# **2006 ARRL International DX Phone Results**

"If you've heard this story before, don't stop me, because I'd like to hear it again."— Groucho Marx

H. Ward Silver, NØAX

ope springs eternal in the heart of the DX contester. "Oh, for some flux and a quiet geomagnetic field!" Last year we were teased and jilted with conditions starting out well but clobbered on Sunday due to a lot of operators finding something else to do. This year we got our wish, as reflected in the total number of logs submitted. DX logs were up more than 10 percent from 838 last year to 937 in 2006, while W/VE submissions saw an even bigger increase of nearly 20 percent to 1284 logs.

What's the lesson? Even with the lack of high-band propagation, DX contesting remains healthy around the world.

# Write-up Notes and Features

Expanded coverage is available to members on the ARRL Web at www.arrl. org/contests, where you can enjoy detailed regional coverage from every Division and Continent. As always, please take a moment and thank the writer that took time out to do the analysis from your area.

Don't forget that the full line scores are available on the ARRL Web site for contest results. The line score file looks like the QST listings of previous years. Look for the links to "QST Results, [month], [year] (with line scores)" to download the file. After the write-up appears in QST, the file is available to anyone, worldwide.

# Cowboy Up and Head on Down the Bands

With the exception of KH7X setting a new Multi-Multi record in Oceania, all of the new records are on 20 meters or (mostly) lower frequencies. The good news is that there were new records - several of them! Last year's disturbed conditions made 2005 a rare year in the record books. In 2006, the

Table 2 New US/VE Records for 2006						
Category	Call District	Call	New Re			
SO-80	1	K1LZ	223			



The DX Single **Operator High Power** winner Robert Wood, W5AJ, who operated TI1C (right), shown with his host Carlos Fonseca, TI2CF.

calm layers shifting around above our heads even delivered some unexpected 10 meter openings. You can clearly see the cycle declining when you look at the propagation indices for the past five years in Figure 1. The good news is that after 2007, those flux numbers should start rising once again.

# Records

2006

75 7/

The quiet conditions let the dedicated low-band operators make some hay below 20 meters. If you have a good location and some directive antennas, this year and the coming year are prime time! All of the US/ VE records to fall this year were 80 or 160

	Table 1							
	Propagation Indices for ARRL DX Phone							
Flux				Plane	tary A <sub>p</sub>	Estim	ated K	
	Year	Sat	Sun	Sat	Sun	Sat	Sun	
	2002	191	183	5	10	1.6	2.5	
	2003	138	147	14.5	11	2.8	2.6	
	2004	105	106	5	6	1.8	1.8	
	2005	81	84	10	36	2.5	4.3	

Solar and ionospheric data can be obtained from NOAA's "Solar Data and Products Online" Web site www.sec.noaa.gov/Data/index.html#indices

2

Λġ 0.5 meter records. K1LZ must have sufficiently recovered from his DXpedition fall to nearly double the old first district SO-80 record, as did W8LRL at K8V in the eighth district.

Overseas, the Asian SO-20 record fell as JAØAHA navigated through the crowds to clear the old bar. Two more SO-80 records fell from the western edges of AF and EU, with OH1RY piloting the superb station at EA8AH and ON4UN making good use of the advice in his book Low-Band DXing. If you're wondering where KH6ND was this year, look no further than the next record. KH6YY assembled an all-star cast from three continents at his Oahu station, high over the famous surfing beaches of the North Shore. Even near the bottom of the cycle, they still broke the old record!

Be sure to review Tables 2 and 3, which show the complete set of new W/VE and DX records set during the 2006 contest.

The oldest record to fall this year was the MM Oceania record, originally set in 1986 between cycles 22 and 23. The tenth district MM record set at KØRF in 1979 still stands! If you want some really low-hanging fruit, no records from Antarctica have ever

Old Record Year Set

2001

1996

1996

1986

281,532

187 050

188,448

6,062,463

New Record

(op OH1RY)

295,020

238 419

189.840

6,314,238

					Table 3		
ds for 2006					New DX	<b>Records</b> f	or 2006
<i>Call</i> K1LZ KU1CW K8V (op W8LRL) KØLW (op KU1C)		Old Record 136,275 27,450 7,740 4.896	Year Set 1998 1993 1996 1987		<i>Category</i> SO-20 SO-80 SO-80 MM	<i>Continent</i> AS AF EU OC	<i>Call</i> JAØAHA EA8AH (op OH1R ON4UN KH7X @ KH6YY
ROLIN (OP ROTO)	0,004	4,000	1007				

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SO-160

8 Ø

Top Ten — W/VE				
Single Operator High	15		Single Operat	tor Assisted
Power	N4PN	206,793	K1AR	2,024,343
VY2ZM (K1ZM, op)	K9BGL	149,877	K1KI (KM1P, o	
4,925,184	N2MM	121,752	( ) -	1,852,032
VE3EJ 3,645,414	KØRH	117,576	N3AD	1,799,334
VC3A (VE3AT, op)	NA4CW	111,042	K3WW	1,657,260
3,478,440	N5DO	76,941	N8TR	1,571,700
K4ZW 3,471,300	WA7LT	67,938	K1UQ	1,400,355
VY2TT 3,252,024 W9RE 3.070.377	W7BJN	51,684	N3KS VA3DX	1,369,845
W9RE 3,070,377 K3CR (LZ4AX, op)	W7EB KI6LZ	45,192 38,160	AA3B	1,299,375 1,288,320
2,814,066	KIULZ	50,100	K2XA	1,133,160
NN3W (@N3HBX)			W1GD	1,125,852
2,783,832	20			
AA1K 2,685,267	VE6WQ (@ VE6	(YL	Multioperator	Cinalo
W3BGN 2,498,472		906,927	Transmitter	Single
	W7WA	620,844	VE3RM	0.007.100
Single Operator Low Power	N3HBX	498,978	K5NA	2,387,100 2,203,980
÷ .	W6AAN	354,594	NN2W	2,070,600
N1UR 1,063,530	W1NR	279,090	K1IR	1,672,059
K2PS 792,360 N5AW 748,440	VE3XN W8TWA	262,773 181,194	W1QA	1,645,656
N1PGA 613,320	K8IA	173,565	NE3F	1,642,500
W1JQ 587,571	K6HNZ	170,235	W3MF	1,441,584
WD5K 557,823	NV8N	167,874	W4WS N1FD	1,241,757
VO1MX 525,525			WØZT	1,201,698 1,097,544
VE3AD 504,240			VV021	1,037,344
K8BL 487,797	40			_
W1CTN 464,250	K8DJC	30,753	Multioperator	Two
	WDØBGZ	30,090	Transmitters	
Single Operator QRP	NA2X VA3XH	21,228 19,323	N3RS	6,048,090
K4CIA 185,319	N5OT	19,323	WE3C W4RM	5,363,064 4,132,350
N8IE 179,118	W9SE	18,315	KØTV	3,705,948
NDØC 115,824	W1TY	17,613	K3000	3,283,380
N1TM 102,258	AD8J	17,172	VE1JF	3,021,222
W6QU (W8QZA, op)	W9GXR	16,800	N2RM	2,311,920
81,585 VE6EX 73.656	N1QM	16,500	W2ZQ	2,235,870
VE6EX 73,656 KA1C 62,034			K3DI	1,809,885
VA3DF 59,670	80		N1AU	1,722,315
K3TW 55,014	K1LZ	223,725		
N3HU 39,798	AA1BU	166,050	Multioperator	Unlimited
	K5RX	44,550	Transmitters	
10	W4SVO	44,421	K3LR	9,131,736
	NØNI	34,944	W3LPL	8,068,200
K4WI 3,726 N2EOC 3.648	K4KZZ	31,950	KC1XX K1TTT	7,905,150 5,112,855
N2EOC 3,648 W5PR 2,754	N3XEG W9IND	20,355 18,468	K1RX	5,105,418
K4QVK 1,248	N4USB	12,201	W1FJ	5,040,306
WB5JID 1,110	K9IDQ	7,440	W3PP	3,809,319
WB2AMU 816		, -	KB1H	3,451,308
AA1ZT 756			N6RO	2,073,945
W9CNF 285	160		WØAIH	1,955,862
W9ROG 192	K8V (W8LRL, op	o) 15,561		
WAØFQK 162	W3GH	11,700		
	AA4MM	9,504		
	KK4SI	9,072		
	W2VO NN1N	8,319 7,920		
	KØLW (KU1CW,	op) 6.804		
	K1HAP	5,760		
	NA2P	2,025		
	WB2ABD	1,800		

#### DX

15

HI3CCP

НКЗЈЈН

CT3EN

**JI2UNR** 

KG4WW

.IAØJHA

OM3PC

F4EGD

HI3TE.I

WP3C

YV5KG

KG4RN

CO8LY ZF2AH

YV5LIX

ON4UN

**YV3AZC** 

I4AVG

CT3IA

CO8KA

114 150

96,750

88 245

83.430

80

40

4A7L

DP4K

20

Single Operato Power	or High
TI1C (W5AJ, op	
V31BH (OH2BH	
FS5KA (W1SJ,	5,356,728 op) 4,717,152
WP2Z (N2TK, o	4,613,805
TO5A (NH7A, c	
8R1EA (AH8D)	
KH6WT (K1YR	, op) 3,179,076
CT8T (I4UFH, o	
OK1RI 6V6U	3,044,028
0000	2,893,770
Single Operato Power	or Low
P4ØA (KK9A, o	
WP3F	4,889,664 4,242,558
VP5H (WØGJ, o	op) 3.452.625
VP9/W6PH J88DR	3,041,955 1,925,880
HI3NR	714,036
LU2NI 8P6EX	678,294 597,240
KH6/K2YY	546,612
HK6PSG	496,188
Single Operato	or QRP
YV5YMA	291,342
LU1VK F5BEG	115,128 79,716
IK5RUN	74 244
OM7DX JR4DAH	40,110 18,432
UA3BL	15,318
EA1TI I5KAP	14,835 12,546
RAØQD	5,712
10	
LU1HF	257,358
CX5BW PP5AMP	241,794 133,878
LQ5H (LU3HS,	op)
LU9DAG	115,182 103,584
LW7HT CX1AV	91,260 87,900
CX4DX	59,535
HC1HC LU8EOT	41,832
LUGLUI	36,519

#### 160 PS2T (PY5EG, op) 491,040 KV4FZ CM6RCR 457,020 CU2AF 358,020 YV2IF J37K (AC8G, op) 243,198 KL7RA LU5FF PW2C (PY5KW, op) 172,800 SP3KEY (SP7VC. (qo DF2UU J79DX (VA3YDX, op) 149,160 LY2IJ USØLW 146.598 EAIDVY IU3X (IV3SKB, op) 136,935 124,656 Single Operator Assisted P4ØW (W2GD, op) 20 OH8X (OH8NC, op) 512,583 5.161.041 3,844,368 P40CW LTØH (LU3HY, op) 2,021,016 476,640 ZX2B (PY2MNL, op) 1,805,400 385,506 378,000 8P2K (8P6SH, op) 344,340 FA7RU 898 080 IR4T HG3M (HA3MY, op) 309,240 336,354 826,659 AL9A 607,365 482,112 YOOHP OH4R 295,020 290,103 I2SVA IK3SCB 476 556 341,721 247.320 Multioperator Sinale Transmitter 4M5DX (YV5SSB, op) 288,510 FY5KE 6,883,110 XE7T 4.123.956 NP2B 3,914,649 283.377 LR2F 3.340.608 277,182 IR4X 2,791,404 2,456,415 XE2K 264,969 ZX5J (PP5JR, op) 231,870 TO1T EA8ZS 2.441.166 213,324 IR<sub>2</sub>C 1.909.824 F6KHM (F4DXW, op) HG1S ,569,090 206 568 OM5M 1 448 340 203.616 132,762 114,912 Multioperator Two Transmitters PJ2T 9.414.792 OF4A 2 900 484 EA8AH (OH1RY, op) HG6N 2,640,600 238.419 9A7A 2 451 600 190,503 TI8M 1,543,680 189,840 CV5D 917 196 G3PPG (G4BYB, op) 144,144 JE1ZWT 644,490 SN3A (SP3GEM, op) 126,990 Multioperator Unlimited 122,661 Transmitters IR4M (IK4MGP, op) KH7X @KH6Y

74,196

67,500

30 666

22,464

9,975

ź,776

2,760

2.592

1 980

1,428

6,314,238 9A15DX 2,777,736 **RK2FWA** 1.794.690 YR7M 947,025 ED1EA 23.085

been claimed. Just hop a boat to the South Shetlands and have at it!

# **Exceptional Performances**

One way to get a write-up author's attention is to win a category or place in the Top Ten with low power or even QRP — it's been done, but rarely! Other ways are top scores outside the "traditional" winning regions or repeat winners. We have all three this year.

 K4WI was the SO-10 category leader using Low Power from Alabama, beating N2EOC in New Jersey by a whisker.

• Even though the "sweet spot" for 20 meters seems to be somewhere in Western Pennsylvania, the band is owned by VE6JY's station near Edmonton, Alberta and W7WA on Puget Sound.

• This must be K3LR's year. Inducted into the CQ Contest Hall of Fame at Dayton 2006, Tim's station also brought home the walnut in both modes of ARRL DX for the first time ever!

# Reminder

Contesters seem to "get it" that watching packet or getting frequency tips from somebody else requires them to enter the Assisted category. The log checkers have become quite skilled at spotting a "packet poacher." However, you might not be aware that spotting yourself or arranging/asking to be spotted is entirely prohibited, regardless of class! When in doubt, read the contest rules! Additional information about operating in contests is available at the ARRL's new Web resource "HF Contesting - Good Practices, Interpretations and Suggestions" at www. arrl.org/contests/hf-faq.html.

W/VE

Single Operator QRP — There was a

lot of turnover this year with a lot of new calls in the Top Ten. K4CIA led the pack from NC with 185K although N8IE in OH was just 3 percent behind at 179K, one of this year's featured photo-finishes. The Dakota Division winner, NDØC, moved up to a nice 3<sup>rd</sup> place finish from MN, moving up from 8th last year. In 4th place, N1TM bettered last year's 7th place finish, too. The list then jumps all the way across the continent to San Diego section where W8QZA piloted W6QU to 5th and VE6EX in sixth.

Single Operator Low Power — After chasing the top spot and coming close last year, N1UR rang the bell this year and topped the pack with a convincing win! He was followed by K2PS who also moved up a place from 2005. N5AW landed in the Top Ten with a nice 3<sup>rd</sup> place finish fueled by a big multiplier total, followed by N1PGA who repeats in fourth. W1JQ and WD5K both moved up

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#### **Continental Leaders**

Category Call Score	Category Call	Score Ca	ategory Call	Score
AfricaSingle Operator High Power6V6U 2,893,770Single Operator Low PowerCN8SG 34,371Single Operator 80 MetersCT3DZ 103,656Single Operator 40 MetersCT3DZ 103,656Single Operator 20 MetersCT3KY 83,832Single Operator 15 MetersCT3EN 146,598Single Operator Single TransmitterEA8ZH 33,600Multuoperator Single TransmitterEA8ZS 2,441,166	Single Operator 15 Meters IU3X (IV3SKB, op) Single Operator Assisted EA7RU Multioperator Multi Transmitter 9A15DX 2 Multioperator Two Transmitters OE4A 2	79,716 Sin 30,666 Sin 189,840 Sin 206,568 Sin 512,583 Sin 136,935 Sin 898,080 Mul	ceania     ngle Operator High Power KH6WT (K1YR, op)     ngle Operator Low Power   KH6/K2YY     ngle Operator 40 Meters   VK2KPP     ngle Operator 20 Meters   4F1MEU     ngle Operator 15 Meters   VK3KF     ngle Operator 15 Meters   AK3GK     ngle Operator 10 Meters   AH6RF     ultioperator Single Transmitter   ZL1AA     ultioperator Multi Transmitter   KH7X @KH6YY)	546,612 24,948 585 67,779 1,350 107,520
Asia			buth America	
Single Operator High Power JA1ELY 852.768   Single Operator Low Power JH4UYB 454.896   Single Operator QRP JR4DAH 18,432   Single Operator 80 Meters JE1SPY 300   Single Operator 20 Meters JA8NFV 23,256   Single Operator 15 Meters JA2UNR 295,020   Single Operator 15 Meters JI2UNR 124,656   Single Operator Two Transmitters JE12WT 644,490   Multioperator Single Transmitter JA8RWU 549,936   Europe   Single Operator High Power CT8T (H4UFH, op) 3.096,768	Single Operator QRP     AL2Q       Single Operator 160 Meters     KV4FZ       Single Operator 80 Meters     CO8KA       Single Operator 40 Meters     HI3TEJ       Single Operator 20 Meters     KG4WW       Single Operator 15 Meters     HI3CCP       Single Operator 10 Meters     HI3CCP       Single Operator 10 Meters     WP4BL       Single Operator Single Transmitter     XE7T 4	799,708 Sin ,242,558 Sin 1,890 Sin 74,196 Sin 83,430 Sin 83,430 Sin 283,377 Sin 476,640 Sin 457,020 Sin		4,889,664 291,342 22,464 190,503 288,510 227,799 491,040 257,358

Plaque Sponsor

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#### Sponsored Plaque Winners

Plaque Category	Winner
W/VE Single Operator High Power	VY2ZM (K1ZM, op)
W/VE Single Operator Low Power	N1UR
W/VE Single Operator QRP	K4CIA
W/VE Single Operator Assisted	K1AR
W/VE Multioperator Single Transmitter	VE3RM
W/VE Multioperator Unlimited	K3LR
W/VE 1.8 MHz	K8V (W8LRL, op)
W/VE 3.5 MHz	K1LZ
W/VE 14 MHz	VE6WQ (@ VE6JY)
W/VE 21 MHz	N4PN
W/VE 28 MHz	K4WI
World Single Operator High Power	TI1C (W5AJ, op)
World Single Operator Low Power	P4ØA (KK9A, op)
World Single Operator QRP	YV5YMA
World Single Operator Assisted	P4ØW (W2GD, op)
World Multioperator Single Transmitter	FY5KE
World Multioperator Two Transmitters	PJ2T
World Multioperator Unlimited	KH7X (@KH6YY)
World 1.8 MHz	KV4FZ
World 3.5 Mhz	EA8AH (OH1RY, op)
World 7 MHz	4M5DX (YV5SSB, op
World 14 MHz	OH8X (OH8NC, op)
World 21 MHz	PS2T (PY5EG, op)
World 28 MHz	LU1HF
Asia Single Operator High Power	JA1ELY JA8RWU
Asia Multioperator Single Transmitter Europe Multioperator Unlimited	9A15DX
North America Multioperator Single Transmitter	XE7T
Oceania Single Operator High Power	KH6WT (K1YR, op)
Oceania 28 MHz	AH6RF
South America Multioperator Two Transmitter	PJ2T
Central Division Single Operator High Power	W9RE
Central Division Multioperator Single Transmitter	WN9O
Central Division Single Operator Low Power	AJ9C
Seventh Call Area Single Operator High Power	K7RL
Canada Single Operator Low Power	VO1MX
Japan Single Operator Low Power	JH4UYB
W/VE Single Operator High Power Combined Score	K3CR (LZ4AX, op)
W/VE Single Operator Low Power Combined Score	N1UR
World Single Operator Low Power Combined Score	VP9/W6PH
World Multionerator Unlimited Combined	9415DX

World Multioperator Unlimited Combined Rocky Mountain Division Single Operator Combined N6ZZ

Dayton Amateur Radio Association Southern Arizona DX Association (KK9A, op) MA (W2GD, op) Willamette Valley DX Club Carl Cook, AI6V/P49V W6NL and K6BL Stanley Cohen, W8QDQ Fred Race, W8FR, In Memory of ZL2BT Northern Illinois DX Association (@KH6YY) H (OH1RY, op) Dayton Amateur Radio Association X (YV5SSB, op) (OH8NC, op) (PY5EG, op) Don Wallace W6AM Memorial Award Long Island DX Association North Shenandoah DX Association, NS4DX Tim Coad, NU6S wu Yankee Clipper Contest Club Operators at K1TT DX Nick Lash, K9KLR /T (K1YR, op) W7EW / W7AT Ralph Fontaine, AH6RF Operators at K1TTT Society of Midwest Contesters Society of Midwest Contesters Society of Midwest Contesters Willamette Valley DX Club Contest Club Ontario Western Washington DX Club IX YB (LZ4AX, op) National Contest Journal **Bochester DX Association K2FB Memorial** N6PH C. Sharp, K5DX Memorial, Texas DX Society W2PV Memorial — Schenectady ARA Albuquerque DX Association 9A15DX

from last year to finish 5<sup>th</sup> and sixth.

Single Operator High Power - Not for the faint of heart, the SOAB-HP category competition was once again overpowered by K1ZM operating on the Atlantic shore at his Prince Edward Island station, VY2ZM. Jeff's margin of victory was 26 percent not quite the whopping 40 percent of last year, but certainly impressive. Noteworthy is the Canadian dominance of this category. Last year found four Canadians in the Top Ten and we have the same this year

(VY2ZM, VE3EJ, VC3A and VY2TT), but they are packed into spots #1 through #5! VE3EJ and VC3A (operated by VE3AT) really delivered a 1-2 punch from Ontario this year.

Let's not overlook K4ZW's strong showing, narrowly shouldering his way past VY2TT to claim 4th position and just missing on displacing VC3A for third. In fact, the competition for the HP spots 2-3-4 was very tight. The Top Ten returned to the lower 48 to stay with W9RE's 6th place finish, followed by K3CR operated by LZ4AX, and NN3W moving to HP in the new N3HBX QTH, AA1K, and W3BGN - all familiar calls from many years of top finishes.

Single Operator Assisted — This is the most competitive Top Ten of all US/VE or DX single-op categories, with the winning score only 45 percent higher than that of tenth spot. K1AR took a break from waxing the competition at K3LR's multi-multi, putting his skills to waxing the Assisted competition instead. Right on his heels was KM1P operating K1KI's station and just barely eluding the snapping jaws of N3AD in third. N8TR wound up in 4th while K1UQ and N3KS battled to a close finish at 5th and 6<sup>th</sup>, respectively. Last year's 20 meter SOSB winner K2XA moved to Assisted this year and appears in the 9<sup>th</sup> position.

# Single Operator Single-Band

The money band, I've learned, just keeps raking in the signals and single-band entries. If you've got a tribander, it's fairly easy to be competitive at the bottom of the cycle on 20. What is a little surprising is that there weren't more 40 meter entries, although 40 meter phone can be a bear. Both 160 and 80 meter entries were up solidly.

10 meters — Quiet. The band was quiet - too quiet. Even though the ionosphere did its best to cooperate, the little UV photons just weren't numerous enough to turn those 10 meter photons back. K4WI's winning score was just over a tenth of last year's category winner, so you know things were slow. Maybe it was a good time to fill out QSL cards while the voice keyer did the heavy lifting! Nevertheless, his LP score topped the pack, moving up from 5<sup>th</sup> place in 2005. Persistence paid off for N2EOC who moved up to 2<sup>nd</sup> place this year, just ahead

#### W/VE Region Leaders

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

Phone				
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)
VY2ZM (K1ZM, op) 4,925,184 C VY2TT 3,252,024 C K3CR (LZ4AX, op) 2,814,066 C NN3W (@N3HBX) 2,685,267 C	K4ZW     3,471,300     C       N8II     1,778,115     C       K4SSU (NA4BW, op)1,419,237     C     WA4TII       954,345     C     W2OO     475,164	VE3EJ     3,645,414     C       VC3A (VE3AT, op)     3,478,440     C       W9RE     3,070,377     C       N0IJ     763,344     C       VE3CX     356,766     C	K0KT     554,130     C       WB0HCH     481,140     C       W0BH     288,333     C       N0KE     256,620     C       WAØMHJ     210,141     C	K7RL     2,099,766     C       W6YI     1,286,637     C       WC6H (NU6S, op)     1,006,926     C       VE5UA     518,370     C       N6AA     499,140     C
N1UR     1,063,530     B       K2PS     792,360     B       N1PGA     613,320     B       W1JQ     587,571     B       V01MX     525,525     B	K1TO     402,300     B       N4NX     305,370     B       KA8Q     296,430     B       WB3BEL     247,212     B       K9OM     243,165     B	VE3AD     504,240     B       K8BL     497,797     B       AJ9C     349,812     B       WA8RCN     243,525     B       K9QVB     226,077     B	N5AW     748,440     B       WD5K     557,823     B       VE5ZX     210,990     B       K0HW     188,604     B       NT0F     186,798     B	WN6K     193,998     B       VE7XF     186,813     B       KE7RT     182,223     B       K7JE     181,908     B       N7VR     170,166     B
N1TM     102,258     A       KATC     62,034     A       K3TW     55,014     A       NSHU     39,798     A       NF2L     12,768     A	K4CIA 185,319 A N4ZAK 4,773 A AF4KL 108 A	N8IE     179,118     A       VA3DF     59,670     A       N8XA     22,422     A       WD9FTZ     10,176     A       KC9ECI     7,686     A	NDØC     115,824     A       KA5PVB     17,877     A       WA8ZBT     4,650     A       WD5FGZ     2,691     A	W6QU (W8QZA, op)     81,585     A       VE6EX     73,666     A       K7MM     24,534     A       K6TV     23,760     A       KE6CC     9,798     A

#### of last year's winner, W5PR.

**15 meters** — Scores were down about 50 percent on this usually hot band, but there was still enough activity for stations across the US to be represented in the Top Ten. N4PN moved up a notch from 2005's 2<sup>nd</sup> place finish. His big QSO total and DXCC of multipliers locked up the top spot this year with a solid win over 2<sup>nd</sup> place finisher, Midwestern beacon K9BGL, with N2MM in third. KØRH improved from 7<sup>th</sup> place a year ago and grabbed 4<sup>th</sup>, just ahead of NA4CW. The final places move west, through N5DO in 6<sup>th</sup>, to WA7LT and W7BJN (Eastern WA), W7EB (Nevada), and finally, to KI6LZ (Santa Barbara).

**20 meters** — Twenty will be the band of choice for a couple more years before 15 starts taking up the slack. Twenty meter entries had another solid increase in a string of solid increases since 2003, and have reached 41 percent of all single-band entries.

Top scores this year even increased a tad over last year, 906K to 700K, and both first and 3<sup>rd</sup> place finishers VE6WQ (at the big VE6JY station) and N3HBX at his new QTH narrowly missed call-area records. Second place finisher W7WA muscled in from WA, with the remainder of the Top Ten bouncing around the US from W6AAN in 4<sup>th</sup> place, back to W1NR in 5<sup>th</sup>, and VE3XN in sixth. K6HNZ was the final West Coast call in the Top Ten at 9<sup>th</sup> place.

**40 meters** — Where the 20 meter Top Ten ricocheted around the continent, 40 meters was bounded in the southwest by WDØBGZ in CO and N5OT in OK — everybody else was to the north and east. The QSO and multiplier counts were very closely packed, making this a very competitive category. Ohio was the place to be on both 20 and 40, with K8DJC using the best multiplier total to lead the way. He was closely challenged by WDØBGZ much farther west, whose extra QSOs nearly made up the difference. NA2X appears in the Top Ten this year at third. Here's a rarity — N5OT and VA3XH ran to a dead heat, tying for fourth! The six through 10 spots are all new Top Ten faces, as well: W9SE, W1TY, AD8J, W9GXR and N1QM.

**80 meters and 160 meters** — This was a good year to take advantage of low-band conditions and the opportunity was not missed by K1LZ on 80 meters and W8LRL (as N8V) on Top Band. Both smashed the old call area records, nearly doubling them! Second place finisher AA1BU's 80 meter score would have also been a new all-district record, and sixth place NØNI as well, so congratulations are due to both. KØLW, operated by KU1CW, was the farthest west station in the 160 meter Top Ten, too.

On 80 meters, 4<sup>th</sup> and 5<sup>th</sup> places were only separated by a whisker, as K5RX eked out four additional QSOs to W4SVO's one additional multiplier — that's one tight race! 160 meters was competitive, too, with W3GH in 2<sup>nd</sup>, and relative neighbors AA4MM and KK4SI duking it out for 3<sup>rd</sup> and 4<sup>th</sup>. That competitive fire propelled them ahead of Northeasterners W2VO and NN1N in 5<sup>th</sup> and 6<sup>th</sup> place.

#### Multi-Operator

Multi-op stations picked up a few more adherents this year, with 90 logs submitted. Multi-single percentage (61 percent) was the highest since 2003, as more teams figure out how to keep the airwaves burning all night. Multi-two seems to have stabilized at 25-30 percent of the multi-op logs (27 percent this year). Multi-multi, however, is down, as the two other categories continue to gain "market share" at its expense. The logistics associated with running a big multi-op station make it harder to attract (and retain) operators with uneven conditions and activity.

**Multi-Single** — This year the three top spots weren't separated by much. K5NA's

team made a great effort, but was bested largely due to the huge 20 meter volume (1494 QSOs) from VE3RM, who came in first. Right behind both, 3<sup>rd</sup> place finisher NN2W couldn't quite overcome the 436 multipliers of K5NA. All in all, a real horse race between the three. Fourth place K1IR was locked in an even tighter race with 5<sup>th</sup> place W1QA and 6<sup>th</sup> place NE3F.

**Multi-Two** — Last year's two top multitwo stations went all out and wound up in the same order, with N3RS taking the blue ribbon and WE3C right behind in second. The teams are so consistent that they were even separated by very nearly the same percentage of scores! W4RM made a nice entry to the Top Ten in 3<sup>rd</sup> place. In 4<sup>th</sup>, KØTV advanced significantly, moving up from 8<sup>th</sup> place in 2005.

**Multi-Multi** — The annual clash of the titans tends to culminate with the ARRL DX Phone contest. The top titan this year: the K3LR team for a three-peat. And not only a three-peat, but a sweep of both modes! Tim's Talkers made up on 20 and 15 meters what distance took away on the low bands. Second place W3LPL excelled on 160, 80, 40 and 10 meters, and KC1XX was not far behind. To illustrate the strength and competence of these stations, their single-band scores would have swept the SOAB field.

#### DX

The oldest of all contests, the ARRL DX is an ideal forum for the "little guys" to get a shot, whether from home or abroad. DXpeditions during ARRL DX are a little less daunting, since it's possible to focus your efforts in just a few directions, instead of world-wide. Are you a DX station in pursuit of WAS or 5BWAS? Only have a few hours to work the states? Pick a single-band effort and make some W/VE stations happy! Here's your contest! From our side of the various ponds, we're so glad you're there! Close races are by no means confined to the domestic contest scene. Narrow decisions are to be found in several categories:

• P4ØA (by KK9A) and WP3F in SOAB-LP went toe to toe, with P4ØA prevailing.

• TI1C (by W5AJ) bested V31BH (by OH2BH) by only 8 percent in the SOAB-HP category.

• 4M5DX (by YV5SSB), HI3TEJ, and WP3C engaged in a SO-40 pileup with only 4 percent separating the three of them.

The most competitive Top Ten boxes are to be found in the evenly contested SOAB-HP and SOSB-20 categories. Anyone listening to 20 meters over the weekend will not be surprised.

**Single Operator QRP** — We're always thrilled to have that weak signal with the big DX sound call in to our CQ. This year, YV5YMA came from out of the blue with a big score to easily best the 2005 winner, LU1VK, and claim the top spot. LU1VK was followed by F5BEG, just as in 2005, but one place lower. IK5RUN moved up a place to fourth. The top Asian entrant was that ever-popular call sign JR4DAH. AL2Q was the top NA entry — no Caribbean QRP entries! Oceania and Africa didn't show up in the QRP category.

Single Operator Low Power - Lots of stations decided to run barefoot again this year, including a few DXpeditioners. Hopefully without fighting a cold this year, KK9A returned to Aruba and took home the top spot again as P4ØA. Second place finisher WP3F made a strong effort, particularly on the low bands, but didn't get the 10 meter openings enjoyed by Aruba and that made the difference. WØGJ once again traded the snowy climes of Paul Bunyan country for the entirely more comfortable Turks and Caicos, coming in third. DXpedition regular W6PH put on his Bermudas and placed 4<sup>th</sup> from VP9. J88DR moved up a place to 5<sup>th</sup> and 8P6EX from 10th to eighth. Welcome to the Top Ten, HI3NR (6th), LU2NI (7th), KH6/K2YY (9th), HK6PSG (10th). With the east-west paths at a lull, JH4UYB was the top Asian entry, just out of the Top Ten in 12th place, and EA1WS led the way for EU in 14th place. Africa's leading entry was provided by EA8CQW.

**Single Operator High Power** — Here we are, the home of the Big Gun, for whom "Have ticket, will contest" is a way of life, it seems. The complications of a high-power operation away from home are legion: heavier, bigger, harder. And we *do* appreciate it! In fact, eight of the Top Ten entries are from world travelers. I'm not sure who traveled farthest — OH2BH to V3, or K1YR to KH6. At any rate, it didn't slow them down a bit.

TI1C was hotly pursued by the globetrotting Finn, Martti, OH2BH, in disguise as

Affiliated	Club	Competition
	Uld N	oompounden

•	Score	Entries
Unlimited Category	00010	2.11.100
Yankee Clipper Contest Club Frankford Radio Club Potomac Valley Radio Club Florida Contest Group Society of Midwest Contesters Contest Club Ontario Minnesota Wireless Assn Northern California Contest Club	196,375,278 174,069,834 122,282,505 38,980,746 29,116,362 28,618,086 25,943,529 13,841,253	205 131 171 81 66 59 64 64
Medium Category		
North Coast Contesters South East Contest Club Tennessee Contest Group Caribbean Contesting Consortium Southern California Contest Club Hudson Valley Contesters and DXers Maritime Contest Club Order of Boiled Owls of New York North Texas Contest Club Rochester (NY) DX Assn Central Texas DX and Contest Mad River Radio Club Western Washington DX Club Empire Contest Club Grand Mesa Contesters of Colorado Carolina DX Assn Central Arizona DX Assn Bay Area Wireless Assn BC DX Club Western New York DX Assn Texas DX Society Western New York DX Assn Texas DX Society Western Illinois ARC Utah DX Assn Florida Contest Group - Panhandle Norther Lode DX/Contest Club Oklahoma DX Assn Florida Contest Group - Panhandle Northern Arizona DX Assn Kentucky Contest Group Spokane DX Assn Kentucky Contest Group Spokane DX Assn Kansas City DX Club Alberta Clippers Southern California DX Club	35,731,797 21,818,229 19,226,328 16,808,064 16,778,472 313,779,870 11,128,392 9,355,098 8,157,903 7,596,087 7,222,416 6,472,2950 6,202,659 3,682,131 3,498,333 3,228,140 2,747,289 2,631,480 1,410,591 1,375,755 1,331,121 1,286,316 1,264,005 1,084,821 1,015,734 971,082 807,567 733,011 6,43,503 6,25,737 592,893 497,187 492,606 328,347 257,004	19 27 41 38 31 13 13 13 13 13 13 13 13 13 13 13 22 34 8 10 3 17 21 37 9 14 8 5 13 4 8 7 12 7 5 11 4 4 4 3
Bergen ARA South Jersey Radio Assn	192,396 127,704	7 4
Local Category		
Wireless Association of South Hills Mt Frank Contesters Albuquerque DX Assn Sterling Park ARC CT RI Contest Group Northeast Wisconsin DX Assn Dominion DX Group Low Country Contest Club Great South Bay ARC South Texas DX and Contest Club Meriden ARC Metro DX Club East Coast DX Assn	3,597,180 1,978,455 772,812 718,539 668,310 658,758 632,079 444,564 348,012 263,655 220,470 71,964 42,459	3 6 3 5 4 5 10 6 3 4 4 3 4 3 4

V31BH, but the extra multipliers Carlos' big signal pulls in made up for Martti's QSO advantage. The Windward station, WP2Z, was piloted by N2TK to a nice 3<sup>rd</sup> place showing. NH7A went to Guadeloupe and drove TO5A to 4<sup>th</sup> place ahead of AH8DX on the north shore of South America at 8R1EA. Leading the EU contingent, OK1RI moved up a position to 8<sup>th</sup>, and 6V6U was a welcome addition from Africa in ninth. In 17<sup>th</sup> place, JA1ELY led the way from Asia.

**Single Operator Assisted** — The spotting networks have become truly worldwide. Not too many years ago, Assisted category stations outside Europe were few. With every beachfront resort offering broadband Internet, there's little holding back the category today. W2GD decided to give Assisted a try and seems to have married his considerable pileup management skills with good judgment about picking up spots from the network. P4ØW placed first by a large winning margin in both QSOs and total multipliers. Fellow islander P4ØCW kept Aruba on the list with a 2<sup>nd</sup> place finish. The north-south path played well for both LTØH (operator LU3HY, 3<sup>rd</sup> place) and ZX2B (operator PY2MNL, 4<sup>th</sup> place). Europe made its first appearance as EA7RU in 5<sup>th</sup> and North America as AL9A in sixth. JF2SKY was the top Asian score in the category and EA8BZH was the top African entry.

# **Single Operator Single-Band**

Single-band entries took a BIG jump this year, from 406 to 460, without taking a bite out of total DX logs or QSOs! As in the US and VE, 20 meter logs made up the lion's share, representing 53 percent of all DX single-band logs. In general, the distribution of logs between the bands looked about the same.

10 meters — Welcome to the Way South American QSO Party! The station farthest north (HC1HC) is almost directly on the equator. It was a very close contest between last year's winner, CX5BW, and LU1HF. When the band closed for the last time, LU1HF prevailed by 40 QSOs and 2 multipliers. The word was out on 10 meter single-band, because the Top Ten is full of calls not there last year. PP5AMP placed 3<sup>rd</sup> from Brazil before the standings turn south again to Argentina (LQ5H operated by LU3HS in 4th, LU9DAG in 5th as a LP entry and LW7HT in sixth). Repeat Top-Tenner CX1AV appears in 7th place, with countryman CX4DX right behind. Ecuador's HC1HC and LU8EOT round out the Top Ten, making it a South American sweep. AH6RF made a casual entry from Oceania, and WP4BL's single-QSO was the sole North American entry and a continent-winning log!

**15 meters** — There's quite a bit more variety in the 15 meter Top Ten with SA, NA, AF, EU and AS all represented. The top spots were largely a matter of QSOs, since all three stations had identical QSO totals of 60, not far from the maximum available 63. HI3CCP made a very good run at the win, but was just too far north to beat WRTC2006 Chairman PY5EG, operating PS2T, who is the winner, moving up from 2<sup>nd</sup> in 2005. HK3JJH put Colombia in a lot of 15 meter logs with low-power to place third. DXpeditioners AC8G traveled to Grenada and wound up in the Top Ten at 4th place and VA3YDX took 7th from Dominica as J79DX. LU5FF's nice low-power score made 5th place, followed by PY5KW at PW2C in sixth. Africa makes an appearance with CT3EN in 8th place, followed by southern European IU3X operated by IV3SKB in ninth. Asia is also represented in the Top Ten by JI2UNR at the 10th position. Outside the Top Ten, VK3GK led the way from Oceania.

20 meters — Competitive in score and deed, the 20 meter Top Ten is thickly populated with excellent scores by great operators. As we saw in the US and VE 20 meter scores, stations at northern latitudes were not greatly disadvantaged and this holds true here - OH8NC guided OH8X to the top score from Scandinavia. Zooming to a location about as close as you can get to the continental US, 2nd place goes to KG4WW at Guantanamo Bay, Cuba. 4A7L's low-power entry makes an unexpected appearance in 3rd place from Venezuela, then 4th place goes winging back across the Atlantic to DP4K in Germany. Fifth place? Back across the pond to 8P2K in Caribbean, and then pack your bags for the return trip to Europe as IR4T and HG3M (operated by HA3MY) put Europe on the list at 6th and 7th. Asia is also represented, as JAØJHA placed 8th and then back to the European call signs of OM3PC (9th) and F4EGD (10th). CT3KY is the leading African score and 4F1MEU the Oceania winner.

40 meters — With the congestion on 40 meter phone, it not surprising that the Top Ten is dominated by stations near the continental US and Canada. YV5SSB used the call sign 4M5DX to repeat as the number one station, but just barely ahead of HI3TEJ who fought off power outages to nearly take first, one of the closest races this year. Not far behind were low-power Caribbean entry WP3C in 3rd place and Central American XE2K in fourth. South America kept the run going with PP5JR, using ZX5J, to place 5th and YV5KG in sixth. Europe's top (and only) score in the Top Ten is from F6KHM (operated by F4DXW). Three more Caribbean calls round out the list; KG4RN, CO8LY and ZF2AH. CT3DZ, just barely missing the Top Ten, was Africa's leading score. VK2KPP fell out of the Top Ten this year, but was still the continental leader from Oceania.

80 meters — The trend of improving lowband conditions continued in 2006 with last year's 80 meter winner, CO8KA, barely making "the box" this year. The winner moved from North America to Africa, as OH1RY set a new continental record from EA8BH, followed by YV5LIX from South America in 2<sup>nd</sup> place. (YV5LIX became a Silent Key on the YXØA expedition just weeks after the contest.) Three Europeans follow: ON4UN in 3<sup>rd</sup> (with another continental record), G3PPG (operated by G4BYB), and SN3A (operated by SP3GEM). YV3AZC is new to the Top Ten this year in 6<sup>th</sup> place, followed by familiar call IR4M with IK4MGP at the microphone. Another African call is in 9th place — CT3IA. JE1SPY is the top Asian score, but there is no Oceania entry this year.

160 meters — Top Band entries saw

dramatic improvement in scores and participation this year. US and Canadian DXers know that the ARRL DX contest is a great way to add new counters to their totals and they make special efforts around the solar minimum. DX stations that operate 160 around the solar cycle reap the benefits of their practice sessions with single-band operations. KV4FZ repeated as the high score (would that be Tip-Top Band?), although he was hotly pursued by CM6RCR with just a few QSOs less. Europe was represented by its western-most entity, the Azores, as CU2AF placed 3<sup>rd</sup>. South America's top score was turned in by YV2IF at the 4<sup>th</sup> position before the list swings to the far north, where KL7RA fought off the aurora and braved the bears to place fifth. Europe ran the rest of the Top Ten list and, in fact, the rest of all submitted entries!

# Multi-Operator

**Multi-Single** — The FY5KE team, a regular in the multi-op categories, made their first win in multi-single this year. A strong showing was also made by a Mexican-American team at XE7T. A team of DXpeditioners assisted NP2B to the 3<sup>rd</sup> place finish, ahead of LR2F from the southern part of South America and IR4X from southern Europe. TO1T barely beat EA8ZS for 6<sup>th</sup> place, who was followed by three more European teams at IR2C, HG1S and OM5M. The big signals from JA8RWU topped all Asian teams while ZL1AA was the Oceania leader.

Multi-Two and Multi-Multi - The winning PJ2T station of the Caribbean Contest Consortium has carried the legacy of PJ9JT and W1BIH into the 21st century, racking up win after win against strong competition. They showed no sign of slowing down in 2006 at the top of the category. Europe's three entries battled each other to the final bell with OE4A coming out on top and in 2<sup>nd</sup> place overall. HG6N and 9A7A kept southeastern Europe on the bands, finishing 3<sup>rd</sup> and fourth. Using TI2KAC's station, the TI8M team put in a good score, followed by CV5D in Uruguay. JE1ZWT was the only Asian entry - I expect to see more Multi-Two entries from the many club stations in Japan and those forming in China. Oceania and Africa were not represented in Multi-Two this year.

KH6YY's station is capable of challenging for a win in any category. Using KH7X, this year the crew set their sights on Multi-Multi. Their efforts added a plaque and a record to the Oahu wallpaper. Three big European efforts follow, beginning with a special call sign at 9A15DX that generated no end of busted spots. Kaliningrad was available due to RK2FWA, and the YR7M team made sure no one missed Romania. It's also nice to see a Spanish entry from ED1EA.

#### Affiliated Club Competition

Affiliated Club entries rebounded overall, with the 60 entries surpassing the 59 of 2004, establishing what one hopes will be a rising trend. Those 60 entries included 1411 individual station logs! Not every club has to be a giant in the Unlimited category. There is lots of room for Medium and Local clubs.

In the Unlimited Club category, the Big Three dominate: Yankee Clipper (YCCC), Frankford Radio Club (FRC) and Potomac Valley (PVRC). With a little extra "get out the vote" oomph, YCCC will be taking home the coveted Unlimited gavel for 2006, followed by FRC and PVRC.

In the large Medium category, the North Coast Contesters really deserved their first place gavel with more entries and an even higher score than last year! In 2<sup>nd</sup> and 3<sup>rd</sup> place, the Southeast Contest Club and Tennessee Contest Club traded last year's squeaker for another this year, but in the opposite order.

In the Local category, the Wireless Association of South Hills submitted fewer but larger scores to push past the Mt Frank Contesters to take the gavel. A number of new names made their appearance this year, led by the Albequerque DX Association and the Sterling Park ARC in 3<sup>rd</sup> and 4<sup>th</sup> places. Local club entries increased to 13 from nine last year.

#### **Concluding Remarks**

When receiving a big, fat e-mail with the data spreadsheets, I'm often a little overwhelmed at first. All that data and all those calls and categories...yikes! But then the familiar sorting and massaging and headscratching begins to kick in, and pretty soon I've spent a couple of days getting to know everyone all over again. Having done this write up since 2002, I'm beginning to get a feel for the ebb and flow of the solar cycle on a score-by-score, category-by-category basis. It's fun thinking up new ways to slice-and-dice the data, looking for nuggets of information!

Whenever you get on during a big contest, take a second to consider how many other stations are on the air doing just what you're doing. Contacts are flying around the globe, darting between continents and skipping across borders. Islands quiet most of the year are lighting up burning red as a crack team is pouring on the coals to antennas on the hotel roof. A virtual pipeline is filling between Europe and the US and Japan. If you could listen to the ionosphere, it would echo with the drumbeat of thousands of hopping, skipping signals making their way along the airwaves. The globe is alive with the crackle of HF radio! Q5T~