

# Results, 1990 ARRL 10-Meter Contest

Wide-open band conditions and enthusiastic operators made for worldwide success at the top of the HF spectrum.

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Contest Manager Assistant Contest Manager

The 10-Meter Contest is a most enjoyable contest. When the band is open, it doesn't take a powerhouse station to have fun on the band—and boy, was the band open! The winning single ops made well over 3000 QSOs. Even the top QRPer made almost 1000 QSOs. At the green flag (0000Z) in most of North America, especially the southern and central regions, the band was open to Japan and North America, with a few Oceania stations being logged. Ken, WB2AMU, says, "The skip to Japan Saturday evening was monstrous and lasted more than two hours. The best I've heard in any 10-meter contest." Bob, NS6V, reports, "The band closed earlier than last year, but it was jumping when it was open!" Steven,

KA9SCG, found, "Propagation was great, especially to the west and south."

To see how things are progressing with the contest overall, the Contest Branch decided to compare a few notes with the 1979 10-Meter Contest. Looking back one sunspot cycle, the first thing noticed is the dramatic evolution the contest has gone through over the past 11 years. It's gone from a mere two entry categories to the present ten categories. The Canadian multipliers have changed from call areas to provinces. In today's contest, multipliers can be worked on both modes, as opposed

to only one in 1979. Participation has increased by more than 300 entries, with about 250 of the newcomers being DX stations. The number of Novices and Technicians participating in the contest nearly doubled, with 101 in 1990 and only 56 in 1979. Scores have dramatically increased over the past 11 years—sixfold for DX stations and almost triple for W/VEs. The winning score in 1979 barely topped 900k; this year's winning mixed-mode score (KP2A) was more than three million points. It will be interesting to see what the next 11 years brings when we reach the peak of the next sunspot cycle.

This year was the first year for the new power classes (high power, low power and

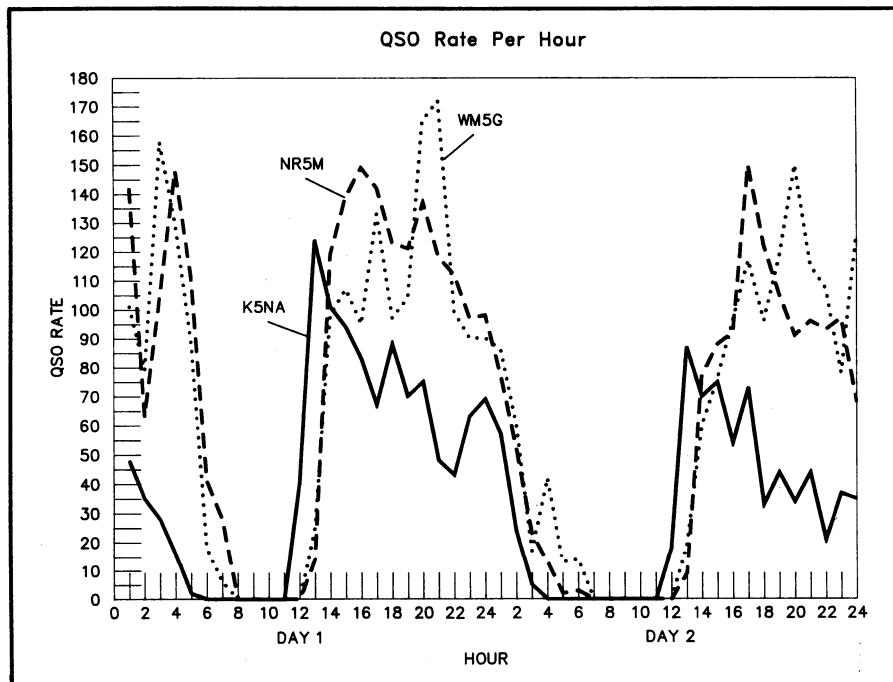
## Percentage of Entries by Category

	QRP	Low Power	High Power	All
Mixed Mode	0.8	8.0	12.7	21.5
Phone Only	1.7	14.3	20.3	36.3
CW Only	3.4	12.2	15.6	31.2
Multioperator	—	—	—	11.0

## Top Ten Multioperator

	W/VE	DX
AA5B	2,591,058	4U1UN
W7XR	2,216,160	LR5T
W0AIH/9	2,024,224	IJ4R
KW8N	2,006,950	6D2X
W5WMU	1,872,996	PA3EPN
N4ZC	1,837,056	PI4COM
N8CXX	1,753,380	G0KPKW
KL7RA	1,701,082	LZ1KOZ
KR9U	1,593,344	VS6WO
AA8U	1,584,838	GW8GT

Jon, NL7GP, broke the 3-million-point barrier operating Mixed Mode from KP2A.



## Division Leaders

Division	Mixed Mode	Phone	CW	Multioperator
Atlantic	NW3B	WS2W	K2MK	KD2I
Central	W9RE	KS9K	AG9A	W0AIH/9
Dakota	KA3DRR	AC0W	WB0HCH	KR0B
Delta	KG5RM	WB4PUD	N4ZZ	W5WMU
Great Lakes	NM8X	K8CC	N4AR	KW8N
Hudson	N1CC	WB2EAR	K5NA	K2XR
Midwest	W00G	K9HOF	WB0RTK	NC0P
New England	K1IU	K1NG	K1DG	KX1G
Northwestern	WL7E	(KI1G,op)	(KD2SX,op)	
Pacific	W1FEA	N7L	K7QQ	W7XR
Rocky Mountain	N0TK	K3EST	NF6S	NF7P
Roanoke	AA4NC	K6CS	AC0S	AAB5
Southeastern	N4RJ	W4PRO	N8DGV	N4ZC
Southwestern	K6LL	(WB8HDD,op)		
West Gulf	WM5G (KR0Y,op)	NR5M	K5NW	N5NMX
Canada	VE5UF	VE7SZ	VE3KP	VE3XO

QRP) in the single-operator categories (mixed mode, phone only and CW only). These new categories were well liked, adding to the overall popularity of the contest. They give people with small or moderate stations a place to compete on an equal basis with their peers. The favorite entry category was high power, phone only, accounting for 20.3% of the entries. The second most popular was high power, CW only, with 15.6% of the entries, followed by low power, phone only, with 14.3%. The accompanying chart shows the percent of entries in each category. There were 1920 entries in the 1990 10-Meter Contest (W/VE—1075; DX—725; checklogs—120). Whatever your interests or abilities, the 10-Meter Contest now has a category in which you can be competitive.

Ever wonder how the "Big Guns" rack up such big scores? We plotted a graph showing QSO rates per hour for WM5G (KR0Y,op), NR5M and K5NA, the top mixed mode, phone only, and CW only operators, respectively. If you believe in the old maxim, "rate is everything," the graph should be useful in providing clues that could improve your performance. You be the judge and determine the usefulness of the graph. It should be helpful in determin-

next few years as we move away from the sunspot peak, but we'll still see a few years of decent conditions before the band is flat.

The 1990 10-Meter Contest (and the new entry categories) provided a bevy of new winners. There are winners in the top ten boxes that have never been there before. The list has grown to such proportions that there are too many to mention here; check the boxes for the winners. We applaud them all!

Many operators mentioned in the soapbox comments that they can hardly wait until this year's contest. Mark your calendar and use the warm summer months to get ready for the ARRL 10-Meter Contest on the weekend of December 14-15, 1991. Special thanks to Tammy-Beth Zimmerman, KA1WWP, for her help in preparing the results.

## SOAPBOX

I enjoyed the contest. There was a short opening to NA and EU, but not a lot like last year. I worked nearly 500 stations. I like 10 meters! (JE7DOT). There were good conditions into Europe, but, conditions were poor elsewhere. Next year I'll run high power (JAIXDA). I enjoyed the contest, although I couldn't operate for long (JA1ASO). I wanted to operate more, but I had appointments during the contest (JA0ZRY). Our antenna was broken by a typhoon a week before the contest, but, we made another one (JA1YXP). The

## Continental Leaders

Continent	Mixed Mode	Phone	CW	Multioperator
Africa	TU2UI	CT3M (CT3BX,op)	JF1SEK	JK3GAD
Asia	JR3NZC	F6CCT	F2CW	VS6WO
Europe	HA0DU	VP2EXX	HI8A	I4JR
North America	KP2A (NL7GP,op)			4U1UN
Oceania	AH3C	VK2GAH	N7DF/KH2	ZL0AAA
South America	PP8WHL	HK3JJH	LU1EWL	LR5T

ing band openings and expected rates for your effort next year or for analyzing your 1990 results. Band conditions should diminish over the

contest was great. The conditions were fantastic. I'm looking forward to next year's contest, although I'm sure it won't be nearly as exciting as this year because I'll be back at my home QTH (VE2UJE/DA2PL). My home-built linear amplifier broke Sunday morning, but 100 W into a beam works just as well (DL7MG). This year I took part only with a small station from my home, but it's a pleasure to work a lot of DX even with 100 watts and a vertical antenna! (DL4AAE). I hope I can spend more time on the next contest. The conditions were good, but they were somewhat down from last year. There were fewer country multipliers and fewer bits of spicy DX. My friend for life, WA0ZY, gave me North Dakota for the last state just before the band closed! (G3SXW). Most European stations had an echo on them for the whole weekend. I had to contend with blizzard conditions outside and the power going off and then dipping to 180 volts! (G4BK1). I enjoyed the contest. I was unable to erect my new monobander, but my tribander seems to work well on 10 meters (G4BUO). The contest was tremendous fun and was a real test for me. I can't wait for next year (GX4RFR). This was my first contest. It was great fun, and maybe next year I'll have a computer and a linear amplifier to assist me (GM0JKF). It was interesting and pleasant (V3FSG). Propagation was reasonable. I had a lot of fun (OK1RI). Conditions were super. I didn't have much time to operate, so I just looked for new countries on 10. I worked four new ones! I'll see you again next year (OZ6PI). I enjoyed it. It's a pity that conditions weren't a little better, but that's one thing we can't control (OZ2ACL). This was a fine contest, but with 30-50 watts and a vertical antenna, the QRM was tough (OZ4VW). I worked with 80 watts into a 6-element monoband Yagi, and believe me, it was big fun. I'll be there next time (PA2REH). I lost more than one hour of good propagation because I went for a walk with my wife and children (UT4UZ). It was marvelous excitement from morning until night. I felt like Alice in Wonderland on the "10-meter Wonderband". I found that switching from sideband to CW and back drastically improves my operating skill (UC2AB). I enjoyed the contest, but I was busy on Sunday (YO9HP). It was a nice contest. There were a lot of stations, but I didn't have enough time to work them all (YU2CAH). It sure was a challenge working with 25 watts and a 57-branch vertical in a Navy barracks (VP9/KX5H). It was a fun contest, except for the time when the island lost its electricity for more than two hours! Can you imagine turning the power off at a time like that? (VP5JM). Conditions seemed pretty good. After the CQWW, though, I was surprised to hear any Africans (AA6RX/XE1). I had to limit my participation, as my in-laws from Panama had just arrived in time for the contest. Conditions seemed to be fairly good, although the previous week, we'd seen tremendous signals out of Europe well into the night (DU1/KG6UH). Conditions were good and there was a lot of activity (AY9F). This little pistol's score doubled compared to last year's score. I hope I do even better next year! (KA1MXZ). I had a lot of fun. My rig failed nine hours into the contest, though (N1CCO). Where were all the VEs? This is my first year as a ham and my first serious try at contesting. I wish I had more time on the radio! (KA1WAU). I had fun and I'll see you next year (W1CNU). I wish I didn't have so many term reports to read at this time of the semester—imagine what my score would have been had I operated the allowed 48 hours. Oh, well, there's always next year (K2AJY). It's hard to believe that last year as a Novice I was too terrified to enter this contest. I had such a great time this year! (NX1T). It never ceases to amaze me how many nice people there are in this hobby (WN1G). I was only able to operate for six and a half hours. I was able to average 71 QSOs per hour, though. There were nice conditions on Sunday (K1PLX). I had a good time participating in my first 10-meter contest. It brought back memories of when I was a Novice and I was more active in contesting. The band conditions were interesting: On one day it seemed that all I worked were US stations and then the next day all I worked

## Top Ten W/VE, Mixed-Mode

High Power	Low Power	QRP
WM5G (KR0Y,op)	KG4W	AA2U
W00G	AA4JN	593,880
W9RE	K1YRP	327,762
NW3B	KA3DRR	618,400
K6LL	K6JCW	605,052
K3ZO	N7LOX	583,200
WL7E	KB9MP	550,130
AA4NC	N0ILS	541,178
VE5UF	WA1IJU	518,702
W1FEA	N7NKG	513,342
		504,348

## Top Ten W/VE, Phone Only

High Power	Low Power	QRP
NR5M	KY5N	WA0VBW
K1NG (KI1G,op)	N1FJL/T	86,030
K4XS	VE7ZR	86,108
K3EST	NY1E	296,200
N6NV	AC0W	291,328
KS9K (WE9V,op)	K6SVL	263,032
WB1GQR (WB2JSJ,op)	WA6FGV	239,000
N1GLG	WD9DSD	221,958
ND1X	WA5IYX	198,848
NN7L	WA2EOV	198,220
		191,436

## Top Ten W/VE, CW Only

High Power	Low Power	QRP
K5NA	937,040	N4ZZ
N4AR	926,640	WC4E
K1DG (KD2SX,op)	922,944	WD4AHZ
N2AZA	885,984	NJ5N
K1XA	850,000	KV8Q
NX1H	826,672	K1EBY
KV1E	698,640	K3TEJ
K7QQ	678,528	NC5O
K5NW	677,040	WB8RTK
N4BP	675,920	KC7V
		742,896
		589,908
		415,296
		354,712
		346,304
		330,400
		288,052
		285,600
		276,252
		271,104
		KB9S
		K7GS
		WA2TVU
		AK5E
		W2NZH
		AA4W
		AA5KK
		W8WVU
		WA8RPI
		W5TTE
		145,604
		120,000
		115,128
		95,748
		79,424
		70,390
		57,792
		56,160
		53,572
		49,504



## Top Ten DX, Mixed Mode

High Power	Low Power	QRP
KP2A (NL7GP,op)	3,503,478	JR3NZC
AH3C	2,188,680	3W4DX
HA0DU	1,548,708	4Z4DX
KG6DX	1,524,384	JH8PNE
4U1ITU	1,520,038	HA8EK
OK1RI	1,307,552	HATTM
OL9A	1,050,450	JE7WBI/1
F6EEM	1,022,250	UC2AB
TM5M (F1JTL,op)	817,890	SP3RNZ
OM2PAY	778,532	HB9DFY
		847,728
		703,542
		675,352
		652,960
		417,944
		392,372
		317,370
		257,488
		243,788
		236,825
		JL3MCM
		UT3UA
		RO4OW
		JA3TOT
		Y05BEU
		UZ0XWA
		Y05QBR
		162,426
		125,008
		59,136
		22,736
		15,836
		5,460
		2,490

## Top Ten DX, Phone Only

High Power	Low Power	QRP
F6CTT	785,280	VP2EXX
OT4AMT (ON4AMT,op)	783,216	OT4AAQ (ON4AAQ,op)
CT3M (CT3BX,op)	738,990	773,136
GW4BLE	734,760	JF1SEK
HK3JJH	718,074	JA1SGX
FF6KRC (F6GYT,op)	631,368	JA8QNJ
DL8PC	607,392	CU3LF
YU3HR	577,576	4N2Y
FX1L (F1LBL,op)	557,664	FR5DX
GM0ECO	546,532	FD1LFY
		1,291,800
		370,656
		362,880
		311,454
		247,710
		247,392
		190,400
		187,688
		169,470
		FB0X (FB1MUX,op)
		JA1XDA
		4M1G
		JA2JSF
		OK3CRH
		OH5NHI
		UB4MF
		PY2ORF
		EA3FHP
		PA3FDW
		104,544
		66,196
		66,144
		45,900
		19,740
		17,262
		6,810
		2,916
		1,440
		1,160

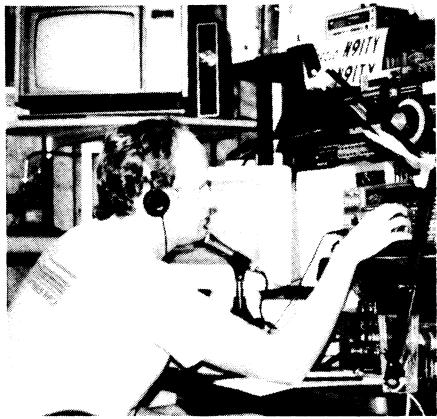
## Top Ten DX, CW Only

High Power	Low Power	QRP
HI8A (JA5DQH,op)	953,004	HI8DMX (JP1DMX,op)
F2CW	902,200	JK3GAD
N7DF/KH2	768,600	YT4I
LD/DL1VJ	643,672	JE1CKA
JA7ASD	624,480	OM6VD
G4BUO	620,412	JH7XGN
YU2OB	581,880	RO4OA
G3SXW	514,352	VK4XA
DL6WT	505,780	JA0ZRY (JR0BQD,op)
G3KHZ	488,520	LX2PA
		641,240
		497,760
		458,232
		443,080
		396,264
		354,820
		291,648
		266,071
		262,288
		240,064
		XE3HLV/1
		JR3RWB/2
		JA6VZB
		SP4FGF
		JR1IOS
		OK1FFC
		OK3CUG
		GM4HQF
		JR4GPA
		OK2PCN
		169,344
		148,604
		128,656
		111,160
		82,824
		59,724
		57,960
		55,304
		54,528
		33,972

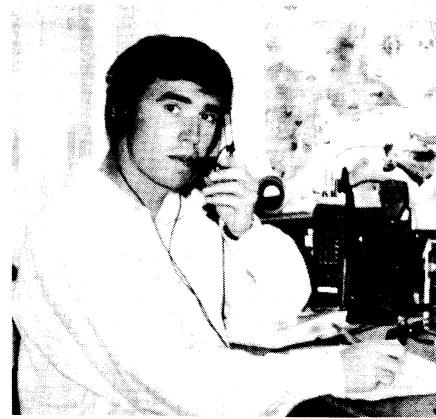
were DX stations (KA1BNO). Band conditions were fantastic! (N1GLG). This was our first contest. We had a ball! Imagine our horror when we woke up late Sunday morning and realized the band had already been open for four hours (N1GNQ). I tripled my score from last year and I got two new countries! I'm looking forward to next year! (WB1GUY). It was frustrating to hear stations within the skip zone on backscatter but still be unable to work them. Even though we knew we couldn't compete score-wise with high-powered, experienced multiop stations, we enjoyed the competitive atmosphere of the contest and worked hard to maximize our score (N1HKG). Family get-togethers and contests are not compatible (K2TE). The band conditions were quite good, especially the backscatter conditions! I worked all states once, and if more stations were on, I probably would have done it a few times over. Conditions to VK and ZL were a bit marginal, though (AK2F). I was excited to be using a new quad, but a kitchen fire turned out to be the real excitement Sunday afternoon (WA0GOA). It's a good thing the bands were in such great shape. I got a lower score this year because my amplifier went "bang" as I was tuning up for the contest, and I had to work all QRP (KD2UF). A great contest to learn contesting! (N2HMM). I didn't have any disk crashes; the finals didn't smoke; conditions were fantastic. It doesn't get any better (K2MK). The excellent band conditions made for a great weekend. This year was quite good. Almost all equipment worked! (KD2I). I had a great time with the contest this year. Something exciting always happens; this year the wind nearly blew down my 5-element Yagi on its push-up-pole. I had to stop an hour before the end to drop and tie down the system before it was blown down (N2IZJ/T). It was great working the contest with 25 watts and a 10-meter

Ringo. My thanks go to Lisa and FM5WD for a lot of patience (N2JNZ). I made more contacts on 10 meters during this contest than I've made in my six and a half years as a ham. I never realized what I was missing. Thanks to all who heard my QRP signal. See you next year (NQ2W). Conditions were the best I've ever heard on 10 meters. I had to spend almost the whole weekend doing a brake job on my wife's car (KA2SJG/N). Great conditions this year! Thanks to N3RS for letting me use his station. I've never worked so many stations backscatter. There were few stations active from Africa (NW3B). The increase in categories seemed to increase participation. It was a big contest with lots of activity (WE3C). I had a brand-new rig, a brand-new antenna, a brand-new headset, a brand-new computer logging program, the weather was nice and band conditions were good, but I hardly had enough time to operate. I had only eight and a half hours on the air, but I had a great time! (NS3L). I enjoyed working the contest with an AEA DX-Handy. My best DX was LR5T! (K3TW). I checked my power after every QSO and the average was 32 milliwatts output. That's how you find out who really hears the weak ones! (WA8MCQ). After seeing how hot the bands were last year, I cleared off my calendar for the 10-Meter Contest this year. Wow! Propagation on 10 meters sure is funny (AA4LR). This was my first contest. I had an S5-S6 noise level most of the time. I also had intermittent company and the XYL advised that it wasn't nice to operate when we had visitors over (W4JFL). This was my first contest, and even though I didn't score many points, I had a lot of fun. That's what Amateur Radio is all about! (N4YHC). My score is down from last year because I took time out Saturday to play a job with my band! I hated to do it because conditions were so good! (AA4NC). I made as many

QSOs in the CQWW CW! (N4DYU). The bands were noisy this year, but I still had loads of fun. (WB4Y). I had a blast! Unfortunately, I was just recovering from a bad case of the flu, so I wasn't able to operate as long as I wanted to. Ten meters had always been my favorite band! (WB4ETY). I made more contacts in this contest than I have since I've been an amateur! All contests should have Novice and Technician categories when possible. This would introduce new blood into contesting (K4TIR/N). I enjoyed participating in the contest (KC4JFA). This was my first contest in years. Although I could only operate for three hours, I really enjoyed it! (N1BOY). It was a pleasure to see so many participants. I decided to finish off my DXCC after being licensed for more than 25 years; I think I've finally got it! (K1FJM/4). This is only my second try at contesting and I thoroughly enjoyed the event and hope to do more in the future (WB4PUD). The contest was delightful and I enjoyed it very much (W4MV). My biggest surprise was finding that my CQ tape added 10 dB to my signal as reported in Europe (KG4W). It was a great contest and a lot of fun! Many thanks go to my XYL for watching the kids during the contest (KG5RM). In just a few hours I worked a bunch of DX (KCSBH). Work schedules kept my operating time to 13½ hours, but I scored better this year, thanks to all the DX multipliers. I worked a lot of states, but I didn't hear many Ws here in Louisiana (AA5FJ). This was my first time in the contest. I had a lot of fun. When the band is open to the east and west coasts, there's a lot of QRM here in Oklahoma. It's interesting how the band opening moves during the day! (KE5TC). The band wasn't in quite as good shape as last year, but I had a great time thanks to everyone who participated (NS1RJ). I had a lot of fun. I wish I could have gotten more multipliers (NJ5N). This contest was the most fun I've had in a long time! I quintupled my score from last year. I can't wait until next year. (AA5UR). Conditions were terrific; unfortunately, so was the weather. I wound up painting the house most of the weekend (W5TB). This was our first multioperator effort by our group, and we had a lot of fun and plan on doing it again next year (AA5UK). I enjoyed my 12 hours of H&P operation with 10 meters at its best (KC5AC). This was my first time operating QRP/Novice. I hope it pays off when the Novice Roundup rolls around! (KA5VDX). I missed the boss's Christmas party again for this one. More operating time brought more QSOs, but less multipliers. States I worked last year went into hibernation this year. I'll keep trying. This was my first contest with the new HF rig. I'm glad the power categories were added (N4DLA/6). This is my first contest. I enjoyed it very much and will be looking forward to my next one! (N6SPY). I was sick with the flu and a high fever. I wanted to go all out, but I had no energy and I couldn't talk (WZ6Z). The DX wasn't as good as last year, but I still had a lot of fun! My operating and contesting skills were a lot better this time than last year (N6TCZ). I finally realized my dream of combining my two hobbies, Amateur Radio and computers. I've found that using a logging program changes the nature of contest operating. I had a blast! The band seemed dead around here in the afternoons, though (WA6PPZ). This was the first time our club operated an event other than Field Day. The seven operators had a good time. Our newest club member, KC6POM, had just gotten her license and this was her first excursion on the air. She's eight years old (K6QWR).



Mike, N9ITX, hunts for another phone multiplier from Illinois.



Jose, CT1EEB, logs another of his 814 phone contacts.



Hernani, CT3BX, operated CT3M from Madeira Island, finishing as the number-one phone op from Africa.

## Scores

DX Scores are listed by continent and country according to the ARRL DXCC Countries List. US and Canadian scores are listed by call sign area and ARRL/CRRRL Section. Each line score lists call sign, score, QSOs, multipliers, entry class (A = Mixed Mode; B = Phone only; C = CW only; D = Multioperator) and power (A = less than 5 watts output; B = less than 150 watts output; C = more than 150 watts output). The /T after a call sign indicates a Technician entry and the /N a Novice entry.

DX		JH0MXV	48,048	264	66-B-C	J3YBB (JA3e AHI, CLY, FHL, PJJ, JE3TXA, JH3s FOF, UHG, ops)	CQ7VV	102,600	475	108-B-C	E47BA	483,888- 1779	136-B-C		
Africa		JA2J5F	45,900	270	79-B-A	JE3TXA, JH3s FOF, UHG, ops)	CT1QF	26,344	178	74-B-B	E43EZD	327,462- 1353	121-B-C		
		JP1SRG	32,706	207	79-B-A	634,266- 1194	DA2CF	407,836- 1426	143-A-C	E43BX	227,392- 748	152-B-C			
		JR7LVK	31,108	202	77-B-B	J7YTB (JG7KAF, JH8XVT, JR8NMX, ops)	DF1IK	264,932	959	107-A-C	E43EJI	95,034- 337	141-B-C		
		JAGODU	27,060	205	66-B-C	524,880- 1315	180-D	DF1QF	79,560	340	117-B-C	E43CHT	93,312- 486	96-B-B	
Azores		JASPEE	20,252	166	61-B-C	J46YJS (+ JS1PWW)	DA2CFT	505,760- 1090	116-D	E42BFM	53,600	335	80-B-B		
CU3LF	247,710- 1077- 115-B-B	JH8DHV	18,260	166	55-B-C	Y38YE	50,388- 207	78-A-B	E43FOV	29,346	201	73-B-C			
Madeira Island		JA7BEW	16,580	184	45-B-B	J46YBR (JF1DHS, JI6RB, JI6RNA,	DU5VA	23,544	148	54-A-C	E45JC	28,552- 172	83-B-B		
CT3M (CT3BX, op)	738,990- 2415- 153-B-C	J46EFT	15,808	152	52-B-C	JR6GX7, ops)	Y63SI	18,158- 106	47-A-B	E41EYD	21,384	132	81-B-C		
		JH6FTJ	14,250	125	57-B-B	JA0YAK (JG7JMO, JH9PUO, JI70ED,	Y21WB	7,480	108	34-A-B	E43DZ	19,716	159	62-B-C	
		JA2FZI	9,964	106	47-B-C	JH9YVG, JR8FCM, ops)	Y26FI	5,148	206	26-B-A	E42BYM	10,400	100	52-B-B	
Canary Islands		JL1MWI	9,804	114	43-B-C	JH1YDT (JO1ID, JO1TID, 7K1BW, ops)	Y23OD	5,488	50	41-A-C	E45AN	2,304	36	32-B-C	
		JH2WHS	7,110	79	45-B-B	342,456- 1101	114-D	DK5KJ	4,664	66	22-A-B	E43FHP	1,440	40	18-B-A
EABOE	47,344- 269- 88-B-B	JA1ASO	6,536	76	43-B-B	J46YCL (JF4CZL, JE6UWK, JI6MVW, ops)	DL8PC	607,392- 1998	152-B-C	E44DAS	444,720- 1090	102-C-C			
EABAD	9,920- 80- 62-B-C	JE9PSW	4,712	62	38-B-C	DU2U	431,396	1519	142-B-C	E47BS	182,626	513	89-C-C		
Reunion Island		J3GPC	1,092	26	21-B-B	JA0YAV (+ JR9FNW)	DL1EK	116,820	590	99-B-C	E43BOW	98,940	255	97-C-C	
FR5DX	190,400- 850- 112-B-B	JR7OHV	1,020	30	17-B-B	266,710	638	149-D	E42CKP	70,200	233	75-C-B			
Ivory Coast		JR8FLY	420	15	14-B-B	JA9YAV (+ JR9FNW)	DL8SDC	56,358	303	93-B-C	E47GVR	57,392	211	68-C-C	
TU2UI	188,244- 690- 126-A-C	JH1RMH	126	8	8-B-A	20,064	152	66-B-C	E43DWX	54,056	233	58-C-C			
South Africa		7L1CV	50	5	5-B-B	JA1BG	1,050	35	15-B-C	E47CA	38,440	155	62-C-C		
ZS8HO	48,204- 309- 78-B-C	JG7LBN	8	2	2-B-A	Y24SH	22,656	118	48-C-C	E47AAW	27,772	131	53-C-B		
Kenya		JK9GAD	497,760- 1037- 120-C-B	JA0YBR	425,040- 1013- 168-D	DF3IS	13,500	125	54-B-C	E44BV	16,112	76	53-C-C		
5Z4BI	178,908- 877- 102-B-C	JH7XGN	354,820	785	113-C-B	Y48GN	18,104	146	62-B-C	E41EXJ	7,752	50	39-C-C		
Malawi		JABZRY (JR8QD, op)	262,288	676	97-C-B	DL1EK	118,252	590	99-B-C	E43JK	2,592	27	24-C-C		
7Q7JA	37,800- 172- 90-A-C	JA1NLX	201,096	513	98-C-B	RA8BR	1,350	225	3-B-C	E43KU (+ EA3AIR)	711,550- 1794	133-D			
Asia		JA9CWJ	190,460	535	98-C-B	RA0FM	252,588	652	97-C-C	Baleal Islands					
		JE8UXR	183,396	492	93-C-C	UA8SLN	189,380	560	85-C-C	E46GP	71,200	258	80-A-C		
United Arab Emirates		JR3RWB/2	148,604	381	97-C-A	Y24NNP	950	25	19-B-C	E46ZS	19,176	102	47-C-B		
A61AD	9,300- 155- 30-B-C	JM1NKT	34,504	91	86-C-B	DL1SBF	450	15	15-B-C	France					
Taiwan		JA6VZB	128,656	370	66-C-A	Y63WV	505,780	1045	121-C-C	F6EEM	1,022,250- 1594	235-A-C			
BV2WA	64,428- 546- 59-B-B	JR7MD/2	124,960	355	88-C-B	DL6WT	57,600	230	121-C-C	TM5M (F1JTL, op)	817,890- 1243	199-A-C			
Korea		JR9DZJ	83,824	338	62-C-B	DL7MG	199,764	537	93-C-C	F6EZV	382,704- 1100	119-A-C			
HL38AP	71,456- 232- 77-C-B	JA11OS	82,824	238	87-C-A	Y25ZN	85,800	278	78-C-C	F6BHI	373,262	749	193-A-C		
Japan		JA2KKA	81,920	256	80-C-C	DL7QB	82,320	294	70-C-C	F6GKQ	337,440	658	185-A-C		
		JA1AUD	74,472	208	80-C-B	DL4XU	75,344	268	68-C-C	F1JDG	147,200	463	92-A-C		
		JA2J7SD	63,232	208	76-C-C	DL1TH	70,832	233	76-C-C	F6DD	56,700	226	75-C-C		
		JA2N2B	62,480	220	71-C-C	Y21YT	69,856	236	74-C-C	F1A1FG	32,760	203	78-A-C		
		JA2N4T	60,444	207	73-C-B	DL7YS	100,060	230	65-C-B	F1MAA	22,440	137	66-A-B		
		JA2N7SD	58,280	165	58-C-C	DL1ZQ	99,456	336	74-C-C	F3YD	8,610	53	33-A-C		
		JA2N8B	57,420	165	58-C-C	Y23L	86,240	284	77-C-B	F6AXD	3,640	49	28-A-B		
		JA2N9B	56,044	165	58-C-C	DL7QZ	85,800	278	78-C-C	F6CTT	785,280	2454	160-B-C		
		JA2N9C	55,720	165	58-C-C	Y25GB	84,720	180	56-C-B	F6FKC (F6GYT, op)					
		JA2N9D	55,444	165	58-C-C	DL2GBB	84,272	136	63-C-C	631,368- 1998	158-B-C				
		JA2N9E	55,164	165	58-C-C	Y21CB	33,984	137	63-C-C	FX1L (F1LBL, op)					
		JA2N9F	54,884	165	58-C-C	DL8SG	30,192	148	51-C-C	557,664- 1884	148-B-C				
		JA2N9G	54,604	165	58-C-C	DL4GBR	22,776	132	42-C-A	F6EXQ	305,838	130	117-B-C		
		JA2N9H	54,324	165	58-C-C	DK5OS	19,688	107	46-C-C	F6FCB	38,408	412	117-B-C		
		JA2N9I	54,044	165	58-C-C	Y23P	18,049	96	47-C-A	F6FCA	37,204	173	154-B-C		
		JA2N9J	53,764	165	58-C-C	DL1HCM	59,238	254	59-C-B	F6FCH	19,510	713	153-B-C		
		JA2N9K	53,484	165	58-C-C	DL8BN	47,882	265	49-C-B	F6FCA	16,994	116	100-B-C		
		JA2N9L	53,204	165	58-C-C	DK2QH	41,538	176	52-C-B	F6FCH	16,788	109	126-B-C		
		JA2N9M	52,924	165	58-C-C	Y23GB	39,900	175	52-C-B	F6FCA	16,582	116	127-B-C		
		JA2N9N	52,644	165	58-C-C	DL4XU	34,720	180	56-C-B	F6FCH	16,376	116	128-B-C		
		JA2N9O	52,364	165	58-C-C	Y23GM	4,104	38	27-C-B	F6FCA	12,792	615	104-B-C		
		JA2N9P	52,084	165	58-C-C	Y38SH	3,168	38	22-C-B	F6FCA	11,050	547	107-B-C		
		JA2N9Q	51,804	165	58-C-C	DK8SQ (DL3OBQ, op)	6,019	148	51-C-C	FB8X (FB1MUX, op)					
		JA2N9R	51,524	165	58-C-C	Y24TG	1,892	43	11-C-C	F6EXQ	10,454	484	108-B-A		
		JA2N9S	51,244	165	58-C-C	Y24TF	1,700	25	17-C-A	F6FCB	8,640	412	117-B-C		
		JA2N9T	50,964	165	58-C-C	Y59ZF	1,100	25	11-C-C	F6FCA	83,204	116	100-B-C		
		JA2N9U	50,684	165	58-C-C	Y4DOP	12,312	81	38-C-C	F6GDO	7,104	342	108-B-B		
		JA2N9V	50,404	165	58-C-C	DF3ON	9,248	17	17-C-B	FE1MF	68,004	420	81-B-B		
		JA2N9W	50,124	165	58-C-C	Y4ZL	120	6	5-C-A	F6FCA	6,052	352	92-B-B		
		JA2N9X	49,844	165	58-C-C	DA08V (DL3MAA, DL6RAI, op)	1,727	311	63-C-B	F6FCA	4,272	242	83-B-C		
		JA2N9Y	49,564	165	58-C-C	DL4GAC ( + DT1FD, DL1GET, DL5GAC, op)	1,892	107	63-C-B	F6FCA	3,736	100	68-B-C		
		JA2N9Z	49,284	165	58-C-C	Y24WV	4,070	109	63-C-B	F6FCA	3,588	100	67-B-C		
		JA2N9A	49,004	165	58-C-C	FF10DV	38,556	238	81-B-C	F6FCA	3,440	100	66-B-C		
		JA2N9B	48,724	165	58-C-C	Y24XV	26,640	180	74-B-B	F6FCA	3,300	100	65-B-C		
		JA2N9C	48,444	165	58-C-C	Y59ZG	22,200	175	72-C-C	F6FCA	3,160	100	64-B-C		
		JA2N9D	48,164	165	58-C-C	Y4DOP	17,604	136	58-C-C	F6FCA	2,920	100	63-B-C		
		JA2N9E	47,884	165	58-C-C	Y4ZL	17,000	100	58-C-C	F6FCA	2,780	100	62-B-C		
		JA2N9F	47,604	165	58-C-C	Y4DOP	16,300	100	58-C-C	F6FCA	2,640	100	61-B-C		
		JA2N9G	47,324	165	58-C-C	Y4ZL	15,700	100	58-C-C	F6FCA	2,500	100	60-B-C		
		JA2N9H	47,044	165	58-C-C	Y4DOP	15,100	100	58-C-C	F6FCA	2,360	100	59-B-C		
		JA2N9I	46,764	165	58-C-C	Y4ZL	14,500	100	58-C-C	F6FCA	2,220	100	58-B-C		
		JA2N9J	46,484	165	58-C-C	Y4DOP	13,900	100	58-C-C	F6FCA	2,080	100	57-B-C		
		JA2N9K	46,204	165	58-C-C	Y4ZL	13,300	100	58-C-C	F6FCA	1,940	100	56-B-C		
		JA2N9L	45,924	165	58-C-C	Y4DOP	12,700	100	58-C-C	F6FCA	1,800	100	55-B-C		
		JA2N9M	45,644	165	58-C-C	Y4ZL	12,100	100	58-C-C	F6FCA	1,660	100	54-B-C		
		JA2N9N	45,364	165	58-C-C	Y4DOP	11,500	100	58-C-C	F6FCA	1,520	100	53-B-C		
		JA2N9O	45,084	165	58-C-C	Y4ZL	10,900	100	58-C-C	F6FCA	1,380	100</td			

F2DE	91,120- 236-	85-C-C	LZ1DP	11,374- 121- 47-B-C	PA3EPN (+PA2DWH,PA0AAC, PD0PNK,DA10W)	Y07LFV	40,040- 260- 77-B-C	Argentina
F6EOV	83,600- 274-	76-C-C	LZ1MC	225,060- 616- 93-C-C	PA0AHX	Y02BYE	12,400- 124- 50-B-B	LP3F (LU6FAZ,op)
F6BSU	69,828- 249-	69-C-B	LZ1KOZ (+ops)	1,132,160- 1679- 232-D	PI4COM (PA3e DMH,ERC,EWP,ops)	Y03AII	11,220- 110- 51-B-C	368,184- 134- 138-B-C
F3AT	60,728- 242-	71-C-B	LZ2Z (LZ2s CM,GR,RM,ops)	1,218,016- 1591- 272-D	PA3DWD (+PA3e CEF,DCO,DOW,DWD, PA0es COR,IMH,VAJ,PEI,LAU,ops)	Y04BBH	5,096- 91- 52- 31-B-B	AY9F (LU7FJD,op)
FD1PQX	64,504- 252-	63-C-C		41,116- 304- 38-D	PA3DEC (PA3e ATA,AWW,DEW,FAQ, FQX,PA0es BOE,TUK,ops)	Y05OBA	3,224- 52- 31-B-B	307,684- 1261- 122-B-C
FD1QJL	52,496- 201-	68-C-B			PA3DWD (+PA3e CEF,DCO,DOW,DWD, PA0es COR,IMH,VAJ,PEI,LAU,ops)	Y05CJU	12,628- 79- 29-C-A	89,496- 452- 99-B-C
F1MFI	38,048- 158-	59-C-C			PA3DEC (PA3e ATA,AWW,DEW,FAQ, FQX,PA0es BOE,TUK,ops)	Y03CR	4,480- 40- 28-C-A	42,444- 262- 83-B-B
F1PBB	37,584- 162-	59-C-C	OE1WEU	310- 17- 15-B-C	PI4THT (PA2AWU,PA3EKK,ops)	Y06FPZ	3,948- 47- 21-C-A	LU4HKN
F8FKL	30,240- 135-	56-C-B			PI4THT (PA2AWU,PA3EKK,ops)	Y06ADW	60- 5- 3-C-C	15,074- 59- 43-B-C
FD1LMJ	21,840- 105-	52-C-C						LU/KA3XO
F5AM	18,540- 102-	45-C-B						LSF (LU1FNH,op)
F2FX	10,368- 70-	36-C-B						35,616- 168- 53-C-C
F/N6TR	9,152- 104-	22-C-B						LR6T (LU5ULL7UAF,LU8DPM, ops)
F2AI	5,152- 46-	28-C-B						2,378,938- 2989- 291-D
FF6KBF (F1HQY,F6B,BJ,HSV,ops)	34,880- 100-	85-C-B						LU8DZE (+ops)
FD1PTI	33,264- 132-	63-C-B						273,362- 853- 103-D
F9QE	32,760- 130-	63-C-B						
F9BB	30,360- 137-	55-C-C						
F8FKL	30,240- 135-	56-C-B						
FD1LMJ	21,840- 105-	52-C-C						
F5AM	18,540- 102-	45-C-B						
F2FX	10,368- 70-	36-C-B						
F/N6TR	9,152- 104-	22-C-B						
F2AI	5,152- 46-	28-C-B						
FF6KBF (F1HQY,F6B,BJ,HSV,ops)	34,880- 100-	85-C-B						
FD1PTI	33,264- 137-	63-C-B						
F9QE	32,760- 130-	63-C-B						
FD1NBX (+F6COU)	349,246- 1333-	131-D						
DA8FDX (+ops)	343,992- 1297-	132-D						
F6BSJ (+ F1FLV,H6JHC)	260,000- 903-	130-D						
FF6KDC (FB1s NAN,OKD,PAL, FD1JCN,FE6BIF,ops)	660,450- 1117-	136-D						
FF1QJX (FD1s MLS,MNC,FE1s LVN, MFL,ops)	243,712- 896-	136-D						
FF6KSJ (FD1NCK,FF6HYT,ops)	202,224- 595-	132-D						
	119,040- 390-	93-D						
England								
G0MFC (AA6MC,op)	684,720- 1088-	216-A-C						
	53,256- 179-	84-A-B						
G4OJH	510,188- 1882-	137-B-C						
G4NXGM	24,300- 150-	81-B-C						
G4LZZ	21,600- 150-	72-B-C						
G4BUO	620,412- 1260-	123-C-C						
G3SXW	514,352- 1037-	124-C-C						
G3KHZ	488,502- 1062-	115-C-C						
G3ESF	181,280- 477-	95-C-C						
G4BK1	142,400- 400-	89-C-C						
G3TXF	105,608- 307-	86-B-C						
G4WVX	81,120- 259-	78-C-C						
G4ZMF	75,920- 257-	73-C-C						
G3WRR	57,424- 194-	74-C-B						
G4DFC	16,376- 89-	46-C-A						
G8KPW (G4s BAH, FRE, PIO, VMM, G7ABQ,ops)	1,172,232- 1809-	243-D						
GX4RFF (G4CVX,G6CFE,ops)	418,320- 1660-	126-D						
Scotland								
GM8ECO	546,532- 1834-	149-B-C						
GM8JKF	34,440- 246-	141-B-C						
GM3CSF	138,092- 367-	94-C-C						
GM4HQF	55,304- 220-	62-C-A						
Wales								
GW4BLE	734,760- 2340-	157-B-C						
GW8ARK	532,980- 1890-	141-B-C						
GW8GT (G4WXE,GW3KYA,3W4TTU, GW5NF,GW6ZUQ,GW8WM4W,ops)	1,038,258- 1442-	221-D						
Hungary								
HA9DU	1,548,708- 1845-	309-A-C						
HA8EK	417,944- 775-	178-A-B						
HA7TM	392,372- 1085-	132-A-B						
HA9MM	357,500- 1089-	125-A-C						
HA9IR	77,616- 280-	77-A-C						
HA9LC	152,640- 720-	106-B-C						
HA4XG	75,330- 405-	93-B-C						
HG3FMZ	5,130- 95-	27-B-C						
HA5NK	48,620- 185-	65-C-C						
HG8N (HA6s ND,NF,QO,ops)	751,248- 2029-	141-D						
HG5C (HA1AD,HA5L,LV,ops)	574,192- 1702-	136-D						
Switzerland								
HB9DFY	236,825- 409-	177-A-B						
HB9DMQ	13,224- 76-	87-B-B						
HB9DX	49,796- 107-	107-C-C						
HB9KC	43,952- 164-	67-C-B						
HB9AGH	16,576- 73-	56-C-B						
HB9ZZ (HB9s CAT,DDO,ops)	205,350- 841-	111-D						
Italy								
IS2VA	597,740- 1216-	190-A-C						
IK8GRS	429,692- 808-	178-A-C						
IK8HP	81,936- 264-	119-A-B						
IQLS	468,194- 1787-	131-B-C						
IK3ORD	361,128- 1342-	142-B-C						
IV3BMV	120,668- 622-	97-B-C						
IK7BRX	77,484- 421-	92-B-C						
IV3FSG	14,896- 133-	56-B-C						
IC5P	12,626- 107-	59-B-C						
IK2IAR	3,700- 50-	37-B-C						
IK1LKR	18,656- 88-	53-C-C						
IK2ODI	1,700- 25-	17-C-B						
IJ4R (I2s EUW,VXJ,IK2s BHX,EGL, I4s JMY,UHF,USC,IK4s IE,PLX, IW4BZO,ops)	2,009,584- 2650-	284-D						
IG4ZV (I4s BBC,YNO,K14s MDZ,YNO)	485,760- 1265-	165-D						
Norway								
LA4YW	31,620- 132-	82-A-B						
LA1PHA	24,832- 165-	64-B-A						
LA8NM	22,908- 83-	69-A-C						
LA4GY	187,220- 851-	110-B-C						
LA9DI	58,782- 291-	101-B-C						
LA2TY	40,194- 261-	77-B-B						
LA1IE	33,260- 104-	80-C-C						
LA4ODA	31,500- 125-	63-C-C						
LA9FFA	31,244- 106-	73-C-C						
LA2HFA	14,112- 97-	36-C-C						
LA1VL	6,600- 50-	33-C-B						
Luxembourg								
LX01VJ	643,672- 1317-	122-C-C						
LX2PA	240,064- 496-	121-C-B						
Bulgaria								
LZ1KNP	166,334- 467-	109-A-B						
LZ1VL	98,084- 468-	62-A-C						
LZ1HA	123,880- 652-	95-B-C						
LZ2ES	47,272- 311-	76-B-B						
Austria								
ÖE6HD	182,360- 590-	97-A-C						
OE8CLD	256,794- 1011-	127-B-C						
OE3GOU	24,090- 165-	73-B-B						
OE1WEU	310- 17-	15-B-C						
Finland								
OH3YM	23,226- 120-	49-A-B						
OH7NW	14,016- 103-	48-A-B						
OH6NEV	232,526- 977-	119-B-C						
OH9MH	119,016- 522-	114-B-C						
OH4NZ	95,190- 501-	95-B-C						
OH7MO	28,098- 454-	200-B-C						
OH6VC	69,098- 454-	76-B-C						
OH7MO	42,090- 305-	69-B-C						
OH8SU	18,338- 173-	53-B-C						
OH5NH	17,262- 137-	63-B-A						
OH9HEJ	11,832- 102-	58-B-C						
OH6MXS	32- 4-	4-B-C						
OH6NIO	385,104- 852-	113-C-C						
OH3JF	314,352- 710-	111-C-C						
OH2AG (OH2LU,op)	287,472- 636-	113-C-C						
OH2AG (OH2LU,op)	105,100- 624-	102-B-B						
OH2AG (OH2LU,op)	85,000- 890-	102-B-B						
OH2AG (OH2LU,op)	75,000- 700-	102-B-B						
OH2AG (OH2LU,op)	65,000- 600-	102-B-B						
OH2AG (OH2LU,op)	55,000- 500-	102-B-B						
OH2AG (OH2LU,op)	45,000- 400-	102-B-B						
OH2AG (OH2LU,op)	35,000- 300-	102-B-B						
OH2AG (OH2LU,op)	25,000- 200-	102-B-B						
OH2AG (OH2LU,op)	15,000- 150-	102-B-B						
OH2AG (OH2LU,op)	5,000- 50-	102-B-B						
OH2AG (OH2LU,op)	1,000- 10-	102-B-B						
OH2AG (OH2LU,op)	100- 10-	102-B-B						
Sweden								
SM8BSK	318,954- 544-	177-A-C						
SK0KL	253,572- 1117-	113-A-C						
SM8BDS	57,474- 200-	93-A-B						
SM6FJY	54,432- 336-	81-A-C						
SM5DAC	29,896- 201-	74-A-C						
SM4RRD	31,688- 233-	71-B-C						
SM4SET	29,118- 211-	68-B-B						
SM3CER	28,640- 179-	60-B-B						
SM4HEJ	14,288- 94-	76-B-C						
SM6MC	4,836- 82-	39-B-C						
SM6LIF	450- 15-	15-B-C						
SM5SINC	359,800- 899-	100-C-C						
SM7MTW	119,232- 353-	81-C-C						
SM5SRE	79,300- 309-	65-C-C						
SM3DXC	28,208- 163-	43-C-C						



KJ6MW	46,540- 358- 85-B- B	Oregon	WA8NIV/W/T	3,540- 59- 30-B- C	NG6L	83,180- 420- 99-B- B	North Dakota	
M6WLF	23,408- 154- 78-B- C	KQ7I	1,107,072- 2047- 188-A- C	WB2UB	3,528- 63- 28-B- C	NG6Q	86,980- 286- 79-B- B	WB8O
KG6NOA	12,578- 131- 48-B- C	KU7K	90,980- 317- 85-A- C	K6BOM	2,912- 52- 28-B- C	NG6Q	46,188- 286- 79-B- B	N6HJM (WB8O,op)
KABZP/N	5,378- 64- 34-B- C	W7IMP	36,180- 143- 90-A- C	N8AXA	2,496- 53- 24-B- A	W6VLY	25,344- 206- 72-B- C	52,224- 544- 48-B- C
KOBNEF/T	3,468- 51- 34-B- C	W7TE	160,128- 834- 98-B- C	N8GY/T	2,322- 43- 27-B- B	W6RZW	20,200- 186- 80-B- C	Nebraska
NE2ZB	364,812- 886- 101-C- C	WS7O	80,820- 446- 90-B- C	W8KYZ	2,080- 40- 26-B- C	KADSPR	18,228- 186- 48-B- C	KV8I
K9MJ	177,056- 493- 88-C- C	N7JR	30,488- 206- 74-B- B	WD8KTM	728- 26- 14-B- C	KW7FT	9,374- 106- 43-B- C	WB8O
W8RVY	33,904- 161- 88-C- C	W7GIU	7,480- 68- 55-B- C	WD8LLD	539,604- 1150- 117-C- C	W6UB	103- 43-B- C	WB8O
N6YE	12,320- 77- 40-C- B	K7FD	4,280- 142- 15-B- C	WD8QB/P	361,349- 891- 107-C- C	W6GHY	208,980- 755- 98-C- C	WB8O
KB6FPW	12,98- 74- 4-C- B	KB7KVL/T	3,080- 51- 30-B- C	N8LXS	349,824- 908- 96-C- C	K6OS	145,804- 106- 99-C- C	N6LYK
WB6CJE (+ N6E ZES,ZFA,ZJM)	277,830- 729- 147-D	KG7DC	1,702- 37- 23-B- A	KV8O	346,304- 771- 112-C- C	NOX	107,712- 300- 88-C- B	KF8MS
AJ6V (+ NET)	211,580- 503- 129-D	N7ENU	300,228- 882- 85-C- C	WB8PHI	321,024- 836- 98-C- C	W6HE	50,852- 201- 63-C- C	KABZON
K9JYQ	12,320- 77- 40-C- B	K7RO	258,800- 847- 100-C- C	W8FN	242,112- 579- 104-C- C	WB8HWP (KABFOX,K8FVF,KM8O, WB8O,ope)	2,024,224- 2681- 272-D	WB8RTK
San Diego	632,210- 1306- 191-A- C	K7JBX	81,658- 341- 85-C- B	K9CCV	216,980- 564- 98-C- C	WB8RTJ	240- 12- 10-B- C	AJ6I
WB8QOF	782,048- 1337- 188-A- C	W7WYH	61,200- 48- 75-C- C	K9JS	120,700- 361- 85-C- C	K9GW	57,800- 224- 64-C- C	K9SW
KT6V	12,621- 1306- 191-A- C	W7YAO	20,738- 72- 72-C- C	WT8P	109,344- 406- 67-C- C	WB8Y	24,000- 100- 60-C- C	WB8RT
KC8EY/Z	287,120- 751- 148-A- C	NK7U (+ N7T)	1,112,788- 2731- 191-D	WB8YTO	58,208- 213- 09-C- B	N8TK	1,025,000- 1928- 205-A- C	South Dakota
K9XT	497,538- 1898- 131-B- C	W7NI (+ A17B,WB7RFA)	2,006,950- 2614- 275-D	WB8GOC	27,180- 148- 45-C- C	N8ZA	833,644- 1898- 192-A- C	KA3DRR
AB8H	154,836- 758- 102-B- C	WB7QNW (K7WZ,K7G,TW,WAT7B,IM, OEM,ope)	2,006,950- 2614- 275-D	KD8FW	15,808- 104- 38-C- B	W1XE	329,886- 840- 149-A- B	WBACT
AABU8	54,696- 318- 88-B- C	WB7UF (+ op)	4,211,738- 886- 134-D	KF8FF	13,416- 84- 39-C- A	WB8EA	327,762- 876- 144-A- B	KF8HL
KC8FZU	19,964- 161- 88-B- C	WB7UJ ( + KB7FS,KL7KL,KL7V)	22,448- 184- 61-D	W8PN	5,616- 52- 27-C- C	K9GW	233,280- 552- 144-A- B	WB8ZL
N6ND	594,360- 1270- 117-C- C	WB7UJ ( + K7FD)	15,800- 200- 39-D	WB8ZV	54,288- 45- 87-C- C	WB8ZL/N	240- 12- 10-B- C	WB8RTK
N6IW	550,560- 1240- 111-C- C	WB7KUD ( + K7FD)	15,800- 200- 39-D	WB8YGR	1,906- 29- 22-C- B	AACVY	5,960- 63- 35-A- C	AJ6I
KASQ6	87,016- 298- 73-C- C	WB7KUD ( + K7FD)	15,800- 200- 39-D	K9CS	413,980- 1380- 131-C- B	K9GW	57,800- 224- 64-C- C	K9SW
WB8MVW	56,680- 218- 85-C- C	WB7KUD ( + K7FD)	15,800- 200- 39-D	WB8YMM	178,782- 1028- 87-B- C	WB8Y	24,000- 100- 60-C- C	WB8RT
K9JYQ (+ WB8OK,K9VW)	1,332,456- 2248- 236-D	Utah	WB7KUD ( + K7FD)	KD8NS	74,152- 403- 62-B- C	WB8YU	307,980- 1002- 136-A- B	VE1AOE
WB8WNG (AA8TR,KC6Fa,KP6,KPB8L, KH6TL,KG6JM,KG6KL,KZ6X,N6I,KI6URW, WLX,XXU,YMD,WG6AHW,K98KVW,ope)	143,444- 617- 109-D	WB7KUD ( + K7FD)	15,800- 200- 39-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	380,328- 1794- 106-B- C	VE1ZV
WB2CHO6 (+ NET)	28,684- 202- 71-D	Western Washington	WB7KUD ( + K7FD)	WB8YVU	34,780- 235- 74-B- C	WB8YU	133,724- 662- 101-B- C	VE1ZM
WB8QAU	182,632- 701- 116-B- C	WB7T	480,512- 1178- 156-A- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KI6OT	56,950- 335- 85-B- C	WB7T	39,338- 211- 79-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6GBT	24,034- 197- 61-B- B	WB7T	517,608- 1098- 117-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6RA	17,800- 89- 50-C- C	WB7T	293,780- 816- 90-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K6JFY	10,296- 68- 39-C- C	WB7T	550,130- 1333- 145-B- A	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB2CHO6 (+ NET)	28,684- 202- 71-D	WB7T	504,348- 1140- 159-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
San Joaquin Valley	WB7T	WB7T	183,498- 461- 119-A- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KJ6EL	136,468- 396- 119-A- B	WB7T	101,200- 310- 88-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB5TUF	59,584- 258- 98-B- A	WB7T	65,886- 228- 84-A- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6GJI	276,794- 1163- 119-B- C	WB7T	30,388- 196- 84-A- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K4B8IM	268,224- 1056- 127-B- C	WB7T	15,156- 101- 56-A- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6EE	180,740- 705- 114-B- C	WB7T	223,392- 2576- 121-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6FWFT	28,934- 201- 67-B- B	WB7T	20,840- 118- 55-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KAB8AMD	19,098- 154- 62-B- B	WB7T	13,000- 118- 55-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KK6MF (+ K8RYN)	76,000- 320- 100-D	WB7T	1,468- 44- 32-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
Sacramento Valley	WB7T	WB7T	17,844- 590- 1450- 1140- 156-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7T	1,389,520- 2451- 210-A- C	WB7TUV	181,700- 539- 75-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6TIB	603,530- 1516- 164-A- C	WB7TUV	29,808- 157- 48-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7PYX	327,000- 378- 150-A- C	WB7TUV	8,000- 50- 30-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N6JM	28,884- 127- 82-B- A	WB7TUV	4,216- 35- 31-C- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K3EST	936,652- 3282- 143-B- C	WB7TUV	2,216,180- 3060- 285-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB8JUN	448,500- 1950- 115-B- C	N7TT (+ KA2KRA)	1,282,940- 2924- 194-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KC6RMN/T	43,280- 300- 70-B- C	WB7TUV	678,000- 1500- 1450- 1140- 156-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KC6JBS/T	800- 50- 8-B- C	WB7TUV	157,844- 590- 1450- 1140- 156-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
Alaska	WB7T	WB7T	1,544,424- 2734- 203-A- C	WB7TUV	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7T	602,946- 2240- 123-A- C	WB7TUV	10,672- 92- 58-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KL7FAP	173,594- 1189- 73-B- C	WB7TUV	25,920- 120- 54-C- A	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
NL7PJT	8,820- 98- 15-B- A	WB7TUV	1,248- 23- 13-C- A	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KL7AF	132,300- 440- 75-C- C	WB7TUV	17,404- 120- 54-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KL7GN	27,806- 155- 43-C- C	WB7TUV	17,404- 120- 54-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KL7RA (AA8DX,AL7z Co,HC,ope)	1,701,082- 3274- 211-D	WB7TUV	1,701,082- 3274- 211-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7TUV	1,349,096- 2516- 221-D	Wyoming	WB7TUV	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
Arizona	WB7TUV	WB7TUV	267,840- 806- 143-A- A	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K8LL	1,827,350- 3068- 227-A- C	WB7TUV	119,186- 354- 129-A- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WE7G	34,030- 205- 83-B- B	WB7TUV	34,030- 205- 83-B- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N7NEV/T	8,910- 98- 45-A- B	WB7TUV	71,148- 376- 376-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KY7M	305,020- 752- 101-C- C	WB7TUV	53,424- 318- 84-B- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KC7VM	271,104- 706- 96-C- C	WB7TUV	48,772- 274- 84-B- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N7RIR	241,188- 597- 101-C- C	WB7TUV	8,200- 100- 41-C- A	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7HTX	43,940- 169- 65-C- C	WB7TUV	213,684- 607- 88-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
KB1IMC	32,560- 143- 55-C- B	WB7TUV	210,924- 559- 93-C- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7KPL	25,808- 100- 43-C- B	WB7TUV	165,600- 443- 92-C- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7KTY	7,200- 240- 30-C- B	WB7TUV	128,490- 363- 88-C- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
Eastern Washington	WB7TUV	WB7TUV	65,506- 284- 82-C- C	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
WB7TUV	1,281,328- 114-B- C	WB7TUV	1,753,890- 2170- 270-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N7BES	218,832- 1184- 94-B- C	WB7TUV	1,045,880- 201- 201-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
N7CKJ	54,210- 417- 65-B- C	WB7TUV	1,035,860- 1838- 205-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K7TAL	22,204- 182- 61-B- C	WB7TUV	9,040- 81- 81-C- B	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K7SV	152,144- 502- 74-C- C	WB7TUV	1,451,236- 915- 186-D	WB8YVU	34,780- 235- 74-B- C	WB8YU	34,780- 235- 74-B- C	VE1ZM
K7GS	120,000- 375- 90-C- A	WB7TUV	1,584,836- 2520- 283-D	WB8YVU	34,780- 235-			