

A Brilliant Dance— The 2004 ARRL 160 Meter Contest Results

Ford Peterson, NØFP

Quanta, photons, RF, light ...nobody knows how they work so call them what you like. The first full weekend of December was once again a brilliant dance of nearly a thousand lights (961 to be exact). True to my prediction last year, this year's annual Topband ritual was attended by a record number of natives, beating 2002's record setting 919 logs by almost 5%. With more in attendance, the fireworks retired quite a few records: 2 Top Ten records, 9 Region records, 34 Division records, and 92 Section records, were dragged kicking and screaming into the archives by the torch, bearing inhabitants of our little island. If you hold one of these records, you better be ready to defend your turf next year as we still have a

couple of years to the absolute bottom of the solar cycle.

I can also report that we have a first ever sweep of the ARRL sections. Richard, K5NA, managed to land the elusive #80, along with all the other sections, to actually book a single band sweep. To my knowledge, this has never been done on a single band, on a single weekend. Check out the full story on the Web.

These days, every Tom, Dick, and Harry thinks he knows what a photon is, but he is wrong.—Albert Einstein

More and more people are interested in Topband. Why? It's a mixed response. Some have abandoned the upper bands due to old Sol's lack of enthusiasm. Others have 'worked them all' elsewhere and are rising to the seemingly impossible challenge of working them all on Topband. If you need hardware to join the fun, summer is the perfect time to get ready for the next extravaganza on Topband—the first full weekend in December.

A photon is what a photo detector detects.—Professor Roy J. Glauber (Harvard)

Top Ten

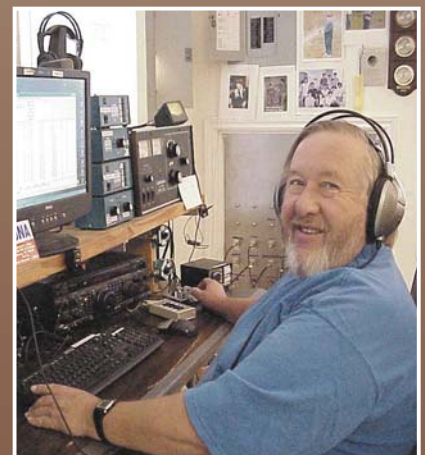
Our Canadian brethren managed to usurp two Top Ten records this year. VY2PX (K1PX op) managed to decimate W3GH's 2001 SOLP score by 53%! And VE3EJ edged past KC1XX's 2002 trophy by a slim 0.69% in the multioperator category.

I don't know anything about photons, but I know one when I see one.—Professor Roy J. Glauber (Harvard)

"I therefore take the liberty of proposing for this hypothetical new atom, which is not light but plays an essential part in every process of radiation, the name PHOTON."

—Gilbert N. Lewis,

1926



Richard, K5NA, achieved what we believe to be the first clean sweep of all 80 WVE sections during an ARRL 160-Meter contest. Quite an accomplishment!

Top Ten

Single Operator, QRP

WA4PGM (s)(d)	76,800
N7IR (s)(r)(d)	65,325
W3TS	51,794
N9NE (s)(d)	51,612
W4BVNE	46,548
N4ROA	39,872
VE3MGY (d)	37,908
W4TMR	37,224
W8VE	29,172
K4UK	25,857

Single Operator, Low Power

VY2PX	309,514
(K1PX, op) (t)(s)(r)(d)	
K8FH (s)(r)(d)	166,000
NØFP (s)(d)	155,844
K9OT (s)(d)	155,800
K4GNW (s)(r)(d)	155,430
W2LC (s)(d)	154,812
NØIM	151,200
W0UO (s)(d)	142,843
K9WJU	141,015
(W9CG, op) (s)	
KSØT	129,440

Single Operator, High Power

K9DX (s)(r)(d)	508,804
AA1K	386,988
K5GO (s)(d)	375,951
W4MYA (s)(d)	355,110
K5NA (s)(r)(d)	336,966
K5RX (s)	314,356
W5MX (s)	309,978
N1EU	257,880
WE3C (s)	252,553
W2RE	238,610

Multioperator

VE3EJ	408,516
(t)(s)(r)(d)	
W2GD (s)(d)	403,352
K9FO (s)(d)	382,220
NO2R	343,625
K8XXX (s)(d)	334,848
KC1XX	326,774
K1LT	314,928
NØNI (s)(r)(d)	314,500
K1TTT (s)	287,430
N7GP (s)(r)(d)	286,546
N5TW (s)(d)	279,720

*Records set in: t=Top Ten; s=Section; r=Region; d=Division

Affiliated Club Competition

	Score	Entries
Unlimited Category		
Minnesota Wireless Assn	2,829,616	57
Medium Category		
Society of Midwest Contesters	3,838,731	46
Frankford Radio Club	3,309,992	40
Potomac Valley Radio Club	3,290,526	46
Yankee Clipper Contest Club	1,969,560	31
Mad River Radio Club	1,703,212	15
Tennessee Contest Group	1,170,493	19
Contest Club Ontario	1,108,869	20
Northern California Contest	1,081,966	35
Hudson Valley Contesters	848,737	8
North Texas Contest Club	844,477	8
Central Texas DX and Contest	843,890	6
Florida Contest Group	773,231	14
South East Contest Club	509,634	15
North Coast Contesters	462,784	5
Grand Mesa Contesters	451,699	6
Kentucky Contest Group	408,611	6
Willamette Valley DX Club	382,158	6
Spokane DX Association	363,530	5
Rochester (NY) DX Assn	310,142	8
Western New York DX Assn	304,746	7
Carolina DX Assn	279,578	5
Western Washington DX Club	247,540	11
Oklahoma DX Assn	226,366	3
Central Arizona DX Assn	179,375	4
Order of Boiled Owls of New	174,102	3
Southern California Contest	148,386	8
Mother Lode DX/Contest Club	121,310	5
Green River Valley ARS	103,142	3
BC DX Club	98,516	4
Alberta Clippers	77,402	3
West Park Radiops	65,457	5
Bergen ARA	29,002	3
Local Category		
Medina 2 Meter Group	339,471	4
CT RI Contest Group	257,981	5
Redmond Top Key Contest Club	138,555	3
Sterling Park ARC	111,877	3
Montgomery (MD) ARC	42,105	3

Non-US/VE DX

Every year, DX plays a significant role in the outcome of this contest. By encouraging DX to participate, a significant wild card is introduced that makes this contest an interesting game of location, strategy,

Non-W/VE Top Scores

Single Operator QRP			
YO4AAC	18	3	3
JH4UYB	8	2	2
Single Operator Low			
CU2JU	10,580	115	46
UA0FLZ	3,120	66	24
JE1SPY	2,184	55	21
JO7KMB	870	29	15
JH7XMO	768	25	16
Single Operator High			
9Y4/DL6FBL	25,842	221	59
PJ2DX (W0CG, op)	23,142	204	57
SO2R (SP2FAX, op)	18,860	207	46
OM3GI	8,880	116	40
HA5JI	8,424	123	36
Multioperator			
JA3YBK	3,976	72	28
YZ7A	2,700	50	27

and brute force effort. A special editorial about the inclusion of DX in scoring the ARRL 160 Meter Contest can be found in the Web page extended coverage area under results.

A special thanks to all the DX that handed out the few precious Qs that make the ARRL 160 Meter Contest so entertaining.

All the fifty years of conscious brooding have brought me no closer to the answer to the question: What are light quanta? Of course today every rascal thinks he knows the answer, but he is deluding himself.—Albert Einstein

Regional Competition

Without a close examination of the

Regional Competition, the ARRL 160M would be nothing short of frustrating. If you measure winners and losers by the single top score, this year there was one winner and 960 losers. The Regional perspective illustrates some spectacular performances.

In the **Northeast**, VY2PX challenged the SOLP category and decimated W3GH's 2001 record by an amazing 53%. W2GD's multioperator effort narrowly missed a record by 0.59%, leaving KC1XX's 2002 record enshrined—two more radials may have done the trick!

In the **Southeast**, K4CNW managed to improve the SOLP SE record by over 2%.

The **Central** Region enjoyed 3 new records this year. K8FH managed to edge out KG4BIG's 2001 SOLP score by nearly 6%. K9DX continues to improve his SOHP score for the third year in a row—in 2002 John improved the SOHP score by 7.7%, in 2003 by 18.7%, and this year by 36.4%! That's a three year growth of 62%! Check out the K9DX sidebar article on the Web. In the multioperator arena, the Canadians are showing their Topband prowess. VE3EJ improved K8XXX's score by 29%.

The Region near-and-dear to my heart, **Midwest**, enjoyed two new record performances. K5NA is the proud winner of the SOHP category this year, and finally retired the record by N5JA from back in 1997. Richard also managed the first ever

Regional Results

*Records set in: t=Top Ten; s=Section; r=Region; d=Division

Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)				Southeast Region (Delta, Roanoke and Southeastern Divisions)				Central Region (Central and Great Lakes Divisions; Ontario Section)				Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)				West Coast Region (Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)								
W3TS	51,794	445	58	A	WA4PGM (s)	76,800	597	64	A	N9NE (s)(d)	51,612	393	66	A	W0CH (d)	25,810	224	58	A	N7IR	65,325	433	75	A
KR2Q (s)(d)	22,704	259	44	A	N4ROA	39,872	197	56	A	WA8VNE	46,548	435	54	A	N2AWE	19,136	193	52	A	(s)(r)(d)				
K3TW	19,215	216	45	A	W4TMR	37,224	276	66	A	VE3MGY (d)	37,908	364	52	A	WU0L	12,584	149	44	A	VE7VV (s)	21,267	208	51	A
KB2EBL	16,277	204	41	A	K4UK	25,857	257	51	A	W8VE	29,172	296	51	A	W5ESE	8,800	116	40	A	N6WG (s)	18,040	228	40	A
KA1LMR (s)	14,260	163	46	A	K4ORD	24,304	250	49	A	KM4CH (s)	17,160	205	44	A	WA8ZBT	8,400	123	35	A	W7RAB	16,910	222	38	A
																				(KH7YD, op)				
																				W6YJ	14,504	149	49	A
VY2PX	309,514	921	118	B	K4CNW	155,430	839	90	B	K8FH	166,000	1037	80	B	N0FP (s)(d)	155,844	967	81	B	K8IA (s)	84,162	535	78	B
(K1PX, op)	(t)(s)(r)(d)				(s)(r)(d)					(s)(r)(d)					N0IM	151,200	900	84	B	N6RK (s)(d)	81,104	528	74	B
W2LC (s)	154,812	920	84	B	WJ9B (s)(d)	121,604	694	86	B	K9OT (s)(d)	155,800	947	82	B	W0UO (s)	142,843	857	83	B	W6JTI (s)	77,578	481	79	B
W3TDF (s)	126,765	772	81	B	W4SAA (s)	120,669	669	87	B	K9WJU	141,015	895	79	B	KS0T	129,440	811	80	B	KJ7WY	70,984	489	76	B
N3GJ	105,875	681	77	B	AF4OX	115,200	717	80	B	(W9CG, op)	(s)(d)				N0PB	114,629	728	79	B	NT6K	66,172	454	71	B
WA1LNP	97,440	693	70	B	W4AA	108,563	569	91	B	K8BL	122,980	700	86	B						W7TMT	66,172	471	71	B
										K9MMS	119,730	768	78	B										
AA1K	386,988	1496	119	C	K5GO (s)(d)	375,951	1516	113	C	K9DX	508,804	1742	131	C	K5NA	336,966	1367	113	C	WA7LT	162,282	903	86	C
N1EU	257,880	1176	105	C	W4MYA	355,110	1453	114	C	(s)(r)(d)				(s)(r)(d)					(s)(d)					
WE3C (s)	252,553	1073	109	C	(a)(d)					W5MX (s)	309,978	1448	102	C	K5RX (s)	314,356	1321	109	C	K7OX	158,088	897	84	C
W2RE	238,610	1067	107	C	K4OAX	219,856	1184	91	C	N8EA	219,899	1101	97	C	K5BG	235,320	989	106	C	K67H (s)	132,053	790	83	C
W3BGN	220,100	1056	100	C	N4XD	215,250	973	105	C	W8MJ	207,334	1248	83	C	K0RF (s)(d)	202,475	1046	91	C	K6SE (s)	123,732	701	84	C
					K2UOP	174,064	964	88	C	W9IU	204,210	1118	90	C	K2BA	184,986	1068	86	C	K7BG (s)	113,560	639	85	C
W2GD	403,352	1392	127	D	W0UCE	271,352	1214	107	D	VE3EJ	408,516	1591	118	D	N0NI	314,500	1517	100	D	N7GP	286,546	1232	107	D
(s)(d)					(s)(d)					(t)(s)(r)(d)				(s)(r)(d)					(s)(r)(d)					
N02R	343,625	1223	125	D	W05SR (s)(d)	259,184	1272	97	D	K9FO (s)(d)	382,220	1538	116	D	N5TW (s)(d)	279,720	1179	108	D	K7TJR (s)(d)	145,684	769	86	D
KC1XX	326,774	1245	119	D	N4DD (s)	188,858	1053	89	D	K8XXX	334,848	1487	109	D	K0LIR (s)	192,465	1044	91	D	W76G (s)	95,680	587	80	D
K1TTT (s)	287,430	1242	110	D	AA4V	168,810	780	102	D	(s)(d)				W0GG	175,330	973	89	D	W6AW	78,120	548	72	D	
K3WW (s)	255,411	1079	111	D	N4RV	142,176	707	96	D	KILT	314,928	1398	108	D	W4YOK	151,962	861	86	D	VE6AO (s)	63,432	443	72	D
										(K8ND, op)														
										W0AIH (s)	234,174	1234	93	D										

Division Leaders

Single Operator QRP

Atlantic	W3TS	51,794
Central	N9NE (s)(d)	51,612
Dakota	AG0T (s)	7,560
Delta	KW4JS (s)	19,272
Great Lakes	WA8VNE	46,548
Hudson	KR2Q (s)(d)	22,704
Midwest	W0CH (d)	25,810
New England	KA1LMR	14,260
Northwestern	W7RAB (KH7YD, op)	16,910
Pacific	N6WG (s)(d)	18,040
Roanoke	WA4PGM (s)	76,800
Rocky Mountain	WU0L	12,584
Southeastern	W4RYW	7,783
Southwestern	N7IR (s)(r)(d)	65,325
West Gulf	W5ESE	8,800
Canada	VE3MGY (d)	37,908

Single Operator Low Power

Atlantic	W2LC (s)	154,812
Central	K9OT (s)(d)	155,800
Dakota	N0FP (s)(d)	155,844
Delta	W04O	92,340
Great Lakes	K8FH (s)(r)(d)	166,000
Hudson	W2GDJ (s)	71,784
Midwest	N0PB	114,629
New England	WA1LNP	97,440
Northwestern	W7TMT (d)	66,172
Pacific	N6RK (s)(d)	81,104
Roanoke	K4CNW (s)(r)(d)	155,430
Rocky Mountain	W0ETT	62,472
Southeastern	WJ9B (s)(d)	121,604
Southwestern	K8IA (s)	84,162
West Gulf	W0UO (s)	142,843
Canada	VY2PX	309,514
	(K1PX, op) (s)(r)(t)(d)	

Single Operator High Power

Atlantic	AA1K	386,988
Central	K9DX (s)(r)(d)	508,804
Dakota	K0SR (s)(d)	183,036
Delta	K5GO (s)(d)	375,951
Great Lakes	W5MX	309,972
Hudson	N1EU	257,880
Midwest	N0TT	149,100
New England	W1ECT	178,030
Northwestern	WA7LT (s)(d)	162,282
Pacific	K6XX (s)	112,728
Roanoke	W4MYA (s)(d)	355,110
Rocky Mountain	K0RF (s)(d)	202,475
Southeastern	WX4G (s)	112,840
Southwestern	K6SE (s)	123,732
West Gulf	K5NA (s)(r)(d)	336,966
Canada	VE3PN	140,160

Multioperator

Atlantic	W2GD (s)(d)	403,352
Central	K9FO (s)(d)	382,220
Dakota	K0KX	135,903
Delta	WD5R (s)(d)	259,184
Great Lakes	K8XXX (s)(d)	334,848
Hudson	N02R	343,625
Midwest	N0NI (s)(r)(d)	314,500
New England	KC1XX	326,774
Northwestern	K7TJR (s)(d)	145,684
Pacific	WT6G (s)	95,680
Roanoke	W0UCE (s)(d)	271,352
Rocky Mountain	W0GG	175,330
Southeastern	N4XMX	25,137
Southwestern	N7GP (s)(r)(d)	286,546
West Gulf	N5TW (s)(d)	279,720
Canada	VE3EJ (s)(r)(t)(d)	408,516

*Records set in: t=Top Ten; s=Section; r=Region; d=Division

recorded Sweep of all 80 sections. See the special sidebar interview with Richard on the Web. The multioperator team at N0NI just keeps on improving their scores. For the fifth consecutive year, N0NI has improved their totals to secure their spot in the archives for years to come.

The Midwest and Central Regions boast (tongue-in-cheek) of being the Black Hole. If scores dictated who should be allowed the label, then the **West** Coast Region would win hands down. In spite of the challenges out West, N7IR managed to improve his SOQRP top score for the

fifth time. N7GP managed to increase their multioperator score for the third year in a row.

Division Competition

For the first time, I'm including the Divisional Competition records for your consideration. There were 34 new Division records set this year. Space does not permit describing them all. Atlantic had 1, Canada 3, Central 4, Dakota 2, Delta 3, Great Lakes 3, Hudson 1, Midwest 2, Northwestern 3, Pacific 2, Roanoke 4, Rocky Mountain 1, Southeastern 1, Southwestern 2 and, finally, West Gulf had 2 new records. The complete detail is available on the Web at www.arrl.org/contests/results.

Club Competition

Another record! 38 clubs are credited with having submitted 571 logs. The previous record was 464 in 2002. That's a 23% increase! The only club sponsoring at least 50 logs (Unlimited Category) was the Minnesota Wireless Association with 57 logs. Although other clubs posted higher cumulative scores, the MWA is boasting a continuance of its proud tradition of increasing the number of logs submitted for the fourth year in a row. In 2001, only 24 logs were credited to the MWA. The effort to "win the gavel" paid off this year. Each year, the MWA is experiencing an increase in competitive effort by its members.

In the Medium category, the total score from the Society of Midwest Contesters' 46 logs edged out the totals from the Frankford Radio Club's 40 and the Potomac Valley Radio Club's 46. In the local category, the Medina 2 Meter Group used 4 logs to land the title.

2005 Competition

With old 'Sol' gasping for energy, 2005 promises to be another great year in the ARRL 160 M Contest. As we approach and even pass the solar minimum, expect the unexpected. If you take the time to examine the spreadsheet available on the Web, you will observe a large number of records that have remained intact since 1997 and 1998. 1997 plus 11 years equals 2008. As we approach the solar minimum, expect to see amazing scores tallied. Clubs need to help equip members to participate. Getting a few years experience on Topband is going to prove essential to landing the monster scores that will remain intact for decades to come. Be there the first full weekend in December.



Scores

Scores are listed by DXCC Countries and ARRL/RAC Sections. Within each Country or Section, scores are listed in descending order, Single Operators by power categories, followed by Multioperator. Line scores list call sign, score, QSOs, multipliers, Single or Multi Operator (A = QRP, B = Low Power, C = High Power, D = Multioperator).

Asia

Japan

JH4UYB	8	2	2	A
JE1SPY	2,184	55	21	B
JO7KMB	870	29	15	B
JH7XMO	768	25	16	B
JE1TSD	690	23	15	B
JH1GVY	494	19	13	B
JA0QNJ	7,548	115	34	C
JH7XGN	5,332	86	31	C
JA6GCE	3,600	73	25	C
JN1BMX	330	15	11	C
JA3YBK (JF4FUF, +packet)	3,976	72	28	D

Mongolia

JT1CO	2,814	68	21	C
-------	-------	----	----	---

Asiatic Russia

UA0FLZ	3,120	66	24	B
UA0DC	330	15	11	C

Oceania

South Cook Island

ZK1DRA	70	7	5	B
--------	----	---	---	---

Europe

Azores

CU2JU	10,580	115	46	B
-------	--------	-----	----	---

Fed. Rep. of Germany

DF2PY	4,662	63	37	C
DL7CX	1,218	31	21	C
DL1MGB	8	2	2	C

Balearic Islands

EA6BF	364	14	13	B
-------	-----	----	----	---

Belarus

EU6EU	32	4	4	C
-------	----	---	---	---

France

F8BPN	3,712	60	32	C
F5IN	360	15	12	C

England

M0SDX	3,906	70	31	C
M8C (G4DBL, op)	198	11	9	C

Hungary

HA5JI	8,424	123	36	C
-------	-------	-----	----	---

Switzerland

HB9CIP	240	15	10	C
--------	-----	----	----	---

Italy

I2PJA	2,072	40	28	C
-------	-------	----	----	---

Finland

OH2BO	144	9	9	C
-------	-----	---	---	---

Czech Republic

OL9S (OK1DOS, op)	936	28	18	C
-------------------	-----	----	----	---

Slovakia

OM3GI	8,880	116	40	C
-------	-------	-----	----	---

Belgium

ON4AEB	140	10	7	B
ON4WW	4,270	61	35	C

Netherlands

PA3AAV	2	1	1	B
PA5TT	50	5	5	C

Poland

SP2EXN	8	2	2	B
SO2R (SP2FAX, op)	18,860	207	46	C

European Russia

UA6LV	3,224	62	26	C
-------	-------	----	----	---

Ukraine

UU5J (UU0JL, op)	24	4	4	C
------------------	----	---	---	---

Romania

YO4AAC	18	3	3	A
--------	----	---	---	---

Serbia and Montenegro

YZ7A (YU7CM, YU7KC, 4N7ZZ, ops)	2,700	50	27	D
---------------------------------	-------	----	----	---

North America

St. Kitts & Nevis

V47ZM (K3ZM, op)	6,882	116	31	C
------------------	-------	-----	----	---

Montserrat

VP2MW (W6KK, N7CQQ, N9NS, N0FW, ops)	109,224	754	74	D
--------------------------------------	---------	-----	----	---

South America

Trinidad & Tobago

9Y4/DL6FBL	25,842	221	59	C
------------	--------	-----	----	---

Netherland Antilles

PJ2DX (W0CG, op)	23,142	204	57	C
------------------	--------	-----	----	---

Venezuela

YV5MBX	8,056	112	38	C
--------	-------	-----	----	---

1

Connecticut

W1AMF	9,792	144	34	A
K5GMX	7,000	125	28	A
N1TM	4,920	83	30	A
K1BV	30,037	305	49	B
W2JU	23,716	239	49	B
K1ZE	23,036	220	52	B
NX1Q	18,315	204	45	B
W1JQ	6,549	88	37	B
N4QX	1,080	31	18	B
NN1N	864	24	18	B
W1QK	115,868	686	83	C
W1WEF	11,609	116	47	C
NZ1U (KB1H, +packet)	138,849	718	93	D

Eastern Massachusetts

WV1K	12,906	120	54	A
W1TW	11,357	139	41	A

K1EP	61,318	497	62	B
K1NTR	41,080	397	52	B
N1DM	30,420	291	52	B
W1CCE	29,380	286	52	B
W1VIV	28,704	301	48	B
WG1Z	14,268	174	41	B
KV1J	9,204	118	39	B
W1OH	728	26	14	B
W6ZF	532	24	14	B
K5MA	148,520	767	94	C
K1DFT	41,904	273	72	C
K2LP	24,804	228	53	C
W1ZT	10,520	131	40	C
K1RV (+packet)	6,534	99	33	D

Maine

W1CEK	5,920	81	37	A
NY1S	83,421	603	69	B
N1CGP	34,216	331	52	B
K1PQS	43,035	373	57	C
K1JB	34,210	312	55	C
AC1O	27,948	281	51	C

New Hampshire

KA1LMR	14,260	163	46	A
KN1H	6,400	100	32	A
WA1LNP	97,440	693	70	B
K1TR	21,471	209	51	B
AC1J	4,582	79	29	B
W1ECT	178,030	892	95	C
NE1B	16,014	158	51	C
KC1XX (K1GQ, W1FV, WA1Z, KM3T, ops)	326,774	1245	119	D
K0TV (+N1IW, WO1N))	206,336	942	104	D

Rhode Island

W1VET	896	28	16	A
KS1J	63,756	481	66	B
N1HRA	16,544	176	47	B
K2MN	9,450	135	35	B
W1YRC	29,040	243	60	C

Vermont

K1KD	23,220	258	45	B
K1IB	16,684	197	43	B
W1ECH	11,565	132	45	B
W1SJ	174,760	1021	85	C
W1ZK	23,520	210	56	C

Western Massachusetts

W1BYH	61,479	450	69	B
N1RL	57,600	483	60	B
K5ZD	57,920	344	80	C
W1TO	50,719	369	67	C
W1CSM	12,336	118	48	C
K1TTT (+KB1W)	287,430	1242	110	D
W1QA (+NC1I)	135,648	672	96	D

2

Eastern New York

W2GDJ	71,784	501	72	B
K2UF	53,106	506	53	B
N2EK	49,989	438	57	B
N2LL	13,330	158	43	B
W2WO	12,374	140	46	B
K2TA	6,400	100	32	B
K2YR	5,800	100	29	B
WB2PUH	1,254	33	19	B
WB2BTJ	560	28	14	B
N1EU	257,880	1176	105	C
W2RE	238,610	1067	107	C
W2XL	150,771	852	87	C
K2SX	63,490	453	70	C

K2UG (WA2JQK, op)					
	54,173	394	71	C	
NA2M	49,700	347	70	C	
WT4Q	17,930	162	55	C	
N2BZP	7,600	108	38	C	
W2LK (+packet)	60,912	401	72	D	

NYC-Long Island

KA2D	20,188	202	49	B	
WA2YOW	2,652	51	26	B	
K2TV	2,400	50	25	B	
WB2TPS	2,352	50	24	B	
W2HLI	27,500	250	55	C	
KD2HE	1,056	33	16	C	
K2QMF	24,908	227	52	D	

Northern New Jersey

KR2Q	22,704	259	44	A	
KB2EBL	16,277	204	41	A	
K2JT	8,128	127	32	A	
W2JEK	6,090	105	29	A	
N2NC	37,819	320	59	B	
WB2AA	33,360	348	48	B	
K2YHL	14,784	173	44	B	
KA2BZS	13,865	150	47	B	
N2ZU	8,160	123	34	B	
N2NT	112,644	648	84	C	
N2ED	79,648	525	76	C	
N2LT	67,014	430	73	C	
K2DM	19,437	163	57	C	
K2AF	8,988	108	42	C	
W2VQ	7,992	110	37	C	
W2UDT	2,300	51	23	C	
NO2R (+K2NG)	343,625	1223	125	D	
W2RQ (+packet)	31,188	218	69	D	
AB2DE (+KC2AVE)					
	27,924	168	78	D	
N2WM (+packet)	25,773	169	71	D	

Northern New York

NS2P	11,440	145	40	B	
W2IB (+N4TW, W3TB)					
	158,240	986	80	D	

Southern New Jersey

N2CQ	4,672	74	32	A	
K1JT	31,440	261	60	B	
KD2E	18,300	187	50	B	
K2SZ	3,348	64	27	B	
AB2E	109,590	691	78	C	
WK2W	102,546	616	81	C	
W5KI	58,872	430	66	C	
W2GD (W1GD, K2SG, K2TW, KU2C, N2HM, N2NC N2OO, N2OO, N4HY, W2CG, W2GD)					
	403,352	1392	127	D	
N2VW (+packet)	27,000	226	60	D	
K2SB (+packet)	21,675	217	51	D	
N1RK (+packet)	20,116	214	47	D	
K2GN (+packet)	8,588	115	38	D	

Western New York

W2RBA	7,800	131	30	A	
W2LC	154,812	920	84	B	
K2ZR	78,514	532	74	B	
W2TZ	68,272	502	68	B	
WB2ABD	35,380	306	58	B	
K2CS	25,536	270	48	B	
W2KKZ	23,077	248	47	B	
K2YW	19,044	214	46	B	
WB2DVU	11,840	149	40	B	
KV2X	7,128	104	36	B	
WB2AIV	3,224	66	26	B	
N2OPW	3,132	62	29	B	
NA2X	2	1	1	B	
K2FU	157,383	891	87	C	
W2RU	91,360	547	80	C	
N2CU	84,925	535	79	C	
W2UB	60,582	438	69	C	
K2OS	59,906	383	77	C	
WB2HJV	27,417	241	57	C	
W2FU	12,005	118	49	C	

3

Delaware

NY3C	15,334	188	41	B	
AA1K	386,988	1496	119	C	
AB1P (+ AA1K)	1,160	31	20	D	

Eastern Pennsylvania

W3TS	51,794	445	58	A	
WA2GBF	3,900	78	25	A	
W3TDF	126,765	772	81	B	
NY3A	88,530	683	65	B	
K3NK	48,840	408	60	B	
K3SWZ	36,060	301	60	B	
N3ST	28,900	286	50	B	
AA3I	25,776	267	48	B	
WA3IIA	23,324	242	49	B	
K3UW	7,630	111	35	B	
W3CF	5,312	88	32	B	
W3DZH	3,640	71	26	B	
WE3C	252,553	1073	109	C	
W3BGN	220,100	1056	100	C	
KF3B	118,065	670	85	C	
K3ATO	87,046	616	71	C	
N3AD	79,948	497	79	C	
W3RJ	73,511	503	73	C	
K3SV	68,080	405	80	C	
K3OQF	46,784	378	64	C	
N3NR	40,321	327	61	C	
K4JLD	34,048	205	76	C	
W3AP	31,900	286	58	C	
K3QIA	24,380	233	53	C	
W3PT	20,634	180	57	C	
N3BNA	17,690	149	58	C	
K3MD	16,254	150	54	C	
AA3TL	3,600	80	25	C	
K3WWW (+packet)	255,411	1079	111	D	
NN3Q (+packet)	108,810	684	78	D	
W3FV (+packet)	67,268	499	67	D	
AA3B (+packet)	41,048	369	56	D	
W3MF (+packet)	40,440	329	60	D	
K3CP	23,108	219	53	D	
K3ND (+packet)	14,151	121	53	D	
N3ZA (+packet)	11,481	134	43	D	
N3MX (+packet)	9,823	107	47	D	

Maryland-DC

K3TW	19,215	216	45	A	
WB8YYY	14,160	182	40	A	
NG3K	8,772	131	34	A	
N3II	32,079	316	51	B	
K4MUT	27,825	263	53	B	
NS3T	12,792	157	41	B	
WA3KYY	5,508	104	27	B	
W3FAY	3,534	58	31	B	
K3STX	616	22	14	B	
K3ZO	112,428	683	81	C	
N3UM	109,590	685	78	C	
W3MC	80,734	533	74	C	
N3AM	71,514	619	58	C	
N3HUV	49,959	397	63	C	
N3OC	41,478	325	62	C	
W3HVQ	37,440	316	60	C	
W3MR	18,720	195	48	C	
K3DI (+packet)	152,504	851	88	D	
W3UL (+packet)	23,220	259	45	D	
4U1WB (AJ3M, op) (+packet)					
	2,496	51	26	D	

Western Pennsylvania

K3WWP	9,656	144	34	A	
N3GJ	105,875	681	77	B	
AD8J	50,820	429	60	B	
W3WH	22,848	230	51	B	
NA3V	20,256	214	48	B	
W3KWH (N3LL, op)					
	9,804	126	38	B	
W3AG	6,290	86	37	B	
N3LL	2,756	53	26	B	
W3BBO	2,600	50	26	B	
W3GH	198,656	1002	97	C	
W3SO (W3YOZ, op)					
	105,315	604	85	C	
W3WC	3,108	55	28	C	

4

Alabama

W4RYW	7,783	88	43	A	
KA9EKJ	91,168	611	77	B	
K4WI	76,272	439	84	B	
K4ZGB	49,715	418	61	B	
KE6QR	18,440	233	40	B	
N4AX	8,640	108	40	B	
AF4OD	39,516	270	74	C	
W4NTI	37,440	293	64	C	

Georgia

NA4BW	4,292	76	29	A	
KE2WB	3,968	65	31	A	
W4JKL	3,078	58	27	A	
K4AQ	2,640	55	24	A	
K4YJ	144	10	8	A	
W4ATL	66,232	487	68	B	
W4OWY	56,133	354	77	B	
N4WD	27,846	216	63	B	
AE4Y	18,216	199	46	B	
W0AG	15,364	168	46	B	
NK9R	3,968	64	31	B	
N5VI	2,968	53	28	B	
K4GA	2,400	49	25	B	
AA4LR	98	7	7	B	
K4BAI	66,263	490	67	C	
N4NX	58,302	364	79	C	
NQ4I	44,812	326	68	C	
AA4CF	36,924	269	68	C	
K4PIC	9,044	120	38	C	
N4XMX (+packet)	25,137	197	63	D	

Kentucky

KM4CH	17,160	205	44	A	
K4IE	17,658	163	54	B	
NZ4L	15,198	146	51	B	
KM4FO	9,424	126	38	B	
WA4JQS	4,332	57	38	B	
W5MX	309,978	1448	102	C	
N4GN	51,745	312	79	C	
N4KZ	23,940	187	63	C	
N4XM	2,646	51	27	C	

North Carolina

W4TMR	37,224	276	66	A	
K4GHS	7,350	107	35	A	
AE4EC	1,540	39	22	A	
N2NFG	72,336	545	66	B	
W4MY	68,655	498	69	B	
WA4DOU	57,164	455	62	B	
WB4MSG	30,528	291	53	B	
N4QVM	9,660	103	46	B	
WA4WPD	1,694	37	22	B	
K4WES	924	23	21	B	
K0PJG	768	24	16	B	
N4XD	215,250	973	105	C	
K4QPL	70,770	483	70	C	
N4AF	34,476	234	68	C	
N4UH	30,492	236	63	C	
K4PFK	20,648	172	58	C	
K4MA	2,700	42	30	C	
W0UCE (+N4CW)					
	271,352	1214	107	D	

Northern Florida

WJ9B	121,604	694	86	B	
W4AA	108,563	569	91	B	
KN4Y	44,722	387	59	B	
KR4OW	14,135	125	55	B	
N4EK	11,880	129	44	B	
W8IM	3,480	58	30	B	
WA8SUA	24	6	4	B	
K9OM	41,382	295	66	C	
KK4SI	40,992	225	84	C	
W7QF	40,182	255	74	C	
K4JAF	27,470	201	67	C	
W3TMZ	10,494	81	53	C	
W4VQ	9,360	90	48	C	

South Carolina

K4QO	9,555	125	39	A	
------	-------	-----	----	---	--

K4CNW	155,430	839	90	B
AF4OX	115,200	717	80	B
K4DLJ	68,226	399	83	B
WA2EMF	8,282	103	41	B
N2FY	54,549	285	87	C
N1ND	15,762	279	74	C
N4UFP	4,884	67	37	C
AA4V (+packet)	168,810	780	102	D

Southern Florida

W4SAA	120,669	669	87	B
N4CU	5,180	75	37	B
N4IS	66,100	286	100	C
K4PB	49,280	304	77	C
N8PR	24,242	181	62	C

Tennessee

KW4JS	19,272	227	44	A
WO4O	92,340	613	76	B
NY4N	61,442	500	62	B
N4TN	60,066	422	71	B
W4DAN	56,234	465	62	B
K3CQ	21,708	202	54	B
W4HZD	19,740	215	47	B
AB4GG	12,285	135	45	B
WA4OSD	11,610	136	43	B
W4TDB	7,828	106	38	B
WB3JKQ	7,760	108	40	B
K4BX	7,200	100	36	B
KM4H	3,904	61	32	B
K4BP	3,024	56	28	B
W4BCG	3,024	54	28	B
W6DSQ	3,007	47	31	B
NA4K	153,052	915	83	C
K1GU	143,820	825	85	C
N4IR	107,800	765	70	C
W4NZ	80,388	510	77	C
N4DW	67,360	410	80	C
N4ZZ	64,285	495	65	C
K4AMC	42,624	297	72	C
W2OO	30,132	242	62	C
AG4V	19,072	153	64	C
WA4GLH	9,888	105	48	C
W4OGG	3,584	64	28	C
N4DD (+N4UW)	188,858	1053	89	D
N4VV (+packet)	37,620	228	76	D
W6UB (+packet)	13,664	118	56	D

Virginia

WA4PGM	76,800	597	64	A
N4ROA	39,872	197	56	A
K4UK	25,857	257	51	A
K4ORD	24,304	250	49	A
K4VU	62,130	550	57	B
WB3BEL	57,897	456	63	B
K4RDU	32,385	318	51	B
W4YE	30,914	265	58	B
K3MT	28,763	299	49	B
K7CMZ	27,702	256	54	B
N4VA	26,796	225	58	B
AD4TJ	19,050	191	50	B
N3CKI	8,890	134	35	B
N4MM	8,720	109	40	B
NN3W	2,438	55	23	B
K4RT	390	30	13	B
KI4FDF	24	4	3	B
W4MYA	355,110	1453	114	C
K4OAQ	219,856	1184	91	C
WK4Y	159,375	929	85	C
K4EU	114,816	731	78	C
KM4M (W3BP, op)	73,231	549	67	C
K7CS	61,929	491	63	C
K1KO	48,896	383	64	C
N3JB	42,277	313	67	C
W2YE	35,340	277	62	C
W4AU	32,895	322	51	C
K4IA	31,350	281	57	C
N4DJ	19,451	180	53	C
N4UTY	14,608	171	44	C
N4RV (+packet)	142,176	707	96	D
N6ZO (+packet)	65,676	410	78	D

Virgin Islands

KV4FZ	75,044	527	73	B
-------	--------	-----	----	---

West Central Florida

W0PV	40,077	252	73	B
WD4AHZ	13,616	146	46	B
K1YPP	240	12	10	B
WX4G	112,840	490	104	C
N4AO (WC4E, op)	24,909	215	57	C

5

Arkansas

W5ZN	34,293	247	69	B
K5VR	28,424	212	68	B
W5RW	8,120	121	35	B
W5MK	7,030	97	37	B
K5GO	375,951	1516	113	C
WD5R (W5OOO, N5ECT, ops)	259,184	1272	97	D

Louisiana

W5WZ	7,920	107	40	A
KZ5D	23,373	188	63	C

Mississippi

W5UE	26,125	237	55	B
WD5BJT	1,343	38	17	B
N15F	52,762	350	74	C
W5THT	9,900	112	45	C
W5XX (+packet)	135,270	726	90	D

New Mexico

K7IA	33,768	253	67	B
N5UL	110,792	581	88	C
N6ZZ	47,742	327	73	C
W5GZ	8,652	107	42	C
W5AKU	3,392	53	32	C
K5AM (+packet)	14,484	109	68	D

North Texas

WA8ZBT	8,400	123	35	A
W0UO	142,843	857	83	B
W0VX	71,361	429	81	B
KB5NJ	62,561	427	73	B
K5SF	22,176	202	56	B
W5BL	18,666	183	51	B
AA5WH	7,490	107	35	B
K6JT	4,928	77	32	B
N0RQ	3,900	66	30	B
N5HSG	2,016	56	18	B
N5NJ	110	11	5	B
K5RX	314,356	1321	109	C
K5BG	235,320	989	106	C
N5TY	56,871	293	89	C
W5QM	9,898	98	49	C
WT5U	240	16	8	C
W4YOK (+W8FN)	151,962	861	86	D

Oklahoma

K5UV	31,122	250	63	B
K2BA	184,986	1068	86	C
N5DY	29,160	241	60	C
K5KA	10,258	111	46	C

South Texas

W5ESE	8,800	116	40	A
KI0G	3,333	53	33	A
N5ZE	168	14	6	A
K5LJ	45,006	276	78	B
W5TEN	21,840	195	56	B
AJ4F	11,376	120	48	B
K1TU	8,505	96	45	B
K5NA	336,966	1367	113	C
K5PTC (N1LN, op)	136,059	678	93	C
K5NZ	113,564	565	89	C
K5WA	98,900	506	92	C
NA4M	4,620	67	35	C
N5TW (+KE5C, K5PI)	279,720	1179	108	D
K5IUA (+WA5SNL)	105,830	533	95	D

AB5K (+K5FOG, WD0ACD)

	48,650	354	70	D
N5XJ (+packet)	10,120	115	44	D
KE5LQ (+packet)	598	23	13	D

West Texas

N5DO	51,333	362	71	B
W5AJ	1,440	30	24	B
NZ5M	360	18	10	B
W5JMW	61,722	375	81	C

6

East Bay

N6WG	18,040	228	40	A
AE6C	9,120	120	38	B
W4UAT	33,475	251	65	C
N6RO	30,492	229	66	C
KX7M	11,664	108	54	C
W6NV	10,290	107	49	C
K6XV	7,240	86	40	C
KG6WJF (KG6HM, KL7IDY, ops)	9,200	125	40	D

Los Angeles

W6WQC	9,216	128	36	B
W6JK	7,980	106	38	B
N6RV	7,667	100	41	B
KU6T	4,958	68	37	B
N5BF	960	31	16	B
K6SE	123,732	701	84	C
WA6BOB	10,890	126	45	C
N6AA	8,692	106	41	C
W6YRA (WA6AYI, KN6Y, KU6T, ops)	14,670	172	45	D

Orange

W6YJ	14,504	149	49	A
N6WK	9,944	115	44	B
AD6WL	8,008	95	44	B
KQ6ES	5,858	102	29	B
W6SJ	3,672	72	27	B
W6RTW	3,422	60	29	B
AD6FR	896	33	14	B
W6HG	7,992	118	36	C

Pacific

KH6ZM	81,836	430	82	C
NH6KB (N6KB, op)	42,600	292	71	C
KH6BK	2,160	47	24	C

Santa Barbara

K6YR	2,006	61	17	A
W6GL	2	1	1	A
WA6FGV	23,300	236	50	B
W6VM	16,432	158	52	B
W6UM	47,817	304	77	C
WA5VGI	33,858	252	66	C
W7CB	31,844	204	76	C

Santa Clara Valley

K6EI	7,888	136	29	A
N6NF	41,469	291	69	B
W6SC	4,200	70	30	B
K6EP	3,864	84	23	B
K2RDX	3,256	76	22	B
W6ZZZ	8	2	2	B
K6XX	112,728	621	84	C
K6RB	46,860	356	66	C
W6ISQ	26,650	196	65	C
K6II	5,800	100	29	C
W6ISO (+packet)	144	9	8	D

San Diego

AA6EE	7,182	93	38	B
K6NY	31,374	249	63	C

San Francisco

W6JTI	77,578	481	79	B
N6ZFO	44,367	316	69	B

K6RAD	8,382	130	33	B
K6OWL	4,750	98	25	B
KA6UMQ	4,176	72	29	B
WW6D	3,132	58	27	B
AA6DX	1,050	35	15	B
K6CTA	7,524	101	38	C
K6RIM	5,472	72	38	C

San Joaquin Valley

K6MI	448	17	14	A
K6VOA	18,216	207	44	B
N6IV	3,740	58	34	B
KI6PG	2,132	41	26	B
K6CSI	2,088	58	18	B
N5VWN	533	25	13	B
KA6BIM	85,873	531	79	C
K6YK	35,784	251	72	C

Sacramento Valley

N6DM	11,568	119	48	A
N6RK	81,104	528	74	B
NT6K	66,172	454	71	B
N6JV	19,768	178	56	B
K6DGW	14,514	177	41	B
W6NKR	3,306	61	29	B
AE6AY	2,944	64	23	B
W6EU	97,760	585	80	C
K6LRN	69,030	422	78	C
W6FA	22,736	198	58	C
KI6IV	17,040	228	40	C
KI6T	17,003	172	49	C
W6SR	15,162	130	57	C
K6TA	13,377	130	49	C
W6BEG	224	15	8	C
WT6G (+packet)	95,680	587	80	D
W6AW (+WB6RUU, WB6RVR, K6PW, K6SDW, WA9WA)	78,120	548	72	D
W6RKC (+packet)	25,620	211	61	D

7

Arizona

N7IR	65,325	433	75	A
K7BHM	1,088	32	17	A
K8IA	84,162	535	78	B
KJ7WY	70,984	489	76	B
AC7A	53,889	380	71	B
N7MAL	31,578	272	57	B
W7SW	25,606	218	59	B
W6RLL	12,000	124	50	B
W9NGA	103,976	560	82	C
W7YS	40,040	281	70	C
W7ZR	39,390	299	65	C
K7NU (WA2DFI, op)	28,800	243	60	C
W7GNP	2,728	52	31	C
N7GP (N5IA, W7MCO, N15L, NA5S, ops)	286,546	1232	107	D

Eastern Washington

K7QBO	40,260	307	66	B
W7WKR	26,100	216	60	B
K7AWB	11,300	119	50	B
WA7LT	162,282	903	86	C
K7OX	158,088	897	84	C
WA1PMA (+packet)	18,522	149	63	D

Idaho

WX7G	13,872	143	48	A
K7TQ	13,338	171	39	A
AI7H	23,870	220	55	B
W7QDM	18,870	187	51	B
K7ARJ	5,304	69	39	B
K3SHD	360	18	12	B
KG7H	132,053	790	83	C
K0TO	65,380	470	70	C

Montana

KK7UV	59,184	409	72	B
KB7Q	55,760	414	68	B
KS7T	33,418	275	62	B

KE7NO	26,180	246	55	B
K7BG	113,560	639	85	C
NW7MT (NW7O, WA7MT, ops)	7,955	98	43	D

Nevada

NU7T	4,416	102	23	A
K1NV	8,742	96	47	B
K7AO	107,952	644	78	C
WA7CWM	28,728	274	54	C
W6SA (+packet)	7,296	98	38	D

Oregon

W7YAQ	43,885	328	67	B
W3CP	38,016	302	64	B
AA7IH	9,176	125	37	B
N7VS	8,330	122	34	B
W7GG	108,924	583	87	C
K7RAT (N6TR, op)	79,926	485	77	C

W7AT (W7EW, op)

58,422	344	78	C	
KI7Y	37,319	272	67	C
K7TJR (+K7ZUM)	145,684	769	86	D

Utah

W7HS	18,560	145	64	B
K7OA	7,616	114	34	B
K7EA	5,888	95	32	B
KA7EII	1,886	41	23	B
WA7LNV	142,080	857	80	C

Western Washington

W7RAB (KH7YD, op)	16,910	222	38	A
KX7L	1,900	50	19	A
W7TMT	66,172	471	71	B
N9ADG	43,523	304	71	B
W7NNN	16,344	230	36	B
K7LAY	13,413	124	51	B
N0AX	11,868	130	46	B
WA7BOC	10,280	131	40	B
KJ7H	6,882	90	37	B
N7WA	5,952	96	32	B
WB7FJG	5,572	98	28	B
W7QN	4,316	85	26	B
K7II	2,408	43	28	B
W7IMP	408	17	12	B
N6MZ	140	10	7	B
W7QC	80,625	506	75	C
N7LOX	45,606	345	66	C
KB7N	42,090	309	69	C
W7VJ	38,912	307	64	C
K7UIR	28,362	247	58	C
N4SL	25,960	240	55	C
W9PL	15,840	165	48	C
N7BF	15,738	184	43	C
N7DM	1,176	29	21	C

Wyoming

AC7AF	2,162	47	23	A
KO7X	30,080	235	64	B

8

Michigan

WA8VNE	46,548	435	54	A
NF8M	2,912	58	26	A
K8BP	1,116	34	18	A
N8MR	67,963	465	73	B
NE8O	56,259	499	57	B
W8SJ	44,424	311	72	B
N8TC	37,675	347	55	B
K8VF	37,271	304	61	B
WB8RFB	37,236	325	58	B
W8DCQ	31,964	266	61	B
N8SS	29,916	274	54	B
K8GVK	23,950	240	50	B
K8GT	20,075	181	55	B
K8SIA	16,340	194	43	B
K8RS	14,847	155	49	B
W8RU	13,209	129	51	B

K8OT	12,240	159	40	B
K8KU	7,942	104	38	B
WB8TNN	3,132	58	27	B
W8ROS	2,632	47	28	B
N8XD	1,976	43	26	B
N8UZE	1,804	44	22	B
N8EA	219,899	1101	97	C
W8MJ	207,334	1248	83	C
W4FMS	146,454	957	77	C
N8LJ	84,084	539	78	C
K8MJZ	81,178	553	74	C
K8IR	58,236	425	69	C
K8ZZ	42,029	346	61	C
K8CC	32,192	244	64	C
K8XXX (N8CC, K8KS, NU8Z, K8AQM, ND5S, ops)	334,848	1487	109	D
K8BB (+packet)	48,440	347	70	D

Ohio

W8VE	29,172	296	51	A
NO8C	15,390	172	45	A
NX8A	12,384	138	43	A
NU8S	7,735	118	35	A
N8WS	704	25	16	A
K8FH	166,000	1037	80	B
K8BL	122,980	700	86	B
K8NVR	102,487	663	77	B
WA8YRS	89,815	635	71	B
W8DD	53,184	419	64	B
WB8JUI	36,521	309	59	B
N8IE	32,835	299	55	B
W8DHG	30,976	245	64	B
W8IDM	30,080	320	47	B
WB8RTJ	25,064	243	52	B
W8PN	21,995	208	53	B
W8EH	20,540	201	52	B
N8OH	18,308	202	46	B
K8TV	17,800	188	50	B
NS8O	15,453	152	51	B
K8KSN	13,986	129	54	B
K3DMG	11,524	135	43	B
K8AB	8,676	121	36	B
AF8C	4,002	69	29	B
N8GU	330	15	11	B
N8VW (K5ZG, op)	179,728	927	94	C
AD8P	153,972	801	94	C
N8AA	139,860	827	84	C
W8CAR	119,952	709	84	C
N8BJQ	109,055	627	85	C
K8MR	54,002	405	67	C
W8FAX	42,560	299	70	C
AE8M	40,535	302	67	C
N8XP	29,744	324	52	C
WA8TNO	16,172	156	52	C
K8BCK	15,900	128	60	C
K1LT (+K8ND)	314,928	1398	108	D
N8TR (+packet)	45,494	240	86	D
WC8VOA (W8CDA, W8FEJ, W8ND, ops)	3,016	62	29	D

West Virginia

K8OWL	7,560	108	35	A
N8IY	6,142	84	37	A
N8II	98,945	628	77	B
K8JQ	34,026	321	53	B
WA8SDA	17,072	194	44	B
AJ1M	5,022	85	31	B
K2UOP	174,064	964	88	C
K8OQL	99,600	659	75	C

9

Illinois

WA9GQT	13,630	145	47	A
K9COE	5,576	95	34	A
K9MMS	119,730	768	78	B
WA9AQN	72,065	512	71	B
WO9S	45,761	343	67	B
N9TF	33,280	264	64	B
K9OZ	31,320	273	58	B
K9IJ	26,397	209	63	B
K9WA	25,200	225	56	B
K9AB	23,265	207	55	B
K9CW	23,240	206	56	B

KK9DX	17,010	142	63	B
N9MSG	4,752	73	33	B
AF9R	4,224	68	32	B
NV8V	3,780	67	30	B
N9LYE	3,720	61	31	B
W9LYA	2,160	46	24	B
K9FH	2	1	1	B
K9DX	508,804	1742	131	C
AA9D	100,448	572	86	C
K9YC	72,633	515	71	C
WX9U	68,250	436	78	C
W9YYG	58,240	417	70	C
KG9N	21,041	202	53	C
N9GH	19,712	178	56	C
K9FO (+K9NR, WB9Z, AK9F, K9CS)	382,220	1538	116	D

W9OL (+packet)	48,552	358	68	D
N2BJ (+packet)	45,080	322	70	D
K9MOT (K9PW, N9EP, ops)	42,294	373	57	D
W9RM (+packet)	26,585	200	65	D
K9OR (+packet)	24,246	224	54	D
W9LYN (+packet)	10,050	101	50	D

Indiana

AD9T	12,054	154	41	A
K9WJU (W9CG, op)	141,015	895	79	B
K9BG	112,189	727	77	B
WB9CIF	91,840	571	80	B
KJ9C	82,840	546	76	B
WT9U	80,316	581	69	B
WD8DSB	45,543	398	57	B
WC9C	25,488	240	54	B
K9WX	25,288	219	58	B
W9DZ	24,530	223	55	B
K1TN	14,996	166	46	B
K9MI	14,532	184	42	B
N4TZ	3,450	54	30	B
KG9HG	2,236	43	26	B
W9IU	204,210	1118	90	C
W9RE	184,730	997	91	C
K9WWT	108,825	731	75	C
N9RV	65,520	398	80	C
KE9I (+AJ9C)	225,882	1174	94	D
K9IG (+packet)	72,300	480	75	D

Wisconsin

N9NE	51,612	393	66	A
AA9PB	16,512	176	48	A
K9OT	155,800	947	82	B
K0PJ	92,352	596	78	B
KB9S	53,868	407	67	B
K9MU	19,500	202	50	B
WE9V	17,010	156	54	B
KB9Q	11,250	132	45	B
N9TTX	7,000	100	35	B
KS9WI	3,422	60	29	B
WT9Q	189,458	1092	86	C
N9CK	117,502	754	77	C
N0IJ	91,773	564	81	C
WA9IRV	71,568	505	71	C
NE9U	19,800	199	50	C
W9XT	16,500	166	50	C
W9ERW	11,115	124	45	C
W0AIH (+K0TG)	234,174	1234	93	D
K9OSH (+packet)	4,860	82	30	D

Ø

Colorado

WU0L	12,584	149	44	A
N0TK	360	18	10	A
W0ETT	62,472	407	76	B
KT5E	58,400	406	73	B
CO8LY	18,048	198	48	B
WV0H	12,084	114	53	B
KB0YH	8,554	91	47	B
WA3COS	7,296	97	38	B
NO2D	1,470	40	21	B
K0AV	1,292	39	17	B
N1SZ	224	14	8	B
K0RF	202,475	1046	91	C
K8FC	168,452	881	92	C
K0UK	62,496	444	72	C

W0GG (+K7TD, K9BWI)	175,330	973	89	D
K0SX (+K0SX)	126,907	767	83	D

Iowa

N2AWE	19,136	193	52	A
N0SM	32,000	250	64	B
WT0D	28,560	286	51	B
K0SRL	20,160	210	48	B
KB0SK	14,570	160	47	B
KB0CRG	10,988	139	41	B
K0IO	8,448	98	44	C
N0NI (+N0AC)	314,500	1517	100	D
KE0FT (+K9G9IE)	58,806	454	66	D

Kansas

W0BH	88,560	620	72	B
K0WA	36,704	301	62	B
K0RY	21,670	198	55	B
KK0HF	19,530	220	45	B
K0BJ	13,356	126	53	B
KU0KU	96	8	6	B
WS4Y	113,406	682	82	C
W0UY	46,296	323	72	C
K0PY	25,992	232	57	C
N3PXF	19,620	232	45	C

Minnesota

WB0SOK	2,958	51	29	A
WB0TRA	952	34	14	A
N0FP	155,844	967	81	B
N0IM	151,200	900	84	B
KS0T	129,440	811	80	B
K0TT	112,320	699	80	B
N0AT	99,530	677	74	B
WR0DK	89,064	627	72	B
AC0W	88,800	594	75	B
N0UR	85,484	607	71	B
N0HJZ	75,740	544	70	B
W0OR	68,816	507	68	B
K0AD	57,439	408	71	B
WA2MNO	49,530	388	65	B
K0QC	40,535	312	67	B
WA0MHJ	31,744	258	62	B
K0MPH	31,696	286	56	B
W0PI	28,084	240	59	B
K0PC	27,594	221	63	B
W0ZQ	27,432	255	54	B
KN0V	26,565	241	55	B
K0SQ	24,360	215	58	B
K0JE	17,444	181	49	B
N0KK	16,328	158	52	B
K0JA	13,818	145	49	B
NG0R	9,984	128	39	B
K0KP	7,920	100	40	B
N0UV	7,918	112	37	B
N0EO (AA0AW, op)	7,560	109	35	B

KE0L	7,560	112	35	B
KB0NES	5,840	74	40	B
K0TK	5,120	81	32	B
K3WT	4,698	87	27	B
N0PFY	1,748	46	19	B
K0SV	1,332	37	18	B
K0OB	560	37	8	B
KC0REO	480	21	12	B
K0SR	183,036	1092	84	C
K0CAT (K9WIE, op)	138,105	847	81	C
W0HW	87,975	594	75	C
WB0HCH	84,804	587	74	C
KT0R	67,950	456	75	C
WA0RBW	61,104	459	67	C
K4IU	41,080	319	65	C
WG0M	30,927	257	61	C
W0GJ	27,456	211	66	C
K0HB	15,364	169	46	C
W0YC (K8GU, op)	4,950	75	33	C
K0VG	3,432	68	26	C
K0UH	3,016	54	29	C
K0KX (+packet)	135,903	744	89	D
N5IN (+packet)	7,920	99	40	D

Missouri

W0CH	25,810	224	58	A
------	--------	-----	----	---

N0OCT	3,944	68	29	A
N0PB	114,629	728	79	B
KC0M	22,848	211	56	B
WB0QLU	12,160	152	40	B
K0LWV	9,196	121	38	B
N0TT	149,100	886	84	C
K0JPL	95,858	578	82	C
W0TT	62,160	447	70	C
W0TY	13,916	145	49	C
K0LIR (W0IYY, N0IS, W0SLW, W0HBH, W0RL, K19A, ops)	192,465	1044	91	D
AB0RX (+packet)	21,276	200	54	D
KC0SUZ (+WE0G)	1,080	35	18	D

North Dakota

AG0T	7,560	105	36	A
W0CZ	308	14	11	A
N7IV	34,450	267	65	B
N0UD (WB0OAJ, op)	19,928	194	53	B
AI0Q	1,776	37	24	B
K0VX	43,608	316	69	C

Nebraska

WN0L	19,085	176	55	B
W0KT	11,096	149	38	B
KG0GY (+WD0EGK)	10,660	139	41	D

South Dakota

K0EWS	510	17	15	B
K7RE	160,640	1010	80	C
K0HW	33,924	262	66	C

Maritime-Newfoundland

VY2PX (K1PX, op)	309,514	921	118	B
VE1RGB	25,758	240	53	B
VE1AI	28,200	231	60	C
VE1KB	5,696	89	32	C

Newfoundland-Labrador

VO1HP	5,967	72	39	B
VO1AU	52,744	303	76	C

Quebec

VE2UJ	37,800	349	54	B
VE2DSK	1,360	36	20	B
VE2RA	62,530	486	65	C
VE2OJ (VE3EDR, VE3NJ, VE3OP, VE3ZY, VE3XL, ops)	165,060	976	84	D

Ontario

VE3MGY	37,908	364	52	A
VE3OIL	7,918	112	37	A
VE3KP	89,692	661	68	B
VE3OSZ	88,425	584	75	B
VE3SPW	70,620	532	66	B
VE3DZ	60,390	455	66	B
VA3NR	57,120	474	60	B
VE3NZ	44,408	398	56	B
VE3RCN	26,112	273	48	B
VE3RER	24,860	228	55	B
VE3WG	20,304	216	48	B
VA3EC	15,480	173	45	B
VE3XD	15,124	199	38	B
VE3CRU	13,416	172	39	B
VA3IX	11,680	158	40	B
VE3GLO	10,730	147	37	B
VA3TJP	10,296	143	36	B
VE3HG	9,398	130	37	B
VE3JM	8,736	113	39	B
VE3XAT	3,780	67	30	B
VA3XRZ	2,244	52	22	B
VE3PN	140,160	683	96	C
VE3KZ	53,064	397	67	C
VE3FU	1,460	35	20	C
VE3EJ (+K8PO)	408,516	1591	118	D

Manitoba

VE4VV	20,720	187	56	B
VE4JB	20,540	197	52	B

Saskatchewan

VE5ZX	36,180	279	67	B
VE5SF	11,186	124	47	B
VE5QRP	1,520	45	19	B
VA5DX	138,080	864	80	C

Alberta

VE6EX	63,350	458	70	B
VE6BF	17,712	164	54	B

VE6TN	10,980	125	45	B
VE6GJ	3,072	65	24	B
VE6AO (VE6KC, VE6EPK, VE6GJ, ops)	63,432	443	72	D

British Columbia

VE7VV	21,267	208	51	A
VA7ST	28,396	229	62	B
VE7ALN	26,780	207	65	B
VE7WU	17,875	163	55	B

VE7NS	15,984	148	54	B
VE7CA	13,580	198	35	B
VE7NH	6,698	98	34	B
VA7MM	2,000	50	20	B
VA7LC	1,760	44	20	B
VE7UF	73,644	485	76	C
VA7DX	48,300	356	69	C
VE7ZBK	35,904	276	64	C
VE7JKZ	19,866	231	42	C
VA7CAB	384	25	8	C
VE7FO (+packet)	7,128	99	36	D