

Number groups after call letters denote following: Band (A = All), Final Score, Number of QSOs, Zones, and Countries. An asterisk (\*) before a call indicates low power. An 'A' after the band indicates Assisted category. Certificate winners are listed in bold. Late logs are listed in italics. (All country terminology reflects the DXCC list at the time of the contest.)

**2013 CQ WW DX CW CONTEST RESULTS**

**SINGLE OPERATOR NORTH AMERICA**

**United States - District 1**

N1NT	A	10,652,128	5093	174	562
KDD1		10,297,950	5540	152	498
K5ZD/1		10,050,712	4945	160	547
K1ZZ		8,782,400	4322	158	546
K02M/1		8,419,257	4413	164	529
W1KM		7,455,204	3903	156	510
K1ZR		6,164,172	3982	126	423
W1WEF		5,634,444	3195	145	472
K1RWE		5,060,825	2969	146	459
W1ZK		1,700,140	1205	121	382
WC1M		1,611,375	1496	91	284
W1ZT		997,920	828	117	323
K1BV		969,122	1019	79	262
K1DG		862,296	849	95	271
AB10P		496,672	527	75	277
NE1RD		466,824	558	80	238
W1EQ		416,932	505	73	161
AK1N		345,818	510	70	172
W1XX		202,592	339	52	156
K1SM		198,129	326	61	150
W2AHP/1		66,300	261	53	103
K1BZ		63,412	154	51	115
K1WHS		20,700	89	28	64
K1LL		18,352	105	33	49
K1RM	28	720,954	1485	32	137
W1EF		522,750	1109	32	138
K1QS	14	60,580	194	35	95
W1OHM		44,064	204	20	61
W1MK	3.5	455,715	1311	27	96
*N1UR	A	4,752,231	2881	140	501
*K1BX		1,763,172	1518	98	304
*K1HT		1,438,988	1109	123	316
*W1DG		1,224,689	1024	94	327
*N1DC		1,127,023	943	97	340
*W1JO		1,074,404	855	113	339
*W1CCE		1,045,330	872	95	335
*W1AO		872,802	826	92	286
*K1BT		592,200	650	87	242
*W3SM/1		437,388	542	71	216
*N1GN		434,388	513	85	233
*K1GGI		404,492	479	92	227
*KX1E		382,956	501	63	219
*W1UK		356,864	401	79	249
*K1PU		346,619	432	82	211
*W4ZY7/1		336,296	499	61	193
*K1GV		300,048	397	74	208
*K1FI		274,890	419	53	178
*K1LOG		265,625	324	64	171
*N1BN		119,438	268	54	124
*W1EHC		114,232	224	67	151
*N1NN		86,433	288	38	103
*N0XZ/1		60,500	197	28	82
*K1A1C		50,256	152	47	97
*W1MJ		49,274	133	44	84
*W1DH		47,580	127	87	85
*K1A1C		34,578	122	29	73
*W1RB		25,200	103	40	72
*W1PD		19,120	113	23	57
*W1AESO		16,426	84	35	51
*K1IX		14,535	101	29	56
*N1BC		10,710	90	44	58
*W1HFG		44	37		
*N1DN		4,416	37	18	28
*W2VM/1		912	18	10	14
*W3EP/1	28	319,009	758	32	117
*K1VJS		283,824	695	30	114
*N1MK		256,340	643	30	110
*N1JD		51,555	208	25	80
*N1MG		51	11	28	
*K1RFD	21	9,048	88	15	37
*K1MR	1.8	6,517	80	13	36
K1AR	AA	6,319,210	2692	177	665
N9NC/1		5,229,576	2188	178	674
W2ZU/1		3,959,910	2012	144	546
W1TE		3,267,000	1699	144	531
W1MSW		3,059,000	1695	151	507
W1EBI		2,879,032	1725	134	477
K8B1W		2,804,208	1506	144	534
K2TE/1		2,695,612	1763	116	432
W1QK		2,534,301	1327	153	540
N1YX		2,343,540	1488	119	443
AA1V		2,289,824	1287	144	508
K1LL		2,164,575	1182	152	513
K81EFS		1,943,700	1171	133	487
N8RA/1		1,762,780	1192	115	415
K1HI		1,717,840	1111	112	433
K1RV		1,563,195	1094	115	414
K1ESE		1,395,940	852	130	468
W1CJ		1,388,304	1025	118	378
K1J		1,262,816	787	127	462
W1RM		1,189,422	749	142	456
KG1D		1,035,501	681	133	410
W1NK		951,200	828	112	352
K1TH		811,890	622	138	347
W1EZ		530,438	579	84	253
W1CTN		489,216	468	85	299
K1TB		475,750	503	74	230
K1VJ		446,794	553	60	229
W1ZS		435,848	453	99	263
K3IU/1		402,318	529	64	215
N1YC		372,500	392	93	257
		361,974	374	95	271

W1KO		64,389	144	47	122
W1JB		56,575	153	49	127
N1KWF		35,182	130	29	69
K1XC		21,012	75	42	60
		(OP:K1GO @K1GO)			
W1JR		20,227	81	44	69
AB10C		17,372	80	32	54
K1BG		4,600	37	19	21
*K1JB	14A	3,949,948	848	37	127
W1FQ	7A	53,841	187	29	108
K1SND		19,789	102	19	58
K1AO	3.5A	38,157	193	15	64
K1DM		19,215	111	12	51
*K1SJ	AA	4,303,978	2303	140	518
*N1EN		2,952,268	1790	131	455
*W1NT		2,502,291	1572	126	447
*W1DN		1,953,042	1280	122	424
*W1XS		1,107,683	880	101	348
*K1RO		711,848	647	96	308
*A1ET		668,219	607	97	294
*N1AP1		607,725	613	83	282
*W1AN		463,203	508	77	256
*N1FO		439,467	449	87	270
*K1R2		402,370	378	62	227
*K1DEU		364,744	425	78	261
*K2RS/1		330,718	427	66	208
*K1A1OR		323,615	420	74	221
*W1LE		217,828	293	82	202
*AD1E		199,750	315	57	178
*W1DRO		199,290	325	56	152
*K1EV		133,889	244	65	164
*W1VM		9,048	61	12	46
*A1JE		102,780	222	52	128
*K1NXY		95,392	221	51	125
*K1TW		85,656	174	53	119
*N1DBL		47,888	147	55	91
*W1DS		19,360	84	46	64
*K1SEZ		19,096	86	20	57
*K1EY		9,048	61	12	46
*N1QWV		43,368	43	20	32
*A1AAR		3,796	30	25	27
*K1ZJ	28A	186,048	440	30	123
*A1BJ		71,048	234	22	85

**United States - District 2**

W2BC	A	5,050,549	2311	127	426
		(OP:W2RU @W2RU)			
W2WY		4,793,880	3169	140	406
K5ELZ		4,738,984	2768	139	465
N2XZ		4,405,931	2575	144	457
K2NV		4,138,332	2462	140	446
N2MF		3,365,280	2140	135	435
KE2WY		1,326,315	1127	104	331
N2ZJ		981,604	802	108	331
K2ML		869,442	795	91	290
K2ZJ		808,680	947	84	209
K2GJ		676,016	687	94	274
K2ZF		445,839	562	95	258
W2O1B		437,526	487	88	239
N2ED		197,795	410	51	128
N2ZD		100,342	176	102	124
N2CY		48,508	128	41	93
N2CG		861	26	17	24
K2ZR	28	39,512	171	23	65
N2ZU	21	319,104	795	32	112
W2EG	7	8,280	67	13	32
*K2ZTM	1.8	5,280	53	11	33
*N2GA		1,474,111	1221	107	336
*N2GA		1,184,826	1169	90	284
*K2ZR		804,874	795	104	278
*N2UJ		532,432	605	71	240
*KE2D		363,584	460	72	227
*N2RI		361,032	492	84	223
*W2MCR		252,650	323	90	220
*W2AJK		240,040	319	88	252
*K2ZM		150,100	262	65	160
*N2BEG		112,924	237	68	125
*W2KSP		86,686	203	53	125
*AC2FA		84,672	218	46	112
*W2KAI		78,554	196	63	118
*AA2TH		59,200	158	43	105
*K2ZEX		59,092	180	47	111
*K2OO		58,058	146	46	107
*N2US/3		55,522	137	45	97
*NG2D		53,793	197	35	94
*W2TZ		45,192	194	22	62
*K2LML		12,675	73	26	49
*W3JP/2		11,040	65	22	47
*K2ZJC		10,725	68	27	48
*K2ZK		173,721	1091	35	123
*K2ZF		5,264	48	19	37
*W2ZU		3,784	38	15	29
*N2DD		992	19	17	15
*W2CWW	28	71,928	237	23	85
*K2TV		19,500	107	21	54
*W3YR/2		14,606	82	20	47
*K2ZM	21	719,374	1619	35	123
*W2AW					

K4XD	152,550	251	72	154	*K5LH	687,080	719	88	268	*N6RV	A	1,038,756	949	123	305	AATD/J	120,414	351	29	93	N8BJO	2,865,600	1782	135	443	
KK4EIR	139,442	230	68	158	*W5ZO	670,500	702	109	266	*N6GVH		553,532	592	110	263	W7D	75,684	278	28	78	K8GL	2,149,191	1344	128	431	
WAADT	137,555	247	65	140	*W5DQG	546,350	587	92	258	*N6MU		517,725	536	116	235	W6Z0/T	21,238	127	23	51	K5PM	1,516,256	1358	104	288	
K4GM	107,578	262	34	115	*K5ME	364,210	474	92	209	*W6JK		266,700	376	93	161	W7KKR	11,200	88	23	41	WA8RCP	1,268,343	1065	117	360	
K3JWV4	105,648	222	57	129	*WASSOG	188,750	299	81	169	*AF6GQ		122,580	294	66	114	W8TK7	361,896	984	35	101	N8AA	594,064	609	101	256	
K4WW	99,879	197	59	138	*KFSOZJ	188,448	326	65	143	*WBBYQJ/6		120,540	277	62	102	WA7LT	268,032	830	30	98	W8TWA	517,319	534	106	253	
W5D4D	99,146	217	52	126	*K0EG0E/5	185,840	299	70	160	*N3PV/6		114,885	237	65	120	K8DN	109,982	313	34	93	N8JTB	303,000	387	100	200	
N4DXI	85,560	203	73	113	*W45ZKO	187,566	340	59	139	*N6PN		103,400	206	68	120	K7DZ	29,646	137	37	91	K1JTH	167,268	296	59	153	
W4TTY	52,452	134	37	103	*K0KXW	134,972	292	54	134	*K6KCV		103,212	226	72	111	*N6Z07	536,208	376	66	108	W8Z07	157,920	319	62	148	
W4NL	11,750	56	43	82	*NSBR	128,700	269	58	140	*AA6EE		84,309	219	106	106	W7WA	562,028	1242	38	126	W8OHT	294,890	566	158	158	
K4SV	47,268	154	43	74	*AD5VC	107,198	231	71	146	*AC6SL		64,116	165	53	84	W7VA	18,605	117	21	40	K8MJU	26,883	99	33	70	
WA30FC/4	45,360	111	36	108	*W5PQ	93,219	207	55	106	*N6MUF		57,915	210	59	84	N7GP	38,464	391	20	44	K8SSS	14,140	88	21	49	
W9L14	44,511	142	36	75	*ACST	71,736	184	48	99	*K6CSL		24,849	110	44	55	(OP-N5IA)					W8BAN	6,222	49	13	38	
W4VIC	41,328	123	32	91	*NF5Y	64,124	155	58	106	*W6LEN		15,826	79	37	45	*K2PO7/ A	2,133,314	1628	136	342	K8MFO	28	550,942	1193	32	129
N4ES	36,533	114	41	78	*NSMF	62,914	148	65	101	*N800/6		11,622	59	33	45	*N7GZ	1,242,640	1174	125	267	N8ACU	184,652	481	28	106	
K4ZL	36,025	111	34	97	*K5WOG	36,960	117	31	79	*K8D7J/6		10,443	70	30	29	*W7ODM	648,784	664	112	256	N8BR	152,900	391	61	108	
N3MK/4	35,750	107	44	86	*W3RML	36,153	125	45	72	*K6DQ		1,296	35	12	12	*W7D7	344,080	503	96	176	W8TA	156,254	1306	36	129	
K7R1/4	18,096	85	21	57	*N9NM/5	33,813	126	38	79	*AF6N		1,032	25	21	22	*K7JE	212,598	303	72	182	N8MZ	7,662,625	399	36	119	
WA2MBP/4	8,954	44	30	44	*WFSK	30,847	113	36	73	*K6MZ	28	41,940	169	26	64	*W6QWVV/7	113,487	240	67	114	N8CP	115,200	316	33	95	
W4ATL	8,064	53	23	41	*N7KRT/5	26,332	89	43	70	*NP4IWW/6		6,825	101	15	20	*W7GN	111,010	272	67	103	K8CMM	11,077	89	15	38	
K21X/4	7,308	55	14	49	*KDSJ	16,740	84	37	53	*WA7BNM/6		1,470	18	14	16	*K7ZG	101,184	195	71	133	*N8BV	A	3,200,146	1192	146	440
K84FB	2,016	28	21	27	*W1XTE	16,740	77	38	52	*AE9F/6	21	96,052	304	33	85	*AB7RW	100,620	225	64	116	*K8VO	1,380,942	1104	117	361	
N84F	440	70	70	70	*AASTB	11,011	54	28	49	*W6D6		20,510	110	22	48	*K7YAR	99,940	216	71	119	*N8VU	1,280,178	1101	111	342	
N84VJ	598,970	1187	37	60	*K8D7T	6,854	56	16	41	W1SRD/6	AA	1,648,224	1033	159	423	*W8JUI	178,520	178	178	178	N8BJS	1,260,550	597	121	289	
W6LZT/4	395,085	902	140	140	*K5KSMR	6,580	78	30	40	K61A		1,515,000	1105	134	366	*K6A7T	73,162	192	57	100	*K8BTU	509,850	584	86	244	
N4GN	247,580	357	117	117	*W8SEIN	6,270	82	21	36	W60AT		1,473,363	927	150	441	*N7VS	64,527	213	56	87	*K8GP	349,648	381	82	246	
N4XD	189,208	520	31	103	*N5KAE	2,720	29	12	20	N6JV		1,461,042	1041	133	384	*N7LOX	40,567	151	48	65	*K8LY	323,407	378	87	242	
K4UEE	104,512	275	30	112	*AF5O	1,600	27	14	26	K2RD/6		1,135,240	835	151	354	*N7GOA	33,098	104	57	77	*AF8C	263,796	399	73	194	
KK9A/4	4,794	39	17	30	*W6EEZ/5	56,644	208	26	72	W6SX		1,129,898	1009	124	282	*K7OVM	32,623	124	34	67	*W8BMM	260,850	426	64	158	
W1J7/4	168,560	442	32	108	*N1SF	13,671	80	19	44	KX7M/6		1,128,270	1019	117	273	*K7ARJ	31,130	113	41	69	*K8VUS	232,500	340	73	177	
W2A/4	155,901	381	36	121	*K5GY	2,414	30	15	19	*K6DQ		1,094,049	968	132	326	*W7AOCG/7	28,325	108	108	108	*W8DMM	228,890	348	61	129	
W1M/4	155,901	381	36	121	*NS5A	7,400	42	16	24	N6WS		1,052,100	764	138	363	*K7NEW	18,260	81	32	51	*AA8OY	164,808	322	61	155	
W4W	114,878	303	30	112	N5JR	AA	2,108,984	1207	152	480	N6OQ		1,040,261	708	149	464	*WATPRC	17,394	80	32	46	*W8BAKW	162,792	248	66	172
K4JPD	126,420	422	27	102	AC4CA/5	2,093,351	1356	145	424	AA6PW		879,648	714	129	347	*K7ACZ	11,277	64	23	40	*W8OHB	157,464	289	73	170	
K4LY	93,338	315	25	93	K7XC/5	1,371,648	849	138	470	WASV6I/6		749,710	696	130	265	*K7CWX	9,891	65	28	35	*NE8J	148,992	301	53	139	
W4PK	88,776	299	24	84	K9MK/5	1,014,093	622	153	468	W6GH		748,512	720	125	289	*K6GX7	8,496	51	26	33	*KE8G	132,927	285	43	134	
K4A0A	7,320	59	14	46	K5VU	918,694	776	119	303	N6TU		621,021	551	114	297	*X0U	6,018	50	27	30	*W8ASA	132,086	250	64	147	
W6HG/4	66	4	3	3	N6TD	885,391	793	103	300	K6RC		595,932	680	87	231	*K8TSPS	3,780	40	26	34	*W8BKN	106,329	267	54	148	
N4WJ	24,900	134	17	62	K5SD	770,133	721	108	295	W1RH/6		585,881	560	108	269	*AC7JM	3,627	46	18	21	*K8SJM	104,716	141	127	121	
AC4W	12,722	88	17	46	K7M/5	741,502	629	129	329	K6RM1		496,081	427	118	313	*K7TR	2,262	39	14	12	*N8SBE	75,776	186	48	100	
N4DU	9,075	75	13	42	K5VW	717,588	503	137	421	N6PE		452,620	421	125	302	*K7O	1,938	42	19	32	*N8FM	59,517	141	52	101	
*K1HWT/4	AA	2,422,520	1245	156	554	K5CM	625,040	455	127	393	N6ED		453,556	378	110	308	*K7SS	195,000	581	30	95	*W8OKWJ/8	56,322	144	46	103
*N9NB/4	2,270,433	1318	162	482	N5TJ	555,360	478	91	221	K6RKM		428,465	456	112	223	*K9WZB/7	95,872	308	29	83	*W9RKN/8	27,468	109	35	74	
*W4A4H/5	1,909,206	1272	124	409	K4AM	538,704	573	112	375	K9JM/6		271,780	373	79	175	*W8TJG	15,576	95	25	41	*W8BYV	21,712	88	33	59	
*W6NWS/4	1,764,792	1084	142	437	K5AX	460,665	491	105	248	W8KA/6		222,687	355	82	146	*W7LGG	12,104	100	22	46	*N8VM	12,054	92	24	58	
*W41FCN/4	1,739,070	1158	141	429	AESX	409,649	449	105	249	K5FO		444,497	297	106	237	*W8DUM	28,325	108	108	108	*W8DUM	228,890	348	61	129	
*AA4D	1,212,246	811	136	431	N5OQ	350,316	422	95	238	N6DA		204,392	313	79	153	*W7AAY	43,134	179	26	65	*K8XK	11,664	80	24	48	
*N4CJ	1,012,662	734	121	392	KE5AKL	299,390	353	107	222	W6SC		194,969	296	84	157	*K7DMSC	10,348	79	22	30	*K8FBT	7,475	44	28	37	
*K4FXN	679,712	713	87	265	K6SVK	293,715	352	77	244	W6YI		145,167	335	46	113	*W7GSV	6,762	51	19	30	*K8BU	4,788	40	10	32	
*W3ZL/4	594,220	611	95	270	N5EA	238,510	358	93	212	NE6I		143,902	260	70	141	*K7WA	4,522	44	19	19	*K8BM	3,168	38	10	30	
*K4ZGB	544,666	607	85	244	W4SKG/W	179,219	227	75	202	N6VH		108,416	220	68	108	*W8TME	48	7	3	3	*K8FZY	2,460	48	11	30	
*K4MM	512,448	468	97	311	W8SO	176,275	245	74	201	KF6I		97,744	218	56	108	*N8TMS	18	11	5	4	*W8KNO	1,258	21	16	18	
*AE4O	402,847	502	73	214	N6SD	174,276	352	48	140	K6GF		1,094,049	968	132	326	*N5TK	2,449	36	13	18	*W8I/8	41	2	2	2	
*W4TMT	396,633	494	78	213	W8S1YT	167,268	281	56	156	K6DQW		79,566	177	70	108	K70AA	AA	4,716,063	2301	179	558	*K7DR/8	15,410	96	18	49
*K8VC4	272,096	286	93	259	N5TM	164,220	297	61	149	W6SJ		77,355	181	68	123	K6LL/7	4,068,414	2208								



SEE US AT DAYTON HAMVENTION BOOTHS 20, 21, 22 & 23



# HAM RADIO OUTLET

WORLDWIDE DISTRIBUTION

#1 Yaesu Dealer Worldwide

## ANAHEIM, CA

(Near Disneyland)  
933 N. Euclid St., 92801  
(714) 533-7373  
**(800) 854-6046**  
Janet, KL7MF, Mgr.  
anaheim@hamradio.com

## BURBANK, CA

1525 W. Magnolia Bl., 91506  
(818) 842-1786  
**(877) 892-1748**  
Eric, K6EJC, Mgr.  
Magnolia between  
S. Victory & Buena Vista  
burbank@hamradio.com

## OAKLAND, CA

2210 Livingston St., 94606  
(510) 534-5757  
**(877) 892-1745**  
Nick, AK6DX, Mgr.  
I-880 at 23rd Ave. ramp  
oakland@hamradio.com

## SAN DIEGO, CA

5375 Kearny Villa Rd., 92123  
(858) 560-4900  
**(877) 520-9623**  
Jerry, N5MCJ, Mgr.  
Hwy. 163 & Claremont Mesa  
sandiego@hamradio.com

## SUNNYVALE, CA

510 Lawrence Exp. #102  
94085  
(408) 736-9496  
**(877) 892-1749**  
Jon, K6WV, Mgr.  
So. from Hwy. 101  
sunnyvale@hamradio.com

## NEW CASTLE, DE

(Near Philadelphia)  
1509 N. Dupont Hwy., 19720  
(302) 322-7092  
**(800) 644-4476**  
Ken, N20HD, Mgr.  
RT 13 1/4 mi., So. I-295  
dolaware@hamradio.com

## PORTLAND, OR

11705 S.W. Pacific Hwy.  
97223  
(503) 598-0555  
**(800) 765-4267**  
Leon, W7AD, Mgr.  
Tigard-99W exit  
from Hwy. 5 & 217  
portland@hamradio.com

## DENVER, CO

8400 E. 131st Ave. #9, 80231  
(303) 745-7373  
**(800) 444-9476**  
John W01G, Mgr.  
denver@hamradio.com

## PHOENIX, AZ

10613 N. 43rd Ave., 85029  
(602) 242-3515  
**(800) 559-7388**  
Gary, N7GJ, Mgr.  
Corner of 43rd Ave. & Peoria  
phoenix@hamradio.com

## ATLANTA, GA

6071 Buford Hwy., 30340  
(770) 263-0700  
**(800) 444-7927**  
Mark, K4VVO, Mgr.  
Doraville, 1 mi. no. of I-285  
atlanta@hamradio.com

## WOODBRIIDGE, VA

(Near Washington D.C.)  
14803 Build America Dr.  
22191  
(703) 643-1063  
**(800) 444-4799**  
Steve, W4SHG, Mgr.  
Exit 161, I-95, So. to US 1  
virginia@hamradio.com

## SALEM, NH

(Near Boston)  
224 N. Broadway, 03079  
(603) 898-3750  
**(800) 444-0047**  
Dave, N1EDU, Mgr.  
Exit 1, I-93,  
28 mi. No. of Boston  
salem@hamradio.com

**YAESU**  
The radio



### FTDX1200 100W HF + 6M Transceiver

• Triple Conversion Receiver With 32-bit Floating Point DSP • 40 MHz 1st IF with selectable 3 kHz, 6kHz & 15 kHz Roofing Filters • Optional FFT-1 Supports AF-FFT Scope, RTTY/PSK31 Encode/Decode, CW Decode/Auto Zero-In • Full Color 4.3" TFT Display



### FTDX5000MP 200W HF + 6M Transceiver

• Station Monitor SM-5000 (included) • 0.05ppm OCXO (included) • 300Hz, 600Hz & 3KHz Roofing filters (included)



### FTDX3000 100W HF + 6M Transceiver

• 100 Watt HF/6 Meters • Large and wide color LCD display • High Speed Spectrum Scope built-in • 32 bit high speed DSP /Down Conversion 1st IF

**Call For Low Pricing!**



### FT-4500 100W HF + 6M Transceiver

• 100W HF/6M • Auto tuner built-in • DSP built-in • 500 memories • DNR, IF Notch, IF Shift

**Call Now For Pricing!**



### FT-897D VHF/UHF/HF Transceiver

• HF/6M/2M/70CM • DSP Built-in • HF 100W (20W battery) • Optional P.S. • Tuner • TCXO Built-in

**Call Now For Our Low Pricing!**



### FT-857D Ultra Compact HF/VHF/UHF

• 100w HF/6M, 50W 2M, 20W UHF • DSP included • 32 color display • 200 mems • Detachable front panel (YSK-857 required)

**Call For Low Price!**



### FT-7900R 2M/440 Mobile

• 50W 2M, 45W on 440MHz • Weather Alert • 1000+ Memories • WIRES capability • Wideband receiver (cell blocked)

**Call Now For Your Low Price!**



### FT-8800R 2M/440 Mobile

• V+U/V+U+U operation • V+U full duplex • Cross Band repeater function • 50W 2M 35W UHF • 1000+ memory channels • WIRES ready

**Call Now For Low Pricing!**



### FTM-4000R 2M/440 Mobile

• Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bd ready • Spectrum scope • Bluetooth • MicroSD slot • 500 mem per band

### NEW FT1DR C4FM FDMA 144/430 5W Digital Xcvr

• 1200/9600bps AX.25 APRS & GPS Recvr Built-in • Dual Band Operation w/Dual Recvrs (V+V/U+V/V+U) • Wideband Receive/AM Bar Antenna/Aircraft Receive • 1266 Memory Channels w/16 Char Alpha Tagging

**Also Available in Silver!**

### NEW VX-6R 2M/220/440 HT

• Wideband RX - 900 memories • 5W 2/440, 1.5W 220 MHz TX • Li-ION Battery - EAI system • Fully submersible to 3 ft. • CW trainer built-in

**New Low Price!**

### VX-80R

50/144/220/440 • 5W (1W 222 MHz) • Bluetooth optional • Waterproof/submersible (3' for 30 min) • GPS APRS operation optional • Li-ion Hi-capacity battery • Wide band Rx

### FT-60R 2M/440 5W HT

• Wide receiver coverage • AM air band receive • 1000 memory channels w/alpha labels • Huge LCD display • Rugged die-cast, water resistant case • NOAA severe weather alert with alert scan

AZ, CA, CO, GA, VA residents add sales tax. Prices, specifications, descriptions, subject to change without notice

Come visit us online via the Internet at <http://www.hamradio.com>

#1 in Customer Service

COAST TO COAST FREE SHIPPING  
UPS - Most Items Over \$100  
Rapid Deliveries From The Store Nearest to You!



SEE US AT DAYTON HAMVENTION BOOTHS 20, 21, 22 & 23



# HAM RADIO OUTLET

WORLDWIDE DISTRIBUTION

D-STAR EXPERTS!

World's LARGEST HAM RADIO INVENTORY in stock for quick delivery

DISCOVER THE POWER OF DSP WITH ICOM!



### IC-9100 The All-Round Transceiver

- HF/50MHz 144/430 (440) MHz and 1200MHz\*\* coverage • 100W on HF/50/144MHz, 75W on 430 (440) MHz, 10W on 1200MHz\*\* • Double superheterodyne with image rejection mixer



### IC-7800 All Mode Transceiver

- 160-6M @ 200W • Four 32 bit IF-DSPs+ 24 bit AD/DA converters • Two completely independent receivers • +40dBm 3rd order intercept point



### IC-7700 Transceiver. The Contester's Rig

- HF + 6m operation • +40dBm ultra high intercept point • IF DSP, user defined filters • 200W output power full duty cycle • Digital voice recorder



### IC-7600 All Mode Transceiver

- 100W HF/6m Transceiver, gen cov. receiver • Dual DSP 32 bit • Three roofing filters- 3, 6, 15kHz • 5.8 in WQVGA TFT display • Hi-res real time spectrum scope



### IC-7410 HF/50MHz Transceiver

- 32-bit floating point DSP unit • Double Conversion Super-Het Receiver • Built-in 15kHz 1st IF Filter • Built-in Band Scope • Large, multi-function LCD • RTTY Demodulator & Decoder • USB for PC control



### IC-7200 HF Transceiver

- 160-10M • 100W • Simple & tough with IF DSP • AGC Loop Management • Digital IF Filter • Digital Twin PBT • Digital Noise Reduction • Digital Noise Blanker • USB Port for PC Control



### IC-718 HF Transceiver

- 160-10M\* @ 100W • 12V operation • Simple to use • CW Keyer Built-in • One touch band switching • Direct frequency input • VOX Built-in • Band switching register • IF shift • 101 memories



### IC-7100 All Mode Transceiver

- HF/50/144/430/440 MHz Multi-band, Multi-mode, IF DSP • D-STAR DV Mode (Digital Voice + Data) • Intuitive Touch Screen Interface • Built-in RTTY Functions



### IC-5100A VHF/UHF Dual Band Digital Txvtr

- Analog FM/D-Star DV Mode • SD Card Slot for Voice & Data Storage • 50W Output on VHF/UHF Bands • Integrated GPS Receiver • AM Airband Dualwatch • FM Analog/DV Repeater List Function



### IC-V8000 2M Mobile Transceiver

- 75 watts • Dynamic Memory Scan • CTCSS/DCS encode/decode w/tone scan • Weather alert • Weather channel scan • 200 alphanumeric memories



### IC-2820H Dual Band FM Transvr

- D-STAR & GPS upgradeable 2M/70CM • 50/15/5W RF output levels • RX: 118-173.995, 375-549.995, 810-999.99 MHz\*\* • Analog/digital voice with GPS (optional UT-123) • 500 alphanumeric memories

D-STAR optional



### IC-2300H VHF FM Transceiver

- 65W RF Output Power • 4.5W Audio Output • MIL-STD 810 G Specifications • 207 alphanumeric Memory Channels • Built-in CTCSS/DTCS Encode/Decode • DMS



### IC-880H Analog + Digital Dual Band D-STAR

- D-STAR DV mode operation • DR (D-STAR repeater) mode • Free software download • GPS A mode for easy D-PRS operation • One touch reply button (DV mode) • Wideband receiver

D-STAR ready



### IC-92AD Analog + Digital Dual Bander

- 2M/70CM @ 5W • Wide-band RX 495 kHz - 999.9 MHz\*\* • 1304 alphanumeric memories • Dualwatch capability • IPX7 Submersible\*\*\* • Optional GPS speaker Mic HM-175GPS

D-STAR ready

### IC-51A VHF/UHF Dual Band Transceiver

- 5/2.5/1.0/0.5/0.1W Output • RX: 0.52-1.71, 88-174, 380-479 MHz\*\* • AM/FM/FM-N/WFM/DV • 1304 Alphanumeric Memory Chls • Integrated GPS • D-STAR Repeater Directory • IPX7 Submersible

D-STAR ready

### IC-31A UHF Digital Transceiver

- 5W Output Power • FM Analog Voice or D-STAR DV Mode • Built-in GPS Receiver • IPX7 Submersible • 1,252 Alphanumeric Memory Channels

D-STAR ready



**ANAHEIM, CA**  
(Near Disneyland)  
933 N. Euclid St., 92801  
(714) 533-7373  
**(800) 854-6046**  
Janet, KL7MF, Mgr.  
anaheim@hamradio.com

**BURBANK, CA**  
1525 W. Magnolia Bl., 91506  
(818) 842-1786  
**(877) 892-1748**  
Eric, K6EJC, Mgr.  
Magnolia between  
S. Victory & Buena Vista  
burbank@hamradio.com

**OAKLAND, CA**  
2210 Livingston St., 94606  
(510) 534-5757  
**(877) 892-1745**  
Nick, AK6DX, Mgr.  
I-880 at 23rd Ave. ramp  
oakland@hamradio.com

**SAN DIEGO, CA**  
5375 Kearny Villa Rd., 92123  
(619) 560-4900  
**(877) 520-9623**  
Jerry, N5MCI, Mgr.  
Hwy. 163 & Claremont Mesa  
san Diego@hamradio.com

**SUNNYVALE, CA**  
510 Lawrence Exp. #102  
94085  
(408) 736-9496  
**(877) 892-1749**  
Jon, K6WV, Mgr.  
So. from Hwy. 101  
sunnyvale@hamradio.com

**NEW CASTLE, DE**  
(Near Philadelphia)  
1509 N. Dupont Hwy., 19720  
(302) 322-7092  
**(800) 644-4476**  
Ken, N2JHD, Mgr.  
RT.13 1/4 mi. So. I-295  
cklawson@hamradio.com

**PORTLAND, OR**  
11705 S.W. Pacific Hwy.  
97223  
(503) 598-0555  
**(800) 765-4267**  
Leon, W7AD, Mgr.  
Tigard-99W exit  
from Hwy. 5 & 217  
portland@hamradio.com

**DENVER, CO**  
8400 E. Iliff Ave., #9, 80231  
(303) 745-7373  
**(800) 444-9476**  
John W81G, Mgr.  
denver@hamradio.com

**PHOENIX, AZ**  
10613 N. 43rd Ave., 85029  
(602) 242-3515  
**(800) 559-7388**  
Gary, N7GJ, Mgr.  
Corner of 43rd Ave. & Peoria  
phoenix@hamradio.com

**ATLANTA, GA**  
6071 Buford Hwy., 30340  
(770) 263-0700  
**(800) 444-7927**  
Mark, KJ4VO, Mgr.  
Doraville, 1 mi. no. of I-285  
atlanta@hamradio.com

**WOODBRIDGE, VA**  
(Near Washington D.C.)  
14803 Build America Dr.  
22191  
(703) 643-1063  
**(800) 444-4799**  
Steve, W4SHG, Mgr.  
Exit 161, I-95, So. to US 1  
virginia@hamradio.com

**SALEM, NH**  
(Near Boston)  
224 N. Broadway, 03079  
(603) 898-3750  
**(800) 444-0047**  
Dave, N1EDU, Mgr.  
Exit 1, I-93  
28 mi. No. of Boston  
salem@hamradio.com

\*Except 60M Band. \*\*Frequency coverage may vary. Refer to owner's manual for exact specs. \*\*\*Tested to survive after being under 1m of water for 30 minutes. \*\*Optional IZK-9100 required. GST MAY 2014. The Icom logo is a registered trademark of Icom Inc. 70326

## CALL TOLL FREE

Phone Hours: 9:30 AM - 5:30 PM  
Store Hours: 10:00 AM - 5:30 PM  
Closed Sun.

Tel. free. Inc. Hawaii, Alaska, Canada, call routed to nearest store. All HRO 800 lines use 888. If the first line you call is busy, you may call another.

West.....800-854-6046  
Mountain.....800-444-9476  
Southeast.....800-444-7927  
Mid-Atlantic...800-444-4799  
Northeast.....800-644-4476  
New England...800-444-0047



Come visit us online via the Internet at <http://www.hamradio.com>

AZ, CA, CO, GA, VA residents add sales tax. Prices, specifications, descriptions, subject to change without notice.





*0090	*	35,723	172	44	95	*9A3VM	28	273,178	924	33	104	OK1KJW	*	2,658,656	2244	140	476	*G3VGG	*	70,525	299	45	130	*R210K	*	467,792	650	88	250
*ORZF	14A	183,870	814	34	101	*9A2BW	*	22,774	179	18	41	OK2Z20	*	1,196,271	1095	129	357	*G4JGJ	*	68,968	296	37	111	*UA1NFA	*	403,678	746	79	232
*ON7HE	7A	57,928	230	29	75	*9A2MF	21	39,762	201	27	67	OK8YD	*	1,141,440	1220	104	306	*G3KMQ	*	50,048	130	57	79	*UA1TGO	*	379,132	694	81	236
*ON6FC	3.5A	14,272	159	16	48	*9A2AD	14	15,939	218	14	45	OK8BD	*	646,517	682	117	302	*G2HDR	*	49,140	248	36	90	*RA1WA/1	*	310,977	591	86	231
*ON6UF		3,744	98	6	33	*9A2WU	*	9,145	123	14	45	OK2PP	*	394,450	594	84	259	*G0DXY	*	48,461	227	42	119	*R100	*	217,674	424	83	195
Bosnia-Herzegovina																													
E71A	21	843,744	2326	40	136	*9A3JH	7	443,849	1470	37	126	OK1D0T	*	377,114	688	74	240	*G0DYL	*	42,245	265	32	87	*UA1ZZ	*	209,844	549	61	200
E71BA	*	5,390	74	19	30	*9A9R	*	308,568	1269	29	100	OK1D0T	*	253,076	366	92	210	*G0TMM	*	22,345	133	31	88	*RX1AG	*	139,503	334	62	155
E73W	14	1,035,408	2983	40	136	*9A9DML	*	44,612	475	16	60	OK2PCL	*	215,388	412	66	120	*G0MRH	*	20,160	138	31	53	*RA1CE	*	116,328	324	58	164
E77R	3.5	4,459	79	8	41	*9A8A	*	10,528	147	15	41	OK1DTC	*	205,076	573	49	118	*G0K1D	*	20,090	137	28	70	*R1AUR	*	33,702	137	47	90
*E73X	A	157,131	574	55	166	9A4WY	AA	3,439,720	2098	180	581	OK7K	28A	759,425	1780	39	146	*M0TOR	*	3,960	46	20	25	*RV1A	*	8,512	116	19	57
*E74KM	*	63,756	258	48	106	9A9DX	28A	101,388	327	36	106	OK1DG	*	886,110	727	35	130	*G3YPP	*	2,640	38	14	19	*UA1OMB	*	6,715	49	30	49
*E71W	28	54,285	250	27	78	9A5Y	14A	920,000	2514	38	146	OL8M	*	734,832	1751	40	143	*ZEOXAR	*	1,692	21	15	27	*UA1CBM	21	28,196	243	22	54
*E73KM	*	13,407	146	24	27	9A2Z	1.8A	3,240	53	9	36	OK1TN	*	523,671	1316	40	139	*G4ZOB	28	112,470	417	28	87	*UA1ATD	14	49,720	420	20	68
*E73R	7	68,186	349	24	79	*9A2GA	AA	623,420	1026	88	197	OL9Z	14A	672,484	2078	39	139	*G3BZD	*	40,887	233	24	75	*R100	*	44,408	355	22	69
*E75A	3.5	52,456	645	15	64	*9A5ST	*	241,296	569	71	273	OK1F9S	7A	897,806	2369	39	143	*G3BZD	*	26,680	184	19	39	*RW10Z	7	6,604	84	14	38
*E77G	1.8	20,350	368	9	46	*9A5V	*	43,473	306	28	101	OK1TUG	7A	897,806	2369	39	143	*G3BZD	*	26,680	184	19	39	*RNHJG/1	3.5	13,662	223	9	45
E73M	AA	7,523,992	4378	177	635	*9A5DA	28A	79,534	265	34	99	OK1TUG	7A	897,806	2369	39	143	*G3BZD	*	26,680	184	19	39	UA10MS	AA	2,417,184	2364	164	508
E73ESP	7A	120,495	960	19	68	*9A7T	28A	79,534	265	34	99	OK1TUG	1.8A	50,160	599	36	123	*G3BZD	*	26,680	184	19	39	UA10MS	AA	2,417,184	2364	164	508
E70A	3.5A	224,808	1577	22	94	*9A3TY	*	69,828	338	26	66	OK1IWI	*	46,176	613	13	61	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E77TA	AA	512,332	867	99	268	*9A3TU	*	11,505	81	21	38	*OK2QX	AA	1,039,350	1126	132	401	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E72U	28A	317,152	525	75	197	*9A9K	*	11,385	93	17	28	*OK1DVA	*	157,544	447	58	130	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E74A	21A	413,780	1168	38	132	*9A2NO	7A	95,256	475	29	97	*OK1DXE	*	142,926	323	63	186	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E73TT	*	34,265	250	29	58	*9A5ADH	*	88,046	363	32	101	*OK4DZ	*	90,128	204	68	104	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E74Y	14A	212,735	768	39	118	*9A7ZZ	*	8,771	116	10	39	*OK2BDF	*	89,096	330	51	121	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E75MM	*	28,400	199	19	61	*9AKJ	3.5A	56,544	465	17	76	*OK1ABF	*	20,160	119	27	85	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E71AVW	3.5A	638	34	4	18	OK1FZM	A	1,432,020	1537	103	332	*OK1PFM	*	12,320	113	19	58	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*E740	1.8A	77,868	878	16	68	OK2FLO	*	802,262	1257	100	267	*OK1DSX	*	3,905	33	22	33	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L21GE	A	269,616	639	71	203	OK2KOE	*	543,244	786	104	299	*OK1DRX	*	90,321	291	31	88	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L21NT	*	86,870	261	64	106	OK2AO	*	483,483	769	84	215	*OK1TDD	*	46,799	174	28	81	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L24TX	28	537,264	1457	37	127	OK1MAW	*	5,775	58	19	36	*OK2BKE	21A	220,215	209	49	123	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L22PG	*	74,635	252	31	84	OK1KXC	28	191,389	685	34	93	*OK1TDD	*	199,200	558	37	123	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L21D0	14	74,134	480	26	75	OK2ZBU	*	131,968	482	31	97	*OL5W	14A	448,572	1386	38	136	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L25K	7	557,875	2717	29	96	OK1DVM	7	332,748	1212	37	119	*OK1S1	7A	133,614	756	28	89	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L21A00	*	134,030	622	39	103	OK1CRM	3.5	448,053	2133	31	110	*OK1LZSF	*	23,310	202	14	60	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L22JR	*	119,790	802	26	73	OL2W	1.8	131,310	1130	22	68	*OK1D0T	3.5A	117,800	924	17	53	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L22AO	*	80,784	548	28	71	OK1ATP	*	33,803	401	14	63	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L21SDR	L27A	40,800	304	23	57	OK1TAP	*	31,240	411	12	59	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L27A	3.5	92,520	968	19	71	OK1DWD	*	7,245	68	13	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L220TRC	*	57,810	614	16	66	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
L24TL	1.8	90,528	808	18	74	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L20C	A	190,955	650	45	136	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L210J	*	181,376	465	61	157	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21MS	*	178,920	286	93	191	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21ZM	*	139,732	351	70	123	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21KY	*	99,244	385	50	122	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21MDU	*	85,042	274	66	136	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21ZU	*	60,621	199	87	74	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21HW	*	58,718	242	50	107	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A	2,800,044	2689	146	412	*G4ERW	21	201,788	739	31	91	UA10MS	AA	2,417,184	2364	164	508
*L21HU	*	57,436	138	64	102	*OK2MNB	A	1,336,992	1821	104	352	OV3X	A																





*DL1HSI	*	9,870	108	16	26	DL5WVV	*	1,188	19	17	19	OHL1WZ	*	55,062	296	36	102	F8CMF	*	1,301,750	1481	136	274	*E13KI	A	586,838	874	80	254		
*DJ4MH	*	8,820	94	15	27	DL1KWK	*					OH6TN	*	35,768	117	53	83	F5IN	*	898,320	1196	118	338	*E13HMB	A	230,601	539	60	170		
*DL2JWJ	*	5,822	70	16	25	DL1L1K	*	729	15	13	14	OH6BN	28	229,377	661	35	122	TM5A	*	335,530	506	98	279	*E13DI	*	207,172	619	41	110		
*DL4PEP	21	129,465	466	34	103	DF8AA	*	575	13	10	13	OH2PZ	*	30,780	128	30	84	F5VJC	*	230,944	413	77	147	*E13DG	*	127,464	324	50	138		
*DL6KO	*	113,573	364	34	103	DH80A	28A	550,080	1318	187	148	OH2HW	3.5	22,274	531	13	54	F5FEB	*	162,260	547	18	39	*E13EG	*	114,332	452	54	148		
*DK4REX	*	195	10	6	7	DL1VDL	*	180,748	522	35	111	OH2WV	1.8	34,907	531	13	54	F4FEP	*	64,988	186	48	106	*E13CTB	*	96,432	319	50	118		
*DL9ZP	14	257,336	958	35	117	DL2LIAN	*	66,312	297	28	80	*OH1B	A	537,470	847	82	273	F6DSV	*	61,177	191	55	76	*E13IX	*	92,460	452	39	95		
*DL4XU	*	62,560	450	21	71	DL5MX	*	59,184	229	28	80	*OH1B1	A	537,470	847	82	273	F8GRY	28A	577,020	1554	37	126	*E13KA	*	70,992	201	53	121		
*DL7CO	*	5,016	67	15	42	DL5JO	*	14,100	120	16	44	*OG5G	*	301,602	613	78	223	F5NBX	*	215,501	667	36	107	*E13G2C	A	14	16	2	2		
*DL5KS	*	1,820	40	6	22	DL4CF	*	9,686	80	21	37	*OH2LU	*	118,978	416	52	150	TM5J	*	16,320	148	15	36								
*DL4HWI	7	59,319	260	29	88	DL1HAC	21A	925,080	1910	40	155	*OH2LZ	*	89,908	290	50	119	F8CIL	21A	289,170	844	38	124	E13KE	AA	141,440	434	57	151		
*DL5P3CV	30	30,312	277	14	58	DL5RMH	*	749,870	1686	40	147	*OH2HZ	*	89,908	290	50	119	F5LLE	71A	3,082	517	18	39	E13KN	28A	460,460	1182	35	147		
*DL2YAG	*	5,376	10	6	7	DL3FCG	*	245,836	620	39	135	*OH2WA	*	47,642	263	42	124	F5UTN	1.8A	135,412	1106	19	78	*E13JX	AA	433,161	900	64	199		
*DL2YAK	*	475	17	6	13	DL1L1H	7A	372,267	1186	37	124	*OH2TP	*	24,642	90	41	70	*F4ADWX	AA	2,369,358	2162	120	402	*E13W5GN	21A	287,679	1248	30	103		
*DL6KWN	3.5	85,744	800	18	74	DL2CC	*	84,546	424	25	52	*OH2LP	*	3,036	46	14	32	*F4VFX	*	1,247,688	1159	114	402	*E14JZ	14A	32,340	326	17	60		
*DL4TJ	*	45,414	429	15	72	DL7YS	*	55,836	252	29	79	*OH2FHN	*	832	22	10	16							*E16DX	7A	195,951	893	31	98		
*DL7YAD	*	17,459	140	17	62	DL7JDA	*	37,442	205	25	72	*OH3MC	28	42,195	223	25	72	*F6FDL	*	962,756	889	128	338								
*DM4MM	*	5,074	103	9	34	DJ7AA	*	14,615	100	19	60	*OH3UFO	21	106,932	349	32	102	*F5OWL	*	544,242	817	97	269								
*DP4M	*	4,816	10	37	DR1D	3.5A	553,664	2023	37	127	*OH4MGA	*	66,255	344	28	81	*TMTT	*	116,032	383	47	101									
*DO6NIK	*	84	9	2	2	DM2C	*	475,553	1867	35	122	*OH2V8	7	6,560	75	17	63														
*DL5SWB	1.8	10,036	178	8	44	DL2SAX	*	81,477	606	21	78	*OH6RC	*	6,365	64	17	50	*F6BIP	*	82,360	240	55	90								
*DK9BV	*	6,211	31	4	19	DL2MDD	*	31,185	251	17	64	*OH1TN	3.5	12,078	133	14	52	*F5PNI	*	62,988	237	45	71	*GD4RFZ	28	70,520	445	20	62		
*DL2RZG	*	588	33	3	18	DJ0MDR	1.8A	126,174	1021	23	79							*F6FLU	*	47,586	118	54	100	*GD4EIP	AA	54,462	255	47	127		
DJ5MW	AA	8,609,022	4238	196	730	DJ4XK	*	79,394	5021	21	85	OH8L	AA	4,638,984	3216	165	577														
DK0MM	*	4,612,321	2527	181	652	DJ4AMC	AA	23,068	995	16	57	OH6MW	*	4,025,518	3087	166	577														
DL7ON	*	4,574,516	2561	139	478	*DLKDF	*	1,764,471	1401	150	531	OH60S	*	2,861,229	2611	122	375														
DF3CB	*	3,876,962	2347	177	569	*DKBNT	*	1,506,500	1434	128	447	OH60S	*	1,331,792	925	151	507														
DL2ML	*	3,798,366	2615	160	539	*DLINKS	*	1,330,350	1477	123	402	OH3JF	*	1,219,750	1676	115	310														
DL7URH	*	3,546,062	2241	167	587	*DLBMS	*	1,290,240	1358	111	369	OH30J	*	1,082,851	1617	103	348														
DL6MHW	*	3,311,430	2071	170	585	*DK3K	*	855,440	759	132	460	OH2BR	*	640,300	658	123	352														
DF9GR	*	2,900,796	2140	145	491	*DL10W	*	755,840	929	99	281	OH2JK	*	595,840	929	99	281														
DL3ANK	*	2,885,870	1721	183	607	*DL7UO	*	679,644	815	98	308	OH2BN	*	484,176	768	80	228														
DA0J	*	2,774,073	1987	167	550	*DLSYL	*	617,192	1079	88	270	OH2RE	*	412,335	456	98	259														
DL0LK	*	2,312,604	2074	144	477	*DM1TF	*	279,363	486	69	182	OH2EX	*	381,292	661	83	263														
DL6NDW	*	2,167,594	1382	151	538	*DL5ZBA	*	592,622	762	100	298	OH2JR	*	297,105	321	125	310														
DJ5AN	*	2,114,112	1424	183	545	*DM8FW	*	589,272	882	89	255	OH2MA	*	228,724	575	58	153														
DL5GAC	*	2,101,600	1960	129	463	*DK2BJ	*	547,584	912	88	280	OH2MA	*	228,724	575	58	153														
DL8WEV	*	1,950,452	1546	128	466	*DF10W	*	505,965	597	116	324	OH2CI	*	46,318	84	17	37														
DH0GHD	*	1,874,730	1468	115	474	*DF6LO	*	497,119	752	81	248	OH1MA	*	3,526	28	15	28														
DL1NEO	*	1,842,600	1499	128	427	*DF4PD	*	469,530	512	128	342	OH2CK	28A	142,800	361	36	139														
DL5J5	*	1,741,950	1505	125	428	*DG7EE	*	402,960	695	88	280	OH3AD	*	77,760	235	33	111														
DK1KC	*	1,493,912	1540	118	400	*DL4MFM	*	391,860	709	83	228	OH9VD	*	15,066	78	21	60														
DL6L4U	*	1,493,763	921	158	441	*DL1ARJ	*	360,472	660	84	244	OH3NU	21A	173,740	421	37	133														
DJ7UC	*	1,460,736	1337	137	439	DL2NB5	*	336,444	637	74	202	OH9W	14A	154,938	589	38	140														
DO4Q	*	1,358,030	879	160	535	*DL2BY	*	335,289	705	56	163	OH6R	7A	539,518	1730	38	140														
DL82AW	*	1,341,026	1192	133	380	*DM1TT	*	279,112	585	68	183	OG2W	*	155,890	791	33	98														
DJ6BS	*	1,323,712	1337	144	448	*DZ5EA	*	269,568	409	95	193																				
DL1LDD	*	1,289,885	1202	128	407	*DLBZAJ	*	268,632	510	78	195																				
DL6MCY	*	1,272,240	1129	125	415	*DL5OBY	*	225,504	448	61	155																				
DJ60T	*	1,216,928	1161	124	420	*DJ9CV	*	223,587	512	79	194																				
DJ60T	*	1,088,172	837	157	511	*DL10W	*	204,000	508	66	194																				
DF60V	*	1,053,983	1049	111	402	*DL7ALM	*	201,450	502	62	193																				
DL4YAO	*	1,032,080	1048	117	368	*DHYSP	*	193,617	408	69	144																				
DL5CF	*	902,772	997	123	345	*DL6ON	*	188,944	350	61	127																				
DL3KUM	*	895,650	8																												

*I2JIN	*	29,040	209	18	62	YL2PP	1.8A	480	16	6	14	*PA0ATG	*	12,610	110	23	42	SN6A	*	178,235	346	78	137	SP8CUW	28A	371,305	1098	37	120
*IK1WGW	*	26,956	156	22	70	*YL5X	AA	1,436,154	1366	153	489	*PC3H	*	11,297	96	28	51	(OP:SP6C)						SP5XO	*	78,736	259	33	100
*IK3IUL	*	18,907	201	16	57	*YL7Z		1,137,504	1050	130	414	*PI800GTB	*	9,928	97	24	49	SP7DIK	*	160,975	483	59	176	SP1GZF	*	77,480	248	33	116
*IK5QJ	*	18,200	177	14	56	*YL2EC	*	194,836	524	63	205	(OP:YL2L)						SP2HYO	*	100,359	277	60	117	SP09DE	*	2,688	28	9	23
*IK5QJ	*	301	17	4	3							*PA3GEO	*	5,916	62	18	40	SP2YHO	*	96,760	342	46	159	SNZM	21A	801,357	1979	40	143
*I21POA	7	157,833	947	20	91							*PA3HEX	*	5,457	93	14	37	SP3BHX	*	450,923	158	33	103	SN3R	*	695,520	1595	40	149
*I3PXN	*	56,610	405	20	70							*PA3DAT	*	5,355	59	20	31	SP3BHM	*	19,780	84	39	53	(OP:SO3HMM)					
*I21PKV	*	7,740	122	9	36	HB0/DF4SA	A	2,432,585	2575	108	397	*PA0JHS	*	5,032	58	16	21	SP3SHL	*	19,012	94	30	67	SP8CUR	*	597,356	1578	39	133
*I24AKA	*	6,028	81	12	32							*PA0FAW	*	1,254	27	15	23	SP2NA	*	17,112	72	40	52	SP3ASN	*	335,808	881	39	137
*I27SIA	*	4,264	100	9	32							*PA3CVR	*	676	23	13	13	SP3KRE	*	12,312	100	24	52	SO9C	*	121,500	360	37	113
*I4JEE	3.5	16,683	226	12	55							*PC5F	*	266	7	7	7	(OP:SO3HTX)						SP1RKT	*	52,323	232	25	82
*IK5RUN	*	11,440	103	17	63							*PA3DRL	28	15,060	96	19	41	SP9MRO	*	2,370	37	11	19	SP3HRN	14A	572,741	1685	38	131
*IWOEYT	1.8	40	5	3	5							*PA3REH	21	125,856	479	33	105	SP2MIX	*	135	5	4	5	SP3HNS	*	125	17	141	
												*PA3RBD	21	76,230	358	27	94	SP2DLY	28	166,106	455	36	121	SP1N0N	*	357,238	1245	35	123
												*PA3F	*	16,420	358	27	94	SN5X	*	654,530	1610	39	146	SP9CLX	*	75,325	390	26	89
												*PD0NMF	14	48	4	2	2	SO4M	7	813,540	2709	37	119	SN1ST	7A	278,244	1260	34	97
												*PA3DTR	3.5	961	35	5	26	(OP:SP5SUF)						SP4JTJ	*	37,920	181	23	73
												*PA3MWW	1.8	2,688	90	5	27	SP9A	A	1,036,992	1270	115	376	SN1Z	3.5A	23,460	166	16	69
																		SP6MLX	*	785,248	920	107	317	(OP:SO1TEW)					
																		*SP1AEN	*	725,230	1100	90	300	SP5GH	*	19,200	97	20	80
																		*SO3WVW	*	642,653	985	104	303	SO8BG	*	192	15	3	13
																		*SP2AYC	*	508,438	1006	83	239	SP7JQQ	1.8A	79,200	861	17	63
																		*SP6LV	*	437,668	879	79	240	SO8L	*	73,950	735	20	67
																		*SP7OHR	*	383,238	609	89	213	SP3GTS	*	59,345	631	18	65
																		*SP3DOF	*	307,856	649	86	198	*SP3CNA	AA	1,046,037	1210	104	327
																		*SN7F	*	263,144	565	50	188	SP8LSC	*	155,823	451	77	141
																		(OP:SP7LIT)						*SO9FMU	*	415,681	639	84	217
																		*SP3IC	*	244,732	518	67	169	*SP5GDY	*	403,995	595	103	242
																		*SP2ORF	*	242,352	424	91	215	*SO5LTL	*	392,562	678	91	248
																		*SP4E0O	*	234,725	611	51	178	*SO5JUP	*	384,450	607	100	230
																		*SP2LQJ	*	225,070	404	85	232	*SP6CJX	*	321,056	497	88	228
																		*SP5T1	*	172,791	391	78	185	*SN5B	*	319,662	981	65	193
																		*SP9BJ	*	166,660	444	67	193	*SO6JL	*	406	67	140	
																		*HF3T	*	159,510	513	51	148	*SP6DWS	*	160,186	263	86	198
																		(OP:SP3FYX)						*SO9JKY	*	146,718	320	65	144
																		*SP9CXN	*	158,816	451	67	157	*SP6A	*	128,520	263	76	204
																		*SO3PMM	*	135,610	416	55	136	*SO6LJV	*	104,832	240	63	105
																		*SP7F0E	*	133,120	438	54	154	*SP1MHZ	*	93,432	395	40	96
																		*SP2MHD	*	132,840	431	51	154	*SP8K	*	84,942	235	74	168
																		*SP3BES	*	127,764	352	56	133	(OP:SO8JK)					
																		*SO5LNU	*	102,446	292	60	121	*SN1T	*	56,356	249	40	100
																		*SP9DTH	*	92,310	347	51	135	(OP:SO1RET)					
																		*SO3A	*	126,232	321	56	133	*SO8BKM	*	53,900	148	62	92
																		*SP8GCU	*	87,561	272	41	100	*SOTIEUG	*	51,976	175	51	95
																		*SP5AGU	*	77,924	443	37	124	*SO8W	*	49,298	173	48	109
																		*SP2VS	*	73,283	235	40	93	(OP:SO8LJN)					
																		*SP6BAA	*	66,086	166	62	111	*SP5RE	*	44,800	260	44	116
																		*SO5LNU	*	64,845	417	32	99	*SP3DM	*	35,176	126	48	99
																		*SP9JL	*	63,933	221	47	119	*SO7IOM	*	26,500	253	31	69
																		*SP9OHL	*	55,488	246	40	96	*SO9IAU	*	26,160	106	48	72
																		*SP6BEN	*	54,776	139	60	107	*SP2WGB	*	25,872	181	37	75
																		*SP2HMV	*	50,407	285	35	98	*SO3RX	*	15,865	67	34	61
																		*SO6NFA	*	44,117	222	45	112	*SP2MHC	*	13,260	135	21	57
																		*SP8GV	*	36,057	162	40	61	*SP9UPH	*	3,264	38	23	28
																		*SO7MHN	*	26,857	166	31	76	*SP6M	*	606	72	3	30
																		*SP9M	*	25,760	104	37	55	*SP8GCU	28A	316,465	92	38	128
																		*SP9DTH	*	24,390	117	38	52	*SN7O	*	227,370	537	38	127
																		*SP2CBS	*	23,072	124	34	69	(OP:SP7IWO)					
																		*SP8BWE	*	22,464	152	30	78	*SO2DMX	*	207,654	526	37	122
																		*SP1KJ	*	19,224	119	26	63	*SP6HE	*	67,509	260	31	86
																		*SP3HHF	*	11,613	99	24	55	*SP2MKT	*	23,976	127	24	48
																		*SO8KE	*	10,676	114	20	48	*SP5ES	*	21,389	130	25	48
																		*SP9M	*	10,140	51	10	42	*SO8W	*	1			
																		*SP6BSL	*	8,840	48	23	45	*SP2JLR	21A	88,416	292	37	107
																		*SN5O	*	7,735	71	22	43	*SO9E	7A	277,354	1194	34	120
																		*SO3JMV	*	6,882	59	30	44	*SP7CHR	*	3,196	42	11	23
																		*SO3ZPM	*	4,186	51	16	30	*SN5J	3.5A	78,965	784	15	70
																		*SO7RL	*	3,650	39	19	31	(OP:SP5JK)					
																		*SP3OL	*	2,520	24	18							

*Y0SALI	28	99,946	365	29	89	*YU5T	*	130,104	810	23	81	*OMMO	14A	162,792	719	28	98	EASDFV	*	487,860	608	90	256	SM5DJZ	*	41,307	103	53	94	
*Y0ZIS	*	94,588	399	26	81	*YU7D	*	60,786	378	25	74	*YU1E	3.5	67,229	793	14	63	EASVKN	*	417,144	512	98	284	BS0W	*	29,637	128	42	69	
*Y04ATW	*	83,636	322	33	83	*YU1ED	3.5	47,355	538	14	65	S59AA	A	2,626,078	2115	147	467	EAT1YG	*	197,904	521	53	115	SM7GIB	*	3,105	46	10	35	
*Y05CRCO	*	77,662	308	30	73	*YU1ED	3.5	47,355	538	14	65	S53APR	A	619,115	1406	65	180	EASBARC	*	192,270	382	86	204	SM7CGB	*	3,105	46	10	35	
*Y08DDP	*	53,044	273	27	62	(OP:YU1A)						S51DI	*	399,075	399	141	67	EAEZY	*	132,957	293	67	170	SM5CEU	21A	334,928	885	30	138	
*Y08CQQ	*	47,239	227	20	67	YT0Z	AA	6,584,642	4130	175	619	(OP:YU1Z)					EATZY	*	63,441	264	39	94	SM6BGA	7A	119,833	605	38	89		
*Y09F	*	16,215	123	21	49	YT9M	*	735,165	1326	73	206	S51NM	*	286,933	512	78	185	EATF	*	235,751	113	49	94	SM5MT	3.5A	18,864	204	15	57	
*Y09GVP	*	3,022	52	13	21	YT3H	*	507,305	575	110	311	S58Q	*	254,648	487	79	199	EAC3CC	*	17,030	10	29	36	(OP:SM7SP)						
*Y09RHM	21	108,432	559	29	79	YT2U	28A	45,900	170	30	78	S52OP	28	513,436	1449	37	117	EAKCR	*	16,761	119	39	72	BS0DX	1.8A	104,434	1039	20	74	
*Y09SRE	14	49,231	339	25	68	YT5A	21A	733,414	1854	40	147	S50A	21	725,088	2007	38	128	EAF4X	28A	453,346	1278	37	129	(OP:SM5DS)						
*Y05ODT	7	43,092	339	18	63	YT9A	14A	995,100	2715	39	147	S57C	*	706,496	1912	38	128	EAS5T	*	130,455	613	30	87	*SM3C	AA	966,666	1358	100	338	
*Y02MJZ	*	12,712	106	17	39	YT7W	14A	448,635	1508	37	142	S51F	7	897,288	2706	38	130	EAS5G	*	4,278	55	19	27	*SC6M	*	866,754	1458	87	291	
YP9W	AA	7,129,962	4785	167	630	YT1T	*	294,347	1271	34	109	S51X	*	49,595	642	12	53	EFST	21A	508,348	1579	39	128	*SM2BJS	*	316,274	871	53	700	
YR8D	*	4,582,270	3050	175	595	YT4W	*	85,063	412	31	90	S57CC	3.5	4,551	99	8	33	EAT1FBU	7A	73,140	422	25	90	*SM30M	AA	966,666	1358	100	338	
Y03APJ	*	3,472,930	2807	150	509	YT7A	7A	686,868	2346	37	119	S51V	1.8	278,964	1492	25	98	EESD	3.5A	34,881	285	14	63	(OP:SA6AXR)						
YPTP	*	671,951	985	107	306	(OP:YU7BGA)						S57M	*	76,330	769	16	69	EASDM	*	5,832	72	12	42	*SF5X	*	110,644	244	68	131	
Y08SS	*	298,704	601	73	181	YT7A	7A	686,868	2346	37	119	(OP:YU7DM)					EAT1DR	1.8A	14,007	182	12	57	(OP:SM5EFC)							
Y06PKV	*	215,388	351	89	190	YT7KM	*	367,675	1280	39	136	*S58RU	A	109,263	477	62	169	EAK3KA	*	4,784	95	9	9	*SM5ACO	*	81,252	265	36	112	
Y03CVG	*	92,718	95	17	445	YU7U	3.5A	440,030	1730	35	123	*S57AV	A	63,206	235	52	117	EAK3U	AA	2,455,596	2184	133	450	*SM5CNO	*	63,632	152	65	128	
YR0W	*	21,294	103	38	53	YT5EA	*	127,840	1208	18	76	*S52WD	*	58,460	232	45	103	*EA1NK	*	1,044,544	3588	88	330	*SM6BDS	*	20,465	123	36	107	
Y09HP	28A	386,616	986	38	140	YT0W	*	93,600	746	20	84	*S52BO	*	8,624	93	36	62	*EA2AZ	*	942,438	1286	95	304	*SM6WR4	*	18,360	98	34	34	
Y06PA	*	297,882	785	37	134	*YT8A	AA	3,883,740	3027	168	567	*S52GO	14	169,441	742	33	106	*EA2NN	*	715,825	1321	72	203	*SA0AAZ	*	8,184	105	17	49	
Y08WW	*	63,240	228	30	90	(OP:YU6HNM)						*S57NAW	*	99,822	442	31	100	*EFTT	*	463,980	904	72	213	*SM3CBR	*	660	12	11	27	
YF3A	*	30,527	146	22	85	*YU7KW	*	799,104	1076	110	321	S53MM	AA	8,176,894	4483	188	651	*EAB3S	*	365,304	717	69	179	*SM6LFF	28A	7,560	60	17	28	
Y08MI	*	13,728	159	23	43	*YU2U	*	404,781	137	36	128	S59ABC	*	6,466,337	3544	146	518	*EAC3AV	*	209,198	373	74	183	*SA0BAC	14A	12	4	3		
Y05CUQ	*	1,632	28	9	15	*YU7PG	*	60,830	160	62	92	S57AL	*	6,302,208	3883	162	584	*EAK3U	AA	2,455,596	2184	133	450	*SM20DB	7A	77,220	370	31	99	
YR9F	21A	36,927	220	29	70	*YU7AF	*	31,415	231	29	74	S55O	*	3,176,728	1795	185	644	*EA2GM	*	187,146	580	50	172	*SM6WET	*	54,501	280	26	85	
Y05OHO	3.5A	177,057	1507	17	86	*YU8A	28A	222,735	640	36	119	S58N	*	1,842,672	1383	140	484	*EA3GBA	*	84,234	478	39	100	HB9AZZ	A	256,578	449	70	170	
Y08DHP	*	128,826	1009	27	85	*YU2A	AA	3,883,740	3027	168	567	S55O	*	1,099,050	1508	104	321	*EA4SP	*	72,044	245	42	82	HB97ST	*	98,946	300	60	147	
YF5T	*	99,352	926	16	72	*YU1FG	21A	167,670	593	34	95	S54O	*	626,052	889	100	306	*EA4ES	*	192,560	199	36	84	HB97XE	*	10,640	114	22	54	
(OP:Y05CXB)						*YTSN	*	147,060	601	34	95	S57A	*	236,142	752	54	148	*EAK3U	AA	2,455,596	2184	133	450	HB9ARF	A	907,923	1344	99	282	
*Y04RDF	AA	1,408,512	1624	126	386	*YT2A	7A	466,990	1685	38	132	S51Z	*	224,652	52	56	138	*EAK3U	AA	2,455,596	2184	133	450	HB9DCE	*	92,521	376	43	100	
*Y03RF	*	1,386,000	1568	128	367	*YU1KT	*	160,734	792	28	101	S51Z	*	224,652	52	56	138	*EAK3U	AA	2,455,596	2184	133	450	HB9HXC	*	78,540	354	38	132	
*Y07ARY	*	370,279	763	83	230	*YT2T	3.5A	65,337	615	16	71	S52WW	*	114,958	289	70	159	*EAK3U	AA	2,455,596	2184	133	450	HB9HXC	*	78,540	354	38	132	
*Y06KNY	*	305,152	484	95	203	*YU7RL	*	31,006	399	11	63	S51SK	28A	617,076	1507	38	145	*EA4ED	*	25,092	120	32	50	HB9FEL	*	33,512	140	39	79	
*Y06KNA	*	216,000	497	77	193	GZ3F	Shetland and Fair Isle	A	2,611,766	3033	113	386	S58WR	14A	169,326	708	32	116	*EA4ED	*	25,092	120	32	50	HB9AFH	28	15,300	82	28	62
*Y08RBA	*	202,920	153	20	77	MZ8A	28	331,328	1395	25	99	S57A	*	6,302,208	3883	162	584	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y08RAW	*	208,170	303	95	175	MZ5B	3.5A	439,050	2010	34	116	S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y07MTG	*	71,649	167	65	106	(OP:MM0XAU)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y04FTE	*	26,660	164	34	90	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y09CB	*	22,140	120	42	81	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y06HSU	*	9,280	79	30	50	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y02MKL	*	40	16	7	13	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y03ND	28A	47,111	201	27	77	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y03FUO	*	10,660	83	20	32	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y04AH	*	4,224	54	18	30	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y09CNY	21A	70,035	359	28	77	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y09AGI	7A	42,822	421	17	61	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y02LW	3.5A	41,420	495	15	61	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y02CMI	*	32,000	299	15	65	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y02CA	1.8A	21,243	333	58	58	(OP:G3VWV)						S51Z	*	224,652	52	56	138	*EAD3C	28A	212,100	316	37	105	HB9DCL	21A	10,974	134	17	45	
*Y02A0B	*	12,255	222	8	49																									







