# Results, Tenth IARU HF World Championship

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24 hours of contest propagation just like the "good old days"!

ow! This year's IARU contest was not what any of us expected. It was incredible! July never brings great conditions, and around this point of the sunspot cycle, they're usually even worse. Not this year! We had-great, wonderful, incredible, unbelievable (take your pick of adjectives here)-propagation. Who would have expected to run Europeans on 15 meters in July? Or to make as many contacts as they did on 10 meters? Heck, we didn't have conditions like these in the DX Contest back last winter! We may not even know what happened, but to tell the truth, who cares! The bands were great, and we made the most of it! It wound up being a hot contest for a hot weekend!

Participation was up nearly 10% this year, and that sure helped. Either a lot of folks stumbled onto the contest by accident, or operating events like these are attracting more and more people. We heard from a lot of "first-timers" this year. Is it the shorter time period that makes the difference? Does summer bring a different crop of contesters? Comments were favorable (with a lot less complaints!) about the operators and the operating.

Twenty meters being open during the entire contest was a major attraction, but the big propagation story has to be the 15 and 10-meter bands. Were they open where you are? More importantly, did you remember to check them, or did you just write them off as unusable? Most of the top European folks were able to rack up anywhere from 200 to 400 QSOs on 10 meters, and totals of 600 to 1000 QSOs on 15 meters were not uncommon.

Admittedly, it wasn't as good here in the US and Canada—but you should have been able to make at least 50 QSOs or so on 10, if you were lucky; and some folks had QSO totals on 15 meters in excess of 300. If you were running with the pack on 20 and 40 and didn't think to check 10 or 15, you should know better by now! It's experiences like these that differentiate between the top contesters and the rest of us. Who would have known you'd be able to work folks on those bands? They sure knew!

Another thing that sure helped boost scores were all those IARU HQ stations on the air this year. You should have been able to log a handful—after all, 27 of them were active, and 22 submitted logs. The

Hungarian crew at MRASZ kept their longstanding win streak intact, easily topping anyone (and anything) the other societies could throw at them. The "We Try Harder" competition for number 2 took a twist this year, though. Perennial runners-up DAØHQ found themselves slipping to fifth, with the Slovaks at OM5HQ, the Ukrainian operation at EM5HQ, and the Romanian ARF's YRØA all putting forth excellent efforts. ARRL's Headquarters station, W1AW, also did extremely well this year, making the most QSOs but finishing eighth, with 6.8 million points. For a blow-by-blow description, check out the sidebar, "The Way to Win at W1AW." Our thanks to our IARU sister-societies everywhere for helping to make this contest successful. It sure pays now to do a little multiplier hunting for the HQ folks.

Speaking of winning streaks, we saw another long-standing one broken in the Mixed Mode category: Rad, YU1RL, went to EA9IE and stopped Gyozo, HAØMM, in his tracks! Just when you thought you could win with 2 million points, he comes in and makes almost 3 million! Henry, YT1AD, wasn't too



Top World Scores			Top W/\	/E Scores		
Mixed Mode	CW Only		Mixed Mod	de	CW Only	
Call Score	Call	Score	Call	Score	Call	Score
EA9IE 2,911,184 (YUTIL,op) HAØMM 1,977,150 YT1AD 1,970,724 UTSUGR 1,765,752 TM1C 1,669,920 (GØJFX,op at F6CTT) UASRAR 1,598,625 KF3P 1,500,736 S53R 1,305,103 LY6M 1,272,154 (LY1DS,op) OH6WZ 1,239,249	HAØDU RZ9U (RZ9UA,o) S59AA C47W (5B4WN,o YT5ØBB (YT1BB,o) N2IC/Ø P4ØZ OH1NOR SLØCB (SMØTXT, W1WEF	1,374,206 1,356,516 p) 1,223,586 p) 1,203,734 1,198,392 1,120,560 1,098,165	KF3P KFØH AA4NC KØIJL (AAØBY,o KZ1M WZ4F WX9E (at KS9B) N9AG K3WW N5EA	1,500,736 932,252 919,512 676,021 p) 577,729 558,688 518,122 513,472 507,756 411,152	N2IC/Ø W1WEF K3ZO WXØB (NM5M,o) K4PQL K7SV N6TR K2SX/1 K8GL AA4NU (KØEJ,op	1,203,734 1,070,388 1,006,934 790,400 p) 724,196 633,876 618,288 601,738 586,034 578,816
Phone Only	Multiopera		Call	Score	Call	Scor
Call Score UT5DK 1,462,344 OH1EH 1,416,524 OH6LNI 1,104,752 5NØMVE 846,264 EMØF 843,677 (UXØFF,op) DL8PC 826,619 LY1DT 759,744 5NØGC 755,760	Call UU5J RS3A IR4T RY6Y RK9XWH RU3A RWØA WXØX	Score 2,702,612 1,965,816 1,937,796 1,790,712 1,481,385 1,466,630 1,400,352 1,379,856	WB2K WS1A W3BGN K4VUD WA7FOE VE6JY N4UH KB4WQO WB2NQT K6SVL	729,904 602,030 526,560 489,375 486,552 473,434 380,256 370,364 365,960 296,055	WXØX KN2T N3BB W5WMU K9SD NCØP KA4RRU WT2Q WØAIH N3KZ	1,379,856 1,148,904 1,059,122 1,010,316 798,187 669,123 605,665 602,426 580,152 520,884

### **IARU Headquarters Stations**

HG95HQ (HA1s FF,WD,YA,HA2RX,HA4YD,HA5s AWH, BGG,BSW,BWW,CQA,FM,GF,IW,KS,LN,MK,ML,NG, OM,TI,UA,WE,YLN,ZD,HG5s CCC,CNC,HA6s DX,FQ, GK,IAB,ND,NF,NL,NQ,NY,OB,OI,OQ,OY,PN,PX,BA,VH, WI,WP,WQ,WX,ZS,ZV,HG6IPQ,HA7s JES,PO,RY,VB, HA8s IB,IE,HA9AX,ops)

9,287,492

OM5HQ (OM3s JW,KAG,KAP,KCM,KFF,KII,KZY,RJB, RKA,RMM,ops) 8,095,005 8517 305

EM5HQ (US1s IDX,ITU,UT2s IA,ID,II,IJ,IM,IO,IV, UR3IKY,UR5IFZ,UT5IZO,US8ISC,UT8s IA,IM, UX8IX,US-1-602,-603,-700,ops) 8.052,860 274 7904

YRØA (YO2s ADQ,ARA,AVM,BBT,BEO,BP,CBF,DFA, RIDA (YOZS ADU,AHA,DAWI,BB) JEU,BP, DBP, DFA GL,YO3S APJ,BWK,CDN,FF,FRI,FU,FWC,ATW, HW,NF,SI,XF,YO4S ATW,HW,NF,SI,XF,YO5S CUQ, DMB,TE,YO6S AWR,FUE,YO7UP,YO8S AXP,BAM, BIG,CT,EQ,WW,ops) 7,918,772 7659 2

DAØHQ (DL1s ASA,AUZ,AWI,DTL,EMY,DK2OY, DL2s EBY,HTO,MEH,OBF,DL3s APO,DXX,OI,RMA, DL4s MM,RDJ,DL5s ANT,AOM,ATD,AXX,XU,DK6WL, DL6MYL,DF7RX,DJ7AA, DL7s UTA,VNF,VOA, DL8s HWA, MVG, DL9AWI, ops) 7 258 828 9233 292

S50HQ (S50s A,R,S51s AY,IX,OI,ZO,S52ZO,S56A, S57s AL,O,W,S58s A,AB,FA,S59A,ops) 7,022,966 7789 298

SPØHQ (SP2s EBG,FWC,SP3s ASN,GEM,HLM,RBI, RBR,SP5s BYY,INQ,JTM,SP6s CZ,HEQ,HFZ,VGP, XRZ,SP7GIQ,SP8NR,SP9s EIJ,IUM,ops) 6.882.645 7305

W1AW (K1s CC,KI,TO,ZZ,W1s OD,RM,AA2Z,K5FUV, N6BV.ops) 6.839.532 9745 252 N6BV,ops)

LZ7A (LZ1s GL,LF,MC,PJ,ZD,LZ2s JE,UU,ZF,LZ3s FN, FM,GU,LZ4s AX,ZF,ops) 3 440 310 4872 246

ER7A (ER1s AP,DA,M,OO,ER3s AL,DX,ED,KS,OO,ZZ, ER5s AA,AL,DX,OK,WU,ops) 2782 1,478,750 169 YUØHQ (YU7s AV,BJ,GO,GW,NF,NW,YZ7UN,

4N7DW.ops) 1.214,748 153 IY2ARI (I2MQP,IK2VJF,ops) 1,031,240 2000 145 SK3HQ (SM3s CER, DMP, RAB, ops)

1627 143 LT4E (LU2BDG,LU4AHV,LU6BEG,LU8AQE,ops) 130 683,410 1139

GB5HQ (G1AOF,G3TRU,G4WSE,G0s DBE,IEQ,KXL, PZO,STU,WAB,ops) 647,946 1495 142

8J3XHQ (JA3s MAU,SVG,JF3EIG,JG3RPL,JH3HOA, JI3s ERV,XOM,JJ3WPF,JP3s DZA,TEN,JQ3HDD,ops) 325 668 1313

4V100RC (HH2s B,JO,JR,ops) 239,946 2758 87 LXØRL (LX1s KQ,TI,ops) 204.972 LY1RMD (LY1DC,op) 189,288 735 99 XJ7RAC (VE7SBQ,op) 73 129.356 452 HB9A (HB9DDZ,op) 74,998 372 77 Z30RSM (+ops) 33,762 662 51

far behind HAØMM in the race for second, either, falling just 7k short. Whew! It's pretty obvious to us that one way to ensure a good score is to be in one of those locales with a direct shot to Europe.

These folks weren't the only ones to turn in great scores. Tyler, KF3P, came out of nowhere to win the US mixed mode, and John, WB2K, jumped up a couple of spots to win on phone. Steve, N2IC/Ø, had the best of both worlds: not only were the bands (especially 20) open to Asia, but he was able to work Europeans, too! That was enough for first place W/VE on CW!

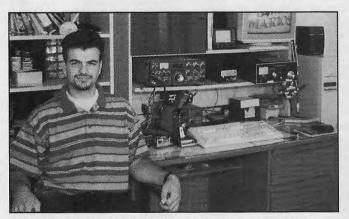
So, are you feeling lucky? Out for blood? Or just looking for a good excuse to get out of the hot July sun? Whichever way you feel, the next IARU HF World Championship is only a couple of months away-July 13-14. Why, it'll be here before you know it. In fact, the IARU records are now available in the new ARRL Contest Yearbook. What better way to motivate yourself to get on the air?

## SOAPBOX

I wasn't able to work the entire contest, but did enjoy picking here and there. I also found that the conditions from this area weren't too bad for this part of the sunspot cycle (KL7Y). This was our team's first effort from Alaska, but we'll be in there during the next contest (KL7/DF4ZY). The band conditions were not that great, but still enjoyable. There certainly was a dearth of Western European stations. Thank goodness there were a lot of Russian stations on the air to fill the gaps. This was a great contest, though (VE3CWE). This was my first IARU contest and I had so much fun that I will be back for the next one (VE9ZL). I was able to make about the same amount of contacts as last year. The bands did not seem as active as they were last year. It certainly seemed good to see all of the Headquarters stations on the air (N4TQO). I am 14 years old and I have been a ham for one year. These were the best band conditions I've ever operated in. I'm looking forward to participating in the contest next year (AC6NS). I only had a few hours to participate in the contest but hope to put an honest effort in next year (K7OX). This was a limited operation for me due to a busy schedule, but I still had a lot of fun (N6TR). This is an excellent contest for those that have a modest station and I wish I had had more time to operate (N7ENU). The propagation was just good enough to let you know that the stations were out there, but not good enough to copy them well. The multipliers just were not there, and again this year there were very few Central and South American stations heard (N5EA). It certainly was a hot contest, as it was 93° in the shack. My air conditioner bit the dust on Friday evening before the contest and I didn't

contest was already 10 hours old by that point (N5NMX). This is a fantastic contest and the rules are terrific. The propagation conditions were excellent and I'll be back for the next contest (N3BB). The only thing that I have ever done is CW ragchewing. This was my first contest and I found it a great deal of fun-I'll be back for next year's (KGØKR). The contest was superb and it seems that summertime conditions during the sunspot cycle minimum were excellent (K7SV). This is one of my favorite contests and I had a lot of fun (NZ5O). I worked with only 100 W, and, considering the sunspot cycle, I was very satisfied with the responses that I received-especially since this was only my second contest (KB8QO). This was a great time and a great contest, and 20 meters was still the workhorse, as usual. Any one who misses this contest is missing a summer classic (K8GL). I find that when the conditions are right this contest is more fun than any other. Conditions were more than right, they were superb on all bands for the entire period. Thanks to the Russians and Europeans for their usual good showing (N9AG) This was my first IARU contest and it positively will not be my last (N9XBM). This was my first attempt at this contest and it took a while to realize that the multipliers are more important than the contacts. I never thought I'd work that many stations from my own zone and in between the DX stations. There were good band openings and strong signals, but not like the big sunspot days. I look forward to a bigger score next year, somehow (KJ9C). This was a great contest, considering that the band conditions were not very good. There was lots of activity (AA9BJ). This was my first contest and I found it really exciting and fun to operate. I plan to enter it again next year (XE2CWW). It was a great pleasure—I enjoyed a very good time in this contest and appreciated being able to participate (XE2Z). The conditions this ear were again excellent and the only problem that I had was with my 160-meter dipole just before the contest (OH6NIO). I tuned up and down the bands looking for a VK or ZL on several bands but without any luck. There was a great opening on 20 meters to W6 in the morning here and this allowed me to better my scores over the past couple of years (OZ5EV). This was my first time operating in the contest because of my busy schedule and I enjoyed the time that I operated CW (OH6YF). This is one of the most pleasant contests of the year, and it was a pleasure to work all six bands (SM4BTF). This was an excellent contest and I enjoyed it very much. I look forward to next year's (UA1PAC). My time was limited, but I was able to make a few contacts and make a few people happy with the points from my area. I will be back next year and hope to do better (PA3AEB). This is my very best contest effort of the year and I enjoyed it very much (F5JBR). There seemed to be quite a bit of activity on the bands. I would like to have a stacked array, but you have to do the best with what you have. I enjoyed the contest except around 0500Z, when the pain really set in (GØLII). This was my first contest alone and I enjoyed it very much (PA3EXI). This has always been a very pleasant contest (ON5CZ). There was lots of activity, plenty of big signals and lots of fun in this contest (PA3DWI). This year the contest was a real summer sizzler, it was 30° C outside and 40° C inside the

get back on line until late Saturday afternoon, but the



Mario, 5B4WN, operating C47W, should have been an easy Zone 39 multiplier!



Need Vietnam? Nickolai, 3W5FM, handed out a few QSOs.

shack. The propagation was excellent on 20 meters and held in there all night long. I know that I will be back next year to try and break my previous record (DL3KDV). This was a great contest but I was handicapped by a visit by my mother-in-law (DL7ANQ). I really enjoy low-power contesting, and so did my neighbors (S57U). I really enjoyed the contest and especially working 15 meters (SO5TW). This was a most enjoyable contest and I was able to Ints was a most enjoyable contest and I was able to work my first Americans on 40 meters with only 15 W (SP2WDW). This was an excellent contest and I enjoyed it very much (SP9MDY). I am 15 years old and visually impaired. I enjoyed the CW part of the contest (SQ9BZK). This was a very exciting contest, but I found 10 and 15 lacking during most of the time (YO5BQ). This was my 18th IARU contest and it was just as exciting as the first one that I entered (YU7SF). Murphy hit twice during the contest. I had (YUTSF). Murphy hit twice during the contest, I had to repair the amplifier and lost nearly an hour in the process. Despite the problems, I had fun. There was a great opening to the West Coast on Sunday morning (LY6M). This was an exciting contest and the activity was better than last year (UT5UGR). This was a superb contest. We didn't sleep for 24 hours. There was great activity from the USA and Europe but we didn't hear anything from large (PS2A). This but we didn't hear anything from Japan (RS3A). This was my first contest after serving my required time in the Army. I enjoyed being a civilian, but I especially enjoyed the contest (UA4AVN). There was strong QRN on Saturday night and it left me with a low score on 40 meters. The only ones that I could work were the big guns, but I was compensated by an excellent opening on 10 meters (EA3EJI). The propagation was not too good to this part of the world, but I still enjoyed the contest and I know I will be back (7K2DOD). I found the conditions on 40 and 20 meters to be excellent. It was great to work many the USA stations. I tried using the computer to key the rig, but it was very hard to get used to (JHØGHZ). I only had a few hours to enjoy the contest from the field, but it was fun under these conditions (JI3KDH/3). I used only a 6-foot-long, 10-foot-high whip antenna. Even though my station was a weak one, there were many stations that heard me and it made for an exciting contest for me (IL7PVR/1). The propagation was just barely good on 20 meters, which I enjoyed even though I only operated during the last half hour of the contest. It was the signals from W1AW that piqued my interest to join the contest (JF1SQC).

# Feedback—1994 IARU HF World Championship

See February 1995 QST, pp 100-104. WB2K's score was 820,068. This made him the Eastern Pennsylvania CW leader, as well as fourth place W/VE and seventh place overall. WX9E was left out of the results for Illinois. His line score was 35,640-204-60-A.

# The Way To Win At W1AW

Well, not exactly. This year's ARRL effort was a bit different than those of the past-rather than trying to deal with the limited resources (and limited space) at W1AW, this year the show went on the road—to the superstation of Tom, K1KI. Tom says, "Our basic goal was to put more QSOs into the W1AW log than in previous years, and we sure met our goals! Conditions were much better than we expected—it's hard to believe we made nearly 10,000 QSOs in 24 hours."

So they may not have won, but they sure had one whale of a time! Without any further ado, here's a band-by-band (and blow-by-blow) description of what it

was like, through Tom's eyes:

"We didn't spend enough time on 160. We timeshared this band with 80 CW, and the rates were better on 80. We heard several European HQ stations we couldn't work because of QRM. Our last European QSO was at 0415Z with TM1C (shortly after their sunrise).

"We worked our first European on 80 at 2330Z, and our last at 0445Z. It was pretty noisy all night. We worked KL7Y at 0830Z. We were able to keep USA

runs going all day long-it was sort of like Sweepstakes!

"On 40, the band was open to Europe from 2115 to 0604Z. We worked a couple of JAs, but conditions were not so good—we stole the SSB amplifier for 80 CW Saturday evening. 5W1AU QSYed from 20 to 15 to 40 for us, but he had no key and the SSB QSO through the broadcast QRM was difficult, especially for a dedicated CW operator!

"We didn't work our first European on 20 meters until QSO number 48, but they were there for almost 24 hours. The USA runs were longer and louder, however. The JA run Sunday morning was just like the good old days! After working an HL,

we asked if there was a DU on frequency, and DU1SSG called in.

On 15 meters, the Europeans were weak most of the day, but they kept calling. We must have worked enough W4 QSOs for the Worked All W4 Award. After 0600Z (2 AM, local time!) the VKs faded, and the Europeans came back in through the end of the contest. We worked a few JAs and got ready for a big JA run that ended with just six JA QSOs.

'I'm certain that we qualified for the Worked Almost All Newcomers Award on 10 meters. There seemed to be an endless list of KE4xxx QSOs, but it was actually only 50 (plus two KF4xxx stations). Midnight brought a pipeline into W9 and we sent people from 20 and 15 to 10. We even found KH6, FO, and VK! The rate dropped below 20 at 0645Z, so we got some sleep and started up at 1000Z

with some more European stations.

"Our rate for the entire contest was 409; our best hour (1447Z to 1547Z) had 707 QSOs, and our best minute was 1538Z, when we made 19. We didn't get much help from packet, but it all adds up. We also found out that there are limits as to how many amplifiers (six at 1400 W) can run off my two 220-V circuits. We popped the breakers three times.

Out of the 9821 QSOs (including duplicates), we worked 6689 unique call signs. Nothing beats working people who say that they've been a ham for 40, 45, 50 or more years and never worked W1AW before. It was really fun! We can

do better next time!"



Here's the number one Multioperator team at UU5J: (I-r, sitting) UU5JR, UU5JQ, UB7-067-2; (I-r, standing) UU3JD, UU2JZ, and UU4JDF.



If S50HQ was one of your multipliers, you surely must have worked one of these ops: (I-r, first row) S58A, S51ZP, S55T, S52ZW, S51IX, S56A; (I-r, second row) S59A, S57W, S51OI; (I-r, third row) S51DB, S50A, S52EZ, S58AB; (I-r, back row) S51RS, S57O, S5ØR, S51AY, S58FA.

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																		gn, final score, erator, single t			pliers
Zone 1				AA7FL N7ENU	17,748 15,295	105 121	36 C	C	N1OPZ (+NET) Eastern Mass		58	28 D	Geo KN40		80,278	363	82 A	Grenada J37LK	1,708	122	14 B
Alaska KL7Y KL7FAP	216,039 2,223	39	101 A 19 A	Utah WA6HXE	21,935	137	41 E	В	KB2R (at K1KP) N1HOQ	405,288 191,805	1030 597	117 A 95 B	KQ4F KD3G	HC HC	240,142 26,884 394,680	718 257	82 A 119 B 52 B 130 C	Puerto Rico WP4LNY	216	14	4 B
WL7CMK KL7/DF4ZY (+NI	39,292 .7DU,DL8 151,689	279 WEM) 657	38 B 59 D	W7HS K6XO (+AB7GN	29,760 I,KI7WX,W 316,110		40 ( ) 82 [		K1VUT K1JKS W1MK	538,607 293,265 121,524	871 401	127 C 115 C 76 C	K4BA	M	170,841 2,304	649 34	93 C 24 C	KP4YS Aruba	63,744	359	
Zone 2				Western Was	shington 23,008	221	32 /	A	KD1VQ (+KA1ZA UJV) W1FM (+N1SOH	137,544	,N1s l 535	JFF, 88 D	Kent KB4V KI4D	tucky VQO	370,364 145,704	1066 556	106 B 78 B	Costa Rica	1,198,392		138 C
Alberta VE6FR VE6JY	69,168 473,434	320 844	66 A 139 B	WA7FOE AA7RW N6HR	486,552 51,322 208,000	1310 267 580	114 E	B B C	Maine	21,949	147	47 D	K2YJ N4XM	L	1,400 225,680	93	8 B 104 C	TI7DBS TI4/AA7JM	27,132 25,000	150	53 B 50 C
VE6BF British Colur	213,213	627	91 C	NN7L WA7UVJ	205,205 102,432	783 450 289	65 C 66 C 59 C	CCC	KA1GTR New Hampsh	156,312 ire	459	104 B	AA4N	h Caroli	919,512	1638	162 A	Turks and C VP5J (KF8UM,			106 B
VE7QO XJ7CFD	109,986 113,152	394 550 381	69 A 64 B 76 B	Zone 7	59,649	209	59 (		KA1FMR WS1A AG1C	25,200 602,030 71,680	180 1309 322	50 A 130 B 56 B	N41 C	/M QL	380,256 77,074 724,196	340 1310	136 B 89 B 151 C 58 C	Cayman Isla ZF2AH	nds 15,408	204	24 A
VE7JMN VE7TLK VE7XO	96,748 55,500 35,896	303 171	60 B 56 B	W5 Arkansas					WC1M AA1HJ	123,840 109,446	522 408	86 C 87 C	Nort	thern Flo		252		Zone 12			
Zone 3 Manitoba				AC5BR AB5SE K5GOE	41,268 49,560 8,358	240 250 61	57 / 60 E 42 E	A B B	AE1D KB1AXF N1SNB	13,962 11,214 3,825	128 101 76	86 C 87 C 39 C 42 C 15 C	AD4F K4VU	JD	50,962 489,375		83 A 145 B	Chile CE8EIO CE8SFG	30,858 4,488	188 50	37 B 22 B
VE4YU	29,640	168	52 A	N5XYN Louisiana	26,145	199	45 (	Ċ	Rhode Island K1PLX	165,680	553	109 B	KC4L W4.Ik		12,240 116,100	100 440	34 A 90 C	Ecuador HD2RG	253,368	598	91 B
Zone 4 Quebec				NZ5O N5OZB KJ5KQ	195,700 168,960 33,920	587 624 118	100 E 88 E 80 E	B B B	WA1MKS N9LYE	13,579 616	105 48	37 B		thern Flo			68 C	HC3AP HC1/KE4EWI HC1NWW	9,557 6,344 4,070	119 56 53	19 B 26 B 22 B
VE2AWR VE2FFE NØTT/VE2 (+WØ	60,705 612 (HW)	411 36	45 A 6 C	AB5HD W5WMU (+WU)	2,415 BV,KC5OAI	55	15 (	č	Vermont N1PBT K1CLN	116,616 49,560	610 266	86 B 59 B	WA6	nessee KUI/4	219,333		113 A	Colombia HK3JJH	158,356	536	61 B
Ontario	177,912	716	76 D	W5MEG,N8RF Mississippi	1,010,316	1646	177	D	Western Mas KZ1M	577,729	1043	137 A		( NU (KØEJ,o		172	50 B	Peru OA4EI	124,872		88 B
VE3CWE VA3WTO VE3STT	50,337 223,223 2,520	223 719 48	63 A 91 B 18 B	WA5OYU N5QDE	121,129 59,292	415 206	89 E	В	AA1EY WE1B WT2Q (+KB1W,F	111,398 49,236 (Y1H.NU1	330 260 P.WM	109 B 66 C	NA4K K4LT KO4E	Α	242,865 188,694 117,231	631 680 511	105 C 99 C 79 C	Venezuela YV1DRK	31,812		66 B
VE3ZIS VE3KP VE3NBE	283,318	6 791 85	3 B 98 C 38 C	North Texas WB5B	249,193	707	97 /		W2	602,426	1246	139 D	Virg	inia	47,336	254	61 A	YV4EYA YV1OB	3,718 6,405	37 67	26 B 21 C
VE3XO (+VE3s	464,578	901	134 D	KS1G AA5UO W5PLN	171,276 209,475 141,703	571 623 425	105 E	A B B	Eastern New KB2HUN	York 47,824	300	61 B	N4OT WB21	r NQT	20,480 365,960	100 844 342	80 A 140 B 106 B	Zone 13 Brazil			
XJ3AT (+NET) VA3NR (+NET)	304,759 28,985	903 175	91 D 55 D	WD4FRX W5RNF WXØB (NM5M,d	11,900 9,380	108 104	35 E	B B	N2BZP NYC-Long Isl	270	37	10 C	KO4II K7SV	Q	119,780 2,556 633,879	142 1109	18 B 153 C	PY7OJ PP7CW	14,040 10,820	87 106	40 C 42 C
Zone 6 W6				N6ZZ W5FO	790,400 530,140 77,616		152 ( 130 ( 42 (	CCC	K2LE WB2AYQ KA2HMJ	250,155 19,150 148,070	589 122 622	109 A 50 B 65 C	W4XI	OI D	126,336 61,299 46,308	402 350 263	96 C 49 C 68 C	Zone 14 Chile			
East Bay KG6LF KI6OY	53,380 5,500	470 68	34 B 25 B	Oklahoma NW5H	39,005	433	29 1		N2LSK (+KA2GV	VM,KF2EF 152,789			NA4F	RRU (+K3TI	605,665		145 D	CE5BPE Argentina	1,170	17	15 B
Los Angeles	118,224	508	72 A	N5RXF WV5S	28,728 372,294	224 884	42 E	B	Northern New N2MZH	160,632	584	97 A		sissippi				LU8HSO LU1AEE	64,538 9,510	81	61 A 30 A
KU6T KC6X	53,314 40,863	268 179	61 A 53 A	South Texas		837		C	W1GD W2LRO WB2K	107,378 9,006 729,904	305 91 1342	106 A 38 A 152 B	KB5I		5,775	75	21 A	L5F (LU1FNH,o L37N (LU2NI,op LU2QC	p) 640 c) 254,944 158,598	80 490 490	10 A 124 B 66 B
K6SVL KM6YX NA2D	296,055 242,648 11,515	1035 792 105	81 B 98 B 35 B	N5EA N5NMX WA1PRY	411,152 216,040 10,114	608 111	26 /	A	K3FNW N2INN N2VYU	123,552 19,650 12,882	332 107 115	108 B 50 B 38 B	Mich	higan	00 551	200	77 A	LU8ADX LU2DW L3HL	147,050 130,392 37,877	380 1571 187	85 B 83 B 49 B
N6IBP N6GL N6IC	20,633 20,102 14,840	112 151 107	47 C 38 C 40 C	WA5IYX KC5HFI K5ZTY	33,915 344 10,050	191 40 132	57 4	B B C	WV2X Southern Nev	1,944	32	18 C	WB8I K8CV	BUQ /	89,551 45,016 23,520	399 208 182	77 A 68 A 49 A	LU5E (LU5EWO	0,op) 31,703 28,548	137	49 B
W6SX N6MI (+K5TTE)	176	16 597	4 C 97 D	W5NR KJ5CR N3BB (+AA5RB	6,072	81	22 (	C	K2PS WB2DIN W5KI	282,942 68,634	718 277	99 A 82 A 32 A	Noul	20		137 107 1141	53 B 38 B 142 C	LU2DKN LU2ANN LU8HLI	22,231 1,254	116 111 278	61 B 47 B 58 B
Orange KE6UP	15,457	117	41 B	WQ5Y (+NZ5V)	1,059,122	1940 327	157 I 107 I	D D	AB2E W2GTN	5,216 523,192 1,584	37	32 A 136 C 16 C	Ohio	0	383,940		108 C	LS7EE (LU7EE	,op) 183,700 159,720	412 397	100 C 88 C 16 C
Santa Barbai W6TKF WA6FGV	54,191	327 381	47 A 55 C	West Texas	5,436	70	18 [	D		,148,904		162 D	N9AG AA8G W8UI	TC	513,472 171,392 45,630	1178 520 268	142 A 103 A 65 A	Zone 15	560	22	16 C
KN6WV AD6J	63,085 18,447 9,960	133 94	42 C 30 C	AB5WB	19,980	180	37	A	Western New AE2T AA2GS	97,040 65,518	394 223	80 A 82 A	K8NZ N8LX	Z KS	28,656 384,087	127 1053	160 A	Brazil PY1EDB	37,996	190	41 C
W6BKY Santa Clara		121	23 C	W9 Illinois					N2UHI AA2BA AA2VZ	552 34,626 6,399	31 205 75	8 A 58 B 27 B	KF8T WT8F	M P	116,952 85,041 45,450	495 271 320	103 C 88 C 99 C 50 C 56 C	PY2NZR PQØMM (PP5s	15,840 JR,UA,PU	106 FBS,F	30 C
N6IP AB6YL AC6NS	292,675 100,659 4,576	707 354 72	115 A 87 A 22 A	NEØP/9 K9SD (KC9AL,\ KWØA,ops)		185 IGGI, 1297	34 ( 169 I	C D	N2LQQ KW2J W2OMV	4,914 141,912 76,807	75 591 267	26 B 73 C 89 C	NBAA		38,304 18,396 457,940	200 137 1082	56 C 36 C 140 D	ops) Zone 16	778,776	1104	140 D
N4TQO (at AG6) N6NM	D) 496,016 57,200	1090 278	65 C	wø					N2PEB WA2RZJ	45,724 42,240	208 203	71 C	Wes K800		89,544	378	82 C 57 C	Argentina LV1V (LU1s VV		,LU4V	Z,
N6NF San Diego	6,204	101	22 C		1,203,734	1766	173	С	W3 Delaware					T RT (+KG8K	28,500 V) 31,700	203 256	57 C 50 D	LU5VC,LU9V\	741,980	1346	115 D
KD6QK N6KI AA6EE	39,600 331,674 7,964	266 881 100	45 B 106 C 22 C	KFØH WØPPF	932,252 10,266	1719 100	148 A	A B	NY3C WN3K	21,408 436,506		48 A 114 C	Illin					Zone 17 Iceland			125.1
KE6MWA (+KE6	MWB) 36,912		48 D	KØOAM KK9W	106,622 90,045 669,123	340 407	89 ( 69 (	CCD	Eastern Penr	507.756	1056	131 A		E (at KS9B	307,375 222,432	1269 779 720	121 A 125 C 112 C	WJ2O/TF Zone 18	441,600	1370	100 A
San Francisc W6BIP	41,552	176	53 C	NCØP (+ops) Kansas KØVGB	141,610	425		A	W3BGN N3MLV N3BDA		1175 431 192	120 B 114 B 61 B	N4O0 N9YI	GW Q	151,618 16,380	569 250	86 C	Norway	52,972	233	76 B
San Joaquin KC6CEX	Valley	27	7 C	WBØYJT WIØR	17,358 61,983	134 281	33 / 71 (	A C	WA3YTI AA3B KL7HIR	480 459,655 176,035	17	12 B 145 C 109 C	Indi	ana	7,548	88	34 C	LA4BN LA1PHA LA2AD LA4LJA	4,000 882 812	47 27 29	76 B 32 B 14 B 14 B
WC6U KB6HRB (AA6A)	161,315 116,348 H,KB6QNI	P.KC6L	68 C ICN,	Minnesota	57,070	290	65 (	C	N3CZB N3KZ (WI2s E,N	106 ,ops)	25	2 0	N9XE AA9A	AQ.	157,388 78,677 294,912	550 502 839	98 A 56 A 128 B	LA5MT LA2HFA	136,846 32,538	403 162	106 C 66 C
KD6HMN,ops) Sacramento	Valley		63 D	KØIJL (AAØBY,	676,021 77,404	1463 338	127 74 80	A B	KB3TS (+KE3RF	124,558	359	126 D	KO9\	Y	102,980 259,160 54,924	298 676 123	95 B 110 C 69 C	Aland Island	82,315	297	101 D
W7	840	20	15 A	KFØT WAØBNX	118,800 7,008	475 65	80 G	C	NN3Q (+NET) Maryland-DC		278	60 D	WBØ KX8E		43,835	273	55 C 105 D	OH2VZ/OHØ Finland	15,224	112	44 C
Arizona N7JXS	42,924	271	49 A	Missouri NSØB AAØNB	119,364 25,695	360 205	98 45 A	A	K3IXD	,500,736 77,436 ,006,934	308	179 A 81 B 158 C	Wise	consin	373,198			OH6WZ OH6NIO	1,239,249 1,227,786	1924	187 A 161 A
KI7MN W7YS K7OX	192 23,134 5,415	11 128 107	2 B 43 C 15 C	WXØX (WX3N,	1,379,856	A,ops)			AA3HM W3CPB N5OKR/3 (+NET	141,592 47,302	469 228	88 C	AA9E W9H	SJ E	74,028 55,728	404 220	62 C 72 C	OH3KCB OH6SU OH1EH	63,630 57,031 1,416,524	331 179 2118	70 A 107 A 173 B
Eastern Was			60 A	North Dakot WBØO	<b>a</b> 312,906	714	121	С	Western Pen	235,635		115 D	NØA	100	580,152	1396	138 D	OH6LNI OH5PA OH1NOR	1,104,752 3,240 1,120,560	1756	176 B 15 B 174 C
NØDH Idaho	290,835	761	115 C	Nebraska KGØKR	10,478	114	31 (	С	KB3AFT W3YEY	38,979 74,760	285 256	61 A 84 B	Zon	1e 9 / Brunsw				OH8LAE OH6YF	565,288 548,100	1067	152 C 135 C
AA7UN Montana	115,640	588	70 B	Zone 8 W1					WBØIWG K3WWP NB4J	52 22,905 12,296	275 126	61 A 84 B 45 C 29 C 14 C	VE92 VE98	ST	39,984 386,229		49 B 93 C	OH6AG (OH6K	238,140 31,872	655 214	108 C 48 C 55 C
N9ITX K7ABV	43,780 40,843	333 217	44 B 32 B	Connecticut KE1BU KD1TM	70,752	324 281	66 A	A B	AA3GM N3QDL (+NET) K3UA (+W3FSB)	1,106 1,029	41 107 20	14 C 7 D 16 D	) Mex	ne 10 rico				OH2YL OH3NM OH3KOH	31,304 3,408 2,034	165 40 32	24 C 18 C
Nevada AB7BS (+KC7BI	NH) 243,179	737	97 D	W1INF (KB1GV	68,476	510	53	В	W4		150		XE3L XE2C XE2Z	LMV CWW	82,895 60,836 56,674	449 274 370	59 B 67 B 43 B	OH3NE (OH1K ops)	AG,OH3s L 651,867	QK,MI	ИН, 151 D
Oregon W7YAQ	349,338		134 A	N1QVE KE1AU K8CH	18,309 3,886 3,171	106 50 59	29	B B B	Alabama WZ4F KS4AW	558,688 2,831	1650 57	104 A	XE10	осв ne 11	58,412	514	34 C	Denmark OZ5EV OZ5MJ	228,375 147,018	457 400	145 B 107 B
N6TR AI7B W7LNG	618,288 174,720 51,116	1200	132 C 78 C 52 C	N1OFO W1WEF K2SX/1	1,070,388 601,735	1123	1 153 1 151	B C C	KK4SM KS4YT (+KB4FA	119,295	397	99 0	Pan	ama	35,776	177	64 C	OZ8T OZ1KWG	2,520 33,344 378	181	24 B 64 C 7 C
AA7KF	22,044	135	44 C	W1BIH	Frc	)327 )m	F	ểb	ruary 1	79,296	654		T ©	ÄRF		177	04 U	OZ5UR	3/8	12	/ 6
114 Fe	brua	ry 1	996	Q <del>51</del> 2					,												

Sweden SMØBDS 83,444 307 92 A	PA3BTH 15,244 110 37 C PA3BEJ 6,541 75 31 C	IK1HSS 371,309 787 157 B IR4B (IK4AUY,op)	SP1AEN 197,750 544 113 C 3Z4EAK 119,392 483 82 C	UA4YJE 6,265 71 35 B UA6XJA 111 41 19 B
SM6CZU 1,272 31 24 A SM5ARL 198,720 1472 135 B SM3LIV 137,994 408 109 B	Zone 28 4UØITU (DL1XAQ, DJ2XS, ops)	325,120 818 128 B IR5R (I5JHW,op) 213,920 608 112 B	SP2UKB 106,106 351 106 C SP5CNA 99,231 309 93 C SP5DIR 79,636 301 86 C	UA6XT 96 6 6 B RA3XO 501,984 944 166 C RV3LA 234,813 715 87 C
SMØTTV 85,981 391 71 B SM7RZF 62,160 260 74 B SM7HSP 58,240 266 70 B	395,698 1141 106 D Croatia	IR4QJH 185,380 563 124 B IK6GPZ 151,848 520 76 B IK2VOV 135,324 429 84 B	SP3PFR 76,014 296 82 C SP7NMW 62,764 282 71 C SP8BAB 37,324 222 43 C	
SM4BTF 22,800 136 60 B SM6AHU 2,898 53 18 B	9A4RU 209,664 555 126 A 9A3ZG 91,000 362 100 A 9A3SM 87,548 312 86 A	IV3FSG 92,988 293 108 B IK6SNR 57,690 316 45 B IK3XNQ 47,182 233 62 B	SP7BYM 35,700 178 70 C SP3FZN 35,283 138 57 C	RA3PP 111,815 403 95 C RN6AI 65,280 259 85 C
SLØCB (SMØTXT,op) 1,098,165 1735 179 C SKØWJ (SMØTHN,op)	9A5I 81,345 341 85 A 9A1CEI 27,869 333 29 A	IK6RFQ 23,698 209 34 B IT9AJP 13,536 90 48 B	SP6SYF 27,324 159 54 C SP5CGN 26,277 147 57 C	UA3DGA 52,140 254 79 C UA4ANZ 39,196 120 82 C
623,199 1473 129 C SMØDZH 100,919 360 91 C SM5AJV 64,086 308 66 C	9A2AJ 296,664 2104 141 C 9A2WJ 15,192 194 64 C	IKØCHU 8,480 86 40 B IV3GCP 2,163 37 21 B IN3KTT 2,090 74 11 B	SP6CXH 18,235 172 35 C SP2AHD 14,950 139 46 C SP4GFG 14,768 134 52 C	UA3YKG 33,891 155 29 C UA3LDU 25,956 148 63 C RX3DTN 24,568 252 37 C UA4SS 22,048 181 53 C
SM5RE 40,896 207 64 C SM6SHF 3,840 52 32 C SKØUX (SMØs JHF,KCO,TQX,ops)	9A2A (9A2FM, 9A4FM,ops) 65,436 380 57 D Fed. Rep. of Germany	IT9CWJ 1,746 37 18 B IK2MJD 1,248 27 13 B IØZUT 280,000 710 125 C	SP9KZ 13,423 124 31 C SP9MDY 8,224 103 32 C SP8LZC 1,806 61 14 C	UA4SS 22,048 181 53 C RA3VY 19,640 179 40 C RS3A (RZ3BW,RAØAX.ER2CQ,ops)
1,089,003 1937 163 D SK5EW (SM5s FUG,IMO,ops)	DL3KDV 975,371 1517 179 A DJØFX (OE2VEL,op)	IKØSHF 224,534 616 131 C IK5TSS 169,904 402 148 C	SQ9BZK 671 37 11 C SP2KJF/4 342 22 9 C	1,965,816 2366 228 D RY6Y (RA6s AU,AX,RV6AGG,RX6BA,
60,580 318 52 D Zone 19	936,144 1332 198 A DL8HCO 76,196 356 86 A DL1MIE 71,910 287 90 A	IKØDWJ 26,585 135 65 C IKØADY 12,685 105 43 C	SP8KEA 20 4 4 C SP3PLD (SP3s BBZ,CB,FLR,IBM,ops) 366,576 780 168 D	UA6YN,UA6-101-350,ops) 1,790,712 2486 231 D RU3A (RA3s AUM,AUU,RK3DT,RU3FM,
European Russia U1BA 26,070 181 55 B	DL2AYI 71,640 344 90 A DL9GMN 39,934 220 82 A DL3BRA 37,812 212 69 A	IT9GXE 2,793 55 21 C IKØHBN 593 211 26 C IR4T (IK2s HOG,QEI,I4s JMY,UFH,YSS,	Greece SV2AEL 26,078 178 59 A	RV6HY/3,UA6XGL/3,ops) 1,466,630 2054 199 D RU4L (RW4LW,UA4LL,
UE1A (RV1AC,op) 790,720 1555 140 C RW1AN 646,737 1014 161 C	DL9MWG 14,924 126 41 A DL6SDW 13,740 97 60 A	IK4IÉE,ops) 1,937,796 2507 204 D IK2VUE (+IK2XYI) 574,104 1373 152 D	SV2BFN 86,602 333 106 B  Dodecanese	UA4-169-459,ops) 741,710 1279 170 D RK3EWW (,RA3EA,RZ3s EC,EM,
RZ1AYX (RV1AQ,RX1AW,RW6HJV/1, ops) 498,960 1123 135 D	DL7URH 180 16 9 A DL8PC 826,619 1245 193 B	II2K (I2GXS,IK2s BUF,SGF,UCK,ops) 556,614 1218 153 D IU8E (IK8s EPC,TEO, ops)	SV5/DL9GTI 2,363 47 17 C  Bosnia-Herzegovina T94EU 124,630 404 103 A	UA3EKG,R3E-1,-4,UA3-147-543,ops) 732,796 1364 167 D
Zone 20 European Russia	DL8OBQ 191,278 537 118 B DF7YU 128,631 627 53 B DL6KY 108,756 369 114 B	340,704 1018 117 D IO2L (I2OKW,IK2s PIG,XYU,YYE,ops)	T94EU 124,630 404 103 A T94NF 23,923 251 47 A Romania	Ukraine UT5UGR 1,765,752 2183 236 A UUØJ (UUØJZ,op)
UA1PAC 20,915 145 47 A Asiatic Russia	DL8SDC 49,236 282 66 B DL2SEU 49,210 211 74 B DF5BX 45,401 259 83 B	309,810 777 138 D Sardinia	YO5BQ 67,670 362 67 A YO2QY 22,230 138 45 A	700,400 1378 170 A UX6VA 238,720 629 128 A
RA9XF 90,525 289 75 B RK9XYW 39,468 214 44 B UA9XC 254,900 589 100 C	DL5FCV 26,740 203 70 B DLØSWL (DL2FJ,op) 24,360 156 70 B	ISØOMH 92,796 565 76 C <b>Bulgaria</b> LZ3YY 272,060 927 122 A	YO3RU 187,579 597 127 B YO7DAA 87,932 399 89 B YO2LFP 86,102 471 76 B	US3IZ 196,298 560 122 A UY5TE 92,070 394 93 A UX1RX 82,650 334 75 A
UA9XS 247,248 537 102 C RA9XU 14,534 128 26 C RK9XWH (UA9s XFY,XJV,XMC,ops)	DL4KCC 15,370 109 53 B DL1HSR 11,136 115 58 B	LZ1VA 114,597 326 48 A LZ2FM 26,460 164 63 A	YO4RDN 55,890 342 81 B YO3AIL 48,057 187 83 B YO4RIU 43,588 289 68 B	UX1LA 74,906 324 67 A UX1HW 33,226 280 74 A UT8IT 8,745 99 33 A
1,481,385 1765 183 D	DL6MTG 5,600 68 40 B DL8URJ 5,510 67 38 B DL7UKE 4,250 58 25 B	LZ2KGA (LZ2NZ,op) 2,848 38 32 A LZ4BU 38,880 230 72 B	YO7ARY 20,466 160 54 B YO2LIM 16,502 214 42 B YO6XB 696 42 12 B	UT1ZZ 7,532 83 28 A UT5DK 1,462,344 2269 156 B EMØF (UXØFF,op)
Zone 21 Asiatic Russia	DL3WB 3,828 60 29 B DL3HWW 1,919 45 19 B DL4VBS 1,121 27 19 B	LZ1DM 27,666 193 58 B LZ5QZ 2,184 38 21 B LZ1BJ 195,597 691 103 C	YO8KAN 275,906 637 142 C YO8FR 176,953 517 119 C	834,677 1420 179 B UX4UA 252,648 666 78 B
UA9KDZ 12,375 120 25 C Zone 23	DL1JPL 738 38 9 B DJ1VQ 715 31 11 B DLØHRO (DL3KUD,op)	LZ2VP 63,414 355 78 C LZ1QZ 26,492 239 37 C LZ1CW 20,700 690 30 C	YO3AAQ 45,162 206 78 C YO5DAS 23,430 160 55 C YO2ARV 12,462 98 31 C	UR5DDX 157,352 541 104 B UR5WHT 65,772 316 81 B UX2VZ 59,444 273 77 B
Asiatic Russia UAØQBR 111,680 411 64 C	299,585 727 143 C DL6KVA 268,320 554 156 C	LZ2TW 11,816 107 56 C LZ1ZJ 7,002 130 18 C	YO4AAC 8,820 108 35 C YO3KWA (YO3s GEK,GHC,ops) 159,318 579 106 D	UT1HT 13,455 210 12 B UT3HD 12,862 137 59 B UR5EAT 873,816 1495 184 C UR8QX 754,290 1328 153 C
Zone 25	DL3JAN 232,883 611 133 C DL6BBT 223,836 552 138 C DJ9RR 211,068 552 123 C	LZ1FJ 2,951 69 13 C LZ2NB 2,431 76 33 C Austria	Yugoslavia YT1AD 1,970,724 2458 203 A	UR8QX 754,290 1328 153 C UY11 (UT3IQ,op) 583,947 1136 161 C
European Russia RKØQXY 34,522 205 51 C	DL2NWK 196,321 431 137 C DL7BQ 179,124 457 132 C DAØTJM (DL9GFB,op)	OE1KYW 55,722 321 74 A OE1GOA 1,600 44 20 A	YU5ØBO 1,792 115 9 A YU5ØKN 63,753 339 79 B 4N1N (YZ1MB,op)	UX3FW 402,116 865 148 C UT7ND 317.086 645 142 C
Zone 26 Asiatic Russia	176,276 581 127 C DL1TH 142,027 431 109 C DL4SZB 110,999 365 101 C	OE8Q (OE8SKQ,op) 10,329 107 33 C	13,608 248 42 B YT5ØBB (YT1BB,op) 1,223,586 1974 182 C	UX2MF 202,740 525 124 C UX5EF 152,378 433 65 C
UAØKCL 66,170 254 16 C Zone 27	DLØTD (T94DX,op) 108,498 349 107 C DL4JYT 93,400 316 100 C	Czech Republic OK1MD 458,749 951 167 A OK1KZ 194,928 564 124 A	YZ7V (YT7AO,op) 702,693 1218 163 C	UR5BCJ 88,722 297 106 C UR3PDM 67,868 250 76 C
Ireland EI1DD 40,680 353 40 A	DL5KUD 87,860 276 115 C DL3AWJ 79,887 270 93 C	OK1IR 90,075 425 75 A OK1DXI 24,026 182 41 A OK1DSA 5,037 111 23 A	YZ1AU 523,450 1144 145 C YU7LS 337,587 743 131 C YU1JU 192,510 582 115 C	UY2ZZ 40,174 267 53 C UT3FM 36,087 157 69 C
EI4VTC/P 113,804 425 92 C EI/G4BUO 58,460 244 79 C	DL5SVB 77,193 336 87 C DL1ARJ 69,485 324 65 C DL1DQY 69,050 343 50 C	OK1UHZ 6,150 137 25 B OK2BDI 386,939 713 167 C OK1VD 319,358 648 142 C	YU7SF 105,339 337 111 C YU1GN 59,925 239 85 C YU1NU 28,126 237 41 C	UU2JA 33,856 152 92 C UX5VK 1,666 30 17 C UU5J (UU1JA,UU2s JQ,JX,JZ,UU3JD,
France TM1C (GØJFX,op at F6CTT) 1,669,920 2378 168 A	DL1ZQ 56,950 670 85 C DL7VOX 54,372 235 92 C DL3BZZ 54,115 225 79 C	OK1FPS 247,368 606 132 C OK1DRQ 245,490 598 147 C	YU7KM 25,800 155 60 C YU5ØRA (YU1RA,op) 5,307 81 11 C	UU4JDF,UU5JR,UUØJX,ops) 2,702,612 2976 257 D
F5ADH 1,638 29 18 B F5PRH 563,323 666 239 C TM9C (F5IN,op) 343,896 1036 89 C	DL6JRA 54,036 261 76 C DL7ANQ 51,828 242 84 C DL2ZAV 49,385 251 85 C	OK1FHI 129,092 404 118 C OK1FKV 127,983 439 111 C	Macedonia Z3ØM (Z31GX,op)	US4IWU (URØIQ,UXØIY,ops) 184,736 629 92 D Latvia
F6BQY 270,940 655 124 C F5NQL 129,536 444 88 C	DL1GHX 43,180 205 68 C DJ5GG 42,975 219 75 C	OK1GS 94,863 242 103 C OK2BWJ 44,784 266 72 C OK2BND 31,666 169 71 C	688,296 1789 136 B Z32BU 218,790 729 99 B Z32JA 123,250 565 85 C	YL2DZ 24,026 206 41 A YL2GN 39,819 360 39 C
F5JBR 87,058 268 79 C F5TNI 17,954 110 47 C	DL5LRA 39,846 153 87 C DL3HSC 36,162 211 63 C	OK1DMS 5,496 79 24 C Slovak Republic	Z32DR 4,862 75 22 C Albania	Zone 30 Turkmenistan
TM8A (F5s OZF,RXL,SSG,EA2KL,ops) 473,796 1180 123 D England	DL4FDM 30,178 175 79 C DL3HRA 25,970 371 70 C DL1EV 22,950 96 85 C	OM3CDZ 120,900 444 93 A OM3TA 108,640 406 97 A OM6MO 102,973 409 89 A	ZA/OK5DX 1,019,133 1839 153 C Zone 29	EZ8BO 12,684 107 28 C European Russia
GØDEZ 219,915 521 135 A GØVYH 167,462 591 74 A	DL1EV 22,950 96 85 C DK7FP 22,792 127 56 C DL9YP 18,778 170 41 C DL3KWF 16,912 120 56 C	OM2SM 59,724 303 63 A OM1AF 128,029 433 103 C OM3IF 56,052 219 81 C	Azerbaijan 4K9W 20,801 226 61 C	UA4WGU 1,203,840 1816 190 A RA4HUQ 4,233 99 20 C
GØVSN 248,882 614 107 B GØLII 277,495 657 127 C G3ESF 209,440 492 119 C G6QQ 29,100 155 66 C	DF3QN 15,675 123 55 C DL10O 15,400 308 50 C DL3HXS 9,537 74 51 C DL2DRZ 5,632 48 44 C	OM7AT 55,050 303 75 C OM3CAB 49,392 319 63 C OM5KM 30,476 135 76 C	Moldova ER2WD 34,030 260 41 B	RK4WWA (RW4WA,UA4WA,ops) 755,596 1382 172 D Asiatic Russia
Northern Ireland	DL/WD4AHZ 4,380 80 30 C	OM3CDN 17,215 137 55 C OM3TUM 3,383 50 12 C	ER1OA 148,390 467 95 C Belarus	RA9CMO 237,420 847 60 A RW9QA 19,649 114 401 A
GIØSAP 41,760 308 30 C Scotland	DL3KWR 2,880 54 20 C DJ2YE 2,552 50 22 C DL9GMC 2,100 37 20 C	Siovenia S53R 1,305,103 1731 191 A	EU1DQ 206,415 539 135 A EW6TU 161,868 652 94 A EU8MA 59,126 394 47 B	RW9AB 225,982 465 103 B UA9AOL 107,360 294 88 C RV9WB 29,492 100 73 C
GM3CFS 177,858 116 123 A Wales	DL2YAK 1,410 32 15 C DL5FCO 312 18 12 C DLØGVM (DL1SWG,DL4s SUA,SVA,	S59L 742,350 1386 147 B S51DX 685,584 1312 162 B S51WV 34,526 262 61 B	EU1MM 918,340 1534 170 C EW2AA 45,678 232 46 C EW4XA (EU4EU, EU4-001,-002,ops)	RU9D (RW9DX,RX9DR,UA9CSS,ops) 1,272,556 1706 166 D
GWØAJI 25,190 173 55 B  Belgium ONITAGO 75 670 221 04 A	DK7XS,ops) 568,008 1123 168 D DLØDR (DG1IU,DF2IX,DL5s IAI,IAM, DB6IR,DK7IH,DK9IP,ops)	S59AA 1,374,206 1889 202 C S5ØD (S57AD,op) 772,422 1476 159 C	166,440 558 114 D Lithuania	Uzbekistan UK7R 93,732 308 73 C
ON7NQ 75,670 231 94 A ON7SS 19,451 133 53 A ON5GQ 350,901 789 127 B	473,286 979 142 D DLØMBG (DK1AOB,DL8s AUA,AYI,ops) 449,242 978 146 D	S53MJ 175,670 576 110 C S57U 158,326 559 86 C S51NU 109,368 318 98 C	LY6M (LY1DS,op) 1,272,154 1731 226 A LY2IJ 1,162,060 1712 194 A	Kazakhstan UN7BY 588,280 925 140 C
ON4MA 215,800 595 104 B ON4ATW 169,386 615 74 B ON6CR 76,533 273 97 B	DLØWEM (DK8BS,DJ9CN,ops) 253,752 516 194 D DLØWMD (DL1KVA,DL3KUW,DL6KWN,	S54A 89,100 301 108 C S58MU 81,270 325 90 C	LY2LA 325,625 879 125 A LY1DT 759,744 1488 144 B	Zone 31 Asiatic Russia
ON5PJ 28,112 174 56 B ON5CZ 8,676 89 31 B ON4XG 93,700 265 100 C	DL9GRO,ops) 93,936 400 103 D DL6RDE (+NET) 64,600 266 40 D	Poland SP2QCH 256,230 770 130 A SP5ELA 235,587 659 121 A	LY2OU 293,410 799 122 B LY1FW 212,810 620 130 B	RZ9OO 473,375 849 125 B UA9URZ 56,198 346 86 B RZ9U (RZ9UA,op)
ON4NL 41,912 210 62 C ON4RU 25,628 172 43 C ON6TJ 24,388 149 52 C	Hungary HAØMM 1,977,150 2378 245 A	SP6CIK 129.800 458 100 A	LY3NJ 55,809 281 81 B LY2AO 674,847 1164 167 C LY1BA 539,736 989 172 C	1,506,557 1569 221 C RZ9OZ 207,230 558 85 C RZ9HG 200,816 522 88 C
OT5V (ON4s ALL,AYM,BCP,ON6KZ, KB2RRV,ops)	HA7RC 96,354 315 106 B HAØDU 1,877,533 2299 233 C HA3OD 236,313 649 121 C	SP3IOE 126,046 444 107 A SO5TW (K3TW,op) 34,528 266 52 A SP6KEP (SP-23022,op)	LY2MW 537,251 1042 169 C LY2PAQ 246,152 682 116 C LY3MR (LY1s FF,FR,LY3NFW,ops)	RW9OWW (UA9OO,UA9s 145-590, 145-591,ops) 39,996 198 44 D
1,162,720 1829 160 D ON6AH (+ON4GO,ON5OO,ON6s QR, VL) 893,760 1515 152 D	HA4FV 10,802 265 22 C HG5M (HA1ZU,HA5s BBC,BVD,EH, MY,WA,ops) 1,359,299 2057 193 D HG75ØK (HA1s XO,ZN,ZZ,ops)	328,152 800 132 B SN9K (SP9LJD,op) 276,727 943 121 B	745,542 1437 100 D Kaliningrad	Zone 32
OT5K (ON4s AGX,BCJ,KB,ON,ON5s DI, GK,SY,ON6CX,ON7XT,ON9CGB,ops) 498,432 1156 118 D	303,702 971 98 D	SP9XCN 269,698 684 143 B SP7SEW 162,936 497 124 B SP8OON 93,600 342 100 B	RA2FAD 1,215 45 15 B European Russia	Asiatic Russia RWØA (RVØs AM,AR,AX,UA3DPX,
Netherlands PI4ZLD (PA3EOB,op)	Switzerland HB9IBA 13,356 183 36 C	SP6MLX 82,058 316 89 B SP1HJK 66,906 326 81 B SP9VEJ 58,859 331 71 B	UA3RÅR 1,598,625 1781 225 A RN3QO 330,250 821 125 A RX3AQL 131,026 1337 98 A	UAØs AGI,ANW,I2VXJ,ops) 1,400,352 1754 174 D
44,880 210 68 A PAØYN 36,500 57 43 A PAØIJM 318,816 930 96 B	IK3SCB 61,676 287 68 A IK4WMG 30,282 210 49 A	SP6FBD 37,115 251 65 B SP6DVP 25,593 157 57 B	RK3SWX (UA3S-952,op) 82,916 417 63 A	Zone 33 Asiatic Russia
PA3GAB 60,240 247 80 B PA2ALF 40,690 220 65 B PA3DWJ 16,104 118 44 B	IØKHP 18,550 143 50 A IKØXBX 11,140 115 40 A IR4R (IK4ALM,op)	SP6FJ 20,832 152 56 B SP8OOB 17,108 156 52 B SP6SOX 16,044 128 57 B	RU6BV 39,292 272 47 A RU4SS 71,258 329 82 B	UAØJB 570,920 995 140 C Zone 34
PA3AEB 8,052 86 33 B PAØQX 5,200 68 20 B	512,958 1142 141 B IRØC IKØAZG,op)	SP5BB     13,216     179     32     B       SP3ZJA     2,678     49     26     B       SP2FOV     328,640     760     130     C	RA1QEA 29,786 196 53 B RU3WT 19,140 147 55 B	Asiatic Russia RAØFU 271,425 688 105 A
PA3EXI 2,166 44 19 B PA3GNO 56,240 217 80 C PA0JR 32,838 145 78 C	451,328 982 128 B IO4A (IK4PVR,op) 433,698 898 129 B	SP9KRT 238,524 586 143 C SP2WDW 219,125 639 125 C	UA3RCO 18,480 148 40 B UA4AVN 14,352 202 52 B	RSØF 14,448 130 28 C UAØLS 5,442 57 26 C
	From Fe	hruary 1996 OST	@ ΔRRI UST-	February 1996 115

nds pp) 657,597 167,172 54,050 ds 3,088 245,300 11,211 328,605	1245 833 371 52	109 95 50	В	JF3IIC         101,288         291         88         C           JH0GHZ         85,374         248         81         C           JM1NKT         61,364         250         58         C           JA5APU         59,472         328         42         C           JA3ARM         57,836         207         76         C           JF3GKE         53,370         294         45         C
0p) 657,597 167,172 54,050 <b>ds</b> 3,088	833 371	95		JA3ARM 57,836 207 76 C
657,597 167,172 54,050 <b>ds</b> 3,088	833 371	95		JE3GKE 53 370 294 45 C
54,050 ds 3,088	371		B	JA1WYQ 47,064 157 74 C
54,050 ds 3,088	371			JR2BNF/1 29,971 153 43 C JH6TYD 25,152 131 48 C JA1QN 22,425 141 39 C JA1KI 19,844 109 44 C
3,088	52		В	JA1QN 22,425 141 39 C JA1KI 19,844 109 44 C
245,300	UL.	22	В	JA7COI 17,646 121 34 C JH1DYV 17,064 112 36 C
245,300 11,211 328,605				JA7COI 17,646 121 34 C JH1DYV 17,064 112 36 C JA2SWF 11,715 81 33 C JA8SPZ 11,322 78 37 C
245,300 11,211 328,605				JA6CM 10,140 74 30 C
328,605	667	110	A	JA2MOG 8.512 66 32 C
250,000	102 1008	37 95	AB	JR9FJY 7,920 60 33 C JO2CKU 5,346 68 27 C
233,649 187,999	615 531	117	B	JRFIJY   7,920   60   33   C     JO2CKU   5,346   68   27   C     JA2GTW   4,599   51   21   C     JA2GTW   3,655   55   17   C     JA7DNO   2,912   40   16   C     JCPVR/1   1,290   29   10   C     JFSQC   1,280   20   16   C     JA8AJE   1,289   35   9   C     J2KFF   1,248   24   13   C
179,280 76,349	457 269	120	ВВ	JA1XEM 3,655 55 17 C JA7DNO 2,912 40 16 C
67,575 64,296	305 276	51 76	B	JL7PVR/1 1,290 29 10 C JF1SQC 1,280 20 16 C
59,616	260	69	В	JABAJE 1,269 35 9 C
37,764	291	42	В	JA1AAT 931 22 7 C
34,112	434	26	В	JH1JGZ 891 25 11 C JA3AVO 711 17 9 C
6,180	76	30	В	JA3BCT 204 8 5 C JA7YAA (JE1AMC,JF1s CKX,SXL,
	68 68	10	B	JG7PSJ, JRØSPG,ops) 763,147 1417 119 D
1,092	26 26	14	B	JAØYAK (JF1USQ,JI7TDR,JM7SGO, JEØETP,JFØESV,ops)
720	26	12	В	220,920 651 84 D
44,320	190	80	C	Zone 46
1,349	33	19	C	Nigeria
156,816	432	121	D	5NØMVE 846,264 1208 148 B 5NØGC 755,760 1134 141 B
13,638	271	33	В	Zone 49
11,172 3,444	120 50	42 21	B	Vietnam
7,192	76	29	C	3W5FM 8,096 156 16 A
elilla				Zone 50
2,911,184	2888	212	Α	Philippines DU1SSR 36,405 179 45 B
				OHØXX/DU1 11,085 152 14 C
100 510	000			4G2X (DU2s AYL,BBH,RK,DY2BRL, 4F2s IR,MD,ops)
8,330	308 98	17	A	353,632 850 86 D
4,471	52	17	C	Zone 52
op)				Angola D2TT (ON6TT,op)
	1948	147	C	448,440 980 95 B
893.500	1506	125	C	Zone 54
000,000				Indonesia
1,147,248	1761	144	Α	YB2CPO 37,640 201 40 B YC1JZF 9,020 86 22 B
C on)				YBØASI (AA4U,op) 138,498 363 82 C
157,868	566	61	C	Zone 55
				Australia
455 000	400	00	•	VK4TT 35,061 229 31 C VK4MZ (+VK4EMM)
155,308	432	82	C	572,314 907 134 D
				Zone 57
184,955	657	71	Α	South Africa
88,320	338	44	В	ZS9F (ZS6YA,op) 95,976 282 86 B
JX,MK,BZ1	DCH,	ops)		ZS6CAX 19,395 101 45 C ZS6AJS 6,386 54 31 C
20,492	122	47	В	Zone 59
47,412	283			Australia
DS2AFP,H	L1s LN 289	ME,OI	DG,	VK5GN 201,572 467 92 A
	_00			VK2ARJ 66,261 357 39 B
58,351	271	59	C	VK2APK 344,080 644 115 C
				Zone 60
667 464	1080	197		New Zealand ZL2AGY 243,360 628 80 C
195,920	376	124	A	Zone 61
76,610	219	94	A	Hawaii
72,542 69,342	266 221	78	A	KH6FKG 90,650 500 37 B WH6CQH 56,940 302 39 B
65,412	264	69	A	WH6PK 20,590 150 29 B
6,510	53	30	) A	Zone 63
6,120	61	24	A	French Polynesia
2.413				FO5IW 482,963 1029 97 B
AQ.op)		106	B	Zone 65
95,628	298	78	B	Marshall Islands V73CO (KE6TDY,op)
49,600	255	64	1 B	6,400 64 20 C
18,960	115	48	3 B	Checklogs 4S7WP, DH5DAK, DJØMAQ,
14,792 11,491	59 200			4S7WP, DH5DAK, DJØMAQ, DLØMWG, DLØSH, DL2AKF, DL2DWA, DL2HUM, DL3HTR, DL3NEO, DL4AMA
8,954 6,358	66		B	DL5AMF, EA1AKP, EA5JC/EA1,
2,982	38	21	1 B	JR1XKU, KL7UR, LA4OGA, LA7CL,
2,460	43	20	B	DLEAMM, DLSHTH, DLSNEO, DLEAMMA DLSAMF, EATAKP, EASJC/EAT, EA8BXQ, ECTFAB, HASGN, JRØBAT, JR1XKU, KL7UR, LA4OGA, LA7CL, LA8CE, LABLA, LZ1KVF, LZ1VQ, LZ2UA, LZ2UA, NØXCF, NGSK, OLGYGO, OKYSENY, OM JD, BAZTV,
1,456	22	16	6 B	
1,157	23	13	3 B	SMØCSX, SMØGKF, SMØNJO,
324	48	. 6	6 B	SP3NGB, SP4TJS, SP5KDK, SP6DMJ,
45	13	2	2 B	SV2YC, UAØYAY, UA1QBE, UA3WCN,
247,044	510	119	9 C	PASCNI, PASTYF, PY3CJI, RY3VF, SMØCSX, SMØGKS, SMØGKS, SMØNJO, SP1QZT, SP2HHX, SP2LNW, SP3NGB, SP4TJS, SP5KDK, SP6DMJ, SP6LK, SP7VCK, SP7VCK, SP9HOF, SV2YC, UAØYAY, UA1OBE, UA3WCN, UNTEAT, UNSPO, WD4FJP, XE1LM (XE1PE, op), YOSQCA, YOSHH, YV2FEQ.
217,251	489	10	1 C	YV2FEQ.
	59,616 47,160 37,764 37,084 34,112 31,500 61,800 3,948 2,190 11,092 1,092 1,092 1,092 1,092 1,349 156,816 13,638 11,172 3,444 156,816 13,638 11,172 3,444 168,330 11,172 3,444 171 129,516 8,330 11,172 13,494 156,816 155,308 11,172 129,516 8,330 11,172 13,494 14,711 129,516 8,330 11,172 13,444 14,711 129,516 8,330 11,172 13,444 14,711 129,516 8,3350 11,172 129,516 8,3350 11,172 120,492 120,492 120,492 120,492 120,492 120,492 120,492 13,640 13,650 14,760 1	59,616 2600 353 37.764 291 47.160 353 37.764 291 153 37.084 153 34.112 434 68 2.190	\$ 59,616 260 353 40 \$ 37,764 291 47,160 353 40 \$ 37,764 291 60 \$ 37,764 291 60 \$ 37,764 291 60 \$ 31,12 434 51 73 \$ 34,112 434 68 21 \$ 2,190 68 21 \$ 2,190 68 10 \$ 1,092 26 14 \$ 1,092 26 14 \$ 1,092 26 12 \$ 61,245 297 61 \$ 12,290 116 30 80 \$ 12,920 116 33 19 \$ 156,816 432 121 \$ 13,638 271 33 \$ 11,172 120 42 \$ 3,444 50 21 \$ 13,638 271 33 \$ 11,172 120 42 \$ 3,444 50 21 \$ 13,638 271 33 \$ 11,172 120 42 \$ 3,444 50 21 \$ 12,9516 308 86 \$ 8,330 98 17 \$ 4,471 52 17	59,616         260         98         B           47,160         353         40         B           37,784         291         42         B           37,784         153         73         B           34,112         434         28         B           31,500         191         60         B           3,948         68         21         B           1,092         26         14         B           1,092         26         14         B           720         26         12         B           1,092         26         14         B           1,092         26         14         B           1,092         26         14         B           1,349         33         19         C           1,349         33         19         C           1,349         33         19         C           1,349         33         19         C           41,712         29         C         C           11,172         120         A         A           4,471         52         17         C