAR ON MAR	<b>55</b> 26 38	<b>78 75</b> 65	92 90 84	109 <b>123</b> 101	<b>97</b> 74 88	14 15 12
VY2ZM VX3AT (VE3AT, op) VY2TT K3CR (LZ4AX, op)	MAR ON MAR WPA	55 26 38 36	<b>78 75</b> 65 68	92 90 84 83	109 <b>123</b> 101 104	97 74 88 83	14 15 12 13
VY2ZM VX3AT (VE3AT, op) VY2TT K3CR (LZ4AX, op) W9RE	MAR ON MAR WPA IN	55 26 38 36 28	<b>78 75</b> 65 68 63	92 90 84 83 95	109 <b>123</b> 101 104 105	97 74 88 83 84	14 15 12 13 13
VY2ZM VX3AT (VE3AT, op) VY2TT K3CR (LZ4AX, op) W9RE AA1K	MAR ON MAR WPA IN DE	55 26 38 36 28 34	78 75 65 68 63 57	92 90 84 83 95 79	109 123 101 104 105 113	97 74 88 83 84 72	14 15 12 13 13
VY2ZM VX3AT (VE3AT, op) VY2TT K3CR (LZ4AX, op) W9RE AA1K W3BGN	MAR ON MAR WPA IN DE EPA	55 26 38 36 28 34 37	78 75 65 68 63 57 66	92 90 84 83 95 79 78	109 123 101 104 105 113 92	97 74 88 83 84 72 70	14 15 12 13 13 13

40 meter QSOs, as well. As the distribution chart shows, these three stations led the pack by a substantial margin. Elsewhere in the Top Ten, it's been a few years (five to be exact) since the Central Division has been above fifth place in SOAB-HP. This was W9RE's turn, putting Indiana into a lot of DX logs. Mike's big 40 meter Yagis really put out a whopping signal as he was second in QSO totals and first in DX entities on the band with 95. Another indication that conditions were good – Dan, K1TO did a great job from West Central Florida and put the hurt on 15 meters, leading all Top Ten QSO totals on that band by a wide margin and narrowly missing doing the same on 10 meters. As flux continues to climb, the high bands will allow many others to challenge the VE lock on the leader board.





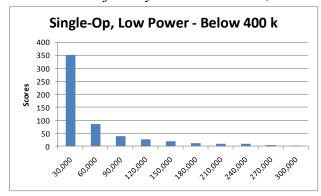
Single-Operator, Low Power (SO-LP)

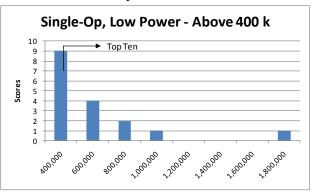
Ed, N1UR continues to distance himself from the pursuit with a whopping victory in SOAB-LP and a new 1<sup>st</sup> call area record, more than doubling the score of WRTC-2010 competitor Marv, N5AW. This was by far the biggest margin of victory for any of the SOAB

Call Sign	Score	QSOs	Multipliers	QTH
N1UR	1,717,380	1656	348	VT
N5AW	883,479	941	317	STX
VE3BDN	775,248	1056	248	ON
VE3AD	677,424	1297	176	ON
N4XL	594,282	822	247	SC
KT4ZB	588,612	726	271	GA
K6AM	448,596	738	204	SDG
NA4K	439,230	609	242	TN
KD9MS	394,605	569	237	IL
WA2JQK	387,504	497	276	ENY

categories. Marv was able to muscle in to the second spot from STX, giving up a full ionospheric hop to the East Coast stations, on the strength of 354 QSOs on 15 meters in 87 entities. Citing favorable propagation, Marv relates, "Operated 10 hours less than last year but increased score by 20 percent!" And no, that's not a typo in the seventh position —

John, K6AM is the first West Coast station since 2002 and maybe longer to make the Top Ten in SO-LP – nice job! By no means a fluke, his effort was solid on every band.





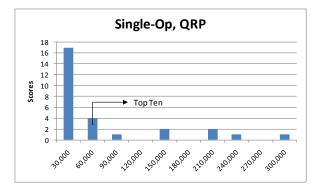
Single-Operator, QRP (SO-QRP)

From third, to second, to first – continual improvement and being in the right spot at the right time paid off for Doug, VA3DF as he grabbed the brass ring with QRP and set a new Canadian record. If you think working a DX phone contest with 5 watts of output power is easy, give it a try! Last year's third-place winner, Tom, N1TM gave chase, but fell a bit short. Last year's winner, Phil, NØKE came in third, but had the second highest QSO total of 400.

Call Sign	Score	QSOs	Multipliers	QTH
VA3DF	294,120	522	190	ON
N1TM	217,005	396	185	СТ
NØKE	188,853	399	161	СО
N5DO	186,000	404	155	WTX
NDØC	137,448	333	138	MN
W6QU (W8QZA, op)	123,708	340	122	SDG
WF4U	88,920	250	120	UT
KT8K	55,590	176	109	MI
N5FPW	54,108	168	108	NC
K3TW	51,975	165	105	MDC

Competition in QRP really spans the continent with scores from both coasts (W6QU, op W8QZA, in San Diego and N1TM in CT) and both borders (NDØC in MN and N5DO in WTX).

In the QRP Top Ten, nine different Divisions are represented! While most scores in this category are small, the top competitors really slug it out and getting through the pileups makes every QSO an accomplishment

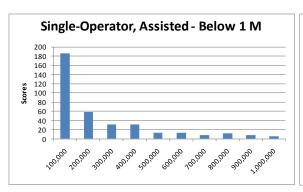


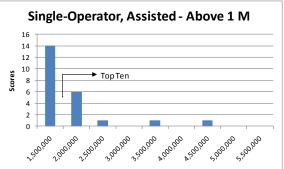
Single-Operator, Assisted (SOA)

Leading the way is repeat winner Ray, W2RE with a convincing lead over perennial SOA maven Chas, K3WW. Although K3WW had more multipliers than W2RE, Ray's 900-QSO

			<u> </u>	
Call Sign	Score	QSOs	Multipliers	QTH
W2RE	4,174,938	3404	411	ENY
K3WW	3,156,300	2517	420	EPA
AA3B	2,445,795	2024	405	EPA
N2MM	1,916,214	1682	389	SNJ
W1GD	1,821,687	1566	389	NNJ
W4MYA	1,674,216	1352	414	VA
N4ZC	1,664,388	1411	396	NC
W2IRT	1,567,500	1383	380	NNJ
VE3MMQ	1,533,927	1610	323	ON
K2TE	1,491,996	1405	356	NH

advantage more than made up the difference. Nearby in EPA was Bud, AA3B with another big multiplier total. The QRM must have been fierce in the Hudson and Atlantic Divisions!





SOA could also be referred to as the "Jack be nimble, Jack be quick" category, especially with the flood of spots available these days. This is a phone contest, so the <a href="CW Skimmer">CW Skimmer</a> automated decoder technology hasn't had a chance to affect the competition. Yet. The ability to get in and out of "packet pileups" puts a premium on proximity to the DX, so the Top Ten tends to stay close to the East Coast and this year is no different with the Top Ten filled by stations in a box from NC to NH and VE3.

## Single-Operator, Single-Band (SOSB) Categories

## 10 Meters (SOSB-10)

W5PR and K4WI have been jockeying for the lead on 10 meters for a while and this year propagation smiled on STX as W5PR made the most of what opportunities arose.

Top Ten – W-VE Single-Operator, Single-Band, 10 Meters				
Call Sign	Score	QSOs	Multipliers	QTH
W5PR	16,380	183	30	STX
K4WI	4,224	88	16	AL
W3EP	3,942	76	18	СТ
KC4TVZ	1,980	45	15	GA
KE5SNJ	1,518	46	11	LA
KD4W	1,512	42	12	TN
WA2AOG	672	28	8	WNY
KI6YYT	156	13	4	EB
N1AIA	126	8	6	ME
K7ULS	99	11	3	UT

### 15 Meters (SOSB-15)

Even with improved conditions, the Top Ten still followed its usual arc from New England down and across the southern part of the country. W4SVO was right in the middle of that arc in West Central Florida and was able to overcome N3HBX's proximity advantage to Europe.

Top Ten – W-VE Single-Operator, Single-Band, 15 Meters				
Call Sign	Score	QSOs	Multipliers	QTH
W4SVO	245,670	878	95	SFL
N3HBX	235,710	877	90	MDC
W5KFT (NA5TR, op)	185,625	632	99	STX
KV4T	157,872	575	92	AL
N1SV	151,923	576	89	EMA
W6AFA	125,610	534	79	LAX
N7RQ	105,702	449	79	AZ
AC5O	85,449	319	91	LA
N4TZ	81,528	344	79	IN
W6SR	76,734	446	58	SV

## 20 Meters (SOSB-20)

Twenty meters was the usual equal-opportunity employer as the Top Ten was spread far and wide. Beginning with a big score from Alberta by VE6WQ, the list jumps to KU1CW from Iowa in 2<sup>nd</sup>, then N4PN in Georgia for third and a new 4<sup>th</sup> district record. Nice to see VO1KVT making the Top Ten from a semi-rare multiplier – Newfoundland.

Top Ten – W-	Top Ten – W-VE Single-Operator, Single-Band, 20 Meters				
Call Sign	Score	QSOs	Multipliers	QTH	
VE6WQ	809,088	2119	128	AB	
KU1CW	552,123	1583	117	IA	
N4PN	447,552	1340	112	GA	
VE3DZ	406,929	1347	101	ON	
VX3XN	369,198	1161	106	ON	
VE3NE	285,120	967	99	ON	
KK1KW	205,200	725	95	NH	
WR2G	190,404	744	86	NNJ	
N8II	184,497	694	89	WV	
VO1KVT	148,473	616	81	NL	

## 40 Meters (SOSB-40)

W6YI is surely on the "must work" list for every JA station on 40 meter phone because he seems to be near the top of SOSB-40 every year, setting a new call district record despite the "Chinese Dragon" over-the-horizon radar tearing up the low bands. KI6LZ from Santa Barbara is a new call in the list this year, with his #2 score giving Jim an incentive to stay in the chair.

Top Ten – W-VE Single-Operator, Single-Band, 40 Meters				
Call Sign	Score	QSOs	Multipliers	QTH
W6YI	207,648	832	84	SDG
KI6LZ	116,100	519	75	SB
WDØBGZ	66,861	333	69	CO
K4KZZ	58,500	257	78	NC
W1AJT	42,180	192	74	NC
W8FR	30,150	152	67	MS
K1EY	27,966	158	59	SFL
NØUU	25,704	127	68	KS
VA3XH	24,759	133	63	ON
N8QAZ	21,336	131	56	ОН

## *80 Meters (SOSB-80)*

AA1BU from EMA was the winner this year, although 2009 winner KU2M made a good run at the top from NNJ. Fighting through the lower-latitude QRN in SFL, N4QV was the third-place entry.

Top Ten – W-VE Single-Operator, Single-Band, 80 Meters					
Call Sign	Score	Score QSOs Multipliers		QTH	
AA1BU	150,552	614	82	EMA	
KU2M	114,075	510	75	NNJ	
N4QV	46,224	215	72	SFL	
NØNI	39,690	192	70	IA	
VE9ZX	36,465	188	65	MAR	
W4QNW	35,145	169	71	SC	
KM1R	26,724	138	68	СТ	
WD5COV	20,274	109	62	NM	
W2RR (WA2AOG, op)	18,270	105	58	WNY	
WA4TII	17,655	109	55	GA	

### 160 Meters (SOSB-160)

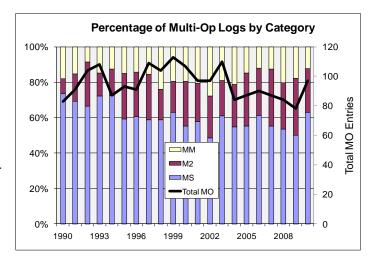
W2MF repeated last year's victory, pushed the 2<sup>nd</sup> district's record up another few percent, and has been #1 or #2 in each of the last three years. Not bad for a weekend's work! K5RX's second-place score from NTX is noteworthy – there's a lot of geography to overcome! VE2DWA's 4<sup>th</sup>-place finish was a new Canadian record, as well.

Top Ten – W-VE Single-Operator, Single-Band, 160 Meters				
Call Sign	Score	QSOs	Multipliers	QTH
W2MF	25,578	147	58	SNJ
K5RX	13,728	88	52	NTX
W3GH	11,475	87	45	WPA
VE2DWA	4,416	48	32	QC
W2VO	4,257	43	33	WNY
кфкт	3,108	37	28	IA
NA4W (K4WI, op)	1,725	27	23	AL
VE3EDY	1,134	21	18	СТ
VE3CUI	624	16	13	ON
KK4SI	495	15	11	NFL

## **Multioperator Categories**

The multioperator categories continue to grow in popularity, with Multi-Single (MS) leading the way as shown in the following figure. It looks as if the doldrums of the past few years are past and with conditions perking up, so is interest in a group operation.

If you don't have time for a full weekend's contesting, why not join up or form a multi-op? It's great fun and you will learn a lot about operating and contesting.



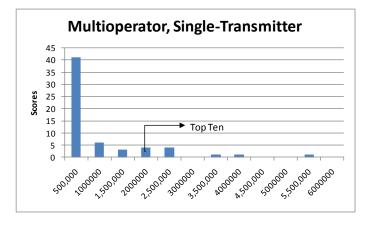
Multioperator, Single Transmitter (MS)

The K1LZ team made the most out of their single signal from EMA and won for a second straight year. Their score would have been second in M2! This is a competitive category

Top Ten – Multioperator, Single-Transmitter					
Call Sign	Score	QSOs	Multipliers	QTH	
K1LZ	5,240,760	3699	476	EMA	
K9RS	3,922,695	2986	441	EPA	
N1MM	3,216,663	2579	419	СТ	
W5RU	2,251,158	1885	403	LA	
NK7U	2,236,761	2254	333	OR	
W1ZA	2,215,020	1967	380	VA	
N1FD	2,086,272	1828	384	NH	
NN2W	1,925,478	1657	394	NLI	
W3MF	1,668,975	1459	385	EPA	
N2RM	1,638,270	1688	327	SNJ	

though, as K9RS (EPA) and N1MM (CT) battled it out to second- and third-place, respectively. W5RU (LA), NK7U (OR), and W1ZA (VA) accomplished a photo finish for third-fourth-fifth, only 36,000 points separating them!

By far the most popular Multioperator category, MS entries nearly doubled to become almost two-thirds of the total MO log count.



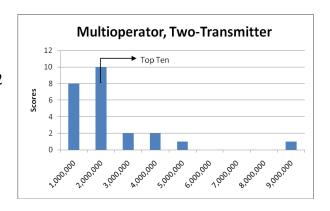
*Multioperator, Two Transmitter (M2)* 

This is the WE3C team's third straight trip to the highest podium from EPA, outdistancing second-place finisher W4RM (VA) by a wide margin with a score that would have

Top Ten – Multioperator, Two-Transmitter				
Call Sign	Score	Score QSOs Multipliers		QTH
WE3C	8,679,984	5423	536	EPA
W4RM	4,652,967	3469	451	VA
κØΤV	3,659,001	2813	437	NH
N1LN	3,321,402	2580	434	NC
K7ZSD	2,179,377	2385	309	OR
NØIJ	2,065,833	1916	363	WI
K1KP	1,917,825	1989	325	EMA
W7RN	1,681,560	1745	324	NV
K2AX	1,556,640	1421	368	SNJ
VE3MIS	1,505,142	1571	326	ON

placed 4<sup>th</sup> in MM – well done! KØTV (NH) made a big jump to third from 2009's eighth-place. Keeping pace with cross-state rival NK7U, the K7ZSD team placed fifth in the category.

Holding steady between one-quarter and one-third of all MO entries, the M2 category has created a solid niche in the contest. Requiring less hardware and fewer operators than MM, M2 is within reach of more stations than ever.



Multioperator, Multi-Transmitter (MM)

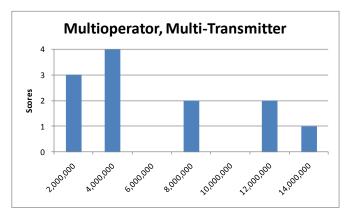
You learn an awful lot about RF engineering when you put together a Multi-multi station and get it through an entire contest! Issues that smaller stations can gloss over or work around

Top Ten – Multioperator, Multi-Transmitter				
Call Sign	Score	QSOs	Multipliers	QTH
K3LR	12,240,396	6968	588	WPA
W3LPL	10,761,933	6521	553	MDC
KC1XX	10,688,937	6475	553	NH
KM1W	7,031,871	4619	511	EMA
K1TTT	6,574,713	4381	503	WMA
WØAIH	3,515,184	2878	412	WI
NE3F	2,751,552	2297	408	EPA
W6WB	2,303,160	2271	340	EB
K4VV	2,055,504	1858	374	VA
N8RA	1,529,376	1441	356	СТ

become major impediments to a top score in this most difficult of team efforts. That's why a sweep of both modes of the contest is rare and K3LR's crew has managed it for the first time from a very WPA OTH.

The operators also achieved the highest Accuracy Index of any W-VE station this year (see "Accuracy" below). The two stations that have made up the "big three" of MM over the

past decade – W3LPL (MDC) and KC1XX (NH) – had an extremely close finish for 2<sup>nd</sup> and 3<sup>rd</sup>, respectively, with identical multiplier totals! KC1XX has battled back from a devastating ice storm a couple of years ago – it's good to see them back! KM1W (at W1KM's station) appears to be a new team to contend with, too, nudging in-state competitor K1TTT for fourth.



## **Club Competition**

Club competition is increasing every year along with the larger number of contesters. This is making for some interesting competition!

#### Unlimited Category

This year's winner – the Yankee Clipper Contest Club (YCCC) – added only only more log from 2009, but about 60 million more points to retain "king of the hill" status. Second-place Frankford Radio Club (FRC) and third-place Potomac Valley Radio Club (PVRC) made enough points to win last year, but this isn't last year!

Contest Club Ontario (CCO) made a big move up with 13 more logs, placing fourth – they were sixth in 2009. Right behind with 36 new logs (!) was the Northern California Contest Club (NCC). Their austral counterparts, the Southern California Contest Club (SCCC) added enough logs to qualify for Unlimited status this year and a new club, the Arizona Outlaws Contest Club joined the fun, as well, bringing the category total up to 11.

## Medium Category

And the gavel goes to...the North Coast Contesters (NCC) who nearly doubled their log total and more than doubled their total score! Nice job from the Great Lakes region. The Hudson Valley Contesters and DXers moved up from last year's third-place to second and the Carolina DX Association made a big jump to take third.

Medium categories entries declined by 4 this year, reducing the total to 33.

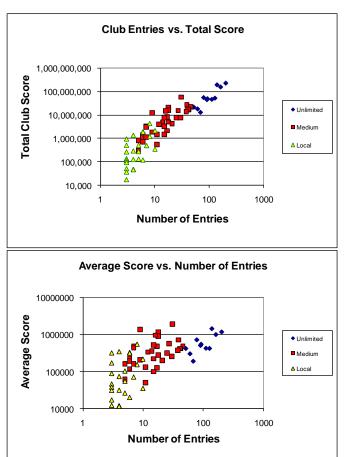
## Local Category

This category is firmly in the grasp of the Southwest Ohio DX Association (SWODXA) who outdistanced all others in the category. A new entry in the category this year – the Central Virginia Contest Club – was the second place finisher.

The Local category really came on strong this year with 25 entries – up from 8 last year!

Club Name	Total Score	Total Logs
Unlimited Ca	ategory	
Yankee Clipper Contest Club	234,062,475	203
Frankford Radio Club	197,699,928	140
Potomac Valley Radio Club	159,675,111	163
Contest Club Ontario	55,574,469	79 128
Northern California Contest Club Florida Contest Group	52,535,436 49,639,950	93
Society of Midwest Contesters	46,504,080	112
Minnesota Wireless Assn	44,967,489	91
Southern California Contest Club	21,271,257	52
Tennessee Contest Group	17,925,594	61
Arizona Outlaws Contest Club	13,299,261	70
Medium Ca	tegory	
North Coast Contesters	58,532,361	31
Hudson Valley Contesters and DXers	27,636,801	39
Carolina DX Assn	22,155,432	46
Central Texas DX and Contest Club Willamette Valley DX Club	21,177,222 17,177,835	18 42
Maritime Contest Club	16,199,220	18
Alabama Contest Group	16,786,749	41
Mad River Radio Club	15,329,817	27
Rochester (NY) DX Assn	15,143,019	16
South East Contest Club	13,960,356	38
Louisiana Contest Club	12,256,338	9
Order of Boiled Owls of New York Western Washington DX Club	8,114,070 7,800,837	17 25
North Texas Contest Club	7,737,999	15
Grand Mesa Contesters of Colorado	7,590,135	30
Contest Group Du Quebec	5,021,055	14
CTRI Contest Group	4,953,390	18
Utah DX Assn	4,197,258	21
Western New York DX Assn	3,989,697	12
Texas DX Society  Mother Lode DX/Contest Club	3,295,278	7 15
Central Arizona DX Assn	3,301,542 3,067,443	7
Spokane DX Association	2,122,962	17
Saskatchewan Contest Club	1,859,364	9
Bergen ARA	1,493,955	15
Sterling Park ARC	1,442,100	11
BC DX Club  Kentucky Contest Group	1,371,510 1,123,467	6 6
Allegheny Valley Radio Association	1,116,471	7
Eastern Iowa DX Assn	796,782	5
Magnolia DX Assn	706,551	6
Portage County Amateur Radio Service	549,594	11
Oklahoma DX Assn	307,551	5
Local Cate	egory	
Southwest Ohio DX Assn	4,397,364	8
Central Virginia Contest Club	2,168,688	10
Southern California DX Club	1,971,396	6
Kansas City DX Club	1,906,203	6
Delaware ARA (Ohio)  Metro DX Club	1,382,190 1,228,992	4 8
Lincoln ARC	956,811	3
Southeastern DX Club	515,937	5
Northern Arizona DX Assn	513,951	3
Meriden ARC	496,806	7
West Park Radiops	351,138	10
Falmouth ARA Skyview Radio Society	293,787	4 5
Salt City DX Assn	274,173 265,848	3
Loudoun ARG	137,970	3
Delaware-Lehigh ARC	131,034	5
Great South Bay ARC	125,559	4
Hays-Caldwell ARC	120,000	6
Wireless Association of South Hills	113,403	3
Fort Wayne Radio Club Low Country Contest Club	93,129 51,144	3
Saginaw Valley ARA	47,850	4
South Texas DX and Contest Club	45,903	4
Bristol (TN) ARC	36,399	3
Heartland DX Association	17,241	3

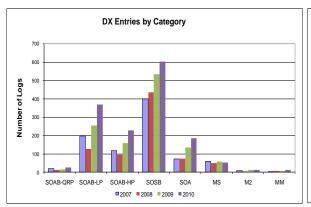
How did your club stack up against the other clubs in your category? The following scatter plots tell the story.

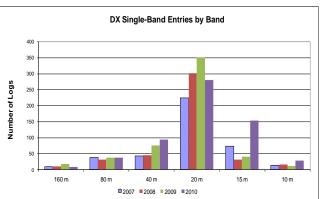


Each point plots a total or average score against the number of logs in your club's total. The Unlimited clubs are at the right in blue, the Mediums in the middle in red, and the Locals at the left in yellow. Your goal should be to move "your" data point up and to the right every year!

#### **DX Results**

As always, a big "THANK YOU!" to the many operators around the world that make the ARRL DX contests a success. Without your enthusiastic participation, this contest would simply not be viable. Since its inception in 1929 as the ARRL International Relay Party, the longest-running Amateur Radio contest of any type has relied on you to be there "on the other end" of every contact. The everybody-works-W/VE format makes it possible for many of the smaller domestic stations to fill their log with DX and take a big step toward their DXCC – you can see the results in the QSL bureau and in Logbook Of the World. It's appreciated! (And a reminder to W-VE hams – return the favor by participating in the national contests of DX sponsors - don't forget to send in a log!)





## **Single-Operator Categories**

Single-Operator, High Power (SO-HP)

All year long, top operators from around the world plan for their trips to locations that are "just right" – the results depend heavily on favorable propagation across all bands. A QTH far enough away from the North American continent for good 10 and 15 meter propagation likely means a harder time on the low bands, and vice versa. Will another big station be active and dilute the need for that particular entity? After the airline tickets have been purchased and the station location chosen, it's a battle of wits and stamina.

This year, the title went to WRTC-2010 competitor Tom, W2SC as 8P5A. Tom led a trio

Call Sign	Score	QSOs	Multipliers
8P5A (W2SC, op)	7,951,068	8005	332
6Y9V (WE9V, op)	6,819,318	7520	303
PJ2T (WB9Z, op)	6,554,676	6622	332
KH7XS	6,244,950	6732	310
KP2M (N2TK, op)	4,897,830	5819	281
TO5A	3,886,035	4436	295
CT1JLZ (OK1RF, op)	3,121,476	3894	269
LX7I (LX2A, op)	2,608,290	3983	219
PZ5RA	2,459,646	3384	243
403A (YU1YV, op)	2,069,256	3185	218

of big Caribbean scores, cracking the 8000-QSO barrier with the highest accuracy index (see "Accuracy" below) of any station in the contest, even the multioperator teams. If this was a tune-up for WRTC-2010, it was a good one! Making up the rest of that trio were Chad, WE9V as 6Y9V and Jerry, WB9Z piloting PJ2T solo – somewhat unusual for that station – in a tight race for

second and third respectively. Jerry had more mults, but Chad's higher QSO total made the difference.

Elsewhere in the top ten, KH7XS' 4<sup>th</sup>-place finish was the highest for an Oceania station since 2003. The improved high-band conditions allowed Europe to push back into the Top Ten in a big way as Central America was shut out this year, leaving PZ5RA as the sole South American representative.

## Single-Operator, Low Power (SO-LP)

If the traveler doesn't want to tote (or store) an amplifier, the SO-LP category can be just as much fun as SO-HP. And just as competitive once you get past John, KK9A, better known in his contest persona, P4ØA. John has led the pack comfortably for six straight years! The Aruba magic just keeps on rolling as his score would have been 5<sup>th</sup> in SO-HP.

Call Sign	Score	QSOs	Multipliers
P4ØA (KK9A, op)	5,510,736	5987	308
HI3TEJ	3,488,265	4497	261
V26M (N3AD, op)	3,032,010	3480	295
VP9/W6PH (W6PH, op)	2,860,164	3364	284
J88DR (G3TBK, op)	2,653,224	3741	238
J7Y (K1LI, op)	2,315,328	3126	248
8P6EX	1,571,994	2063	258
GIØKOW	767,961	1507	171
НК6Р	653,913	1077	207
KH7T	652,344	1416	154

Proximity to the US and Canada for a good low-band signal is more important in this category and the leading Top Ten reflects that. As you look back over the past few Top Ten SO-LP results, you will find that most of the top-scoring stations are from Caribbean or north-shore South American entities. Since 2002, the highest finish in SO-LP from Europe was 7<sup>th</sup> - OM5CD in 2007. We'll have

to see if the new solar cycle brings any changes with better conditions on 15 and 10 meters.

## Single-Operator, QRP (SO-QRP)

Just as low-power and QRP W-VE stations find it easier to be heard across the long distances in ARRL DX contests, so do the DX stations beaming the other way. With all the Big Noise coming out of the Caribbean, you'd think it would be the same for QRP, but not so! No Top Ten Caribbean stations at all!

Call Sign	Score	QSOs	Multipliers
OK2BYW	65,286	236	93
F5BEG	51,600	216	80
CT2IOV	36,675	164	75
JR4DAH	25,872	157	56
OK1DVM	18,468	111	57
IV3AOL	16,650	111	50
IK1BBC	13,029	103	43
JE1LDU	9,999	101	33
JA2MWV	4,968	69	24
PU5ATX	4,536	76	21

The top three stations are all from Europe – Milan, OK2BYW (1<sup>st</sup> place), regular Top Tenner Gerard, F5BEG, and Arnaldo CT2IOV. Izuno-san, JR4DAH is almost always in the QRP Top Ten and he is in 4<sup>th</sup> place this year – mo ichi do!

Single-Operator, Assisted (SOA)

Time was that an Internet connection sufficient to support a full-bore SOA 48-hour effort was a hard thing to find in the Caribbean, leaving the field wide open to more populous (and

Call Sign	Score	QSOs	Multipliers
J7N (K3TEJ, op)	4,058,577	4684	291
OM3GI	2,781,300	3685	254
LT1F (LU1FAM, op)	2,728,818	3847	237
OE3K	2,532,360	3613	235
IR4M	2,397,720	3463	232
ZX2B (PY2MNL, op)	1,928,004	2921	221
OK4U (OK1DIG, op)	1,875,750	3072	205
S57DX	1,548,021	2617	199
NP2KW	1,200,114	2232	183
DK4YJ	1,195,404	2049	196

connected) areas. Well, over the past few years, that situation has vanished with a Caribbean station in the catbird's seat for the past five contests. The Caribbean catbird was not in P4 or PJ for the first time this year as John, K3TEJ took a trip to Dominica as J7N and swept past the field. However, that was the end of the Caribbean-ers as Europe and South America filled spots 2 through 8, led by Jozef,

OM3GI and Lucas, LU1FAM as LT1F in a very tight race with less than a percent separating the two.

## Single-Operator, Single-Band (SOSB) Categories

### 10 Meters (SOSB-10)

The north-south path simply will not be denied and LU1HF has the sweet spot on this band, leading the category for fifth straight running. There is very little other propagation on 10 meters at this point and no station outside South America has placed in the Top Ten since AH6RF in 2005. Congratulations to the other Argentinian stations that followed – LR2F (2<sup>nd</sup> place) who made it a very competitive race, then LU1UM (3<sup>rd</sup> place) and LU6FOV (4<sup>th</sup> place). They will have the band to themselves for another two or three years!

Top Ten – DX Single-Operator, Single-Band, 10 Meters					
Call Sign	all Sign Score QSOs		Multipliers		
LU1HF	255,696	1540	56		
LR2F	202,608	1219	56		
LU1UM	103,509	657	53		
LU6FOV	93,330	613	51		
PY2ZXU	83,556	635	44		
PU50GE	81,075	590	47		
CE2WZ	74,925	559	45		
PY2MTS	63,624	485	44		
PU2LEP	46,242	367	42		
CX4DX	39,663	345	39		

#### 15 Meters (SOSB-15)

15 meters is showing signs of life and this gives other tropical stations a shot at the Top Ten. That doesn't mean they will displace ZX5J, however, as PP5JR has a string of four consecutive first-place victories. He was very closely followed by LP2F (LU1FDU operating) but OH8NC took a chance that paid off with a 3<sup>rd</sup>-place finish as CR2A – the highest finish from

Europe since 2004. KH7Y also moved up several spots to represent Oceania and just missed taking third. This category should be very exciting over the next few years!

Top Ten – DX Single-Operator, Single-Band, 15 Meters					
Call Sign	Score	QSOs	Multipliers		
ZX5J (PP5JR, op)	588,504	3188	62		
LP2F (LU1FDU, op)	558,699	3080	61		
CR2A (OH8NC, op)	435,174	2383	61		
KH7Y	431,640	2419	60		
PY2BK	398,574	2209	61		
HC1HC	379,908	2103	61		
EF8R	359,640	2026	60		
AY5F	325,008	1790	61		
PY1KN	266,448	1470	61		
PY3FOX	264,261	1513	59		

### 20 Meters (SOSB-20)

Low enough in frequency for the east-west path to be wide open and high enough in frequency for smaller stations to be plentiful, the spotlight on 20 meters was nearly all European with the first seven position all across the Atlantic. Leading the way were a pair of French stations, F6KHM with F8DBF operating and TM5C. Stations from an arc about one hop past France - S5ØK, SN2B, OH8L, OZ7X, and E7ØT – were all packed closely together in places three through seven before HQ2T squeezed by LN9Z with nearby TG9ANF just on the other side. Twenty meters is by far the most popular and competitive single-band category.

Top Ten – DX Single-Operator, Single-Band, 20 Meters					
Call Sign	Score	QSOs	Multipliers		
F6KHM (F8DBF, op)	621,696	3246	64		
TM5C	583,632	3092	63		
S5ØK	442,680	2396	62		
SN2B (SP2WKB, op)	426,006	2264	63		
OH8L (OH8LQ, op)	400,680	2131	63		
OZ7X (OZ5KF, op)	377,346	2080	61		
E7ØT	345,216	1814	64		
HQ2T (K2BB, op)	334,341	1778	63		
LN9Z (LA5KO, op)	331,962	1822	61		
TG9ANF	323,826	1751	62		

### 40 Meters (SOSB-40)

Scores on 40 meters are higher and stress levels lower since amateurs no longer have to "share" 7.100-7.200 MHz with the broadcast service in Region 1 (they're still working on it in Region 3). DX and contest veteran Martti OH2BH seized the opportunity, changed from 80 meters in 2009, and piloted the Arcala Extremes station CR2X to first place from the Azores and the first European win since 2004. ZF2AH made a pretty good run at first place, but had to settle for second. JAØJHA's sixth-place finish was the highest by an Asian station since 2002.

Top Ten – DX Single-Operator, Single-Band, 40 Meters					
Call Sign	Score	QSOs	Multipliers		
CR2X (OH2BH, op)	469,944	2575	61		
ZF2AH	431,100	2420	60		
CT1ILT	345,420	1927	60		
EA7LL	279,129	1586	59		
YT8A (YU1EA, op)	257,040	1541	56		
JAØJHA	198,000	1204	55		
HQ9R (WQ7R, op)	180,747	1066	57		
TMØT	166,041	994	57		
RW2F (UA2FB, op)	163,611	1041	53		
YTØW	152,847	1013	51		

### 80 Meters (SOSB-80)

Here's a great story – KH6LC (piloted by NH6V) is the first Oceania station to win this category since before 2002. In fact, no other Oceania station has even made the Top Ten in that period! Considering the advantage Europeans have with the East Coast's many stations being so much closer, that's quite an achievement! Second and third place were only separated by 2.8% as RA3CO's Bahamas vacation as C6AWL resulted in a narrow second-place margin over G4BYB operating GM3PPG.

Top Ten – DX Single-Operator, Single-Band, 80 Meters						
Call Sign	Score	QSOs	Multipliers			
KH6LC (NH6V, op)	211,731	1158	61			
C6AWL (RA3CO, op)	199,125	1130	59			
GM3PPG (G4BYB, op)	193,662	1118	58			
CT2ITR	132,516	819	54			
YV5MSG	113,190	694	55			
E77DX	109,152	764	48			
HK1NK	99,693	595	57			
YV6BXN	85,542	547	53			
UX2X (UT2XQ, op)	62,568	480	44			
G8DYT	45,030	399	38			

### 160 Meters (SOSB-160)

In another shift of fortunes towards Europe, M8M (operated by G3LNP) was the winner on Top Band this year – the first time since before 2002 that has been done, as well. In fact, all three top finishers (S56P in 2<sup>nd</sup> and I4FYF in 3<sup>rd</sup>) were European, taking the medals completely away from the Americas where they have been comfortably residing. More countries are freeing up 160 meter amateur allocations from radiolocation (LORAN) services – welcome to the band!

Top Ten – DX Single-Operator, Single-Band, 160 Meters					
Call Sign	Multipliers				
M8M (G3LNP, op)	34,848	268	44		
S56P	25,992	229	38		
I4FYF	13,860	146	33		
LU2DVI	1,248	26	16		
XE1GRR	510	17	10		
SP5CJY	288	12	8		
LY2OU	144	8	6		
OK1DF	48	4	4		

### **Multioperator Categories**

Imagine Field Day on steroids and you have a pretty good picture of what many of the DX multioperator stations have to deal with. If there's no resident host station, most of the gear has to be flown in and assembled in often less than ideal conditions, then operated like mad for the entire contest, disassembled, then flown back home. It actually sounds like a lot of fun!

### *Multioperator, Single-Transmitter (MS)*

When all the yelling stopped, P4ØN was the winning team this year from a DX contest's dream location – Aruba. Not far away, the operators at PJ4G came up just a little bit short in second. Except for G5W from the Emerald Isles, every MS Top Ten score was from the Caribbean or South America this year, leading me to think that a lot of frequent-flyer miles got used up in early March! If you think a contest expedition would be fun, why not form a team, rent some vacation space, and have at it? You'll have a great time and the pileups never end!

Top Ten – DX Mi	Top Ten – DX Multioperator, Single-Transmitter					
Call Sign	Score QSO		Multipliers			
P4ØN	7,373,388	7461	332			
PJ4G	6,494,220	6647	327			
VP5H	5,931,945	6529	305			
HI3K	4,851,120	5626	290			
4A2S	4,698,120	5655	280			
T46A	3,781,356	4597	278			
TO2T	3,455,334	4012	291			
CW5W	3,170,976	3918	272			
C6ANM	3,083,841	3732	277			
YN2EA	2,465,280	3473	240			



(Photo by KØDQ)

*Multioperator, Two-Transmitter (M2)* 

D4C is the hands-down star of the MO show this year – their score was not only a new continental record for Africa, but the highest score of any DX multioperator team, even in MM! That distinction was almost achieved by the second-place M2 team at TI5N, as well. Nice job, everybody – you should be very proud of those scores! A tip of the "Hey, folks, we're up here!" cap goes to the KL7RA team for finishing fourth from the Kenai Peninsula. They couldn't see Russia from there, but it's not all that far away!

Top Ten – DX Multioperator, Two-Transmitter					
Call Sign	Score	QSOs	Multipliers		
D4C	8,372,304	8868	318		
TI5N	7,792,560	8261	316		
LP1H	5,586,975	6733	279		
KL7RA	4,810,680	5775	280		
CE4CT	4,360,125	5317	275		
ZY7C	3,647,520	4512	272		
DF7ZS	2,008,818	3154	214		
RL3A	1,400,976	2501	188		
PR5D	750,060	1413	180		
OZ1ADL	566,406	1247	153		

Multioperator, Multi-Transmitter (MM)

KH7X was an SO-HP entry last year but...they're back! Alex KH6YY's ridge-running station easily outdistanced the Caribbean and South American competition with an Oceania record-setting performance ahead of V48M in Saint Kitts and Nevis and ZW5B from Curitiba, Brazil. JA3YBK was the top Asian score for the third straight year. MM entries are growing since the valley of 2007, so we hope to see more big scores as the number of simultaneously open bands increases.

Top Ten – DX Multioperator, Multi-Transmitter					
Call Sign	Score	QSOs	Multipliers		
KH7X	7,884,783	8496	311		
V48M	6,668,550	7722	290		
ZW5B	5,258,400	6304	280		
TI8M	4,388,202	5399	273		
DR1A	3,875,430	5279	247		
9A1A	3,546,630	4773	251		
HG1S	2,397,750	3528	230		
JA3YBK	2,394,948	3688	218		
JA1YPA	1,311,057	2364	187		
RX3APM	730,125	1392	177		

#### **PART III – About the Results**

#### **Accuracy**

With all the extra scrutiny applied to contest logs, it's high time that we recognize the exceptional logging accuracy of top operators and teams. rate is calculated in percent as the number of "bad" QSOs -- those with a busted call (B), a miscopied exchange (X), or that can't be found in the other station's log (N) – divided by the total number of "good" QSOs after duplicates have been removed from that log.

Error Rate (%) = 
$$100\% \times (B+X+N) / QSOs$$

This calculation is pretty much the same across the contest world. The penalties a particular sponsor assesses for each bad QSO vary, ranging from simply not counting the QSO to assessing extra penalty points. (Note that having a QSO designated as "bad" in one's log is NOT an accusation of cheating any more than being assigned an error for bobbling a ground ball or being called for offsides.)

Error rate, though, isn't enough. There are a lot of "golden logs" out there but most contain less than 100 QSOs -- a multi-thousand QSO log with a very low error rate is a tougher achievement. To recognize those exceptional performances, I devised a formula for computing an accuracy index that accounts for log size and adds a bonus for low error rate:

Accuracy Index = 
$$log(QSOs) + Accuracy Factor (1 - Error Rate in %/100)$$

where QSOs is the same as for Error Rate, Accuracy Factor is a weighting constant equal to 1 or higher that emphasizes accuracy more as its value increases. I took the logarithm of QSOs because it keeps the numbers within a reasonable range and I wanted a 1-QSO log with a 100% error rate to have an index of 0.

**Table 5** contains the top five Accuracy Indexes achieved by SOA, SO (AB and SB), and MO stations. While the order generally tracks number of QSOs, there are some entries where a smaller, but more accurate, log is rated higher than a larger one. By "moving up a place", the smaller, but more accurate, log is recognized. For example, in the W-VE SOAB-HP category, W9RE's 2710 QSOs with an error rate of 0.3% achieved a slightly high accuracy index than the 2890 QSOs and 0.7% error rate turned in by K3CR with LZ4AX as operator. To be sure, both of these are impressive efforts! Nevertheless, in radiosport's top echelons, accuracy is (and should be) king.

In these tables, my Accuracy Factor is set to 10. How did I decide on 10? I started with Accuracy Factor set to 1, took a look at the resulting tables, then increased the value by one at each step until I saw some of the place changes taking place where significant (to my eye) differences in error rate translated to place changes. Then I stopped. The process was entirely empirical – the result "looked right".

I'm sure there could be (and should be) lots of discussion about what value of Accuracy Factor is appropriate and whether the formula actually measures what it is purported to measure. The intent is to stimulate discussion and create a formula that could be used for any contest, regardless of scoring methods.

**Table 5 - Accuracy Leaders** 

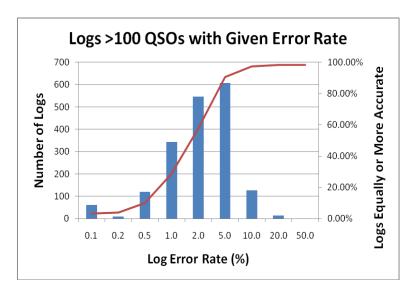
	W	-VE					DX		
Sin	Single-Op (Non-assisted)				Single-Op (Non-assisted)				
Call	QSOs	Error %	Index	Category	Call	QSOs	Error %	Index	Category
VY2ZM	4084	0.5	13.561	SO-HP	8P5A (W2SC, op)	8005	0.3	13.873	SO-HP
VX3AT (VE3AT, op)	3762	0.4	13.535	SO-HP	6Y9V (WE9V, op)	7520	0.3	13.846	SO-HP
VY2TT	3591	1	13.455	SO-HP	KH7XS	6732	0.3	13.798	SO-HP
W9RE	2710	0.3	13.403	SO-HP	PJ2T (WB9Z, op)	6622	0.7	13.751	SO-HP
K3CR (LZ4AX, op)	2890	0.7	13.391	SO-HP	KP2M (N2TK, op)	5819	0.2	13.745	SO-HP
S	Single-Op (Assisted)			Single-0	Op (Assi	sted)			
Call	QSOs	Error %	Index	Category	Call	QSOs	Error %	Index	Category
W2RE	3404	0.9	13.442	SOA	J7N (K3TEJ, op)	4684	0.8	13.591	SOA
K3WW	2517	0.9	13.311	SOA	LT1F (LU1FAM, op)	3847	0.4	13.545	SOA
AA3B	2024	0.9	13.216	SOA	OE3K	3613	0.7	13.488	SOA
W1GD	1566	0.6	13.135	SOA	IR4M	3463	0.6	13.479	SOA
W4MYA	1352	0.6	13.071	SOA	OM3GI	3685	1	13.466	SOA
	Mul	ti-Op				М	ulti-Op		
Call	QSOs	Error %	Index	Category	Call	QSOs	Error %	Index	Category
K3LR	6968	0.7	13.773	MM	KH7X	8496	0.6	13.869	MM
W3LPL	6521	0.8	13.734	MM	TI5N	8261	0.6	13.857	M2
KC1XX	6475	0.9	13.721	MM	D4C	8868	1.1	13.838	M2
WE3C	5423	0.8	13.654	M2	V48M	7722	0.8	13.808	MM
K1TTT	4381	0.7	13.572	MM	P40N	7461	0.8	13.793	MS

Golden logs without any copying errors are always nice to single out for special – it's hard to get everything exactly right every time! **Table 6** shows all of the golden logs that contained 200 or more QSOs. ON5ZO was the largest anywhere and N2NS was the largest from W or VE.

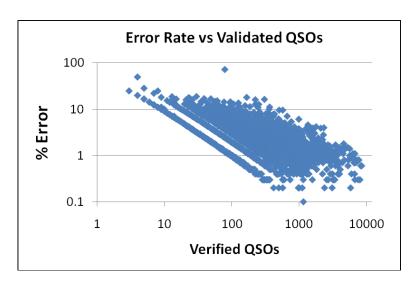
Table 6 - Top Golden Logs

QSOs
458
397
367
317
267
265
258
240
226
220
214
205
204
200

How did you do compared to the other stations? The following two graphs tell the tale. In the first chart, your job is to move left, into the groups with fewer errors. As you can see, it's an exclusive club. (This chart only includes logs with more than 100 QSOs.)



In the following chart, your job is to push your data point down and to the right: more QSOs with fewer errors.



How do you find your error rate? Browse to the ARRL Web site, log in, and then go to the <u>Log Checking Reports (LCR) page</u>. All of the LCRs for stations at which you were listed as an operator can then be downloaded.

### **Neat Stuff This Year**

Browsing the results, you can tell something was up – namely, solar flux. In SOAB-HP – Indiana (W9RE) and West Central Florida (K1TO) invaded the SOAB-HP Top Ten. The paths taken were slightly different, but W9RE wore out 40 meters with 800 QSOs and 95 entities, the top DX entity total by a single operator. From farther south, K1TO was able to muscle up on 15

meters, logging a Top Ten-leading contact total of 738 spread over 83 entities. Last year, the entire SOAB-HP Top Ten was roughly north and east of West Virginia!

Along with the new calls in the SOAB-HP, the Top Ten for SOAB-LP was all over the map: Northeast, Midwest, Midwest, Central, Southeast, Southeast, West Coast, Southeast, Central, Northeast. Last year, the West Coast was nowhere to be seen! As conditions open wider, I'm sure we'll see Dakota, Northwestern and Rocky Mountain Division call signs in that list

In the "Persistence Pays Department," after five straight Top Ten finishes in SOAB-QRP, VA3DF finally grabbed the brass ring this year – congratulations! On 10 meters, since 2002 either W5PR or K4WI has been first or second: can you smell a *rivalry*? Will next year be the West Gulf's year on 160 meters? K5RX has been steadily moving up year by year to reach second in 2010. Let's see if Texas can triumph on Top Band!

In the massively competitive MM category, teams at K3LR swept both modes this year from far Western Pennsylvania. (Give plate tectonics another century or two and K3LR will be portable-8!) In the M2 group, a pair of West Coast stations, NK7U and W7RN (this was mistakenly given as K7ZSD and NK7U in the *QST* version of this article – apologies), appear for the first time since 2004.

## **DXing**

Hey, it's a DX contest! Who cares if G or CT counts just the same as ZA or ND? The rarer it is, the more fun it is to work and the bigger the cheer when that QSO scrolls across the screens at a multi-op station! Here are the top DX count band bonanzas for multi-op and single-op:

160: K3LR (MM) 67, W2MF (SOSB-16) 58

80: K3LR (MM) 104, AA1BU (SOSB-80) 82

40: K3LR (MM) 126, W2RE (SOA) & W9RE (SOAB-HP) 95

20: K3LR (MM) 145, VE6WQ (SOSB-20) 128, and 64 stations made DXCC

15: K3LR (MM) & KC1XX (MM) 120, N4ZC (SOA) & W5KFT (SOSB-15, NA5TR, op) 99, and 10 stations made DXCC

10: W5PR (SOSB-10) 30, W3LPL (MM) 28

Which station will be the first to log 5BDXCC in the new cycle? Out of 15 stations listed, 10 are category leaders!

#### **Oddities**

One can't stare at this many numbers for this long and not find some really interesting material! The best is K1GU's 30,000-point DX Phone "hat trick". Ned not only had a "golden log" (no errors), but grabbed 100 DX multipliers in 100 QSOs exactly! If that isn't sufficiently unique for you, his score was tied with adjacent SOA entry, K2RS!

There were 52 tied scores, with the largest being W9WI and N1BCL in SOAB-HP, each with 235,620 points. The smallest award-winning score was 12 points by NH6PE in SOSB-10 for the Oceania title!

## **Concluding Remarks**

My very first contest, not the last for sure! CM5FZ

And so the sun sets on my last operation from the Seattle area after 27 years of West

Coast contesting. I'm re-learning the Midwest propagation after returning to Missouri, with its own set of challenges – namely, having to fight through *both* coasts to work anybody! Thanks to all my old friends in WWA for the good times and contest fun. Also thanks to the log checkers, robot managers, and ARRL staff who keep paddling like crazy under the water so the contest goes off smoothly on top of the water.

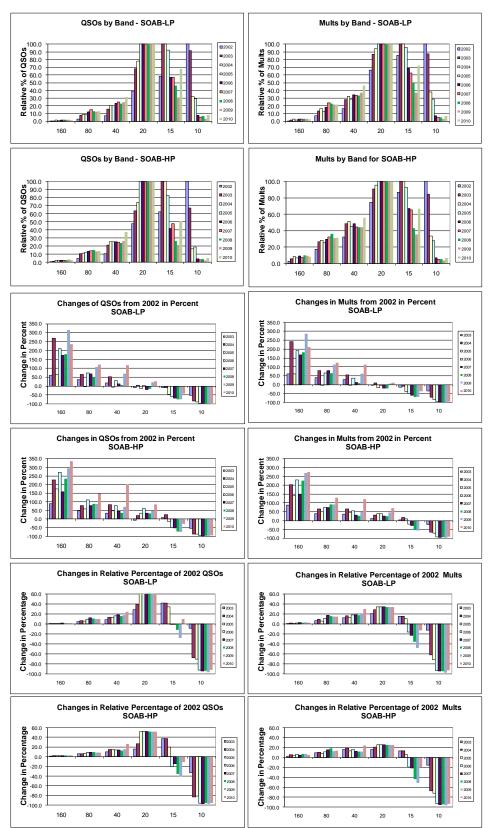
Regardless of a few valleys and hiccups, next year will surely see a "decent pox" on the solar disk and with it, longer openings and more DX to work. I still



remember my first "real" DX opening after the mid-1970's trough – for those of you that haven't had that experience yet, it's coming! Keep it ever so—see you in the pileups on March 5<sup>th</sup> and 6<sup>th</sup> of next year!

73, Ward Silver NØAX

# Appendix A – QSOs and Multipliers Compared to 2002



## **PART IV – Regional Analysis**

It is your editor's strongly-held belief that the vast majority of participants – whose calls do not appear in any of the "boxes" or leader boards – compete against themselves and against their local and regional peers. It is recognition among those peers that brings them back to the game again and again. That's why it's so important to have regional write-ups that look beyond the top scores.

The main contest writeup – in *QST* and on the Web -- should focus on the overall leaders, since they have made the big effort to make those huge scores. They deserve that coverage. That doesn't diminish the achievement of any operator moving up in the standings, making the most of a modest station, or taking advantage of smart strategy. We applaud and encourage their efforts, too.

Every ARRL Division and all of the continents are once again graced with the attention of a resident (or nearly-resident) author to look at their results and emphasize the best efforts among propagational peers. (Some might be "Under Construction" when this writeup is first released, but keep checking and they'll be added as soon as they are available.) In a DX contest spread across the world, the variations at smaller scales are often what hold our personal interest. It's definitely worth taking a minute to read the analysis for your region and learn more about the contest from your area.

Welcome to the following new editors this year:

- New England Joe Fitzgerald, KM1P
- Roanoke Rich DiDonna, NN3W
- Rocky Mountain Tom Horton, K5IID
- West Gulf John Geiger, AA5JG
- Caribbean Bill Smith, W9VA

Your regional editors do the best job they can, but are often limited by a lack of information about your station and its operator. You can help them in future contests by uploading your contest stories to the <u>ARRL Soapbox pages</u>. Soapbox comments from your Cabrillo-formatted log are gleaned for them to use, too. Alternatively, you can contact the editor for your Division or Continent directly--they will appreciate it! Don't be shy about contributing photos and comments – we would love to see them, no matter what the capabilities of your station may be. We're interested!

#### Atlantic Division – by Charles Fulp, K3WW

The Atlantic Division had an increase of 5 entries this year for a total of 177, with 239 different operators participating. This year I thought it would be interesting to study the amount of time put in by these entrants. Table 1 shows various ranges of hours of operation and the number of Multi-Ops and Single-Ops in each range. Only 10 paper logs were submitted, with all of the larger scores electronically sent. In the Multi-Op categories 55% operated more than 24 hours, while only 11% of the Single-Op participants made contacts during more than 24 hours. While there are a few notable exceptions, it appears that the scores track the time spent pretty closely. Time was not calculated for the paper logs as they were relatively small.

HOURS	MULTI-OP	SINGLE-OP	TOTAL ENTRIES	% of Multi	% of Single Ops	% of All electronic logs
>40	5	4	9	25.00%	2.40%	5.39%
30-40	4	3	7	20.00%	1.80%	4.19%
24-30	2	6	8	10.00%	3.59%	4.79%
20-24	2	5	7	10.00%	2.99%	4.19%
10-20	2	41	43	10.00%	24.55%	25.75%
5-10	2	38	40	10.00%	22.75%	23.95%
<5	3	50	53	15.00%	29.94%	31.74%
PAPER		10	10	0.00%	5.99%	n/a

Table 1 - Hours of Operation, Atlantic Division

Choosing the right category makes it possible to win with modest commitments of time, but the biggest scores represent the most serious commitments of time.

Single-Op, Low-Power gained 8 entries to reach 49 and a dead tie with the Single-Op, Assisted category. Our Low-Power Division leaders WD8CQB, KB3LIX, N3ALN, NY3B, KB3OK, KV2M, K2MS, KB3OJM, K1TN, K3NK, and N3ABK were all in the 300 to 100k range.

The spotting net gang dropped from 55 to 49 participants. <u>K3WW</u> led the Single-Op Assisted category finishing second overall. Chas was followed by big efforts by <u>AA3B</u>, <u>N2MM</u>, <u>K3OO</u>, <u>AB3CX</u>, and <u>K3PP</u>, all breaking the 1 million point barrier. Just behind them were <u>W3CF</u> and <u>K2PLF</u> falling a few points short of a million. Special congratulations to K3OO for his 1112 QSOs with an error rate of only 0.2%, the most accurate log with large QSO totals.

Single-Op, High Power gained an entrant this year for 40 entries. <u>K3CR</u> piloted by <u>LZ4AX</u> beat out <u>AA1K</u> and <u>W3BGN</u>, for first spot in the division.. Alex had the best W score, but as is often the case was beaten by several VE phone entrants in the overall W/VE scoring. Jon and Steve returned to the overall Top Ten box. <u>K3ZO</u> came in 4<sup>th</sup> with almost 2 million points. Just under 1 million points came <u>W6AAN</u>, N1WR and K3TC.

Eighteen operators chose to enter the Single-Band categories, gradually increasing the level of participation. 15 meters was the most popular band with 6 entries. N3HBX ran his super station on 15 to run away with the division and place second overall. WA2VQV was the leader for the division on 20, with 3 others entering the category. W2MF and W3GH continued their battle on 160 with W2MF winning and finishing first overall, W3GH was second in the division and 3<sup>rd</sup> overall. W2VO was the 3<sup>rd</sup> entrant on 160. There were also 3 entries for 80 meters. W2RR operated by WA2AOG finished first in the division and 9<sup>th</sup> overall, trailed by W2TN and KM3J. WB7OCV was the only Atlantic Division 40 meter entry and WA2AOG was the only entrant on 10 meters.

There was a surge in Multi-Single participation this year with 7 more entries for a total of 12 entries with 28 operators. <a href="K9RS">K9RS</a> led the division with a solid second place overall. Tightly grouped behind Ray's team were <a href="W3MF">W3MF</a>, <a href="N2RM">N2RM</a> and <a href="K3MD">K3MD</a> all over 1.5M points. N3MX made it 5 Frankford Radio Club Multi-Singles in a row before W3DQ weighed in with a good score for the Potomac Valley Radio Club.

Multi-Two continued to slip, this year down to 5 entries with 19 operators. The <u>WE3C</u> team won going away taking overall top spot again, as well as the division. <u>K2AX</u> finished second and broke into the overall Top Ten. They drew this praise from QRP entrant 5H3EE, "Best contact: K2AX on 15m with 1watt and first call! Men, big ears!!" WA3EKL and W3CC followed close behind and WA2LGZ put in a limited time effort. All the teams tended to be lean and mean this year, maximizing their points per operator.

Only 3 Multi-Multi entrants participated in the division this year, with 35 operators. The <u>K3LR</u> team regained the top spot. <u>W3LPL</u> dropped to second. Once again the two Atlantic Division super Multi-Multi stations were on top of the overall results. Team NE3F was the third and last entrant, also making the overall Top Ten.

Last and least comes the QRP category. K3TW was the undisputed, repeat winner with no one willing to challenge Tom's supremacy as the Atlantic Division QRP champ. Tom made the overall Top Ten once again as well and had an error rate of 0% with the most QSO's of any Atlantic Division log with perfect copy of the call, the exchange and no NILs!

## Central Division – by Ralph Bellas, K9ZO

Single-Operator, High Power

The top score goes to Mike Wetzel, W9RE from Indianapolis. He placed 5<sup>th</sup> overall and first in Central with a score of 3,149,784. What was really impressive that he was the only non-East Coast station in the Top Ten! Mike commented that the opening up of 7125 to 7200 kHz for Europe did not help the situation, just moved it.

VX3AT (VE3AT, op)	4,534,959	1
W9RE	3,149,784	2
N8TR	1,898,334	3
WO9Z	805,794	4
W8TWA	614,781	5

Single-Operator, Low Power

KD9MS placed 9<sup>th</sup> overall and first in Central with a score of 394,605 and aside from N5AW and K6AM, he was the only Midwest station in the top ten. It was really a grind as he relates below, but he managed 569 contacts with 237 multipliers with an error rate of 2.4%. He had better enjoy being a single op, because it won't be long before his youngster demands a seat and microphone.



Meet Craig, KD9MS, and his 2 year old son, Ethyn, who loves to come into the radio room and put on the headphones. This picture was from Saturday morning during a break in 15 meter activities. (Photo by KD9MS)

Here is what Craig had to say about operating low power in a contest. "Running low power is a chore from the Midwest as it is not the best spot to be able to compete with the East Coast stations. This contest was fun because I was finally able to hear some stations from Japan on 15. I got into a pretty good run and 15 meters was good for me. I made 158 contacts on 15. I say run, but with only low power and a 55' tower, it was all S&P for me. I use 2 radios: an FT-2000D and an FT-990 on a Butternut vertical. My best contact came at 12:18 UTC on Sunday morning when I came across KH2JU. I believe he just came on the air. There were a couple of big stations just down the band and up the band who were running and at that time in the morning, I always turn my Discoverer 7-1 dipole to the northwest. I gave my call quickly, tailending a K1 station and I heard him come back to me giving me my call and report. After I replied, there were about 40 stations calling. That was a big one for me! Ten seconds later and I would have missed that multiplier. I have learned a lot from reading the stuff from the SMC group and a lot more from just listening on the air. I hope to make it to the top 10 again this year and I hope my 400k score helps the club in the standings.

"Just as a side note I have been working on my 160 antenna and made some strides there, but I am working on something for 80 meters as my QSO totals have been hurt there. I also bought a new chair this year and it really helped me to stay in it and work!

Thanks, Craig, KD9MS"

VE3BDN	775,248	1
VE3AD	677,424	2
KD9MS	394,605	3
K8LY	233,874	4
К9МҮ	221,034	5

KC9LQS managed 63 QSOs and commented that it's tough going up against the big boys with only 100 watts, but that just made every QSO sweeter! First solo DX experience - used a Yaesu FT-847 barefoot with a homebrew multiband and wire dipole. KU8T made 41 QSOs and noted that this was the first he operated SSB on this contest and it was fun.

# Single-Operator, QRP

Nobody in the Central Division made it to the Top Ten box, but that's obvious – it's pretty rare that a QRP signal can escape. N9TTX from Wisconsin was first in Central and had 150 QSOs with 104 multipliers.

VA3DF	294,120	1
кт8к	55,590	2
N9TTX	45,552	3
AI9I	14,790	4
WD9FTZ	11,016	5

# Single-Band Categories

There is certainly opportunity for someone from the Central Division to step in next year. Nobody made it into the Top Ten on 160, 80, 40, 20, or 10.

### 160

VE3CUI	624	1
WB8JUI	192	2
<u>80</u>		
WI9H	3,720	1
NR8U	1,575	2

# 40

# W9QL was first in Central with 41 contacts.

VA3XH	24,759	1
N8QAZ	21,336	2
W8JMF	17,496	3
N8BV	6,372	4
W9QL	2,160	5

# 20

# W9WJ was first in Central. KG9N made efficient use of the 2.2 hours he operated and made 213 contacts.

VE3DZ	406,929	1
VX3XN	369,198	2
VE3NE	285,120	3
W9WJ	63,042	4
KA8WQL	52,920	5

# 15

Only N4TZ had the nerve to enter single band in a serious fashion. Terry took 9th place overall with a score of 81,528. He had 344 contacts in 79 countries and a 0.3% error rate.

N4TZ	81,528	1
W9OP	22,800	2
VA3FP	21,000	3
AG4CZ	8,880	4
KK9V	6,804	5

# Single Operator, Assisted

Nobody from Central made it to the Top Ten overall but Mike, K9NW, had another excellent showing with 1338 contacts and 371 multipliers keeping his butt in the chair for 28 hours. This poor guy can hardly stand to operate from the US side. Mike, N7MB, sampled the bands for just a few hours searching for unusual DX and found 98 contacts with 64 multipliers.

VE3MMQ	1,533,927	1
K9NW	1,479,177	2
W5MX	1,168,074	3
N8BI	1,062,660	4
ND8L	804,906	5

# Multi-Single

The guys at KD9ST + WY9D, KA9SQR, KB9EXE were good for 1282 QSOs and 362 multipliers to take first in Central. They had a hidden weapon: Conditions were better than they have been in some time. Contesting with three of my sons is great. As always, a special thanks to my wonderful wife for her support, help, great food !!!

KD9ST	1,381,392	1
KC9ARR	381,972	2
K9SG	326,802	3
VE3UZ	161,460	4
N9DT	96,285	5

#### Multi-Two

The guys at NØIJ (+ NØIM, NØKK, AF9T, KØJJR) managed 1916 QSOs and 363 multipliers to pull a first place in the region. K9IU operated by K9SQL, N9VKU, KB9WRA, KB9JHU, KC9EVU, KB9WKW, KC9IGH, KB9LGS, had 414 QSOs and 148 multipliers.

NŎIJ	2,065,833	1
VE3MIS	1,505,142	2
W8BI	434,874	3
K9IU	181,596	4

#### Multi-Multi

WØAIH in Wisconsin placed 6<sup>th</sup> overall and tops in Central with a score of 3,515,184. The crew had 2878 QSOs and 416 multipliers. They stayed in the chair for 40.3 hours, but perhaps suffered a bit with the 1.6% error rate.

WØAIH	3,515,184	1
WA8RRA	31,374	2

Have a look at the QSOs and multipliers and you can see the impact of being so far north.

```
160Q 160M 80Q 80M 40Q 40M 20Q 20M 15Q 15M 10Q 10M 50 34 149 71 572 91 1674 121 392 86 41 9
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Ops were: WØAIH, KB9OWD, VE3CX, K9MU, ACØW, KØTI, OA4ABC, NRØT, AB9NE, WØBM, K9AIH, NE9U, WØRU, WBØN, KØVH.

I had the distinct pleasure of spending an evening with Paul this spring when he spent the night while travelling through my area. His enthusiasm and devotion is evident and obviously infectious when you look at the crew he assembled for the contest.

# Club Competition

This category is interesting because it encourages participation over a wide area and helps to develop awareness and camaraderie between members. It's good to compare clubs of similar size and geographic region as well as those clubs which may be closer to highly populated areas. Look at the number of logs which were submitted as part of a club score!

234,062,475	203
197,699,928	140
159,675,111	163
55,574,469	79
52,535,436	128
49,639,950	93
46,504,080	112
44,967,489	91
21,271,257	52
17,925,594	61
	197,699,928 159,675,111 55,574,469 52,535,436 49,639,950 46,504,080 44,967,489 21,271,257

We all look forward to next year and can be assured that more sunspots will increase the activity and improve conditions on the higher bands.

# Dakota Division – by Bill Lippert, ACØW

After the great CW weekend, Dakota Division stations were split on how things went during the phone weekend. Comments ranged from "Fun contest!" by KDØK to "this weekend was just plain miserable most of the time" by NDØC and "Poor ol' 20 meters must be pretty worn out after that weekend" from NØIJ.

Due to being near the end of a long and hard contest season the number of Dakota Division stations on the air did not increase this year. This breaks our string of four years in a row of steady increase in Dakota Division participation. Luckily for the DX stations there were more North and South Dakota stations on the air this year at the expense of the number of Minnesota stations.



Antenna farm of Mark, KØKX, SOA Winner (Photo by KØKX)

The Midwest Region QRP operators again proved how good they are as the top four Midwest QRP operators finished in the top seven spots in the US. Out of that group one Dakota Division operator made it into the US Top Ten QRP category. Randy, NDØC, finished in fifth in that category moving from the QRP-20 category last year. Randy was the only

Dakota Division station to make it into any US Top Ten box this year.

Ron, NØAT, at the rig (Photo by NØAT)



Continuing the practice from last year, I've again placed the Dakota Division results in tabular form. Table 1 shows the seven Dakota Division stations that made their way into the Midwest Region Top Five boxes.

		Region		
Station	Category	Finish	Section	Score
WØRX	MS	3	MN	392,688
KTØR	M2	1	MN	1,214,520
KCØRQH	SOSB-80	5	MN	270
кøкх	SOA	1	MN	1,161,300
WAØMHJ	SOA	4	MN	593,175
NØAT	SOA	5	MN	519,036
NDØC	SO-QRP	3	MN	137,448

Table 2 shows the top eight Dakota Division stations in their categories.

Station	Category	Section	Score
кøкх	SOA	MN	1,161,300
NØOK	SO-HP	MN	393,651
WBØTSR	SO-LP	SD	116,604
NDØC	SO-QRP	MN	137,448
N7IV	SOSB-20	ND	104,295
KCØRQH	SOSB-80	MN	270
WØRX	MS	MN	392,688
KTØR	M2	MN	1,214,520

Finally, Table 3 presents the top section winners in the different categories.

Station	Category	Section	Score
кøкх	SOA	MN	1,161,300
KØPIR	SOA	SD	20,394
NØOK	SO-HP	MN	393,651

WØPYZ	SO-HP	SD	89,460
WBØTSR	SO-LP	SD	116,604
NØHJZ	SO-LP	MN	55,500
NØJE	SO-LP	ND	3,627
NDØC	SO-QRP	MN	137,448
N7IV	SOSB-20	ND	104,295
KCØRQH	SOSB-80	MN	270
WØRX	MS	MN	392,688
KTØR	M2	MN	1,214,520

# <u>Dakota Division Operators Outside the Region</u>

Three stations staffed by operators from the Dakota Division, or more specifically from the Minnesota Wireless Association deserve mention here for their fine finish. First we have VP5H finishing third overall in the Multi-single DX category with a score of 5,931,945. VP5H

was staffed by Glenn, WØGJ, and Scott, KØMD.

Bill, ACØW, at WØAIH M/M 20 meter station (Photo by WØAIH)

The next station participating in the Multi-Multi category from Wisconsin is WØAIH, finishing sixth in the category. (Wisconsin is actually in the Central Division, but many of the operators are from the Dakota Division



– *Ed.*) The 20 meter station was where all the action was with 1,674 QSO's, and I was lucky to be one of the operators of that station. However, kudos goes out to Rolf, NRØT, and Taty, OA4ABC, for sticking it out on the 10 meter band the complete weekend to make only 41 QSO's. They did manage to give the 160 meter station a challenge by coming close to the 50 QSO's they had on that band. The other stations were not as lucky as the 20 meter station with 149 QSO's on 80, 572 QSO's on 40 and 392 QSO's on 15.



The final station making it into a top ten box is NØIJ operating the in the Multi-Two category from Wisconsin. The crew finished sixth overall with a score of 2,065,833. Operating the station were NØIJ, NØIM, NØKK, AF9T, and KØJJR.

NØIJ at rig of the M2 operation (Photo by NØIJ)

# Delta Division – by Kirk Pickering, K4RO

Activity in terms of log submissions was up slightly in 2010 with 63 log entries made in the SSB contest. The Tennesee Contest Group (TCG) led the combined Delta Division Club Competition with 61 entries generating 17,925,594 points. The Louisiana Contest Club was second, with 12,256,338 points. W5RU was the only Multioperator entry, with a Multi-Single score of 2,251,158.

W5WMU was at the top of the Single-Operator, Delta Division heap this year, with just over one million points generated in about 27 hours of operating. NA4K made the national Top Ten with his fine low-power effort.

The closest race in the division was in the 10 meter, Single-Band category. Only SIX POINTS separated KE5SNJ and KD4W. There were no QRP entries, and no entries in the Multi-Multi, Multi-Two, or 160 Meter Single-Band categories.

# Category Winners in the Delta Division

Category	Call	Score
MM	No entry	
M2	No Entry	
MS	W5RU	2,251,158
SOA	N4ZZ	428,130
SOHP	W5WMU	1,036,431
SOLP	NA4K	439,230
SO QRP	No entry	
SOSB-10	KE5SNJ	1,518
SOSB-15	AC5O	85,449
SOSB-20	W5HD	98,256
SOSB-40	W8FR	30,150
SOSB-80	K4EDI	816
SOSB-160	No entry	

# Single-Operator, High Power Scores

Call	Score	QSO	Mult	Hours	Section
W5WMU	1,036,431	978	361	26.4	LA
W4KW	412,848	581	244	21.7	TN
AG5Z	256,122	478	186	15.1	MS
AB4GG	246,186	424	194	10.6	TN
W9WI	235,620	425	187	9.1	TN
N7FF	91,800	229	136	8.6	AR
K3JWI	88,500	243	125	10.4	TN

K4CX	72,468	199	122	9.6	TN
N5VU	62,328	209	106	7.1	LA
KO4Y	43,488	151	96	6.4	TN
WA5OYU	43,245	160	93	4.5	MS
W200	16,038	100	54	2.3	TN
КА4ОТВ	15,510	97	55	2.6	TN
W5WZ	13,230	107	42	2.9	LA
AI4QU	9,381	62	53	0.0	TN
W4BCG	192	9	8	0.3	TN

# Single-Operator, Assisted Scores

Call	Score	QSO	Mult	Hours	Section
N4ZZ	428,130	677	213	12.7	TN
K5UA	363,909	574	217	17.1	LA
N4VV	164,934	296	187	9.4	TN
WD4OHD	157,314	337	157	12.7	TN
N5KDV	72,600	210	121	10.6	MS
K5KDX (K5KDL, op)	58,374	214	94	10.0	AR
K1GU	30,000	100	100	3.4	TN
W4GHD	27,027	119	77	4.2	TN
W5KI	2,142	42	17	1.3	AR
AI4VA	147	7	7	0.1	TN

# Single-Operator, Low Power Scores

Call	Score	QSO	Mult	Hours	Section
NA4K	439,230	609	242	17.4	TN
KS4X	221,112	447	166	16.3	TN
N2WN	141,912	297	162	8.8	TN
AA5SH	98,748	214	156	7.2	LA
KF5CST	90,450	214	150	11.4	MS
K4SWE	59,130	149	135	7.2	TN
KE5SOF	52,671	182	97	10.2	AR
W4NI	49,938	211	82	6.6	TN
WA5TRX	44,619	144	107	7.4	LA
NT2F	41,325	150	95	6.0	TN
WD8RYC	39,330	115	115	5.1	TN
KJ4BIX	36,660	132	94	6.0	TN
AB6Z	27,018	129	79	6.2	MS
KD5J	24,522	122	67	5.8	AR
W4EEH	19,470	110	59	3.0	TN

AI4DB	19,176	99	68	5.0	TN
N4VAN	15,120	73	72	3.0	TN
KF7CG	10,974	64	62	2.2	TN
AK4DW	7,956	52	52	2.5	TN
N5PU	5,724	54	36	1.7	MS
K4CWA	5,247	56	33	3.1	TN
AD5XM	2,208	33	23	1.3	LA
N4LKE	2,106	29	26	1.4	TN
W5MPC	1,656	25	23	1.0	MS
W4BK	1,638	27	21	1.3	TN
N4DTF	1,380	24	20	0.9	TN
KJ4FTM	1,026	19	19	0.4	TN
W4JHC	108	7	6	0.1	LA

Single-Operator, Single-Band Scores

Call	Score	QSO	Mult	Category	Section
KE5SNJ	1,518	46	11	SOSB-10	LA
KD4W	1,512	42	12	SOSB-10	TN
AC5O	85,449	319	91	SOSB-15	LA
W0SZP	270	10	9	SOSB-15	TN
W5HD	98,256	365	92	SOSB-20	LA
K4BP	24,624	156	54	SOSB-20	TN
W8FR	30,150	152	67	SOSB-40	MS
W5MK	6,615	66	35	SOSB-40	AR
K4EDI	816	17	16	SOSB-80	TN

# Great Lakes Division – by Greg Surma, K8GL

It's over! That was grueling! I need bigger antennas. I need to hear better. I need more power. I need antennas that work better to (insert continent here). Wait until next year!

The year changes but the battle cry of, "Wait until next year!" remains the same. The 2010 ARRL Phone DX Contest is in the books. The Great Lakes Division made a fine showing as witnessed by 75 logs from OH, 37 logs from MI, and 10 logs from KY. This represents a 28% increase from last year. Anchoring the division were fine 1M+ scores from N8TR, W5MX and N8BI.

KT8K continued his quest to "...run QRP in contests for ten years starting in 2003". Tim's fine effort resulted in the #8 score among W/VE QRP contesters. What is more amazing is that he does it from a city lot with wire antennas. Just when you think that you are having problems with your 100 watts and tribander at 50' you can well imagine what he goes through. When asked about his motivation he says "I burn out at least once during every contest and walk away for a while.....I start saying to myself, 'Why are you doing this to yourself? You call 2010 ARRL DX Phone Writeup Version 1.22 Page 44 of 100

this fun?' Later I usually only have a really good memory of the last big one". It comes as no surprise that Tim has plans for wire directive arrays on Europe for 40 and 20 meters for future contests

Karl KD8GOX set a goal of doubling his score from last year. He missed it by a mere 252 points. If he sets the same goal for future contests he will have the US record in a few years. He also plans on having a larger antenna system on 40 meters for next year.

Longevity in contest operating is something to be admired. Think of the advances in contesting since the 60's and 70's. Who wants to go back to paper logs and manual dupe sheets? Do you remember when UB5 stations (Ukraine) were rare? Does anyone remember when AM was used? One who has witnessed and operated in his share of contests is Pete W8TWA. In the 2010 affair Pete handily won the SO-High Power category for Michigan. While perusing old *QST* magazines recently, I found Pete as an operator at super station W8NWO in the 1962 version of this contest. All those years of honing his skills and learning where to listen and how to listen not only resulted in a winning score but also in one of the logs with the lowest percentage of error rate in the Division. A similar tip of the hat for low error rate is also pointed at WT8C, N8TR, N8BJQ, W5MX, W8KEN, WB8K and W8TM for this contest.

Many operators commented on the tremendous amount of QRM on 20 and 40 meters. A few commented that the expansion of the European phone band on the latter was a mixed blessing. An anonymous op mathematically figured that at times there were upwards of 17 stations fighting for a single channel on the band. Mathematics aside, N8QAZ found enough respite from the QRM to work his way to the #10 W/VE score on the band.

Propagation on 75 meters was good, and the band was quiet. N8TR found 69 countries to work during his all band effort. Pete has an incredible single tower setup and great ears. It is no wonder that he is a consistent division leader and a member of the low error rate club.

Gentlemen...start your engines. Now is the time to add those extra radials, or the extra tower sections, to make the next year version of the contest a bit easier to operate in. We end this report with a quote from one who will NOT be upgrading his rig anytime soon. W8JMF (OH) vows "Collins/tubes forever!" We all need a motivational point. We all need battle cries. To paraphrase the TV commercial, think of attacking the bands next year loudly and boldly with "Can you hear me now?"

# Hudson Division - by Ken Boasi, N2ZN

Moving on Up - Conditions and Activity

2010 was the beginning of a new decade, and it was also the beginning of something that many of us have been anticipating for several years now: some signs of life on the high HF bands! After the CW weekend, where 15 and 10 meter totals were actually existent, great anticipation was evident for the phone weekend. Would we actually be able to work the rare Southeast Asians this year? Have JA runs on 15 finally returned for us East Coast types? There is nothing like the prospect of an open band to get the excitement levels up and running.

Looking at the results from the Hudson Division, there was a small increase in received logs in 2010 versus 2009. 104 SSB logs were submitted from the division, 7 more than what was submitted last year. Over 37,000 verified QSO's were made this year from the Hudson Division logs, which is far more than in 2009, where about 26,500 verified QSO's were reported. It is clear that just the impression of better conditions has more people participating for longer 2010 ARRL DX Phone Writeup

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periods of time, leading to more QSO's made. Activity is trending up with the sunspots!

#### National Attractions

It is always an achievement and an honor to make the national Top Ten box. Suffice to say, the Hudson Division has always produced a number of Top Ten entrants each year, and 2010 is no exception. This year, 6 operations from the Hudson Division made the national Top Ten in their respective categories. Congratulations to W2RE, W1GD, W2IRT, WA2JQK, KU2M, and NN2W for their achievements.

Ray, W2RE, made his second #1 USA finish in as many years in the Single-Operator, Assisted category. His score of 4.1 million points is nearly 1 million ahead of his winning score in 2009. An error rate of less than 1% certainly helped. Will 2011 become the 3-peat for Ray in the SOA category? About this year's contest, Ray said "I was not prepared for this test at all; I had no sleep before the test and did not run through the equipment before the test. I normally check everything before the start. Basically, I had amp issues right at the beginning of test. The AL-1500 PS went down! No back up amp! So, I was SO1R. No mult station. The top 20M yagi in the 4/4 stack was not working. Used a the bottom 4EL @ 64ft for running. I had many reports about the big sig in EU. It must have been high all angles on 20M; this explain 1600 QSO's on 20 with on 4EL @ 64ft". We will be watching you next year, Ray! Gerry, W1GD, and Peter, W2IRT, placed #5 USA and #8 USA, respectively, in the Single Operator Assisted category.

Bob, WA2JQK, placed #10 USA in the Single-Operator, Low Power category. Bob made nearly 500 QSO's in about 20 hours of operating for a final score of 387k. Bob is no stranger to the low power category; being a successful low power signal in an SSB contest among the high power operators takes experience and patience.

Last year's #1 USA finisher in the Single-Op, Single-Band 80 meter category, Peter, KU2M, placed #2 USA this year. Peter had 510 QSO's and 75 countries on 80 meters for a final score of 114k.

In the Multi-Single category, the team at NN2W finished #8 USA from their station on Staten Island. Rich, AA2MF, and John, NY6DX, made 1657 QSO's for 1.9 million points in just 30 hours of operation.

Congratulations to all of the Top Ten USA entrants from the Hudson Division!

#### Division-wide Success

Getting back to the divisional scores, a mix of old and new call signs showed up at the top of the divisional scores. Ryan, N2RJ, captured his first plaque for top Single-Operator, High Power. Ryan said "I think that I ran a lot more in this contest than I did for any others. 40 meters was quite nice and surprisingly my best band. With most of the broadcasters gone it was almost like 20m. Conditions on 40 were so good that I was able to hold on to it and run for hours at a time and work Europe from mid afternoon all the way into the US evening hours and EU sunrise. A good setup on 40m is definitely something you want to have in your RF arsenal".

N2RJ's MonstIR - a killer for 40 meters and above. (Photo by N2RJ)



WA2JQK was number one in Single-Operator, Low Power, and W2JEK was top in the Single-Operator, QRP Class. The top Single-Operator, Single-Band awards went to KU2M, WR2G, W2LHL, and WB2AMU for top scores on 80, 20, 15, and 10 meters, respectively. No entries were received for Single-Operator, Single-Band categories for 160 or 40 meters - maybe everyone was hoping for great high band conditions this year?

The top Multi-Single score came from NN2W, while W2CG was number one in Multi-Two this year. As with last year, no entries were received for Multi-Multi this year - perhaps next year a station will attempt the ultimate in multioperator contesting from the Hudson Division.

One of the things that so many contesters, old and new, always wonder about is what makes a "great" contest effort. Very often, "great" contest operations are thought to be BIG contest operations. Big towers on big pieces of land, big amplifiers, and big signals are often thought of as great contesting experiences. And, in many ways, they are. However, equally amazing contesting experiences need not be big. An amazing contesting experience can be had from a club station, in the basement of a local town hall on Long Island, with a vertical, 100 W, and five hams having the time of their lives learning contesting together. An amazing contest experience is hearing 9M6XRO coming in after dark, over the pole with a fluttery signal, and then working him with your low dipole for a new country. An amazing contest experience is working DXCC in one weekend from an apartment in New York City and QRP. It has been done before. Most of the Hudson Division is urban or suburban, with more houses and apartments being built every day. Zoning restrictions make towers of any sort a challenge to put up. The bands get noisier and noisier from your neighbor's new laptop computer charger and your new plasma TV. Yet, from this, many great operators manage to get on the air, have fun, and put QSO's in the logs.

#### Section by Section

The sectional scores really give hams a chance to compete locally in an international competition. For many of us, how we did against our local, section level peers is the most important gauge of success, and also the source of many "friendly" wagers over whose score is better! Local clubs, be it contest clubs or general purpose clubs, have been the starting points for many a contester, and the local competition gives a sense of local importance-club pride and town/city pride are important motivators. The three sections within the Hudson Division are socially and geographically different, but many of the amateurs listed have achieved the same things: fun, new countries worked, and sharpening the operating skills.

In the New York City-Long Island section, the most popular category continues to be Single-Operator, Low Power, with 12 entries received. Gerry, K2GV took the top spot with 242k points, and WB2ATZ and section manager N2YBB right behind. Second most popular category was Single-Operator, Assisted, which allows spotting assistance from the DX cluster. Tom, KA2D, took the top section spot in SOA with over 500k. "There was a wall of sound. It seemed as though every ham in the world was on the bands", said Tom.

"I ran most of the contest on low power and all S&P with cluster. I did turn on the amp for a few rarer mults....time that weekend was very limited. It was good to hear 15 open to EU." We wholeheartedly agree, Tom! Fellow Boiled Owls N2UN, K2QMF, and N2MUN placed second, third, and fourth. Phil, N2MUN said, "This contest is one of my favorites, and this year it was nice to have 15 meters open for a time. My equipment in the contest was an FT-1000MP with an AL-811H amplifier into a C3SS and Dipoles for 40 and 80 meters. The exchange is great

for a SSB contest,"59-NY" (the old voice recorder did a good job!)". Single-Operator, High Power, with only 4 entrants, had WA2HMM on top and W2OSR #2. The Multioperator categories only had one entrant, NN2W, who was #1 in Multi-Single. The Single-Band categories had 4 entrants in Single-Band, 20 meters, with Ed, K2MFY the winner with 110k. Ed had 92 countries, with only low power! K2DO and W3EH were #1 and #2 in Single-Band, 15 meters, and WB2AMU captured the Single-Band, 10 meter win for both the section and the division! Nice job, Ken. The Order of Boiled Owls had 9 logs submitted on their behalf, the most in the section. All told, 31 logs were received from NLI across the various categories.

The Northern New Jersey section had 35 logs submitted, and of those 35, 11 were for Single-Operator, Assisted, making it the most popular category. Gerry, W1GD, and Peter, W2IRT, were #1 and #2 in the section in SOA, with 1.8 million and 1.5 million points. Both had very low error rates and a similar country count, but Gerry had nearly 200 more QSO's. This is Gerry's second section win in a row in SOA! W2IRT commented "Pretty decent conditions here in Northern NJ although 15 had been far better in the CW 'test 2 weeks ago. Still managed to clean out all the usual suspects on most bands and scored some fun mults on 80. Just topped 100 DXCC entities on one band (20m). Had a couple of small runs but just never got as great a rhythm going as I'd have liked. Maybe next time!".

Another NNJ SOA entrant, David, K2DSL, commented that "The bands were active, but not like the ARRL DX CW contest. Only one 10m contact for me which was D4C in Cape Verde, but maybe I missed more openings when I was away from the radio. 20m was a zoo where almost any frequency I tuned to I could hear 3 stations. 15m was more spread out so it was usually just a single signal I would hear on any frequency. I made about the same number of contacts this year (as last year) with less operating time and more multipliers to give me a bit higher score".

8 logs from NNJ were Single-Operator, Low Power entries, and AE2JL had the top score with 68k. WA2CLP and K2ZC had the #2 and #3 scores in SOLP. Single-Op, High Power had 7 entries, with division winner Ryan, N2RJ scoring 1.1 million for the win. KC2QJB and K2FJ were the runners up in SOHP. The lone Single-Op, QRP entry from NNJ was W2JEK, who also won the division plaque with just 27 QRP QSO's. Congratulations to anyone brave enough to try QRP SSB in a DX contest!

Craig, WR2G had a nice Single-Op, Single-Band 20 meter score, with 744 QSO's and 86 countries. This was also the top division score! From Craig: "I enjoy light contesting. This year's ARRL DX contest gave me an opportunity to graduate into modern technology with my old FT-1000D. I recently started using the N1MM logging program and that had a learning curve. I had pretty much mastered it, and then K2SG, Tony, helped me configure the microHAM keyer working through the N1MM program. I had to laugh, as I operated the CW contests manually with a memory keyer prior to this installation. This interface has taken my old clunker FT 1000D into modern day contesting. After 47 years in this hobby it still never ceases to amaze me".

Peter, KU2M, had the top Single-Band 80 meter score, as previously described, and it was a top division score as well. In the multioperator classes, K2OAK and KC2NB were #1 and #2 in NNJ for the Multi-Single category, and W2CG captured the top Multi-Two score in the section (and division) with a score of 1.3 million. Marty's crew at 'CG is especially pleased with their results: "Our key strategy is to have both rigs in the run mode whenever we can. In the SSB contest it becomes difficult to do at times, especially with the band conditions we've had in the latest tests.

"We try to keep one rig on the hottest band as much as possible; we determine this by watching the packet call-outs to see where the activity is on the bands. Also, we do not try to be the first one in the pileup of a new callout, most of the time it pays to wait 5 to 10 minutes, let the big guns with their stacked arrays duke it out, then jump in with relative ease. Most of our success comes from having the station set up and ready to go before the contest. We make sure everything is in working order a week or so ahead of the start. If anything needs fixing, it's better to do it as soon as it's found and not wait until the last moment. We try to have at least one spare rig and amp available in case problems crop up during the contest.

"Station conditions are modest compared to others; we have a Force 12 C36XL for 10-15-20-40m up 60', a Mosley 33 Tri-bander up 44', two Butternut Verticals phased NE for 75m, an Inverted L up 54' for 160m, and a 500' Beverage for NE/SW signals. For rigs we have an Icom IC-7600 and an Icom 756 PRO-3 and the amps are an Alpha 76PA and an Alpha 77D. We run Win-Test for logging". Nice job by Marty and crew, showing how a well-prepared and maintained station is a bigger asset than most people think.

Finally, moving to the Eastern New York section, there were 38 logs submitted, and 17 of those were in the Single-Operator, Assisted category, making it the most popular category in ENY, much like in NNJ. The top score in SOA was Ray, W2RE, who (as previously mentioned) turned in the #1 USA score again this year, with over 4 million points. Behind Ray were N1EU and W2NY, operated by WT4Q.

The second most popular category in ENY was Single-Operator, Low Power, with 9 entries. Bob, WA2JQK finished #1 in the section and the division, with 387k. In the #2 and #3 SOLP slots were WA2MCR and W2LP. Five logs were submitted in the Single-Op, High Power category, with Saul, K2XA coming out #1 in the section. Here's Saul's story: "My effort in the ARRL DX SSB test was only part-time. My rotary monoband beams on 20 and 15 were inoperative so I only had a tribander fixed on Europe and wires on 40, 80 and 160. Because of that I specifically avoided the big run/QRM periods at the openings on 20 meters, (It is too painful to endure the QRM and frequency fights if you're not seriously in the contest.) going to that band only after it had been open for a few hours. I spent a lot of time running on 80, and also on 40 because of the new phone allocation, with good results. I was most surprised and pleased by the openings on 15 which yielded good runs and a lot of multipliers. Hope to get the antennas fixed this summer so I can be more competitive". He was followed by KM2O and WB2SIH. The Multioperator categories had only two entries from ENY, with the W2XL team coming out ahead of the W3JK crew by about 100k in a close race in the Multi-Single category.

# To Next Year

Congratulations to all Hudson Division entrants this year-more activity is a sure indicator of things to come, and with things looking up for next year in terms of band conditions, it looks to be a great 2011 contest season coming up on the horizon!

# Midwest Division – by Toni Radebaugh, NØNI

We continue to have more activity each year with nine more entries over last year. Missouri had the most entries (21), followed by Iowa (18), Kansas (15) then Nebraska (7). Collectively the Midwest participants earned 4.7 million points with 11,690 QSO's and 5,139 mults. The contest period was 48 hours, but the most time any one all-band operator spent on the air was just short of 20 hours. The best (in some cases the easiest) way to improve your score would be to log more hours in the contest. More time on the air may seem like work during the contest but could make a huge difference in the score.

# Single-Op, High Power

First place went to Russ KØVXU in Kansas. Russ was 3<sup>rd</sup>-place in the region also. Russ logged more mults on 15 and 80 to come in ahead of 2<sup>nd</sup>-place finisher, Steve KØOU in Missouri. Steve used 99% search and pounce to achieve his 2<sup>nd</sup>-place finish. Steve had the best 20 meter score in this class. John KØIO from Iowa placed 3rd. Dragan KØAP came in 4th just a few mults behind the 3<sup>rd</sup>-place finisher. Dragan also had the lowest error rate in this class. Gary NØIRM in Missouri placed 5th. Just some more time spent on 40 meters would have scored Gary a 4<sup>th</sup>-place finish.

# Single-Op, Low Power

This was the most popular entry class in 2010. Pat NØHR from Iowa took top spot this year with big scores on 20 meters and 15 meters. Pat was also 3<sup>rd</sup>-place in the region. Don NTØF (also from Iowa) earned 2nd -place. A little more time in the chair and Don could be the winner next year. Third place went to Joe K4LSU in Missouri. Al KØVM in Iowa was 4th. Jerry NXØI used his trapped vertical for a 5<sup>th</sup>-place score. Sixth-place Mark WAØL is now WØMSU. Mark was the only low power entry to use 160 meters and logged an additional 13 mults.

#### Single-Op, QRP

Last year 3 of the 4 states were represented, but this year 100% QRP operator Bob NVØU in Missouri was the uncontested 1<sup>st</sup>-place scorer.

#### Single-Op, Assisted

This looks like a popular entry class for those who had a busy weekend with not much time to operate. Most entrants logged 10 hours or less.

ABØRX George in Missouri led the way in 1st place. John KCØDEB from Kansas placed 2nd. KØJPL operated WØJPL for a 3<sup>rd</sup>-place finish - less than 100 points behind KCØDEB. WØYV placed 4th with his station in Iowa. Bruce KØARY had no errors in his log and placed 5th.

# **Multioperator**

Team NØMA activated the radio ranch and was the only entry this year so they were automatically 1st in the division and also made 2nd in the Midwest region. NØMA operators included W7II, WØIY, KØDAS, KCØSKM, NØLNO, KX9Y and KDØJNG.

#### Club Score

The Kansas City DX club placed 4th overall in the Local Category. They had 6 entries 2010 ARRL DX Phone Writeup Version 1.22 Page 50 of 100

and, with just a little more help, could have easily achieved 2nd place.

# Single-Op, Single-Band

2010 saw entries for all but the 10 meter band with 4 entries making the top 10 boxes.

# Top Band

Bill KØKT in Iowa took a break from 80 meters to give his 160 system a workout. Bill-was 1st in the division, 2nd in the region and  $6^{th}$ -place U.S. and Canada.

# 80 meters

Toni NØNI from Iowa placed 1st in the division, 1st in the region and 4th in the U.S. and Canada.

#### 40 meters

NØUU in Kansas earned 1st place in the division, 2nd place in the region and 8th place U.S. and Canada. KØLAF took 2nd place from Missouri.

### 20 meters

We had 4 entries this year, with 3 of them from Iowa. Alex KU1CW easily took 1st in the division and was 2<sup>nd</sup>-place overall U.S. and Canada. Alex operated 29.4 hours (the most time put in by any operator) and, as you would expect, logged the highest score in the division. Second place went to George WØPPF. From Kansas, WA5SWN was 3rd, followed by KCØYHU in 4th.

#### 15 meters

After winning the all-band in 2009, Jim KØRH took it easy this year and worked only 15 meters and placed 1st in a single band this year. Jim was also 2nd in the region. Second place went to Bill KFØIQ in Missouri. Bill KDØGJS jumped in for his first DX contest and came in 3rd place.

#### Division Leaders

SO-HP	κØVXU	511,980
SO-LP	NØHR	304,950
SO-QRP	NVØU	12,702
SOSB-160	кøкт	3,108
SOSB-80	NØNI	39,690
SOSB-40	NØUU	25,704
SOSB-20	KU1CW	552,123
SOSB-15	KØRH	71,175
SOA	ABØRX	208,125
MS	NØMA	437,724

# New England Division – by Joe Fitzgerald, KM1P

Mother nature can't keep us down

Mother Nature has given the New England Division a lot to contend with in recent years, between few sunspots, lots of ice, and squirrels. Many stations reported that antenna repairs had been made (some on the Friday afternoon before the contest), and ice was a fading memory. Low solar activity, on the other hand, continues to challenge us. After decent conditions on the CW weekend of the contest, many commented that conditions were significantly more challenging for Phone. After one DX-peditioner commented that working low power on 20 meters was "cruel and unusual punishment" N1YX observed that "the punishment is unusual only the first time. After [this long sunspot minimum], it is not unusual anymore. It is still cruel though, no question about that". And as if ice and a quiet sun were not enough, the local squirrel population around KK1X attacked various cables, taking out the 80 meter antenna feed line as well as the ac mains powering the station.

The best way to counter poor ionospheric conditions is to increase your chair time, which some of us did with more success than others. While N9NC was able to put in 22 hours, there would have been more but for yard work.

N9NC: "But this contest comes only once a year, I need to finish it." XYL: "But you said that in October, three times in November, twice in December, and in January, February, and now March. Here's the rake."

We are all pleased to have Matt and the crew at KC1XX back this year after sitting last year out due to severe ice damage, if for no other reason than to provide a 10 meter beacon to convince the rest of us that our receivers were still working. A very respectable Multi-multi finish for Matt, while Greg and friends in Fairhaven MA did a bit of rearranging of their calls sign and piloted KM1W to a solid second place, trailed closely by K1TTT.

Despite trees falling perilously close to Jerry's 80 meter four-square a few weeks before the contest, KØTV was able to make a nice showing in Multi-Two. We're also pleased to hear Tony back on the air at K1KP after a few years off

Rounding out the Multioperator field was a big Multi-Single win by K1LZ. The crew at N1MM tried to challenge themselves in a special way ... forty minutes into the contest, Tom realized the poor audio reports he was getting were due to the fact that the microphone hooked to the radio was on the second operator's headset!. We were also pleased to hear that the next generation of contesters were being trained with 9-year-old KA1RON operating at N1FD helping them score 50% over last year's score, and several high school students got together at W1CLA on the campus of Dexeter and Southfield Schools to put in a nice Multi-Single effort

Single-Op, Assisted entrants had a lot of fun, yet had plenty of time for other activities such as sleeping or raking the yard ... none reported more than 30 hours of operation. Yet when they were on the air, they were indeed working hard: all the entries over 1 million points had an error\* rate below 1%. No one can accuse New Englanders of blindly following busted packet spots! Million plus entries in Single-Op, High Power, on the other hand, were all over 1%, except for "retired" contester K5ZD with a remarkable 0.3% ding rate.

Competitive single ops without assistance were able to find plenty of time for operating, with both K8PO and K9PW (operating NC1I) on for 41 hours, but about 100 QSO's and an extra multiplier found their way into K8PO's log for the win. N1UR was all alone at the top of 2010 ARRL DX Phone Writeup

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the Single-Op, Low Power listings with a very high multiplier including an amazing 32 multipliers on 160 meters.

Let's hope that Mother Nature starts being kind to us. While some solar scientists are starting to talk about "another Maunder Minimum", New England's own Dr Willie Soon of the Harvard Smithsonian Center for Astrophysics who literally wrote the book on the subject has personally assured me that the sunspots will return. Yankee ingenuity will have to deal with the ice and squirrels.

\* Error rate is defined as Busted QSOs + Not-In-Log QSOs + Busted Exchanges divided by the total number of non-dupe QSOs.

# Northwestern Division - by Ward Silver, NØAX

Seeing how I have absented myself from the Division, this will have to be my swan song as the Regional editor. You can be assured that I'll be leaning on my former cohorts to find another scrivener to satisfy the sundry savants of SSB.

Some readers may be wondering if the WWA stations just don't work Phone – what's the deal? Well, now that you mention it, "the deal" is precisely the cause of the missing-in-action WWA contesters! The Puyallup hamfest – largest of the year and in the division - is usually on the same weekend as ARRL DX Phone. If the choice is between trying to wedge in on 20 and picking up some goodies at the flea market, I guess the decision was clear!

# Multioperator

Long gone are the days of the legendary W7RM and his Multi-Multi operations from Foulweather Bluff, then near La Center, WA. John, N7TT is the owner of that station now and prefers Single-Operator categories. That is not deterring two powerhouses one state to the south, however. Brad K7ZSD in northwestern OR and Joe NK7U in southeastern OR have put together stations and teams of operators that really put the pedal to the metal. Both were fifth in W-VE this year. How can that be? Brad's team entered as M2 and Joe's as MS – congratulations to both for keeping the West Coast on the multi-map!

Call	Score	QSOs	Mults	Category	Section
K7ZSD	2,179,377	2385	309	M2	OR
NC7M	369,096	744	169	M2	OR
NK7U	2,236,761	2254	333	MS	OR
WX7P	239,112	496	162	MS	EWA
W7TVC	72,240	226	112	MS	OR
N7VS	31,500	151	70	MS	OR
K7AYZ	1,392	34	16	MS	WWA

Single-Operator, High Power

While propagation didn't make it possible for any of our SOHP competitors to make the national Top Ten, N7TT and K7RL placed 1-2 in the division and 2-4 in the West Coast Region. Here are our top five SOHP scores:

Call	Score	QSOs	Mults	Section
N7TT	899,388	1213	249	WWA
K7RL	763,113	1154	221	WWA
W6AEA	203,670	469	146	EWA
KS7T	146,982	379	131	MT
KI7AO	140,070	296	161	EWA

Single-Operator, Low Power

The low power enthusiasts are by far the most numerous. It's easy to keep peace with the neighbors, station expense is lower, and lots of folks just enjoy the challenge. And there were lots of challenges – no NW calls appear in either the national Top Ten or regional leader tables. The "dry side" of the division (EWA, ID, MT, and eastern OR) cleaned up this year, sweeping the top five. KE7NO is the divisional SOLP leader this year from usually-difficult MT.

Call	Score	QSOs	Mults	Section
KE7NO	123,900	298	140	MT
WX7B	92,160	264	120	EWA
WAØWWW	54,990	197	94	EWA
W3CP	38,376	173	78	OR
N7VJ	38,157	164	79	ID

Single-Operator, ORP

The NW Division has a long history of QRP activity, especially when propagation to Japan is good. Although this year was not one of those years and no one took the QRP plunge, we can expect to see NW call signs in the national and regional leadership positions. Note to the NW readers – this would have been a good plaque or certificate-earning opportunity!

# Single-Operator, Assisted

This was a popular category this year, particularly east of the Cascade Mountains. The division winner was KG7H with a solid 550 kilo-point effort from ID, hotly pursued by fellow spudster, KØTO – both fine scores.

Call	Score	QSOs	Mults	Section
KG7H	551,736	786	237	ID
кøто	434,340	644	228	ID
К7НС	410,238	665	213	EWA
NW7E	247,596	442	188	OR
KI7M	225,990	813	93	OR

Single-Operator, Single-Band

This group of categories always draws out a few operators in the division and taking a cue from the propagation reports (and the ARRL DX CW conditions), 15 meters was back in the SOSB action, led by W7BJN who made a strong showing on the band. On 20 meters, there was quite a bit more to be worked, although the deep openings to Europe are probably still a year or two away. W7FP put the WA7AR call sign to work and led the division here. KØIP was the lone 40 meter entrant and worked about one-half of DXCC.

Call	Score	QSOs	Mults	Band	Section
W7BJN	62,073	367	57	SOSB-15	EWA
NE7D	16,740	155	36	SOSB-15	OR
KI7BP	8,640	96	32	SOSB-15	ID
NG7Z	7,380	87	30	SOSB-15	WWA
NØAX	4,209	64	23	SOSB-15	WWA
WA7AR (W7FP, op)	116,622	423	93	SOSB-20	OR
KD7IIC	45,126	221	69	SOSB-20	MT
KB7QFE	24,366	141	62	SOSB-20	ID
W7ASF	8,019	82	33	SOSB-20	OR
К7НРТ	3	1	1	SOSB-20	EWA
KØIP	14,259	98	49	SOSB-40	ID

#### Next Year

As go the sunspots, so goes participation from the uppermost, left-hand corner of the lower 48 states. All indications are that things will be a lot better in the years to come with our JA friends showing up on 15 meters and keeping our rotators pointed west for a lot longer than in the past few years. No longer will Saturday and Sunday mornings be for snoozing or trying to squeeze in between eastern stations running the EU crowd. We'll be right in there knocking elbows and logging at a fast rate. Keep the faith!

# Pacific Division - by Mark Schreiber, K6OWL

Inspired by the promise of improved propagation, there were 115 entries from the Pacific Division this year. This was a dramatic 37% jump from the eighty-four participants last year and a 74% jump from the sixty-six log submissions the prior year. After the contest, the participants' reviews of the conditions varied from "great" to "horrible." There was a general consensus, however, that the conditions were not as good as they were during the CW weekend of the contest a few weeks earlier.

The increasing number of entries also reflects the growing strength of the Northern California Contest Club (the "NCCC"). The Club's well-organized outreach, recruiting, and training efforts continue to build great results in getting and keeping contesters on the air. Sixty-three of the Pacific Division participants, more than half, identified the NCCC as their club.

On a combined basis, NCCC members scored over 52.5 million points, more than double the 20 million points tallied by the club last year, putting the NCCC in fifth place nationwide in the unlimited category. The NCCC actively participates in many national, regional, and local events and sponsors education and skills improvement programs for contesters of all levels.

In addition to the great number of logs submitted, the scores contained in these logs overall seemed higher this year. Indeed, in some categories, the scores were again significantly higher than last year.

#### The Winners

Dick K6LRN took top honors in the Pacific Division Single-Operator, High Power category. Dick participates in a number of ham radio groups, including the Northern California DX Foundation, the Northern California Contest Club, and the Mother Lode DX/Contest Club, and has sponsored several DX expeditions over the years.

Shirl AA6K of Stockton, California, repeated his win in the Single-Op, Low Power category. He is also a member of the Mother Lode DX/Contest Club. His station consists of an ICOM-756 Pro II, a 3-element SteppIR with 30/40M, and an Inverted Vee for 80 meters & 160 meters. In his soapbox comments, Shirl observed that the "Bands were better than last year!"

Bob KB1PWF won the QRP title from the Nevada section. According to his QRZ.COM entry, his portable setup consists of a Yaesu FT-817ND, an MFJ-971 tuner, and a Buddistick Vertical.

The Single-Operator, Assisted category was won by Dan KF6A, whose effort also earned him second place in the West Coast Region. Despite his success, Dan described the conditions as horrible, "painful fun for the love of the sport."

W6WB submitted an entry in the Multi-Multi category. It placed eighth nationwide in this category and was the sole Multi-Multi entry in the Pacific Division and the West Coast Region. W6WB was the call sign of Clayton "Bud" Bane who was a well known ham, contester, and friend of many San Francisco Bay Area hams. The Wireless Contesters Club puts Bud's call ign on the air from time-to-time to celebrate his memory. Seven well-known hams (JK3GAD, W6NV, W6SC, N6DA, N6KJ, KX7M, and W6RGG) operated from the FB station of Oliver W6NV. Don, N6DA, reported that "runs to JA on Friday and Saturday on 15 were great, including a number of 1-watt stations and one guy running 500 mW who was a solid 5x5, no problem."

W7RN was the site of the Pacific Division's winning Multi-Two entry from Nevada. The station was operated by K5RC, K7MS, K7STU, N7ON, and W6NF. A detailed Web site about the station can be viewed at **k5rc.cc**/. W7RN also placed second in the West Coast Region and was eighth place nationwide.

K6FO (operated by N6WR, KA6YLA, and N6DXX) won the Multi-Single category from the Sacramento Valley. The team also took fifth place in the West Coast Region.

The following single-band participants led their categories: Emilia KI6YYT (ten meters) from the East Bay (also eighth place nationwide and first place in the West Coast Region), Richard W6SR (fifteen meters) of Sacramento Valley (also tenth place nationwide and third place in the West Coast Region), Ken K6HNZ (twenty meters) in Santa Cruz (also second place in the West Coast Region), and Tyler NU6C (forty meters) from Sacramento Valley.

Finally, Bob N2NS from the San Joaquin Valley section submitted the log with the highest score and no errors. Bob participated in the Single-Operator, Assisted category and reported 265 contacts with 159 multipliers for a score of 126,405 points.

# Nationwide and Regional Box Scores

On the nationwide level, four Pacific Division entries made the Top Ten in various categories. In the West Coast Region, eight entries placed among the top five in their categories.

W6WB placed eighth nationwide and first in the West Coast Region in the Multi-Multi category. W7RN placed eighth nationwide and second in the West Coast Region in the Multi-Two category. K6IDX was third in the West Coast Region among the M2 stations. K6FO placed fifth in the Multi-Single category in the West Coast Region.

No Pacific Division Single-Operator, all-band contestants broke into the Top Ten nationwide. Among single-band entries, KI6YYT placed eighth nationwide and first in the West Coast Region on 10 meters. W6SR placed tenth nationwide and third in the West Coast Region on 15 meters. The two QRP entries from our Division (KB1PWF and K6MI) were among the top five entries in the West Coast Region.

# Single-Operator, High Power

As noted at the start of this report, Dick K6LRN took top honors in the Pacific Division from the Sacramento Valley section with 313,560 points (523 Qs and 201 multipliers). Tiny KT6YL, reporting from the San Joaquin Valley section, came in second with 448 Qs, 149 multipliers, and a score of 198,468 points. Jim K6JAT, from the East Bay Section, finished third

in the category (401 Qs, 151 multipliers, 175,311 points). N6NF (143,157), K6XN (127,575), N6YMM (109,500), W6RKC (91,485), N6ZM (43,845), K6RJP (40,587), and W6EB (35,250) rounded out the Pacific Division's top ten list in the SO-HP category.

# Single-Operator, Low Power

Shirl AA6K from the San Joaquin Valley Section won the low power competition in the Pacific Division with a score of 170,328 (379 Qs and 151 multipliers), nearly double his winning score from last year. W6RFF of the Sacramento Valley Section placed second with 316 Qs, 128 multipliers, and a score of 117,120. The third place winner in this category was KE6SHL, from the San Joaquin Valley, who submitted a log with 71,595 (218 Qs, and 111 multipliers). The remainder of the top ten of the SO-LP class consisted of K7XE (67,311), N7UR (54,708), N3XRU (45,018), N3RC (32,562), N6ORB (30,972), K6AAB (29,388), and W7YKN (28,080).

# Single-Operator, QRP

Two operators in the Pacific Division submitted QRP entries this year. Bob KB1PWF from Nevada completed 22 contacts with 13 multipliers for a score winning score of 741. John K6MI from the San Joaquin Valley Section reported 17 contacts, 10 multipliers, and a score of 510.

# Single-Operator, Single-Band

Thirteen single-band entries were submitted from the Pacific Division. Two of these entries appeared in the nationwide Top Ten boxes this year, one less than last year.

On ten meters, KI6YYT (156 points, 13 Qs and 4 multipliers.) of the East Bay and Anna KE1BYL (48 points, 4 Qs and 4 multipliers.) from Santa Clara Valley submitted single-band entries. These entries were also good for first and second place finishes in the West Coast Region. KI6YYT also earned eighth-place honors nationwide.

On fifteen meters, there were also two entries. Richard W6SR of the Sacramento Valley Section completed 446 contacts with 58 multipliers for a score of 76,734. This was also good for a third-place finish in the West Coast Region and tenth place nationwide. Tom N6WLF also submitted an entry in this category for 165 points (11 Qs and 5 multipliers.) from the Santa Clara Valley section.

There were eight entries on twenty meters this year. Ken K6HNZ of Santa Cruz in the Santa Clara Valley section repeated his win of last year in this category with a score of 139,374 (526 Qs and 89 multipliers). This score was also good for second place in the West Coast Region. In addition to Ken, W7DR (129,024), W7EB (87,525), K7ACZ (52,152), KW6G (8,184), AE6YB (7,920), KD6CPA (12), and W1BUD (12) also filed 20 meter single-band reports.

We had one forty meter single-band entry this year. Tyler NU6C completed two contacts from Sacramento Valley with two different multipliers for a score of 12.

There were no single-band entries this year for 80 or 160 meters.

#### Single-Operator, Assisted

Dan KF6A from Santa Clara Valley (608,058 points, 818 Qs, and 249 multipliers) led this category with a score almost two times higher than last year's winner. This was also good 2010 ARRL DX Phone Writeup Version 1.22 Page 58 of 100

for second place in the West Coast Region. Jim K9YC, also from Santa Clara Valley, took second place (344,520 points, 588 Qs and 198 multipliers). Ken K6TA, from Sacramento Valley (211,800, 354 Qs, and 200 multipliers) placed third. WE6Z (209,568), KØUK (200,109), K6III (181,566), K6RIM (165,336), K6XX (159,600), N2NS (126,405), and K2RD (118,293) rounded out the top ten among the Pacific Division packet users.

# Multi-Operator Entries

The Pacific Division fielded six multi-operator entries this year. The only Multi-Multi effort this year in the Pacific Division and the West Coast Region was W6WB (operated by JK3GAD, W6NV, W6SC, N6DA, N6KJ, KX7M, and W6RGG) of the East Bay section. They completed 2,271 contacts and recorded 340 multipliers, resulting in a score of 2,303,160, to place eighth nationwide.

Two competitive Multi-Two entries were submitted. W7RN (operated by K5RC, K7MS, K7STU, N7ON, and W6NF) from Nevada won the division (1,681,560 points, 1,745 Qs and 324 multipliers) and placed second in the West Coast Region and was eighth place nationwide. K6IDX (operated by K6IDX, N6GQ & W6OAT) from Sacramento Valley placed second in the Division and third in the West Coast Region (1,436,010 points, 1516 Qs and 317 multipliers).

Three Multi-Single efforts were mounted. K6FO (operated by N6WR, KA6YLA, and N6DXX) from the Sacramento Valley won the Multi-Single category in the division and took fifth place in the West Coast Region (89,244 points, 282 Qs, and 111 multipliers). W6NF (operated by W6NF and K7MKL) placed second (43,035 points, 153 Qs, and 95 multipliers). K16UAQ with K16UAP joined forces for 18 points to round out the category.

# Propagation

All bands showed improvement this year compared to last year. The greatest improvements were seen on 10 meters (613 Qs and 230 multipliers this year compared with 182 Qs and 74 multipliers last year) and 15 meters (7,614 Qs and 2,302 multipliers this year compared with 2,849 Qs and 1,114 multipliers last year). Forty meters (4,226 contacts and 1,536 multipliers) produced twice as many contacts and fifty percent more multipliers than last year. Twenty meters was again the most productive band in this year's contest (10,102 Qs and 3,463 multipliers). These numbers for 20 meters are slightly above last year's. Eighty meters (992 contacts and 684 multipliers) was slightly more productive than last year and there was nearly twice as much activity on 160 meters (160 Qs and 143 multipliers).

# Error Rates

Data available this year included error rates. Twenty-five logs were error-free. The top five scores with error-free log submissions were N2NS (126,405), K9JM (79,326), W6DPD (22,680), KJ6RA (20,550) and K6LE (14,175).

# Roanoke Division – by Rich DiDonna, NN3W

Following on the heels of a spectacular weekend during the CW leg of the 2010 ARRL International DX Contests, 127 logs poured into ARRL headquarters from hams living in the Roanoke Division. All but two of the logs were from single ops who, on average, churned out an average of about 200 QSOs per log and an average score of over 95,000 points (be sure to get your envelopes into your friendly incoming QSL bureau sorter (HI! HI!)).

94 of the division's finest hams entered this year's SSB fray sans packet and turned an impressive array of scores – from the serious to the totally casual. Sacrificing power bill for the sake of QSOs, W3GQ of the Carolina DX Association rose to the top of the heap with a score of 839,700. Paul turned in over 900 QSOs to best out approximately 30 others in the region. He also managed to break into the "Box" with a Top Ten finish in the QRO category. Way to go, Paul! K4YYL was second with 659,634 and N4PQX was third with 426,114.

Not willing to line the pockets of the utility companies, N4XL took the checkered flag in the Low Power category with nearly 400,000 points in the logs. Like W3GQ, 'XL's score was also sufficient to break into the "Box" with a #9 finish for all USA and Canadian stations. K4MDX was second with 118,779, and W4YE was third with 116,967.

Only one Roanoker - KG4JGQ - was brave enough to try the SSB leg of the DX test in the QRP category. Rusty's QRP score was enough to take top billing in not only the division but also the entire Southeast region.

On the Assisted side, 30 entrants took advantage of the spotting network and other tools to amass nearly 9,000 QSOs and over 5.5 million points in total score. In a repeat performance from 2009, North Carolina's N4ZC rose to the top of the heap with over 1,000 QSOs – and over 1 million points to his credit. Fellow Carolina DX Association member W3OA was second, and PVRC's own KG4W was third.

17 Roanokers entered the SSB leg in a Single-Band category. Single-banders do so for any number of reasons: 1) their station may be limited in scope and the operator has chosen to optimize the station for a particular band, 2) the operator had only limited time availability, 3) the operator may have a special affection for a particular band, 4) solar cycle movement may present the opportunity to focus on a particular band before its usefulness decreases in future years. Regardless of reason, there are ample opportunities for big scores and QSO counts over the course of a 48-hour weekend.

K4QVK led the pack in the SOSB-15 category, W8ZN with over 1,200 QSOs(!) was the leader on 20 meters (Terry also managed to snag a #4 finish for all W/VE), AC8Y was the leader in the SOSB-40 category, and AA4V's perseverance on 80 meters led him to not only to top billing within the division but also #5 amongst all W/VW entrants.

Only two groups form a multioperator team this year – both in the Multi-Two category and a repeat from the 2009 contest. The O'Mara brothers and friends at W4RM turned in a healthy 3.43 million points from Bill's terrific station in suburban Washington D.C. The score was good enough to land them in the #3 spot in all W/VE. W4RM's superior QSO tally was enough to fend off a challenge from the boys at the NR4M mega station who matched W4RM in multipliers but had about 700 fewer QSOs. Something tells me that this is not the last time we will see this pairing going head to head!

Remember, the 2011 running of the ARRL DX SSB test is next March 4 through 6. With a little luck, we will see the SFI above 70 (and, hopefully, in the 90s!).

# Rocky Mountain Division – by Tom Horton, K5IID

You may ask yourself "Why is some guy from Texas writing "our" division results. Well, I am happy to say that Steve, N2IC was selected to attend The World Radiosport Team Championship (WRTC) in Russia in July in conjunction with the IARU Championship. I am however somewhat familiar with the division after living in New Mexico for several years a while back!

With a total of 59 entries from the Rocky Mountain Division some operators made national recognition in several categories. Although conditions were far from ideal, there did seem to be a little bit of spark from the Sun. We all are looking forward to this cycle's growth, especially the contesters and DXers.

# Single-Operator, QRP: Three Entries

Although Phil, KØKE, scored higher than last year he did not make the top national spot this year but was securely in third place with 399 QSOs and 161 mults.

He also placed first in the Region and first in the Division. WF4U came in second in the division and 7th nationally. Phil spent 17.7 hours and WF4U totaled 12.2 hours.

Single-Operator, Low Power: Eighteen Entries

Ken, WØETT, managed 436 QSOs with163 countries to walk away with the division title in this category. Several operators sat down and played in the contest and soon, when the sunspots return in earnest, I suspect that there will be many more Iron Butt Awards given out by Steve, N2IC.

Single-Operator, High Power: Sixteen Entries

Don, N5LZ operating under the club call of NN7ZZ, bested the division in this category in a big way. With more than double the chair time (22.7 hrs vs. 11.0 hrs) of his nearest competitor he scored over three times KØFX's entry. Don had 1063 QSOs and 220 multipliers in the winning effort. Don placed 2nd in the Midwest Region as well as winning the division.

Single-Operator, Assisted: Seven Entries

From his beautiful location on the edge of the Pike National Forest, NØVD (Kelly) spent a little over twenty hours in the seat and garnered 857 QSOs and 121 mults and won this category with 759k points. Kelly also scored 3rd in the Region. KE7FBY (Wes) made a good effort with 359 QSOs and 121 mults for 125k points in 9.7 hours.

Multi-Operator, Single-Transmitter

Gary (WØEMS) and Jeff (KIØKB) took the WC7WB club station to Wyoming for the contest. They made 414 contacts in 148 countries for 179+k points. W7CT, operating about half the amount of time, made a super effort with 367 QSOs and 126 countries for 138k points. WC7WB placed 5th in the region and 1st in the Rockies.

Single-Band Entries

Mike, K7ULS, got brave and tried a 10 meter single-band effort and ended up as the only entrant in the division. Beyond winning the division he also placed 2nd in the region and 10th nationally. His effort used up a whole half-hour!

John, WA5ZUP, used his 5000-foot ASL to his advantage to top the 15 meter entrants. His 210 QSO / 65 mult, 40+k point score put him tops in the division and 3rd in the Midwest. K8OZ, Jim, was second in the division with 14k points.

KØIZ (John) used his 9000-foot ASL QTH for his 20 meter success. Using wire antennas he made 398 contacts in 88 countries for 101k. KBØYH (Gus) finished second with 14,859 points.

WDØBGZ moved to Colorado from Nebraska for his contest fun. His was the only 40 meter entry in the division and he did very well. 333 QSOs in 69 countries is a very good outing; so good that it scored him third place nationally and first place regionally as well as first place in the division. Well done, Alan!

Dave, WD5COV, did the deed on 80 meters from his far south New Mexico QTH. Using his four square array he managed 109 QSOs in 62 countries for 20k points.

The Club results are interesting. W5CF from New Mexico added to the Arizona Outlaws 69 member outing. Eleven contesters used their alliance with the Grand Mesa Contesters of Colorado and eight came through for the Utah DX Association. Both of the latter clubs finished in the top twenty.

# Soapbox

NN7ZZ Category: SO-HP Total Score = 723,072 Seems like I shared my frequency much more than I should have this time. There must have been 3 or 4 simultaneous Qs in the passband at times, but I still had lots of fun. Tnx for the Qs.

WØETT Category: SO-LP Total Score = 221,028 Pretty good condx in this one although not as good as the ARRL CW DX test. 15m came through with some nice openings and mults - best DX wkd on 15m was  $4X\emptyset A$  and ST2AR. 10m opened to SA and to KH6 for some nice mults.

WD5COV Category: SOSB-80 Total Score = 20,790 I spent a few hours having some fun on 80 meters. Thought I might get lucky and snag a new one. No luck there but still enjoyed working some stations and handing out the NM mult.

NØVD Category: SOA Total Score = 773,310 Now I remember why I do these things from the "other side". The highlight was having V51YJ and TLØA call me after I gave up trying to bust their piles. I scooted down the band hoping they would get tired of the unruly behavior and go into S&P mode - that strategy paid off for 2 new mults.

WDØBGZ Category: SOSB-40 Total Score = 72,030 Icom 756pro-3, Alpha 91B, Force-12 C-39XRN at 80-feet.

KCØWKZ Category: SO-LP 122/66 Total Score = 23,760 Just turned 14 and this was my best contest result ever.

KDØAZR Category SO-LP 12/10 Total score = 360 You should just accept LOTW for contests...Sheesh!

One more sidebar: without revealing any operators, the error rate went all the way from 0% to 16.4%. But the vast majority was below 4%. Good job, guys.

# Southeastern Division – by Jeff Clarke, KU8E

The National Scene

In the past ARRL DX contests the **Southeastern Division** has had many USA winners. In 2010 we only had one. Mark, **W4SVO**, had the top score in the USA for **15 Meters Single Band**. During the past year Mark moved to South Florida to his dad's QTH (W4PZV – SK) and benefitted from the great propagation from that part of the country on the higher bands. Some other entries came close. Cort, **K4WI**, a perennial winner on **10 meters** came in 2<sup>nd</sup> in the USA just behind **W5PR**. **N4QV** managed to get a 3<sup>rd</sup> place USA in the **80 Meter Single Band** category. Paul, **N4PN** was #3 in the USA on **20 meters**.

Other stations in the division placed in the Top Ten nationally. Dan, **K1TO**, in the **Single-Op**, **High Power** category at #10, Jere, **KT4ZB**, at #6 in the **Single-Op**, **Low Power** category, **NA4W** at #7 and **KK4SI** and #10 on **160 meters**, **WA4TII** at #10 on **80 meters**, **K1EY** at #7 on **40 meters**, and **KV4T** #4 on **15 meters**.

Inside the Southeastern Division

Other winners within the division in addition to those I already mentioned were **N4ESS** in the **QRP** category and Ralph, **K1ZZI** who had the top **Single-Op**, **Assisted** score in the division. **KF4ZZ** had the top **Multi-Single** score. Congratulations to these stations and see you in the 2011 contest.

*Top Scores by Category* 

Table 1 - Southeastern Division Category Winners

Single-Op, High Power	K1TO	2,686,602
Single-Op, Low Power	KT4ZB	588,612
Single-Op, QRP	N4ESS	5,130
160 Single-Band	NA4W (K4WI, op)	1,725
80 Single-Band	N4QV	46,224
40 Single-Band	K1EY	27,966
20 Single-Band	N4PN	447,552
15 Single-Band	W4SVO	245,670
10 Single-Band	K4WI	4,224
Single-Op, Assisted	K1ZZI	1,095,885
Multi-Single	KF4ZZ	587,412



Mark, W4SVO (Photo W4SVO)

Table 2 – Southeastern Division Single-Operator, High Power Standings

K1TO	FL	2,686,602
KT4Q	FL	1,095,540
K5RQ	FL	943,572

Table 3 – Southeastern Division Single-Operator, Low Power Standings

KT4ZB	GA	588,612
N4IG	FL	333,684
WB4JFS	GA	303,606



The tower at SOLP winner KT4ZB (Photo KT4ZB)

Table 4 – Southeastern Division Single-Operator, QRP Power Standings

N4ESS	FL	5,130

Table 5 – Southeastern Division Single-Operator, 160 Meter Standings

NA4W (K4WI, op)	AL	1,725
KK4SI	FL	495

Table 6 - Southeastern Division Single-Operator, 80 Meter Standings

N4QV	FL	46,224
WA4TII	GA	17,655
W5JBV	FL	561



The tower at N4QV (Photo by N4QV)

Table 7 - Southeastern Division Single-Operator, 40 Meter Standings

K1EY FL 27,966

Table 8 - Southeastern Division Single-Operator, 20 Meter Standings

N4PN	GA	447,552
N4BP (GW4JUN, op)	FL	109,020

Table 9 - Southeastern Division Single-Operator, 15 Meter Standings

W4SVO	FL	245,670
KV4T	AL	157,872
N4FCG (N4BP, op)	FL	76,230
K4UTE	FL	55,944

Table 10 – Southeastern Division Single-Operator, 10 Meter Standings

K4WI	AL	4,244
KC4TVZ	GA	1,980

Table 11 – Southeastern Division Single-Operator, Assisted Standings

K1ZZI GA 1,095,885

Table 12 – Southeastern Division Multi-Single Standings

KF4ZZ	FL	587,412
W4LHS	GA	234,585

#### 3830 Reflector Comments from the Southeastern Division

AA4LR - Contest started with my radio in pieces on my desk. I had gotten the VCO stability mod as well as the second KPA100 update kit. While I had it all open, I also did a couple of modes to the audio section and one to the KNB2. After that, I had to do a CAL PLL as well as CAL FIL to re-align all the filters. By late Saturday, I got on 80m briefly and worked a few stations. Managed to get on for the last three hours of the contest. Conditions seemed to be modestly good. Great propagation to central and South America late in the day.

AG4W - Had to work a lot harder to make the same number of contacts in the phone than the CW contest. 10 and 40 meters were worse than the CW contest. 20 meters was better. I had a great time running Europe on Sunday morning for an hour. Noise on 15M was louder than normal on Saturday. Used the Orion 2, SB220 at 600 watts, 3 element quad at 40 feet for 10/15/20 and a delta loop for 40/80/160. Can't wait to do some more antenna farming. The 160M/80M vertical goes up next.

AK4I - A great contest. The bands are obviously coming back as I heard many countries that I'd never heard before. I managed to pick up 5 new ones. I'd written a long discussion of my impressions of the contest but when I tried to submit the score the form told me that I'd forgotten to fill in one blank and to click the back key to correct it. Unfortunately it threw away everything that I'd entered previously. (Clearly a deficiency in the program that should be corrected.) It will take too much time to recreate the previous document. However, in summary, a great contest.

K1TO - Another fun ARRL SSB in the books! Once again, a seemingly endless stream of Europeans. The key, though, was that the main source of line noise (that ruined the Oct-Nov-Dec contest season here) has been fixed. With 4 hours to go before the contest, I discovered that both 160 and 75 were not working at all (a downside to not operating outside of contests). Cobbled together solutions to both, finishing just moments before the start. Many thanks to Chris, WF3C for lending his voice keyer. Ran into a bunch of old friends this time and enjoyed the ability to share a brief QSO -- so much easier to do so than on CW.

Certainly, 15 Meters was finally better. Even ran a few Japanese stations for the first time in many years. With just one radio, missed most of the closer-in stuff on 10. I've never gotten SO2R working here on SSB. Some day...

Several annoying frequency disputes, including one from a very well-known station who was a full 2.1 Khz below me and another from someone who moved in on me, then vehemently insisted that \*I\* was the one moving in on him. Then there's the station who believes that a personal 6 Khz swath is deserved...

Enjoyed working many stations on multiple bands. Too many FB QSOs to list here. Thanks to everyone for participating and particularly to those who persisted through the QRM until we could complete the QSO!

K1ZZI - All S&P here. Thanks!

K4AB - Not as much fun as CW portion, but I still wish I'd played full-time. CU WPX as WZ4F.

K4ADR - Great to have 15 Meters back.

K4BAI - FT1000MP, Alpha 78, 1 KW (100W on 10M), TH6DXX, dipole, zepp, inverted vee. I had no amp in the house that would work on 160 or 10M. Need to get both of my Alpha amps off for repairs. High power line noise most of the time. Very bad on 10 and 20M. Great to have the use of the whole phone bands for the first time since 1968. Band conditions were OK on the low bands, good on 20, and fair on 15 and 10. Had difficulty getting the beam to rotate. And a lot of time conflicts with family responsibilities and two tennis matches during the

weekend. Thanks for all the QSOs. Hope to work you all from multi multi station NQ4I in CQ WPX SSB in a few weeks.

K4EA - Horrible power line noise all weekend! It never got below S5 from Europe through north to JA and was typically around S8. Only quite directions were Africa through South America. All Eu stations worked was with the antenna pointed at about 80 degrees where the noise was only S3. My apologies to all who called that I could not hear. Many thanks to all who were persistent and patient while I dug your call out of the crud.

K9MUG - 80M was in good shape for the contest, but always tough from Alabama. Thanks to all who qso'd.

KC4HW - Not much time to give to this event. The Wx was so good today that I found it hard to stay at the radio. Did not really do anything but enjoy the outdoors. Used 200 watts, 204BA @ 107', 40-2CD @ 118' and the dreaded DXCluster. Lot of the spot were off frequency, but easy to tune in, many were not the right call, but what the heck, it was fun to work a few contacts in the contest. Worked 73 countries all together. Would have been nice to have worked 100, but it wasn't going to be! Had a good time, thanks for the Qs! 73

KJ4HYJ - I operated a bit of this contest for the sole purpose of finding new countries.... didn't find much. Most of them were just countries that QRZ says use LoTW, so I figured I'd try and get a LoTW confirmation out of it. I came down into the shack Saturday afternoon to work some of the contest. Planned on working quite a bit, but my mistake was thinking that I would do it QRP (hard on SSB). Ten minutes later I left, frustrated and annoyed. Spent the rest of the afternoon replacing my 40 ft. 40 year old piece of RG-58 coax with RG-8. Didn't quite complete the job, but left the old RG-58 on so I could still work the contest.

At 6 o'clock on Sunday I came down, cranked the power up to 100w, and worked about 11 countries. I felt like one of those S&P stations in a M/M, just looking for new mults. For me I was looking for new countries. Hopefully when I finish replacing this coax, the antenna system will make QRP SSB a LOT easier.

KT4Q - The bands seemed more alive this year. Was able to work on all bands but 10M was still mostly in and out. All was going great until my neighbor said I was getting into his burglar alarm. That added caution to my operating.

Radio: Yaesu FT-1000MP MV Amp: Ameriton AL-572 Ants Cushcraft X7 @ 60ft Carolina Windom 80 @ 40ft Carolina Windom 160 @ 40ft Gap Titan @ 30ft

Software: WriteLog

KT4ZB - Wow - What a difference a few sunspots make! 15 meters is alive and well in Savannah. No EU opening here on 10m, but still had fun with SA openings. 40m was very good and even with low power managed 56 countries including JA on 40m. Part time effort as the

local club wanted to do something for the contest. Helped to set up a Multi-Single station (W4LHS) and watch some new folks try their hand in the QRM bedlam. Think several have caught the contesting bug and want to do more.

Conditions were very good here and since I worked low power, it was almost all S&P. Worked JA on 15, 20 & 40m, also HL, HS, ST, KH2, OD, VK, V51 were nice contacts, but never heard a ZL. The score was almost the same as last years high power score.

Thanks for all the contacts and cu in WPX. FT1000mp Field (100w), TH6DXX, dipoles and N1MM.

KU8E - IC756PRO, AL811H - on loan from K4BAI (500 watts) Center fed zepp @ 50 feet, 160 meter Inverted L with four 130 ft radials Pretty pleased with the score considering I'm using just simple wire antennas. It was frustrating at times to have stations CQ in my face but got over that and still had some fun. Is it me or were there a lot of stations who didn't sign their call for a long time? I think that should be required for every QSO.

I wish a big tower and beams were in my future but they probably aren't... Too many other things are getting in the way. I have some ideas for some wire beam antennas to hang up in the trees this Spring. It sure was fun the run some EU split on 40 meters on Saturday morning. First time I have ever done that from home. The EU opening on 160 meters Sunday morning was also very good. I even broke some pileups and worked a few new ones.

Until next time.... Jeff KU8E

KV4T - Nice conditions, nearly DXCC on 15 meters from AL... I sure enjoyed the contest!

KY5R - Saturday pretty good cndx. Many 05 and 010 JA's in the log. Sunday not so good. No EU or JA runs possible from this QTH. 4/5ths of my score made on Fri nite and Sat. Sunday a real let down. New cycle has a ways to go but nice to have some prop on 15mtrs for sure. TNX for the QSO's this year and have high hopes that next year will be more consistent propagation wise.

N4BCD -Several stations on 5 & 6 bands. Worked some JA's & RU's but where was Africa & Australia?

N4DXI - Started out ok, but then Orion 2 failed. No rf. Checked all menu settings, antennas, swr meters, cables, nothing fixed the problem. Switched to my old workhorse FT 1000D to continue. Last month my pc disc drive failed. Before then my Quad arm snapped. Knock on wood, at least my health is ok, things could be worse!

Orion 2 then FT 1000 D with A3S 40 feet high and 80 meter Windom 40 feet high. N3FJP software. All S & P. Orion 2 shipped to Ten-Tec monday so I'll be ready for WPX and FQP.

N4EK - This weekend is always busy with so many other things going on. Plus I was using a new radio here. Just put in about 3 hours.

N4GG - Just a little lite S&P while stuck doing less fun things... 15 sounded about right given the SSN, but 10 didn't open as I would have expected. The Jas Sunday morning on 80M were about as loud as I have ever heard. There is always a propagation surprise or two when enough people are on the bands to really hear the openings... FT-1000MP, ACOM2000A, Writelog, Wires in the woods

N4KG - I think I enjoy RTTY more than SSB. Phone? UGH! I picked SO Unlimited because SOAB-Assisted was NOT in the List. Conditions from Alabama for this contest ranged from Fair to Poor and were Highly Variable over the weekend. Propagation on 10,15, and 160M were No Where Near as good as during the CW Weekend and the openings were Way Shorter. 20M was STRANGE. The South Americans were weak Friday Night, but there was a fair opening to the Far East. Saturday night, pileups on South Americans were HUGE. The Pacific and Far East were still coming in at 0300Z. Propagation was So Poor Sunday morning that I took a 90 minute Nap in the middle of the morning! The BIG Disappointment was the short and weak opening to Europe on 15M. Only 3 good hours Saturday (vs. 6 on CW) and a Late Opening on Sunday that many Europeans seemed to have missed after giving up when there was NO propagation earlier in the day. I had NO answers to CQSO's on 15M Sunday but had a decent run (my only one) late Saturday morning on 21440 of all places. A few Europeans were worked on 160M Friday night. Saturday night they were Very Weak and not hearing me.

In the Cudda, Shoulda, Woulda department, I suppose if I had stayed in the chair a bit longer and tried CQing on 20M (I get a Headache just thinking about that), I Cudda broken 1000 QSO's, 350 Mults, and 1 Million Points. Oh Well, it was PHONE Contest.

With ALL of my Monobanders out of commission, I was amazed at the results from my TH7 at 40 ft and Wires / GP on the Low Bands. I left my High Dipoles tuned for 40M where they performed amazingly well and used my simple Elevated GP (40 ft tower top loaded by TH7 plus 8 radials at 15 ft on 75M). Even with a 6 dB null to the South (due to another tower acting as a reflector), I still worked everything I heard, including RT0C across the border from BY4.

SO1R with Icom 746, cascaded 2.4 kHz filters + VBT cranked down. B and W PT2500 (1000 to 1200W out with 100W drive).

N4PN - See some of the comments that condx not as good as they had been recently - glad I went single band 20m....there was nothing wrong with that band.

First contact in the log Friday night was JT1CO...now that's the way to start a contest. Other goodies that showed up over the week-end: HZ0ZCW, 6W1SJ (must have been in my backyard...0140Z - 5/9\*\*\*) VR2XMT, XU7ACY, BD6IQD, UP2L, MU0FAL, DU1AV, DU1BP, 9K2K, SV9COL, BX5AA, ER3CT, KG6DX, 5B4AFM and E21YDP (LP on Sunday afternoon).. many VK's - (VK2,3,4,6,7, & 8 - all LP). Great show by the UA9/0's. Worked 84 JA's...

Biggest surprise: Almost giving up a station Sunday afternoon who kept calling. Finally turned the beam down from Europe and it was TY2SF.... One DH3 called me four times on Sunday...no one using logging programs anymore? It seems like a lot more dupes these days....Last few hours on Sunday turned out well with TO5A, DS5FNE, and my friend, HP3FTD, who always finds me for that mult...Very last contact was a new mult....VP2MPR...He had a buzz saw there coming on the band just above my frequency where I was trying to scare up a few more JA's...glad he showed up just in time.... Hard to believe so may VK's and didn't work a single ZL...almost nothing in Africa...not even one ZS....

Still great fun..thanks to all who made the log and to a few that I just couldn't get....

NA4BW - 10M ONLY score - stayed @ home for this one. WX FB here this weekend for a change. 73 Brian NA4BW

W4SVO - First time operating on 15 meters in this contest, usually do 80 or 160 meters. Also first time from my dad's qth(W4PZV,sk). Condx not as good as two weeks ago in the cw contest, which I did this band also. Only 12 QSO's the first night. Saturday worked TM6M at 1115z for first European. Then it was 30 mins later to start the onslaught. Saturday had 538 QSO's and 83 countries in the log, but not many JA's. Sunday morning did not start working Europe until 1245z, but had a late run around 1800z, working Italian stations, which was 8pm their time, in complete darkness! After that spent the rest of the day looking for new mults and stations going up and down the band. Sunday night not much of an opening into Asia, but did hear BX5AA, but he could hardly hear any stateside. Well until next year. Cu all in two weeks from NQ4I, where we will have a great team in WPX.

#### Southwestern Division – by Leigh Jones, KR6X

2010 was a slight upturn on the "daylight" bands after years of downward trends, leading a heightened interest in the all-band categories.

# **Single-band Results**

10 Meters - Ten meters saw no single band entries this year from the Southwestern Division. Yet, the upturn was clear on the air as we saw N6QQ logging 55 10 meter contacts in the assisted category and W6QU (W8QZA, op) logging 36 contacts on 10 meters as a part of his QRP all band effort. Last year it took a full time single band high power entry to turn in these kinds of results.

15 Meters - W6AFA and N7RQ held a single op/single band 15 meter shootout with W6AFA coming out on top owing to his band-high 534 contacts. 15 meters was a high point in this years Southwestern Division competitive terrain.

20 Meters - With such a great focus on 15 meters this year, competiton on 20 meters waned. The top single-band 20 meter competitors in the Southwestern Division this year were well behind the single operator all band competitors on 20 meters, behind the QRP all band competitors as well. Yet 20 meters was productive for the all band entries, with several scoring in the one hundred multiplier range.

40 meters - 40 meters in the Southwestern Division cannot be understood without recognition of the superlative competitive leadership of W6YI. Sometimes his station is used as a multioperator station, but when Jim enters as a single operator he lately has shown a propensity for high scores on 40 phone. His 832 QSOs and 84 multipliers easily defeated second place KI6LZ.

75 and 160 Meters - There were no single band entries on 75 or 160 meters this year from the Southwestern Division.

#### **All-band Results**

K6NA led all single operator entries with 1,213,800 points in the SO-HP category - about 50% ahead of nearest competitor K5RR. Glenn made heavy use of 20 and 40 meters to build up this lead, giving up a little on 15 meters. In the SO-LP category, K6AM defeated K7JE and N6RV for top honors. John can credit his 75 meter and 40 meter results – both QSOS and multipliers – for most of his victory. W6QU (W8QZA, op) was the unparalleled victor in the division in the SO-QRP category. The Single-Op, Assisted category saw hot competition from a bevy of top competitors: N6QQ, KC6X, N6ED, N6WIN, and N6KI distinguished themselves, with N6QQ finishing first in a tight race on the strength of his 15 meter totals – especially his 73 multipliers on that band.

# **Multioperator Results**

There were no Southwestern Division Multi-Multi entries this year. N7VF led a handful of Arizona competitors in the Multi-Single category. The multioperator categories can be a good training ground for inexperienced contesters... perhaps this is an indicator of great things to come from AZ.

#### The Clubs

The club competition this year again was a dramatic focus of attention in the Southwestern Division. Clubs are truly the best vehicle for raising interest in on-the-air Amateur Radio activities. The Southern California Contest Club moved from the Medium category to the Unlimited category this year, where with more than double the average score per entry, the SCCC topped the new Arizona Outlaws Contest Club to take Southwest Division honors. The Central Arizona DX association took top honors in the Medium club category with the highest average score per member of all Southwest Division club entries. Taking Southwest Division honors in the Local club category, the Southern California DX Club's six entries topped the three entries from the Northern Arizona DX Association, 1.9 M points to 0.5 M points.

# West Gulf Division – by John Geiger, AA5JG

What a difference a few sunspots can make, especially from the "Black Hole" in the center of the country.

Dxing is always tough from 5-land, except for working into South America and the Caribbean. The QSO rich areas of Europe and Asia are far away and the East and West Coast DXers lie between us and the DX. However, 71 stations from Texas and Oklahoma gave it a go in the SSB DX contest this past March. This was up from 63 entries in the 2009 contest and hopefully it indicates a trend in entries as the sunspots continue to (hopefully) reappear on the sun.

The winner for the entire division was Darin, WG5J in the Single-Operator, Assisted category. Any time a single-operator beats the multi-op stations out it is impressive, and Darin turned in an amazing score of 968,544. He was followed in the Single-Operator, Assisted category by Hal, K5MV at 240,492, Joel, N5JR at 229,245, and Mike, K5NZ at 208,623.

Scoring over 200,000 points is sure an accomplishment at this place in the solar cycle! There were a total of 13 entries in the SOA category using some sort of spotting assistance.

So why do people choose to turn on the DX cluster and enter in the SOA category? Terry, KS5Z used the cluster to help him spot openings and make better use of the limited operating time he had available. Jim, K5BZH, was running 100 watts and a vertical and thought that the cluster would help him overcome some of those limitations. He also hoped to find a few new countries in the contest. One interesting thing he brought up was that contesting stations seem to expect a 2 x 2 call sign over a 1 x 3 call. He spent lots of time correcting stations that originally had him as KB5ZH. One cannot overstate the value of listening in a contest and trying to get it right the first time!

Second place overall in the West Gulf section goes to Marv, N5AW in the Single-Op, Low Power category. Running 100 watts and still beating all of the high-power ops is sure a testament to his operating skills. He scored 883,479 which is well ahead of second place W5GFI at 225,639. Jack, KZ5A finished 3rd in SO-LP at 199,080, which is just a hair ahead of 4<sup>th</sup>-place finisher Robert, WA5VSK with 199,056. Wow, that is a difference of 24 points over a 48-hour contest. Jack had quite a few more QSOs but Robert made up for it with 176 vs. 168 multipliers. Digging down for those 1 or 2 extra countries can sure make a difference in your score. With 28 entries the SO-LP category was by far the most popular entry class this year. Low power should become even more fun in the next few years with more sunspots and better openings on the higher bands.

So what was operating low power like this year? Our winner Marv, N5AW actually operated less time than last year but improved his score. He stated that there were better 15 meter openings to Europe and JA and longer European openings on 20 this year. He also said that getting more rest and breaks made the contest more enjoyable. I also found myself making far fewer fatigue induced errors late in the contest. When the contest was over I felt good enough to take my wife out to dinner. I had also been able to spend a little time with her over the weekend so that she felt she hadn't been totally abandoned. He also added that Sunday morning on 15 meters was one of those rare times when we had better propagation to Europe than most of the rest of the USA did. Several stations said they were only hearing Texas.

Ray, W5RAY, didn't get to operate much in the contest due to work, but also found that a great improvement in working Europe compared to past years. He even worked some all time new countries-way to go! He found it unusual that he didn't work Italy this year, which for him is usually a guaranteed multiplier in a DX contest.

A contest is always a fine opportunity to try out a new radio, and that is the situation our Single-Operator, High Power winner found himself in. Milton, AD5XD used the SSB DX contest to try out his new Elecraft K3. It must have worked, as he won the category with 425,847 points. He states that the 1.8 kHz roofing filter really helped him slice through the band and work stations he would have missed on his previous rig. He also added another antenna to his collection-a 10 meter inverted Vee, and he thinks that also helped. It is impressive that he won the category using only dipole antennas, but feels that he needs to move to at least a tribander if he really wants to improve his numbers. He made some impressive QSOs like Cape Verde on 160 meters, Guam on 40 meters, and Mongolia on 20, but one QSO that stuck out in his mind was 13-year-old Beatriz, PU5BIA (YL) in Brazil on 10 meters whom one could hear dad coaching in the back ground. Sounds like contesting in Brazil has a bright future.

Second place in the SO-HP category went to Jim, K5LAD, with 294,030 points. Jim was also to top scoring single op in the state of Oklahoma. He uses N3FJP software for contesting,

and notice an unusual "feature" in the software during the SSB DX contest. He said that it seemed like during the early Sunday afternoon hours, Kimberly's (XYL of N3FJP) voice saying, "Duplicate" was sounding more and more tired and bedraggled. Then, as the clock approached the last hours she seemed to sound peppier and almost happy to note that the end was in sight. He wondered if this was all in his head or if Scott (N3FJP) has a "time is dragging on" feature built into the software to have Kimberly's contesting attitude parallel our own? Interesting observation, did anyone else notice this?

Milton and Jim were followed in the SO-HP category by Willis, K5EWJ with 225,900 points, Herbert AB5C (what a great call!) with 160,866 points, and 5th place went to Patrick, KZ5J. In all, 14 operators turned on the amp and went for the High Power category.

If you want a true challenge, try running a DX contest, especially an SSB one, at QRP levels! N5DO and KA5PVB were up to the challenge this year. David, N5DO turned in an impressive QRP score from way out in West Texas at 186,000 points. That was just shy of the winning score for all of WTX, and he did it at 5 watts. Charles, KA5PVB, also in Alpine, TX finished second with 26,718 points. I wonder if Charles and David had a cross-town rivalry going this year?

One nice feature of the ARRL DX contest is that you can decide to focus on a single band if you like, instead of having to contest on all six bands. Eleven operators decided to take this route representing all bands except for 40 meters. Charles, W5PR gave it a go on 10 meters and scored 16,380 points. That came from 183 QSOs and 30 countries. Obviously there was plenty of activity on 10 meters in spite of the fact that we are just climbing out of the solar minimum. Just wait a few years if you really want to see 10 meters take off.

Fifteen meters was the most popular single band category this year with 6 stations limiting their contesting to that band. Ron, AF5Q choose to go SOSB-15 since the propagation was pretty good on 15 meters and he wanted the challenge of a single band entry. Rusty, NA5TR took over controls of the W5KFT superstation to finish at the top spot on SOSB-15 with 185,625 points. He just missed a 15 meter DXCC during the weekend, finishing with 99 multipliers. I wonder if he worked a W or VE station after the contest was over just to say he did a 15 meter DXCC in a weekend? K3TD finished second with 14,241, and N5KF finished in third with 6,633 points. It is great to see the large number on 15 meter entries this year after a long period of few sunspots and poor conditions on the higher bands. The improved conditions were definitely reflected in the decision by so many stations to give SOSB-15 a try.

Dave, K5YM decided to try a 20 meter single-band entry this year. He looked over contest scores from the past few years and felt that his best chance at winning an entry class for Oklahoma would be in the SOSB-20 category. It must have worked, as he won the category with 40,110 points. Dave also felt that his station performs best on 20 meters and that 20 would keep him busy during the day and allow him to rest at night.

John, AA5JG, used the same planning as K5YM by checking past scores and thinking that an 80 meter single-band entry would increase his chances of winner a category. It also worked, as he won the SOSB-80 category with 504 points. He also figured that 80 meters would allow him to spend time with the family during the day and operate later at night when the little ones are in bed. Dave, NØRQ finished second in SOSB-80 with 390 points. K5YM and AA5JG illustrate an interesting line of thinking if you want to maximize your chances at winning a certificate. The ARRL Web site will allow you to view past contest results, so what classes in your section have been underrepresented the past few years? What band will allow you to meet other responsibilities and still contest? Since no one entered on 40 meters this year, that might

be a good single-band entry for next year's contest, especially if you want to focus more of your contesting time in the evening and early morning.

Jim, K5RX gave 160 meters a try this year with good results. He made 88 QSOs with 52 countries for a final score of 13, 728. As someone who gets on 160 meters with a poor antenna, I admire anyone who can DX on the top band and Jim certainly knows what he is doing up there.

Two hams opened up their stations for some help by friends and entered the Multi-Op, Single-Transmitter category. The team at K5MR made a fine showing with 815,211 points, just missing 1000 QSOs for the weekend. They finished with 991 QSOs and 277 multipliers. The N3BUO team finished second with 265,872 points, also a fine showing. They just broke the 500-QSO barrier with 507 QSOs and 191 multipliers. Multioperator contesting gives you a chance to put the stations on the air for the entire contest time, even if you as an operator can't hack it for 48 hours (and few of us probably can). It also allows you to watch others contest and learn from them, and just have the fun involved in a team effort.

Those of us who do VHF contesting are familiar with the big signal out of KBØHH in far north Oklahoma, and this year Gary opened up the operating cabin and bunkhouse for a Multi-Op, Multi-Transmitter entry on HF. They worked 587 QSOs and 267 multipliers for a final score of 458,172; good enough for first place in the West Gulf MM category. Building a category-winning station for both HF and VHF categories is a real challenge but Gary has done it. He had tower space left over after setting up the VHF/UHF antennas for some HF beams. His contesting crew added a 192' tower to be used as a J-pole for 40 meters and 80 meters. The 80' microwave tower has 40/80 meter inverted Vees as top guy wires. The UHF tower also holds the 15 meter beam at 35'. The 2 meter tower is host to the 20 meter beam at 65'. And the 6 meter tower has a 5 element 10 meter beam at 45'. That is already an impressive station, but he isn't done yet. He wants to add a 3-element beam for 40 meters and a 5 element beam for 20 meters on a new tower. With these additions KBØHH will be a killer signal on HF as well as on VHF. Gary feels that HF contesting is good training for the 6 meter operators in his VHF crew as they learn how to increase rate. He feels that there are some differences between HF and VHF contesting, though. On HF you seen to spin the rotors less and don't have the stress of having to track the rovers from location to location and run them through all of the bands each time. However, maintaining a competitive station is lots of work. He says the technical work is forever! "I work from one contest to the next on bad feed lines, broken antennas, broken amps, broken rotors, broken computers, broken radios, broken ..."

He also described the contesting area a little for us: "The Bunkhouse and Cabin area is a family retreat/vacation area. I built the cabin in 1976 to have a place to live while attending summer school at North West Oklahoma State University working on the Masters degree. It then became the retreat. There are ponds for fishing and hunting migratory birds, swimming for the grandkids, outdoor living!! The Bunkhouse which was built after I retired in 2000, is a wood shop, metal shop, blacksmithing, foundry, welding, machine shop, plus the living area which houses the kitchen, living area, and the radio room ... oh yes, the bathroom. We operate in tornado alley. There have been times we had trouble even getting to the Bunkhouse for a contest due to the amount of flood waters and roads washed totally out. We have had range fires, lightning strikes, BIG wind (read tornadoes), loss of electricity, loss of water, antennas ripped off the towers, ..... I Love This Place!! Never a dull moment!!"

Sounds like a great place to contest. I know Gary welcomes any rovers to stop by during and visit during a VHF contest and would probably always welcome additional operators for the HF contests as well.

That's all for the West Gulf report this year. See everyone next year with hopefully more sunspots, more countries on the air, and better QSO runs!

#### Canada – by John Sluymer, VE3EJ

It seems that conditions may have been a bit better than in 2009 but a sleepy sun kept big things from happening on both 15 and 10 once again. 2010 saw 118 Canadian stations active as represented by log submissions. This is another healthy increase in VE participation, eclipsing the 2009 level by 19%. Canadians represented 7% of the total VE/W participation. All Canadian provinces and territories were represented with the exception of VYØ, the always rare Nunavut.

### Regional distribution:

Newfoundland	VO1: 4
Labrador	VO2: 1
Nova Scotia	VE1: 6
New Brunswick	VE9: 4
Prince Edward Island	VY2: 3
Quebec	VE2: 14
Ontario	VE3: 47
Manitoba	VE4: 2
Saskatchewan	VE5: 7
Alberta	VE6: 12
British Columbia	VE7: 13
North West Territories	VE8: 1
Yukon	VY1: 2

Of note in the regional distribution above is the high level of participation from Saskatchewan this year, a 350% increase over 2009. Of note as well are the sharp increases in activity levels from Quebec and the Yukon.

#### Categories:

Single-Operator, Low Power continues to be the most popular category with 43 entries followed by Single-Op, Assisted with 21 and Single-Op, High Power with 20. There were 24 Single-Band entries, 2 QRP and 8 Multi-Op stations split evenly at 4 and 4 Multi-Single vs. Multi-Two.

In the Club Competition, Contest Club Ontario (CCO) placed 4th overall in the Unlimited category with 55.5 Million point from 79 participants. The Maritime Contest Club (MARCC) managed 16.2 million with 18 club members submitting logs followed by Contest Group du Quebec (CGQ) with 5 million points from 14 entries. The latter two were in the Medium club category.

In case you thought the participant totals were on the high side, keep in mind that the club scores are combined totals for both the Phone and CW halves of the contest and are always reported with the Phone results.

## Individual Highlights:

Special congratulations to the following for finishing first overall in their respective categories:

- **VY2ZM** (K1ZM op) #1 VE/W Single-Op, High Power.
- VA3DF #1 VE/W QRP. (New Canadian record!)
- VE6WQ (@VE6JY) #1 VE/W Single-Band 20 Meters.

# Top Ten:

# Single-Operator, High Power

- VY2ZM (K1ZM) Overall contest winner, #1 Canada
- VX3AT (VE3AT) Second overall, # 2 Canada.
- **VY2TT** (K6LA) Third overall, #3 Canada.

# Single-Operator, Low Power

- **VE3BDN** Third overall, #1 Canada
- **VE3AD** Fourth overall, #2 Canada

## Single Operator, Assisted

• **VE3MMO** – Ninth overall and #1 in Canada.

#### Single-Operator, QRP

• **VA3DF** – First overall, #1 Canada.

## Single-Band, 160 Meters

- **VE2DWA** Fourth overall, #1 Canada. (New Canadian Record!)
- **VE3EDY** Fifth overall, # 2 Canada.
- **VE3CUI** Seventh overall, #3 Canada.

### Single-Band, 80 Meters

• **VE9ZX** – Fifth overall, #1 Canada.

## Single-Band, 40 Meters

• VA3XH – Ninth overall, #1 Canada.

#### Single-Band, 20 Meters

- **VE6WQ** First overall, #1 Canada.
- **VE3DZ** Fourth overall, #2 Canada.
- **VE3XN** Fifth overall and #3 Canada.
- **VE3NE** Sixth overall and #4 Canada.
- **VO1KVT** Tenth overall and #5 Canada

# Multi-Two

• VE3MIS – Tenth overall, #1Canada.

#### Top Canadian Finishers and Scores:

Single-Operator, High Power: VY2ZM – 5,436120
 Single-Operator, Low Power: VE3BDN – 775,248

• Single Operator, QRP: VA3DF – 294,120

• Single-Operator assisted: **VE3MMQ** – **1,533,927** 

• Single-Operator 10 meters: No entry

Single-Operator 15 meters: VA3FP – 21,000
 Single-Operator 20 meters: VE6WQ – 809,088

Single-Operator 40 meters: VA3XH – 24,759
 Single-Operator 80 meters: VE9ZX – 36,465
 Single-Operator 160 meters: VE2DWA – 4,416
 Multi-Single: VE3UZ – 161,460
 Multi-Two: VE3MIS – 1,515,042

• Multi-Multi: No entry

Two Canadian records were broken this year. Doug, VA3DF broke VE3KZ's long standing 1999 QRP record while Claudio, VE2DWA broke an even longer-standing record held by VE1YX since 1984 on 160 meters.

In the "VE's with suitcases" category, noted are VE7SV travelling to be part of the Multi-Two effort at CE4CT and VE3CX and VE3EJ going stateside to be part of Multi-Multi operations at WØAIH and K3LR.

Finally, at the risk of sounding like a broken record, let's hope that the Sun runs out of sleeping pills to give the much awaited 15 and 10 meter boost in 2011.

## Asia -- by Brett Graham, VR2BG

Japan again dominated Asian competition for 2010, taking all categories with the exception of the Single-Operator, Assisted and Multi-Single, which were won from Asiatic Russia. Second place was also all JAs other than UAØ in the Single-Operator, High Power category. Roughly 63% of entrants were JAs & they made just over two-thirds of the QSOs from the continent, followed by the Russians with 15% of entries & 22% of QSOs, roughly reflecting the distribution of the two top positions. There were a total of 234 entries from the continent, nearly 16% of all DX participants.

In a hopeful sign of improving conditions, six entries made the overall Top Ten in their categories – three times last year's figure and half of those were QRP! Likewise after several years of no reported 10 meter QSOs from the continent, Multi-Multi JA3YBK had nine this year, interestingly nearly double what was worked by overall #2 V48M from the Caribbean. There were even some 160 meter QSOs reported from Asia, with Multi-Single RTØC having made 14.

There were 82 golden logs from Asia. Those with at least 100 QSOs & did not lose a single contact for any reason were JA8ECS (397), UN6P (240) & 7Z1SJ (160). There was only one other DX golden log with more QSOs than JA8ECS. Well done Kazu-san!



Kazu JA8ECS had the second largest golden log (no lost QSOs in log-checking process) of everyone in the contest! (Photo JA8ECS)

Single-Op, Single-Band

There were no single operator single band entrants on 10 meters. On 15 meters, Nob JA1KSO operating from 7J2YAF again led the pack with 96.2k/754/43 (points/QSOs/multipliers), safely ahead of Taka JN1NDY with 86.9k/682/43 and Naomi JA7NVF with 59.6k/573/35. Nob was 28th overall. Scores of all three were at least eight times greater than Nob's score last year.

Some of JA7NVF's lovely antennas went unused as Naomi only worked 15 meters. (Photo JA7NVF)

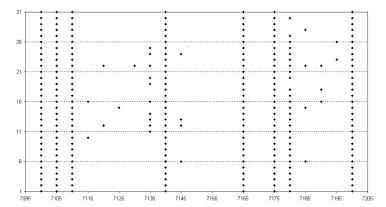
Once again the top three scores on 20 meters were from the Japanese seventh call area (northern end of the main island of Honshu, only JA8 is further north). After being second last year, JH7XMO led this year's Tohoku domination with 213k/1211/60 (23rd overall)

comfortably ahead of Syuichi JA7FTR (last year's winner) with 198k/1130/59. Ted JA7XBG again was third with 173k/1001/58.

On 40 meters, Akira JAØJHA with 198k/1204/55 was well ahead of Makoto JA1XMS with 19.8k/192/35 28 & Ah-Ying VR2YYW with 5.8k/99/20. After just missing the overall Top Ten last year (as Single-Op, High Power), Akira's score this time is sixth.

Speaking of 40 meters, last year the contest was held a few weeks before the date that the broadcast service was to have vacated 7100-7200 kHz. How clear was that segment of the band during this year's contest? The days on which frequencies during March 2010 broadcast signals were reported by either the ITU or IARU Monitoring Systems is shown as a scatter plot below. Broadcasters were sadly still using a fair amount of the band – though the good news is that as this is written (June) several more frequencies have since been vacated, so next year the situation will be better.





The contest was held about one year after broadcasters were to have vacated 7100-7200 kHz.

And down on 75 meters, last year's top scorers swapped places, Aki JE1SPY with 504/23/8 ahead of Dai JF2IWL with 156/14/4 in second.

#### Single-Operator

JR4DAH led Single-Operator, QRP for Asia yet again, with 25.8k/157/56 was 2.5 times larger than last year's score and included three QSOs on 75 meters. Last year Masa was second overall, this year's effort earned him fourth. JE1LDU with 9.9k/101/33 was second and eighth overall. JA2MWV with 4.9k/69/24 – Hiro did not operate on 20 meters – was third and ninth overall, a nice consolation prize after slipping one place from last year.

Likewise Asian Single-Operator, Low Power honors again went to Masa JH4UYB who at 476k/1049/152 was thirteenth overall, well ahead of Masa JA2CUS with 28.8k/156/62 and Peter HZ1PS with 17.1k/113/53. JH4UYB nearly doubled the number of QSOs he made last year.

Returning to the Single-Operator, High Power category after a year's absence, Toshi JA1ELY with 1.15M/1928/203 led the continent & was 17th overall. His score was nearly 24% larger than that of last year's winner. Vlad UAØFM with 572k/1704/114 was second ahead of Mito JM1XCW with 504k/1270/134 - both were in the top 30 overall.

And in the Single-Operator, Assisted category, Yuri RAØFU with 418k/1238/114 doubled the score of second place finisher Hide JF2QNM with 191k/606/106. XU7ACY (Peter, NO2R) with 55.9k/325/59 was third. RAØFU was 21st overall.

### Multioperator

The Multi-Single category was won by RTØC (RWØCWA club station), operated by RWØCF, RWØCN, UAØCA, UAØCDX, UAØCO & UAØCW who amassed 1.39M/2507/187, good for 16th overall. JA8RWU with JR7OMD/2, JE8KKX & JH8PNE/1 were second with 896k/1815/166 & 25th overall. UA9UZZ (piloted by RK9UE & RZ9UN) with 90.9k/470/65 took third.

The only Multi-Two entrant from Asia was JA1YAI, driven by unknown operators to 828 points. Just five of all 79 DX multi-op category entrants did not identify their operators.

A significantly bigger effort this year atop Mt RF by JG3KIV, JG3MRT, JH4NMT, JF4FUF & JS1PWV from JA3YBK was good for 2.39M/3688/218 as Asia's top Multi-Multi for



the second year running & eighth overall. Their score was nearly four times last year's. In second again, JA1YPA operated by JA1PEJ, JF6DEA, JG4KEZ, JI6BRB & JR8VSE managed a very respectable 1.31M/2364/187 for ninth overall – tripling their score of last year.

Impressive antennas at Asian multi-single leader RTØC (Photo RWØCWA).

# Caribbean Region -- by Bill Smith, W9VA

The Caribbean is always a popular warm weather destination in March, so why not take along a radio. This year's results show a good mix of those northern visitors as well as resident operators. In total 41 entries were received, about half from resident stations. If operating from the W/VE side, part of the fun (?) is figuring out where some of the stations are: TO2T, TO5A, T46A? Well, we can look at the prefix list and figure out that T46A is Cuba, but, how about the other two. I am guessing that anywhere from Reunion to Tahiti is possible. Read on for the answer!

And how about 10 meters? Even though we continue to scrape along the bottom of Cycle 23, or have we started Cycle 24 – hard to tell the difference - there were a few openings on that band for the vigilant. Here's a little trivia – these 41 stations made just short of 100,000 contacts. How many QSO's were on 10? The answer is...2,200, slightly over 2% of the total. Judging from the way 10 sounds most days, many of us are surprised there were that many. Also, I think even more surprising, is that the most productive band was 15, which many days doesn't sound much better than 10. Amazing the effect of a contest on band activity!

Caribbean Category Winners - Congratulations to All!

Single-Op, High Power	8P5A (W2SC Op)	7,951,068
Single-Op, Low Power	HI3TEJ	3,488,265
Single-Op, Assisted	J7N (K3TEJ Op)	4,058,577
Single-Band 75	C6AWL (RA3CO Op)	199,125
Single-Band 40	ZF2AH (W6VNR Op)	431,100
Single-Band 20	CO8ZZ	80,172
Single-Band 15	J37K (AC8G Op)	186,006
Multi-Op, Multi-Trans	V48M (W2OX K3NM Ops)	6,668,550
Multi-Op, Single-Trans	VP5H (WØGJ KØMD Ops)	5,931,945

In the Single-Op, High Power category, Tom, W2SC in Barbados as 8P5A was not only first in the Caribbean but first in the world, based on 8,005 contacts and 332 multipliers. Close behind, operating from Jamaica as 6Y9V, was Chad, WE9V, with 7,520 QSO's and 303 mults. Chad's 6.8M score was good for second in the world. Other world Top Ten scores in the SO-HP category from the Caribbean are KP2M (St. Croix) and TO5A – if you guessed ... Martinique, you are correct!

The Single-Op, Low Power category attracted 13 entries, the most popular class in the region. Ted, HI3TEJ repeated as regional winner with 4,497 QSO's and 261 mults. Close behind were V26M, VP9/W6PH, J88DR, J7Y and 8P6EX. Overall, Ted was second in the world, trailing only P4ØA on Aruba. The other stations listed above also made the world-wide Top Ten.

The Single-Op, Assisted category attracted 5 entries, with John, K3TEJ at J7N (Dominica) winning by a significant margin. His 4+M score, based on 4,684 QSO's and 291 mults, not only led the region but was first in the world. Second in the region, and ninth in the world, is NP2KW on St Croix with 1.2M points.

There were ten single-band entries, with 20 meters being the most popular and the most competitive. Congratulations to the 20 meter winner CO8ZZ. The 40 and 75 meter winners, ZF2AM and C6AWL, had great scores and both came in second world-wide on their respective bands. The 15 meter winner was AC8G at J37K (Grenada) with 186k points.

And, finally, the Multi-Op stations. The region's only Multi-Multi Entry, V48M on St Kitts/Nevis, came in with 7,722 QSO's and 290 mults – a score of 6.7M, in this category second in the world only to KH7X. In the more popular Multi-Single category, Glenn WØGJ and Scott KØMD, at VP5H, prevailed over five other MS entries, with 6,529 QSO's and 305 mults, an 18% improvement over their 2009 score. The VP5H score was good for third in the world. Right behind were HI3K, T46A, TO2T and C6ANM. So, where was TO2T? Well, unless the Caribbean has been significantly redefined, we know it's not Reunion or Tahiti as suggested above, but indeed it was Guadeloupe!

#### Odds and Ends...

Location, Location – Not only in Real Estate but in Contesting. Look at the table below for the first and second place scores in the Single-Op, High Power category:

Call	Score	QSOs	Mults	160	75	40	20	15	10
8P5A	7.9 M	8,005	332	351/55	915/58	1468/60	1911/60	2706/58	654/41
6Y9V	6.8 M	7,520	303	425/59	840/59	1283/59	2209/62	2755/60	8/4

Overall, Tom in Barbados had 485 more QSO's and 29 more mults than Chad in Jamaica – now look at how the two stations compared on 10 meters. Barbados, about 1,200 miles southeast of Jamaica, enjoyed hours of propagation on 10 to most areas of North America. Jamaica had only one very short opening to the US West Coast in spite of constant monitoring. The only other stations in the region to have a significant number of 10 meter contacts were also in the eastern Caribbean, Martinique and south. Overall, the biggest 10 meter scores came from even further south, Argentina and Brazil, with reported longer and stronger openings, just providing further evidence that the long North/South path is the only reliable 10 meter opening at this point in the sunspot cycle.

Chad sent along a few pictures – you can see what a world-class contest station looks like, inside and out. Here is Chad at the controls of the north coast Jamaica site. We're not sure if this was before or after he got the 10 meter news from Tom.



And here's part of the 6Y9V antenna farm, looking north over Montego Bay toward North America.



And here's the operating position...



By the way, if you thought 10 was bad this year, it was hugely better than last year. The same Jamaica station shown above entered the Multi-Two category, presumably monitoring the band throughout the contest, came up with only 27 QSO's with 2 (!) mults. In the 2009 contest the Caribbean Region in total had fewer than 200 10 meter contest QSO's.

So that's the Caribbean Region 2010 Phone Contest story. We look forward to the 2011 contest, hopefully with a few more sunspots and more equal 10 meter opportunities for the entire region.

### Central America – by Diego Salom – LU8ADX, assisted by Hector Garcia XE2K

# Centroamérica Central America

A pesar que el año pasado no habíamos tenido participación en la categoría Multi-Multi desde Centroamérica, este año contamos con la presencia de Costa Rica, TI8M activada por un equipo internacional formado por TI2JCY, TI2KAC, TI4ZM, K4UN, W4BW, W4KTR, W4XO, ellos obtuvieron también el 3er puesto mundial.

Although last year we had not had participants from Central American in the Multi-Multi category, this year we have the presence of Costa Rica, TI8M activated by an international team which was composed by: TI2JCY, TI2KAC, TI4ZM, K4UN, W4BW, W4KTR, and W4XO. They were also ranked No. 3 worldwide.

Call sign	Score	QSOs	Mults
TI8M	4.388.202	5.399	273



Team TI8M (Photo TI8M)

También desde Costa Rica estuvo en el aire TI5N con un equipo internacional integrado por AJ3G, KA4RRU, TI2LCO, WØCN, W4DC, WA4PGM, siendo la única estación de la región en esa categoría M2 sacando un 1er. puesto en la región y 2do en el mundo.

Also from Costa Rica was in the air TI5N by another international team with AJ3G, KA4RRU, TI2LCO, WØCN, W4DC, and WA4PGM on it, being the only station in the region in that category they got 1st M2 place in the region and 2nd in the world.

Call sign	Score	QSOs	160	80	40	20	15	10
TI5N	7.792.560	8.261	170/41	916/59	1782/59	2756/63	2258/60	379/34



Front Row Left to Right - AJ3G, TI5KD, WØCN, WA4PGM; Back L to R- TI2IY, KA4RRU, W4DC. (Photo TI5N)

En la categoría Multi-Single, hubo 3 estaciones de Centroamérica, el 1er. puesto de la región fue para México 4A2S que a la vez obtuvo el 5to puesto en el mundo seguido por YN2EA que clasifico 9no en el Top Ten mundial. Por último tenemos a un equipo familiar, Benjamín XE2AU y su hijo de 12 años David XE2AUD siendo éste unos de sus primeros concursos internacionales.

In the Multi-Single category Central America had three stations, the 1st place from the region was for Mexico 4A2S who also achieved 5th place in the world followed by YN2EA who classified 9th on Top Ten in the world. Finally, we have a family team formed by Benjamin XE2AU and his 12-years-old son David XE2AUD, this being one of his first international contests.

Call sign	Score	QSOs	Mults	Operators
4A2S	4.698.120	5.655	280	N7DD, XE2S, XE2Q, XE2RV, XE2URF, XE2JA
YN2EA	2.465.280	3.473	240	WF5W, K5UO, NM5G, WB5TKI, @ YN2N
XE2AUD	622.398	1.438	146	XE2AU & XE2AUD



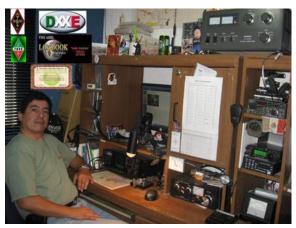
From left to right seated: N7DD, XE2Q y XE2JA; standing left to right: XE2RV, XE2URF, XE2S. (Photo XE2S)



XE2AUD (Photo XE2AUD)

En la categoría SO, Asistido con sola una participación en la región fue para Alejandro XE1EE con 374 QSOs, 87 mults. Con un total de 95,526 puntos.

In the category SO, Assisted with only one participant in the region, 1<sup>st</sup> place was for Alejandro XE1EE with 374 QSOs, 87 mults, giving a total of 95,526 points.



XE1EE (Photo XE1EE)

En la categoría SO-LP, Juan José XE2ANT con algo más de 1000 QSOs clasificó en la región seguido por Dan HQ2W (HR2DMR).

In the category SO-LP, Juan José XE2ANT with something over 1000 QSOs was the leader of the region followed by Dan HQ2W (HR2DMR).

Call sign	Score	QSOs	Mults
XE2ANT	404.040	1.057	130
HQ2W (HR2DMR, op)	304.674	993	103





XE2ANT (Photo XE2ANT)

HQ2W (Photo HQ2W)

Con 3 participantes en la región en la categoría Mono-Banda 15 metros, todos ellos desde México, en primer lugar se encuentra Luis XE1L seguido por el Club XE1TD activada por Antonio XE1GRR, terminando con José Antonio XE1ZTW.

With 3 participants in the region Single-Band, 15 meters, all of them from Mexico, in first place was Luis XE1L, followed by the XE1TD club call operated by XE1GRR Antonio, in the third place was José Antonio XE1ZTW.

Call sign	Score	QSOs	Mults
XE1L	203.280	1.222	56
XE1TD (XE1GRR, op)	39.942	317	42
XE1ZTW	10.752	113	32



XE1L (Photo LU8ADX)

En la categoría Mono-Banda 20 metros, el primer lugar para la región y 8vo en el Top Ten mundial fue para Oleksandr K2BB que salió desde Honduras como HQ2T seguido por Francisco TG9ANF que logro el 10mo puesto en el Top Ten mundial quedando al 3% de puntos, a solo 27 QSOs y a un multiplicador de HQ2T y por ultimo Mario TG9ADQ como 3ro en la región.

In the Single-Band, 20 meters category, the first regional place and 8th overall worldwide Top Ten went to Oleksandr K2BB, who operated as HQ2T from Honduras, followed by Francisco TG9ANF who secured 10<sup>th</sup> place in the worldwide Top Ten, finishing 3% of points and just 27 QSO's and 1 mult behind HQ2T, and lastly, Mario TG9ADQ establishing a solid regional 3rd spot.

Call sign	Score	QSOs	Mults	
HQ2T (K2BB, op)	334.341	1.778	63	
TG9ANF	323.826	1.751	62	
TG9ADQ	89.100	552	55	





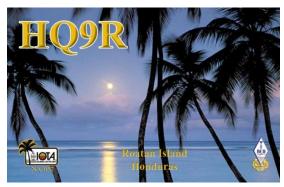
K2BB (Photo K2BB)

TG9ANF (Photo TG9ANF)

Con solo un participante en la región en la categoría Mono-Banda 40 metros, Raymond WQ7R que salió como HQ9R desde Honduras ha logrado el puesto número 7mo del Top Ten mundial.

With only one participant in the Region, Single-Band, 40 meters, Raymond WQ7R activated HQ9R from Honduras and achieved 7th. Place and Top Ten World.

Call sign	Score	QSOs	Mults
HQ9R (WQ7R, op)	180.747	1.066	57



HQ9R (Photo HQ9R)

Con solo un participante en la región en la categoría Mono-Banda 160 metros el puesto fue para Antonio XE1GRR, habiendo logrado un 5to lugar en el Top Ten mundial.

With only one participant in the region for the Single-Band, 160 meters category, the winner was Antonio XE1GRR, who achieved a 5th place in the world Top Ten.

Call sign	Score	QSOs	Mults
XE1GRR	510	17	10



XE1GRR (Photo XE1GRR)

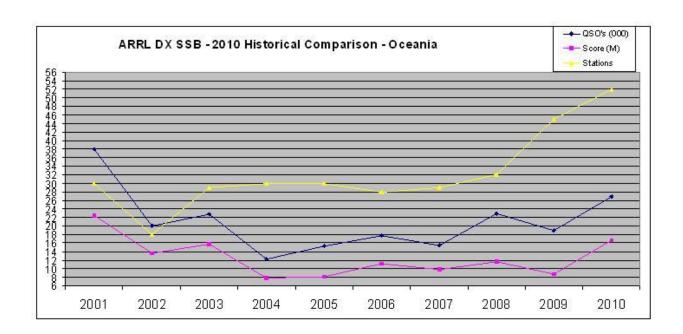
# Europe and Africa - by Andy Cook, G4PIQ

The writeup for Europe and Africa was not completed this year.

# Oceania – by David Burger, VK2CZ/ K3HZ

Participation in the 2010 ARRL DX SSB from Oceania exceeded anything seen in the past 10 years! This is a great turnaround from the depressed participation observed in the past few years and may be an indicator of the generally improving conditions on the bands. A lot of new participants were also on the air and many reported tough going with just 100 watts available to them. This is probably true for any contest operating from the Oceania region.

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## South America – by Diego Salom – LU8ADX, assisted by Hector Garcia XE2K

South America Sudamérica

Con un total de 147 logs recibidos desde el continente Sudamericano pasamos a dar un breve comentario de la actividad en cada una de sus categorías.

With a total of 147 logs received from the South American continent, we will give a brief review of the activity in each of their categories.

Comenzando con la categoría Multi-Multi, desde Brasil pudimos contar con la participación de ZW5B operada por los siguientes colegas: PY5EG, PY5KD, PU5RAS, PU2MZI, PY2NDX, PY2KC, PY2YU, PY3KN, PY3MM. Como lo vienen haciendo últimamente en ZW5B han incluido operadores jóvenes en su equipo a fin de enseñarles e incentivarlos pensando en el futuro. Este equipo obtuvo el primer puesto en Sudamérica y el 3ro a nivel mundial, luego del ganador KH7H y V48M que salio 2do.

Starting with the Multi-Multi category, from Brazil we have the participation of ZW5B operated by the following colleagues: PY5EG, PY5KD, PU5RAS, PU2MZI, PY2NDX, PY2KC, PY2YU, PY3KN, and PY3MM. As they have done recently in ZW5B, they have included young players in their team to teach and encourage them about the future in amateur radio. This team was ranked 1st in South America and 3rd worldwide, after the winner KH7H and V48M who came in 2nd.

Call sign	Score	QSOs	Mults
ZW5B	5.258.400	6304	280
ZY5Z	540.690	1382	134



Team ZW5B (Photo PY5EG)

Con 4 estaciones que han participando desde la región en la categoría Multi-2, en primer lugar para Sudamérica y 3ro en el mundo fue para LP1H desde la provincia de Córdoba, Argentina, los operadores fueron LU5HM, LU7HH, LU7HE, LU3HY, LU2NI, LU5DX. En 2do lugar y 5to en el mundo fue para CE4CT activada por CE4CT y VE7SV, y en 3er lugar y 6to en el mundo, le correspondió a los colegas de Brasil ZY7C y la cuarta estación que clasifico 9na en el Top Ten fue para los colegas de PR5D.

With four stations from the region participating in the category Multi-Two, first to South America and 3rd in the world was LP1H from the province of Cordoba, Argentina. The operators were LU5HM, LU7HH, LU7HE, LU3HY, LU2NI, and LU5DX. The 2nd place and 5th in the world went to CE4CT, activated by CE4CT and VE7SV, and 3rd place and 6th in the world went to Brazilian colleagues ZY7C, and the fourth station that classified as 9th in the Top Ten was for colleagues PR5D.

Call sign	Score	QSOs	Mults.	160	80	40	20	15	10
LP1H	5.586.975	6733	279	0/0	142/42	662/57	1774/62	2938/62	1217/56
CE4CT	4.360.125	5317	275	10/8	123/38	588/53	1068/60	2426/61	1102/55
ZY7C	3.647.520	4512	272	32/18	628/54	629/53	1415/61	1668/61	140/26
PR5D	750.060	1413	180	0/0	7/7	73/31	335/50	788/57	210/35



VE7SV and CE4CT (Photo CE4CT)



LU5HM, LU2NI, LU3HY, LU7HH, LU9HS & LU5DX



Con una participación de 7 estaciones desde el sur del continente en la categoría Multi Single el ganador del continente y a la vez 1er puesto mundial fue para P4ØN operada por KØDQ y N4OC que hacía más de 30 años que no participaba en este tipo de concursos. En 2do puesto también en el Top Ten fue para el equipo de PJ4G activada por K2NG y K1VR, con un 3er puesto continental y 7mo en el mundo fue para CW5W operada por N3BNA, CX4VA, CX5TR y CX6VM.

With a turnout of seven stations from the southern continent in the category Multi-Single, the winner of the continent and also 1<sup>st</sup> place worldwide was for P4ØN, operated by KØDQ and N4OC who for more than 30 years weren't involved in this type of competition. (See DX Results in the main writeup for a photo.) 2nd place in the Top Ten went to the team PJ4G, activated by K2NG and K1VR. Third continental place and 7th in the world was CW5W operated by N3BNA, CX4VA, CX5TR, and CX6VM.

Call sign	Score	QSOs	Mults
P4ØN	7.373.388	7461	332

PJ4G	6.494.220	6647	327
CW5W	3.170.976	3918	272
HD2A	1.005.480	1636	210
ZW8T	617.232	1270	167
L73D	481.596	1212	134
LQ4D	58.716	238	84

Ahora es el turno de comentar las estaciones SO, Asistidos, donde año tras año va agregando nuevos adeptos en esta categoría habiendo este año recibido 18 planillas. El ganador Sudamericano de este año fue Lucas LU1FAM desde LT1F habiendo obtenido a la vez el 3er puesto en la grilla mundial, seguido por Wanderley PY2MNL activando su licencia especial ZX2B con un 6to lugar en el Top Ten. Estas dos estaciones lograron menos del 0,5% de errores sobre el total de los comunicados y en 3er lugar Sergio CE1TT.

Now is the time to comment on the SO, Assisted stations, where year after year new fans are added in this category. This year 18 logs were received. The South American winner this year was Lucas, LU1FAM using LT1F obtaining also the 3rd place in the global grid, followed by Wanderley, PY2MNL activating the special call ZX2B and achieving a 6th place in the Top Ten. These two stations made less than 0.5% errors of total QSOs. Sergio CE1TT got 3rd place.

Call sign	Score	QSOs	Mults
LT1F (LU1FAM, op)	2.728.818	3847	237
ZX2B (PY2MNL, op)	1.928.004	2921	221
CE1TT	738.906	1703	146
YV5EAH	678.480	1302	176
CW7T	422.565	992	143
PY4OG	167.040	938	60
PW2B	165.240	924	60
PY2VZ	103.329	396	89
PY3OPP	89.208	537	56
VP8DMH	84.480	516	55



LU1FAM (Photo LU8ADX)

En la máxima categoría de un mono operador la SO-HP, con un total del 15 logs recibidos, el 1er puesto Sudamericano fue para Jerry WB9Z desde PJ2T que a la vez obtuvo el 3er puesto mundial, el 2do lugar fue para Ramón PZ5RA desde Paramaribo que califico en la grilla del Top Ten en el puesto 9no.

At the top category for a single operator the SO-HP, with a total of 15 logs received, the 1st place in South America went to Jerry, WB9Z as PJ2T from which he got the 3rd place worldwide, the 2nd place went to Ramon, PZ5RA from Paramaribo who qualified in the grid of the Top Ten in the 9th position.

Call sign	Score	QSOs	Mults
PJ2T (WB9Z, op)	6.554.676	6622	332
PZ5RA	2.459.646	3384	243
YV5KG	1.535.655	2334	227
L44DX (LU3DX, op)	864.546	1650	178
LW3DC	510.120	1101	156
PP1CZ	457.449	1119	139
HK3/KC2LSD	421.650	990	150
НКЗЈЈН	316.383	668	163
PP5JY	91.962	405	78
PY5KA	74.184	287	88



WB9Z @PJ2T (Photo WB9Z)

PZ5RA (Photo LU8ADX)

Habiendo recibidos 26 planillas de en la categoría SO-LP, siendo esta la categoría con mas participantes y con un tremendo resultado con apenas el 0,4% de errores en su log y a poco de batir el record, el ganador Sudamericano y mundial fue John KK9A desde P40A, el segundo lugar fue para Luis HK6P que a la vez obtuvo el 9no lugar en el Top Ten de la categoría y el 3er sudamericano clasificado fue Gustavo LU7HW.

auris Guris

Having received 26 logs in category SO-LP, this category was the one with the most participants and also tremendous results. With only 0.4% of errors in the log and very close to beating the record, South American and global winner was John, KK9A from P4ØA. Second place went to Luis, HK6P who also is 9th place in the Top Ten for the category, and South American 3rd place went to Gustavo, LU7HW.

Call sign	Score	QSOs	Mults
P4ØA (KK9A, op)	5.510.736	5987	308
HK6P	653.913	1077	207
LU7HW	619.164	1337	156

LU5FF	600.660	1430	141
P43E	415.410	1139	122
PY1ZV	250.614	851	102
LW5EE	213.435	771	93
PY7ZY	195.873	601	109
LU5CAB	161.082	496	114
LW1HR	88.725	334	91



KK9A @P4ØA (Photo KK9A)

En la categoría SOAB QRP, solo 2 estaciones participaron desde este continente, el primer lugar fue para José PU5ATX que a la vez saco el 10mo puesto en el Top Ten de dicha categoría, seguido por su colega Antonio PY2BN que quedo debajo por solo 36 puntos de diferencia.

In the SO-QRP category, with only two stations involved from this continent, the first place went to Jose, PU5ATX who took the 10th place in the Top Ten in that category, followed by his colleague Antonio PY2BN who is below with just 36 points.

Call sign	Score	QSOs	Mults
PU5ATX	4.536	76	21
PY2BN	4.500	54	30



PU5ATX (Photo PU5ATX)

Entrando ahora en las categorías Mono banda, comenzamos por la banda de 10 metros que durante este concurso se pudo apreciar la mejoría en la propagación, es así que este año se recibieron 27 planillas desde Sudamérica.

Coming now to the Single Band categories, starting on the 10 meters band. During the contest we were able to appreciate the improvement in the propagation, so this year we received 27 logs from South America.

En SOSB-10, este año volvió ganar esta categoría no solo la continental, sino la mundial, Juan Manuel LU1HF, superando los 1000 QSOs cosa que no pasaba hace algunos años, seguido por Roberto LU2FA que quedo debajo por solo el 20% de puntos, en 3er lugar Alex LU2UF desde el Radio Club LU1UM.

In SOSB-10, the winner, not only continental but global, was Juan Manuel, LU1HF again, surpassing the 1000 QSOs which had not happened since a few years ago, followed by Roberto, LU2FA by just 20%, and in 3rd place was Alex, LU2UF from the radio club LU1UM.

Call sign	Score	QSOs	Mults
LU1HF	255.696	1540	56
LR2F (LU2FA, op)	202.608	1219	56
LU1UM (LU2UF, op)	103.509	657	53
LU6FOV	93.330	613	51
PY2ZXU	83.556	635	44
PU50GE	81.075	590	47
CE2WZ	74.925	559	45
PY2MTS	63.624	485	44
PU2LEP	46.242	367	42
CX4DX	39.663	345	39



The LU1HF 10 meter antennas (Photo LU1HF)



LU2FA / LR2F y LU8ADX / AY8A (Photo LU5FF)

Un párrafo aparte se merece dos jóvenes operadores que participaron desde Brasil, ellos son Beatriz PU5BIA de 13 años y Eduardo PU5FJR de 11 años. Ellos son hijos de Sergio PP5JR / ZX5J que mientras el participaba en la banda de 15 metros, sus hijo compartían de a ratos la estación en 10 metros. Ellos en pocas horas de operación lograron hacer algo más de 300 QSOs cada uno con un porcentaje bajo de errores. Felicitaciones chicos!

Special mention goes to two operators that participated from Brazil. 13 years old Beatriz, PU5BIA and 11 years old Eduardo, PU5FJR are Sergio's, PP5JR/ZX5J's children. They got to share the 10 meter station from time to time during the contest, while their father was operating 15 meters. In just a few hours of operations they logged approximately 300 QSO's each, with one of the lowest error percentages – congratulations, kids!

Call sign	Score	QSOs	Mults	Hours
PU5BIA	37.800	309	42	4,4
PU5FJR	50.799	418	41	6,8



PP5JR and PU5BIA (Photo PP5JR)



PP5JR and PU5FJR (Photo PP5JR)

En SOSB-15 con 25 logs recibidos el ganador de la categoría con más de 3000 QSOs, fue nuevamente Sergio PP5JR operando su gran estación "Morro da Boa Vista" ZX5J, muy pegadito, a solo 5% de puntos quedo Ezequiel LU1FDU con su licencia especial LP2F, un joven muy entusiasta y que concurso tras concurso viene superando su parte operativa como también su estación y en 3er puesto y 5to en el Top Ten clasifico Fabio PY2BK.

For SOSB-15 with 25 logs received, the winner of the category with more than 3000 QSOs was again Sergio, PP5JR (*Seen above with his young operators* – *Ed.*) operating his big station "Morro da Boa Vista" ZX5J. Too close from him with only 5% points of difference was Ezequiel, LU1FDU, with his special license LP2F. A very enthusiastic young guy who contest after contest improves his operational skills as well as his station, in the 3rd place and 5th in the Top Ten was Fabio, PY2BK.

Call sign	Score	QSOs	Mults
ZX5J (PP5JR, op)	588.504	3188	62
LP2F (LU1FDU, op)	558.699	3080	61
PY2BK	398.574	2209	61
HC1HC	379.908	2103	61
AY5F	325.008	1790	61
PY1KN	266.448	1470	61
PY3FOX	264.261	1513	59
PY1NB	226.980	1265	60
HC2GF	224.982	1354	58
LQ5H	192.204	1140	57



LU1FDU (Photo LU1FDU)

En SOSB-20 con 14 logs recibidos en esta categoría no hemos logrado ingresar en el Top Ten, el 1er lugar Sudamericano fue para Chris 9Y4D, seguidos por Andre PY2MTV y el 3er lugar fue para Adriano PY2ADR con su licencia especial ZY2C.

In SOSB-20 with 14 logs received in this category South America failed to make the Top Ten, but South American 1st place went to Chris, 9Y4D, followed by Andre, PY2MTV, and 3rd place went to Adrian, PY2ADR with his special license ZY2C.

•		•	
Call sign	Score	QSOs	Mults
9Y4D	290.346	1593	62
PY2MTV	242.730	1331	62
ZY2C (PY2ADR, op)	170.100	951	60
PY2NY	131.688	748	59
PY5ZHP	96.396	560	58
PY5QW	89.610	520	58
PP2RON	50.796	341	51
PR7AR	44.394	312	49
CP1FF	41.850	281	50
CE3DNP	28.077	197	49



9Y4D (Photo 9Y4D)



PY2MTV (Photo PY2MTV)

En SOSB-40 con 2 logs recibidos desde el continente, en el 1er puesto sudamericano en la categoría fue para Greg YV5OK, seguido por Juan Manuel YW5T.

In SOSB-40 with two logs received from the continent; 1st place South American in the category went to Greg, YV5OK, followed by Juan Manuel, YW5T.

Call sign	Score	QSOs	Mults		
YV5OK	148.680	855	59		
YW5T	99.000	617	55		



YV5OK (Photo YV5OK)

En SOSB-80 con 3 logs recibidos desde Sudamérica, el 1er puesto para este continente y 5to en el mundo fue es para Jesús YV5MSG, seguido por Jham HK1NK que obtuvo el 7mo lugar en el mundo y Ismael YV6BXN el 8vo puesto en la grilla mundial.

For SOSB-80, with three logs received from South America, 1st place for this continent and 5th in the world was Jesus, YV5MSG, followed by Jham, HK1NK who got 7th place in the world, and Ismael, YV6BXN, 8th place in the global grid.

Call sign	Score	QSOs	Mults
YV5MSG	113.190	694	55
HK1NK	99.693	595	57
YV6BXN	85.542	547	53



YV5MSG (Photo YV5MSG)

En SOSB-160 con pocos QSOs pero que desde estas latitudes llevan un gran trabajo lograrlos, el 1er puesto para la región y 4to en el mundo fue para Juan Carlos LU2DVI.

In SOSB-160 with a few QSOs but from which in these latitudes takes a great effort, achieving 1st place in the region and 4th worldwide went to Juan Carlos, LU2DVI.

Call sign	Score	QSOs	Mults
LU2DVI	1.248	26	16

# PART V – Additional Tables

Top Ten Since 2002

Regional Leaders

**Continental Leaders** 

Sponsored Plaque Winners

Тор Те	n - US/VE									
	Single-Operator, High-P	Power								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	KQ2M	VY2ZM (K1ZM, op)	VY2ZM (K1ZM, op)	VY2ZM (K1ZM, op)	VY2ZM (K1ZM, op)	VY2ZM (K1ZM, op)	VY2ZM (K1ZM, op)	VY2ZM (K1ZM , op)	VY2ZM (K1ZM, op)	
2	K5ZD (KM3T, op)	KQ2M	VE3EJ	VC3A (VE3AT, op)	VE3EJ	VO1MP	NN3W (@N3HBX)	K5ZD (KM3T, op)	VX3AT (VE3AT, op)	
3	K4ZW	VE3EJ	N9RV	K4ZW	VC3A (VE3AT, op)	VC3O (VE3AT, op)	K4ZW	AA1K	VY2TT (K6LA, op)	
4	VE3EJ	K1TO	K4ZW	AA1K	K4ZW	K1TO	VE3EJ	VO1MP	K3CR (LZ4AX, op)	
5	W9RE	K3ZO	W9RE	W9RE	VY2TT (K6LA, op)	AA1K	VC3E (VE3AT, op)	VC3A (VE3AT, op)	W9RE	
6	N2NT	N9RV	VE3AT	W3BGN	W9RE	K3CR (LZ4AX, op)	AA1K	K3CR (LZ4AX, op)	AA1K	
7	VY2SS (K6LA, op)	W9RE	AA1K	VE3DZ	K3CR (LZ4AX, op)	K1RU	VO1MP	K3ZO	W3BGN	
8	AA1K	W3BGN	K3ZO	K3ZO	NN3W (@N3HBX)	W9RE	W3BGN	KK1L	K8PO	
9	WB9Z	AA1K	K3CR (LZ4AX, op)	K7RL	AA1K	WB9Z	W9RE	W3GQ	K1TO	
10	K3ZO	K5TR	K3NA	VO1MX	W3BGN	K7RL	K1RX	VY2SS	NC1I (K9PW, op)	
	Single-Operator, Low-P	ower								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	VA3UZ	W4IX	N5AW	NN3W	N1UR	N1UR	K1BX	N1UR	N1UR	
2	K8PO	N5AW	N1UR	N1UR	K2PS	W3LL	KU1CW	N1PGA	N5AW	
3	ACØW	N1SV	N1SV	K2PS	N5AW	N5AW	W3LL	K2PS	VE3BDN	
4	N1SV	KS1J	N4TZ	N1PGA	N1PGA	N4KG	N5AW	N5AW	VE3AD	
5	N5AW	N8II	KS1J	VY2TT (K6LA, op)	W1JQ	VE3AD	N4TZ	N4TZ	N4XL	
6	K8EP	N4TZ	W1JQ	N4TZ	WD5K	VE3XN	N1PGA	N1SV	KT4ZB	
7	N4TZ	N1UR	KG1E	W4XDX (WØYR, op)	VO1MX	W4TAA	K2PS	WD5K	K6AM	
8	W2TZ	WA1S	N1PGA	WD5K	VE3AD	N3DG	W1CTN	W1NT	NA4K	
9	K1VR	W1CTN	N8WRL	W1JQ	K8BL	KD9MS	K7SV	N4XL	KD9MS	
10	WS1A	N4IG	K8IA	KS1J	W1CTN	W1CTN	N4XL	W3LL	WA2JQK	
	Single-Operator, QRP									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	N4KG	N4KG	N4KG	KA1LMR	K4CIA	N1TM	K4CIA	NØKE	VA3DF	
2	K7MM	WB3BEL	KA1LMR	KO1H	N8IE	KA1LMR	W6QU (W8QZA, op)	VA3DF	N1TM	
3	N2XT	N1TM	N8IE	VE3KZ	NDØC	VA3DF	N1TM	N1TM	NØKE	
4	W3EWL	VE3KZ	WØAH	W6QU (W8QZA, op)	N1TM	WA8WV	VA3DF	W6QU (W8QZA, op)	N5DO	
5	WA8ZBT	WA8ZBT	N1TM	K3TW	W6QU (W8QZA, op)	KA1C	K3TW	NN7SS (K6UFO, op)	NDØC	
6	KB3TS	N8IE	K7MM	K7MM	VE6EX	N4AU	WA8WV	N4IJ	W6QU (W8QZA, op)	
7	KKØQ	K4WY	W6AQ	N1TM	KA1C	K3TW	N8XA	WF4U	WF4U	
8	NØUR	KKØQ	WA8ZBT	NDØC	VA3DF	N4ZAK	KA5PVB	KT8K	KT8K	
9	N3GXY	KG5U	K4WY	VA3DF	K3TW	KT8K	K5KLA	KA5PVB	N5FPW	
10	VE6BF	W1AMF	K3TW	KR1ST	N3HU	KO1H	K5ZE	NØUR	K3TW	
	Single-Operator, 10 Me	_								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	W4ZV	W5PR	K5RX	W5PR	K4WI	K4WI	K4WI	W5PR	W5PR	
2	W5PR	K4WI	K4WI	NA4CW	N2EOC	KE5CCN	NA4CW	NA4CW	K4WI	
3	K4EA	K9BGL	W2KV	N6EE	W5PR	KI4ETD	W6GMT	K4WI	W3EP	
4	K9NW	K7BV	KØRH	NØVD	K4QVK	WAØFQK	K4JRB	K4MF	KC4TVZ	
5	K5RX	W2RD	W7UPF	K4WI	WB5JID	AD5ZA	KM6Z	W7ISG	KE5SNJ KD4W	
6	K4WI	W2KV	N6EE	KM6Z	WB2AMU	K4DLD	KI4ETD	W6GMT		
7	VO1MP	K4JLD	KØGT	N2EOC	AA1ZT	KN4JN	KE5SNJ	K4JRB	WA2AOG	
8	K7XZ (K1MY, op)	NØHF	AA1ZT	WD9DZV	W9CNF	KI4EVA	W5MK	NN1N	KI6YYT	
9	K4VX (N9JF, op)	K1VSJ	N6HC	KC9AMM	W9ROG	KE3WM	WAØFQK	ND6S	N1AIA	
10	K7QQ	W7UPF	KC9AMM	KG6YEF (KX7M, op)	WAØFQK	W6GMT	W4GRW	W8REG (tie)	K7ULS	
	1	1	1		1	1	I .	WAØFQK (tie)	i i	

	Single-Operator, 15 Met	ers							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	VE6WQ (@VE6JY)	N7DD	N7DD	K5TR (WM5R, op)	N4PN	K2SS	NR5M	K4EA	W4SVO
2	N3RD	KVØQ	N4PN	N4PN	K9BGL	K6XX	KC7V	K5TR (WM5R, op)	N3HBX
3	N2TX	N3HBX	KVØQ	KC7V	N2MM	K9BGL	AC50	N4PN	W5KFT (NA5TR, op)
4	W7WA	N5TW (KC5YKX, op)	N3HBX	W6AAN	KØRH	KC7V	N8PR	N4BP	KV4T
5	K6HNZ	WX5S (@N6RO)	WE2F	N5AW	NA4CW	K8IA	WØVX	K90M	N1SV
6	AD4L (@N4AF)	WW4LL	W7AT (W7EW, op)	K8IA	N5DO	NØVD	W7UPF	KC7V	W6AFA
7	WA7AR	VO1MP	AK2P (KC2LLM, op)	KØRH	WA7LT	K5FP	KC6R	WA2AOG	N7RQ
8	WF3J	W6AFA	WW4R (K4WX, op)	W6AFA	W7BJN	NØRB	KE3WM	KC6R	AC5O
9	VE7ZBK	N8BJQ	W7UT	N6QQ	W7EB	W2AW	KØRH	N2CU	N4TZ
10	N1HRA	K6HNZ	W7EB	NN7ZZ (N5LZ, op)	KI6LZ	KC6R	W4SUL	K7BG	W6SR
10	Single-Operator, 20 Met		W/ED	ΝΝ722 (Ν312, Ομ)	NIOLZ	KCOK	W43UL	N/BQ	WUSK
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	N7DD	W7WA	VE6WQ (@ VE6JY)	K2XA	VE6WQ (@ VE6JY)	W7WA	K2XA	KQ2M	VE6WQ
2	WW4M	WA2QNW	W7WA	N3HBX	W7WA	NA3D	W7WA	K2XA	KU1CW
3	K1QS	VE3DZ	VY2TT (K6LA, op)	N1RR	N3HBX	N4PN	N4PN	VE3XN	N4PN
									VE3DZ
5	VE6EX (@VE6JY)	NQ4I	N800	VO1TA	W6AAN	VA3YP	VO1HE	W8ZN	VX3XN
	N9HCA	WØYR/4	WA60 (@N6RO)	W8TWA	W1NR	W6AAN	VO1KVT	WØEWD	_
6 7	W7EB K4VUD	W7FP K9CAN	K6HNZ W9IGJ	WA1JMP W5FO	VE3XN W8TWA	W7BJN K6HNZ	W8TWA W7BJN	W1NR VE5ZX	VE3NE KK1KW
									_
8	KB1EAX (WA1LNP, op)	WA1MKS	VE3DZ	K6HNZ	K8IA	W8TWA	W9NY	N7AT (K8IA, op)	WR2G N8II
9	WØID	WY3T	W8CZN	W7GG	K6HNZ	W7TTE	K2MFY	W9EXY	
10	W5ZO	K7LVJ	K4BP	WA7AR	NV8N	W6AEA	WR2G	K6HNZ	VO1KVT
	Single-Operator, 40 Met		2004	2005	2000	2007	2000	2000	2010
1	2002	2003 N4PN	2004 K4XS	2005	2006	2007	<b>2008</b> W6YI	<b>2009</b> WB9Z	
2	K4XS WQ2M	W2MF	N6IG	K4XS KC2NTB	K8DJC WDØBGZ	KY5R W1XX	N4QV	W6YI	W6YI KI6LZ
3	VA6MA (VE6MAA, op @		WX4G	N5MV	NA2X	WDØBGZ	WDØBGZ	WU2X	WDØBGZ
4	W2MF	K8DJC	K8DJC	WDØBGZ	VA3XH	K8DJC	AA4VV	K4AB	K4KZZ
5	K7KR	K2UOP	WF2W		N5OT	K5MQ	K8DJC	W6PU	W1AJT
6	VE7IG	WQ2M	AD8C	VE6WQ (@VE6JY) K4VUD	W9SE	K4KZZ	AD8J	WDØBGZ	W8FR
7	K8DJC	KSØT	K5GH	AD8C	W1TY	KI6LZ	W3TMZ	K8DJC	K1EY
8	W9GXR	AD8C	W8JWN	K1IM	AD8J	K4LTA	K7AO	AC5O	NØUU
9	WYGXK	AD8C	VV8JVVIN	W8FR	W9GXR				
9	V0A0	NOOY	NOW						
	K8AO	N9QX	N2KX			W8FR	VA3XH	VE6JY	VA3XH
10	KD4RH	AD8J	N2KX KSØT	ABØCT	N1QM	W8FR W9OP	W8JMF	AC8Y	N8QAZ
	KD4RH Single-Operator, 80 Met	AD8J ers	KSØT	ABØCT	N1QM	W9OP	W8JMF	AC8Y	N8QAZ
10	KD4RH Single-Operator, 80 Met 2002	AD8J ers 2003	KSØT 2004	ABØCT 2005	N1QM 2006	W9OP 2007	W8JMF 2008	AC8Y 2009	N8QAZ <b>2010</b>
10	KD4RH Single-Operator, 80 Met 2002 AA1BU	AD8J ers 2003 AA1BU	2004 AA1BU	ABØCT  2005  KSRX	N1QM 2006 K1LZ	W9OP 2007 AA1BU	W8JMF  2008  ND8DX	AC8Y 2009 KU2M	N8QAZ <b>2010</b> AA1BU
10 1 2	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R	AD8J ers 2003 AA1BU KT1V	Z004 AA1BU W4SVO	2005 KSRX KM1R	N1QM 2006 K1LZ AA1BU	2007 AA1BU KT1V	W8JMF  2008  ND8DX  N3YD	2009 KU2M AA4MM	N8QAZ  2010  AA1BU KU2M
10 1 2 3	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y	AD8J ers 2003 AA1BU KT1V K6OY	Z004 AA1BU W4SVO W5PR	ABØCT  2005  KSRX  KM1R  K4JLD	N1QM  2006  K1LZ  AA1BU  KU1CW	W9OP  2007  AA1BU  KT1V  KU1CW	W8JMF  2008  ND8DX  N3YD  K4KZZ	2009 KU2M AA4MM NØNI	N8QAZ  2010  AA1BU KU2M N4QV
10 1 2 3 4	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op)	AD8J ers 2003 AA1BU KT1V K6OY AA4MM	Z004  AA1BU  W4SVO  W5PR  N2GC	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM	N1QM  2006  K1LZ  AA1BU  KU1CW  K5RX	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG	2009  KU2M  AA4MM  NØNI  KM1R	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI
10 1 2 3 4 5	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y	AD8J ers 2003 AA1BU KT1V K6OY AA4MM	Z004  AA1BU  W4SVO  W5PR  N2GC  VE6JY	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD	N1QM  2006  K1LZ  AA1BU  KU1CW  KSRX  W4SVO	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD  K9MUG	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL	2009  KU2M  AA4MM  NØNI  KM1R  AA4V	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX
10 1 2 3 4 5 6	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op)	AD8J ers 2003 AA1BU KT1V K60Y AA4MM N6RO	Z004  AA1BU  W4SVO  W5PR  N2GC  VEGJY  K6OY	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK	N1QM  2006  K1LZ  AA1BU  KU1CW  KSRX  W4SVO  NØNI	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD  K9MUG  NØNI	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M	AC8Y  2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX  W4QNW
10 1 2 3 4 5 6 7	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op)	AD8J ers 2003  AA1BU KT1V K60Y AA4MM N6RO W7CB W5FO	AA1BU W4SVO W5PR N2GC VE6JY K6OY	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA	N1QM  2006  K1LZ  AA1BU  KU1CW  KSRX  W4SVO  NØNI  K4KZZ	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD  K9MUG  NØNI  K4JLD	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP	XC8Y  2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N800	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX  W4QNW  KM1R
10 1 2 3 4 5 6 7 8	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op)	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG	XSØT  2004  AA1BU  W4SVO  W5PR  N2GC  VEGIY  K6OY  K6OR  K7ZM	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V	N1QM  2006  K1LZ  AA1BU  KU1CW  KSRX  W4SVO  NØNI  K4KZZ  N3XEG	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD  K9MUG  NØNI  K4JLD  N2GC	W8JMF  2008  ND8DX N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  WI9H	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX  W4QNW  KM1R  WD5COV
10 2 3 4 5 6 7 8	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op)	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD	XSØT  2004  AA1BU  W45VO  W5PR  N2GC  VE6JY  K6OY  K6OR  K7ZM  WI9H	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA	N1QM  2006  K1LZ  AA1BU  KU1CW  K5RX  W45VO  NØNI  K4KZZ  N3XEG  W9IND	W9OP   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   K9IDQ   K9IDQ   K9IDQ   K9IDQ   K9IDQ   K9IDQ   K007   K9IDQ   K007   K007   K9IDQ   K007   K	W8JMF  2008  ND8DX N3YD K4KZZ WA2AOG K8OQL NA4M KU4BP WI9H WO9S	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT	N8QAZ  2010  AA1BU  KUZM  N4QV  NØNI  VE9ZX  W4QNW  KM1R  WD5COV  W2RR (WA2AOG, op)
10 1 2 3 4 5 6 7 8	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG	AD8J ers 2003 AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY	XSØT  2004  AA1BU  W4SVO  W5PR  N2GC  VEGIY  K6OY  K6OR  K7ZM	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V	N1QM  2006  K1LZ  AA1BU  KU1CW  KSRX  W4SVO  NØNI  K4KZZ  N3XEG	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD  K9MUG  NØNI  K4JLD  N2GC	W8JMF  2008  ND8DX N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  WI9H	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX  W4QNW  KM1R  WD5COV
10 2 3 4 5 6 7 8	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Met	AD8J ers  2003  AA1BU KT1V K6OY  AA4MM N6RO W7CB W5FO WØYG K8MD N6HY	XSØT  2004  AA1BU  W4SVO  W5PR  N2GC  VE6JY  K6OY  K6OR  K7ZM  W19H  N8OL	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  KIGPG	N1QM  2006  K1LZ  AA1BU  KU1CW  K5RX  W4SVO  NØNI  K4KZZ  N3XEG  W9IND  N4USB	W9OP  2007  AA1BU  KT1V  KU1CW  N3YD  K9MUG  NØNI  K4JLD  N2GC  K9IDQ  N4NM	W8JMF  2008  ND8DX N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3VD  N8OO  NJ1H  KØKT  W2/E78WW	N8QAZ  2010  AA1BU KU2M N4QV NØNI VE9ZX W4QNW KM1R WD5COV W2RR (WA2AOG, op) WA4TII
10 1 2 3 4 5 6 7 8 9	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY teters 2003	XSØT   2004   AA1BU   W4SVO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   AA1BU   AA1BU	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  KI6PG	N1QM   2006   K1LZ   AA1BU   KU1CW   K5RX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006	W90P   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007	W8JMF  2008  ND8DX N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N800  NJ1H  KØKT  W2/E78WW	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX  W4QNW  KM1R  WD5COV  W2RR (WA2AOG, op)  WA4TII  2010
10 1 2 3 4 5 6 7 8 9 10	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY eters 2003 K5RX	XSØT   2004   AA1BU   W45VO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   XTV	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  KI6PG  2005	N1QM   2006   K1LZ   AA1BU   KU1CW   KSRX   W4SVO   NØNI   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)	W9OP   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008	2009  KU2M AA4MM NØNI KM1R AA4V N3YD N800 NJ1H KØKT W2/E78WW	N8QAZ  2010  AA1BU  KU2M  N4QV  NØNI  VE9ZX  W4QNW  KM1R  WD5COV  W2RR (WA2AOG, op)  WA4TII  2010  W2MF
10 1 2 3 4 5 6 7 8 9 10	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY etters 2003 K5RX KK4SI	XSØT   2004   AA1BU   W45VO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  KSTA  KK9V  KI6PG  2005  KT1V  KK4SI	N1QM   2006   K1LZ   AA1BU   KU1CW   KSRX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   K1LZ   W3GH   K1LZ   K1L	W9OP   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA	N8QAZ   2010   AA1BU   KUZM   N4QV   NØNI   V59ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   KSRX   KSRX
10 1 2 3 4 5 6 7 8 9 10	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003 AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY ters 2003 K5RX KK4SI W2VO	XSØT   2004   AA1BU   W4SVO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM   KK4SI   KK4SI   X6OK   KK4SI   X6OK   KK4SI   X6OK   KK4SI   X6OK   X6OK	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  KSTA  KK9V  KI6PG  2005  KT1V  KK4SI  W2VO	N1QM   2006   K1LZ   AA1BU   KU1CW   K5RX   W4SVO   NØNI   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   AA4MM	W90P   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM   W8LRL	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  K5RX	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX	N8QAZ  2010  AA1BU KU2M N4QV NØNI VE9ZX W4QNW KM1R WD5COV W2RR (WA2AOG, op) WA4TII  2010 W2MF KSRX W3GH
10 1 2 3 4 5 6 7 8 9 10 1 2 3 4	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003 AA1BU KT1V K60Y AA4MM N6RO W7CB W5FO WØYG K8MD N6HY eters 2003 K5RX KK4SI W2VO W3GH	XSØT   2004   AA1BU   W4SVO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM   KK4SI   W2VO	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  KI6PG  2005  KT1V  KK4SI  W2VO  W3GH	N1QM   2006   K1LZ   AA1BU   KU1CW   K5RX   W45VO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   KK4SI   K1LZ   AA1BU   KK4SI   AA1BU   KK4SI   AA1BU   AA1BU   AA4MM   KK4SI   AA1BU   AA1BU   AA1BU   AA4MM   KK4SI   AA1BU   AA1BU   AA1BU   AA4MM   KK4SI   AA1BU   AA1BU   AA1BU   AA1BU   AA4MM   KK4SI   AA1BU   AA1BU   AA1BU   AA1BU   AA1BU   AA1BU   AA4MM   KK4SI   AA1BU   AA1BU   AA1BU   AA1BU   AA1BU   AA1BU   AA4MM   KK4SI   AA1BU   AA	W90P   2007	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  KSRX  WF2W	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX  KK4SI	N8QAZ   2010   AA1BU   KU2M   N4QV   NØNI   VE9ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   KSRX   W3GH   VE2DWA
10 1 2 3 4 5 6 7 8 8 9 10 11 2 3 4 5 6 7 7 8 9 10 10 10 10 10 10 10 10 10 10	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY teters 2003 K5RX KK4SI W2VO W3GH NA4W	XSØT   2004   AA1BU   W4SVO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM   KK4SI   W2VO   W3GH   X4SVO   W3GH   X4SVO   W3GH   X6OV	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  KI6PG  2005  KT1V  KK4SI  W2VO  W3GH  VE3MGY	N1QM   2006   K1LZ   AA1BU   KU1CW   KSRX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   KK4SI   W2VO   N4US   W2VO	W90P   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM   W8LRL   W3GH   KK4SI   KK4SI   W3GH   KK4SI   W3GH   KK4SI   W3GH   KK4SI   W3GH   W8LRL   W3GH   KK4SI   W3GH   KK4SI   W3GH   W8LRL   W3GH   KK4SI   W8LRL   W3GH   KK4SI   W3GH   W8LRL   W3GH   KK4SI   W8LRL   W3GH   KK4SI   W8LRL   W8LR   W8L	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  K5RX  WF2W  W4SVO	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX  KK4SI  N2WN	N8QAZ   2010   AA1BU   KU2M   N4QV   NØN   VE9ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   KSRX   W3GH   VE2DWA   W2VO   W2VO
10 1 2 3 4 5 6 6 7 8 9 10 10 1 2 3 3 4 4 5 6 6 6 7 6 6 6 7 7 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY eters 2003 K5RX KK4SI W2VO W3GH NA4W K9HUY	XSØT   2004   AA1BU   W4SVO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM   KK4SI   W2VO   W3GH   WA9IRV   W3OH   WA9IRV	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  K16PG  2005  KT1V  KK4SI  W2VO  W3GH  VE3MGY  K3BU	N1QM   2006   K1LZ   AA1BU   KU1CW   KSRX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   KK4S!   W2VO   NN1N   N	W90P   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM   W8LRL   W3GH   KK4SI   K5RX   K5RX   SOOT   SOOT   SOOT   W6SVO   W6SVO	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  K5RX  W42W  W45VO  K1HAP	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX  KK4SI  N2WN  K1HAP	N8QAZ   2010   AA1BU   KU2M   N4QV   NØNI   VE9ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   K5RX   W3GH   VE2DWA   W2VO   KØKT   KØKT
10 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 1 1 2 3 4 4 5 6 6 7 7 8 9 1 1 1 1 2 3 4 4 4 5 6 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB WSFO WØYG K8MD N6HY eters 2003 K5RX KK4SI W2VO W3GH NA4W K9HUY K6SE	XSØT   2004   AA1BU   W45VO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM   KK4SI   W2VO   W3GH   W49IRV   KD1IA	ABØCT  2005  K5RX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  KI6PG  2005  KT1V  KK4SI  W2VO  W3GH  VE3MGY	N1QM   2006   K1LZ   AA1BU   KU1CW   K5RX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   KK4SI   W2VO   NN1N   KØLW (KU1CW, op)	W90P   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM   W8LRL   W3GH   KK4SI   K5RX   K4MHZ	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  K5RX  WF2W  W4SVO  K1HAP  WJ9B	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX  KK4SI  N2WN  K1HAP  W3GH	N8QAZ   2010   AA1BU   KUZM   N4QV   NØNI   VE9ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   KSRX   W3GH   VE2DWA   W2VO   KØKT   NA4W (K4WI, op)
10 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 10 10 10 10 10 10 10 10 10	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB W5FO WØYG K8MD N6HY eters 2003 K5RX KK4SI W2VO W3GH NA4W K9HUY	XSØT   Z004   AA1BU   W45VO   W5PR   N2GC   VE6JY   K6OY   K6OY   W19H   N8OL   Z004   KT1V   AA4MM   KK4SI   W2VO   W3GH   WA9IRV   KD1IA   VE3MGY   KD1IA   VE3MGY   X6OV   X	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  K16PG  2005  KT1V  KK4SI  W2VO  W3GH  VE3MGY  K3BU	N1QM   2006   K1LZ   AA1BU   KU1CW   K5RX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   KK4S!   W2VO   NNIN   KØLW (KU1CW, op)   K1HAP	W9OP   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM   W8LRL   W3GH   KK4SI   K5RX   K4MHZ   K1HAP   K1HAP	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  K5RX  WF2W  W4SVO  K1HAP  W19B  KK4SI	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  N11H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX  KK4SI  N2WN  K1HAP  W3GH  VE3CUI	N8QAZ   2010   AA1BU   KUZM   N4QV   NØNI   VE9ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   K5RX   W3GH   VE2DWA   W2VO   KØKT   NAAW (K4WI, op)   VE3EDY   NAABU   NAABU   NAAW (K4WI, op)   VE3EDY   NAABU   NA
10 1 2 3 4 5 6 7 8 9 10 10 1 2 3 4 4 5 6 6 7 7 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	KD4RH Single-Operator, 80 Met 2002 AA1BU KM1R AC8Y VA6DXR (VE6JY, op) KI6PG Single-Operator, 160 Me 2002 AA4MM	AD8J ers 2003  AA1BU KT1V K6OY AA4MM N6RO W7CB WSFO WØYG K8MD N6HY eters 2003 K5RX KK4SI W2VO W3GH NA4W K9HUY K6SE	XSØT   2004   AA1BU   W45VO   W5PR   N2GC   VE6JY   K6OY   K6OR   K7ZM   W19H   N8OL   2004   KT1V   AA4MM   KK4SI   W2VO   W3GH   W49IRV   KD1IA	ABØCT  2005  KSRX  KM1R  K4JLD  AA4MM  N5DD  K4QVK  K5TA  KK9V  K16PG  2005  KT1V  KK4SI  W2VO  W3GH  VE3MGY  K3BU	N1QM   2006   K1LZ   AA1BU   KU1CW   K5RX   W4SVO   NØN!   K4KZZ   N3XEG   W9IND   N4USB   2006   K8V (W8LRL, op)   W3GH   AA4MM   KK4SI   W2VO   NN1N   KØLW (KU1CW, op)	W90P   2007   AA1BU   KT1V   KU1CW   N3YD   K9MUG   NØNI   K4JLD   N2GC   K9IDQ   N4NM   2007   W4SVO   AA4MM   W8LRL   W3GH   KK4SI   K5RX   K4MHZ	W8JMF  2008  ND8DX  N3YD  K4KZZ  WA2AOG  K8OQL  NA4M  KU4BP  W19H  W09S  K16PG  2008  KT1V  W2MF  K5RX  WF2W  W4SVO  K1HAP  WJ9B	2009  KU2M  AA4MM  NØNI  KM1R  AA4V  N3YD  N8OO  NJ1H  KØKT  W2/E78WW  2009  W2MF  W1NA  K5RX  KK4SI  N2WN  K1HAP  W3GH	N8QAZ   2010   AA1BU   KUZM   N4QV   NØNI   VE9ZX   W4QNW   KM1R   WD5COV   W2RR (WA2AOG, op)   WA4TII   2010   W2MF   KSRX   W3GH   VE2DWA   W2VO   KØKT   NA4W (K4WI, op)

	Single-Operator, Ass	isted								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	K3WW	K2NG	W2RE	W2RE	K1AR	N2NT	KI1G	W2RE	W2RE	
2	W2RE	W2RE	K2XA	K3WW	K1KI (KM1P, op)	N3KS	K3WW	NN3W (@N3HBX)	K3WW	
3	K2DM	K3WW	K3WW	W4WTB	N3AD	K2XA	N3KS	VY2TT (K6LA, op)	AA3B	
4	W1GD	K2XA	W2WB	AA3B	N8TR	K3WW	AA3B	K3WW	N2MM	
5	W2GD	W4NF	W2GD	N8TR	K1UQ	NN3W	K3PP	AA3B	W1GD	
6	W2GDJ	K5KG	K1AR	NN3Q	N3KS	N8TR	N8TR	K3PP	W4MYA	
7	N8TR	W2GDJ	N3OC	N2NT (N4HY, op)	VA3DX	K2PS	N3AD	VA3DX	N4ZC	
8	N2MM	WE2F	N2MM	N2MM	AA3B	N3AD	VE3UTT (W1AJT, op)	N8TR	W2IRT	
9	K5KG	NO2R	K9NW	K1JB	K2XA	AA3B	N4ZC	K2PLF	VE3MMQ	
10	AA3B	AA3B	кфкх	K2KQ	W1GD	W3PP	W1GD	N3AD	K2TE	
	Multi-Operator, Sing	le-Transmitter								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	K8AZ	K8AZ	K1IR	K1IR	VE3RM	W3BGN	K9RS	K1LZ	K1LZ	
2	WØGU	K5NA	VE3RM	K5NA	K5NA	VE3RM	N1MM	W3BGN	K9RS	
3	W4MR	KY2J	KØDU	N2RM	NN2W	W1QA	W1QA (@NC1I)	W1QA	N1MM	
4	K8CC	NØNI	NE3F	WN9O	K1IR	N1MM	K5NA	N1FD	W5RU	
5	K5NZ	K8CC	WW4LL	K3MD	W1QA	K3MD	W1ZA	K1KI	NK7U	
6	KØDU	K2KQ	WØZT	W3MF	NE3F	N1FD	W6WB	W6WB	W1ZA	
7	K2XR	VE3RM	N4BP	NE3F	W3MF	W3MF	W3MF	KD9ST	N1FD	
8	NE3F	K2DM	NN2W	KK1L	W4WS	W3GQ	N1FD	W2ZQ	NN2W	
9	K5NA	W5KFT	WB1ADR	W4WS	N1FD	K1KI	W3GQ	VE3RM	W3MF	
10	AA1ON	NE3F	VE3RZ	wøzt	wøzt	NT4D	N7AP	W2XL	N2RM	
	Multi-Operator, Two									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	K1AR	K4JA	K4JA	N3RS	N3RS	KC1XX	WE3C	WE3C	WE3C	
2	K4JA	N3RS	N3RS	WE3C	WE3C	N3RS	N3RS	N3RS	W4RM	
3	KI1G	N2NT	W4RM	KB1H	W4RM	WE3C	KB1H	W4RM	κØτν	
4	KR1G	VE1JF	NK7U	NE4AA	κøτ∨	W4RM	W4RM	K8AZ	N1LN	
5	N4TO	NK7U	κØτν	NB1B	K3000	κØτν	κøτ∨	NR4M	K7ZSD	
6	K1IR	AA5NT	K5NA	VE1JF	VE1JF	NE3F	K2AX	KB1H	NØIJ	
7	W5KFT	W6NV	K7ZSD	NK7U	N2RM	NK7U	NE3F	NE3F	K1KP	
8	KB1H	N5YA	VE1JF	KØTV	W2ZQ	W4MYA	W2ZQ	κøτ∨	W7RN	
9	VE6SV	K1KI	W2XL	W5KFT	K3DI	WX3B	VE3RM	W5WMU	K2AX	
10	K2RD	K6IDX		K3DI	N1AU	N3MX	W2CG	NK7U	VE3MIS	
	Multi-Operator, Mul									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1	W3LPL	KC1XX	K3LR	K3LR	K3LR	K3LR	K3LR	W3LPL	K3LR	
2	KC1XX	W3LPL	KC1XX	W3LPL	W3LPL	W3LPL	W3LPL	K3LR	W3LPL	
3	K9NS	K9NS	W3LPL	KC1XX	KC1XX	K1TTT	W1UE	W1FJ	KC1XX	
4	W2FU	W4MYA	K9NS	K1RX	K1TTT	K1RX	K1CX	K1RX	KM1W	
5	W1FJ	W1FJ	K1RX	K1TTT	K1RX	KB1H	K1TTT	K1TTT	K1TTT	
6	N2RM	K1RX	KB1H	W3PP	W1FJ	WØAIH	W4ML	W3PP	WØAIH	
7	W3PP	W2FU	K1TTT	W4MYA	W3PP	K7ZSD	W3PP	N6BV	NE3F	
8	K1TTT	W3PP	N3AD	N3AD	KB1H	K1IR	N6RO	WØAIH	W6WB	
9	K3NM	K1TTT	WØAIH	WØAIH	N6RO	квфнн	K7ZSD	N8RA K4VV WX3B N8RA		
10	K3ANS	N2RM	W3PP	K7ZSD	WØAIH	KB5TX	WØAIH			

			1						
Top Te	1 - DX								
	Single-Operator, High-P	lower							
-	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	ZF2MM (K9PG, op)	WP3R (K9PG, op)	8P1A (W2SC, op)	P4ØW (W2GD, op)	TI1C (W5AJ, op)	8P1A (W2SC, op)	HC8A (N6KT, op)	P49Y (AE6Y, op)	8P5A (W2SC, op)
2	8P5A (W2SC, op)	8P1A (W2SC, op)	P4ØL (W6LD, op)	WP2Z (N2TK, op)	V31BH (OH2BH, op)	FY5KE	8P1A (W2SC, op)	KH7X (KH6ND, op)	6Y9V (WE9V, op)
3	KH7R (KH6ND, op)	D4B (4L5A, op)	CN2R (W7EJ, op)	CN2R (W7EJ, op)	FS5KA (W1SJ, op)	TO5A (NH7A, op)	KP2M (N2TK, op)	KP2M (N2TK, op)	PJ2T (WB9Z, op)
4	VP2E (N5AU, op)	KH7X	EA8BH (OH2BH, op)	FG/F5CWU	WP2Z (N2TK, op)	CN3A	TO5A (NH7A, op)	FS5KA (W1SJ, op)	KH7XS
5	TI5/VE7CC	EA8BH (OH2BH, op)	8R1K (EA4BQ, op)	TO5A (NH7A, op)	TO5A (NH7A, op)	OK5R (OK1RI, op)	KH6LC (N6GQ, op)	TO5A (NH7A, op)	KP2M (N2TK, op)
6	V47KP (W2OX, op)	V47KP (W2OX, op)	TO5A (NH7A, op)	8R1EA (AH8DX, op)	8R1EA (AH8DX, op)	EA4KR	NP2I	CT1ILT	TO5A (NH7A, op)
7	WP2Z (N2TK, op)	WP2Z	WP2Z (N2TK, op)	OA4SS	KH6WT (K1YR, op)	SN7Q	HQ2W (HR2DMR, op)	OA4SS	CT1JLZ (OK1RF, op)
8	SN2B (SP2FAX, op)	CN2R (W7EJ, op)	OK1RI	XE2K	CT8T (I4UFH, op)	YW5NN	V31XX (HP1WW, op)	HP1WW	LX7I (LX2A, op)
9	M6T (G4PIQ, op)	ZF2DQ (KØDQ, op)	OA4SS	OK1RI	OK1RI	IZ3ALF	PY2NY	KH6FI	PZ5RA
10	NH7A	LU1NDC	DL5YY	NP2I	6V6U	SO6X	EA4KR	OX2A	403A (YU1YV, op)
	Single-Operator, Low-P	ower							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	P4ØP (W5AJ, op)	V26P (W5AJ, op)	WP3R (K9PG, op)	P4ØA (KK9A, op)	P4ØA (KK9A, op)	P4ØA (KK9A, op)	P4ØA (KK9A, op)	P4ØA (KK9A, op)	P4ØA (KK9A, op)
2	HK3JJH	VP9/W6PH	TI5A (W5AJ, op)	TI5A (W5AJ, op)	WP3F	HI3T	HQ9R (WQ7R, op)	TI5N (W5AJ, op)	HI3TEJ
3	J6/G3TBK	J88DR (G3TBK, op)	J88DR (G3TBK, op)	KH7X (KH6ND, op)	VP5H (WØGJ, op)	VP9/W6PH	VP9/W6PH	HI3TEJ	V26M (N3AD, op)
4	JH4UYB	XE2AC	VP9/W6PH	VP9/W6PH	VP9/W6PH	P4ØLE	J88DR (G3TBK, op)	J88DR (G3TBK, op)	VP9/W6PH (W6PH, op)
5	JM1LPN	KH6/K2PLF	HK3JJH	VP5H (WØGJ, op)	J88DR	8P6EX	HK6P	HK6P	J88DR (G3TBK, op)
6	ZX2B (PY2MNL, op)	LT5H (LU2HF, op)	PV8DX	J88DR (G3TBK, op)	HI3NR	XE1XOE	8P6EX	8P6EX	J7Y (K1LI, op)
7	EA3CI	CO2JG	HK6PSG	XE1XOE	LU2NI	OM5CD	YV5EAH	PY1NX	8P6EX
8	6Y8Z	LV7H	XE1XOE	XE2AUB	8P6EX	3G1K	CE1KR	J7Y (K1LI, op)	GIØKOW
9	EA1WS	CT1EAT	EA7RM	CE1L	KH6/K2YY	IZ2FOS	LU3CT	KH6/ACØW	HK6P
10	XE2AUB	LVØN	EA3CI	8P6EX	HK6PSG	YV5EAH	KP2BH	PW2P (PY2XAT, op)	KH7T
	Single-Operator, QRP								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	TI5N (W8QZA, op)	TI5N	HD8A (HC1HC, op)	LU1VK	YV5YMA	4M2L	CO6LP	F5BEG	OK2BYW
2	LY5A (LY2PAJ, op)	HI3TEJ	TI5N (W8QZA, op)	F5BEG	LU1VK	PY2HL	F5BEG	JR4DAH	F5BEG
3	F5BEG	HC1HC	HI3TEJ	S57MSU	F5BEG	AH7ZA	IK5RUN	DL4VCG	CT2IOV
4	F5NOD	LU3DR	LU1VK	ON6NL	IK5RUN	F5BEG	JA1CG	JH1APZ	JR4DAH
5	JA2AXB	F5BEG	ZF2NT	IK5RUN	OM7DX	LU1VK	JA2DLM	MM3XXW	OK1DVM
6	JR4DAH	JR4DAH	F5BEG	I1BAY	JR4DAH	F5NOD	JR4DAH	YO3JW	IV3AOL
7	LU1VK	JA2MWV	DF1DX	JR4DAH	UA3BL	OK7CM	IK3XTY	VK4ATH	IK1BBC
8	RX9SR	JA6WFM	SM5ARL	UA3BL	EA1TI	UA3BL	EA3FF	OK1DVM	JE1LDU
9	IK7RVY	GØDCK	KL7IKV	EA1TI	I5KAP	JR4DAH	PE2KP	IZ2FME	JA2MWV
10	F6FTB	DF1DX	GØDCK	EA3FF	RAØQD	EA3FF	DJ3GE	I5KAP	PU5ATX
	Single-Operator, 10 Me	2003	2004	2005	2006	2007	2008	2000	2010
1	<b>2002</b> ZX5J	ZY5G	2004	CX5BW	LU1HF	2007 LU1HF	LU1HF	2009 LU1HF	LU1HF
2	PJ2K (K6RO, op)	CX5BW	LT1F (LU1FAM, op) ZY5G (PP5WG, op)	PY2TO	CX5BW	TISN	PP5NW	LU9DAG	LR2F
3	ZF2AH	PX2W	PX2W (PY2YU, op)	AH6RF	PP5AMP	PP5AMP	LQ5H	LR2F (LU2FA, op)	LU1UM
4	HC1HC	LU1HF	HP3XBS	CE4PBB	LQ5H (LU3HS, op)	LU9DAG	LU9DAG	PU2MTS	LU6FOV
5	NP3X (KP4WW, op)	LU6ETB	CE4PBB	HK3JJH	LU9DAG	LU8EOT	LU4DX	ZV2C (PY2CX, op)	PY2ZXU
6	I4TJE	CX8CP	CX1AV	LU3HIP	LW7HT	PP5TR	LU6FOV	CA6BMF	PU50GE
7	9A5Y	CE4Y (CE4FXY, op)	WP4EDD	LUSFII	CX1AV	CX4DX	CX4DX	PU2LEP	CE2WZ
8	DF9ZP	LO7H	CX4DX	LU7WW (LU5WW, op)	CX4DX	LU3JVO	LU6DU	LTØD (LU6DU,op)	PY2MTS
9	IU2P	PY2TO	LU5FII	LU6HPF	HC1HC	PY2CX	LW1HR	HP1RIS	PU2LEP
10			LU6HPF	CX1AV	LU8EOT	PP5BZ	PY2SRB	PP5JN	CX4DX
10	D SSØC (S5500, op) PY1AK (IV3GKE, op) LU6HPF CX1AV LU8EOT PP5BZ PY2SRB PP5IN CX4E		こハイレハ						

	Single-Operator, 15 Met	tors							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
- 1				V31LZ					
1	P4ØA (KK9A, op)	D44TD (IK4UPB, op)	PS2T (PY5EG, op)		PS2T (PY5EG, op)	ZX5J (PP5JR, op)	ZX5J (PP5JR, op)	ZX5J (PP5JR, op)	ZX5J (PP5JR, op)
2	OK1RI	ZF2AH	PT5A (PY2EMC, op)	PS2T (PY5EG, op)	HI3CCP	ZX2B	LS1D (LW9EOC, op)	LU2QC	LP2F (LU1FDU, op)
3	KL7RA	ZX5J	GIØNWG	KG4WW	HK3JJH	WP3C	ZX2B (PY2MNL, op)	AY5F	CR2A (OH8NC, op)
4	9A1P	CT1BOP	GW4BLE	GW7X (GW4BLE, op)	J37K (AC8G, op)	ZPØR	YV1CTE	LTØH (LU3HY, op)	KH7Y
5	HR3J (JA6WFM, op)	DK2OY	LPØH	FS/K8HTP	LU5FF	L44DX	PY5HOT	PY2LSM	PY2BK
6	IR4T	SO2R (SP2FAX, op)	CS6T (CT1ILT, op)	ZF2AH (W6VNR, op)	PW2C (PY5KW, op)	PP5JD	KH7Y	LS1D (LW9EOC, op)	HC1HC
7	406A (Z32AF, op)	IY4W (I4LEC, op)	LU7DW	CX7BY	J79DX (VA3YDX, op)	YV1CTE	LU2QC	AY4D (LU4DX, op)	EF8R
8	OH6AC (OH6CS, op)	IK2DUU	LU2QC	EA1DDO	CT3EN	LU7HF	A35RK	PY1KN	AY5F
9	OH6RX	OH4XX	CO8ZZ	S57UN	IU3X (IV3SKB, op)	IR4M	HK3JJH	KH7Y	PY1KN
10	IQ3A	DF9ZP	IR4T (I4UFH, op)	HI8/JA6WFM	JI2UNR	9A5E	PY2DN	PY6HD	PY3FOX
	Single-Operator, 20 Met	+							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	OH4A (OH6LI, op)	PYØFF	ZF2AH	XE1L	OH8X (OH8NC, op)	ZF2AH	P4ØV (AI6V, op)	CU2A (OH8NC, op)	F6KHM (F8DBF, op)
2	OH5LF	YV5LIX	P4ØA (KK9A, op)	OH6KN (OH6UM, op)	KG4WW	4M5IR	HT2N (IV3IYH, op)	TM9R (F5FLN, op)	TM5C
3	RJ1Z (RW1ZA, op)	7S2E (SM2DMU, op)	SO2R	CT8T	4A7L	SO2R	KH7B	S5ØK	S5ØK
4	OM5M (OM2RA, op)	DJ7EO	MIØLLL	SO2R (SP2FAX, op)	DP4K	MIØLLL	HI3T (HI3TEJ, op)	E76C	SN2B (SP2WKB, op)
5	IQ4N	LTØH (LU3HY, op)	ZX5J (PP5JR, op)	V31MF (KC5ZT, op)	8P2K (8P6SH, op)	OH8X	HK1X	E71A	OH8L (OH8LQ, op)
6	CT1AHU	IU9S (IT9BLB, op)	DJ7EO	YV5TX	IR4T	YV1RDX	4M5IR	NL7V	OZ7X (OZ5KF, op)
7	RA1ACJ	XE1L	XE1L	FM5FJ	HG3M (HA3MY, op)	TM1W	TM1W (F5HRY, op)	IR1R (IK1HJS, op)	E7ØT
8	SMØW (SMØWKA, op)	PY2NY	HP1XVH	LU7HN	JAØJHA	6H1L	LS2D (LU1DK, op)	TG9ANF	HQ2T (K2BB, op)
9	IT9STX	YV50IE	IU9S	TF3CW	OM3PC	9A1A	ZV5K	WP4EDD	LN9Z (LA5KO, op)
10	S51CK	IT9STX	4M4C (YV4GLD, op)	G1A (MØCLW, op)	F4EGD	DP4K	IT9STX	CT7A (CT1IUA, op)	TG9ANF
	Single-Operator, 40 Met	ters							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	GW7X (GW4BLE, op)	YV5OHW	F6CTT	4M5DX (YV5SSB, op)	4M5DX (YV5SSB, op)	YW4D	AO8A	KH7XS (K4XS, op)	CR2X (OH2BH, op)
2	EA1DLU	OK1RI	OE6Z (OE6MBG, op)	EA8AH (OH1RY, op)	HI3TEJ	TM9R	ZL3A	KP4KE	ZF2AH
3	DF3GY	GW7X (GW4BLE, op)	S53M (S5500, op)	HI3TEJ	WP3C	ZL3WW	TM5C (F6CTT, op)	GW7X (GW4BLE, op)	CT1ILT
4	9A4D (9A5WA, op)	EA1DLU	SN7Q	YV5KG	XE2K	YT5T	PR7AP	S53F	EA7LL
5	JS2LGN (JA7KAC, op)	LX7I (LX2AJ, op)	YZ1E	VK2KPP	ZX5J (PP5JR, op)	SO8A	CT2ITR	YW5W (YV5TX, op)	YT8A (YU1EA, op)
6	UT4UO	SP6IXF	KL7RA	YTØA	YV5KG	KH6FKG	S53S (S52X, op)	ZL3A (ZM3A, op)	JAØJHA
7	PY3NZ	YZ9A	T99W	CO2JD	F6KHM (F4DXW, op)	OL9R	YV6BXN	HQ9R (WQ7R, op)	HQ9R (WQ7R, op)
8	PY6KY	ZX3S	HA5A (HA8LLK, op)	IV3IPS	KG4RN	JAØJHA	IR2C (IK2NCJ, op)	OM3PC	TMØT
9	OK2GG	JS2LGN (JA7KAC, op)	EA1DLU	SP3SLA	CO8LY	EA5BRE	EA3BOX	E7ØT	RW2F (UA2FB, op)
10	LZ2RF	TG9ASO	VK2KPP	JH1EAQ	ZF2AH	DF3GY	PY6KY	F5BZB	YTØW
	Single-Operator, 80 Met	ters							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	YV5OHW	FM5GU	GIØKOW	CO8KA	EA8AH (OH1RY, op)	XE2K	ZF2AH	CU2X (OH2BH, op)	KH6LC (NH6V, op)
2	YV4FZM	YV3AZC	CO8KA	WP3C	YV5LIX	F6CTT	KP4KE	GM3PPG (G4BYB, op)	C6AWL (RA3CO, op)
3	OT2T (ON4UN, op)	CO8ZZ	YV4BU	IR4M (IK4MGP, op)	ON4UN	KP4KE	XE2K	YW4V	GM3PPG (G4BYB, op)
4	I4AVG	YV4FZM	CT3DZ	HC1HC	G3PPG (G4BYB, op)	CM6RCR	CM6CAC	HG3M (HA3MY, op)	CT2ITR
5	S59CAB (S53CC, op)	OR3T (ON4UN, op)	YY5YMA	SN3A	SN3A (SP3GEM, op)	GM3PPG	YV5LMW	EI7M	YV5MSG
6	YT6A	I4AVG	SP3GEM	EA1DLU	YV3AZC	CO6LP	CT3DZ	SP3GEM	E77DX
7	S570	S5ØO	I4AVG	I4AVG	IR4M (IK4MGP, op)	SN3A	HP3AK	SN7Q	HK1NK
8	IV30WC	SP3KFH (SP3JHY, op)	LX7I (LX2AJ, op)	YV4BU	I4AVG	DL1AUZ	GM3PPG (G4BYB, op)	YV5MSG	YV6BXN
9	SP6HEQ	ERØND (UT7ND, op)	T98T	YY5YMA	CT3IA	HG3DX	SN3A	WP4I (WP3C, op)	UX2X (UT2XQ, op)
10	UZ7U (UT3UA, op)	YY5YMA	SP3KFH (SP3JZR, op)	HG3M (HA3MY, op)	CO8KA	KL7RA	LU1FDU	IZ4NIC	G8DYT
	Single-Operator, 160 Me	eters							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	YV1CP	YV5MBX	CU2CE	KV4FZ	KV4FZ	KV4FZ	KV4FZ	ZF2AH	M8M (G3LNP, op)
2	HA5JI	KV4FZ	HA5JI	CU2CE	CM6RCR	YW5T	CM6RCR	KV4FZ	S56P
3	S57M	RN6BN	YU7AV	KP4KE	CU2AF CU2AF CU2AF F6CTT		F6CTT	I4FYF	
4	F6CWA	GWØGEI	RN6BN	CO6LPB	YV2IF	PT7AG	LU2DVI/H	AO8A (EA8AH, op)	LU2DVI
5	DL7CX	DL7CX	EA1DVY	SN7Q	KL7RA	SN3R	DF2UU	E77DX	XE1GRR
6		UX5NQ	OM2VL	DK6WL	SP3KEY (SP7VC, op)	EA1DVY	ES5RW	CU2AF	SP5CJY
7		LY2OU	UT3SA	HA8JV	DF2UU	PP5FMM	F6KCP (F5VHN, op)	SN3R (SP6HEQ, op)	LY2OU
8			LY3ZM (LY1FK, op)	HG1LPS	LY2IJ	LU2DVI	UA2FT	LN9Z (LA5KO, op)	OK1DF
9	1		LY2OU	DF1IAQ	USØLW	DJ8ES	HA8BE	S56P	
10	1			UR5MNZ	EA1DVY		EU3AR	EA1DVY	
				1 -	1	1	1	1	1

	Single-Operator, Assis	ted							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	8P6SH	KH7X (KH6ND @KH6YY)	KH7X (KH6ND @KH6YY)	LO2F (LU1FAM, op)	P4ØW (W2GD, op)	PJ4G	PJ2T (WE9V, op)	PJ4G (K2NG, op)	J7N (K3TEJ, op)
2	YT7A (4N7DW, op)	KP4KE (DK8ZB, op)	KP4KE (DK8ZB, op)	DLØWW	P4ØCW	PT7CB	PY2EX	LT1F (LU1FAM, op)	OM3GI
3	S51DX	LU1NDC	LU1NDC	PY2EX	LTØH (LU3HY, op)	LU4DX	PY5QW	ZX2B (PY2MNL, op)	LT1F (LU1FAM, op)
4	JH7LRS	ZX2B (PY2MNL, op)	ZX2B (PY2MNL, op)	YT7A (YU7GMN, op)	ZX2B (PY2MNL, op)	EA7RU	EA7RU	ZPØR (ZP5AZL, op)	OE3K
5	OH6NIO	DL1IAO	DL1IAO	L2ØH (LU9HS, op)	EA7RU	DLØWW	DLØWW	EE7E (EA7RU, op)	IR4M
6	IZ5CML	SP8BRQ	SP8BRQ	YR7M (YO3JR, op)	AL9A	HR2DMR	EA5KV	LQØF (LU5FF, op)	ZX2B (PY2MNL, op)
7	7L4IOU	YT7A (4N7DW, op)	YT7A (4N7DW, op)	SN8F (SP8FHK, op)	YO9HP	YR9P	PY4OG	YR9P (YO9HP, op)	OK4U (OK1DIG, op)
8	EA5FID	PY2YP	PY2YP	V5/SP6IXF	OH4R	F8CMF	EF1W	KL7FH (KL7Z, op)	S57DX
9	YL2LY	SN8F (SP8FHK, op)	SN8F (SP8FHK, op)	I2SVA	I2SVA	IK3SCB	LU7YZ	KP2BH	NP2KW
10	SN2E	YL8M (YL2KL, op)	YL8M (YL2KL, op)	OK1DG	IK3SCB	G3YYD	YT6M	WP4SK	DK4YJ
	Multi-Operator, Single	e-Transmitter							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	VP5B	FY5KE	VP5B	VP5B	FY5KE	V26H	PJ4G	V26F	P4ØN
2	FY5KE	VP5B	PJ4G	FY5KE	XE7T	VP2E	V26X	VP5H	PJ4G
3	EA8BH	VP5A	HC8L	PJ4G	NP2B	XE7S	HI3C	4B2S	VP5H
4	PJ4G	9Y4TBG	V31MD	HI3CCP	LR2F	HI3C	VP5H	HI3K	HI3K
5	TM5C	HU1A	KP2A	9Y4W	IR4X	CU2A	4A2S	PSØF	4A2S
6	6D2YFM	TM5C	IR4X	V31TR	TO1T	VP5H	LP1H	CT9L	TO2T
7	V31DJ	6Y8Z	CX5BW	LR2F	EA8ZS	LP1H	CW6V	TO2T	CW5W
8	FG/TO4T	KH6RR	6Y8Z	IR4X	IR2C	LT1F	LT1F	C6ANM	C6ANM
9	СТ9М	V31QQ	EA8ZS	EA8ZS	HG1S	TO6T	PW2D	VP9I	YN2EA
10	омфм	OA40	IR4M	EI7M	OM5M	NH6P	HD2A	T46G	G5W
	Multi-Operator, Two-	Transmitter							
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	9A7A	PJ2T	PJ2T	PJ2T	PJ2T	PJ2T	6Y1V	6Y1V	D4C
2	RU1A	6D2YFM	FY5KE	TE2M	OE4A	6Y1V	V47KP	TM6M	TI5N
3	HG6N	V26DX	V26DX	OE4A	HG6N	KH7X	TI8M	TI8M	LP1H
4	DL6RAI	TI8/K4UN	TI8M	RU1A	9A7A	V47KP	ZY7C	ZY7C	KL7RA
5	OA40	9A7A	HG6N	KL7DX	TI8M	TM6M	TM6M	V48M	CE4CT
6	RM6A	HG6N	RU1A	OH6NIO	CV5D	HG6N	9A7A	PS2T	ZY7C
7	EA5DFV	RU1A	9A7A	EA8URL	JE1ZWT	JA3YBK		JA1YPA	DF7ZS
8	IO2A	DH1NFL	DK6WL			JA1YPA		KP3VA	RL3A
9	JI2KVW	LZ9W	ZX3S			OZ/DKØG		OK7K	PR5D
10	JA1YFG	PY3MHZ	RW2F			J42WT		EA3EJI	OZ1ADL
	Multi-Operator, Multi								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	VP5A	9A1A	VQ5A	V47KP	KH7X @KH6YY)	OE4A	TI5ØDX	PJ2T	KH7X @KH6YY)
2	9A1A	IR4X	V47KP	J68RI	9A15DX	9A7A	KH7X	KL7RA	V48M
3	EA8ZS	RW2F	9A1A	T49C	RK2FWA	RK2FWA	9A1A	CS2C	ZW5B
4	V26S	JA3YBK	LZ9W	9A7A	YR7M		JA3YBK	9A1A	TI8M
5	LY7Z	омфм	JA3YBK	JE1ZWT	ED1EA		JA1YPA	HG1S	DR1A
6	YT9X	LY7A		EA9IE			DR1A	SO8A 9A1A	
7	JA3YBK			DL3ABL			IQ6RS	RW2F HG1S	
8	LT1F							JA3YBK JA3YBK	
9	LY7A								JA1YPA
10	TI8/K4QFF		1		1			1	RX3APM

# 2010 ARRL DX Phone Contest

# Regional Leaders by Category

Boxes list call sign, score, and category (MS-Multi-Single, M2-Multi-Two, MM-Multi-Multi, QRP-Single-Op, QRP, LP-Single-Op, Low Power, HP-Single-Op, High Power, SOA - Single-Op, Assisted)

Northogo	4 Domion		Courthogat	Dowlon		Control	Darian		Midweet	Dowlon		West Coss	4 Dagian	
Northeas	t Region		Southeast	Region		Central I	Region		Midwest	Region		West Coas	Region	
New England, Hud Divisions; Mariti Sect	me and Quebe		Delta, Roanoke an Divisio		rn	Central and Great Ontario S		ns;	Dakota, Midwest, Ro West Gulf Division Saskatchewa	ns; Manitoba a		Pacific, Northwestern Divisions; Alberta, Br NWT Sec	itish Columbi	
VY2ZM	5,436,120	HP	K1TO	2,686,602	HP	VX3AT (VE3AT, op)	4,534,959	HP	VE4EAR	739,152	HP	K6NA	1,213,800	HP
VY2TT	4,147,332	HP	KT4Q	1,095,540	HP	W9RE	3,149,784	HP	NN7ZZ (N5LZ, op)	694,320	HP	N7TT	899,388	HP
K3CR (LZ4AX, op)	3,344,841	HP	W5WMU	1,036,431	HP	WO9Z	805,794	HP	KØVXU	511,980	HP	K5RR	806,508	HP
AA1K	3,038,208	HP	K5RQ	943,572	HP	W8TWA	614,781	HP	AD5XD	425,847	HP	K7RL	763,113	HP
W3BGN	2,852,922	HP	KZ2I	871,995	HP	N8BJQ	569,646	HP	KØOU	399,147	HP	VE6BBP	609,525	HP
N1UR	1,717,380	ΙP	N4XL	594,282	ΙP	VE3BDN	775,248	ΙP	N5AW	883,479	ΙP	K6AM	448,596	LP
WA2JQK	387,504	_	KT4ZB	588,612		VE3AD	677,424		VE5ZX	374,631		K7JE	324,768	
W1JQ	370,866		NA4K	439,230		KD9MS	394,605		NØHR	304,950		N6RV	267,300	
W2JU	349,596		N4IG	333,684		K8LY	233,874		VE5SF	270,000		W7RV	218,286	
K1VSJ	289,044		WB4JFS	303,606		K9MY	221,034		W5GFI	225,639		WN6K	172,770	
N1TM	217,005	QRP	N5FPW	54,108	QRP	VA3DF	294,120	QRP	NØKE	188,853	QRP	W6QU (W8QZA, op)	123,708	QRP
K3TW	51,975			23,310	QRP	КТ8К	55,590	QRP	N5DO	186,000	QRP	KFØX	1,275	QRP
W2JEK			W4IM	17,808	QRP	N9TTX	45,552	QRP	NDØC			KB1PWF	741	QRP
			N4ESS	5,130	QRP	Al9l	14,790	QRP	WF4U	88,920			510	QRP
W2RE	4,174,938	SOA				WD9FTZ	11,016	QRP	KA5PVB	26,718				
K3WW	3,156,300	SOA	W4MYA	1,674,216	SOA							VE8EV	613,008	SOA
AA3B	2,445,795	SOA	N4ZC	1,664,388	SOA	N8TR	1,898,334	SOA	KØKX	1,161,300	SOA	KF6A	608,058	SOA
N2MM	1,916,214			1,158,936	SOA	VE3MMQ	1,533,927	SOA	WG5J	968,544	SOA	KG7H	551,736	SOA
W1GD	1,821,687	SOA	K1ZZI	1,095,885	SOA	K9NW	1,479,177	SOA	NØVD	759,132	SOA	N6QQ	543,876	SOA
			W3OA	1,039,824	SOA	W5MX	1,168,074	SOA	WAØMHJ	593,175	SOA	KC6X	536,328	SOA
K1LZ	5,240,760	MS				N8BI	1,062,660	SOA	NØAT	519,036	SOA			
K9RS	3,922,695	MS	W5RU	2,251,158	MS							NK7U	2,236,761	MS
N1MM	3,216,663	MS	W1ZA	2,215,020	MS	KD9ST	1,381,392	MS	K5MR	815,211	MS	N7VF	351,633	MS
N1FD	2,086,272	MS	KF4ZZ	587,412	MS	KC9ARR	381,972	MS	NØMA	437,724	MS	AK7AZ	242,760	MS
NN2W	1,925,478	MS	W4HZ	518,670	MS	K9SG	326,802	MS	WØRX	392,688	MS	WX7P	239,112	MS
			W4LHS	234,585	MS	VE3UZ	161,460	MS	N3BUO	265,872	MS	K6FO	89,244	MS
WE3C	8,679,984	M2				N9DT	96,285	MS	WC7WB	179,820	MS			
KØTV	3,659,001	M2	W4RM	4,652,967		NØIJ	2,065,833					K7ZSD	2,179,377	M2
K1KP	1,917,825	M2	N1LN	3,321,402	M2	NØIJ	2,065,833	M2	KTØR	1,214,520	M2	W7RN	1,681,560	M2
K2AX	1,556,640	M2				VE3MIS	1,505,142	M2				K6IDX	1,436,010	M2
W2CG	1,371,744	M2	K4VV	2,055,504	MM		434,874	M2	KBØHH	458,172	MM	VE6FI	1,323,540	M2
						K9IU	181,596	M2				NC7M	369,096	M2
K3LR	12,240,396													
W3LPL	10,761,933	MM				WØAIH	3,515,184	MM				W6WB	2,303,160	MM
KC1XX	10,688,937					WA8RRA	31,374	MM						
KM1W	7,031,871	MM												
K1TTT	6,574,713	MM												

#### 2010 ARRL DX Phone

#### Continental Leaders

Africa								
Single Operator, High Power								
CT3BD	188,145							
5R8FU	4,860							
Single Operator, L	ow Power							
V51YJ	82,104							
EA8OM	40,257							
ZS2NF	8,400							
6W7RV	1,890							
CN8YE	1,836							
Single Operato	r, QRP							
5H3EE	2,376							
Single Operator,	Assisted							
EA8BZH	22,518							
EA8/EA4SV	1,260							
Single Operator, Single-	Band 40 Meters							
EA8CER	1,995							
Single Operator, Single-	Band 20 Meters							
AO8A (EA8AH, op)	288,720							
6W1SJ (E78A, op)	236,253							
EA8LS	7,068							
Single Operator, Single-	Band 15 Meters							
EF8R	359,640							
5C5W (CN8KD, op)	182,373							
6W2SC	103,785							
EF8G (EA8CNB, op)	972							
9QØAR/6 (ON6NL, op)	12							
Single Operator, Single-	Band 10 Meters							
EA8BZH	22,518							
EA8/EA4SV	1,260							
Multioperator, Two-Transmitter								
D4C	8,372,304							

Asia Single Operator, High Power		
JA1ELY	1,154,055	
UAØFM	572,850	
JM1XCW	504,510	
JA7BME	343,440	
UAØIDZ	327,666	
Single Operator, L		
JH4UYB	476,976	
JA2CUS	28,830	
HZ1PS	17,172	
JA1GLE		
JA1FRQ	14,592	
	12,144	
Single Operator		
JR4DAH	25,872	
JE1LDU	9,999	
JA2MWV	4,968	
JH3DMQ	225	
Single Operator,		
RAØFU	418,950	
JF2QNM	191,436	
XU7ACY	55,932	
JO1WKO	55,704	
JF9JTS	45,384	
Single Operator, Single-	Band 80 Meters	
JE1SPY	504	
JF2IWL	156	
Single Operator, Single-	Band 40 Meters	
JAØJHA	198,000	
JA1XMS	19,845	
VR2YYW	5,880	
JA8NFV	5,520	
JF1RYU	1,155	
Single Operator, Single-		
JH7XMO	213,840	
JA7FTR	198,063	
JA7XBG	173,304	
UAØDC	160,104	
JA7BJS	120,780	
Single Operator, Single-		
7J2YAF (JA1KSO, op)	96,234	
JN1NDY	86,946	
JA7NVF		
-	59,640	
JH7XGN	54,858	
7K4XNN	45,279	
Multioperator, Single		
RTØC	1,394,085	
JA8RWU	896,898	
UA9UZZ	90,675	
E21YDP	13,860	
Multioperator, Two-		
JA1YAI	828	
Multioperator, Multi-Transmitter		
JA3YBK	2,394,948	
JA1YPA	1,311,057	

LX7I (LX2A, op)  403A (YU1YV, op)  20H8X (OH6UM, op)  SP9LJD  Single Operator, Low Pow GIØKOW IW1QN  CU6AY EA3GP EA1EA  Single Operator, QRP OK2BYW F5BEG	3,121,476 2,608,290 2,069,256 1,577,166 1,509,651
LX7I (LX2A, op)  403A (YU1YV, op)  20H8X (OH6UM, op)  SP9LJD  Single Operator, Low Pow GIØKOW  IW1QN  CU6AY  EA3GP  EA3GP  EA1EA  Single Operator, QRP  OK2BYW  F5BEG	2,608,290 2,069,256 1,577,166 1,509,651 ver 767,961 348,777 169,167 125,130
403A (YU1YV, op) OH8X (OH6UM, op) SP9LJD Single Operator, Low Pow GIØKOW IW1QN CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	2,069,256 1,577,166 1,509,651 <i>ver</i> 767,961 348,777 169,167 125,130
OH8X (OH6UM, op) SP9LJD Single Operator, Low Pow GIØKOW IW1QN CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	1,577,166 1,509,651 /er 767,961 348,777 169,167 125,130
SP9LJD Single Operator, Low Pow GIØKOW IW1QN CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	767,961 348,777 169,167 125,130
Single Operator, Low Pow GIØKOW IW1QN CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	767,961 348,777 169,167 125,130
GIØKOW IW1QN CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	767,961 348,777 169,167 125,130
IW1QN CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	348,777 169,167 125,130
CU6AY EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	169,167 125,130
EA3GP EA1EA Single Operator, QRP OK2BYW F5BEG	125,130
EA1EA Single Operator, QRP OK2BYW F5BEG	
OK2BYW F5BEG	
F5BEG	
	65,286
	51,600
CT2IOV	36,675
OK1DVM	18,468
IV3AOL	16,650
Single Operator, Assisted	d
OM3GI 2	2,781,300
	2,532,360
	2,397,720
	1,875,750
	1,548,021
Single Operator, Single-Band 16	
M8M (G3LNP, op)	34,848
S56P	25,992
I4FYF	13,860
SP5CJY	288
LY2OU	144
Single Operator, Single-Band 80	
GM3PPG (G4BYB, op)	193,662
CT2ITR	132,516
E77DX	109,152
UX2X (UT2XQ, op)	62,568
G8DYT	45,030
Single Operator, Single-Band 40	
CR2X (OH2BH, op)	469,944
CT1ILT	345,420
VT9A (VIIITA op)	279,129
YT8A (YU1EA, op) TMØT	257,040
	166,041
Single Operator, Single-Band 20 F6KHM (F8DBF, op)	621,696
TM5C	583,632
S5ØK	442,680
SN2B (SP2WKB, op)	426,006
OH8L (OH8LQ, op)	400,680
Single Operator, Single-Band 15	
CR2A (OH8NC, op)	435,174
CR6K (CT1CJJ, op)	219,408
I4TJE	163,950
TM6M (F1AKK, op)	151,470
I4LEC	146,559
Multioperator, Single-Transn	
	2,026,692
	1,968,624
	1,863,822
	1,809,129
	1,496,322
Multioperator, Two-Transm	itter
DF7ZS 2	2,008,818
	1,400,976
OZ1ADL	566,406
9A6K	413,592
EI9E	311,922
Multioperator, Multi-Transm	
	3,875,430
	3,546,630
	2,397,750
	730,125
RX3APM EA3EZD	293,928

North Amer			
Single Operator, Hi	igh Power		
8P5A (W2SC, op)	7,951,068		
6Y9V (WE9V, op)	6,819,318		
KP2M (N2TK, op)			
TO5A	3,886,035		
PJ7MF	780,291		
Single Operator, Lo			
HI3TEJ	3,488,265		
V26M (N3AD, op)	3,032,010		
VP9/W6PH (W6PH, op)	2,860,164		
J88DR (G3TBK, op)	2,653,224		
J7Y (K1LI, op)	2,315,328		
Single Operator,			
J7N (K3TEJ, op)	4,058,577		
NP2KW	1,200,114		
AL9A	872,067		
WP4SK	653,856		
J68JA	199,920		
Single Operator, Single-B			
XE1GRR	510		
Single Operator, Single-L	Band 80 Meters		
C6AWL (RA3CO, op)	199,125		
Single Operator, Single-L	Band 40 Meters		
ZF2AH	431,100		
HQ9R (WQ7R, op)	180,747		
KL7OU	86,832		
Single Operator, Single-L	Band 20 Meters		
HQ2T (K2BB, op)	334,341		
TG9ANF	323.826		
Single Operator, Single-L	Band 15 Meters		
XE1L	203,280		
J37K (AC8G, op)	186,006		
XE1TD (XE1GRR, op)	39,942		
XE1ZTW	10,752		
Multioperator, Single-			
VP5H			
	5,931,945		
HI3K	4,851,120		
4A2S	4,698,120		
TO2T	3,455,334		
C6ANM	3,083,841		
Multioperator, Two-			
TI5N	7,792,560		
KL7RA	4,810,680		
Multioperator, Multi-Transmitter			
V48M	6,668,550		

Oceania		
Single Operator, H	iah Power	
KH7XS	6,244,950	
KH2JU	401,547	
VK3IO	115,416	
DU1BP	66,990	
FO8RZ	29,382	
Single Operator, Low Pow		
KH7T	652,344	
VK4HAM	22,152	
DV1JM	15,531	
NH6AB		
VK2HBG	11,340	
	5,145	
Single Operator		
VK4ATH	2,310	
Single Operator,		
ZL1BYZ	148,248	
VK8PDX	28,275	
ZL3GA	300	
Single Operator, Single-I		
KH6LC (NH6V, op)	211,731	
KH6QJ	324	
Single Operator, Single-L	Band 40 Meters	
VK3NI	90,072	
DX9M (DV9XO, op)	3,393	
VK3VTH	2,166	
DU7RH	432	
YC2LEV	270	
Single Operator, Single-I	Band 20 Meters	
AH7C	138,171	
NH6WZ	33,660	
DU1AV	20,304	
ZM3T (ZL3TE, op)	12,180	
DU1JI	2,088	
Single Operator, Single-I	Band 15 Meters	
KH7Y	431,640	
VK4EJ	28,659	
VK4FJ	8,928	
YCØNSI	4.914	
AH6NF	819	
Single Operator, Single-I		
NH7PE	12	
Multioperator, Multi-Transmitter		
KH7X	7,884,783	
	. ,,. 00	

South Ame	rica	
Single Operator, H		
PJ2T (WB9Z, op)	6,554,676	
PZ5RA	2,459,646	
YV5KG	1,535,655	
L44DX (LU3DX, op)	864,546	
LW3DC	510,120	
Single Operator, L		
P4ØA (KK9A, op)	5,510,736	
HK6P	653,913	
LU7HW	619,164	
LU5FF	600,660	
P43E	415,410	
Single Operato		
PU5ATX	4,536	
PY2BN	4,500	
Single Operator,	Assisted	
LT1F (LU1FAM, op)	2,728,818	
ZX2B (PY2MNL, op)	1,928,004	
CE1TT	738,906	
YV5EAH	678,480	
CW7T	422,565	
Single Operator, Single-E		
LU2DVI	1,248	
Single Operator, Single-	Band 80 Meters	
YV5MSG	113,190	
HK1NK	99,693	
YV6BXN	85,542	
Single Operator, Single-	Band 40 Meters	
YV5OK	148,680	
YW5T	99,000	
Single Operator, Single-		
9Y4D	290,346	
PY2MTV		
	242,730	
ZY2C (PY2ADR, op)	170,100	
PY2NY	131,688	
PY5ZHP	96,396	
Single Operator, Single-	Band 15 Meters	
ZX5J (PP5JR, op)	588,504	
LP2F (LU1FDU, op)	558,699	
PY2BK	398,574	
HC1HC	379,908	
AY5F	325,008	
Single Operator, Single-	Band 10 Meters	
LU1HF	255,696	
LR2F	202,608	
LU1UM	103,509	
LU6FOV	93,330	
PY2ZXU	83,556	
Multioperator, Single	-Transmitter	
P4ØN	7,373,388	
PJ4G		
	6,494,220	
CW5W	3,170,976	
HD2A	1,005,480	
ZW8T	617,232	
Multioperator, Two-	Transmitter	
LP1H	5,586,975	
CE4CT	4,360,125	
ZY7C	3,647,520	
PR5D	750,060	
Multioperator, Two-Transmitter		
ZW5B	5,258,400	
ZY5Z	540,690	

#### 2010 ARRL DX SSB Contest - 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 SSB 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.

World Single Operator Phone High Power	North Jersey DX Association	8P5A (W2SC, op)
World Single Operator Phone QRP	QRP-ARCI	OK2BYW
World Single Operator Assisted Phone	Southern California DX Club	J7N (K3TEJ, op)
World 1.8 MHz Phone	Fred Race, W8FR, In Memory of ZL2BT	M8M (G3LNP, op)
World 7 MHz Phone	Jim Rafferty, N6RJ Memorial - Cayman ARS	CR2X (OH2BH, op)
World 14 MHz Phone	Don Wallace, W6AM, Memorial Award	F6KHM (F8DBF, op)
World 21 MHz Phone	Long Island DX Association	ZX5J (PP5JR, op)
World 28 MHz Phone	North Shenandoah DX Association NS4DX	LU1HF
World Multioperator Two Transmitters Phone	W6NL and K6BL	D4C
World Multioperator Unlimited Phone	Stanley Cohen, W8QDQ	KH7X
W/VE Single Operator High Power Phone	Frankford Radio Club	VY2ZM
W/VE Single Operator Low Power Phone	Dauberville DX Association	N1UR
W/VE Single Operator QRP Phone	Jeffrey Briggs, K1ZM	VA3DF
W/VE Single Operator Assisted Phone	Pete Carter, K3VW Memorial	W2RE
W/VE 3.5 MHz Phone	Jeffrey Briggs, VY2ZM	AA1BU
W/VE 28 MHz Phone	Ralph Fontaine AF7DX	W5PR
W/VE 1.8 MHz Phone	Butch Greve, W9EWC Memorial	W2MF
Asia Multioperator Single Transmitter Phone	Yankee Clipper Contest Club	RTØC
Europe Multioperator Unlimited Phone	Operators at K1TTT	DR1A
North America Multioperator Single Transmitter Phone	Nick Lash, K9KLR	VP5H
Oceania Single Operator High Power Phone	W7EW / W7AT	KH7XS
South America Multioperator Two Transmitter Phone	Operators at K1TTT	LP1H
Japan Single Operator Low Power Phone	Western Washington DX Club	JH4UYB
Great Lakes Division Single Operator Unlimited Phone	Northern Ohio DX Association	N8TR
New England Division Single Operator Low Power Phone	CTRI Contest Group	N1TM

Unsponsored plaques may be purchased by the plaque winner. If you wish to purchase an unsponsored 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).