

# Results, Ninth IARU HF World Championship

A great contest, with plenty of room for everyone!—Jeff, N2MZH

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Contest Manager Assistant Contest Manager

**I**s there light at the end of the tunnel? It certainly looks that way! After a run of lower scores in the IARU HF Championships, this year's contest saw scores take a jump for the better. Can days of better propagation be far behind?

We remarked in last year's results that to have a good score, you needed to work large numbers of Europeans. Judging by the comments we received, this changed. Many operators told us that working W/VEs this time around made the difference. So much for being at the bottom of the sunspot cycle!

Apparently, the big opening this year was from Europe to the West Coast. Bob, W6CN, reports, "It was the first time in my 50 years of being a ham that I ever saw such a long opening to Europe from the West Coast. It lasted all day and into the night, and I could copy SK2HQ on 20 meters until midnight!" This is that time of the solar cycle where 20 becomes both a daytime *and* a nighttime band. Maybe this is Mother Nature's way of compensating us for taking away 10 and 15 meters for a couple of years.

The final scores bear out the difference. For example, take a look at the perennial dogfight for the top IARU HQ station score between HG94HQ and DA0HQ. The Germans did another great job of hunting down the multipliers. They finished with 299, up 27 from last year. In comparison, the Hungarians only had 9 more than last year. They did add another 734 QSOs over their previous effort, however, leaving the German operators in second place again.

A scan through the Top 10 boxes shows familiar call signs that experienced contestants will recognize. There are a few operators

who put forth outstanding efforts to capture the top spots. Hernani, CT3BX, operated CR3R on Madeira on phone and doubled the score needed to win this class last year. Being able to work Europeans *and* North Americans pays off! Joe, W5ASP, one of the operators at N5EA, noted "a surprising lack of activity from the Central and South America stations." Did they forget to get on the air?

Last year, no one in the US or Canada finished with more than 840k; this year, five stations had more than a million points. A couple of W/VE stations even made it into the

worldwide Top 10 boxes, the first time that's happened in a while.

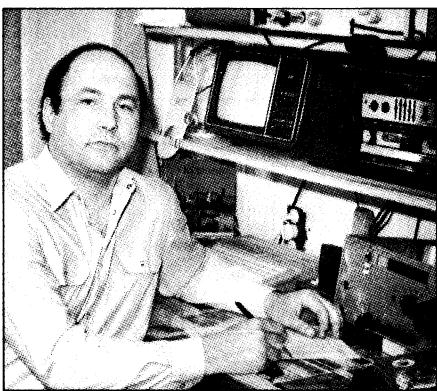
In the multioperator category, W5WMU, stung by WX0X last year, pulled out all the stops and easily outdistanced them this year. Rick, KI1G, and John, W2GD, proved that there's still a lot of activity on CW, finishing 1-2 in the US and 2-3 overall. Fred, K3ZO, always seems to hover around the top, no matter what contest he enters, and he won the Mixed Mode category this year, finishing in ninth place worldwide.

Don't get us wrong—by no means are the bands back to the conditions we were used to a couple of years ago. Those positive thinkers among us, however, will argue that we've turned the corner. If this year's contest was any indication, better times may not be far away.

One thing is certain: The only surefire way any of us is going to know how things are on the bands is to turn on our rigs and make contacts. Don't wait for the results afterward to find out what you missed—get on and operate! The next IARU HF World Championship is July 8 and 9. We'll be looking for you then!

## SOAPBOX

It was great to be home for this contest. I would have worked many more stations, except for the constant rainstorms and severe lightning strikes, and I had to disconnect everything several times. Considering all the conditions, it was a great time (VE6JAV). This was a gratifying contest, but because I loaned my paddle and hand key to friends, I was left with a toothbrush for a key (VY1JA). It was nice to find the bands and conditions to be the greatest in a long time and I hope they keep up this way (VE3CWE). This was an outstanding event (W6CN). I was pleased and gratified to see that we can still have a good time, even when the WWV numbers tell us that in no way should we be on the air, these were



Yuri, UA0ST, "worked a lot of good DX" from Zone 32.

## IARU Headquarters Stations

HG94HQ (HA1s FF,VQ,YA,YU,QL,HA2RX,HA4YD,HA5s AWH,CEH,FA,FM,GF,IW,KS,MK,ML,TI,UA,WE,HG5s BGG,CCC,HA6s DX,FQ,GK,GM,IAB,IDL,ND,NF,NL,OB,OI,ON,OY,PO,PY,RX,VA,NB,VH,WI,WP,WQ,WX,ZS,QV,HA7s JES,RY,VB,HA8s IB,IE,LKE,TK,HA9s CU,SU,ops)	8,896,656	9332	292
DA0HQ (DL1s AKW,ASA,AUZ,AWI,DTL,EMY, DL2EBX,DL3s APO,DX,DZZ,OI,RMA,DL5s ANT,AOM, ATD,AWI,EBE,XV,DL6s CKF,CPG,MYL,DF7RX, DJ7AA,DL7s UTA,VNF,DL8MVG,DL9AWI,ops)	7,704,632	8898	299
EM5HQ (UT1s IA,WA,WL,UT2s IA,ID,II,IM,IO,QT,UY3IM, UX3FW,UR5s WCW,ZMZ,US5s QDP,QRW,UY5s QQ, XE,ZZ,UT7WZ,UR9QQ,UX0FF,ops)	7,450,185	7679	285
OM9HQ (OM3s JW,KAG,KAP,KCM,KFF,KII,RJB, RKA,RMM,ops)	7,120,710	8369	270
YP0A (YQ2s BBT,BV,DFA,YO3s APJ,AWT,CDN,FRI, FU,YO4s AB,ATW,HV,NF,SI,XF,YO6s ADM,AWR,DDF, OBH,UX,YO8s BAM,BIG,RSL,WW,YO9FE,ops)	6,369,920	8247	269
LZ7A (LZ1s NG,UK,UQ,YQ,ZX,LZ2s JE,PO,PP,UU,YF, ZF,LZ3s FN,GU,SM,UA,LZ4s AX,IM,WW,ops)	4,720,911	5815	277
OT4H (ON4s ALT,AM1,AXV,OE,XG,ON5AZ,ON6s HP, JG,LO,MN,NL,VK,ON7s DU,NB,SS,UN,ZM, ONL-4335,ops)	3,306,096	4319	216
SK2HQ/SK3HQ (SM2s EKM,CEW,SM3s CER,DMP, EVR,SGP,ops)	2,618,055	4155	165
OH2C (OH2s BC1,BQW,BVF,NRV,ops)	1,774,325	2963	175
IU2A (+ops)	712,097	1675	139
3Z0HQ (SP3s AMZ,BLV,FLR,MEP,PLK,VKO,ops)	628,575	1777	145
W1AW (NG1J,K2WR,N2BCC,ops)	550,014	1734	109
4U1ITU (KB2R,op)	504,832	1290	128
LX0RL (LX1s HT,JH,KQ,RA,TI,LX2BQ,DL1LE, OH2PQ,ops)	487,920	1238	114
8J3XHQ (JL2NGY,JA3MAU,JF3EIG,JG3RPL,JI3ERV, JJ3WPF,JN3VOG,JP3LKR,JQ3OZY,JR4ISF,ops)	486,291	2105	111
9V1ARU (9V1s YC,YJ,JE1JKL,ops)	288,858	820	93
T70A (T77CD,IK0WIN,ops)	94,643	541	43
VA3RAC (VE3s JQJ,NPL,NXO,REJ,ops)	12,272	253	16



Andre, PY0FF, handed out almost 1700 QSOs on phone.

amazing conditions (KI1G). I tried doing something a little different this year and went to using two radios. It was a little confusing and taxing; I did notice that my overall rate had greatly improved (KIRU). The thunderstorms always seemed to show up at the most critical moments, but propagation produced terrific pileups on 80 meters (WS1A). This was my second IARU contest and I found it more exciting than my first. It was greatly enhanced by having all equipment working superbly, without any breakdowns, and it was great to find 20 meters wouldn't quit; these produced great runs (WM2V). This was my first contest using a beam antenna. I've worked many contests with dipoles or a vertical antenna; boy, what a difference. It's nice to be heard on the first call (N2LSK). I made my first DX QSOs on 80-meter CW with my new ladder-line dipole up about 50 feet. A real thrill was Sunday morning when I called CQ on 40-meter CW and a VK2VM came back to me. This is the first VK I've worked from my home shack. In general, a great contest, with plenty of room for everyone, I even took time out to ragchew and I got a decent amount of sleep (N2MZB). This was my first time operating in the IARU contest. I certainly learned a lot, now you can't keep me away from CW contests (N2PEB). It sure seemed that participation this year was way up, but maybe it was the antennas I was using. 20 and 80 meters had great openings, and if you didn't play, you missed some great fun (WB2K). My antenna system is an inverted V on 40 meters and on 80 meters I only have a horizontal V (cloud warmer) for antennas. When I first got on the air, my intention was to work a few DXCC countries for my log. The area where I live is surrounded by hills and at the time I didn't expect to do well, but as the hours drifted by and the contacts began to accumulate, my excitement began to grow. I decided to establish a score I could strive for in future years. Even with my modest antennas I made a great attempt and it was a great deal of fun putting in the added effort (KG8GW). Murphy didn't go abroad this year, he stayed at home in Northern Ireland and annoyed me instead. Nevertheless, it was an exciting contest. Propagation was poor on 15 and 10, and I missed many zone multipliers (GI0NWG). This was an interesting, exciting contest from this part of the world. I have a modest antenna system, but I hope next year to have an antenna for 40 meters to get the multipliers (DL8HCO). It was great fun to work so many new stations; we made sure we picked up those elusive new countries and prefixes, and hope to be able to do the same in the next contest (SP1MHV). We greatly appreciated the participation of the US stations and it helped gain many points for Poland and Europe. (SP3FAR). The band conditions were by far the best I've seen in this contest in years. I was able to work many Stateside stations, including the West Coast, with just five watts and a dipole (SP9KRT). This was my first DXpedition to ITU Zone 32; it was a complete enjoyment. The weather this time of year in Siberia was outstanding (UA3D/0). This was a fun contest and is still one of the best. It was a lot of fun working ITU and the many IARU HQ stations (CT1BWW). I want to thank you for the first-place award in the 1993 IARU contest. It was a complete surprise and greatly appreciated (EA3EJI). My wife and I shared the shack area for the contest. It was my wife's first attempt at contesting, so it made operating a great deal of fun (EA3BT). This was a fine contest, but Murphy's visit came too early, Friday at noon. We started with no power to the amp, then no TX/RX on 10 meters, then by 1030 UTC Saturday, Murphy finally decided to go on vacation and everything worked fine during the rest of the contest. I hope for the next contest Murphy won't come again (C48A). All of our contacts were on CW and were only operating with 100 watts, but we're glad we were dug out of the low-power mud, especially on 40 meters. Everything aside we'd do it all over again (9V1ARU). Conditions are getting worse and worse, while I keep having more and more fun (F6IIE). It's a pity 15 and 10 were so quiet. I can't wait until next year to give it a second, and hopefully better, crack (G0DEZ). It was nice to see propagation to the US for a change (GM0ECO). The small openings made me chase multipliers and still enjoy the contest (ON4AUC). This is always a pleasant contest (ON5CZ). It was a fine contest and conditions were good (ON4BR). The high temperature in my shack prevented me from going for a higher score. I only heard two stations on 10, and couldn't work either one (PA0MIR). I hope to come back next year, with



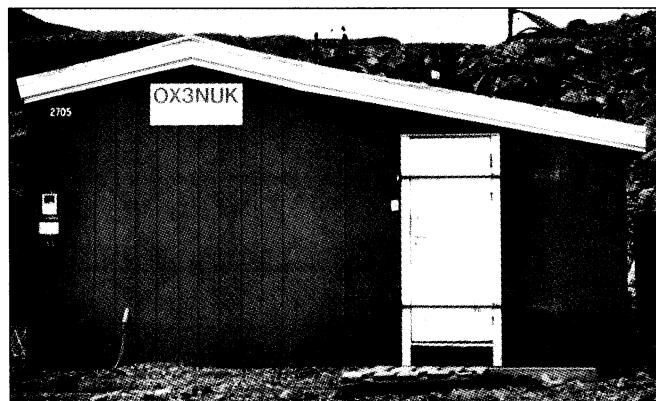
Len, KB2R, popped by 4U1ITU in Geneva to give out HQ multipliers.

better antennas for the low bands, especially 160 (PA0UM). There was so much activity, I didn't have to call CQ once to work someone (PA3DWJ). There was a lot of activity (PA3BN). Propagation was pretty good (PI4COM). I hope next year my amplifier won't trash the computer, and my antenna rotator won't fail and leave everything pointed north (DL5IAR). I nearly doubled my score from last year, although conditions were much better than last year. It was hard to copy any stations from the Far East (DL7VOG). Propagation to the West Coast was excellent on 20 (DL1IAO). It was nice to hear so many HQ stations (DL4FDM). We're going to have to wait a few years for more sunspots to make this contest more fun (DF0FHW). One of our operators turned out to be Murphy, who visited us at the start of the contest (HB0/PI4TUE). My rig decided to stop working on 160 just before the start of the contest. Propagation was about equal to everywhere (OK1BMW). Conditions were good enough, considering the low solar activities, but I prefer harder work in heavy pileups (SP5TT). After 7½ hours, my amplifier quit (Y05BQ). The rain, wind and high QRN made things difficult. The wind bent my 18.5-meter mast in half (YR8A). I need better antennas on the high bands. I was surprised when PY0FF answered my CQ on 160! (LY1DR). Although propagation wasn't that good, it wasn't that bad, either (EC3ACG). It was a fun contest, but with only a G5RV, I didn't have much of a chance, but it sure beats heck out of mowing the lawn (N6XJG).

#### Feedback

See February 1994 *QST*, page 109: HA0MM's line score was incorrectly printed as 199,404. It was actually 1,999,404.

Dave, WJ2O, traveled to Greenland to operate from the club station in Nuuk.



#### A "Revolutionary" Contesting Experience

*By Peter Casier, D2TT/ON6TT*

The IARU HF Championship is one of my favorite contests. This year, I found myself in Angola working as a telecommunication consultant for the Red Cross. Luckily, during the weekend of the contest, I was in Luanda, the capital of Angola. I had set up an HF station for the Red Cross at its headquarters: a triband Yagi fixed to Geneva (due north) and a multiband dipole on the top of a seven-story building.

For the contest, I hooked up my faithful HF transceiver and prepared to cope with the regular power failures common to Luanda: two 124-Ah batteries and a small 600-W generator. The power didn't fail once during the contest, but the voltage dropped to 190 V from 220 V, causing the output of my transceiver to drop to only 20 W. The office where I set up the equipment is in an apartment block, overlooking a living area of small houses. Africa is normally a noisy place; there, everyone tried to beat everyone else by turning up the volume on their television sets as loud as possible. So I was quite used to hearing all kinds of things. At about midnight, though, I heard the noise level going higher than that of my headset. It was like hundreds of people were shouting and screaming in the street below. I took a careful look over the balcony and saw a couple of gangs involved in a gunfight. People in the streets were running around trying to find a place to hide. It was the first time I had "local QRM" in a contest caused by a gunfight.

Propagation was good the first couple of hours in the contest, with nice runs into the US (despite my 20-W output), but once 20 meters closed, I could forget working anyone on 40 or 80. I heard stations, but I wasn't heard by anyone else. I fell asleep in front of the receiver with my voice failing after calling CQ six times per minute. Early in the morning, most of my contacts were by search-and-pounce. I couldn't get a pileup running. Even the S&P was difficult; I kept getting, "What is your call sign? 3D2TT? OD2TT? DL2TT?" But I didn't give up, and five minutes before the end of the contest, I had my pileup running again. I would have done anything for a kW or a rotatable Yagi...even for a voice keyer...or 220 V. Then again, that's the fun of contesting, isn't it?

## Top World Scores

Mixed Mode		Phone Only		CW Only		Multioperator	
Call Sign	Score	Call Sign	Score	Call Sign	Score	Call Sign	Score
HA0MM	1,875,258	CR3R (CT3BX,op)	3,718,451	C48A (5B4ADA,op)	1,852,590	HG73DX	3,237,894
VP5NC (AA4NC,op)	1,490,886	UR5MAF	2,209,116	KI1G	1,194,510	UU5A	2,552,256
DL5IAR	1,362,200	EN2D (UT7DX,op)	1,266,252	W2GD	1,099,150	UT7E	2,300,400
UA3RAR	1,242,428	RZ9U (RZ9UA,op)	1,192,498	S59AA	1,041,390	IR4T	1,792,635
OH6NIO	1,181,582	PY0FF	1,153,740	OH2PM (OH1WZ,op)	970,717	RU6L	1,777,888
EN11 (US1ITU,op)	1,081,917	YT1AD	1,149,660	K4PQL	826,284	C49C	1,662,880
UA3D/0 (UA3DPX,op)	1,023,840	OH6LNI	1,036,935	UX2HO	814,660	T9A	1,580,128
DL3KDV	849,090	G4JVG	1,025,208	S53DCM	790,071	RW6AWC	1,576,274
K3ZO	803,125	UX0MM	868,700	N6TR	752,410	W5WMU	1,534,250
KZ5D	760,608	5N0MVE	835,968	DL1IAO	742,462	OK5W	1,443,224

## Top W/VE Scores

Mixed Mode		Phone Only		CW Only		Multioperator	
Call Sign	Score	Call Sign	Score	Call Sign	Score	Call Sign	Score
K3ZO	803,125	WA4PGM	650,236	KI1G	1,194,510	W5WMU	1,534,250
KZ5D	760,608	W4PZV (WA4SVO,op)	471,660	W2GD	1,099,150	WX0X	1,251,888
N8II	597,820	WA7FOE	452,214	K4PQL	826,284	K5NA	1,098,131
KF0H	447,412	WS1A	397,320	N6TR	752,410	N5EA	863,863
N5NMX	435,612	K4VUD	386,004	K1RU	698,775	AA1AS	849,126
K3WW	434,910	N4UH	375,100	WZ3Q	607,420	KN2T	805,375
VE3RM	429,739	C16AO (VE6MD,op)	345,840	AG6D (N4TQO,op)	533,021	K9SD	680,295
WX9U	372,720	WM2V	305,828	W1ZM (K0EJ,op)	518,520	AD5Q	642,692
K14XO	367,356	KD9ST	278,168	VE3KP	368,019	KF2KT (UT5UGR,op)	600,010
W1GD	345,840	VE1UK	253,184	K2SX/1	342,693	NC0P	578,600

## Scores

Scores are listed by ITU zone and then by country, ARRL section or Canadian province within the zone. Line scores indicate call sign, final score, QSOs, multipliers and entry class (A = single operator, mixed mode; B = single operator, phone only; C = single operator, CW only; D = multioperator, single transmitter).

Zone 1	Santa Barbara	Zone 7	Kansas	WF1L
<b>Alaska</b>	W67KF WA6FGV W6AB (N6GC,WZ9J,ops)	W6,292 325 68 A 77,994 412 63 A 183,770 570 85 D	KI1G W2GD	34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
KL7RA	244,937 821 77 A		W0FVB N0MSB	849,126 1562 137 D
KL7FAP	7,540 84 26 B		KF0T N0AT (+NET)	KB1W (+NET) 25,980 212 30 D
Zone 2	Santa Clara Valley	Louisiana	Minnesota	W2
<b>Alberta</b>	N6IP N6NM	341,544 806 104 A 167,498 538 89 C	KZ5D NZ5O AB5HD W5WMU (+WU3V,NS5AN,W5Z,W0MJ)	31,624 168 59 B 4,530 43 30 B 53,820 291 60 C
CI6AO (VE6MD,op)	345,840 1168 88 B		KF0T (+NET)	8,091 73 29 D
VE6JAV	112,392 360 84 B		N0JHX W0X0X (WX3N,NB9T,ops)	Eastern New York 223,686 633 102 A
VE6JY	66,368 240 68 B		W0X0X (WX3N,NB9T,ops)	K2POF 57,000 257 57 A
CI6BF (VE6BF,op)	196,308 612 84 C		W0X0X (WX3N,NB9T,ops)	KC2QF 22,550 216 41 B
<b>British Columbia</b>	KF6BL W6CN KD6QK W6UQF AB6NE	137,592 632 63 A 45,738 206 63 B 37,056 772 48 B 113,470 470 69 C 33,600 700 48 C	W50YU NSQDE	K5NA (+KU2Q,KY2J,JA9SSY) JH7CUO 1,098,131 1768 163 D
VE7QO	213,435 583 85 A		W50YU NSQDE	N21WE (+K2DXU,N2XDI) 192,794 707 94 D
VE7JMN	51,832 336 44 B		W0X0X (WX3N,NB9T,ops)	WA2UKP (+WA2JQK) 186,786 706 81 D
VE7XO	32,383 107 47 B		KM0L (+NET)	
Zone 3	San Francisco	Mississippi	North Dakota	NYC-Long Island
<b>Manitoba</b>	AG6D (N4TQO,op)	533,021 1115 113 C	W85B NN5T NA5F WA5MUF	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
CI4VV	216,080 643 74 A		W85B W5UDA WV5S	W0X0X (WX3N,NB9T,ops)
CK6HBR	12,000 99 32 B		NJ1V (+AB5I,KB5RBX)	W0X0X (WX3N,NB9T,ops)
CK1JA (VY1JA,op)	109,719 399 73 C		316,158 1108 87 D	W0X0X (WX3N,NB9T,ops)
CK1JA (VY1JA,op)	132,066 215 66 A		KM0L (+NET)	W0X0X (WX3N,NB9T,ops)
Zone 4	San Joaquin Valley	Oklahoma	North Dakota	NYC-Long Island
<b>Quebec</b>	WW6D W68IP	31,020 182 47 C 23,680 182 32 C	KB5BOB W5UDA WV5S	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
CI2AWR	63,720 402 45 A		NJ1V (+AB5I,KB5RBX)	W0X0X (WX3N,NB9T,ops)
VE2FFE	960 22 12 C		316,158 1108 87 D	W0X0X (WX3N,NB9T,ops)
Zone 5	Sacramento Valley	South Texas	Oklahoma	NYC-Long Island
<b>Ontario</b>	N6WR N6NF K6FO AA6CX	7,852 104 26 B 73,975 361 55 C 44,464 208 56 C 25,652 175 44 C	N5NMX W5UDA WV5S W5NR N5EA (+K5GA,W5ASP)	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
VE3RM	429,739 1019 113 A		KB5BOB W5UDA WV5S	W0X0X (WX3N,NB9T,ops)
VE3CWE	86,424 302 78 A		NJ1V (+AB5I,KB5RBX)	W0X0X (WX3N,NB9T,ops)
VA8SYL	48,480 451 32 A		316,158 1108 87 D	W0X0X (WX3N,NB9T,ops)
VE3KP	368,019 903 103 C		KM0L (+NET)	W0X0X (WX3N,NB9T,ops)
VE3EJ	46,428 226 53 C			W0X0X (WX3N,NB9T,ops)
Zone 6	Arizona	South Texas	Oklahoma	NYC-Long Island
<b>Greenland</b>	W7YS	69,120 304 64 B	W6EG WV1C K1DBM N1NQD K1IG K1RU K2SX/1 N4XR W1AMBK W4YDD	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
OX3/WJ2O	17,640 124 45 C		W6EG WV1C K1DBM N1NQD K1IG K1RU K2SX/1 N4XR W1AMBK W4YDD	W0X0X (WX3N,NB9T,ops)
Zone 7	Eastern Washington	West Texas	Oklahoma	NYC-Long Island
<b>Idaho</b>	K7NEW	91,250 576 50 A	K5RC (+NET)	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
K7ATT	53,845 265 55 C		642,692 1519 124 D	W0X0X (WX3N,NB9T,ops)
K7ABV	111,244 540 42 A		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
Zone 8	Oregon	W7	Oklahoma	NYC-Long Island
<b>Oregon</b>	W7YAO	314,464 708 124 A	AD5Q (+KB5 UHS,YVT)	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
K6TR	752,410 1413 134 C		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
K7FEF	3,450 56 23 C		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
Zone 9	Wyoming	W7	Oklahoma	NYC-Long Island
<b>Utah</b>	W7HS	67,394 259 62 C	W0X0X (WX3N,NB9T,ops)	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
K6XO (+KI7WX)	227,756 724 97 D		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
Zone 10	Western Washington	W8	Oklahoma	NYC-Long Island
<b>Washington</b>	W7DK (AJ7R,K7YLM,KB7NAG, KC7AVT,N7e EDV,VGO,WA7UQV, WB7s AVJ,DFQ,ops)	452,214 1162 105 B 147,040 520 80 B 35,098 237 46 C	W0X0X (WX3N,NB9T,ops)	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
K6HR	9,504 82 33 A		680,295 1121 165 D	W0X0X (WX3N,NB9T,ops)
KM6YX	130,680 549 72 B			W0X0X (WX3N,NB9T,ops)
N6TCZ	144 18 8 B			W0X0X (WX3N,NB9T,ops)
W6NNV	6,804 86 18 C			W0X0X (WX3N,NB9T,ops)
N8SR	976 116 26 C			W0X0X (WX3N,NB9T,ops)
N6XJG	920 115 8 C			W0X0X (WX3N,NB9T,ops)
W6YR	657 27 9 C			W0X0X (WX3N,NB9T,ops)
Zone 11	Los Angeles	W9	Oklahoma	NYC-Long Island
<b>Los Angeles</b>	N6MI KU6T N6IBP AG8L/6 KJ6HO	296,240 882 92 A 32,256 190 48 A 31,700 164 50 A 21,402 180 41 A 9,504 82 33 A	Illinois	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
VE3EY	17,057 144 37 A		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
KD7EY	6,858 82 27 A		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
W6HAL	64,170 1395 46 C		W0X0X (WX3N,NB9T,ops)	W0X0X (WX3N,NB9T,ops)
Zone 12	Orange	W9	Oklahoma	NYC-Long Island
<b>Orange</b>	W0X0F	107,281 469 71 D	Iowa	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
AB8ED	17,057 144 37 A		K1CLN WW1R W1TS	W0X0X (WX3N,NB9T,ops)
KD7EY	6,858 82 27 A		37,260 176 54 A 49,500 250 55 B 79,915 379 55 C	W0X0X (WX3N,NB9T,ops)
W6HAL	64,170 1395 46 C			W0X0X (WX3N,NB9T,ops)
Zone 13	New Hampshire	W9	Oklahoma	NYC-Long Island
<b>New Hampshire</b>	KD1ON WS1A N1OAZ	12,837 123 33 A 39,320 938 110 B 49,848 254 42 B	KD1ON WS1A N1OAZ	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
KD0NB (+NET)	21,420 142 45 D			W0X0X (WX3N,NB9T,ops)
Zone 14	Rhode Island	W9	Oklahoma	NYC-Long Island
<b>Rhode Island</b>	K1PLX K1HMO	190,012 537 106 B 108,000 323 96 B	K1PLX K1HMO	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
KD0NB (+NET)	21,420 142 45 D			W0X0X (WX3N,NB9T,ops)
Zone 15	Vermont	W9	Oklahoma	NYC-Long Island
<b>Vermont</b>	K1CJN WW1R W1TS	37,260 176 54 A 49,500 250 55 B 79,915 379 55 C	K1CJN WW1R W1TS	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
KD0NB (+NET)	21,420 142 45 D			W0X0X (WX3N,NB9T,ops)
Zone 16	Maryland-DC	W9	Oklahoma	NYC-Long Island
<b>Maryland-DC</b>	K3ZO N2WCQ	803,125 1617 125 A 103,020 455 68 A	K3ZO N2WCQ (UT4UZ,ops)	WF1L 34,686 200 47 C AA1AS (+KY1H,NU1P,W1MK)
KD7EY	10,304 62 56 A			W0X0X (WX3N,NB9T,ops)
W6HAL	25,392 144 46 B			W0X0X (WX3N,NB9T,ops)
W6HAL	51,612 266 51 C			W0X0X (WX3N,NB9T,ops)
W6HAL	21,291 139 47 C			W0X0X (WX3N,NB9T,ops)
W6HAL	20,256 138 48 C			W0X0X (WX3N,NB9T,ops)

<b>Western Pennsylvania</b>	AA9AQ	217,316	559	121	B	OH1MMM (OH1VR,OH6LI,AC6T,ops)	ON6CR	71,131	277	83	B	DL0DRI (DL1MGB,DH6MBV,ops)				
W3YEF	42,987	185	68	8	B	KB0C	56,959	195	79	B	106,470	364	105	D		
WW3S	37,760	204	59	59	B	W9HYL	11,220	129	20	B	DL0JX (+DJ9CQ)	106,288	407	112	D	
WB0IWG	24	6	2	2	B	KO9Y	152,750	465	27	C	DF0FH/W/P (DH1PAZ,DC5WK, DL8WM,DD9WL)	97,119	363	99	D	
K3UA	624	18	13	13	C	<b>Wisconsin</b>	KA9FOX	45,182	401	38	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>W4</b>						N29Z	150,677	537	89	B	ON6AH (+ON5PV,ON6s MH,VL)	819,020	1619	124	D	
<b>Alabama</b>	AA4UF	44,523	437	51	B	N0BSH	206,988	650	94	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KK4SM	118,300	406	91	1 C	W9HE	47,790	262	59	C	ON4NL	30,748	189	52	C		
<b>Georgia</b>	KI4KO	367,356	988	138	A	KO9Y	152,750	465	27	C	ON4BR	15,715	134	35	C	
W4GLS	34,556	193	53	53	A	<b>Zone 9</b>	KO9Y	152,750	465	27	C	ON6AH (+ON5PV,ON6s MH,VL)	819,020	1619	124	D
AC4PQ	12,992	120	32	32	A	<b>Maritime-Newfoundland</b>	KA9FOX	45,182	401	38	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
KO4HC	113,652	482	82	82	B	VE1UK	253,184	744	92	B	ON6AH (+ON5PV,ON6s MH,VL)	819,020	1619	124	D	
K4ZTL	10,290	80	35	35	B	VE9HF	65,472	584	31	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KB4GID	309,042	849	118	118	C	VE9ST	328,968	1117	72	C	ON6AH (+ON5PV,ON6s MH,VL)	819,020	1619	124	D	
KN4QV	129,390	508	95	95	C	XL9/WD8AUB	2,418	62	13	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K4BAI	115,206	515	78	78	C	<b>Quebec</b>	VE2GHI	18,018	154	33	C	ON6AH (+ON5PV,ON6s MH,VL)	819,020	1619	124	D
<b>Kentucky</b>	KI4DC	26,691	276	41	B	<b>Zone 10</b>	VE1UK	253,184	744	92	B	ON6AH (+ON5PV,ON6s MH,VL)	819,020	1619	124	D
KC4ULX	19,223	151	47	47	B	Mexico	65,472	584	31	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KR4KL	9,860	106	29	29	B	XE3LMV	38,192	240	44	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
N4XM	119,282	417	86	86	C	XE1/AA6RX	42,381	253	51	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
<b>North Carolina</b>	WB4IUY	58,133	401	61	A	<b>Zone 11</b>	8F9GY	160,758	537	78	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
K54S	20,724	141	44	44	A	<b>Barbados</b>	SM3JLA	103,774	614	53	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
N4UH	375,100	1158	100	100	B	SM0BDS	57,000	238	75	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K4PQL	826,284	1448	148	148	C	SM3LIV	50,458	266	74	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
WZ3Q	607,420	1308	121	121	C	SM7RZF	39,008	200	53	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
W11HN	58,459	287	53	53	C	SM7HSP	18,538	127	46	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K14HN	4,784	102	23	23	C	SM5OK	14,160	102	40	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
<b>Northern Florida</b>	KI4UD	366,004	1198	114	B	SM6AHU	3,020	53	20	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KD4HXT	2,550	172	10	10	B	SL0CB (SM0TXX,op)	184,639	565	91	D	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
AC4OC	26,400	180	50	50	C	<b>Zone 12</b>	SM5IMO	685,064	1237	152	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>South Carolina</b>	KI4UH	47,992	259	56	A	SM5RE	204,906	663	74	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
WD4FJP	90	8	6	6	A	SM6DPE	10,602	103	38	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
WA4JK	150,118	515	94	94	C	SM6REA (+SM6s LPF,LPG,TOL)	129,600	581	60	D	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
<b>Southern Florida</b>	W4PZV (WA4SV,op)	47,160	1128	140	B	<b>Zone 13</b>	RV1CC	13,590	398	110	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
WD4AHZ	274,614	778	111	111	C	RV1ZQ	3,666	51	26	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
<b>Tennessee</b>	WA6KUI/4	209,825	699	109	A	RV1AN	590,520	1084	152	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K52X	56,580	381	60	60	A	UA1ZO	134,442	523	44	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K14KR	1,584	39	18	18	B	RW1A (UA1-169-900, UA1-169-2391,ops)	129,600	581	60	D	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
W12ZM (K0EJ,op)	518,520	1177	120	120	C	<b>Zone 14</b>	RA0BR	26,586	155	42	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
KO4EW	36,465	213	51	51	C	RA0CJW (UA9s JAF,JKT,WO,ops)	34,866	421	67	D	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
AC4EM	34,656	190	59	59	C	<b>Zone 15</b>	RA0EJ	265,545	545	105	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
AA4WX	11,256	108	28	28	C	RA0CWR	102,084	440	47	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
<b>Virginia</b>	AD4FX	46,155	199	51	A	<b>Venezuela</b>	RA0EJ	265,545	545	105	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
WA4PGM	650,236	1073	149	149	B	YV2FEQ	31,687	150	44	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
N4MM	106,848	307	96	96	B	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KR4CZ	12,051	95	39	39	B	<b>Zone 16</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
WD4AD	77,004	408	62	62	C	<b>Argentina</b>	YV2FEQ	31,687	150	44	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
N4MO	36,309	239	57	57	C	LUBADX	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
N4JEQ	20,680	145	40	40	C	Fernando de Noronha	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
KA4RRU (+KE4DFI,K4JVG,K4OFM, WB4NFS)	278,584	362	97	97	D	<b>Zone 17</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>W5</b>						<b>Zone 18</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>Louisiana</b>	N5OZB	31,857	235	41	B	<b>Paraguay</b>	ZP5XYE	15,222	354	43	B	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
AB5PO	3,150	47	18	18	B	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
<b>Mississippi</b>	N5KKG	45,695	293	65	B	<b>Zone 19</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
KB5IXI	10,788	162	29	29	C	<b>European Russia</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>W8</b>						<b>Zone 20</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>Michigan</b>	WB8BUQ	50,778	87	62	A	<b>Bolivia</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
KB8BLU	22,134	247	34	34	B	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K8CV (+NET)	1,053	23	13	13	D	<b>Zone 21</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
<b>Ohio</b>	KU8E	41,076	151	63	A	<b>Asiatic Russia</b>	YV1DRK	138,148	383	75	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D
N6WLX/B	235,331	689	109	109	B	TM5M (F5s MYH,MXH,RWA, FA1MXI,ops)	129,600	581	60	D	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KI8O	198	18	6	6	B	TM5F (F5s PQX,PYQ,ops)	244,321	903	77	D	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
N8LXS	321,639	1021	87	87	C	F5KJN	370,384	709	112	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
K8SJ	120,868	518	82	82	C	TM5P (F5s PQX,PYQ,ops)	370,384	709	112	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
KF8TM	70,602	250	82	82	C	F5KJN	370,384	709	112	C	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
WT8P	52,910	308	55	55	C	TM5P (PY2NY,op)	59,904	214	64	A	OT4V (ON1H,ON2AH,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)	608,256	1228	132	D	
N8BQJ (+NET)	248,528	587	112	112	D	TM5P (PY2NY,op)	56,214	220	54	B	OT4V (ON1H,ON2AH,ON4s ALL, AM					

OK1KQJ (+OK1AYP)	70,376	296	76 D
OL5PLZ (OK1DDR,OK1-19873,ops)	67,405	269	85 D
<b>Slovak Republic</b>			
OM3YK	16,685	123	47 B
OM3FON	126,060	275	110 C
OM3CCC	112,623	415	93 C
OM3CAB	45,198	292	62 C
OM3TEG	20,790	117	66 C
OM2I (OM3s CQL,TA,TSQ,TXM, WPB,WST,ops)			
41,930	1209	115 D	
OM3RDP (OM3CDZ,OM3s -28173, -28756,ops)			
144,352	531	42 D	
OM9CA (+ops)	30,444	210	59 D
<b>Slovenia</b>			
S50C (S57MM,ops)	362,103	1009	129 A
S53CAB	314,793	823	131 B
S50AA	1,041,390	1679	171 C
S53DCM	790,071	1453	159 C
S53R	551,102	1011	152 C
S56A	415,728	850	144 C
S57J	277,794	717	122 C
S51WA	72,420	278	85 C
S51OZ	62,060	247	58 C
S51RW	15,179	119	43 C
S59DKR (S7s BZD,XX,ops)	278,997	951	113 D
<b>Poland</b>			
SO8IF (DJ0JF,op)	533,216	1260	152 A
SP5UAF	143,260	515	116 A
SP5VQ	81,984	224	67 A
SP2WDW	80,520	328	88 A
SP5ELA	66,164	318	68 A
SP9RTI	64,600	328	76 A
SP1MHV	31,837	149	79 A
SP6TRH	17,157	117	17 A
SP7SEW	142,168	378	104 B
SP9BBH	118,320	444	102 B
SP4SKW	101,649	470	97 B
SP9UOG	85,424	354	68 B
SP6NVK	36,920	230	65 B
SP9LDI	26,980	167	71 B
SP9VEJ	23,184	206	42 B
SP2WEI	18,310	97	26 B
SP8OON	17,150	130	50 B
SP6FB/3	16,560	135	40 B
SP6EI	13,608	128	42 B
SP8OOB	13,095	133	45 B
SP9MQD	11,200	100	50 B
SP9EMV	7,525	107	25 B
SP7GSM	2,562	110	23 B
SP8TDE	2,484	34	23 B
SP9FTJ	2,120	32	20 B
SP7GIQ	731,126	1522	167 C
SP2AYC	186,377	575	113 C
SP6YAQ	156,240	471	112 C
SP5TT	127,388	386	110 C
SP3FAR	97,020	250	110 C
SP4FGF	65,600	316	82 C
SP1AEN	45,760	268	64 C
SP8BAB	33,072	194	39 C
SP6AU1	25,440	147	60 C
SP1BLE	22,764	164	42 C
SP3AOT	15,800	107	48 C
SP9HNB	14,382	136	47 C
SP6CXH	7,982	99	26 C
SP6SYF	7,304	112	22 C
SP4EAK	5,175	66	23 C
SO5TW	4,446	108	26 C
SP9KRT	3,402	47	54 C
SN0PR (SP6s ALE,BGL,FER, HAO,ops)	112,203	380	117 D
<b>Greece</b>			
SV2BNF	11,396	115	94 B
<b>Bosnia-Herzegovina</b>			
T9A (T91ENS,T93M,T94d DD,NE, ON,T99W)	1,580,128	2790	176 D
<b>Romania</b>			
Y05BQ	7,904	117	32 A
YO2CJX	3,683	86	29 A
YO9FNR	33,672	216	69 B
Y03AIL	21,168	162	54 B
Y08RRO	18,990	133	45 B
Y05BVI	12,876	132	37 B
YR8A (YO8AXP,op)	203,016	668	132 C
Y08FR	85,916	356	94 C
Y08BPY	75,650	372	89 C
Y04AAC	600	40	10 C
Y07KJX (Y07s BGA,LFU,ops)	240,282	729	126 D
Y08KAN (Y08s BFC,RGJ,ops)	164,268	528	106 D
<b>Yugoslavia</b>			
ZY7QY	105,210	431	90 A
YT1AD	1,149,660	1887	180 B
ZY7ZV	620,796	1282	132 C
YU1HA	262,990	722	130 C
YU7XM	140,192	507	101 C
YU7SF	129,222	443	107 C
4N1N (YU4NJ,op)	62,396	518	38 C
<b>Albania</b>			
ZA1AJ (OK1PSZ,op)	678,155	1787	145 C
UT7ND	101,574	382	99 C
UT5UJY	97,179	322	123 C
UR3PDM	70,490	323	70 C
UU5JNW	55,084	360	47 C
UT4EK	49,164	224	68 C
USBUA	40,950	219	65 C
UT2QT	20,280	292	30 C
UY2ZZ	18,540	233	30 C
UX5VK	11,315	162	31 C
UT1ZZ	6,867	111	21 C
UR5FCM	3,114	91	18 C
UT1PO	1,584	58	12 C
UT2XK	330	22	15 C
UU5A (UU1JA,UU2s JO,JX,JZ, UU3JD,UU3JW,UU5JR,UU7JF,UU0JX, UU5-067,2000,ops)	1,339	59	13 C
EW8OS	40,959	1107	37 C
<b>Moldova</b>			
EV1F	273,812	877	98 C
ER1OA	135,150	502	85 C
ER1CW	117,920	522	80 C
ER3DX	86,856	382	88 C
<b>Belarus</b>			
EU1DO	171,699	437	129 A
EW4MM	188,589	577	111 B
EU1MM	729,111	1470	141 C
EE6EU	103,586	363	98 C
EW8OS	40,959	1107	37 C
<b>Lithuania</b>			
LY1DR	593,775	212	175 A
LY2OU	111,549	365	103 A
LY3BH	512,541	1131	123 B
LY2MW	302,211	831	123 C
LY2KM	157,818	518	105 C
LY1CF	136,424	513	97 C
LY1CN	84,320	370	85 C
LY3MR (LY1s FF,FR,LV3NFV,ops)	483,804	1156	151 D
<b>European Russia</b>			
UA3RAR	1,242,428	1698	187 A
RU3RN	50,139	222	81 A
FW3WX	38,430	214	63 A
RU4AA	37,152	236	54 A
RA2QO	32,976	154	64 A
FW9AB/6	279,698	372	214 B
UA4HE	200,880	524	116 B
RA4NC	81,512	288	92 B
RV4LP	55,554	177	94 B
RA3THN	22,503	2577	369 B
RU3WT	18,500	149	60 B
RA4KYY	4,750	59	25 B
UA6LP	300,580	725	133 C
RA4FW	125,532	475	98 C
RA4YJ	121,885	398	95 C
RA3PP	112,385	395	95 C
RA3GU	110,126	433	82 C
RA3RB	97,266	408	87 C
FW3RP	68,256	270	72 C
UA4ANZ	43,870	173	82 C
UA4HY	43,520	241	68 C
RA3WM	33,384	266	39 C
UA4SS	32,780	226	55 C
UA4YG	23,800	230	40 C
RA6HE	21,170	125	58 C
RA3VY	14,544	148	36 C
RA3RFG	16	4	4 C
RU6L (UA6s LFO,LV,NP,UT2W, UR5IBG,UA6-150-1403,ops)	1,777,888	2185	220 D
RU6AWC (UA6s AAY,AJJ,AQA,ops)	1,576,274	2058	238 D
RZ6HWA (RA6FW,RW6Ms MA,MZ,ops)	741,704	1232	184 D
RK3EWW (RA3EA,RZ3EM,UA3s EDQ,UA3s -147-505,-147-512, -147-541,ops)	602,188	1258	151 D
RZ6HWH (+ops)	420,660	1237	108 D
RZ4AYT (RA4AI,UA4AI,AY, UA4-156-1052,ops)	254,198	726	134 D
RZ1AYX (RX1AW,UA1ANE, RW6HJV,ops)	165,216	1220	72 D
RK3UWA (+ops)	123,375	520	75 D
RK3DZD (RV3DA,UA3-142-1896,ops)	117,525	493	75 D
RK3PWJ (RW3PN,UA3PNO,UV3AKK,ops)	105,840	393	84 D
RK3QWB (+ops)	762	260	75 D
<b>Ukraine</b>			
EN1 (US1TU,op)	1,081,917	1679	175 A
UX7FN	370,448	974	137 A
UR4LRQ	266,448	453	122 A
UU0J (UU0JZ,op)	235,368	1633	143 A
UX8I (UX8IX,op)	174,124	588	101 A
UY5TE	123,876	476	93 A
UU2JA	124,478	418	109 A
UX5J	124,256	339	118 A
UY5TE	107,370	410	90 A
US3LX	66,682	297	77 A
UT5XF	25,898	264	26 A
UR5LBX	16,104	178	33 A
UR5EPV	10,800	198	18 A
UR5MAF	2,209,116	2378	221 B
EN0D (UT7DX,op)	1,266,252	2154	156 B
UX0MM	668,700	1672	146 B
UX0LT	414,030	604	228 B
UY3CC	87,856	377	76 B
UX0HA	14,781	156	27 B
UX2HO	814,664	1484	154 C
UX7VA	594,732	1108	174 C
UT4PZ	503,361	1136	130 C
UT3IQ	352,092	893	122 C
UX7IA	335,604	835	140 C
UR5EAT	289,613	871	109 C
UX5EF	203,585	513	130 C
UR4LCB	177,856	532	114 C
UR3MP	107,338	468	82 C
<b>Zone 29</b>			
<b>Azerbaijan</b>			
4K9W	36,208	146	73 C
<b>Moldova</b>			
EV1F	273,812	877	98 C
ER1OA	135,150	502	85 C
ER1CW	117,920	522	80 C
ER3DX	86,856	382	88 C
<b>Belarus</b>			
EU1DO	171,699	437	129 A
EW4MM	188,589	577	111 B
EU1MM	729,111	1470	141 C
EE6EU	103,586	363	98 C
EW8OS	40,959	1107	37 C
<b>Lithuania</b>			
LY1DR	593,775	212	175 A
LY2OU	111,549	365	103 A
LY3BH	512,541	1131	123 B
LY2MW	302,211	831	123 C
LY2KM	157,818	518	105 C
LY1CF	136,424	513	97 C
LY1CN	84,320	370	85 C
LY3MR (LY1s FF,FR,LV3NFV,ops)	483,804	1156	151 D
<b>Zone 30</b>			
<b>European Russia</b>			
UA3RAR	1,242,428	1698	187 A
RU3RN	50,139	222	81 A
FW3WX	38,430	214	63 A
RU4AA	37,152	236	54 A
RA2QO	32,976	154	64 A
FW9AB/6	279,698	372	214 B
RA4NC	81,512	288	92 B
RV4LP	55,554	177	94 B
RA3THN	22,503	2577	369 B
RU3WT	18,500	149	60 B
RA4KYY	4,750	59	25 B
UA4HE	300,580	725	133 C
RA4HG	158,270	560	85 C
RU4WE	86,940	327	84 C
RX4HX	29,232	162	56 C
RZ4WWB (UA4s WEI,WGY,WJF,ops)	966,897	1641	173 D
RA4WWA (RW4WA,UA4s WA, WAN,ops)	775,260	1358	180 D
<b>Asiatic Russia</b>			
UW9QK	79,947	267	81 A
UA9SHM	11,958	355	40 A
RA9ST	33,349	285	89 B
RA9FDR	4,541	55	19 B
RV9CE	53,650	253	50 C
UA9SCX	19,055	131	37 C
RK9CYA (RA9CKQ,UA9CLZ,ops)	38,114	243	38 D
<b>Zone 31</b>			
<b>Asiatic Russia</b>			
UK7R (UK3s ADT,AX,ops)	24,986	568	101 D
RZ9OO	264,240	1047	60 A
RZ9U (RZ9UA,op)	1,023,840	1411	160 A
UA0ST	11,618	98	37 B
RA0AB	341,328	742	104 C
RK05XF (UA8ATA,RU0SN,UA0s SMM,SUI,ops)	467,375	842	125 D
<b>Zone 32</b>			
<b>Asiatic Russia</b>			
UA3D/0 (UA3DPX,op)	1,023,840	1411	160 A
UA0ZAJ	35,240	225	40 C
<b>Zone 33</b>			
<b>Asiatic Russia</b>			
UA0J&B	133,282	328	103 C
RA0JX	91,934	1069	86 C
<b>Zone 34</b>			
<b>Asiatic Russia</b>			
RA0FU	41,401	521	127 A
RZ0LWA (RZ0LMF,op)	71,640	332	60 B
<b>Zone 35</b>			
<b>Asiatic Russia</b>			
RA0ZAJ	35		