



ARRL Periodicals Archive – Search Results

A membership benefit of ARRL and the ARRL Technical Information Service

ARRL Members: You may print a copy for personal use. Any other use of the information requires permission (see Copyright/Reprint Notice below).

Need a higher quality reprint or scan? Some of the scans contained within the periodical archive were produced with older imaging technology. If you require a higher quality reprint or scan, please contact the ARRL Technical Information Service for assistance. Photocopies are \$3 for ARRL members, \$5 for nonmembers. For members, TIS can send the photocopies immediately and include an invoice. Nonmembers must prepay. Details are available at www.arrl.org/tis or email photocopy@arrl.org.

QST on CD-ROM: Annual CD-ROMs are available for recent publication years. For details and ordering information, visit www.arrl.org/qst.

Non-Members: Get access to the ARRL Periodicals Archive when you join ARRL today at www.arrl.org/join. For a complete list of membership benefits, visit www.arrl.org/benefits.

Copyright/Reprint Notice

In general, all ARRL content is copyrighted. ARRL articles, pages, or documents--printed and online--are not in the public domain. Therefore, they may not be freely distributed or copied. Additionally, no part of this document may be copied, sold to third parties, or otherwise commercially exploited without the explicit prior written consent of ARRL. You cannot post this document to a Web site or otherwise distribute it to others through any electronic medium.

For permission to quote or reprint material from ARRL, send a request including the issue date, a description of the material requested, and a description of where you intend to use the reprinted material to the ARRL Editorial & Production Department: permission@arrl.org.

QST Issue: Feb 1995

Title: Results, Ninth IARU HF World Championship

Author: Warren Stankiewicz, NF1J

[Click Here to Report a Problem with this File](#)



2010 ARRL Periodicals on CD-ROM

ARRL's popular journals are available on a compact, fully-searchable CD-ROM. Every word and photo published throughout 2010 is included!

- **QST** The official membership journal of ARRL
- **NCJ** National Contest Journal
- **QEX** Forum for Communications Experimenters

SEARCH the full text of every article by entering titles, call signs, names—almost any word. **SEE** every word, photo (including color images), drawing and table in technical and general-interest features, columns and product reviews, plus all advertisements. **PRINT** what you see, or copy it into other applications.

System Requirements: Microsoft Windows™ and Macintosh systems, using the industry standard Adobe® Acrobat® Reader® software. The Acrobat Reader is a free download at www.adobe.com.

2010 ARRL Periodicals on CD-ROM

ARRL Order No. 2001

Only \$24.95*

*plus shipping and handling

Additional sets available:

2009 Ed., ARRL Order No. 1486, \$24.95
 2008 Ed., ARRL Order No. 9406, \$24.95
 2007 Ed., ARRL Order No. 1204, \$19.95
 2006 Ed., ARRL Order No. 9841, \$19.95
 2005 Ed., ARRL Order No. 9574, \$19.95
 2004 Ed., ARRL Order No. 9396, \$19.95
 2003 Ed., ARRL Order No. 9124, \$19.95
 2002 Ed., ARRL Order No. 8802, \$19.95
 2001 Ed., ARRL Order No. 8632, \$19.95



ARRL The national association for **AMATEUR RADIO™**

SHOP DIRECT or call for a dealer near you.
 ONLINE WWW.ARRL.ORG/SHOP
 ORDER TOLL-FREE 888/277-5289 (US)

Results, Ninth IARU HF World Championship

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

By Billy Lunt, KR1R and Warren C. Stankiewicz, NF1J
 Contest Manager Assistant Contest Manager

Is 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 contesters 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, K1IG, 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!

IARU Headquarters Stations

HG94HQ (HA1s FF,VQ,VA,YU,QD,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,PX,PY,RX,VA,NB,VH,WI,WP,WQ,WX,ZS, QV,HA7s JES,RY,VB,HA8s IB,JE,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,I,IM,IO,OT,UY3IM, UX3FW,UR5s WCV,ZMZ,UZ5s ODP,QRW,UY5s OQ, 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 (YO2s BBT,BV,DFA,YO3s APJ,AWT,CDN,FRI, FU,YO4s AB,ATW,HW,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,AMI,AXV,OE,XG,ON5AZ,ON6s HP, JG,LO,MR,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,BOW,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,IKOWIN,ops)	94,643	541	43
VA3RAC (VE3s JQJ,NPL,NXO,REJ,ops)	12,272	253	16



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



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

amazing conditions (KIIG). 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 (N2MZH). 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 (G10NWG). 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 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 (EA3EJ). 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 (9V IARU). 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.



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 kind 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?

Western Pennsylvania			
W3VEY	42,987	185	69 B
WV3S	37,760	204	59 B
WB0JW	24	6	2 B
K3UA	624	18	13 C
W4			
AA4UF	44,523	437	51 B
KK4SM	118,300	406	91 C
Georgia			
KI4XO	367,356	988	138 A
W4GLS	34,556	193	53 A
AC4PQ	12,992	120	32 A
KQ4HC	113,652	482	82 B
K4ZTL	10,290	80	35 B
KB4GID	309,042	849	118 C
KN4OV	129,390	508	95 C
K4BAI	115,206	515	78 C
Kentucky			
KI4DC	26,691	276	41 B
KC4ULX	19,223	151	47 B
KR4KL	9,860	106	29 B
N4XM	119,282	417	86 C
North Carolina			
WB4IUY	58,133	401	61 A
KS4S	20,724	141	44 A
N4UJH	375,100	1156	100 B
K4PQL	826,284	1443	148 C
WZ3Q	607,420	1306	121 C
W1IHN	58,459	287	53 C
KI4HN	4,784	102	23 C
Northern Florida			
K4VUD	386,004	1198	114 B
KD4HXT	2,550	172	10 B
AC4OC	26,400	180	50 C
South Carolina			
KC4UH	47,992	259	56 A
WD4FJP	90	8	6 A
W4JKC	150,118	515	94 C
Southern Florida			
W4PZV (WA4SVO,op)			
WD4AHZ	471,860	1128	140 B
	274,614	778	111 C
Tennessee			
WA6KUI/4	209,825	699	109 A
KS2X	56,580	381	60 A
KI4KR	1,584	39	18 B
W12M (K0EJ,op)			
	518,520	1177	120 C
KO4EW	36,465	213	51 C
AC4EM	34,656	190	57 C
AA4WX	11,256	108	28 C
Virginia			
AD4FX	46,155	199	51 A
WA4PGM	650,236	1073	149 B
N4MM	106,848	307	96 B
KR4CZ	12,051	95	39 B
W4XD	77,004	408	62 C
N4MO	36,309	239	57 C
NA4EO	20,680	145	40 C
KA4RRU (+KE4DFI,KJ4VG,KO4FM, WB4NFS)	278,584	362	97 D
W5			
Louisiana			
N5OZB	31,857	235	41 B
AB5PO	3,150	47	18 B
Mississippi			
N5KXG	45,695	293	65 B
KB5XI	10,788	162	29 C
W8			
Michigan			
WB8BUU	50,778	87	62 A
KB8LUV	22,134	247	34 B
K8UW (+NET)	1,053	23	13 D
Ohio			
KU8E	41,076	151	63 A
N6WLX/8	235,331	689	109 B
KI8B	198	18	6 B
N8LXS	321,639	1021	87 C
K8SJ	120,868	518	82 C
KF8TM	70,602	250	82 C
WT8P	52,910	308	55 C
N8BJQ (+NET)			
	248,528	587	112 D
N8JEC (+WA8OSE,WB8LXG)			
	49,113	271	51 D
NZ8Y (+N8RPA)			
	7,981	91	7 D
West Virginia			
N8II	597,820	1134	142 A
K3JT	86,359	356	73 C
KG8GW	14,120	135	16 C
KF8JM (+N8VCF)			
	184,679	483	112 D
W9			
Illinois			
W9XU	372,720	1052	120 A
K9MMS	258,108	622	137 A
NE8P/9	3,476	48	22 A
WA9WDT	168	28	6 B
KD9ST	278,168	704	116 A
W9LYA	28,500	189	60 B
NA1FR	223,734	655	98 C
Indiana			
W9JOO	52,838	911	58 A
N9DHN	9,100	122	35 A
N9WHG	3,510	61	26 A

AA9AQ	217,316	559	121 B
KB0C	56,959	195	79 B
W9HLY	11,220	129	20 B
KO9Y	152,750	465	27 C
Wisconsin			
KA9FOX	45,182	401	38 A
NZ9Z	150,677	537	89 B
NB9SH	206,988	650	94 C
W9HE	47,790	262	59 C
Zone 9			
Maritime-Newfoundland			
VE1UK	253,184	744	92 B
VE9HF	65,472	584	31 B
VE9ST	328,968	1117	72 C
VO9SF	298,900	716	98 C
XL9/W08AUB	2,418	62	13 C
Quebec			
VE2GHI	18,018	154	33 C
Zone 10			
Mexico			
XE3LMV	38,192	240	44 B
XE1/AA6RX	42,381	253	51 C
Zone 11			
Barbados			
8P9GY	160,758	537	78 B
Costa Rica			
TI4/AA7JM	41,325	197	57 C
Antigua & Barbuda			
RV1CC	13,590	398	110 A
W29PE	3,366	49	18 C
Turks & Caicos Islands			
VP5NC (AA4NC,op)			
	1,490,886	2443	159 A
Dominican Republic			
HIBOMA	16,539	150	44 B
HIBLC	9,850	100	25 C
Zone 12			
Bolivia			
CP1OZ (JE6CXU,op)			
	32,856	194	32 A
Ecuador			
HC4L	104,951	203	50 B
Colombia			
HK3JUH	304,902	809	78 B
Peru			
OA4EI	265,545	545	105 B
OA4CWR	102,084	440	47 C
Venezuela			
YV2FEQ	31,687	150	44 B
YV1DRK	138,148	383	75 C
Zone 13			
Argentina			
LU8ADX	68,376	206	77 B
Fernando de Noronha			
PY0FF	1,153,740	1693	140 B
Zone 14			
Argentina			
LR0N (LU2NI,op)			
	249,501	499	109 B
LU6AMD	32,670	128	55 B
L3CW (LU6BEG,op)			
	370,384	709	112 C
LU4FD	58,233	259	47 C
LU1EWL	32,010	123	66 C
LU1BW	9,044	77	28 C
LU1QW	9,044	77	28 C
LU1VV (+LU1VK,LU2s VD,YE,LU4s VY,VZ)			
	758,708	1180	124 D
Paraguay			
ZP5XYE	15,222	354	43 B
Zone 15			
Brazil			
PW2N (PY2NY,op)			
	59,904	214	64 A
PY2APQ	56,214	220	54 B
PY1AJK	12,342	113	22 C
PY2NZR	8,040	79	33 C
Zone 18			
Norway			
LA4BN	30,240	170	54 B
LA2AD	21,996	160	47 B
LA2GCA	14,574	111	42 B
LA5MT	134,302	377	106 C
LA3UG	20,295	495	41 C
LA8CE	9,768	118	33 C
LA1CCA	8,910	80	27 C
LA6ZFA (+LA2HJA,LA5FBA,LA7EJA)			
	138,040	1624	85 D
Finland			
OH6NIO	1,181,582	2075	142 A
OH6LNI	1,036,935	2045	113 B
OH3OJ	703,685	1355	145 B
OH6SU	44,293	165	81 B
OH2PM (OH1WZ,op)			
	970,717	1367	187 C
OH8LAE	480,928	940	152 C
OH2YL	44,890	170	67 C
OH6UP	17,802	119	46 C
OH6DH	12,180	86	40 C

OH1MMM (OH1VR,OH6LI,AC6T,ops)	893,900	1643	140 D
OH3NE (DH1KAG,OH3s LQK,MMH,ops)	356,829	949	121 D
Denmark			
OZ1APA	269,040	101	60 A
OZ5MJ	138,800	404	108 A
OZ9SIG	22,776	150	52 A
OZ5EV	171,457	405	121 B
OZ/WB2PSD	72,852	292	78 B
OZ8T	24,640	136	55 B
OZ8SW	26,708	202	17 C
OZ5UR	463	20	17 C
OZ5DX	280	16	7 C
Sweden			
SM3JLA	103,774	614	53 A
SM0BDS	57,000	238	75 A
SM3LV	50,468	266	74 B
SM7RZF	39,008	200	53 B
SM7HSP	18,538	127	46 B
SM5OK	14,160	102	40 B
SM6AHU	3,020	53	20 B
SL0CB (SM0XT,op)			
	685,064	1237	152 C
SM5IMO	204,906	663	74 C
SM/DL3JAN	197,976	536	173 C
SM3CCM	171,957	505	93 C
SM5RE	36,024	192	57 C
SM6DPF	10,602	103	38 C
SM6REA (+SM6s LPF,LPG,TOL)			
	184,639	565	91 D
Zone 19			
European Russia			
RW1C	13,590	398	110 A
RW1ZQ	3,666	51	26 A
RW1AN	590,520	1084	152 C
UA1ZO	134,442	523	44 C
RW1A (UA1-169-90U, UA1-169-2391,ops)			
	129,600	581	60 D
Zone 20			
Asiatic Russia			
RX9JA	10,074	124	40 B
UA9XS	171,500	408	98 C
UA9XC	148,897	409	99 C
RK9JWJ (UA9s JAF,JKT,WQ,ops)			
	34,866	621	67 D
Zone 21			
Asiatic Russia			
RA0BR	26,586	155	42 B
RK9KWI (+ops)	56,644	265	49 D
Zone 26			
Asiatic Russia			
UA0KA	8,380	106	20 A
RA1WO/0	1,136	50	8 A
UA0KY	33,408	218	36 C
Zone 27			
Ireland			
EJ1K0XBX	3,213	62	17 B
EI4DW	61,427	257	61 C
France			
F5NWX	155,775	505	93 A
F5RMY	48,484	252	62 A
TM2P (F5TCN,op)			
	168,504	544	84 B
F2AR	68,540	255	92 B
F2RO	62,622	252	71 B
F5PCX	60,918	266	78 B
F5JBF	22,200	143	50 B
F6CEL	266,364	801	84 C
TM9C (F5IN,op)			
	230,325	931	83 C
F6IIE	206,664	601	109 C
F6OIE	96,135	367	85 C
F5TNI	55,450	295	50 C
F5NQL	45,528	255	56 C
F5LET	33,726	249	42 C
F5RAB	4,560	64	24 C
TM2T (F5s ROP,SIH,ops)			
	1,144,485	1989	145 D
TM5M (F5s MYH,MXH,RWA, FA1MXI,ops)			
	443,492	1258	94 D
F6GIN (+F5MYK,F6DBA)			
	336,544	803	104 D
F6KAW (F5PMP,F8s DZS,GDK,ops)			
	244,321	903	77 D
F5KDZ (F5s PXQ,PYQ,ops)			
	130,790	393	110 D
England			
G4JVG	1,025,208	1498	174 B
G0OHV	63,329	269	83 B
G0NIF	781	35	11 B
G0LLI	543,972	1005	156 C
G3SWH	258,064	600	127 C
G3TRF	117,728	366	167 C
G3DFV	102,256	394	77 C
G0DEZ	82,288	348	74 C
Northern Ireland			
G1ONWG	647,520	1598	114 A
Scotland			
G0M0EC	763,715	1371	145 B
G03CFS	45,280	322	40 C
Wales			
GW3CSA (G1AOF,G4WSE,G0s IEQ, KXL,LHW,ops)			
	416,990	1113	98 D
Belgium			
ON5GO	289,432	656	121 B
ON4AUC	104,384	339	112 B

ON6CR	71,131	277	83 B
ON5CZ	15,698	118	47 C
ON4KFM	55,948	238	71 B
ON6TJ	32,054	184	57 C
ON4NL	30,748	189	52 C
ON4BR	15,165	134	35 C
ON6AH (+ON5PVO,ON5s MHV,L)			
	819,020	1619	124 D
OT4V (ON1IH,ON2AHJ,ON4s ALL, AMM,AWK,AYM,ON6KM,ops)			
	608,256	1228	132 D
Netherlands			
PA0MIR	70,348	283	86 A
PA0LJM	392,175	1022	105 B
PA0KHS	60,183	237	81 B
PA3GAB	44,957	219	67 B
PA2ALF	25,694	151	58 B
PA3SWP	20,736	150	52 B
PA3DWJ	14,145	205	69 B
PA0YV	3,564	162	22 B
PA3BNT	15,476	101	53 C
PA3BEJ	4,082	55	26 C
PA3FNE (+PA3EYZ)			
	665,912	1215	152 D
PHCOM (PA3s ERC,GBQ,ops)			
	558,464	1247	128 D
Zone 28			
Croatia			
9A2TX	24,017	163	47 B
9A2AJ	437,294	1014	139 C
9A1BHI	146,028	527	86 C
9A0K22QX	80,558	339	94 C
9A9D (9A4s DD,KK,UU,9A7GC0,ops)			
	303,892	1010	109 D
9A6P (9A3s ZG,ZO,ops)			
	59,348	303	74 D
9A1HBC (+op)	39,072	232	37 D
Fed. Rep. of Germany			
DL5IAR	1,362,200	1843	196 A</

OK1KQJ (+OK1AYP) 70,376 296 76 D
OL5PLZ (OK1DDR,OK1-19973,ops) 67,405 269 85 D

Slovak Republic
OM3YK 16,685 123 47 B
OM3FON 126,060 275 110 C
OM3CCG 112,623 415 93 C
OM3CAB 45,198 292 62 C
OM3TEG 20,790 117 66 C
OM2J (OM3s CQL,TA,TSQ,TXM,WPB,WST,ops) 411,930 1209 115 D
OM3RDP (OM3CDZ,OM3s -28173,-28756,ops) 144,352 531 42 D
OM9CA (+ops) 30,444 210 59 D

Slovenia
S50C (S57MM,op) 362,103 1009 129 A
S53CAB 314,793 823 131 B
S59AA 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
S51QZ 62,060 247 58 C
S51RW 15,179 119 43 C
S59DKR (S7s BZD,XX,ops) 278,997 951 113 D

Poland
SOBIF (DJ0IF,op) 533,216 1260 152 A
SP5UAF 143,260 515 116 A
SP5YQ 81,984 224 67 A
SP2WDW 80,520 328 88 A
SP5ELA 66,164 318 68 A
SP9RT 64,600 326 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
SP9UQJ 85,424 354 68 B
SP8NWK 36,920 230 65 B
SP9LDI 26,860 167 71 B
SP9VEJ 23,184 206 42 B
SP2WEJ 18,310 97 26 B
SP8OON 17,150 130 50 B
SP6FBD/3 16,560 135 40 B
SP6EII 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 1252 167 C
SP2AYC 186,377 575 113 C
SP8YAQ 156,240 471 112 C
SP5TT 127,380 386 110 C
SP3FAR 97,020 250 110 C
SP4GFG 65,600 316 82 C
SP1AEN 45,760 268 64 C
SP8BAB 33,072 194 39 C
SP6AUI 25,440 147 60 C
SP1BLE 22,764 146 42 C
SP3AOT 15,600 107 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
SOSTW 4,448 108 26 C
SP9KRT 3,402 47 54 C
SN6PR (SP6s ALE,BGL,FER,HAO,ops) 112,203 380 117 D

Greece
SV2BFN 11,396 115 94 B
Bosnia-Herzegovina
T9A (T91ENS,T93M,T94s DD,NE,ON,T99W) 1,580,128 2790 176 D

Romania
YO5BO 7,904 117 32 A
YO2CJX 3,683 86 29 A
YO9FNH 33,672 216 69 B
YO3AIL 21,168 162 54 B
YO8ROO 18,990 133 45 B
YO5BWI 12,876 132 37 B
YRBA (Y08AXP,op) 203,016 668 132 C
YO8FR 85,916 356 94 C
YO8BPY 75,650 372 89 C
YO4AAC 600 40 10 C
YO7KJX (Y07s BGA,LFU,ops) 240,282 729 126 D
YO8KAN (Y08s BFC,RGJ,ops) 164,268 528 108 D

Yugoslavia
YT7QTY 105,210 431 90 A
YT1AD 1,149,660 1887 180 B
YZ7V 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

Albania
ZA1AJ (OK1PSZ,op) 678,155 1787 145 C

Zone 29
Azerbaijan
4K9W 36,208 146 73 C
Moldova
EV1F 273,812 877 98 C
ER1OA 135,150 502 85 C
ER1CW 117,920 522 80 C
ER3DX 86,856 382 88 C
Belarus
EU1DQ 171,699 437 129 A
EU4MM 188,589 577 111 B
EU1MM 729,111 1470 141 C
EU6EU 103,586 363 98 C
EW8OS 40,959 1107 37 C

Lithuania
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 157,815 518 105 C
LY1CF 136,420 513 79 C
LY1CN 84,320 370 85 C
LY3MR (LY1s FF,FR,LY3NFW,ops) 483,804 1156 151 D

European Russia
UA3RAR 1,242,428 1698 187 A
RU3RN 50,139 222 81 A
RU3WX 38,430 214 63 A
RU4AA 37,152 236 54 A
RZ3QQ 32,976 154 64 A
RW9AB/6 279,698 372 214 B
UA3RE 200,680 524 116 B
UA4NC 81,512 288 92 B
RV4LP 55,554 177 94 B
RA3THN 22,503 257 369 B
RU3WT 18,500 149 60 B
RK4YYY 4,750 59 25 B
UA6LP 381,276 1001 119 C
RA4FW 300,580 725 133 C
UA4AGP 159,948 506 109 C
RV6LFE 125,538 475 98 C
UA4YJ 121,885 398 95 C
RA3PP 112,385 395 95 C
RW3GU 110,126 433 82 C
RX3RB 97,266 408 87 C
RW3RP 68,256 270 72 C
UA4ANZ 43,870 173 82 C
UA4HY 43,520 241 68 C
RW3WM 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 C
RU6L (UA6s LFQ,LV,NP,UT2W,UR5IBG,UA6-150-1403,ops) 1,777,888 2185 220 D
RW6AWC (UA6s AAY,AJU,AQA,ops) 1,576,274 2058 238 D
RZ6HWA (RA6FV,RW6s 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,UA4AIY,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
RK3PWW (RW3PN,UA3PNO,UV3AKK,ops) 105,840 393 84 D
RK3QWB (+ops) 762 260 75 D

Ukraine
EN1I (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
UY2ZA 124,478 418 109 A
UY2JA 124,254 339 118 A
UY5TE 123,876 476 93 A
US3IZ 107,370 418 90 A
UT5XF 66,682 297 77 A
UR5LXB 25,896 264 26 A
UR5EVP 16,104 178 33 A
UR5EYV 10,800 196 18 A
UR5MAF 2,209,116 2378 221 B
EN0D (UT7DX,op) 1,266,252 2154 156 B
UX0MM 868,700 1672 146 B
UX0LT 414,030 604 228 B
UY3CC 87,856 377 76 B
UX0HO 14,769 156 27 B
UX2HO 814,660 1484 154 C
UR7VA 594,732 1108 174 C
UT4PZ 503,360 1136 130 C
UT3IQ 352,092 893 122 C
UX7IA 335,600 835 140 C
UR5EAT 289,813 871 109 C
UX5EF 203,580 513 130 C
UR4LCB 177,856 534 112 C
UR3MP 107,338 468 82 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 49,164 242 68 C
US8UA 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
US3IEZ 1,339 59 13 C
UT2XX 330 22 15 C
UU5A (UU1JA,UU2s JQ,UJ,JZ,UU3JD,UU3JW,UU5JR,UU7JF,UU0UX,U5-067-2000,ops) 2,552,256 2923 252 D
UT7E (UT3s EC,EW,UR5s ECE,ECW,EDU,UT5EL,ops) 2,300,400 3252 200 D

Latvia
YL2GN 573,666 1296 138 A
YL2GUV 672 28 12 B
YL2EC 78,204 259 84 C

Zone 30
European Russia
RU4HY 55,862 436 34 A
UA4HGG 158,270 560 85 C
RU4WE 86,940 327 84 C
RX4HX 29,232 162 56 C
R24WWB (UA4s WEI,WGY,WJF,ops) 966,897 1641 173 D
RK4WWA (RW4WA,UA4s WA,WAN,ops) 775,260 1358 180 D

Asiatic Russia
UW9QK 79,947 267 81 A
UA9SHM 11,959 355 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

Uzbekistan
UK7R (UK8s ADT,AX,ops) 24,986 568 101 D
UK8BWO (UK8s BAM,BCQ,BDA,BN,ops) 21,750 207 25 D

Kazakhstan
UN9LGS 37,440 234 36 C
UN7ID 12,150 76 45 C

Zone 31
Asiatic Russia
RZ9OC 264,240 1047 60 A
RZ9U (RZ9UA,op) 741,704 1232 184 D
UA9UUN 6,776 60 28 B

Zone 32
Asiatic Russia
UA3D/0 (UA3DPX,op) 1,023,840 1411 160 A
UA0ST 11,618 98 37 B
RW0AB 341,328 742 104 C
RK0SXF (UA8TAA,RU0SN,UA0s SMM,SUI,ops) 467,375 842 125 D

Zone 33
Asiatic Russia
UA0JB 133,282 328 103 C
RA0JX 91,934 1069 86 C

Zone 34
Asiatic Russia
RA0FU 41,401 521 127 A
RZ0LWA (RW0LWF,op) 71,640 332 60 B

Zone 35
Asiatic Russia
UA0ZAJ 35,240 225 40 C

Madeira Islands
CR3R (CT3BX,op) 3,718,451 1909 389 B

Canary Islands
EA8BXQ 20,102 117 38 B

Zone 37
Portugal
CT1BWW 77,000 297 70 B
CT8T (CT1s BOH,DVV,ESV,ops) 1,073,754 1980 153 D

Spain
ED5URN 135,320 567 68 A
EA3GEP 72,800 469 32 A
EA1UX 201,239 916 61 A
EA5GRC 164,528 458 112 B

EA3EJI 115,137 391 99 B
EA3BT 53,499 301 51 B
EA3GHC 28,060 152 61 B
EA1EMZ 27,496 151 56 B
EA5AEI 18,725 154 35 B
EA3CZM 17,200 100 43 B
EA1AKK 15,500 146 50 B
EA1AAH 8,216 109 26 B
EC3ACG 2,590 61 14 B
EA3ACA 610 29 10 C
EA7HAT 88,218 288 87 C
EA3AEC 80,642 351 61 C
EA1FBJ 72,335 256 85 C
EA2CR 18,538 133 46 C

Balearic Islands
EA6JN 2,057 53 11 B

Zone 39
Israel
4X/OK1FMR 332,969 775 91 C
4X1VF 219,470 558 85 C

Cyprus
C48A (5B4ADA,op) 1,852,590 2158 185 C
C49C (5B4s KH,XF,WN,ops) 1,662,880 2316 58 D
P39P (+ops) 1,371,600 2124 135 D

Turkey
TA2ZO 23,850 200 25 C

Zone 44
China
BY5VZ 11,744 128 32 A

South Korea
HL0K (HL1s DXK,LME,LUL,ODG,HL2DWD,HL3EAT,HL4GGI,ops) 67,260 330 59 D

Hong Kong
V56BG 104,832 356 84 C

Zone 45
Japan
JH7PKU 747,890 1303 130 A
JR4GPA 205,246 601 82 A
JA4CUU 80,524 254 82 A
JH4NMT 55,115 185 73 A
JK2VCC 35,834 348 46 A
JF0SGW 35,380 140 61 A
JH0HON 3,168 144 22 A
JG1RDV 2,835 65 21 A
JA0GZ 2,071 25 19 A
JK7JCC 12 2 2 A
JA7BWB 126,918 411 66 B
JH0ZQH 105,420 397 60 B
JH7LRS 81,984 300 61 B
JH1UUT 37,383 177 51 B
JA6CM 14,245 99 35 B
7K2DOD 12,640 89 32 B
7K2GNK 10,208 84 29 B
JR7WAB 9,476 170 23 B
JA1IT 9,141 595 33 B
JR1MRG 4,482 166 27 B
JE1LGY 3,465 36 21 B
7K1EHK 3,384 46 18 B
JA1STY 1,710 27 18 B
JA2GHP 845 19 13 B
JL6IPK 832 20 13 B
JA1JLP 416 12 8 B
JH1RMH 162 9 6 B
JH2WHS 156 39 4 B
JN1NUJ 75 5 5 B
JG1GCO 16 2 2 B
JH7XGN 426,474 1642 114 C
JA7DLE 224,884 718 76 B
JA9CWJ 141,100 374 85 C
JA2IU 121,728 30 96 C
JF3IUC 106,020 308 93 C
JQ1VNM 103,520 309 80 C
JA2KVB 96,147 286 81 C
J3BFC 84,312 281 72 C
JA3ARM 81,548 264 74 C
J51UMQ 51,129 195 69 C
JR7OMD/2 48,106 172 67 C
JA5APU 47,648 313 32 C
JA1QOW 46,252 164 62 C
JL4CMT 35,742 191 46 C
JA1WYQ 34,408 130 68 C
JH0GHZ 31,920 136 57 C
JF3NLQ 25,905 121 55 C
JP1DMX/6 24,990 142 49 C
JH1EIG 24,864 94 84 C
JA1GTF 13,454 92 31 C
JA7MWC 12,716 86 34 C
JF1SQC 10,430 70 35 C
JA3EEM 9,218 69 34 C
JE1PNC 9,016 78 28 C
J1V1RO 6,758 56 31 C
JA1KI 6,664 54 34 C
JA8AJE 6,600 58 30 C
JG5OYU 5,404 47 28 C
7M2JTT 4,725 53 25 C
JH1PYX 4,500 56 18 C
JA1AB 2,816 34 22 C
JA1XEM 1,284 23 12 C
JH1NXU 611 13 13 C
JE1KDM 399 13 7 C
JA6QDU 252 10 6 C
JA1AAT 168 8 7 C
JF3XMI 32 4 2 C

JA7YAA (JF1s CKX,SXL,JG7PSJ,JR0SPG,ops) 547,616 1088 109 D
JA0YAK (JF1USQ,JE2RAJ,JK2PVL,J3SVZL,JL7UPJ,JE0WIP,JF0TJU,7M1FQD,7M2UQR,ops) 257,950 734 77 D
JH0ZHQ (JH1s BBT,GNU,MDJ,JK1GK,ops) 168,672 409 96 D
JA7YAI (JE1NXR,JL2NJC,JL4ARB,JL7WEG,ops) 30,267 139 57 D

Zone 46
Nigeria
5N0MVE 835,968 1174 128 B

Niger
5U7Y 32,823 321 21 B

Zone 48
Djibouti
J28FX 12,714 99 26 C

Zone 50
Philippines
DU1SAN 66,745 391 35 B
DU1SSR 3,978 45 18 B
DU7AFT 1,248 22 12 B
SM0CNS/DU7 8,375 72 25 C

Zone 52
Angola
D2TT (ON6TT,op) 626,428 1401 92 B

Zone 53
Zimbabwe
Z21HS 4,695 63 15 C

Zone 54
Brunei
V85BJ 20,975 175 25 B

Indonesia
YB2BKI 3,484 126 26 A
YB2JOY 125 5 5 B
YB0ASJ (AA4U,op) 226,442 484 101 C
YB6ZZ (YC6MHH,op) 52,728 272 39 C

Zone 55
Australia
VK4EMM 318,240 648 104 C
VK4EET 132,840 364 82 C
VK4TT 4,950 69 15 C

Zone 59
Australia
VK2VA 27,324 118 54 A
VK5GN 91,350 304 63 B
VK2APK 364,302 696 111 C
VK2AYD 152,978 345 98 C

Zone 60
New Zealand
ZL2AGY 89,271 297 63 C
ZL1AIZ 48,576 165 66 C
ZL3SL 115 5 5 C

Zone 61
Hawaii
KH6FKG 263,004 866 62 B
KH6GMP 36,387 193 39 B
AH6JF 25,200 146 36 C

Zone 75
Ranz Josef Land
R1FJV 135 9 9 A
R1FJC 131,334 600 53 C
4K2MAL 224 8 7 C

Checklogs
C12/WDBAUB,DF5WN,DL1AVH,DL1JPF,DL3ARX,DL3HRA,DL3ZBJ,DL4HGF,DL4VAD,DL6MTA,DL6JUC,DL8FOP,EA1EX,EA3GD,EA3J,EA4BJD,EA5BZS,EA7GBD,ED5URN,EV1HG,FP9LT,HC2GRC,IK35CB,IK4WMM,JI1XKU,K7EFB,K8QO,LA2MW,LU2DKN,LY2BAG,LZ6A,0Z5PA,PA2GWA,SM0CSX,SP2JGW,SP3FZN,SP4CHY,SP4CMG,SP6ICK,SP6CZ,SP9CLO,SP9CQ,SP9HOF,SP9LAS,SP9LDP,SP9MCU,SP9MDY,SP9QME,UA3WCV,UA4APY,VE1ACO,VE3KLM,VE6AO,VR0KF,W4RA,YO3AS,YO4DJ,YO2EK,

