

## Results of the 2009 ARRL 160 Meter Contest

*Note – this is a temporary publication pending conversion to the updated ARRL Web site.*

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*Excellent Conditions + Record Participation = Maximum Fun!*

The 2009 ARRL 160 Meter contest (Dec 4-6) was an historic event! Scoring records were broken left and right as great propagation and all-time high activity converged during the first weekend in December. Here are few numbers that fit into the “maximum fun” equation:

2 — The number of stations that broke the 2000-QSO barrier! Recent winners have approached this milestone, but in 2009, the top two Single Operator, High Power finishers finally made it, with 2046 and 2013 QSOs respectively.

95 — The number of stations that made more than 1000 QSOs. The next-best total from past contests is just 78.

112 — The number of stations that had more than 100 multipliers. In the past, the highest count was 69.

1366 — This number of log submissions was a seven percent increase over the previous all-time high, set just one year earlier in 2008. Interestingly, the High Power category had fewer entries, but the number of QRP, Low Power and Multioperator entries easily surpassed all previous years' entries. US/VE entries were up 6 percent, while DX entries were a remarkable 15 percent higher than any previous edition of this contest. QSO and multiplier totals suggest that the number of participants who did not submit a log was likely at an all-time high, as well. Hams all around the world continue to be drawn to this fascinating band!

87 — Four entry categories and 80 ARRL/CRRL Sections means that there are 320 section records for US/VE hams to strive for, and 87 them were broken as shown in the New Records table below. Many were new personal best scores by previous record holders, with gains of 25 to 40 percent being quite common. Some of those past records were already quite substantial, which makes the new records truly impressive. No part of the US and Canada was left out, as new records were established from coast-to-coast. In the Eastern PA Section, all four entry category records fell, while three out of four were surpassed in MI, OR, VA and WI. Two DX continental records were broken as well.

*Note that individual DX country records, Division and Section records are available in the full listing of 160 Meter Contest records on the ARRL Contest Branch Web page.*

<b>New Records in 2009</b>			
<b><i>DX Continental Records</i></b>			
<b>Continent</b>	<b>Category</b>	<b>Station</b>	<b>Score</b>
North America	SO-LP (Also overall DX SO-LP record)	C6AKQ (op, N4BP)	187,356
North America	SO-HP	6Y7J (op, UU4JMG)	204,768
<b><i>ARRL/CRRL Section Records</i></b>			
<b>Section</b>	<b>Category</b>	<b>Station</b>	<b>Score</b>
EMA	SOLP	K1EP	193,347
	MO	K1LZ	591,429
ME	SO-HP	K8PO	602,615
NH	SO-QRP	AA1CA	53,088
RI	SO-LP	W1WBB	106,080
	MO	W1OP	291,648
VT	SO-HP	W1SJ	284,406
WMA	SO-HP	N2KW	402,463
	MO	K6ND	411,432
ENY	MO	N1EU	226,050
NLI	SO-LP	N2RI	43,674
NNY	SO-HP	NN2L	101,964
SNJ	MO	W2GD	585,982
WNY	SO-HP	WF2W	417,012
	MO	W2FU	577,330
DE	SO-QRP	AE3J	5,456
	SO-HP	AA1K	530,140
EPA	SO-QRP	W3TS	102,640
	SO-LP	WY3A	160,724
	SO-HP	NY3A	415,863
	MO	WE3C	517,370
MDC	SO-HP	K3ZO	332,748
WPA	SO-HP	W3GH	258,741
AL	MO	K4TD	394,524
GA	SO-HP	W8JI (op, K1TO)	695,960
KY	SO-LP	K4FT	199,300
	SO-HP	W5MX	484,500
NC	MO	N1LN	516,864
SC	SO-QRP	K4CNW	81,923
	SO-HP	KM4D	227,106
TN	SO-LP	N2WN	260,610
VA	SO-LP	K1HTV	197,870
	SO-HP	K3ZM	655,819
	MO	W4MYA	475,008
VI	SO-HP	KV4FZ	376,257
WCF	MO	K5KG	53,088
AR	SO-LP	K5LG	117,734
LA	SO-HP	N8OO	459,900
NM	SO-HP	N5IA	307,718
NTX	SO-LP	WØUO	184,239

OK	SO-QRP	N4IJ	28,152
	SO-HP	W5TM	367,614
STX	SO-HP	K5NA	513,549
	MO	NX5M	345,695
WTX	MO	W5AJ	77,786
EB	SO-QRP	K6EI	43,810
SB	SO-HP	AC6DD	149,865
SF	SO-LP	W6JTI	108,885
	MO	K6SRZ	134,676
SV	MO	W6OAT	163,982
AZ	SO-QRP	N7IR	82,000
	SO-LP	W7RH	159,936
ID	SO-LP	A17H	60,624
	SO-HP	KG7H	159,530
MT	SO-LP	KB7Q	202,410
NV	SO-HP	W7RN (op, KY7M)	266,640
OR	SO-LP	W7Yaq	62,700
	SO-HP	K7RAT (op, N6TR)	351,216
	MO	NK7U	224,200
UT	SO-HP	NN7ZZ (op, N5LZ)	208,656
WWA	MO	K7RL	156,558
MI	SO-QRP	N8BB	100,813
	SO-LP	N3CO	130,572
	MO	W8MJ	397,880
OH	SO-LP	K8FH	250,818
	SO-HP	K1LT	514,304
WV	SO-LP	N8II	165,261
IL	SO-HP	K9DX	674,325
	MO	WB9Z	561,467
IN	SO-LP	K9IG	258,358
WI	SO-QRP	N9NE	74,962
	SO-LP	WE9V	212,515
	SO-HP	K9AY	457,138
CO	SO-HP	KØRF (op, WØUA)	345,690
IA	MO	NØNI	487,080
KS	SO-LP	KØBJ	106,812
MN	SO-QRP	WØGJ	140,798
NE	SO-QRP	WTØA (op, KE5RX)	18,720
	SO-HP	WW2Y	126,255
ND	SO-LP	N7IV	103,976
SD	MO	KDØS	226,464
QC	SO-HP	VA2EW (op, VE2TZT)	464,512
ON	SO-HP	VE3EJ	621,158
AB	SO-QRP	VE6EX	3,036
	MO	VE6JY	77,952
BC	SO-QRP	VE7VV	38,640

<b>Top Ten by Category</b>			
<b>Single Operator, QRP</b>	<b>Score</b>	<b>Single Operator, High Power</b>	<b>Score</b>
WØGJ	140,798	W8JI (K1TO, op)	695,960
W3TS	102,640	K9DX	674,325
N8BB	100,813	K3ZM	655,819
KØPK	88,776	VE3EJ	621,158
N7IR	82,000	K8PO	602,615
K4CNW	81,923	N1BUG	568,490
N9NE	74,962	AA1K	530,140
NK8Q	63,492	K1LT	514,304
AA1CA	53,088	K5NA	513,549
W4TMR	51,696	W5MX	484,500
<b>Single Operator, Low Power</b>	<b>Score</b>	<b>Multioperator</b>	<b>Score</b>
N2WN	260,610	KC1XX	639,653
K9IG	258,358	K1LZ	591,429
K8FH	250,818	W2GD	585,982
WE9V	212,515	W2FU	577,330
KB7Q	202,410	WB9Z	561,467
K4FT	199,300	WE3C	517,370
K1HTV	197,870	N1LN	516,864
WB8JUI	197,600	K3WW	499,356
K1EP	193,347	NØNI	487,080
C6AKQ (N4BP, op)	187,356	W4MYA	475,008

<b>Division Leaders</b>		
<b>Division</b>	<b>Call</b>	<b>Score</b>
<b>Single-Op, QRP</b>		
Atlantic	W3TS	102,640
Central	N9NE	74,962
Dakota	WØGJ	140,798
Delta	K4RST	18,941
Great Lakes	N8BB	100,813
Hudson	KR2Q	42,432
Midwest	WTØA (KE5RX, op)	18,720
New England	AA1CA	53,088
Northwestern	KX7L	9,408
Pacific	K6EI	43,810
Roanoke	K4CNW	81,923
Rocky Mountain	KT5E	43,310
Southeastern	N4AX	20,094
Southwestern	N7IR	82,000
West Gulf	N4IJ	28,152
Canada	VE7VV	38,640
<b>Single-Op, Low Power</b>		
Atlantic	WY3A	160,724
Central	K9IG	258,358
Dakota	K7RE	148,680
Delta	N2WN	260,610
Great Lakes	K8FH	250,818
Hudson	K1NK	106,026
Midwest	KØDI	155,400
New England	K1EP	193,347
Northwestern	KB7Q	202,410
Pacific	N6RK	123,120
Roanoke	K1HTV	197,870
Rocky Mountain	ACØDS	139,318
Southeastern	K4CWW	80,975
Southwestern	W7RH	159,936
West Gulf	WØUO	184,239
Canada	VE3KF	146,500
<b>Single-Op, High Power</b>		
Atlantic	AA1K	530,140
Central	K9DX	674,325
Dakota	K9DU	237,120
Delta	N8OO	459,900
Great Lakes	K1LT	514,304
Hudson	W2XL	240,563

Midwest	NØTT	240,856
New England	K8PO	602,615
Northwestern	K7RAT (N6TR, op)	351,216
Pacific	W7RN (KY7M, op)	266,640
Roanoke	K3ZM	655,819
Rocky Mountain	KØRF (WØUA, op)	345,690
Southeastern	W8JI (K1TO, op)	695,960
Southwestern	AC6DD	149,865
West Gulf	K5NA	513,549
Canada	VE3EJ	621,158
<b>Multioperator</b>		
Atlantic	W2GD	585,982
Central	WB9Z	561,467
Dakota	KDØS	226,464
Delta	N4VV	147,105
Great Lakes	W8MJ	397,880
Hudson	N1EU	226,050
Midwest	NØNI	487,080
New England	KC1XX	639,653
Northwestern	W7CT (@ NK7U)	224,200
Pacific	NR6O	212,420
Roanoke	N1LN	516,864
Rocky Mountain	WØGG	246,335
Southeastern	K4TD	394,524
Southwestern	N6MA	86,856
West Gulf	NX5M	345,695

### Single Operator, High Power

At the top of the list is the station of Tom, W8JI operated by Dan, K1TO who finished in first place with an all-time high 2046 QSOs. As a guest operator, Dan observes that, “The top tier of the 160 community has certainly assembled a dazzling array of antennas on FB QTHs, and I especially salute those who have both built and operated their own stations.” One ham who fits the latter description is John, K9DX who used the “dazzling array of antennas” he has built to achieve a close second-place finish, also surpassing the 2000-QSO mark. John has consistently made Top Ten finishes from his Illinois QTH, and this is his best ever.

Third place was gained by Peter, K3ZM who says, “Many thanks to the DX stations for helping us have a fun contest on our end.” Peter emphasized working DX and ended up with well over 400 5-point QSOs in his log. Further north in eastern Ontario, John, VE3EJ put in another strong performance to earn a fourth-place finish. The battle for fifth and sixth place was fought by two hams in the Maine section, with Paul, K8PO edging out Paul, N1BUG by six percent. When scoring was completed, K8PO’s extra QSOs trumped N1BUG’s higher multiplier count. [*Would that be an unbalanced di-Paul? – Ed*]

In the High Power category, the top 12 finishers surpassed the old records for their sections. In total, there were 29 new section records in the High Power category, including some

excellent performances in the western US. “Tree,” N6TR operated with the club call K7RAT for a new Oregon record; Ed, W5TM set a new Oklahoma record; while George, WØUA piloted the KØRF station to a new Colorado record — all with scores exceeding 300k points!

### **Single Operator, Low Power**

Julius, N2WN repeated his 2008 Low Power victory, noting, “This contest was my personal best for an ARRL 160.” It certainly was, with a 15 percent increase over his previous Tennessee section record. Also repeating as runner-up is Greg, K9IG, who boosted his Indiana record by nearly 25 percent despite persistent local noise.

As has been the case in the past, the top Low Power finishers represent most of the North American continent, with each of the Top Ten from different places. In addition to the two already mentioned, the list includes MI (K8FH), WI (WE9V), MT (KB7Q), KY (K4FT), VA (K1HTV), OH (WB8JUI), EMA (K1EP) and WTX (WØUO). Like the High Power entries, the top 11 US/VE Low Power scorer all posted scores higher than their section’s previous records.

### **Single Operator, QRP**

With the twin requirements of “hearing well” and “being heard,” succeeding at QRP power level on the 160 meter band is especially rewarding. Glenn, WØGJ, guided his Bemidji, MN station to a repeat victory. According to Glenn, “...at least in the QRP category, the Midwest is the place to be on 160M!” Mike, W3TS continued his successful QRP efforts with a second-place finish from Eastern Pennsylvania, with Werner, N8BB in Michigan not far behind in third. Paul, KØPK, joined fellow Minnesotan WØGJ in the Top Ten box with his fourth-place finish. Other notable QRP performances were Gary, N7IR in Arizona; Jack, K4CNW, in South Carolina; Todd, N9NE in Wisconsin; and Tom, AA1CA, in New Hampshire. All had personal best scores and new section records.

### **Multioperator**

12 of the top 14 Multioperator stations established new section records! The crew of operators at KC1XX were the best of the four northeast US efforts that topped this category, not only winning, but raising the US/VE Multioperator record by 41k points. They were followed by teams at K1LZ in Eastern Massachusetts, W2GD in Southern New Jersey and W2FU in Western New York.

Further west, WB9Z captured fifth place with the highest QSO total in this category, just short of the 2000-QSO mark with 1930 contacts. The highest score west of the Mississippi was made by the operators at NØNI in Iowa, which was good enough for a spot in the Top Ten box, ninth place.

The WB9Z multi-op crew established a new IL Section and Central Division record. (Top: Jerry KE9I, Mike AJ9C, Ralph K9ZO, Jerry WB9Z, foreground: Mike K9XZ)



To see more good stories of these and other excellent performances, take a look at the sidebar “The Winners’ Stories (and More)” with comments from the top finishers, as well as other enthusiastic participants following this main article.

<b>Regional Leaders</b>				
Categories are A – Single-Op, QRP; B – Single-Op, Low Power; C – Single-Op, High Power; D - Multioperator				
<b>Call</b>	<b>Score</b>	<b>QSOs</b>	<b>Mults</b>	<b>Category</b>
<b>Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)</b>				
W3TS	102,640	629	80	A
NK8Q	63,492	475	66	A
AA1CA	53,088	475	56	A
KR2Q	42,432	440	48	A
K3TW	40,392	394	51	A
K1EP	193,347	912	99	B
WY3A	160,724	850	92	B
K3SWZ	124,033	657	91	B
W2TZ	123,238	698	86	B
N2ZN	119,795	592	95	B
K8PO	602,615	1786	127	C
N1BUG	568,490	1664	130	C
AA1K	530,140	1705	130	C
VA2EW (VE2TZT, op)	464,512	1512	128	C
WF2W	417,012	1426	124	C
KC1XX	639,653	1880	137	D
K1LZ	591,429	1672	137	D
W2GD	585,982	1794	134	D
W2FU	577,330	1872	130	D
WE3C	517,370	1553	133	D
<b>Southeast Region (Delta, Roanoke and Southeastern Divisions)</b>				
K4CNW	81,923	507	79	A
W4TMR	51,696	359	72	A
AA4XX	36,904	324	56	A
K4ORD	35,722	329	53	A
N4AX	20,094	205	51	A
N2WN	260,610	1198	105	B
K1HTV	197,870	1032	94	B
WA4PGM	173,901	933	91	B
N8II	165,261	856	93	B
N4IR	142,500	921	76	B
W8JI (K1TO, op)	695,960	2046	137	C
K3ZM	655,819	1757	137	C



N8OO	459,900	1550	126	C
KV4FZ	376,257	1064	133	C
W5ZN	338,952	1366	116	C
N1LN	516,864	1761	128	D
W4MYA	475,008	1573	128	D
K4TD	394,524	1560	117	D
N3UA	387,000	1251	125	D
N4PN	335,124	1345	116	D
<b>Central Region (Central and Great Lakes Divisions; Ontario Section)</b>				
N8BB	100,813	684	73	A
N9NE	74,962	504	74	A
WO9S	47,970	374	65	A
N8LJ	32,832	313	54	A
K8ZT	31,860	265	60	A
K9IG	258,358	1249	101	B
K8FH	250,818	1178	102	B
WE9V	212,515	1093	95	B
K4FT	199,300	960	100	B
WB8JUI	197,600	1018	95	B
K9DX	674,325	2013	135	C
VE3EJ	621,158	1793	137	C
K1LT	514,304	1667	128	C
W5MX	484,500	1690	125	C
K9AY	457,138	1665	121	C
WB9Z	561,467	1930	127	D
W9AZ (K9NR, op)	423,640	1619	119	D
W8MJ	397,880	1627	116	D
K8QKY	376,736	1404	122	D
VA3DX	311,562	1237	114	D
<b>Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)</b>				
WØGJ	140,798	791	89	A
KØPK	88,776	541	81	A
KT5E	43,310	299	71	A
KEØG	39,065	303	65	A
WX7G	38,553	267	71	A
WØUO	184,239	902	99	B
KØDI	155,400	924	84	B
K7RE	148,680	891	84	B
ACØDS	139,318	847	82	B
NØIM	138,368	717	94	B
K5NA	513,549	1697	129	C
W5TM	367,614	1405	117	C
KØRF (WØUA, op)	345,690	1405	115	C

N5IA	307,718	1303	106	C
WD5COV	292,680	1068	120	C
NØNI	487,080	1836	120	D
NX5M	345,695	1365	119	D
WØGG	246,335	1284	95	D
KDØS	226,464	1154	96	D
W7RF	197,666	987	98	D
<b>West Coast Region (Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)</b>				
N7IR	82,000	487	82	A
K6EI	43,810	335	65	A
VE7VV	38,640	271	70	A
N6WG	16,830	187	45	A
KX7L	9,408	112	42	A
KB7Q	202,410	1117	90	B
W7RH	159,936	779	98	B
KØPP	132,515	770	85	B
N6RK	123,120	755	80	B
AB7E	113,872	635	88	B
K7RAT (N6TR, op)	351,216	1480	108	C
W7RN (KY7M, op)	266,640	1246	101	C
VE7CC	174,432	913	92	C
KG7H	159,530	920	86	C
AC6DD	149,865	727	97	C
W7CT (@ NK7U)	224,200	1153	95	D
NR6O	212,420	1063	95	D
W6OAT	163,982	862	91	D
K7OX	162,514	896	89	D
K7RL	156,558	789	97	D

## DX Results

This contest is a unique hybrid of domestic and DX, with band conditions playing a big part on the DX side. This year's great conditions resulted in excellent European participation, and big QSO totals by North and South American DX stations. Although conditions were not as strong to all parts of the world, the final result is the highest number of DX logs ever submitted, plus plenty of DX operators who contributed QSOs and multipliers without sending in a log.

### DX Top Ten

Call	Score
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#### Single Operator, QRP

JH4UYB	2
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#### Single Operator, Low Power

C6AKQ (N4BP, op)	187,356
EI4CF	6,264
XE2YWH	3,520
G4AFS	3,422
UT7UW	2,000
SP5CJY	1,848
OK6Y (OK2PTZ, op)	1,512
GM3YEH	1,188
F1UVN	1,102
JE1SPY	1,040

#### Single Operator, High Power

6Y7J (UU4JMG, op)	204,768
HC8GR (K6AW, op)	165,426
ZF2AH	126,450
XE2S	77,380
OM2VL	62,952
ON4UN	62,098
CT1JLZ (OK1RF, op)	50,688
G5W (G3BJ, op)	48,944
G3LET	45,828
HC2SL	39,456

#### Multioperator

PJ2T	191,724
VP5CM	163,394
F5IN	30,348
OL5R	18,900
UW2M (URØMC, op)	15,752
E77DX	15,228
ES5RY	15,200
EA1DR	12,696
5J1A	12,126
JA3YBK	10,640

In North America, 6Y7J, operated by Andy, UU4JMG was the High Power winner and the top DX score overall. His efforts also resulted in new North American record. Bob, N4BP traveled to the Bahamas to operate as C6AKQ in the Low Power category, reaching a new continental record and a spot in the overall Top Ten list before the winds blew down his antenna. VP5CM had an excellent Multioperator score, finishing second among all DX stations.

In South America, the Multioperator entry from PJ2T was the top in that category, with HC8GR (operator Steve, K6AW) achieving the second-place DX score for High Power.

Europe provided the majority of DX QSOs and multipliers for this contest. Leslie, OM2VL's 523 QSOs were enough to top John, ON4UN's 514 QSOs for the top European in the High Power category. G5W (operated by G3BJ), and G3LET each worked more than 400 US/VE stations, while CT1JLZ (operated by OK1RF) came close with 390 QSOs. At Low Power, the two best European entries were Niall, EI4CF and Terry, G4AFS, who between them managed to make 148 QSOs. Mike, F5IN used the spotting network to reach the top of the European Multioperator list.

Asian 160 meter enthusiasts are always a big part of the morning hours in the US and Canada. Although conditions were less than stellar in 2009, JH4UYB managed a contact and submitted the only DX QRP entry in the contest. At Low Power, JE1SPY made 28 QSOs to be the top Asian score. JA8NFV was the best High Power entry from that part of the world, while the crew at JA3YBK pulled 136 US/VE call signs from the noise to be the top Multioperator entry. Several UA9/UAØ stations and JT1CO provided more than 100 DX QSOs and multipliers from their Asian QTHs.

FO8RZ was the only entry from Oceania, with just two QSOs, but there were reports of ZL and VK station activity. No logs were received from Africa, but a few logs contain QSOs from this continent. Of course, we would like all DX entrants to submit a log for log-checking purposes, as well as to help gauge worldwide activity.

Additional notes and comments from some of the DX entrants are included in the sidebar, "Notes from the DX Side".

## **Club Competition**

The Unlimited Club competition was incredibly close, with the three top clubs having aggregate scores within three percent, a spread of just 210,000 points out of nearly 7 million. This year's winner of the gavel is the Yankee Clipper Contest Club, whose 58 entries totaled 6.92 million points. Close behind is the Society of Midwest Contesters who had the greatest participation with 76 logs, but hoped for a few more to add to their 6.77 million point total. In third, with 6.71 megapoints from 69 entries, was the Potomac Valley Radio Club. The last club to reach the required 50 entries for an Unlimited entry was the Minnesota Wireless Association, with 57 stations represented.

<b>Affiliated Club Competition</b>		
	<b>Score</b>	<b>Entries</b>
<b>Unlimited Category</b>		
Yankee Clipper Contest Club	6,924,804	58
Society of Midwest Contesters	6,773,425	76
Potomac Valley Radio Club	6,714,918	69
Minnesota Wireless Assn	3,977,934	60
<b>Medium Category</b>		
Frankford Radio Club	5,215,768	35
Contest Club Ontario	3,448,319	33
Tennessee Contest Group	2,597,177	31
Mad River Radio Club	2,429,687	21
Northern California Contest	1,940,834	44
Florida Contest Group	1,587,914	20
South East Contest Club	1,493,338	16
Alabama Contest Group	1,402,156	18
Grand Mesa Contesters of	1,269,124	15
Rochester (NY) DX Assn	1,110,756	8
Central Texas DX and Contest	1,090,531	8
Arizona Outlaws Contest Club	1,017,179	23
Western New York DX Assn	861,390	7
North Texas Contest Club	778,648	6
Contest Group Du Quebec	659,121	5
Hudson Valley Contesters and	605,333	11
Southern California Contest	404,383	13
Kentucky Contest Group	362,628	5
CTRI Contest Group	334,024	6
Willamette Valley DX Club	313,814	6
Order of Boiled Owls of New	277,884	7
Western Washington DX Club	272,543	9
BC DX Club	244,101	4
Carolina DX Assn	241,707	6

North Coast Contesters	223,818	4
Utah DX Assn	219,542	4
Texas DX Society	113,861	4
<b>Local Category</b>		
Central Virginia Contest Club	1,405,088	9
Kansas City DX Club	441,335	6
Spokane DX Association	329,686	5
Mother Lode DX/Contest Club	318,603	6
Delaware ARA (Ohio)	278,067	4
Maritime Contest Club	276,985	6
Skyview Radio Society	265,079	3
West Park Radiops	113,320	6
Midland ARC	89,231	3
Allegheny Valley Radio	80,408	3
Southeastern DX Club	77,548	3
Magnolia DX Assn	64,332	3
Metro DX Club	44,174	3

In the Medium Club competition, the 32 logs submitted for the Frankford Radio Club totaled 3.83 million points, earning the top spot in this category. The largest group in the Medium Club category was assembled by the Northern California Contest Club, with 44 participants.

The Local Club category saw the Central Virginia Contest Club at the top spot, with a total of just over 1 million points by eight members.

### **Get Ready For Next Year**

Good conditions to various parts of the world can occur almost any time in the solar cycle, and hopefully, that time will once again align with the dates of a future ARRL 160 Meter Contest. The next event is scheduled for December 3-5, 2010.

## Sidebar -- Stories from the Winners (and Others)

Our top scorers all have their own stories to tell, but there are many other stories and comments as well. Together, they create an overall impression of the 2009 ARRL 160 Meter Contest. There is no better way to capture the spirit of this event than the participants' own words!

*W8JI, Operated by Dan Street, K1TO — Single Operator High Power Winner  
(Edited from the "3830" reflector on Contesting.com)*

WOW! What a wonderful station that Tom, W8JI has painstakingly assembled! It was a pleasure to be able to just step in and reap the benefits of all of Tom's hard work.

This operation came together at the very last minute, starting with a casual phone call three days before the test. I cannot thank Tom enough for rolling out the red carpet to make it happen. All I had to do was drive seven hours and bring my favorite paddle and headphones.

Looked for exotic long-path QSOs at sunset and for Asian grey line DX at sunrise, but worked nothing of note. Did work 24 JAs and felt several times Sunday morning like the band was about to explode with JA callers. I can understand that they, like many longer-distance DX stations, save their efforts for the CQ 160 where they can work everyone for credit and not just USA/VE.

Used a Yaesu MP MarkV for transmit and a K3 for receive most of the time. Having never compared them side by side, it was an eye opener at times to see how well the K3 performs, particularly with the diversity RX option deployed. Kept a wattmeter in view and ran less than 1500W at all times. Have to have faith that everyone else did the same.

160 is of course the hardest band on which to get significant directivity both on xmit and receive. The top tier of the 160 community has certainly assembled a dazzling array of antennas on FB QTHs and I especially salute those who have both built and operated their own stations.

Congratulations to K9DX for a very strong performance and to K3ZM for maximizing the DX portion of his effort. In the end, I'm happy to have found the happy medium between QSO points and mults that produced a record score. Buried in the scores is the effort of Tree, operating as K7RAT, who beat the west-of-the-Mississippi record by around the same margin as the overall score record was broken.

*N2WN, Julius Fazekas — Single Operator Low Power Winner  
(Edited from the "3830" reflector on Contesting.com)*

ARRL160 is the pain game. I figure it is a true test of equipment and operating mettle for most people. Can't compare it with a DXpedition, but it has to come close. Where else can you cram so many people in such a small spectrum with fish buoys, AM broadcast, tuners every 50 Hz, rapid QSB, short propagation windows, even smaller spectrum for many non-US/VE stations, mega-power, mega-antennas, QSOs happening eight layers deep, hearing needed EU multipliers and knowing they can hear you (or vice versa). Gotta love it!

As a betting man, I would not have placed any money on this year's event to be worth talking about. After CQWDX CW, I actually had really low expectations. Thursday night wasn't horrible and did hear a JA Friday morning, so I was not so depressed that it might be really lousy.

Friday night started off hot and heavy, was able to run for a few hours maintaining a rate

of about 91 QSOs per. I'll take it! Had a problem with the keyboard towards the middle of the night with the "M" key becoming intermittent. My apologies to those with M in their calls or sections. Swapped it out in the morning and all was well. In the morning, I ended up just shy of 800 QSOs and 92 (!) multipliers. 92 was what I worked for the entire 2008 contest. That was VERY nice to see.

Managed all 50 states and 79 Sections, with NWT missing in my log, and probably many other logs too. NL7Z was my last state, caught him as he was starting to build. G3OLB called in around 0830z for my last EU QSO. W9YK put me over 250K. NP4A called in as my last multiplier and VE1ZAC was my last QSO. Had a total of 36 five pointers at the close of the night and every one of them was a thrill. I never worked so many LAX stations before, usually I miss it or only manage one.

It was great to hear "Tennessee Row" with TCG out in force. Looking forward to seeing the club scores as many other sections were also extremely numerous!

Finally, I REALLY worked the K3, played with diversity reception using a selection of antennas: 40M vertical, 80M tee, 40M delta loop and 330' beverage pointed towards the tip of South Africa. It was a hoot to use and did help with much of the QSB unless it was very deep. Also, ran and S&Ped "split". This is a real art and have to admire, or at least be amazed by, those who can do this well. I did pick up a couple multipliers and manage to keep running for a while.

Oh, Saturday morning was also worth mentioning, we had an unusual event: SNOW in East Tennessee. It was great! Heard it coming in, but was tickled to see the ground covered and it still coming down at dawn.

Many thanks for all the QSOs, greetings and chuckles along the way.

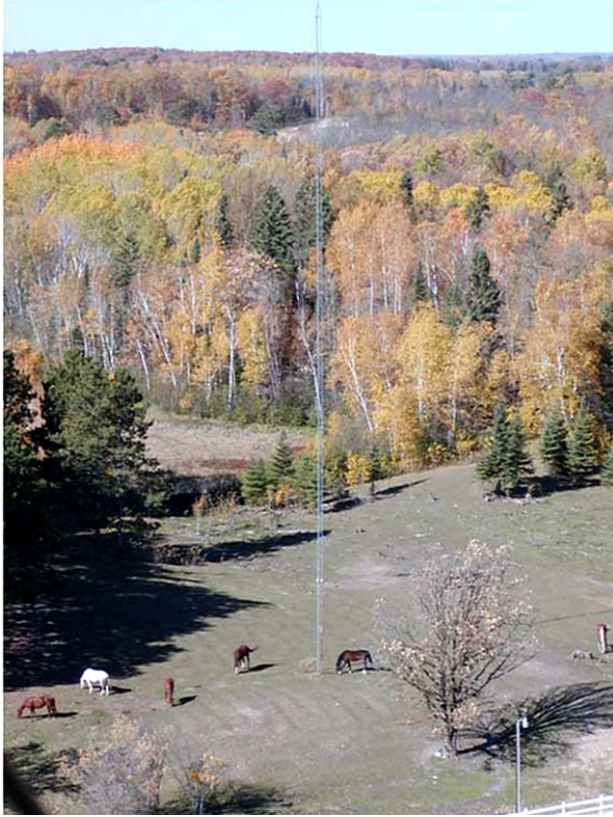
### *WØGJ, Glenn Johnson — Single Operator QRP Winner*

Earlier this year [2009] I about fell off my chair when I opened a letter from the ARRL. It was a certificate for FIRST PLACE WORLD, QRP for the 2008 contest. As I recall, I put in most of the time, but did sleep for several hours each night... I could have tried harder. The US record was 104,000+ points. I had 97,000 or something like that.

This year, I was in the contest for the full time, except for the middle of Saturday day, which was nap time. When I would call CQ, I had many dupes on the last night ... and I wonder if my original contact was in their log as a mis-copied call, being QRP on my end. The most exciting: I had a CT1 and an OM call me at my gray line and a G and a KL7 call me at their gray line when CQing. I tied up ON4UN for almost 10 minutes getting my call sign correct. (Thanks, John, for your perseverance!)

This is the second year in a row I've worked WAS with 5 watts on 160M within just a few hours. THAT is a thrill!





Having a full-size antenna on 160 means a great deal in any category and WØGJ certainly put his to good use for the overall QRP category win.

I have a 1/4-wave ground plane with elevated radials at 30 feet. The tower is a Philystran-guyed Rohn 25G that sits on top of a small hill, 800 feet from the shack fed with 7/8" hardline. I have an inverted-V at 140' on another tower 700 feet away from the ground plane. Lobes are to EU and VK/ZL. Receiving (when needed) is a K9AY loop. I have no neighbors and all power lines in the area are buried. My noise floor is exceptionally low. I have used Beverages in the past, but with my low ambient noise level, they rarely helped, unless there's lots of QRN from a storm.

I have learned (quickly) operating QRP on 160M: Don't plan on working DX the first night ... and maybe some Caribbean DX the second night. If someone steals your run frequency, move or start S&P. If I have to call

someone more than 3-4 times, move on, unless it is a multiplier. Trying to run with a 2:1 SWR is harder than with 1:1 SWR with only 5 watts. That 15-20% power loss is critical when QRP.

QRP does not lend itself to a lot of DX, but here in the midwest, with QRP I can work both the east and west coasts. I'm sure QRP on either coast would have a hard time working the other coast. For once, at least in the QRP category, the midwest is the place to be on 160M!

*KC1XX — Multi-Operator Single Transmitter Winners  
(Edited from the "3830" reflector on Contesting.com)*

Nice job by all the multi-single teams this weekend. Thanks to the Strelow family for the use of the station. 79 Sections worked; only missed NT. Thanks for all the QSOs!

Run Station: Elecraft K3, AL-1500, 3-element inline vertical array, Beverages

Rx-only Spot Station 1: Elecraft K3, 3-element inline vertical array, Beverages

Rx-only Spot Station 2: Elecraft K3, Beverages, single DXE RX Vertical

	QSOs	Percent
	-----	-----
North America	1635	83.7
South America	8	0.4
Europe	299	15.3
Asia	3	0.2
Africa	2	0.1
Oceania	6	0.3

*More Comments...an edited selection of "Soapbox" comments that are intended to show the wide range of experiences, and the great enthusiasm, for contesting on the 160 meter band:*

WM3O — 72 hours before the contest I was at Home Depot buying 500' of #12 wire. 48 hours before the contest I was outside in the pouring rain at 10 PM throwing ropes over branches.

24 hours before the contest I was outside in the pouring rain soldering coax to the newly installed inverted L for 160m.

N5RP/9 — Hooked my transceiver up to the center conductor of my coax so as to drive the center of the coax and the 4BTV vertical on the pole barn. Let the shield of the coax "float." SWR out of sight, so used the built-in tuner to get as close to something acceptable as I could. In just a couple of hours of messing around, I worked 200 stations, including Europeans, SA, Carib, and darn near any stateside station I could hear and call.

AAØCX — Band conditions were absolutely excellent this year! And the neighbors were either gone or quiet: no computer hash, no touch lamps, no TV buzz, and no ignition noise! I live on the garden level of a three-story apartment building, and used my everyday antenna, the "three-story downspout/gutter special."

K9IJ — Always enjoy this contest. It's still the "gentlemen's" contest where most everyone will back off to let a weaker QSO complete.

K3TN — This contest is sort of like single band Sweepstakes, with the best activity during the slowest SS hours... I missed ND and HI for single weekend WAS, but later in the 10M contest I only worked 30 states. Who'da thunkit?!

K1DG — Next year I will read the contest calendar more carefully before telling my XYL, "Yes, dear, a concert on December 5 should be fine. The 160 contest is the weekend after that."

KV8Q — Absolutely amazing!! I was always in need of a 160 meter antenna at this location and K6MM's article in a recent QST provided me with a solution. It didn't cost much and it's not the prettiest thing in the world but it sure provided lots of fun for me in this contest.

W9AZ (@K9NR) — we split up the WB9Z/W9AZ multi team this year to generate more points for the SMC club effort. Last year we set a station best record in this contest at WB9Z, however, the K9NR and K9FO stations were idle as we were all at WB9Z's. K9CS, AK9F and K9NR operated K9NR's station and K9FO operated single-op at his QTH. In so doing, we have increased our SMC score contribution from last year's 482,306 points to over 1.2 million.

WB8BZK — Spent several hours on Friday evening playing on 160 from my mobile. I set up a very low hanging dipole and had some fun, all S&P. It was cold taking that dipole down before heading home!

WE9V — Operated from my mother's house in central WI. I was sick of the S9 noise I

have from my station and wanted to be able to hear more callers. A couple weekends ago I installed an inverted L (up ~85' thanks to a spud launcher) and a 900' two-wire beverage towards EU.

K9IG — What a weekend. I really had to work to get the Q's this year. Electric fence hash made it work at times with some fun too. I apologize to those that I CQ'd over or just couldn't pull through. I had some great runs like last year, my QSO total was pretty good but I didn't get the EU's that others did.

KØWA — I live on a small city lot in the middle of a small Kansas town. My 160 meter antenna is an inverted-L that goes up 60 feet, out 70 feet, but droops down on the end to 30 feet. All the radials are to the north, none to the south. Not an ideal antenna. John, ON4UN calls me Friday night when I was running stations. I heard someone call but worked a stronger signal. Then he called again. Somewhere in my brain, it triggered that a DX station was calling. I sent a question mark. He sent his call again and I copied ON4UN. I sent another question mark. He sent his call again. Then I worked him and he sent me his information. After 44 years in the hobby and being 59 years old, there still a lot excitement in ham radio!

K2DB — I want to apologize to all who were calling when RF got into my DSL modem and I had N1MM set to auto CQ. I was running remotely from my nice warm office in Rochester, NY, and the modem disconnected me from the Internet and I could not get the connection back on for a few minutes. Yes, there was a big pile-up when I got it fixed — maybe because I'm in NNY?

AF9J — I actually managed to work K8QKY (in Ann Arbor, MI, 250 miles away), at 1:53 in the afternoon! Not bad for 4.7 watts to a 125 foot long rain gutter, up 30 feet or so.

AJ4FM — First time on 160 and only 2nd time in a CW Contest. Loved it!

NK8Q — Let's just start by saying that this contest was a great boost to my mental health. As crazy as it sounds to run QRP in a 160m contest I really looked forward to it and used the ARRL 160m CW contest as a goal. You see, I got a new job and have been working 3 hours away from home for the past 6 months while we are trying to sell our house. I come home on the weekends, and just mope around because our house hasn't sold yet, and we haven't been able to look for our new QTH yet. I had a great time and had some pretty good runs also. We'll see if I can operate in the 2010 ARRL 160m CW contest, but this past event was a fond memory.

K1HTV — Even after 50+ years of Ham Radio I'm still amazed at what can be worked with low power and a wire on 160M.

K5AF — Where else can you S&P up the band and work the states next to you, Canada, both coasts, a bunch of Caribbeans, and even a few EU stations in a span of 20 minutes. Despite my short time in the contest, this was one of my most memorable ARRL 160 contests ever.

K5NA — This is the 40th ARRL 160M Contest and I have participated and sent scores in for 35 of them. I really like this contest. My ARRL 160M Contest goals are simple: to try to

make the top ten. Sometime I make it, sometimes I don't. Last year I also set new personal records for this contest but failed to make the top ten. It is a different contest for those of us operating west of the Mississippi.

K6TU — This started as a casual “see what I can work” effort ... then I got hooked!

KE7YF — 1 Hustler mobile stick; big homebrew coil; 12-foot MFJ Whip; ground-mounted; no radials. Got on Sunday at sunrise. Called every station over S-5 that I heard. Nine stations actually heard me. Heard much better than I could transmit. More experimentation needed.

N6DW — Loaded my 31' vertical using the built in K3 tuner. I could hear a lot more than I could work. That being said, I think I doubled the number of top band QSOs I have ever made, and it was fun.

WB9Z — Great conditions, Super activity and the best ARRL 160 Meter Contest score ever from the WB9Z station.

*And, Finally...From N9JF* — “This was pretty funny ... afterwards.”

Friday, 2130Z. YL leaves for an appointment, leaving me with three visiting granddaughters, ages 7, 5 and 3. How tough can it be to take care of three kids for three hours? I dash outside and string out the elevated radials for the inverted L. Kids are asking for a video. I pop in a Disney special and leave them in the living room and go down to the shack. Set up computer, turn on rig, hook up to inverted L, everything looks cool.

2200Z. I start CQing. East Coast guys are listening for EU and many ignore me the first couple of hours, so my strategy is to CQ and listen for those who aren't expecting to work EU. Seven-year-old comes down, sits in chair beside me. I explain what I'm doing. She seems somewhat fascinated by the code and cheers every time the multiplier bell (Alt-J in TRLog) goes off. I grab a map of the USA and she locates the states as I work them. This is cool.

2215Z. Three-year-old comes down, crawls up on my lap, sucks thumb, tries to type with the other hand. I ask her to PLEASE not do that. Rate meter hits 120/hr. Still cool.

2220Z. Five-year-old comes down, wrapped in a fuzzy blanket, displaces seven-year-old on chair. Minor scuffle ensues. I referee. Blanket belongs to seven-year-old. She goes to get five-year-old's blanket in exchange. “I don't want THAT blanket. This one is warm!” Rate meter hits 126/hr. Getting less cool.

2225Z. Five-year-old disappears. Rate meter hits 132/hr. Screams issue from upstairs. I ignore for about 60 seconds, then realize that I am, after all, “in charge” and investigate. Child has not made it to bathroom in time, blanket and clothes and bathroom floor are soaked. Not cool.

Interlude....Without going into unnecessary detail (they will probably help choose my nursing home), spend 15 minutes convincing child that she HAS to wear clothes, and not the soaked ones, warding off “accident” by three-year-old, starting laundry, and a few other crises. I stagger back to the shack.

Seven-year-old is sitting by the radio. “Grandpa, I think you missed quite a few of them...”

## Notes from the DX Side

We wanted to provide a place for more comments specifically from DX operators, but first, let's review this contest's format from the DX perspective:

The ARRL 160 Meter Contest has unique format, focused on US/VE hams. These hams are the "hosts" of the contest, and — like the ARRL DX and 10 Meter contests — are the only contacts allowed for participating DX stations. But unlike the ARRL DX contests, US/VE hams can contact one another, assuring plenty of contest activity. And unlike the ARRL 10 Meter Contest, the multipliers for DX participants are the 80 ARRL/CRRL Sections, while US/VE stations add DXCC entities to their section multiplier totals.

From the US/VE perspective, this is a domestic contest with a substantial bonus for working DX. From the DX perspective, their activity is supported by providing a set of rules that only applies to them. Like all other contests, the format has its fans and foes. One challenge for DX stations is that operation is limited to times when there is propagation to North America — In Europe, it is an "early a.m." contest, while in the Far East, the contest period runs to late Sunday night.

Hams in the ARRL Sections that are also DXCC entities occasionally experience some confusion when DX stations unfamiliar with the format mistakenly believe they cannot work these "DX" stations. Also, continental stations may be disappointed that the several DXCC entities in outlying sections are not additional multipliers.

While all criticism is legitimate, and rules are occasionally adjusted in response, the final story is that there is no "perfect" way to establish a single-band 160 meter contest! Every set of rules creates a set of advantages and disadvantages based on geography, population density, plus local and regional frequency allocations and power/mode limitations. With these things in mind, let's hear from some of the DX stations who participated in the 2009 contest.

### *DX Comments*

C6AKQ (N4BP) — Antenna fell down 10 p.m. EST Saturday, ending the contest for me.

ZF2AH — Conditions were good for me, I worked as many stations as I could hear. I found the operators to be very friendly and accommodating. Had trouble with EU stations (loud) wanting a QSO, which I did give them, breaking any USA contacts. Thrills were working Pacific stations at 579 with no problems.

ES5RY — Good condx, heard lots US stations and very happy to QSO with KH7C after contest.

So, nice to hear U.S. competition with U.S. on 160m! First night no chance give CQ! Why? No place to call CQ. Maybe we need a bigger DX Window?

G3LET — Conditions from Europe to the West Coast were much better than in 2008 and the extra sections all came from that area. A real joy to work so many excellent operators, with none of the hassle of CQWW. Thanks to all who called.

G5W (G3BJ) — This was a "first" for me. I had not entered this contest before, having been put off, I think, by the thought of having to break through the wall of "local" stations in the US/VE to make QSOs. But I decided to have a moderately serious try this year, and I am glad I

did. Whilst the score is modest, it was good fun, with some really steady runs to the States, and a good selection of Section multipliers.

HC8GR (K6AW) — I dedicated this contest effort to my friend Ken Adams, K5KA who came to the HC8 station several times and established himself quickly as a great worker, tower climber, operator and beer drinker.

JH3PRR — Just a casual S&P only entry. Condition was not good this year.

LY2IJ — It is always tough to find freq. for CQ and very easy to lose it from here.

MDØCCE — The tower is still cranked down due to the winds, so just trying to give out a mult to those who could hear me. Very satisfying, though, to work the last state for WAS on 160m, so thanks W5MX for your FB ears! Quiet conditions and many W/K stations very clearly copied here but who couldn't hear me with the low TX antenna.

TF3DX/M — It is RF current that counts! Having recently improved my mobile antenna and built a new tuner for the car, I thought that driving down to the west coast of town to see if I could land a few transatlantic QSOs in the ARRL 160 m contest might be worth a try. I ended up sitting in my car for almost 8 hours harvesting 27 QSOs in log. Admittedly, a QSO rate of 3.5 QSOs/hr is low on any account, but still it was much more than I actually hoped for. Bear in mind that TF is inconveniently located under the aurora oval, and the low efficiency of short whip antennas on the lower bands. The most important parameter to measure and maximize in installation like this, is of course the antenna RF current. That I learned from the ARRL literature half a century ago, and the fact that it was soon swept to the side for the more fashionable SWR measurement did not diminish its value. I now calculate the radiated power to have been around 2.5 W with my 100 W FT-900. I believe that 2.5% efficiency is pretty good for a mobile whip on 160 m.



OK2BFN — Congrats to all who could copy my weak signal (VE1ZJ on the first shot).

OM2VL — First night total 349 QSO (last year I had this QSO number after the contest...) I began with CQ in the DX window. Some stations very hard to copy, because I have big QRM from stations PJ2T and PA2A. Sometimes also some stations from the USA began CQing on my frequency, but after asking to QSY from DX Window they are QSYed. Thanks a lot for understanding!

ON4UN — This is one of the 160m contests I like best. At my age (approaching 70), I can still manage this contest all by myself. Conditions were very similar to last year. I made the

same number of QSOs but worked 9 more sections, so my score is up 12%, which is great. General operating practice has improved over the years and most USA stations hear much better than many years ago.

RL3FT — It was interesting propagation at first night (but it was not easy to get answer). Second night was worse. The strongest were K1LZ, W2GD, K3ZM, WE3C and W1UE. Many thanks to those who answer me, especially to K7RAT (N6TR) and N7UA (heard them in both in my morning and evening).

## **Comments on Band Conditions – by Gary Breed K9AY**

At the bottom of an extended solar minimum, sooner or later, great conditions on the 160 meter band will coincide with a major contest weekend — and that's what happened in 2009! The steady increase in worldwide activity was evident, as well. Many Soapbox comments and Internet group posts talked about “first time” entries, significant station improvements, and personal best performances. Scores and participation were at an all-time high.

But there are no guarantees on the 160 meter band, and unpredictability was also evident. Conditions from east to west across North America were not as strong as some past contest weekends. DX propagation to the Far East and Oceania was clearly down from past years, as well. Yet, at other times during the Northern Hemisphere winter, propagation to these regions on Top Band was excellent. Most true 160 meter enthusiasts will tell you that their biggest satisfaction comes from being in the right place at the right time to make an unexpected QSO with some faraway place. These pleasant surprises certainly include very good conditions occurring on a contest weekend.