

# 2006 ARRL 10 Meter Contest Results

*Learning to do more with less.*

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**E**ven at the bottom of the solar cycle, the 10 Meter Contest remains one of the most popular HF operating events sponsored by the ARRL. A total of 1863 logs were received at ARRL headquarters for the 2006 contest, over twice as many entries as the Contest Branch received at the minimum of the previous solar cycle 11 years ago. A total of 1295 (69.5%) of the logs were submitted by stations in the United States and Canada, and 568 (30.5%) were submitted by stations in the rest of the world. To those new to operating on HF, 10 meters may seem like a dead band most of the time at this point in the solar cycle, but major contests like the ARRL 10 Meter Contest bring the band to life!

What gets so many stations excited about operating on 10 meters? For starters, antennas for 10 meters are easier to build, are smaller, and have lower height requirements to work effectively. A dipole antenna requires just 5 meters (16.5 feet) of wire, and the antenna is a full wavelength above ground at just 10 meters (33 feet) up in the air. If you have an HF radio, it is relatively easy to get on 10 meters and enjoy making contacts. There are also more amateurs licensed to operate on the 10 meter band than any other HF band. Countries like Japan, Argentina and the United States extend more privileges to entry-level licensees on the band. Even at the bottom of the solar cycle, you never know when you will be someone's very first HF contact!

No HF band is more affected by the solar cycle than 10 meters. Remarkably, 2006 is the fourth year in a row in which the solar flux index has been between 85 and 90.2. In 2002, the daily solar flux indices for the contest weekend were 180.1 on Saturday and 196.6 on Sunday, and life was great for operators on the 10 meter band. According to the archives at the National Geophysical Data Center, the indices in 2003 were an unusually low 85 on Saturday and 89.5 on the Sunday of the 10 Meter Contest. In 2004, the indices were 87.1 on Saturday and 87.7 on Sunday, and in 2005 they were 88.7 on Saturday and 90.2 on Sunday. 2006 could have been worse than it was. Saturday's solar flux index was 89.6, and Sunday's solar flux index was 87.3, but just two months earlier, on October 18, 2006, the solar flux index dipped as low as 69.0. Next year may be another rough year, as the NOAA Space Environment Center predicts an average

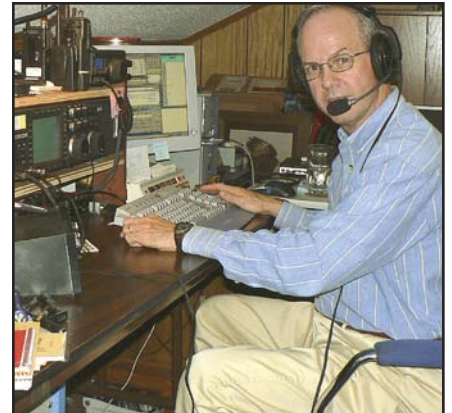
solar flux value of just 79.4 for the month of December 2007, with an expected range from 60.0 to 102.4.

The three Single Operator Low Power entry categories remain the most popular in 2006 for both W/VE stations (58% of all W/VE logs) and for DX stations (59% of all DX logs). The most popular mode for W/VE single operators was mixed-mode. 36% of all W/VE log submissions were mixed-mode single operators. Historically, the mixed-mode single operator categories are more popular with W/VE operators in the years around solar minimum. By entering in a mixed-mode category, you can make contact with a station active in the contest on both CW and phone. In the years ahead, expect the phone-only single operator categories to grow in popularity, as they are historically the most popular in years around the solar maximum. The most popular mode for DX single operators was CW Only. 35% of all DX logs were submitted in the three CW Only single operator categories. Since the late 1980s, the CW-only single operator categories have been the most popular with DX stations, whether near solar maximum or near solar minimum.

The contest remains more popular with W/VE stations than DX stations. Not only were there over twice as many W/VE logs as DX logs submitted in 2006, the decline in the number of DX log submissions since the previous solar maximum has been greater than the decline in W/VE log submissions. This year's total of 1295 logs is still 70% as many as the 1843 W/VE logs submitted in 2002. This year's total of 568 DX logs is just 45% as many as the 1276 DX logs submitted in 2002. This is mostly the result of fewer logs coming in from Europe and Japan. One part of the world where interest in the contest remains high is South America. 2006 was the fourth highest log submission total ever for South American stations, and well over 1/5 as many logs were submitted from South America in 2006 as in 2002.

## DX Categories

At the bottom of a solar cycle, the most reliable F layer propagation on the 10 meter band will be on north-south paths. Ionization in the F layer will be strongest near the equator, so communications paths that cross the equator are more likely to be successful. This



**Ed, K3IXD (in photo) and Mel, W4MEL, operated at W4MEL's QTH using the Low Country Contest Club Call NU4SC.**

## Affiliated Club Competition

	Score	Entries
<b>Unlimited Category</b>		
Potomac Valley Radio Club	6,664,458	84
Florida Contest Group	3,456,660	55
<b>Medium Category</b>		
Northern California Contest Club	3,859,448	41
Minnesota Wireless Assn	1,881,244	37
Yankee Clipper Contest Club	1,605,382	28
Central Texas DX and Contest Club	1,534,604	12
Society of Midwest Contesters	1,353,440	36
Frankford Radio Club	1,126,516	12
Southern California Contest Club	1,095,914	15
Tennessee Contest Group	961,134	22
South East Contest Club	905,396	15
Contest Club Ontario	893,732	31
Grand Mesa Contesters of Colorado	872,826	12
Western Washington DX Club	707,756	13
Central Arizona DX Assn	580,586	9
North Texas Contest Club	414,916	5
Utah DX Assn	410,490	6
Mad River Radio Club	400,020	10
Alabama Contest Group	348,112	6
Hudson Valley Contesters and DXers	207,506	10
<b>Local Category</b>		
Midland ARC	243,254	3
Willamette Valley DX Club	238,492	6
Texas DX Society	230,292	3
Bay Area Wireless Assn	204,524	3
Florida Contest Group - Panhandle	198,742	5
Western New York DX Assn	183,848	4
Carolina DX Assn	178,960	4
Kentucky Contest Group	167,436	4
Low Country Contest Club	151,202	7
Order of Boiled Owls of New York	98,148	6
West Allis RAC	88,852	5
Spokane DX Association	86,836	3
Sussex County ARC	84,542	3
Metro DX Club	82,060	4
Dominion DX Group	76,318	7
CTRI Contest Group	72,608	5
Mother Lode DX/Contest Club	65,238	4
Hampden County Radio Assn	64,878	7
Murgas ARC	63,428	3
North Coast Contesters	63,204	3
Columbia-Montour ARC	57,776	3
West Park Radiops	41,490	6
Heartland DX Association	24,056	3
Athens County ARA	20,316	4
Bergen ARA	12,882	3
Six Meter Club of Chicago	8,006	3
West Park Radiops	41,490	6
Heartland DX Association	24,056	3
Athens County ARA	20,316	4
Bergen ARA	12,882	3

## Top 10, W/VE

Mixed Mode, QRP	Phone Only, High Power
WA6FGV	152,872
KA1LMR	74,152
N6WVG	69,750
WA8ZBT	52,500
W5GZ	50,820
VA3DF	32,116
K3TW	20,298
NA4BW	18,480
K4CIA	17,184
K1EQA	12,400

Mixed Mode, Low Power	CW Only, QRP
K6AM	464,112
K2PS	317,848
NT6K	292,496
WD5K	267,912
W3EP	266,112
AC0W	254,476
N7LOX	247,046
KT0K	206,064
W0ETT	168,912
W04O	150,360

Mixed Mode, High Power	CW Only, Low Power
KV7DX	606,430
N8II	606,132
WE3C	553,536
K6XX	521,642
W0AIH	512,952
NN3W	494,024
K9WZB	424,592
N2TTA	417,576
W7ZR	386,568
KA6BIM	361,368

Phone Only, QRP	CW Only, High Power
W7YA	35,970
W6QU	34,384
WW0WB	10,664
KC8QAE	9,200
KC9AMM	5,340
KE2OI	4,216
NO4FX	2,862
WB0IWG	2,704
WD9FTZ	1,932
WA0QJE	1,116

Phone Only, Low Power	Multioperator
AC5N	78,256
W3LL	71,208
KE3WM	70,656
WW4LL	59,776
W4GKF	56,160
KE0L	54,484
NJ7I	41,184
VA3YP	35,310
WB9PUB	30,702
K4CGY	29,640

## Top 10, DX

Mixed Mode, QRP	Phone Only, High Power
YT7TY	21,566
RW3AI	4,032
JK2VOC	2,628
DL1ARJ	2,400
JH7RTQ	1,700
JK1TCV	1,232
RA3AOS	1,140
PA0RBO	616
RX3ALL	612
JH8FAJ/7	156

Mixed Mode, Low Power	CW Only, QRP
LT7W	663,264
PP5BZ	141,112
HR2DMR	102,096
HA508IB	102,024
PY2NY	101,640
Z36W	82,678
NP3CW	79,856
LU5FF	61,138
HA5MY	61,100
ER0FEO	50,388

Mixed Mode, High Power	CW Only, Low Power
PS2T	783,804
T15N	485,394
OA4SS	438,600
ZF2AH	240,840
S57S	132,254
ZS1EL	88,128
9M6XRO	61,600
JH4UTP	41,360
UA3QDX	29,700
F8AOF	28,652

Phone Only, QRP	CW Only, High Power
H13TEJ	96,560
LU1VK	39,900
HP3BS	25,452
I5KAP	5,040
YO9BXC	3,360
IU9A	2,528
EA8AJO	2,360
PY2XC	1,584
EA3FF	696
DF1RK	540

Phone Only, Low Power	Multioperator
PP5JD	281,320
LU4DX	256,956
H13C	120,960
LW3DN	118,776
HK3JH	117,576
CX1AV	112,158
LU8EOT	95,408
PY2DN	61,596
LR1F	56,316
4A7L	51,610

Coast have difficulty working Europe, and stations on the West Coast have difficulty working Japan. The most reliable DX openings on the band are north-south across the equator to South America, New Zealand and Australia. Stations located farther south and closer to the equator may get better F layer propagation on those DX paths, but what can really set W/VE stations apart during the years around solar minimum is how good propagation is within North America. Stations in the southwest generally had the best intracontinental propagation in 2006, and they took advantage of it.

Nine of the 10 W/VE category winners were stations located west of the Mississippi River. Three winners were from southern California, two were from Arizona, two were from Texas, and one each was from Oklahoma, South Dakota, and Florida. Ed Gray, W0SD's victory in the Single Operator Phone Only High Power category was the only victory by a northern W/VE station. Many operators in southern California and Arizona remarked on Sporadic E propagation that lasted well after local sunset, in some cases until past midnight local time, giving them an extra boost to their scores.

## ARRL Affiliated Club Competition

The ARRL Affiliated Club Competition always attracts a lot of attention. A total of 46 ARRL Affiliated Clubs entered the competition in 2006, the same number as last year. Affiliated clubs are organized into three categories: Local Clubs, Medium Clubs, and Unlimited Clubs. Which category your club will be ranked in depends on the number of logs submitted for the club, and how large the territory is from which the club members operate. For a club to be listed in the results, the Contest Branch must receive at least three entries from club members. DXpedition logs cannot be included for a club score, so energizing the stations in your club territory to get on the air and make contacts is a key to success!

In 2006, the most competitive of the three club categories was the Local Club competition, with the Midland Amateur Radio Club taking top honors in the category with 243,254 points. The Willamette Valley DX Club placed second with a score that beat out 24 other local clubs. Congratulations to all!

In the Medium Club competition, the Northern California Contest Club had 42 entries, and secured the top spot by a margin of just under 2 million points! The Minnesota Wireless Association took second place with scores from 41 logs, followed closely by the Yankee Clipper Contest Club, who had 85% of the Minnesota Wireless Association's score with just 31 logs. In fourth place, the Central Texas DX and Contest Club was the only other Medium Club to break 1.5 million points, and they did so with just 12 logs!

gives an unusual advantage to stations in the southern hemisphere. While South America, New Zealand, or South Africa might be far away from the dense populations of radio amateurs in Europe, North America, and Japan, and at a disadvantage in other years or in other contests, they are at the better end of the best 10 meter DX openings during solar minimum. South America especially is geographically favored at this point in the solar cycle, with north-south propagation paths to both North America and Europe. Even DX stations in the Caribbean found it hard to compete against the best stations in Argentina, Brazil and Uruguay this year.

Europe and North Africa faced perhaps the most challenging propagation conditions the region has seen in this contest in the past 11 years. Isidro Acosta Hernández, EA8NQ, summed it up for many when he remarked, "Very bad propagation!" Cedric Lamouche, F4EGZ, operating in the Single Operator Mixed Mode Low Power category at the

F8KHF club station, agreed with Isidro, "Very poor propagation in central France." Cedric found CW a better choice this weekend for making QSOs in the tough conditions. Bosko Milankov, YT7TY, had the best result from Europe with his victory in the Single Operator Mixed Mode QRP category.

Perhaps the least favorable area of the world from which to operate in the ARRL 10 Meter Contest at the bottom of the solar cycle is Japan. Only 62 logs (3.3% of all logs) were received from Japanese stations this year. Only one of these logs was a Multioperator effort. No Japanese station made over 322 QSOs. Yoshi Fukuta, JK2VOC, had the best result from Japan with his third place overall finish in the Single Operator Mixed Mode QRP category.

## W/VE Categories

At the bottom of the solar cycle, W/VE stations across the continent face surprisingly similar F layer DX propagation on the 10 meter band. Even stations on the East

