



ARRL 10 Meter Contest

2011 Results

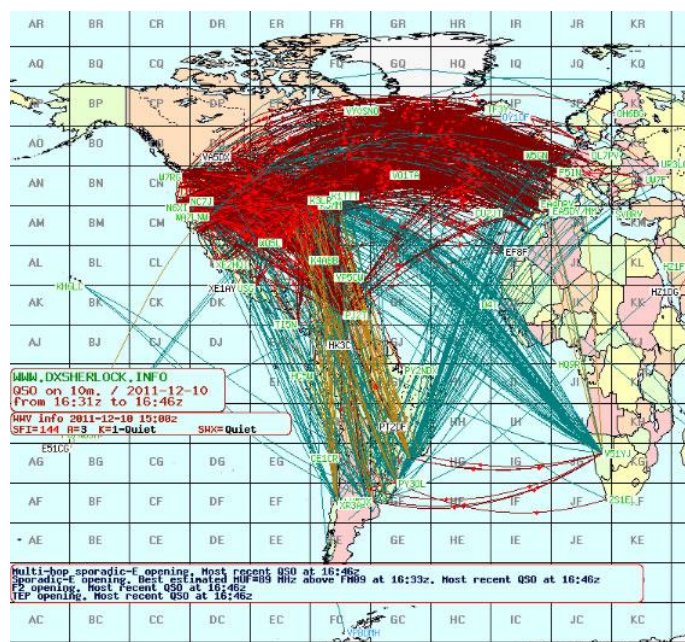
By Scott Tuthill, K7ZO

"Hey , look, it's a DX Contest again!" -- WQ5L

The 39th annual ARRL 10 Meter Contest was held on December 10-11, 2011. After tantalizing us in 2010 with what might be, the band broke wide open for deserving operators worldwide. Conditions were the best since just after the peak of the last solar cycle in 2002. What an on-the-air party was celebrated by all!

Activity

Nothing attracts operators of all interests like a wide open 10 meter band. Low power and small antennas generate contacts far and wide. Whether operating for competition or fun, when open, 10 meters is a great place to hang out. As a picture of how open the band was check out EA6VQ's DXSherlock map from 16:45 UTC Saturday below. That solid mass of long red and green lines means operators were really enjoying themselves by making QSOs all over the world.



DX Sherlock 28 MHz real time QSO map at 16:45 UTC Saturday. (www.dxsherlock.info) Map courtesy of Gabriel EA6VQ.

The 2011 contest attracted operators like no other 10 Meter Contest in history. An absolutely unbelievable 5,361 logs were entered this year! This count more than

doubled last year's total of 2,474 and was 70% higher than the previous record in 2002. For further comparison, the 2011 ARRL DX Phone contest set an all-time mark with 3,343 logs submitted. The 10 Meter Contest exceeded that by more than 2,000! Continuing the comparison, all the logs submitted for the 2011 ARRL DX Phone contest contained 1.49 million QSOs across all six bands. Submitted 10 Meter Contest logs contained 1.95 million QSOs as a single-band contest. Of course the 10 Meter Contest has an advantage in that you can make contacts on both CW and phone but still, a lot of people had a lot of fun over the weekend. The average log contained 363 QSOs this year compared to 153 in 2010.

Another notable milestone was achieved with the 2011 edition. For the first time ever the 2,692 DX logs submitted exceeded the 2,669 from W/VE/XE! DX logs more than tripled from 2010 driven by a genuine explosion from Europe where logs entered jumped from 380 in 2010 to 1,763 in 2011. Solid growth continues from Asia as well where logs entered increased from 191 to 550.

As far as operating categories goes, the Single-Operator, Low Power (SOLP) categories continue to be the most popular, making up just over half of all log submissions. For DX operators the CW-Only categories were most popular while for W/VE/XE the Phone-Only categories were most popular. Overall, Phone-Only entrants exceeded CW-Only entrants in 2011, capturing the top spot back after CW-Only moved into first for the first time ever in 2010. For 2011 the big category news was the creation of the Multioperator, Low Power (MOLP) category. Filling the role of both a true Multioperator category as well as a Single-Operator Mixed-Mode Assisted category it proved to be quite popular with 512 logs submitted worldwide. From first impressions it looks like we have a real winner here. When combined with the Multioperator, High Power (MOHP) category it propelled total Multioperator entries ahead of total Single-Operator, Mixed Mode entries. During the previous 38 runnings of this contest the Multioperator category was always a distant last place to the other three.

Top Ten, USA

Mixed Mode, QRP

K9OM	490,732
W7YAAQ	310,232
WA6FGV	298,016
W7IV	263,700
W2MF	253,572
W6AQ	192,780
K7XC	163,184
N6WG	145,140
KS4X	119,574
WB2AMU	107,670

Mixed Mode, Low Power

N8OO	1,719,968
N8II	1,368,380
N1UR	1,255,872
KU2M	1,121,328
K2PS	914,746
N5DO	885,204
N7ZG	824,724
N6ZFO	781,776
KØTT	767,980
K7SS	714,776

Mixed Mode, High Power

KM3T	3,018,720
N2NT	2,737,742
NQ4I (VE7ZO, op)	1,920,036
K6LL	1,702,350
WØAIH (NE9U, op)	1,696,320
K3ZO	1,657,136
K1UO	1,606,500
KF6T	1,501,464
WB9Z	1,443,204
WC6H	1,375,776

Phone Only, QRP

KE2OI	142,296
NØNI	127,676
K6OO	84,390
K6MI	80,408
KB5KYJ	66,000
N8XA/P	63,896
W8QZA	61,824
WA7PVE	44,160
WWØWB	36,696
WB7OCV	33,200

Phone Only, Low Power

K7ULS	321,624
KTØDX	294,128
N7FLT	278,576
AC5O	271,880
W1TJL	224,640
N7XS	218,622
N9ISN	215,320
KC6AWX	200,376
N9TGR	199,836
W3PAW	193,980

Phone Only, High Power

KK1KW (WW1WW, op)	771,426
W5PR	690,018
K5TR (WM5R, op)	649,428
NA3D	600,372
W6YI	573,540
W1SJ	564,062
WO4DX	529,104
K4NV	520,880
K8CC (N8NX, op)	456,030
KQØC	445,516

CW Only, QRP

KR2Q	333,792
W6JTI	265,024
KØLUZ	252,720
NØUR	249,260
AA1CA	231,648
W7FB	175,740
KE5AKL	169,988
K4LTA	161,600
K3TW	161,092
K2SM	150,800

CW Only, Low Power

WA1Z	812,000
W3BGN	799,488
KH6ZM	749,320
W2ID	597,104
N4WW (N4KM, op)	550,400
WD4AHZ	516,880
NA8V	495,040
WQ5L	493,120
K9WZB	491,616
N4ZI	491,040

CW Only, High Power

K1TO	1,409,952
NN1N	1,347,720
N2IC	1,322,980
W1WEF	1,307,496
K8AZ (K8NZ, op)	1,262,400
K1RM	1,256,736
W5KFT (K5PI, op)	1,253,904
KD4D	1,248,000
K5NA	1,202,624
NY3A	1,197,364

Multioperator, High Power

K1LZ	3,635,992
NR5M	3,000,024
W2RE	2,865,160
K1WHS	2,734,200
NX5M	2,512,200
K9CT	2,483,824
K3WW	2,169,680
WX3B	2,143,854
W6YX	2,087,120
KØDU	2,084,064

Multioperator, Low Power

KD2RD	1,326,080
W7TVC	733,176
W1WBBS	585,752
KO3T	574,864
N4CJ	568,920
K4MM	489,632
KA2D	396,312
K4ABB	372,292
K2DFC	363,636
KØRC	353,212

Top Ten, Canada

Mixed Mode, QRP

VE6BIR	59,128
VE3XTI	39,840

Mixed Mode, Low Power

VE3CX	257,174
VE4YU	234,472
VE3IAE	221,078
VE7WO	203,294
VX2AWR (VE2AWR, op)	189,810

VE5UO	186,456
VE9ML	182,972
VE5SF	159,160
VE1ZA	122,472
VE1JS	115,920

Mixed Mode, High Power

VY2TT (K6LA, op)	2,392,420
VX6WQ	1,817,202
VA2EW	1,513,920
VE3KZ	1,161,072
VE3MMQ	929,106
VE3FGU	738,344
VE6TL	317,408
VE4EAR	246,344
VE2FXL	19,716
VE2DC	12,596

Phone Only, QRP

VX4MM	93,956
VA7IR	75,844
VE3HG	13,300
VE3FCT	7,896
VE6SKY	5,304

Phone Only, Low Power

VA3YP	264,186
VE4TV	190,512
VE8GER	108,758
VA3PC	99,990
VE3VE	70,512
VE3TU	57,428
VE1SQ	41,412
VE3JOC	23,246
VA3GD	21,700
VE7WWW	20,634

Phone Only, High Power

VO1KVT	403,182
VA6UK	143,528
VE3CR	125,240
VA3ZDX	108,192
VE2JM	89,792
VE3KPP	67,404
VE2/K1ZM	2

CW Only, QRP

VY2OX	74,456
VA3RJ	18,096
VE6EX	15,504
VA3RKM	9,324
VE2KOT	7,424
VE3MO	4,428
VE3WZ	2,280
VA3WR	1,872
VE3IGJ	640

CW Only, Low Power

VA2WA (VA2WDQ, op)	772,680
VE3DZ	681,408
VO1TA	515,280
VE3KI	400,384
VE3ZT	320,032
VE1RGB	230,520
VA3EC	227,772
VE7JKZ	192,192
VA7RN	171,976
VA7DZ	160,704

CW Only, High Power

VY2ZM	1,638,972
VE9AA	1,062,560
VE5UF	865,032
VE3EY	813,852
VE3EK	768,600
VE7XF	593,400
VY2SS	558,240
VE6WP	369,228
VA7ST	348,288
VE2SG	313,200

Multioperator, High Power

VE5MX	1,717,056
VE1OP	1,231,808
VE3EJ	715,350
VA3DX	628,002
VE6AO	607,260
VE3RZ	420,966
VE3MM	309,684
VE7AX	174,150
VE9HF	74,592
VE3MV	56,358

Multioperator, Low Power

VA7BEC	591,840
VE6FI	217,516
VE3XAT	167,272
VE4EA	134,160
VE3AD	107,748
VE7IO	94,612
VE3CWU	77,376
VE2EBK	74,688
VA3DF	65,730
VO1HP	35,984

Top Ten, Mexico

Mixed Mode, QRP

No Entries

Mixed Mode, Low Power

XE1L	122,944
XE2GG	109,968
XE2YWH	84,224
XE1SVT	63,744
XE1FZE	42,624
XE2HWB	26,480
XE1RZL	21,888
XE3DX	480

Mixed Mode, High Power

XE2K	740,520
XE1GRR	36,448

Phone Only, QRP

XE2JA	95,892
XE1RCS (XE1ODG, op)	34,128

XE1AKM	992
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Phone Only, Low Power

XE1B	518,256
XE3N	279,628
XE2O	150,660
XE1ZTW	69,168
XE1AO	61,992
XE1J	43,540
XE1GZU	20,488
XE3OAC	8,282
XE1AJ	6,640
XE2PXT	420

Phone Only, High Power

XE1CWJ	321,216
XE2HUQ	175,120
XE1EE	132,430
XE1R	82,056
XE1MW	76,800
XE1OGG	55,176

CW Only, QRP

XE3WMA	2,944
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CW Only, Low Power

XE1AY	134,048
XE1CT	82,896
XE2MX	30,444

CW Only, High Power

XE1MM	525,600
XE2S	279,444

Multioperator, High Power

XE2X	392,524
XE2B	93,744

Multioperator, Low Power

XE2AU	163,200
XE2FGC	39,312
XE2CRH	39,308
XE2VHF	38,482
XE2WK	960
XE2MVs	416
XE1BRX	220

Top Ten, DX

Mixed Mode, QRP

ON6AB	261,416
EA1GT	130,626
CT2IOV	123,970
UX1UX	116,340
UX8ZA	84,660
SP3PL	73,632

4M2L (YV5YMA, op)	69,388
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RT4W	65,846
JM2RUV	61,200
9A2EY	55,610

Mixed Mode, Low Power

PY2EX	1,578,528
EA8OM	835,176
C4Z (5B4AIZ, op)	826,084
DL4MCF	581,240
RL6M	579,006
7Z1SJ	564,596
JA6WFM	562,536

CR5A (CT1FFU, op)	537,358
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RA1AL	480,110
OR2F	479,520

Mixed Mode, High Power

ZM2V (AI6V, op)	1,735,344
VP5CW (W5CW, op)	1,661,868

NH2DX (KG6DX, op)	1,640,640
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OM2VL	1,542,260
ZF2AH	1,506,816
EA6SX	1,474,908

VK4CT (VK4EMM, op)	1,470,016
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UW1M (UR5MW, op)	1,331,652
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3G3FZ (CE3FZ, op)	1,240,492
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OE8Q (OE8SKQ, op)	1,159,380
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	1,240,492
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	1,159,380
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Phone Only, QRP

KP4KE	282,274
TG9ANF	266,304
R7NA	100,416
LU1VK	34,768
R2AD	29,952
I5KAP	25,792
CT2JBG	22,512
SN5R (SP5XMU, op)	22,080

	22,080
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JR6HMJ	21,616
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VK4ATH	21,080
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Phone Only, Low Power

HI3TEJ	790,152
EA8MT	610,450
PU2LEP	449,334
CO6LC	324,104
IQ9BT (IT9SPB, op)	317,966
CM8AKD	284,160
VK4LAT	261,632
LW7DUC	249,776
CA3SOC	238,290
LU6FOV	232,078

Phone Only, High Power

KP2A (KW8N, op)	1,131,248
LP1H (LU5HM, op)	1,192,794
CE3CT	1,133,508
V25R (K6IF, op)	1,127,232
GW9T (MWØZZK, op)	884,722

	835,536
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CT3FQ	835,536
PQ5B (PP5JD, op)	792,582
GM5X	750,708

ZX2B (PY2MNL, op)	718,740
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TMØT	709,770
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	181,280
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JA1YNE (JR1NKN, op)	170,016
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AY9F (LU5FZ, op)	149,380
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RU7A	126,080
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US5VX	104,580
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PY4ZO	100,584
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UA6LCJ	85,008
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YO8DDP	79,800
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DF1DX	73,272
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UA9AB	67,584
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	1,328,000
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KP2MM (N2TTA, op)	730,592
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GIØRQK	678,368
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YT9A	662,088
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EA8CN	618,552
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ZL1GO	502,500
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9A3VM	491,064
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HGØR (HAØNAR, op)	460,256
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XR3A (CE3DNP, op)	434,436
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RW9QA	415,800
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CW Only, High Power

LU1HF	2,001,136
CE1/K7CA	1,597,280
ZM1A (ZL3CW, op)	1,428,336
EF5Y (EA5GTQ, op)	1,130,112

PY2ZEA (OH2MM, op)	1,057,536
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G3TXF	1,046,900
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ZC4LI	968,772
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HA1AG	943,020
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EI7KD	917,280
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JF1SQC	870,756
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	4,351,000
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D4C	4,351,000
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CW5W	3,615,656
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EF8R	3,565,078
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PY2NDX	3,420,348
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HK1NA	3,306,360
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LS1D	3,235,680
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CX5BW	3,123,778
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EI7M	2,859,864
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PJ2T	2,758,288
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CR6K	2,717,242
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	2,565,348
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TI5N	2,565,348
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PY1GQ	1,676,196
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ZY2C	1,292,830
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4Z5MU	1,092,180
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LU5DX	1,040,160
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EA6BF	783,272
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YT2F	764,568
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LU2EE	641,240
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EF1D	615,660
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V63QQ	590,006
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Version 1.2 of this article corrects the Phone Only, High Power Top Ten table. KP2A (KW8N, op) was the World High score and mistakenly omitted from the Top Ten, DX tables, although correctly shown in the Continental Leaders table. We regret the omission.

Version 1.3 of this article corrects the Mixed Mode, High Power Top Ten table.

Division Winners

Mixed Mode		Phone Only		CW Only		Multioperator, High Power								
Atlantic	W2MF	253,572	Q	Atlantic	KE2OI	142,296	Q	Atlantic	K2SM	150,800	Q	Atlantic	W2RE	2,865,160
Central	AF9J	40,992	Q	Central	WB9FOL	30,806	Q	Central	A19K	39,104	Q	Central	K9CT	2,483,824
Dakota	no entry		Q	Dakota	ND0C	25,160	Q	Dakota	N0UR	249,260	Q	Dakota	KD0S	1,643,600
Delta	KS4X	119,574	Q	Delta	NSAWS	20,776	Q	Delta	K4LTA	161,600	Q	Delta	WO4O	927,360
Great Lakes	N8HP	100,576	Q	Great Lakes	N8XA/P	63,896	Q	Great Lakes	N8AP	83,296	Q	Great Lakes	W8MJ	1,870,506
Hudson	WB2AMU	107,670	Q	Hudson	AA2VK	17,160	Q	Hudson	KR2Q	333,792	Q	Hudson	N1EU	615,480
Midwest	W0MRZ	55,444	Q	Midwest	N0NI	127,676	Q	Midwest	W7FB	175,740	Q	Midwest	N0MA	614,978
New England	W1AN	83,224	Q	New England	WA1JG	1,302	Q	New England	AA1CA	231,648	Q	New England	K1LZ	3,635,992
Northwestern	W7YAQ	310,232	Q	Northwestern	WA7PVE	44,160	Q	Northwestern	K5UJU	54,752	Q	Northwestern	NK7U	1,475,760
Pacific	K7XC	163,184	Q	Pacific	K6OO	84,390	Q	Pacific	W6JTI	265,024	Q	Pacific	W6YX	2,087,120
Roanoke	K4KSR	1,224	Q	Roanoke	NO4FX	18,172	Q	Roanoke	K14FW	65,056	Q	Roanoke	K4FJ	1,864,506
Rocky Mountain	NS7K	76,140	Q	Rocky Mountain	WW0WB	36,696	Q	Rocky Mountain	KE5AKL	169,988	Q	Rocky Mountain	K0DU	2,084,064
Southeastern	K9OM	490,732	Q	Southeastern	KS4GW	12,540	Q	Southeastern	K0LUZ	252,720	Q	Southeastern	W4UH	1,843,968
Southwestern	WA6FGV	298,016	Q	Southwestern	W8QZA	61,824	Q	Southwestern	N7IR	99,856	Q	Southwestern	N7DD	1,753,224
West Gulf	AA5CK	13,776	Q	West Gulf	KB5KYJ	66,000	Q	West Gulf	K2DG	47,280	Q	West Gulf	NR5M	3,000,024
Canada	VE6BIR	59,128	Q	Canada	VX4MM	93,956	Q	Canada	VY2OX	74,456	Q	Canada	VE5MX	1,717,056
Mexico	no entry		Q	Mexico	XE2JA	95,892	Q	Mexico	XE3WMA	2,944	Q	Mexico	XE2A	392,524
Multioperator, Low Power														
Atlantic	K2PS	914,746	LP	Atlantic	W3PAW	193,980	LP	Atlantic	W3BGN	799,488	LP	Atlantic	KO3T	574,864
Central	W9AV	198,852	LP	Central	N9ISN	215,320	LP	Central	W9PN	288,932	LP	Central	KF9US	90,948
Dakota	K0TT	767,980	LP	Dakota	WB0TSR	78,606	LP	Dakota	K7RE	345,420	LP	Dakota	K0RC	353,212
Delta	N8OO	1,719,968	LP	Delta	AC5O	271,880	LP	Delta	WQ5L	493,120	LP	Delta	K0RC	353,212
Great Lakes	K8BL	583,232	LP	Great Lakes	NF8J	124,938	LP	Great Lakes	NA8V	495,040	LP	Delta	NO4Q	159,120
Hudson	KU2M	1,121,328	LP	Hudson	KS2G	106,680	LP	Hudson	W2ID	597,104	LP	Great Lakes	AA8IA	132,300
Midwest	KT0K	612,750	LP	Midwest	KA0FSP	93,480	LP	Midwest	KU1CW	273,000	LP	Hudson	KD2RD	1,326,080
New England	N1UR	1,255,872	LP	New England	W1TJL	224,640	LP	New England	WA1Z	812,000	LP	Midwest	W0IW	105,450
Northwestern	N7ZG	824,724	LP	Northwestern	N7FLT	278,576	LP	Northwestern	AB7R	420,648	LP	New England	W1WBB	585,752
Pacific	N6ZFO	781,776	LP	Pacific	KC6AWX	200,376	LP	Pacific	KH6ZM	749,320	LP	Northwestern	W7TVC	733,176
Roanoke	N8II	1,368,380	LP	Roanoke	AD4L	103,032	LP	Roanoke	K4ORD	226,432	LP	Pacific	K6EI	178,064
Rocky Mountain	W0ETT	543,536	LP	Rocky Mountain	K7ULS	321,624	LP	Rocky Mountain	W2UP	394,128	LP	Roanoke	K4FPF	161,024
Southeastern	N4OX	551,200	LP	Southeastern	WB4JFS	114,608	LP	Southeastern	N4WW (N4KM, op)	550,400	LP	Rocky Mountain	K5WO	289,280
Southwestern	W7ZR	493,652	LP	Southwestern	NF7E	149,240	LP	Southwestern	K9WZB	491,616	LP	Southeastern	N4CJ	568,920
West Gulf	N5DO	885,204	LP	West Gulf	W5TMC	123,420	LP	West Gulf	W5MT	325,728	LP	Southwestern	N6MA	66,368
Canada	VE3CX	257,174	LP	Canada	VA3YP	264,186	LP	Canada	VA2WA (VA2WDQ, op)	772,680	LP	West Gulf	WD0GTU	57,456
Mexico	XE2GG	109,968	LP	Mexico	XE3N	279,628	LP	Mexico	XE1AY	134,048	LP	Canada	VA7BEC	591,840
												Mexico	XE2AU	163,200
Atlantic	K3ZO	1,657,136	HP	Atlantic	NA3D	600,372	HP	Atlantic	KD4D	1,248,000	HP			
Central	W0AIH (NE9U, op)	1,696,320	HP	Central	N7US	358,316	HP	Central	K9BGL	846,144	HP			
Dakota	WA0MHJ	1,185,664	HP	Dakota	NX0X	423,660	HP	Dakota	NE0U	809,904	HP			
Delta	N4ZZ	1,135,304	HP	Delta	N4QWZ	212,772	HP	Delta	KN5O	921,728	HP			
Great Lakes	N8LJ	116,644	HP	Great Lakes	K8CC (N8NX, op)	456,030	HP	Great Lakes	K8AZ (K8NZ, op)	1,262,400	HP			
Hudson	N2NT	2,737,742	HP	Hudson	WU2X	111,890	HP	Hudson	N2UN	512,960	HP			
Midwest	K0DEQ	425,862	HP	Midwest	N0UU	141,180	HP	Midwest	KV1E	208,896	HP			
New England	KM3T	3,018,720	HP	New England	KK1KW (WW1WW, op)	771,426	HP	New England	NN1N	1,347,720	HP			
Northwestern	K7ABV	415,488	HP	Northwestern	W7ZB	361,120	HP	Northwestern	N9RV	988,344	HP			
Pacific	KF6T	1,501,464	HP	Pacific	K6HNZ	348,480	HP	Pacific	KH7Y	1,159,968	HP			
Roanoke	K4EU	1,071,968	HP	Roanoke	NN4F	306,592	HP	Roanoke	K4VV (K4ZA, op)	951,600	HP			
Rocky Mountain	KO7X	427,330	HP	Rocky Mountain	KQ0C	445,516	HP	Rocky Mountain	N2IC	1,322,980	HP			
Southeastern	NQ4I (VE7ZO, op)	1,920,036	HP	Southeastern	WO4DX	529,104	HP	Southeastern	K1TO	1,409,952	HP			
Southwestern	K6LL	1,702,350	HP	Southwestern	W6YI	573,540	HP	Southwestern	AA7A	772,200	HP			
West Gulf	N5NA	609,120	HP	West Gulf	W5PR	690,018	HP	West Gulf	W5KFT (K5PI, op)	1,253,904	HP			
Canada	VY2TT (K6LA, op)	2,392,420	HP	Canada	VO1KVT	403,182	HP	Canada	VY2ZM	1,638,972	HP			
Mexico	XE2K	740,520	HP	Mexico	XE1CWJ	321,216	HP	Mexico	XE1MM	525,600	HP			

Regional Leaders

Category: A = Mixed Mode, B = Phone only, C = CW only, D = Multioperator

Northeast Region				Southeast Region				Central Region				Midwest Region				West Coast Region			
New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections				Delta, Roanoke and Southeastern Divisions				Central and Great Lakes Divisions; Ontario Section				Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections				Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections			
W2MF	253,572	A	Q	K9OM	490,732	A	Q	N8HP	100,576	A	Q	N5TK	76,140	A	Q	W7YAQ	310,232	A	Q
WB2AMU	107,870	A	Q	KS4X	119,574	A	Q	KU4A	97,970	A	Q	W0MRZ	55,444	A	Q	WA6FGV	298,016	A	Q
N2XP	94,080	A	Q	K9TM	91,616	A	Q	AF9J	40,992	A	Q	W0PWE	45,500	A	Q	W7IV	263,700	A	Q
W1AN	83,224	A	Q	W14R	54,498	A	Q	VE3XTI	39,840	A	Q	K0OU	18,124	A	Q	W6AQ	192,780	A	Q
W1VT	75,088	A	Q	NT4TS	28,644	A	Q	K8BL	583,232	A	LP	KB7QOS	15,984	A	Q	K7XC	163,184	A	Q
N1UR	1,255,872	A	LP	N8OO	1,719,968	A	LP	N8VV	262,800	A	LP	N5DO	885,204	A	LP	N7ZG	824,724	A	LP
KU2M	1,121,328	A	LP	N8II	1,368,380	A	LP	VE3CX	257,174	A	LP	K0TT	767,980	A	LP	N6ZFO	781,776	A	LP
K2PS	914,746	A	LP	K1HTV	606,424	A	LP	VE3IAE	221,078	A	LP	W5GA	660,300	A	LP	K7SS	714,776	A	LP
N1IX	664,104	A	LP	N4YDU	581,380	A	LP	W9AV	198,852	A	LP	KT0K	612,750	A	LP	N7LOX	685,102	A	LP
W6AAN	553,316	A	LP	N4OX	551,200	A	LP	W0AIH (NE9U, op)	1,696,320	A	HP	W0ETT	543,536	A	LP	W7ZRC	536,576	A	LP
KM3T	3,018,720	A	HP	NQ4I (VE7ZO, op)	1,920,036	A	HP	WB9Z	1,443,204	A	HP	WA0MHJ	1,185,664	A	HP	VX6WQ	1,817,202	A	HP
N2NT	2,737,742	A	HP	N4ZZ	1,135,304	A	HP	VE3KZ	1,161,072	A	HP	KB0EO	961,590	A	HP	K6LL	1,702,350	A	HP
VY2TT (K6LA, op)	2,392,420	A	HP	K4EU	1,071,968	A	HP	W9XT	1,139,496	A	HP	N5NA	609,120	A	HP	KF6T	1,501,464	A	HP
K3ZO	1,657,136	A	HP	K4BAI	1,024,832	A	HP	VE3MMQ	929,106	A	HP	K07X	427,330	A	HP	WC6H	1,375,776	A	HP
K1UO	1,606,500	A	HP	K5RQ	1,017,648	A	HP	N8XA/P	63,896	B	Q	K0DEQ	425,862	A	HP	K9YC	996,410	A	HP
KE2OI	142,296	B	Q	N3AWS	20,776	B	Q	WB9FOL	30,806	B	Q	N0NI	127,676	B	Q	K6OO	84,390	B	Q
WB7OCV	33,200	B	Q	N04FX	18,172	B	Q	WD9FTZ	14,592	B	Q	VX4MM	93,956	B	Q	K6MI	80,408	B	Q
AA2VK	17,160	B	Q	KC5WA	15,456	B	Q	VE3HG	13,300	B	Q	KB5KYJ	66,000	B	Q	VA7IR	75,844	B	Q
W2WGK	16,680	B	Q	WC4J	15,048	B	Q	VE3FCT	7,896	B	Q	WW0WB	36,696	B	Q	W8QZA	61,824	B	Q
W3EK	9,408	B	Q	KS4GW	12,540	B	Q	VA3YP	264,186	B	LP	ND0C	25,160	B	Q	WA7PVE	44,160	B	Q
W1TJL	224,640	B	LP	AC5O	271,880	B	LP	N9ISN	215,320	B	LP	K7ULS	321,624	B	LP	N7FLT	278,576	B	LP
W3PAW	193,980	B	LP	WB4JFS	114,608	B	LP	N9TGR	199,836	B	LP	KT0DX	294,128	B	LP	N7XS	218,622	B	LP
W2TF	188,232	B	LP	W8QYJ	105,776	B	LP	NFBJ	124,938	B	LP	VE4TV	190,512	B	LP	KC6AWX	200,376	B	LP
N1IXF	172,928	B	LP	AD4L	103,032	B	LP	WB9PUB	116,800	B	LP	W0LSD	154,294	B	LP	NFFE	149,240	B	LP
KX1X	114,048	B	LP	K4PZC	94,794	B	LP	K8CC (N8NX, op)	456,030	B	HP	W5TMC	123,420	B	LP	KH6CJJ	147,420	B	LP
KK1KW (WW1WW, op)	771,426	B	HP	W04DX	529,104	B	HP	W8LJZ	366,080	B	HP	W5PR	690,018	B	HP	W6YI	573,540	B	HP
NA3D	600,372	B	HP	K4NV	520,880	B	HP	N7US	358,316	B	HP	K5TR (WM5R, op)	649,428	B	HP	W7ZB	361,120	B	HP
W1SJ	564,062	B	HP	W4SVO	400,722	B	HP	W9NY	287,220	B	HP	K00C	445,516	B	HP	K6HNZ	348,480	B	HP
N8RA	425,664	B	HP	NN4F	306,592	B	HP	WD8EOL	138,762	B	HP	NX0X	423,660	B	HP	N7UQ	322,420	B	HP
N3HBX	407,970	B	HP	AG4W	221,308	B	HP				WA5ZUP	365,932	B	HP	W7LEA	275,412	B	HP	
KR2Q	333,792	C	Q	K0LLUJ	252,720	C	Q	N8AP	83,296	C	Q	N0UR	249,260	C	Q	W6JTI	265,024	C	Q
AA1CA	231,648	C	Q	K4LTA	161,600	C	Q	K2YAZ	44,604	C	Q	W7FB	175,740	C	Q	N7IR	99,856	C	Q
K2SM	150,800	C	Q	K3TW	161,092	C	Q	WA8REI	42,560	C	Q	KE5AKL	169,988	C	Q	AE9F	75,600	C	Q
K3RR	132,916	C	Q	KI4FW	65,056	C	Q	WA8RJF	39,104	C	Q	K0PK	105,576	C	Q	K5UJU	54,752	C	Q
WO2N	132,800	C	Q	N4AU	59,616	C	Q	AI9K	39,104	C	Q	N0AX	50,264	C	Q	WA6L	34,692	C	Q
WA1Z	812,000	C	LP	N4WW (N4KM, op)	550,400	C	LP	VE3DZ	681,408	C	LP	W2UP	394,128	C	LP	KH6ZM	749,320	C	LP
W3BGN	799,488	C	LP	WD4AHZ	516,880	C	LP	NA8V	495,040	C	LP	K7RE	345,420	C	LP	K9WZB	491,616	C	LP
VA2WA (VA2WQ, op)	772,680	C	LP	WQ5L	493,120	C	LP	K8AJS	416,256	C	LP	K7VU	327,488	C	LP	AB7R	420,648	C	LP
W2ID	597,104	C	LP	N4ZI	491,040	C	LP	VE3KI	400,384	C	LP	W5MT	325,728	C	LP	K7HP	379,200	C	LP
VO1TA	515,280	C	LP	WB4TDH	487,760	C	LP	VE3ZT	320,032	C	LP	K9BWI	310,608	C	LP	AB7E	378,576	C	LP
VY2ZM	1,638,972	C	HP	K1TO	1,409,952	C	HP	K8AZ (K8NZ, op)	1,262,400	C	HP	N2IC	1,322,980	C	HP	KH7Y	1,159,968	C	HP
NN1N	1,347,720	C	HP	K4TD	994,788	C	HP	W5MX	1,054,488	C	HP	W5KFT (K5PI, op)	1,253,904	C	HP	N9RV	988,344	C	HP
W1WEF	1,307,496	C	HP	N4BP	971,040	C	HP	K9BL	846,144	C	HP	K5NA	1,202,624	C	HP	K7BG	873,252	C	HP
K1RM	1,256,736	C	HP	K4VV (K4ZA, op)	951,600	C	HP	NE8P	830,560	C	HP	VE5UF	865,032	C	HP	K7NV	853,120	C	HP
KD4D	1,248,000	C	HP	KN5O	921,728	C	HP	VE3EY	813,852	C	HP	NE0U	809,904	C	HP	KB7Q	829,668	C	HP
K1LZ	3,635,992	D		K4FJ	1,864,506	D		K9CT	2,483,824	D		NR5M	3,000,024	D		W6YX	2,087,120	D	
W2RE	2,865,160	D		W4UH	1,843,968	D		W8MJ	1,870,506	D		NX5M	2,512,200	D		N7DD	1,753,224	D	
K1WHS	2,734,200	D		N4PN	1,426,992	D		W9IU	1,136,432	D		K0DU	2,084,064	D		K6EZ	1,720,680	D	
K3WW	2,169,680	D		K5KG	1,373,700	D		N2BJ	877,824	D		VE5MX	1,717,056	D		W7RN	1,653,460	D	
WX3B	2,143,854	D		W4MLB	1,112,436	D		W8TA	784,520	D		KD0S	1,643,600	D		NK7U	1,475,760	D	
KD2RD	1,326,080	E		N4CJ	568,920	E		VE3XAT	167,272	E		K0RC	353,212	E		W7TVC	733,176	E	
W1WBB	585,752	E		K4MM	489,632	E		AA8IA	132,300	E		K5WO	289,280	E		VA7BEC	591,840	E	
KO3T	574,864	E		K4ABB	372,292	E		K8GT	122,08	E		K0RI	260,604	E		N7XU	237,956	E	
KA2D	396,312	E		K4FPF	161,024	E		VE3AD	107,748	E		N0JHZ	215,930	E		VE6FI	217,516	E	
K2DFC	363,636	E		NO4Q	159,120	E		KF9US	90,948	E		K0PC	149,760	E		K6EI	178,064	E	

Continental Leaders

Category: A = Mixed Mode, B = Phone only, C = CW only, D = Multioperator

Africa			Asia			Europe			North America			Oceania			South America		
CT9DL2TM	17,760	A QRP	JM2RUV	61,200	A QRP	ON6AB	261,416	A QRP	J68UN	267,120	A LP	ZL3NB	24,640	A LP	4M2L (YV5YMA, op)	69,988	A QRP
EABOM	835,176	A LP	RA0AY	37,288	A QRP	EA1GT	130,626	A QRP	NP3CW	95,550	A LP	ZL4NR	19,760	A LP	PJ5ATX	46,784	A QRP
EABQM	326,700	A LP	R9DX	22,260	A QRP	CT2IOV	123,970	A QRP	HP3FTD	8,120	A LP	DU7HF	2,736	A LP	PY2EX	1,578,528	A LP
CT3KN	85,746	A LP	7K1CPT	12,464	A QRP	UX1UX	116,340	A QRP	FG1PP	7,400	A LP	YC1BXJ	154	A LP	PY1NB	166,160	A LP
EABQW	77,066	A LP	BD4WM	10,730	A QRP	UX8ZA	84,660	A QRP	VP2CW (W5CW, op)	1,661,868	A HP	ZM2V (AI6V, op)	1,735,344	A HP	PJ5AAD	142,272	A LP
ZS2NF	73,656	A LP	C4Z (SB4AIZ, op)	826,084	A LP	DL4MCF	581,240	A LP	ZF2AH	1,506,816	A HP	NH2DX (KG6DX, op)	1,640,640	A HP	PY6KY	120,650	A LP
5Z4EE	51,336	A HP	7Z1SJ	564,596	A LP	RL6M	579,006	A LP	FM5CD	9,408	A HP	VK4CT (VK4EMM, op)	1,470,016	A HP	YW5T (YV5JBI, op)	98,724	A LP
CT3HF	14,792	A HP	JABWFM	562,536	A LP	CR5A (CT1FFU, op)	537,358	A LP	KP4KE	282,274	B QRP	ZK2V (GM3WOJ, op)	808,080	A HP	3G3FZ (CE3FZ, op)	1,240,492	A HP
EAB8UE	392	B QRP	JG1AVO	454,272	A LP	RA1AL	480,110	A LP	TG9ANF	266,304	B QRP	ZM4M	296,400	A HP	PY7ZY	52,256	A HP
EABMT	610,450	B LP	UN6P	447,580	A LP	OR2F	479,520	A LP	H13TEJ	790,152	B LP	VK4ATH	21,080	B QRP	PP5YJ	42,600	A HP
EC8CQ	99,540	B LP	JT5DX (JT1CO, op)	1,016,024	A HP	EA6SX	1,474,908	A HP	CO6LC	324,104	B LP	YB0NSI	9,620	B QRP	PY2WAS	18,720	A HP
EAB8RW3DO	83,160	B LP	JS6RGY	757,080	A HP	UW1M (UR5MMW, op)	1,331,652	A HP	CM8AKD	284,160	B LP	YC0OHG	2,744	B QRP	LU1VK	34,768	B QRP
CN8VO	23,296	B LP	JR1AIB (JH5GHM, op)	725,088	A HP	OE8Q (OE8SKQ, op)	1,159,380	A HP	FG4NO	100,200	B LP	VK4LAT	261,632	B LP	CE3WYZ	5,070	B QRP
ZS6GRL	22,594	B LP	RT9T	724,160	A HP	DK6XZ (E77XZ, op)	977,076	A HP	KP4R	42,336	B LP	DU1IVT	108,080	B LP	PJ2LEP	449,334	B LP
CT3FQ	835,536	B HP	RG9A	681,910	A HP	UW5Q (JUR3QCW, op)	959,500	A HP	KP2A (KW8N, op)	1,341,248	B HP	YB1AR	87,660	B LP	LU7DUC	249,776	B LP
EA9IE	604,810	B HP	JRH6MJ	21,616	B QRP	R7NA	100,416	B QRP	V25R (K6IF, op)	1,127,232	B HP	DU1LC	30,702	B LP	CA3SOC	238,290	B LP
CT3DZ	275,058	B HP	BD4AAS	9,240	B QRP	R2AD	29,952	B QRP	CO8ZZ	391,288	B HP	VK4NDX	25,668	B LP	LU6FOV	232,078	B LP
EF8F (EA8CER, op)	58,560	B HP	JA2MNV	7,920	B QRP	ISKAP	25,792	B QRP	FM5AN	85,478	B HP	KH2JU	210,420	B HP	YV5KG	218,880	B LP
ZS5NK	10,450	B HP	JR2EKD	6,474	B QRP	CT2JBG	22,512	B QRP	KP4JRS	36,994	B HP	9M6DXX	63,656	B HP	LP1H (LU5HM, op)	1,192,794	B HP
EABCN	618,552	C LP	BD4HY	440	B QRP	SNSR (SP5XMU, op)	22,080	B QRP	KP2MM (N2TTA, op)	730,592	C LP	VK3AVV	37,556	B HP	CE3T	1,133,508	B HP
5C5W (CN8KD, op)	375,664	C LP	HZ1BW	157,776	B LP	IQ8BT (IT9SPB, op)	317,966	B LP	FM/F6AUS	380,600	C LP	VK3GJ	36,656	B HP	PQ5B (PP5JD, op)	792,582	B HP
5X1NH	369,528	C LP	JH7RTQ	104,346	B LP	F5OWT	221,136	B LP	J3B5	286,760	C LP	T88WJ	26,400	B HP	ZX2B (PY2MNL, op)	718,740	B HP
V51YJ	361,128	C LP	JA7BEW	97,440	B LP	HA4XH	189,500	B LP	KP2/K9MA	153,216	C LP	ZL1GO	502,500	C LP	AY8A (LU8ADX, op)	572,160	B HP
V5/DJ4SO	299,172	C LP	JH0JVD	58,950	B LP	CU2AF	175,760	B LP	NP4Z	1,996,400	D HP	YB1ALL	277,248	C LP	AY9F (LU5FZ, op)	149,380	C QRP
ZS6A	144,352	C HP	R9UAG	46,764	B LP	G0AEV	171,864	B LP	T16N	2,565,348	D LP	ZL1TM	255,360	C LP	PY4ZO	100,584	C QRP
D4C	4,351,000	D HP	B7P	624,660	B HP	GW9T (MW0ZZK, op)	884,722	B HP	CO2CW	567,580	D LP	DV1/J07KMB	137,632	C LP	LU1WI	18,228	C QRP
EF8R	3,565,078	D HP	JATOWD	333,248	B HP	M5X	750,708	B HP	CO8CY	376,992	D LP	VK2PN	90,000	C LP	PP5BZ	17,122	C QRP
CT3BD	91,640	D HP	BX5AA	312,394	B HP	TM0T	709,770	B HP	KP2B	297,850	D LP	ZM1A (ZL3CW, op)	1,428,336	C HP	PP5VX	16,544	C QRP
			A61BK	277,016	B HP	PI4DX (PD2R, op)	575,248	B HP	YS1GR	62,400	D LP	ZL3TE (W3SE, op)	543,360	C HP	CE2/VE7SV	1,328,000	C LP
			UP2L (UN9LG, op)	251,560	B HP	EA1DR	551,936	B HP				NH2T (N2NL, op)	502,680	C HP	XR3A (CE3DNP, op)	434,436	C LP
			JA1YNE (JR1NKN, op)	170,016	C QRP	EU1AA	181,280	C QRP				VK4IU	32,648	C HP	LU8QT	383,264	C LP
			UA9AB	67,584	C QRP	RU7A	126,080	C QRP				ZL3PAH	14,432	C HP	LU5HR	240,680	C LP
			RU9UN	43,616	C QRP	US5VX	104,580	C QRP				VK4WIL	1,321,672	D HP	LU5FR	235,840	C LP
			JH3DMQ	38,076	C QRP	UA6LCJ	85,008	C QRP				ZL50GH	355,950	D HP	LU1HF	2,001,136	C HP
			JH8FAJ	38,060	C QRP	YO8DDP	79,800	C QRP				VK2GGC	156,468	D HP	CE1/K7CA	1,597,280	C HP
			RW9QA	415,800	C LP	GI0RQK	678,368	C LP				YB2DX	94,628	D HP	PY2ZEA (OH2MM, op)	1,057,536	C HP
			5B/RN3QO	396,180	C LP	YT9A	662,068	C LP				DU1/JJ5GMJ	68,970	D HP	PJ4LS	653,796	C HP
			JAT7C	385,840	C LP	9A3VM	491,064	C LP				V63QQ	590,006	D LP	LU3DAT	496,848	C HP
			VU2BGS	338,252	C LP	HG0R (HA0NAR, op)	460,256	C LP				ZL3GA	75,200	D LP	CW5W	3,615,656	D HP
			RT9S	295,200	C LP	SP1NY	386,888	C LP				VK4IZ	72,590	D LP	PY2NDX	3,420,348	D HP
			ZC4LI	968,772	C HP	EF5Y (EA5GTQ, op)	1,130,112	C HP							HK1NA	3,306,360	D HP
			JF1SOC	870,756	C HP	G3TXF	1,046,900	C HP							LS1D	3,235,680	D HP
			JG1ILF	764,920	C HP	HA1AG	943,020	C HP							CX5BW	3,123,778	D HP
			JE1CKA	659,964	C HP	EI7KD	917,280	C HP							PY1GQ	1,676,196	D LP
			JASFBZ	638,448	C HP	EA4TX	862,224	C HP							ZY2C	1,292,830	D LP
			RU0FM	983,876	D HP	EI7M	2,859,864	D HP							LU5DX	1,040,160	D LP
			JABWIF	964,656	D HP	CR6K	2,717,242	D HP							LU2EE	641,240	D LP
			UA9CDV	886,894	D HP	TM6M	2,419,054	D HP							PY3YD	374,400	D LP
			JS3CTQ	791,040	D HP	4O3A	2,065,338	D HP									
			RL9AA	783,692	D HP	ED1R	2,023,988	D HP									
			4Z5MU	1,092,180	D LP	EA6BF	783,272	D LP									
			VR2ZQZ	408,842	D LP	YT2F	764,568	D LP									
			RM9RZ	321,832	D LP	EF1D	615,660	D LP									
			JAT7YCC	305,748	D LP	OK2PAY	473,680	D LP									
			E21EIC	286,936	D LP	YT0A	377,060	D LP									

Version 1.1 of the extended writeup corrects the Continental Leaders table that contained mis-sorted data in version 1.0. The text of the writeup is not affected.

Looking around the world, logs were received from more than 230 different DXCC entities and W/VE/XE sections. This is truly a global contest. More logs than from any other area were received from those quintessential contesters in Japan with 267. They were closely followed by Germany's 242 logs and European Russia's 239 logs. Looking for the most active W/VE/XE sections, honors goes to Virginia with 106 logs received followed by Minnesota with 92. If you live in Minnesota and it's the second weekend in December it must be a good time to be on the radio! Minnesota only has about two-thirds the ham population Virginia does so they were out in force. Of particular interest in Asia were the 50 logs received from China -- up from 5 in 2009 and 8 in 2010. Their activity now exceeds that from many stalwart European countries such as Portugal, Hungary, Switzerland, Norway, and Finland. With 1.3+ billion citizens, might China someday become the #1 contesting country? Since the ban on Amateur Radio in China was lifted in 1992 the number of licensed operators climbed to 500 in the year 2000, 3,500 in the year 2003 and shot up to 20,000 in 2010. Though they still only have as many hams as Ontario or North Carolina, the trend is strong.

Who were the most energetic and active contesters? Which operators sit down, keep their butts in the chair, and make a large number of contacts? Looking at those entities from which five or more logs were received the honors go to none other than Cuba. The five logs submitted from Cuba averaged 1,272 QSOs each -- a great effort from CM8AKD, CO2CW, CO6LC, CO8CY, and CO8ZZ. If you wanted to work Cuba and you were within propagation range I bet they were in your log. In second place were the 11 stations from Ireland that averaged 894 QSOs each followed by a tie for third place between 6 stations from Saskatchewan and 11 from Alberta who averaged 847 QSOs each. Like Minnesota, if you live in Saskatchewan or Alberta and it is the second weekend in December it is probably not a bad day to spend some time on the radio!

All in all, the 2011 edition of the contest was a whole bunch of fun. For the more competitive of you, those aiming to set records and or winning your category, it was a pretty good contest for you as well.

Records, Records and more Records

Not only did operators have fun in 2011 but they set records all over the place. Wow, were there records set! Driven by the triple factors of more sunspots, the new MOLP category, and the continuing benefit of 32 new XE multipliers, a total of 432 new all-time records were set at the DXCC entity and W/VE/XE section level. Looking at it another way, almost 1 in every 12 logs

contained a record score and 1 in every 5 DXCC and W/VE/XE section records was set in 2011! Comparatively only 34 such records were set in 2010. (Thanks to the efforts of Ken, WM5R a full set of contest records are available at www.arrl.org/contests.) Of these 432 records, 226 were DX entity records and 206 were W/VE/XE section records. There were 149 High Power records, 221 Low Power records (117 of these being initial records in the MOLP category), and 63 QRP records set. Mexican operators continue to participate in increasing numbers with 40 new XE records in 2011. There are now records in 68 of the 352 possible entry categories in XE, up from 28 last year.

New W/VE/XE Division Records

Division	Category	Call	New Record
Atlantic	MO LP	KO3T	574,864
Atlantic	SO CW HP	KD4D	1,248,000
Atlantic	SO PH QRP	KE2OI	142,296
Canada	MO HP	VE5MX	1,717,056
Canada	MO LP	VA7BEC	591,840
Canada	SO CW HP	VY2ZM	1,638,972
Canada	SO CW LP	VA2WA (VA2WDQ, op.)	772,680
Canada	SO MX HP	VY2TT (K6LA, op.)	2,392,420
Canada	SO PH QRP	VX4MM	93,956
Central	MO LP	KF9US	90,948
Central	SO PH QRP	WB9FOL	30,806
Dakota	MO LP	KØRC	353,212
Delta	MO LP	NO4Q	159,120
Delta	SO CW QRP	K4LTA	161,600
Delta	SO MX LP	N8OO	1,719,968
Delta	SO MX QRP	KS4X	119,574
Great Lakes	MO LP	AA8IA	132,300
Hudson	MO LP	KD2RD	1,326,080
Hudson	SO CW LP	W2ID	597,104
Hudson	SO MX HP	N2NT	2,737,742
Mexico	MO HP	XE2X	392,524
Mexico	MO LP	XE2AU	163,200
Mexico	SO CW HP	XE1MM	525,600
Mexico	SO CW LP	XE1AY	134,048
Mexico	SO CW QRP	XE3WMA	2,944
Mexico	SO MX HP	XE2K	740,520
Mexico	SO MX LP	XE1L	122,944
Mexico	SO PH HP	XE1CWJ	321,216
Mexico	SO PH LP	XE1B	518,256
Mexico	SO PH QRP	XE2JA	95,892
Midwest	MO LP	WØIW	105,450
Midwest	SO CW QRP	W7FB	175,740
Midwest	SO PH QRP	NØNI	127,676
New England	MO HP	K1LZ	3,635,992
New England	MO LP	W1WBB	585,752
New England	SO MX HP	KM3T (@ KC1XX)	3,018,720
Northwestern	MO LP	W7TVC	733,176
Northwestern	SO MX QRP	W7YAQ	310,232
Pacific	MO LP	K6EI	178,064
Pacific	SO CW LP	KH6ZM	749,320
Pacific	SO PH QRP	K6OO	84,390
Roanoke	MO LP	K4FPF	161,024
Roanoke	SO MX LP	N8II	1,368,380
Rocky Mountain	MO LP	K5WO	289,280
Rocky Mountain	SO CW HP	N2IC	1,322,980
Southeastern	MO LP	N4CJ	568,920
Southeastern	SO CW HP	K1TO	1,409,952
Southwestern	MO LP	N6MA	66,368
West Gulf	MO HP	NR5M	3,000,024
West Gulf	MO LP	WDØGTY	57,456

Within W/VE/XE a total of 50 division records were set. Seventeen of these were the initial records in the new MOLP category and 10 were from Mexico where operators set new records in every category except Single-Op, Mixed Mode, QRP. What a great effort from XE in the second year of the contest with the new rules! (See the section "Mexican Activity Update.") Division records were sprinkled across all the operating categories though no new records were set in the Phone-Only Low or High Power categories outside of Mexico.

Even with this big batch of new records there are still some old ones out there to aim at. Three records still remain from 1988, now the oldest ones on the books in W/VE/XE. Who will take the challenge next year and set new records for: Atlantic Division Single-Op, Phone-Only, High Power held by W3LPL (WA8MAZ, op), Hudson Division Single-Op, Phone-Only, Low Power held by N2BJ, and Northwestern Division Single-Op, Mixed-Mode, High Power held by NL7GP?

In addition to the 50 division records there were 4 new W/VE/XE category records set, the first since 2002. Congratulation to KM3T at KC1XX on setting a new Single-Op, Mixed-Mode, High Power record, VY2ZM on setting a new Single-Op, CW-Only, High Power record, and K1LZ for setting a new Multioperator, High Power record. KD2RD came out on top of all entrants in the new MOLP category and now holds that record.

New Continent Records

Continent	Category	Call	New Record
Africa	SO PH LP	EA8MT	610,450
Africa	SO CW LP	EA8CN	618,552
Africa	MO HP	D4C	4,351,000
Asia	SO PH HP	B7P	624,660
Asia	MO LP	4Z5MU	1,092,180
Europe	SO CW HP	EF5Y (EA5GTQ, op.)	1,130,112
Europe	MO LP	EA6BF	783,272
Europe	MO HP	EI7M	2,859,864
N. America	MO LP	TI5N	2,565,348
Oceania	SO PH QRP	VK4ATH	21,080
Oceania	SO CW HP	ZM1A (ZL3CW, op.)	1,428,336
Oceania	MO LP	V63QQ	590,006
S. America	SO CW LP	CE2/VE7SV (VE7SV, op.)	1,328,000
S. America	MO LP	PY1GQ	1,676,196
S. America	MO HP	CW5W	3,615,656

On the DX front 15 new continent records were set, the first since 2007. Five of these were the initial records in the new MOLP category. There are still a few old continental records out there to aim at if that is your goal. The oldest is a 1975 record held by KC4AAC (WB6KLI, op) from Antarctica in the Single-Op, Mixed-Mode, High Power category. If you are interested in setting a new continental record, head to Antarctica as there are no records at all in ten of the eleven operating categories. Remember it is summer time there during the contest! Beyond that record there are a few left from 1990: Asia Single-Op, Phone-Only, QRP held by JA1DXA, Europe

Single-Op, Phone-Only, Low Power held by OT4AAQ (ON4AAQ, op), North America Single-Op, Phone-Only, Low Power held by VP2EXX, and Oceania Single-Op, Mixed-Mode, High Power held by AH3C. Finally, there were three new all-time category world records set, the first since 2002. You will hear about two of these next.

Extraordinary people doing extraordinary things

In most events there are always a small number of participants who stand above others by their will and determination to excel. With the good conditions for the 2011 contest these efforts resulted in new all-time category records. Let's take a look at two of operations that led to new all-time world records and one that led to a W/VE/XE record.

The D4C story -- Fabio I4UFH thought 2011 would be a good opportunity to go after the world Multioperator, High Power record set by VP5K in 2000. As he said "I love the ARRL 10 Meter Contest for more than 20 years and already hold many records. There is no contest as the ARRL 10m Contest !!" Fabio is a proven 10 meter operator. He holds the current Single-Op, Phone-Only, High Power world record as D44TD from 2002. In that contest he also made the all-time record number of QSOs for any operation in any category at 5,085. So this year he invited some friends; Giorgio, I2VXJ, Donato, IK2EGL, and Max, IZ4DPV to the D4C station at Monte Verde in the Cape Verde Islands.



The record breaking D4C team. From left to right: Max IZ4DPV, Fabio I4UFH, Donato IK2EGL, and Giorgio I2VXJ. (Photo - I4UFH)

To say that the D4C station is ideal for a 10 meter contest is a vast understatement. Monte Verde is the highest point on the island of São Vicente. The station rests on the top of this 750-meter mountain with clear shots in all directions. Effectively, their antennas are in "free space" with takeoff angles as low as they can be.



These are the 10 meter antennas at D4C. They can beam into any combinations of these antennas they want, up to and including all four for 360 degree coverage! (Photo - I4UFH)

As Fabio remembered: "Our 4 antenna system beamed over 360 degrees worked like a charm, two interlocked radios have done the job! We started slowly Saturday morning at our sunset, we opted to left all the first night of QRX, allowing us a long second night, and it paid off a lot, 100 JAs long path during the dark hours until 0300Z, it was very thrilling !! Everything was as expected, great sunshine days, no Murphy visit, a short Friday / Monday trip." When the contest was over they racked up a post log-checking score of 4,351,000, beating the previous VP5K record by a healthy 260,000 points or 6%.



The D4C QTH is conveniently located on top of 750 meter tall Monte Verde. Nice view and even better takeoff angles. (Photo - I4UFH)

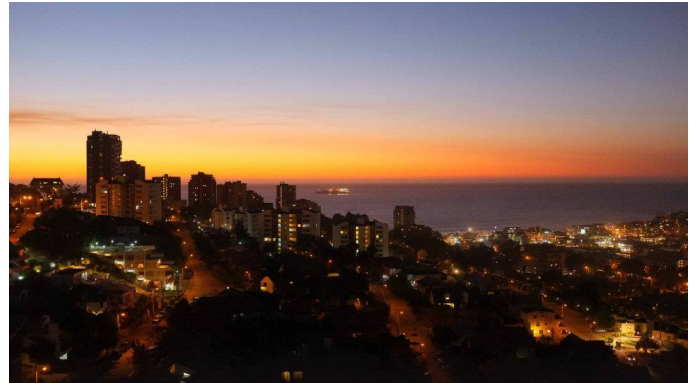
The CE2/VE7SV story – Well-known contester and DXpedition participant Dale, VE7SV may or may not have had in mind setting an all-time world record in the Single-Op, CW-Only, Low Power category. As the contest date approached he didn't even have a working antenna. Only through the efforts of delivery boy Scott, 2011 ARRL 10 Meter Contest Results

KØMD did Dale get the parts needed to fix his 3-element SteppIR Yagi.



Here is Dale VE7SV working the pileups as CE2/VE7SV and setting a new world record in the process. (Photo - VE7SV)

What Dale did have going for him was that his antenna was located 250 feet above the ground on the top of a 20-story apartment building in Renaca, Vina del Mar, Chile. This building was located in turn near the beach and well above it so that his antenna was 600 feet above sea level.



This is the view from the top of the apartment building where the CE2/VE7SV antenna system is. Twenty stories up and 600 feet above the nearby ocean. (Photo - VE7SV)

As at D4C there is something magical about 10 meter antennas high above the ground. As Dale described it: "The pile-ups to Europe were crazy...many times I had to QSY and often ran with the attenuator on trying to copy anything from the mess calling....but what a rush. Working pals from the Pacific Northwest from the Bluff (W7RM) days was fun and a big thrill to hear friends Rebecca and Koji (VA7BEC) crash the pile-up." When the final bell rung Dale had made over 2,100 QSOs with low power and a 3-element antenna! His post log-checking score of 1,328,000 beat the previous record held by K1TO by 110,000 points or about 9%.



Part of the team that is behind the surge in contest activity from Chile. From left to right: VE7SV, CE3CT, VE7AG, and CE3FZ. (Photo - VE7SV)

The KM3T story – Dave, KM3T had an opportunity to operate from KC1XX for the contest and knew he was going to go full-bore in the Single-Op, Mixed-Mode, High Power category. KC1XX may not be on a mountain like D4C nor on top of apartment near a beach like CE2/VE7SV but whatever disadvantage that may be is made up by throwing aluminum at the problem. Dave had at his selection seven different 7-element beams including a rotating 4-stack as well as a few other antennas here and there.



A happy Dave KM3T in front of the operator console at KC1XX. (Photo - KM3T)

As Dave related: "It was great to hear the massive amount of activity this weekend from Europe, USA, and South America. Europe starting coming in via a southerly scatter path Saturday morning between about 1120Z and 1140Z, then the path went direct. The EU opening seemed better and deeper on Sunday with many more

Russian stations and some goodies like 4K4K and 9K, 4X4, etc.



A portion of the KC1XX 10 meter antenna system. This is the 7/7/77 rotary stack. (Photo - KM3T)

The KC1XX station is on a good hilltop in southern NH near the MA border. When the band is closed it is possible to work ground-wave QSOs up and down the East Coast and out toward Buffalo/Rochester, NY and into VE3 – the only way besides backscatter to get into these high population density areas from up here. Much like a VHF contest on 6 meters. My many years of VHF contesting experience came in handy. :-) Tried to balance CW and SSB the best I could. I think I gave slight preference to SSB on Saturday - then applying what I learned Saturday I hit CW much harder on Sunday morning, especially to Europe, where CW activity seems stronger." When the contest was over Dave suspected if his log survived log checking it would be a new record. Well it did survive and it was a new record. His post log checking score of 3,018,720 beat the prior record held by KQ2M by 271,000 points or almost 10%.



Another portion of the KC1XX 10 meter antenna system. These are dedicated to the second radio. (Photo - KM3T)

Hams just want to have fun

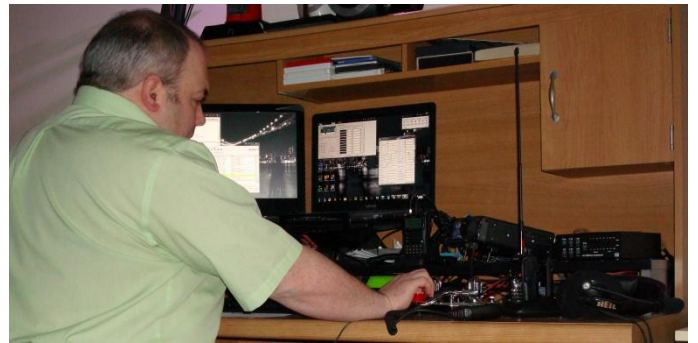
There are also participants who just do it for the fun. That is one of the great things about contesting – you can choose your own level of participation and commitment. Try that playing doubles tennis someday – it does not work quite as well! Several great examples of the spirit and fun of contesting from the 2011 contest were:

Operating as the GM3W team, Ian, GM3SEK and his wife Nadine, MMØMNW invented a "Mr. & Mrs." section to the Multioperator, High Power category. Ian did the CW operating and Nadine did the Phone operating. They ended up with 1,205 QSOs and 196 multipliers and had enough fun that they are planning on the same format in 2012.

For Larry, KD6SXF the 2011 ARRL 10 Meter Contest was his first contest ever! As he described it: "I only operated about 4.75 hours, but I was exhausted! I wonder how so many hams are able to stay on the air hour after hour. I imagine that one builds stamina over time." I asked Larry for a little more detail on his operating conditions and discovered the special effort he made to get on the air -- definitely not what most of us are accustomed to. As he described it: "I basically operate

from my car. I use a Kenwood TS-590S. My antenna is simply a mobile whip antenna. I powered the radio with a deep cycle 12V battery. I also hooked up the battery to solar panels. Actually, most of the solar panels were used for another battery that I used to power my laptop computer. I operated from various places within the city of San Marcos, CA. Sometimes I operated right in front of my Mom's house. Sometimes I operated from the local Target parking lot. Finally, sometimes I went to a local park that is on top of a hill." I would be tired as well, contesting in my car for almost five hours.

Finally there was the fantastic statement from Mike, AB1OD who was operating in the contest near the first anniversary of getting his ticket. As he said: "If you had told me this time last year that I'd be having this much fun sitting at a computer and a radio, I would have questioned your sanity. My, how things change."



Here is Mike AB1OD doing what he enjoys, contesting! (Photo AB1OD)

And how they did change! Many regular contesters probably recognize Mike's call. A graduate of the ARRL Rookie Roundup, since the 2011 ARRL 10 Meter Contest through mid-April 2012 he has participated in no fewer than 21 other contests by a count of his 3830 score postings. Mike is having some fun!



This is a close-up of Mike AB1OD's station. Very well appointed! Looks like he has one of everything. (Photo AB1OD)

Club Competition

Club competition continues to be a popular and fun aspect of this contest. It is like a wide-area Multioperator effort where you can operate from your home QTH but be part of a larger team competing with others. Seventy clubs submitted logs for the 2011 10 Meter Contest, way up from the 55 last year. These 70 clubs represented a combined 1,217 entries meaning almost half of W/VE operators were also part of a club entry!

In the Local Club category the Central Virginia Contest Club took top honors among the 26 clubs. Their 10 members combined for more than 4 million points and ended the streak of the Midland Amateur Radio Club of Midland, Texas who won the category in three of the last four years.

Local Category	Score	Entries
Central Virginia Contest Club	4,359,656	10
Midland ARC	1,255,800	4
Kansas City DX Club	1,176,590	9
Hilltop Transmitting Assn	1,145,576	5
599 DX Association	1,141,616	6
Delara Contest Team	939,460	7
Lincoln ARC	764,918	5
Bergen ARA	753,702	8
Northeast Wisconsin DX Assn	684,290	3
Iowa DX and Contest Club	575,440	3
New Mexico Big River Contesters	455,756	3
Metro DX Club	394,192	3
Meriden ARC	358,964	4
Sterling Park ARC	333,944	9
West Park Radiops	282,488	7
Badger Contesters	268,626	7
Gloucester Co ARC	216,488	5
Granite State ARA	205,664	6
Low Country Contest Club	172,588	4
Murgas ARC	152,960	3
Portage County Amateur Radio Service	104,884	7
Heartland DX Association	92,520	6
Southern Berkshire ARC	62,770	5
Raritan Bay Radio Amateurs	44,878	5
Pueblo West Amateur Radio Club	34,904	4
Hays-Caldwell ARC	6,504	3

In the popular Medium Club category 38 clubs fought a hard-pitched battle with one of the closer finishes in any contest category. In the end, the 31 members of the Frankford Radio Club bested the 44 members of the Arizona Outlaws Contest club by less than 2%! This was a great rebound from the Frankford club as they placed 8th last year and another heartbreaker for the Arizona club who also finished second in 2010. As they say, "There is always next year."

Medium Category	Score	Entries
Frankford Radio Club	13,258,284	31
Arizona Outlaws Contest Club	13,048,014	44
Central Texas DX and Contest Club	11,199,744	21
Contest Club Ontario	10,612,610	43
Southern California Contest Club	7,472,480	30
Grand Mesa Contesters of Colorado	7,439,444	19
Alabama Contest Group	7,227,460	29
Tennessee Contest Group	6,984,066	41
Hudson Valley Contesters and DXers	5,550,942	23
Mad River Radio Club	5,350,674	15
Western Washington DX Club	5,096,476	22
Maritime Contest Club	4,800,072	12
South East Contest Club	4,521,596	24
Carolina DX Association	4,457,550	20
Willamette Valley DX Club	4,454,032	20
Mother Lode DX/Contest Club	4,242,378	12
ORCA DX And Contest Club	3,380,924	14
Order of Boiled Owls of New York	3,046,704	9
Saskatchewan Contest Club	2,741,248	3
Contest Group Du Quebec	2,627,380	13
CTRI Contest Group	2,566,664	15
North Coast Contesters	2,477,072	5
Northern Rockies DX Association	2,277,084	3
Spokane DX Association	2,220,038	11
Western New York DX Assn	1,850,700	8
Lone Star DX Assn	1,609,164	7
Hampden County Radio Assn	1,546,158	18
Rochester (NY) DX Assn	1,437,270	9
North Texas Contest Club	1,436,724	5
Kentucky Contest Group	1,264,876	4
Louisiana Contest Club	1,142,182	5
Utah DX Assn	1,140,548	7
Allegheny Valley Radio Association	1,048,578	4
Bristol (TN) ARC	451,102	11
West Allis RAC	443,982	11
Mississippi Valley DX/Contest Club	309,088	5
Six Meter Club of Chicago	86,688	6
Pacific Northwest VHF Society	55,724	3

In the Unlimited Club category six entries were received in 2011, up from three in 2010. Coming out on top were the 130 members of the Potomac Valley Radio Club who bested second-place Yankee Clipper Contest Club by a wide margin. The PVRC's success formula looks like just overwhelming their competition with the sheer number of members. Their average score per member was the lowest among the top four clubs in this category but by being the only club with more than 100 members they easily took top honors. Congratulations to all the clubs and their organizers.

Unlimited Category	Score	Entries
Potomac Valley Radio Club	33,186,960	130
Yankee Clipper Contest Club	28,654,372	78
Florida Contest Group	24,608,646	83
Northern California Contest Club	20,299,126	66
Minnesota Wireless Assn	14,453,608	83
Society of Midwest Contesters	13,038,478	54

A Skimmer View of the Contest

Among the more competitive testers a common conversation topic is the length and quality of your band openings relative to others. More often than not it we use it as an excuse -- "I just could not overcome the better opening the other operator had!" Of course it never has to do with your operating skills or station capabilities. It is just that uncontrollable propagation. One of the more popular complaints for 2011 was the relatively weak opening between the Pacific Northwest area of the United States and Europe. Guy N7ZG summarized it well: "The band opened up at about 7 AM to the east coast and was expecting EU to open. Never really did. Worked a few western Europeans and then started running the east coast."

With technology it is now possible to gain some unbiased and quantitative insight into actual band openings. That technology is the network of Skimmers around the world and the Reverse Beacon Network web site. (www.reversebeacon.net) The 10 Meter Contest, being a single band contest, is also a bit easier to study with skimmer data than an all band contest like ARRL DX.

Skimmers of course are an imperfect technology for comparison. It is CW only and the 10 Meter Contest is both Phone and CW. Different skimmers have different antennas. Different skimmers use different receivers. Different skimmers may be on the air for different lengths of time. The skimmer network is not uniformly

distributed around the world. But, for its faults the data is incredibly valuable and we can learn a lot from it.

During the 48 hours of the 2011 ARRL 10 Meter Contest the network captured over 500,000 spots, 551,186 to be exact. This data is easily downloaded from the web site, imported into Excel, crunched for analysis and charted

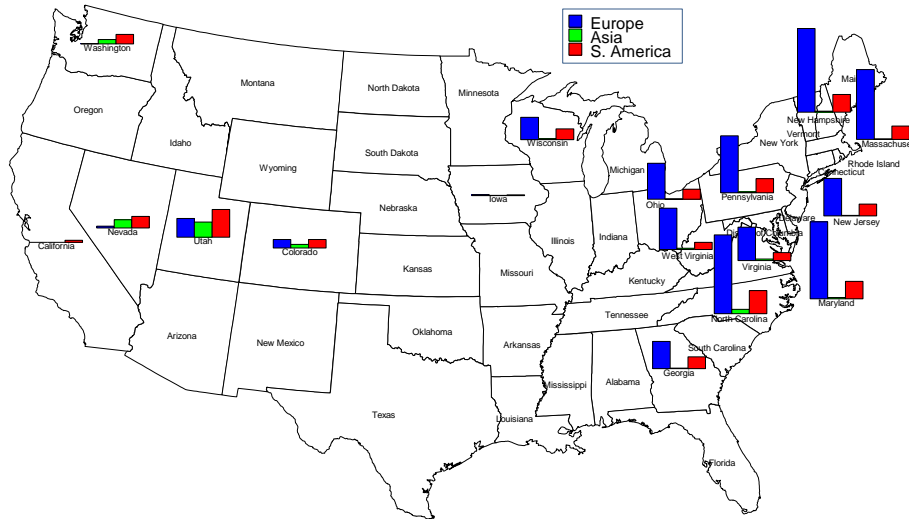
for visual insight. So, to the question of the length and quality of band openings one measure of that is the sum total of stations heard at each skimmer site. Let's take a look using two maps.

The US map shows the skimmer spot count of stations heard across the US skimmer network, breaking the spots down by continent of the received station. The height of the bar corresponds to the sum of spots received from each continent. If there were multiple skimmers in a state the chart presents the skimmer with the highest count.

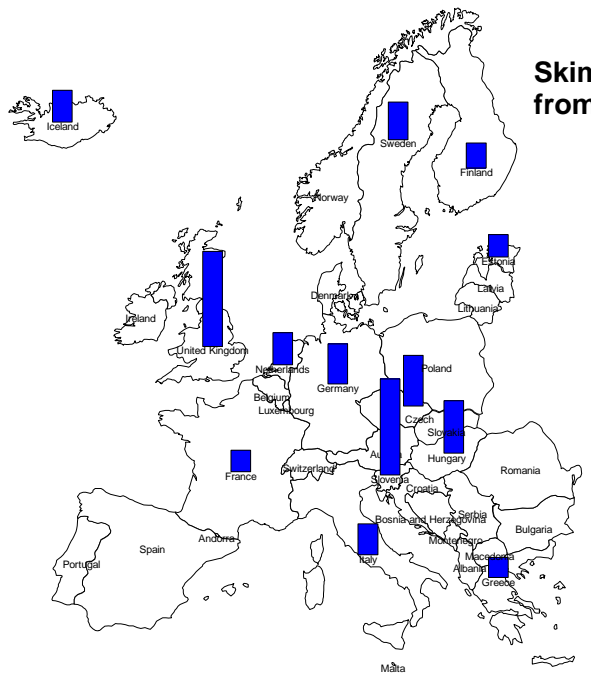
What does this map seem to say? With respect to Europe the openings seemed pretty uniform from the Maryland/Pennsylvania area up into the Northeast US. Stations in the Ohio, West Virginia, and Georgia

areas did not have as good an opening. And, yes, for stations in the western US and in the Pacific Northwest in particular, the opening to Europe was fleeting. The skimmer in the state of Washington recorded a total of 31 skimmer spots from Europe for the whole weekend. Compare this to well over 6,000 spots for skimmers in the Northeast US, a ratio of almost 200 to 1. Definitely -- Advantage East Coast!

Skimmer Spots From Continents



Skimmer Spots from North America



In return though how about the openings to Asia? Does the western US have an advantage here? Looking at the map again shows that yes states from the Rocky Mountains west had a much better opening to Asia than stations on the east coast. The skimmer in Utah recorded 2,410 spots from Asia whereas stations in the Northeast recorded between 50 and 100 spots, giving the west stations a 25 to 50 to 1 advantage over the east. The west did have a relative propagation advantage over the east to Asia but the activity level appears to be less than half the activity the east coast saw from Europe.

As a last insight from this map how did things behave with respect to South America? Geography would seem to project uniform openings across the US. And, the map

does seem to show a pretty uniform pattern of South America openings across the US.

This type of analysis and insight can be repeated for other geographies. With 500,000+ data points to use, time is the limit on the study, not the data. A similar map looks at the skimmers in Europe and how many spots they captured from North American stations.

Conclusions are a bit harder to draw from this map. The central part of Europe and the UK seemed to have a better openings than Scandinavia and the south east area such as Greece and Italy. But, the differences are not nearly as great as seen across the US.

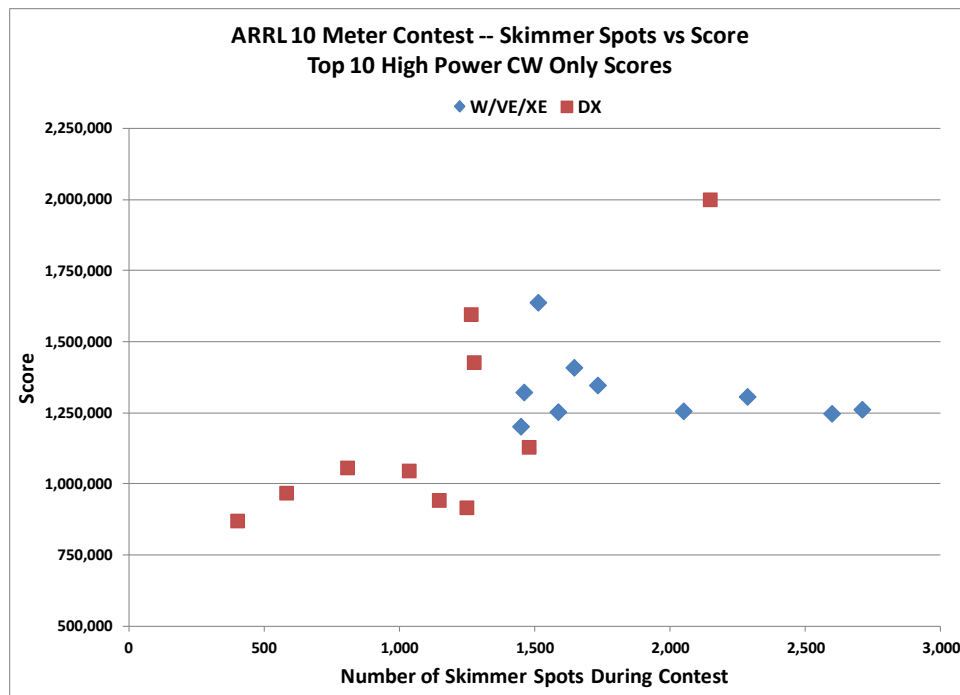
Spots and Predicting Scoring

Another interesting use of the data is using spot counts as a predictor of scoring. Logic would say that the operators that are heard the most by the skimmers might be the high scorers. For this contest this approach works best for the CW Only category. The following chart compares the total number of skimmer spots versus score for the Top 10 stations in the CW-Only High-Power category in the US and DX.

Did having more skimmer spots for you turn into a higher score?

The chart seems to tell two different stories. For W/VE/XE there is almost no correlation. In fact the highest score by VY2ZM had the third lowest skimmer count in the Top 10. Most of the scores are clustered in a fairly tight band from 1.2-1.4 million points, but within that skimmer counts vary by a factor of two. The station with the most skimmer spots, K8AZ placed 6th. For DX stations there seems to more of a positive correlation with a general "Up and to the Right" progression of the data points. The highest scoring station, LU1HF, had the highest number of skimmer spots.

The top four scoring stations also were the top four in number of skimmer spots. But, there are also several negative correlated data points in the DX results as well. So, in the end I just have to leave this investigation in the "Well that's interesting but it really does not tell us anything." category.



My Contest Predictions -- How Accurate were They?

In mid November 2011 I authored a ["Pre-Contest" article](#) that was posted on the ARRL web site. In that article I

made several predictions for the then upcoming 10 Meter Contest based on past year's records and looking at potential solar conditions. When I wrote that article the Space Weather Prediction Center was forecasting a solar flux in the 130 range. Actual flux levels were in the 135-140 range for contest weekend with K-indices bouncing around between 1 and 2 with a A of 6-7. So, overall, pretty good conditions. The best since 2002 for sure and a huge improvement over the 2010 edition when flux was in the 87-89 range.

The question at hand is: "How well did my predictions hold up?" Let's look at each of them.

Participation

History demonstrates that ARRL 10 Meter Contest participation is heavily dependent on propagation. That makes all the sense in the world. With the projected conditions I guessed that 3,200 or so operators would submit logs. This turned out to be among my worst predictions as an amazing 5,361 operators worldwide submitted logs, more than double the number submitted in 2010 and 70% greater than the previous all-time record from 2002.

Also, for the first time ever the number of logs from outside W/VE/XE exceed those in that region. For sure some of this is driven by the increasing ease of log

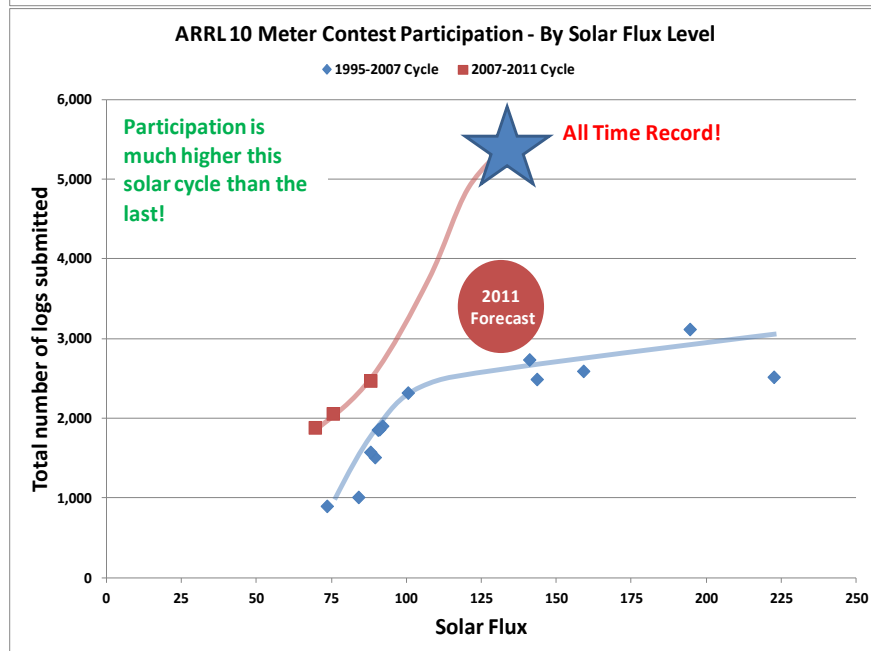
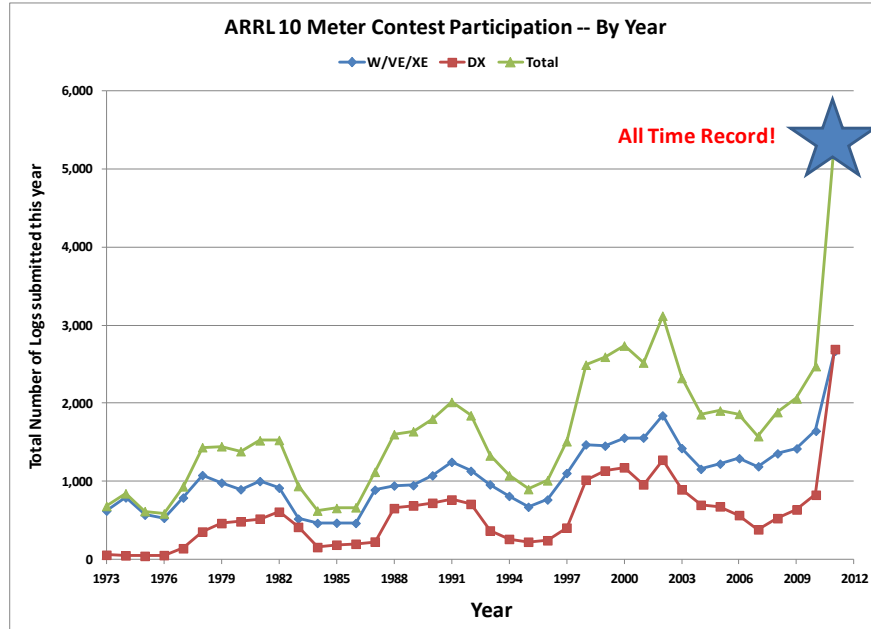
submission with expanding internet connectivity and stability and adoption of the Cabrillo file format. A higher percentage of contesters are submitting logs. However, it also has to be caused as well by growth in

contesting as a part of the amateur radio hobby. There are just more people contesting!

High-Power Category Scoring and Top 10s

I also made some predictions for scoring in the High-Power categories in the W/VE/XE and DX super-regions. The first set was with respect to the average scores of the Top 5 finishers in the four different categories. My predictions were a bit less precise here than with participation. Boldly I stated "Top stations should see scores double or triple over 2010". Again, I managed to understate what top operators and stations were able to accomplish. In W/VE/XE the four High-Power categories had their Top 5 scores increase by an average of 311%, so a bit more

than triple. The Mixed-Mode categories saw the biggest increases both almost quadrupling their 2010 scores. The single mode categories saw their top scores increase by a little more than 200%. DX stations did even better. The four High-Power categories had their Top 5 scores increase by an average of 360%, well more than triple. Almost quadruple!. The Phone-Only folks really raised their game though. The Top 5 increased their scored by over 500% from 2010. Well done! Though you messed up my predictions.



The other set of scoring predictions I made were "What score might be needed to get into the Top 10 box?" When I made these predictions I felt these were the wildest of my guesses. Yet, they turned out to be the most accurate of them all.

Looking at the W/VE/XE High-Power Top 10 table shows three of the four predictions were pretty close and my CW-Only prediction was almost exact! For some reason I really missed on the Phone-Only category.

W/VE/XE High-Power Top 10

What minimum score did it take to get into the Top 10?

Category	Pre-contest Prediction	Actual
Single-Op Mixed-Mode	1,600,000	1,513,000
Phone-Only	800,000	445,000
CW-Only	1,200,000	1,202,000
Multioperator	1,800,000	2,084,000

What about where the W/VE/XE Top 10's were located? Historically South Texas has turned in the most Top 10s in High-Power. The Florida sections do well as does the Atlantic coast from North Carolina up to Massachusetts. This historic pattern was followed in one way during 2011. South Texas hosted six of the 40 High Power Top 10's this year and on a percentage basis this was well above average. The Florida sections however had an off year turning in only one Top 10 when historic averages would predict six Top 10s. The area with a strong showing this year was the Northeast US and eastern Canada. In a normal year the W1 US call area would have four Top 10's. This year they more than doubled that with nine! Throw in two Top 10s in the Canada Maritimes section and you have an outstanding year for that part of the continent. And, congratulations to team W2RE for turning in the first ever Top 10 from Northern New York and VA2EW for the first ever Top 10 from Quebec. Special mention also goes out to W6YI for a Top 10 from San Diego. The last Top 10 from that section was more than a decade ago. Great job!

Looking at the DX High-Power Top 10 table three of the four predictions were pretty close as well. To balance out my miss in W/VE/XE I pretty well nailed the Phone-Only category. The big miss for my DX predictions was in the Multioperator category where it took a score almost 60% higher than I predicted to crack the Top 10.

DX High-Power Top 10

What minimum score did it take to get it into the Top 10?

Category	Pre-contest Prediction	Actual
Single-Op Mixed-Mode	1,150,000	1,016,000
Phone-Only	600,000	709,000
CW-Only	750,000	870,000
Multioperator	1,700,000	2,717,000

What about where the DX Top 10s were located? Historically Argentina is the single best spot. However, Japan, Brazil, France, and Germany are not bad either.

And, actually all of South America, Europe, and the Caribbean can host Top 10 operations. Argentina had a bit off an off year. In a normal year they would turn in five Top 10s but only managed three this year. However, the rest of the southern part of South America picked up the slack with strong showings by stations in Chile and Uruguay. These three countries turned in nine Top 10s versus a historic average of around six and a half. Brazil also had a strong year with four Top 10's compared to a historic average of two or so. South America was the place to be this year. On the other hand continental Europe had an off year compared to long term averages. Finally congratulations to JT5DX for the first ever Top 10 from Mongolia and both EI7KD and the EI7M team for the first ever Top 10's from Ireland.

All-time Records

As discussed in the pre-contest article, prior to the 2011 contest, the last time a new all-time High-Power record for W/VE was set was in 2005 and then it was only one. 2004 also only had one set and 2003 had two. DX operators have been a bit more successful during that period, but still, it has been really hard to set an all-time High-Power record during the 2003 to 2010 period. I did predict though with improved propagation in 2011 plus the new XE multipliers that records would fall. So did they? They sure did! In W/VE/XE 61 new High Power records were set in 2011. Eleven of those were in XE states and 50 in W/VE. This was more than were set in the good old days of the 2002 contest. DX stations set an amazing 88 new High-Power records this year which was also well exceeded the number of records set in 2002. So, yes, 2011 was a year for the record books.

Phone vs CW Mix -- A magic formula?

For Single-Op Mixed-Mode and Multioperator stations one of the most important decisions made during the contest is the mix of time and effort in CW versus Phone modes. Of course many advanced stations have found ways to operate both modes at the same time. But the general decision still exists. How much CW? How much Phone? Is there a magic mix that the top scoring stations have found?

If you don't want to read all the way to the end of this section here are the findings:

There is no magic mix. You can get into a Top 10 or Top 3 position over a very wide range of CW to Phone QSO mix ratios. (There is however a different magic ratio this analysis found. You will have to keep reading to find out what it is.)

However, if your ratio drops into the less CW QSOs than Phone range it becomes harder to get into a Top 10 box.

It can and has been done, KM3T placed 1st in US & World Mixed-Mode High-Power with essentially a 1:1 CW to Phone ratio, and D4C placed 1st in DX & World Multioperator High-Power and set a world record with a 0.85:1 ratio, but it gets harder. You usually need more CW QSOs than Phone QSOs to get into the Top 10.

The lower power you run, the higher the ratio of CW to Phone QSOs you need in order to make it into the Top 10. This makes sense if you think of the efficiency and punch of a CW versus Phone signal. If you are running QRP and Low Power you need to make every watt count. If you are going to operate Mixed-Mode QRP you should consider a ratio of 1.5-2.0 to 1 (CW to Phone), or even higher. On the other hand Top 10 DX Multioperator High-Power stations averaged just 1.11 CW QSOs for every Phone QSO and four of the Top 10 had ratios well under 1:1.

The data to look into this is a bit hard to manage so following detailed investigations are into just US and DX stations.

Looking first at US Single-Op Mixed-Mode stations there were 485 entries that made both CW and Phone QSOs during the contest. [Interestingly there were 56 entrants in this category who actually operated Phone-Only and another 18 who operated CW-Only] Looking at these 485 entrants in aggregate they reported making 111,821 CW QSOs and 102,651 Phone QSOs. So, the overall average mix was 1.09 CW QSOs for every Phone QSO. Looking next just at the Top 10 stations in each power category their overall average was 1.11 CQ QSOs for every Phone QSO. Essentially the same as the overall

average. [It is also interesting that the 30 stations that made up the Top 10 in each of the three power categories made 21% of the reported QSOs overall. So 6% of the stations made 21% of the QSOs. Remember this ratio. It is going to show up again.]

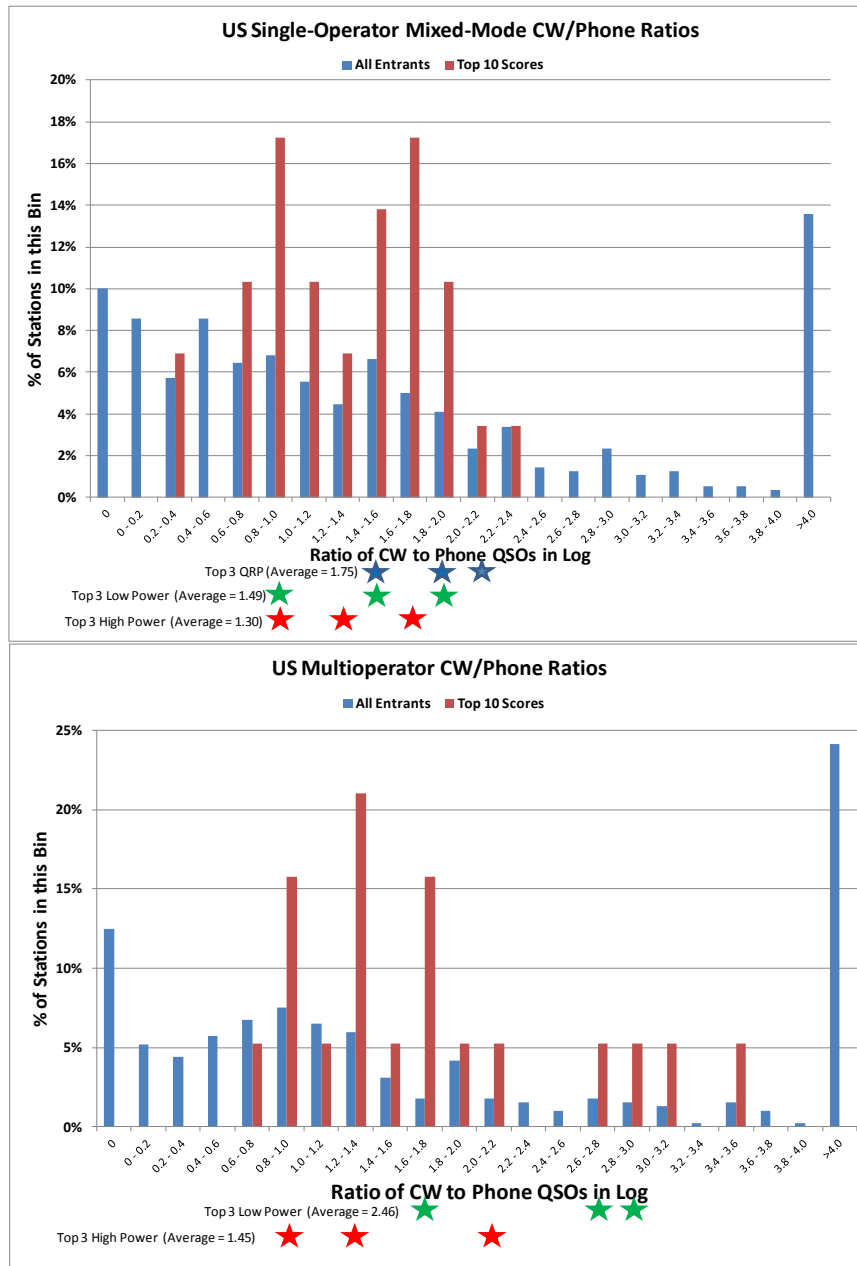
The overall average view does not show the whole story. More insightful is looking at histogram of the different CW to Phone QSO ratios for the overall population and then again the Top 10 stations.

Reading these charts can be a bit tricky, especially the X-axis.

The X-axis is the ratio of CW to Phone QSOs in a station's log. It is broken up into bins. The leftmost bins are for all stations with a CW to Phone ratio of zero -- meaning they were in fact SSB only. The next bin going to the right, labeled "0-0.2", are for stations with a CW to Phone ratio of greater than zero up to and equal to 0.2. The next bin to the right of that, labeled "0.2-0.4", are for stations with a

CW to Phone ratio of greater than 0.2 up to and equal 0.4. And so on across the X-axis until the last bin is for stations with a ratio greater than 4. The Y-axis indicates the percentage of all logs that fell into that bin.

One set of bars looks at the CW to Phone ratios of all stations and the other looks at just the Top 10 stations. One thing that is very clear right away is that you can make it into the Top 10 with a very wide range of CW to Phone operating strategies. Stations made it into the Top 10 with a ratio as low as 0.31 and as high as 2.22. There is no magic mix that will propel you above your competition. There are some general trends though. Top 10 QRP and Low-Power stations had a higher CW mix



than High-Power stations do. Top 10 QRP and Low-Power stations both averaged in the 1.27 to 1.28 CW QSOs per Phone QSO range while High Power stations had a 1 to 1 mix. Examining the Top 10 even closer, what about the Top 3 in each category? Their ratios are shown separately under the X-axis on the chart.

Repeating this analysis for US Multioperator stations shows the same general trends though even more strongly in favor of the CW mode.

There were 387 US stations entering the Multioperator class. Of these 294 made both CW and SSB QSOs. [The rest were effectively operating as a single mode assisted though the 10 Meter Contest operating classifications don't recognize these.] These 294 stations reported 100,954 CW and 85,021 Phone QSOs for a ratio of 1.19 CW QSOs for every Phone QSO. Multioperator stations make an even higher percentage of their QSOs in CW than Mixed-Mode operators did. Top 10 stations drive this ratio even higher, making an average of 1.37 CW QSOs for every Phone QSO. [An also interesting note is that the Top 10 stations which make up 7% of the entrants made 19% QSOs in this class -- almost the same as for Mixed-Mode. A coincidence?] Repeating the observation from Mixed-Mode, Low-Power stations had a higher CW ratio at 1.95 than High-Power at 1.24. Only three of the 20 Top 10 stations in Multioperator made materially more Phone QSOs than CW and the best any of them placed was 8th. NR5M did have a 1:1 ratio and

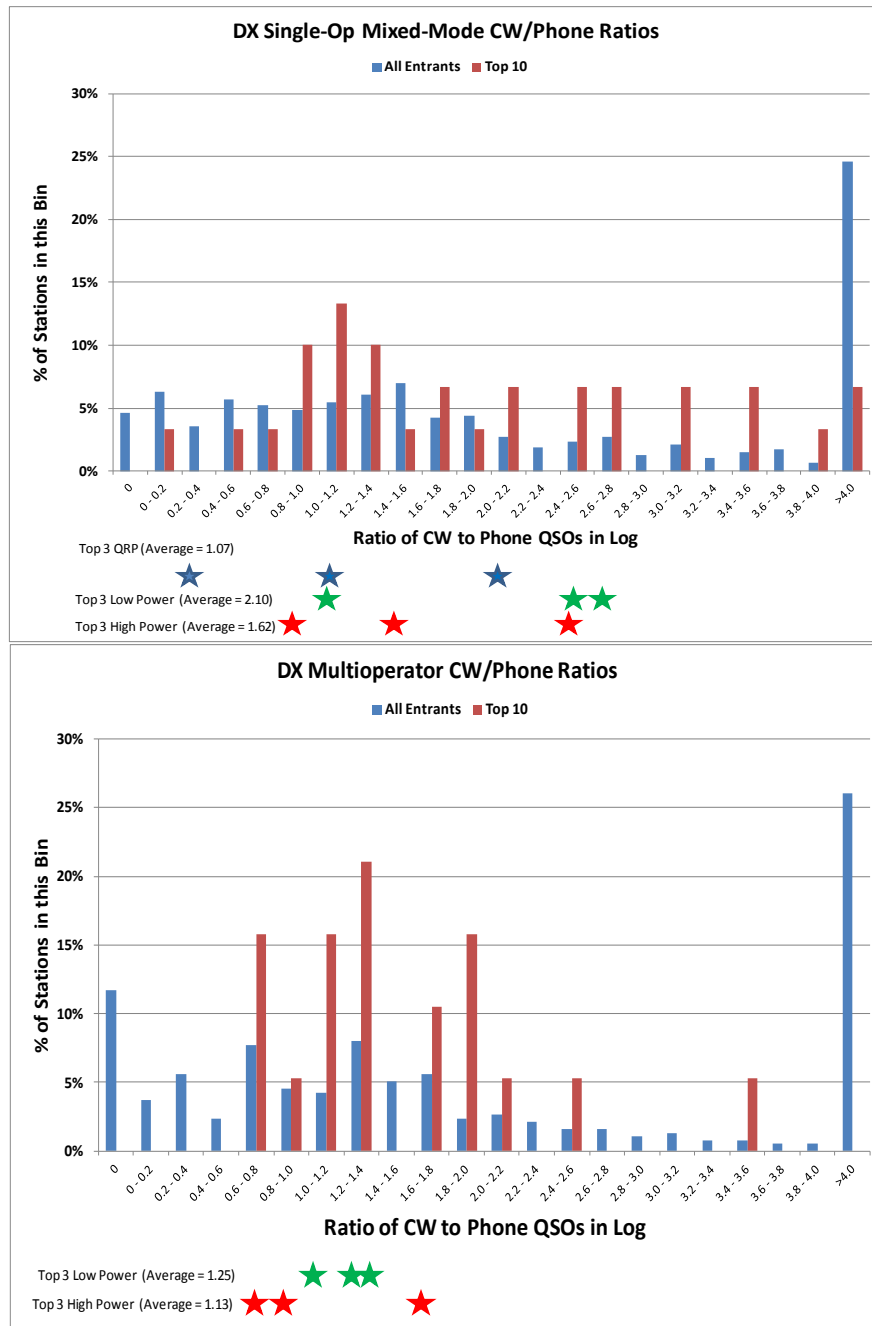
placed 2nd in the High-Power category for a noticeable exception.

Moving on, let's look at DX stations operating in the Mixed-Mode category.

There were 475 entries overall and 426 that made both CW and Phone QSOs. These 426 entrants reported making 90,580 CW QSOs and 64,789 Phone QSOs for an overall ratio of 1.40 CW QSOs for every Phone QSO. This is well above the 1.09 ratio reported by US Mixed-Mode stations. DX stations on average are more active on CW than US. However, similar to the US the Top 10 DX stations had an average essentially

the same as the overall average at 1.44. [And once again these 30 Top 10 stations which represented just 7% of all entrants reported 22% of all QSOs in this class. This is turning into a trend!] Did the same pattern also show up with respect to QRP, Low-Power, and High-Power categories as seen in the US? Sort of. The QRP results are skewed by third place CT2IOV who reported 517 Phone

QSOs to just 16 CW QSOs. Putting this in perspective he had a higher Phone QSO count than any DX Top 10 Mixed-Mode Low-Power station and it even beat one DX Top 10 High-Power Mixed-Mode station. Taking CT2IOV's results out of the calculations shows the same general trend as in the US. QRP and Low-Power stations made a higher portion of their QSOs in CW than the



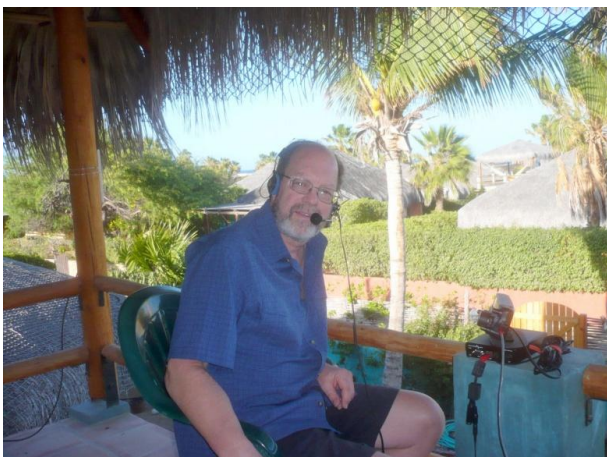
High-Power stations. The respective ratios for QRP, Low-Power, and High-Power were: 1.79, 1.92, and 1.29.

Finally, what about DX stations operating in the Multioperator category?

There were 375 entries overall and 295 made both CW and Phone QSOs. These 295 entrants reported making 123,004 CW QSOs and 102,463 Phone QSOs for an overall ratio of 1.20 CW QSOs for every Phone QSO -- effectively the same ratio as US Multioperator stations. [As a final note, these 20 Top 10 Stations represented 7% of the stations in the class and made 21% of the reported QSOs. This ratio is "The Magic Ratio" mentioned earlier. Consistently, the top 6-7% of stations in each general category report making 19-22% of the total QSOs in that category.] The Top 10 stations had the same overall ratio at 1.22, unlike in the US where the Top 10 stations had a more heavily weighted CW mix. What was similar was that the Low Power stations had a higher CW ratio at 1.59:1 than the High Power stations did at 1.10:1. Both of these ratios are below that of US Multioperator stations suggesting that DX stations can make it into the Top 10 with a lower CW to Phone QSO ratio than the US. This could be explained by the general greater prevalence of Phone operations in the US and DX Multioperator stations who want to work the US will need to operate in Phone to a higher extent.

A 3,000 kilometer long mic cable!

Hams have long been known for their ingenuity and creative exploits in pushing technology limits. One innovation over the last several years has to do with remote operating over the internet. In this way operators can be located just about anywhere on the planet with respect to their transceiver and antennas. Though not an ultra rare mode any more it is still unique enough to draw attention and discussion. Kevin K7ZS is one of the latest to venture into this realm and he put it to great use in the 2011 10 Meter Contest.



Many of us would like to be sitting in the warmth and sun of Baja California Sur on the second weekend of December. In Kevin's case he did that while his transceiver, amp and antennas were on a snowy hilltop in Oregon! Kevin's story and photos:

"Here are a few shots of WHERE I remoted from, with a picture of essentially the whole remote end: Kenwood TS-480SAT head, RemoteRig MKII box, microphone and laptop (not really necessary for operation, but for contest logging).



You get an idea of WHERE I was - about 30 miles off the grid, totally solar powered with the 5.7 GHz Motorola Canopy system providing the internet backbone to the home station in Oregon, via a relay tower which is near where the last photo was, looking down over Cabo Pulmo, Baja California Sur.



"On the Oregon side it was connected to the other RemoteRig, the rest of the TS-480SAT, and routed through a SPE 1K-FA solid state linear amplifier, finally

into the 4 element SteppIR @ 90 feet. It was pretty amazing to be sitting there, running stations from such a remote place. Is this microwave DXing? "And, not only is this setup creative it is also very effective. Kevin placed second in the Oregon section in the Single-Op Phone-Only High-Power category in the process. And which weather would you rather enjoy?"



Mexican Activity Update

The 2011 running of the 10 Meter Contest was the second under the new rules that made the 32 Mexican states multipliers. This 2010 rules innovation met with enthusiastic response from XE operators and over 100 unique XEs were active with 26 states on the air. Fifty logs were submitted up from just six in 2009. Through the tireless efforts and promotion of Hector XE2K, Joaquin XE1R and his XE1RCS bulletin as well as Grupo DXXE, XE participation continued to grow in 2011. More than 110 unique XEs were active in the contest and from 30 of the 32 states. Without a doubt these operators were a major factor in the many new records set in 2011. Comments by several operators setting new records commented on the impact the XE multipliers are having. They really changed the dynamics of this contest. It's always fun to be "the new kid on the block"!

A contest summary from Mexico by Hector XE2K

As we see for second year, having a few more multipliers with the XE states give more fun all weekend long with the improvement of the conditions.

As we know this contest opens the door to make more points with good or not so good propagation, what is always welcome, more stations to log with the double value. Talking from the XE perspective there is another very important fact, the opportunity to promote more Mexican non-contesters to be active and give their state, with the chance they get the Contesting Bug. There still is more work to do but it is a good start.

After the good experience with the 2010 test, this year we used the same bulletins, Internet Social networks and the radio promotion of the event to pressure the few active XE to participate in the "Big event the ARRL 10 Meter Contest where Mexican states are needed."

The pressure works fine to make a few to be on the air and work a few stations, giving that rare or semi-rare state. As a Mexican I know that many XEs just make a few short CQ's and do not stay CQing when there are few callers, making it hard to find them.

The improvement this year was clear, more QSOs from more stations. Not all the states participated and a few with stations making a handful of contacts from rare states like SIN, MIC, DGO, COA, HGO, and NAY to mention a few. The most active states were DF, EMX, BAC, QUI, GTO, and SON.

Most of the stations were not active all weekend, some just a few minutes others a few moments during the contest at least losing the fear to be in a contest. A big problem for several is the "fear" in his English fluency, not really a language barrier, just the fear of the big pile up and freeze.

Another fact, just a few logs were received from those stations with small participation. The reasons are unknown and that is part of the work to do in the next years.

Comments from several of the most active Mexican stations...

XE3N – Zalo (below) report from his Caribbean location, during the 21 hours he participated, 3 hours of 130 + QSOs. It was hard to pass the multiplier QUI which was difficult to understand for a big number of callers but in general for him the propagation was better than past year with his limited working conditions of an A-99 vertical and 100 watts to make the 1,350 QSOs.



XE2S -- Marco, The propagation for him was not the best for the time he participated compared to a few weeks before. Sometimes no stations at all were answering his CQ so he focused providing the multiplier and he kept CQing as a main technique for this contest, finishing with over 800 Q's in his log, with not a single XE.

XE1CWJ -- Javier, One of the most active stations from GTO reports that some family activities take him away from the radio but the time was good to make over 1600 QSOs with very rare conditions. It was difficult to almost impossible to work XE was his experience.

XE1MW -- Carlos, with technical problems at the station and some family activities his effort was limited to 6 hours but his example is good. It was not the best hours of propagation but it worked for him to make over 500 QSOs, putting MOR in many logs.

XE2K – Hector (10 meter antenna shown below from the viewpoint of ground crew photographer N6AN) Starting the contest 2 hours late the first day he found a solid S-7 line noise made it hard to make contacts the first hours. The noise dropped to S4-S5 the rest of the weekend making it possible to run stations, looking for his personal goal to double the number of QSOs from 2010 and looking to be again the station with most QSOs from XE. The personal goal was reached with over 2,000 QSOs using a single 5L OWA Yagi.



XE2X – Jorge (antenna system shown below) with his new call he planned a big effort to make a good score. It was a great start for him at his new station from rural TAM with zero noise but some problems made him stop and lose a lot of time. With a lower interest after the problems and the heavy rain during the weekend he made 800 QSOs.



A Bit of Contest History

As this is my first time authoring the 10 Meter Contest write-up I was naturally a bit inquisitive -- "What is the history of this contest anyway?" Through the hard work of Ken, WM5R and others, score records exist back to that first contest in 1973. But, how did the contest come about in the first place? In the post contest score postings I noticed a reference to those early days from Larry WØPAN. He related:

"Vic Clark, W4KFC (SK) would have been proud of this one. Back in the early 70s, during an ARRL Board meeting, we 'contesters' on the Board kicked around the idea of a 10 meter contest. After discussion, it went to the Contest Advisory Committee for their input. Bob, K8IA was one of them that I recall pushed for approval. My recollection is that this one has to be the most successful one (from a participation standpoint) since it started in the 70s."

I followed up with Larry and he provided some additional background: "The first 10 Meter Contest was reported in the November 1973 issue of QST on page 58. After reading the article, some of the fuzzy memory came back. Back in those days we were concerned that if we didn't use a particular spectrum we would lose it. That was a constant concern of the ARRL Board of Directors as there was much pressure by commercial interests to take over some of our spectrum. After the early discussion of several of us at the January 1973 Board of Directors meeting, it was brought up for some more

discussion at either an ARRL Forum or ARRL Contest Advisory Committee forum at quite probably the Dayton Hamfest or ARRL National Convention in 1973. Much of the discussion centered on the occupancy of 10 meters during the ups and downs of the sunspot cycle. The thought was how about a 10 meter contest to whip up some interest on the 10 meter band. In the ARRL Forum, the consensus of those present was: 'let's give it a try for 1973'. The Contest Advisory Committee, after receiving the task from the ARRL Board, made the recommendation to proceed. I didn't take long from idea to implementation - probably one of the fastest in Ham Radio history of contesting.

"The first contest ran for 36 hours beginning at 1200Z, December 15, 1973. The results of the first contest were reported in July 1974 *QST* beginning on page 56. The article, authored by Rick Niswander, WA1PID reported 720 logs from 65 sections and 29 foreign countries on 6 continents which was phenomenal in participation. With the passage of time, this contest has survived and as you will report in the results with the latest one, an amazing following in our modern day of spotting and automated logging.

"My first 10 meter experience was in 1954 with a newly issued General Class license (WNØPAN in July 1953) and another cycle was experienced in the AM days before SSB was even heard or thought about by most of us." 2011 proved how successful this contest has been.

Of course I also followed up with Bob, K8IA to add his part of the story. His reply was: "I doubt I'll be much help to you, but here goes. 40+ yrs has way of clouding my memory cells. ;-) I was the 8th Area rep (K8HLR then) on the Contest Advisory Committee back then, as I served two terms in the 70s. At that time, the CAC was not a rep from each ARRL Division, like now, but rather one rep from each call area and a VE rep. So, it was a smaller committee and, I recall, closer to the League officials. Larry, WØPAN, who you mention and an active Arizona Outlaw too, was the Controller for ARRL sometime back then and a multi-term Dakota Div Director as well. I recall the "10 Meter Contest" as something on our plate back then, but there were a lot of other things too. I know that we, simply, wanted to increase 10 meter activity with something intelligently sponsored and supported. I don't recall any power struggle with the League guys over this at all. It was something they wanted as much as we did. In fact, the original direction to look into the 10 Meter Contest may have actually come from ARRL down to us. No pics of much of anything here from those days. All my pics and logs and everything else memorabilia were destroyed in a rare Michigan flood I experienced in about 1981."

So that is how we got from a great idea in 1973 to an event extraordinaire with 5,000+ entrants 39 years later. If you ever run into WØPAN or K8IA thank them for their efforts. And, remember they both were on the air in 2011. They know a good thing when they see it!

Summary

The 2012 ARRL 10 Meter Contest will be held on Dec 8th and 9th. As this article is written, solar flux has been varying between 100 and 150 with the band wide open on some days and closed on others. Which will it be? We'll see you on the band in December!



Larry, WØPAN was one of the original promoters of the 10 Meter Contest. (Photo by WØPAN)