Results of the

1961 CQ World-Wide DX (C.W.) Contest

BY FRANK ANZALONE*, W1WY

HAT was quite a week-end of DXing we had back in November. The turnout in this country was probably held down by the anticipated poor conditions, but the dyed-in-the-wool contest addicts were handsomely rewarded by one of the best contest week-ends we have ever had.

On an average, scores are higher than they ever were and in most cases the Trophy winners made new highs in their respective divisions.

In his third try, Josef Plzak, 7G1A came up with another million-plus score on all bands to make him King for 1961. However having won the Trophy in 1959, Josef is not elegible for this year's award and the Larry LeKashman, W91OP Cup goes to CX2CO next in line in the all band category. This makes Ricardo Sierra, Jr. a double winner for the second straight year. With no more worlds to conquer, maybe Jr. and Sr. will team up and make a go of it as multi-operators next year.

It was a close one with KW6DG, but Layne lacked those few extra points in his multiplier, although his contact total was much higher. Maybe he lost out during that short period when he had to shut down because of a typhoon that just skirted Wake Island. Too bad, since Layne will be back in the States as KØSLD for the next contest.

In the fourth spot, is our old friend KH6IJ, with a score lower than his normal average. Had "Nosey" equaled his last year's output the Trophy would have finally gone to Hawaii.

The call 5N2LKZ seems to be a new one in our contest listing. Making fifth in the Top Ten, on his first try, is indeed commendable. Hope Owen will again take advantage of his choice location next year. With the exception of UB5WF who always comes through with a good score, the rest of the spots in the Top Ten are occupied by stations in the USA. This is the best showing ever made by our boys in world competition. A fine tribute to W4KFC, W3GRF, W4YHD and W4DHZ, all tried and true contest veterans.

Over in the Single-Band division the competition was keen and the scores were high. Once again it was 14 mc where the high scores were made and this year's winner is none other than Vladimir Semenov, UA9DN last year's all band winner. So make room for the John Ryan, W7KVU Cup and put it alongside the *Contest Committee Chairman, CQ.

W9IOP Trophy you won last year. Congratulations Vladimir, perhaps we'll see you in the Phone section next year.

Both ZS2HI and KH6DLF also have fine scores on 20. Ken can give it another try next year but Ed has returned to the States and is now in W1-land, so his golden opportunity from KH6 is no more.

Over here on our side, W1BIH was high man on 14 mc. Evidently John decided to take it easy after plans for a Multi-Operator entry did not materialize.

Both 7 mc and 21 mc received equal attention and the activity was divided according to one's sleeping habits. Those with normal habits decided that 15 would fit their requirements and found the band hopping with Europeans from daybreak to early afternoon. After that, it was slim pickings to other areas of the world. Here on the east coast openings to the Pacific and Asia were almost non-existant, although other areas of the country were getting through.

PY4GA took advantage of the north-south opening and is high scorer on that band. And W2WZ, once again, is at the top of the list for our boys. Who is going to be the first one to dethrone Al?



The DJ3JZ Gang preparing for the c.w. week-end.
That's a tri-bander going up, adding to the extensive
antenna farm needed for multi-transmitter operation.
P.S. They made good use of it.

Openings in the Pacific and Asia were of short duration as shown by the lower scores.

The "night owls" who stuck to 7 mc found it very rewarding. Glowing comments of "never heard or worked so much DX on 40" were found only on logs of those blessed with beams or other high-gain arrays. And those that came up with six figures scores had that, plus power to boot. Of course a little savvy on the workings of 40 helped a bit too.

Top man on the totem pole is Don Miller, W9WNV perched on top of a 250 foot hotel building facing Lake Michigan. With an assortment of four arrays and antennas covering all directions, he was able to come up with a big enough multiplier to overcome the point advantage of his nearest competitor, Bob Martinez, K2DGT on the east coast. So to Don goes the new 40 Meter Trophy donated by the Israel Amateur Radio Club.

A member of that club, 4X4DH is third on the list. Followed by W3KFQ. Clarence has won the 3rd district award on each band, 10 through 40, the past 4 years. If he maintains that schedule he should be showing up on 80 next year. Very close and with an identical multiplier is W8FGX, Jake, the 40 meter perennial. With these conditions and a Trophy to shoot for you are going to see more and more stations taking a crack at the 40 meter band.

The 80 meter activity was mostly confined to Europe, with OK3DG at the top of the list. Followed by DJ3WE, PAØLV and SP5IA.

On our side of the pond the surprising high scorer is K6EIV with W1BU and VE3AGX next in line. Out in the mid-west W9PNE and W9PWU got involved in a very close one.

As for 160, well what can I tell you? Only one log was received from our boys. Except for a few multiplier seekers over here all the top band activity was confined to Europe, especially among the Czechoslovakian group.

The 28 mc band was very spotty. Some of the all-banders kept pecking at it for an occasional multiplier but very few stuck it out for single-band awards. Those that did, had very little to show for their efforts, the openings were very few and of short duration. With 21 mc wide open to Europe it was hard to realize that the m.u.f. didn't reach 28 mc.

The JAs who usually occupy 10 in droves, avoided it like the plague and went to 21 mc. Our K2HWL is to be commended for sticking it out the way he did. We know that the band was open for short periods but those that gave it a try went to more productive fields after they had cleaned up the few stations that were on the band.

Once again it was the Europeans that dominated the activity in the Multi-Operator Single-Transmitter division. But it was the only entry from Australia, VK5NQ that tops the heap and wins the Tony Susen, W3AOH Trophy. Jeff and Tubby Vale really poured on the coal and



The Gang at W6RW—Standing: K6ERT, Gregg; K6PJY,
Dan and W6PZH, John; sitting: W6BXL Chuck and
W6RW, Rog himself.

lead the field with plenty to spare. Nice going fellows, The "Mug" is on its way to you.

The c.w. portion of the HVICN story was adequately covered in the April issue so little more can be added here. Altho Al and Larry came up with the highest QSO total ever made by a single transmitter station in this division, it was impossible to break through the European barrier and run up a good multiplier. But they sure made a lot of the boys happy with a new one.

A new club group in Bulgaria takes the third spot with LZ1KSV of the Sofia City Radio Club, beating out LZ1KBA who usually takes top honors for Bulgaria.

VQ4RF, the Trophy winner, in the Phone contest, gave it a go on c.w., but evidently brass pounding requires a different technique and the best Frank and Henning could do was 4th. Even though they took on Jock, VQ4DW as a third hand.

The final honor goes to another new club group, UJ8KAA, reflecting the added activity from Asia.

The Multi-Transmitter division had a better representation than during the Phone contest and the "Big Boys" ran up some eye-opening scores. With the exception of W3AOH, last year's winner who did not put in an appearance this year, it is essentially the same group that has been battling it out for the past 3 or 4 years.

The 1959 winner, DJ3JZ, again leads the field. Hardi Ludwig and his boys planned this one for months and their hard work paid off. Congratulations fellows, we are sending you a suitably engraved plate for the base of the Trophy you won in 1959.

The Buzz Reeves, K2GL Trophy therefore goes to the Potomac Valley group at W3MSK who were right on DJ3JZ's heels with a much bigger multiplier but lacking in contact points.

The Ukrainian power house of the Kharkov Radio Club, UB5KBB, for the third straight year ends up in third position, but with a much higher score than in previous years. They have

LeKashman, L., "DXpedition to HV1CN," CQ, April, 1962, p. 37.



7G1A—Josef Plzak meditating just before he got down to the serious business of contesting. Now that he is back home in Czechoslovakia he will have plenty of time to think about the good old days.

a good multiplier and a record number of contacts but unfortunately to many of them were Europeans and good for only one point. Watch out in 1962 is their slogan.

Roger Mace and his west-coast gang are still in there pitching to put W6RW back in the lime light but with present day propogation conditions it's pretty tough from the west coast. Even so they always manage to make the Top Five, although not the lofty heights they reached back in the lush days of 1957. "But there will come a day," sez Rog.

And a new one in the big time, W2JT did surprisingly well with only a two-man crew and limited multi-transmitter operation. Maybe this will give the North Jersey gang ideas for next year.

There is no question as to where the CQ Plaque goes this year. Once again the Potomac Valley Radio Club heads the list. With three members in the Top Ten and their "Big Gun" a Trophy winner in the Multi-group, how could they miss? The North Jersey DX Association made their usual fine team effort but still lack that big clincher. A few new clubs, among these the Virginia Century Club, show very nice totals. However its disappointing to see the fall-off on the west coast and the small representation of potential powerhouses here in the east. These club members are sure missing a lot of fun.

The score of the German DX Team cannot be considered for an award since once again their secretary failed to make an official entry.

Since there are so many foreign clubs, we found it necessary to cut the listing down to only the large ones and those who sent in a summary sheet of their participating members.

The 1145 logs received this year is a substancial increase of 144 over last year. However the 103 in the country total is a drop of 4 over the countries represented last year.

It was the same hard working crew of Andy Malashuk, W1GYE; Mac McIntire, W2BO; and Ben Lazarus, W2JB, that made this detailed report possible. Wonder if you fellows realize the work involved in a project of this size. Man! you just don't have any idea.

That's it for this one, 73 for now. Frank, W1WY.

U.S.A. Club Scores

Potomac Valley Radio Club	4,883,473
North Jersey DX Assn.	2,721,685
Southern California DX Club	1,268,174
Virginia Century Club	855,441
Northeast DX Association	658,402
West Gulf DX Club	532,164
El Ray Radio Club (Mass.)	337,208
Badger Amateur Radio Society (Wis.)	228,902
Ohio Valley Amateur Radio Assn	228,842
Nashua Mike and Key Club (N.H.)	175,048
Hamfesters (Ill.)	171,152
Northern California DX Club	128,514
Detroit Amateur Radio Association	119,725
Southeastern DX Club	117,088
Frankfort Radio Club	105,930
QCWA DX Club of New York	66,721
Indian Hills Radio Club (Ohio)	49,406
Genesse County Radio Club (Mich.)	28,012
Greater St. Louis DX Club	15,976
Florida DX Club	12,816
Hampden County Radio Assn. (Mass.)	5,672
St. Mary's High School Radio Club	4,720
Niagara DX Association (N.Y.)	2,680
Order of Boiled Owls (N. Mex.)	2,520
Blackstone Valley Radio Club (R.I.)	1,674

Foreign Club Scores

Foreign Club Scores	
German DX Team	3,064,252
Uruguay DX Club	2,008,892
Central Radio Club (Czechoslovakia)	1,600,847
Sofia City Radio Club (Bulgaria)	1,360,066
Kharkov Radio Club (Ukraine)	1,283,407
Swiss DX Radio Club	906,776
Far East DX-Ploiters (Japan)	822,290
Turun Radio Amateur Club (Finland)	370,237
Zagora Radio Club (Bulgaria)	358,581
Japan DX Radio Club	356,069
Amateur Radio Society of Iran	348,877
Okinawa Amateur Radio Club	308,982
SP DX Club (Poland)	269,437
Radio Club of Tallinn (Estonia)	135,843
Shizuoka Amateur Radio Club (Japan)	125,140
Warsaw Amateur Radio Club	112,480
Bremerhaven Radio Club	67,320
Taiwan-American Radio Club	62,532
Doso Amateur Radio Club (Bulgaria)	50,882
South Birmingham Radio Society (England)	48,500
R.A.F. Little Rissington Amateur R.C.	46,200
Kanazowa Amateur Radio Club (Japan)	16,856

Top Ten

ALL BAND—SINGLE OPERATOR

	7G1A	1,177,893	
CX2CO.	856,416	W4KFC	645,663
KW6DG	841,334	W3GRF	622,506
KH6IJ	791,840	W4YHD	544,504
5N2LKZ	777,155	UB5WF	514,022
	W4DHZ	464.002	

Top Five

MULTI-OPERATOR SINGLE TRANSMITTER

V KSINQ	/ 09,0	00
HV1CN529,356	VQ4RF	431,538
LZ1KSV 452,782	UJ8KAA	239,940

Top Five

MULTI-OPERATOR MULTI-TRANSMITTER

	DJ3JZ	1,451,	437
W3MSK	1,405,767	W6RW	538,486
UB5KBB	1,203,350	W2JT	521,554

W2BHM

Continental Leaders SINGLE BAND

	SHAGE	DAND
28	Mc	7 Mc
K2HWL	7,130	W9WNV 146,510
CX9HJ	4,470	4X4DH117,810
G5RP	3,360	VK3ADB 78,588
		OK2KOJ 69,048
		PY4AP 12,204
21	Me	3.5 Me
PY4GA	105,616	OK3DG18,300
W2WZ	77,910	4X4WF 8,019
ZS6APQ	74,808	K6EIV 7,410
ZB1HC		
ZL2GS	22,607	
JA3IW	22,385	
14	Me	1.8 Mc
UA9DN	274,412	OK1ADX740
ZS2HI	219,034	K7EKD 24
KH6DLF		
PY40D		
W1BIH		
G4CP	131,145	
Le	U.S aders and	. A. Runners-up

 14 Mc
 K2IEG
 134,928

 7 Mc
 K2DGT
 134,820

3.5 McWIBU 5,104

K3AIG " 12,834 77 24

Number groups after call letters denote the following: Band (A-all), final score, number of QSO's, Zones and Countries. Certificate winners are listed in bold face.

SINGLE OPERATOR North America United States

•	mitou otu			
K1JTC A K1RTB " W1YHH " W1WAI " W1FZ " W1EZD " W1PLJ " W1WY 21 K1MOD " W1UJK " W1UJK " W1UJK " W1UJK " W1UJK " K1JYN " K1JYN " K1HNI " W1KI "	337,208 144,690 113,524 97,811 48,831 13,800 59,8 60,734 36,408 33,915 7350 3535 142,374 87,840 52,788 13,668 7,700 14,611 11,139 6533 5104	484 283 226 227 142 68 172 228 174 55 414 256 177 72 55 108 85 172	844 669 58 41 27 22 26 19 19 15 15 17	160 127 133 992 865 122 70 559 31 21 86 87 47 32 32 27
W2BXA A K2DCA A W2AGW A W2EQS " W2GUM " W2CYS " W2LY " W2LY " W2LY " W2DX " K2GHM " W2OBX " K2GHM " W2YTH " W2OKM " W2YTH " W2OKM " W2FXN "	362,799 277,632 250,632 174,000 123,648 118,650 117,279 108,996 106,704 96,264 82,764 71,916 54,800 31,512 26,992 26,775	533 403 390 284 269 274 223 226 218 181 175 148 108 94 93	81 83 80 97 52 57 68 63 66 40 45 39	162 158 156 153 109 118 96 118 108 102 108 97 91 61 67 66

K2BSM "	17,216	90	23	46	W3WV "	3320	32	20	20
W2GKZ "	13,515	62	36	49	W3KQD "	210		7	- 7
WA21KL "	10,488	71	19	47	W3YHR "	24		2	2
K2TQC "	7808	48	26	35	W3KFQ 7	105,930		32	7 5
M201	7345	44	27	38	W3MCG 7	546	13	5	9
	4664	38	17	27				-	_
112.11	920	16	10	10	W4KFC A	645,663		121	252
K2HWL 28 WA2WDH "	7130	62	17	29	W4YHD A	544,504		121	225
K2YFE	1010	17	10	13	W4DHZ A	464,002	545	103	219
N211L	200	16	5	-5	W4YWX	126.519	247	66	115
14/01 43/	77,910 45,504	286 171	28	70	***************************************	96,693	201	53	114
W2LAX "	14.874	79	28 22	68 45	WHOT IN	85,330	193	57	104
W2DJT "	12,705	77	18	37	W40J	80,235 75,852	160 188	54	81
WV2QHE "	1311	23	5	14	W4CKD "	73,698	177	56 65	91 108
K21EG 14	134.928	340	36	108	W4LRV "	42,090	165	48	74
K2UVU **	95,634	270	36	90	W4ZM "	35,750	104	43	67
W2LPE "	78,430	247	32	78	K4MXF "	27,450	94	53	66
W2PCJ "	48,970	139	33	85	W4GF "	19,364	82	39	55
K2EAC "	38,896	161	28	60	K40RQ "	17,316	88	31	69 55 47
K2ECL "	31,428	135	22	59	W4QCL "	12,495	56	34	51
K2QHL "	30,874	127	29	57	W4JJL "	8584	57	22	36
N2AAC	9858	60	19	43	W4QV] "	6804	46	21	33
V230	1323	21	12	15	W40MW "	4958	43	31	36
K2DGT 7 W2AQT "	134,820	445	32	73	MAADGIN	3760	28	21	26
K2KFP 3.5	4960 3485	45 37	14 18	26	K4WUY "	3698	35	16	27
NZNFF 3.3	3403	31	10	23	W4H0S/4 "	1200	15	15	15
W3GRF A	622,506	620	110	241	W4JAT 21	42,688	168	28	64
W3EIV A	221,343	314	96	171	W4VZB "	25,228	129	21	47
W3MSR "	190,244	306	93	146	W4EEO "	661 2	40	21	37
MINTER	154,037	256	78	143	W4SNU "	5264	44	17	30
W3VKD "	19,500	90	25	50	W4ZYQ "	1932	23	18	69
W3AEL "	15,192	81	29	43	W4NYF 14	6800	61	19	31
MOREOV III	11,154	71			K4SXT "	4512	45	20	27
Worne	10,295		30	37	W4SSU 7	9450	62	21	42
WIDAND II		61	24	47	W4ZYS "	1485	21	13	14
W3AYD "	7688	46	25	37	W4Z0K "	1150	21	9	14
11.000	7552	47	22	37	K4LG1 3.5	370 0	43	17	20
MOITE	5841	35	25	34	W4SHJ "	1650	30	14	16
WOOKE	2541	27	12	21	W4WHK "	1500	25	13	17
WJDNE	1340	32	14	23					
1130112	650	15	12	13	W5WZQ A	226,500	329	95	155
W3LSG 21	59,925	248	26	59	W5BUK ''	46,665	124	63	90
WOOGEL	25,662	118	24	54	W8RMF/5 "	10,101	57	44	47
W3JTC 14	117,652	306	35	99	K5VTA "	2632	25	22	25
WOZA	55,438	196	34	72	K5BAJ "	54	6	5	4
W3ZQ "	19,116	87	27	34	W5LGG 21	66,444	211	35	78

23,230 90 40 61

W5EHY " K5YNA "	3456 3358 1140		13 20 8	23 26 11	WØDAE WØBTD WØGUV	A	7 5,843 43,566 21,854	187 125 88	66 60 42	93 77 56				odesia, Sa 210,446 21,225	515 106	48 27	91 48
W5KC 14 W5BOS 14 W5PM "	32,643	137 125	31 28 27	62 55 41	KØJPL WØMCX KØLFY	•••	817 18,005 13,701	48 101 78	16 24 25	19 41 46	ZE4JS	1	So	uth Africa	1	21	29
W5EJT 3.5	416	15	7	9	KØDQI WØUAF	• • •	38,456 5123	1 62 40	28 15	60 32	ZS1ACD		4.6	110,556 3094	92	37 7	74 7
				140	KØTHN	44	3344	46	17	21	Z\$10 Z\$2U		41	986 798	22 22	8 10	9 11
W6GRX "	88,357	213	57	116 92	K1 7100		Alaska	357	56	74	ZS6APQ ZS6DZ	2	21		354 255	25 8	47 17
K6BWX ''	76,580		55 54	85 67	KL7JDO K2BBY/KL7	A	96,590 92,004	344	42	60	ZS2HI	1	14	219,034	642	35	83
W6CBE "	48,720	152	49 43	67 62	KØBYC/KL7 W1EJT/KL7	• •	13,860 24,832	102 137	21 20	24 44	ZS6IF ZS5AM		41		379 119	33 29	80 53
WEQDE "	23,205	105	38	47	W1231/ K23		Canada				ZS5UP		41	8736	65	19	37
W6FKZ "	10,200 8840	63	25 25	35 27	VETAE	14	4386 117,320	50 258	9 78	25 120	EAØAB		Spα	nish Guir 260	ιία 13	5	8
W6DCC "	7524 7095	51 47	34 24	32 31	VE2YU VE2AFC	21	2,652	47	9	17	CADAD		_			•	
W6ID "	6519 5250	43	24 24	29 29	VE2NV VE2BV VE3BOG	14	57,120 16,354	209 91	31 26	48	ZS7M		14	waziland 33,040	172	25	45
W6CLZ "	4181 3960		17 15	20 21	VE3BES	• •	60,060 30,740	223 116	64 39	76 67				nganyik	a a	27	56
WA6KZI "	2156 25,416	34 127	9 24	13 48	VE3PV VE3BMB	21	3034 7889	28 62	15 18	22 31	5H3HZ		A	53,010	200	37	36
W6BSY 21 W6TMX " WV6SBO "	23,595 3168	142	25 15	40 18	VE3AGX	3.3	4636 28,906	82 114	17 34	21 63				Āsiα			
W6EPZ 14 W6GHM "	85,910 80,704	249 269	34 33	87 71	VESKY	14	1530 1848	60 5 1	15 12	10							
W6AFI "	47,005 45,299	197 167	29 30	56 67	VEBMG	A 14	14,508 5130	121 50	32 15	30 23	VS9AAC		A	Aden 272, 049	545	56	121
W6CYI "	33,418	146	24	53	VE7BFN VE8RX	Λ.	1408 50,456	44 258	13 42	14 64				Burma			
WAGAYF "	27,643 1260	144 18	22 14	55 16	VE8DM	14	13,497	312	14	19	XZ2TH		14	31,491	174	29	54
K6VTQ 7 W6UED "	65,136 15,400	256 108	32 22	60 28	W.TETB	A	Canal Zor 54,864	1e	65	79	VS6DS		14 H	long Kone 8464	98	19	27
K5TER/6 " WA6DNM "	9248 609 7410	104 13 106	14 11 17	18 10 22	KZ5TD	14	54,038	420	25	57				India			
K6EIV 3.5 W6BYB "	6253	70	16	21	TI2WA	21	Costa Ric 20,520	α 232	20	34	VU2NR VU2AJ			76,400 63,984	290 309	31 31	69 55
K6BPR "	4716 3193	53 45	17 13	19 18	112117		Cuba				VU2CK VU2GG		11	35,113 4465	203 47	26 18	47 27
W6NKR "	2370	34	14	16	CO2CT	Α	650	63	7	3	VU2TH		44	960	16	13	12
W7PQE A W7POU "	1 15,596 11,940	262 67	72 27	97 33	KG1FD		Greenlan 133,215	d 778	43	64	EP2BB		A	lran 235,220	452	60	130
W7BAJ ''	3626	34	24	25		- 73	100,210	575	35		EP2AE		14		195	26	50
W7VY 14					KG1AA		67,252			51	EFZAE		14	40,584			•••
W7VY 14 W7PGS	85,284 59,073	288 203	33 29	70 68	0X3UD		3880	173	ě	11				Israel			
W7VY 14 W7PGS " K7MVR " W7CAB "	85,284 59,073 16,200 7680	288 203 117 69	33 29 20 16	70 68 34 24	0X3UD	14	3880 Puerto Ric	173	9 50	11 85	4X4FV 4X4MJ		A 21	Israel 36,784 8888	143 69	26 13	62 31
W7VY 14 W7PGS " K7MVR " W7CAB " W7BTH " K7JCI "	85,284 59,073 16,200 7680 5400 3584	288 203 117 69 49 45	29 20 16 20 10	70 68 34 24 25 18	KP4AAO	14 A	3880 Puerto Ric	173	9	11	4X4FV 4X4MJ 4X4FA 4X4DH		A 21 14 7	Israel 36,784 8888 173,855 117,810	143 69 567 533	26 13 29 20	62 31 80 57
W7VY 14 W7PGS "" K7MVR "" W7CAB "" W7BTH "" K7JCI "" W7DLR "" K7CAD 3.5	85,284 59,073 16,200 7680 5400 3584 3534 544	288 203 117 69 49 45 38 17	33 29 20 16 20 10 15	70 68 34 24 25 18 16	OX3UD	14 A	3880 Puerto Ric 85,995	173 528	9 50	11 85	4X4FV 4X4MJ 4X4FA		A 21 14 7	Israel 36,784 8888 173,855 117,810 8019	143 69 567	26 13 29	62 31 80
W7VY 14 W7PGS " K7MVR " W7CAB " W7BTH " K7JCI " W7DLR "	85,284 59,073 16,200 7680 5400 3584 3534 544 24	288 203 117 69 49 45 38 17 13	33 29 20 16 20 10 15 8	70 68 34 24 25 18 16 9	OX3UD	14 A	3880 Puerto Ric 85,995	173 528 210	9 50	11 85	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF		A 21 14 7 3.5	Israel 36,784 8888 173,855 117,810 8019 Japan 310,453	143 69 567 533 84	26 13 29 20 7	62 31 80 57 26
W7VY 14 W7PGS " K7MVR " W7CAB " W7BTH " K7JCI " W7DLR " K7CAD 3.5 K7EKD 1.8	85,284 59,073 16,200 7680 5400 3584 3534 544 24	288 203 117 69 49 45 38 17 13	33 29 20 16 20 10 15	70 68 34 24 25 18 16	OX3UD	14 A	3880 Puerto Ric 85,995 12,636	528 210	9 50	11 85	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF		A 21 14 7 3.5	Israel 36,784 888 173,855 117,810 8019 Japan 310,453 272,799 185,300	143 69 567 533 84 680 637 478	26 13 29 20 7 71 64 73	62 31 80 57 26 98 89
W7VY 14 W7PCS 4 K7MVR 1 W7CAB 1 W7CAB 1 W7BTH 1 K7ICI 1 W7DLR 1 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RMK 1 W8KSR 1	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109	288 203 117 69 49 45 38 17 13 297 156 111	33 29 20 16 20 10 15 8 3 41 47 47	70 68 34 24 25 18 16 9 3	KP4AAO	14 A	3880 Puerto Rio 85,995 12,636	173 528 210	9 50 23	11 85	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA1BK JA1VX JA1YL JA2AEY JA7AD		A 21 14 7 3.5 A A	Israel 36,784 8888 173,855 117,810 8019 Japan 310,453 272,799 185,300 103,621 85,239	143 69 567 533 84 680 637 478 317 309	26 13 29 20 7 71 64 73 56 41	62 31 80 57 26 98 89 97 75
W7YY 14 W7PCS 4 K7MVR 1 W7CAB 1 W7CAB 1 W7STH 1 K7ICI 1 K7CAD 3.5 K7EKD 1.8 W8IIN A K8RIM 4 W8IQS 1 W8IQS 1 W8IQS 1	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109 28,012 25,452	288 203 117 69 49 45 38 17 13 297 156 111 104 99	33 29 20 16 20 10 15 8 3 41 47 47 47 34 39	70 68 34 225 18 16 9 3 84 77 66 60 62	KP4AAOKP4CC	. 14 A	3880 Puerto Ric 85,995 12,636 Africe Algeria 110,894 Angola	173 528 210	9 50 23	85 39	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA1BK JA1VX JA1VX JA1YL		A 21 14 7 3.5	Israel 36,784 8888 173,855 117,810 8019 Japan 310,453 272,799 185,300 103,621 85,239 60,390 64,705	143 69 567 533 84 680 637 478 317	26 13 29 20 7 71 64 73 56 41 43 45	62 31 80 57 26 98 97 75 56 60
W7YY 14 W7PCS 1 K7MYR 1 W7CAB 1 W7CAB 1 W7BTH 1 K7ICI 1 K7CAD 3.5 K7EKD 1.8 W8INK A K8RMK 4 W8KSR 1 W8IGS 1 K8UX 4 K8VIX 1 W8KS 1	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109 28,012 25,452 17,460	288 203 117 69 49 45 38 17 13 297 156 111 104	29 20 16 20 10 15 8 3 41 47 47 47 34 39 37 26	70 68 34 225 18 16 9 3 84 77 66 60 62 53 35	KP4AAO KP4CC	. 14 A.	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560	173 528 210 X 218 76	9 50 23	85 39	4X4FV 4X4MJ 4X4FA 4X4BH 4X4WF JA1BK JA1VL JA2AEY JA7AD JA7AD JA3CKI JA1BTG JA7KY JA3BEA		A 21 14 7 3.5 A A A	Israel 36,784 8888 173,855 117,810 8019 Japan 310,453 272,799 185,300 103,621 85,239 60,390 54,705 42,408 19,926	143 69 567 533 84 680 637 478 317 309 253 208 217 105	26 13 29 20 7 71 64 73 56 41 43 45 36 39	62 31 80 57 26 98 89 77 58 56 60 40 42
W7VY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7BTH 16 K7JCI 17 K7JCI 17 W7DLR 18 W8JIN A K8RMK 17 W8KSR	85,284 59,073 16,200 7680 5440 3584 3534 24 103,125 46,368 33,109 28,012 25,452 17,460 12,444 15 23,857	288 203 117 69 49 45 38 17 13 297 156 111 104 99 113 75 4	33 29 20 16 20 15 8 3 41 47 47 47 47 39 37 26 3 23	70 68 34 24 25 18 16 9 3 84 77 66 60 62 53	KP4AAO KP4CC FABRJ CR6DA	. 14 A.	3880 Puerto Ric 85,995 12,636 Africe Algeria 110,894 Angola 7560 ongo, Rer	173 528 210 X 218 76 5. of	9 50 23	85 39	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA1BK JA19X JA7AD JA3CKI JA1BTG JA3BEA JA9TS JA6CY		A 21 14 7 3.5 A A A	Israel 36,784 8888 173,855 17,810 8019 Japan 310,453 272,799 185,239 60,390 54,705 4,705 12,458 19,926 12,458	143 69 567 533 84 680 637 478 317 309 253 208 217 107 63	26 13 29 20 7 71 64 73 56 41 43 45 33 39 21 31	62 31 80 57 26 98 97 75 86 90 40 42 835
W7VY 14 W7PCS 14 W7PCS 14 W7DCAB 17 W7DLR 17 W7DLR 17 W7DLR 18 W7D	85,284 59,073 16,200 7680 5400 3584 3534 24 103,125 46,368 35,442 25,452 17,460 12,444 20,8657 20,8657 20,860 12,139	288 203 117 69 49 45 38 17 13 297 156 111 104 99 113 75 4 117 106 74	29 20 16 20 10 15 8 3 41 47 47 47 34 39 37 26 3	70 68 324 225 18 16 9 3 84 77 660 622 535 2 48	KP4AAO KP4CC FABRJ	14 A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rep 95,230	173 528 210 218 76 392	9 50 23 63 17 46	85 39	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA19X JA19X JA19X JA3CKI JA3CKI JA3EA JA3EA JA9TS JA6CY JA10FQ JA10FQ		A 21 147 3.5 A A A	Japan 36,784 8,855 117,810 8019 Japan 310,453 2212,799 60,390 54,705 42,408 19,926 12,455 10,824 9945 7350	143 69 567 533 84 680 637 478 309 253 208 217 63 85 60	26 139 20 7 71 64 73 56 41 33 44 36 32 21 32 25	62 31 80 57 26 98 97 75 86 40 42 83 57 25
W7VY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7DLR 16 W7DLR 17 W7DLR 18 W9JIN A K8RMK A W8IQS 16 K8UX 17 W8KC 17 W8KC 18 W8TT 28 W8TT 21 W8UMR 17 W	85,284 59,073 7680 5400 3584 3534 24 103,125 46,368 46,368 28,012 25,452 17,460 12,444 20,857 20,860 12,139 58,860 36,860	288 203 117 69 49 45 38 17 13 297 156 111 104 99 113 75 4 117 106 74 167	29 20 10 10 15 8 3 41 47 47 47 39 20 20 20 20 20 20 20 20 20 20 20 20 20	70 6844258693 847766023552 489865 65555	KP4AAO KP4CC FA8RJ CR6DA 9Q5AAA SM5ARQ/	14 A A C G A A G G A G G A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rep 95,230 20,374 uinea, Re	173 528 210 218 218 76 392 125 p. of	9 50 23 63 17 46 23	11 85 39 115 19 43 38	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA18K JA17X JA2AEY JA3AEA JA3BEA JA3BEA JA3BEA JA1DFO JA1EFK JA1EFK JA1EFK		A 21 14 7 3.5 A A A	Japan 36,784 8173,855 117,810 810,453 272,799 103,621 85,239 60,390 54,705 109,26 109,	143 69 567 533 84 680 637 478 317 309 253 208 217 105 117 63 85 60 746 746 746 746 746 746 746 746 746 746	26 13 29 20 7 71 64 73 56 41 43 45 36 39 21 31 24 25 16 19 19 19 19 19 19 19 19 19 19 19 19 19	62 31 857 26 98 97 55 60 40 22 32 57 52 42 22 53 12 22 54 22 54 22 54 54 54 54 54 54 54 54 54 54 54 54 54
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7DLR 16 W7DLR 16 W7DLR 17 W7DLR 18 W7DL	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109 28,012 25,452 17,460 12,444 15 23,857 20,860 12,139 56,860 102,399	288 203 117 69 49 45 38 17 13 297 156 111 104 99 113 75 4 117 106 74 54 167 332 60	33 29 20 10 10 15 8 3 41 47 47 47 47 47 47 39 37 26 30 21 30 21 30 21 30 21 30 21 30 21 30 30 30 30 30 30 30 30 30 30 30 30 30	70 6844258693 8776662352 4898665755	KP4AAO KP4CC FABRJ CRGDA	14 A A C G A A G G A G G A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rep 95,230 20,374	173 528 210 218 218 76 392 125 p. of	9 50 23 63 17 46 23	11 85 39 115 19 43	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA1BK JA1WX JA1WX JA2CAL JA3CKL JA3CKL JA3CKL JA3ES JA3CKL JA3ES JA3CCA JA3CCA JA1EFG JA1EFG JA1CCA JA1EFG JA1EFG JA1EFG		A1 147 3.5 A A A	Israel 36,784 8,788 173,855 117,810 8010 103,621 85,300 54,705 42,408 19,926 10,925 10,824 9345 7350 6868 5891 6248 5891	143 69 567 533 84 680 687 478 317 309 217 117 63 85 60 74 63 69 52	26 13 29 20 7 71 64 47 36 41 43 45 63 9 21 31 22 16 19 22 16 19 21 21 21 21 21 21 21 21 21 21 21 21 21	62 31 857 26 98 97 75 86 60 42 83 27 25 82 22 22 22 22 22 22 22 22 22 22 22 22
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7DLR 16 W7DLR 16 W7DLR 17 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RIMK 47 W8KSR 47 W8VSK 47 W8VSK 47 W8VSK 47 W8VSK 47	85,284 59,073 16,200 7680 5400 3584 3534 544 103,125 46,368 33,109 28,012 25,452 17,460 12,444 15 23,857 20,860 102,399 8512 1150	288 203 117 69 49 45 38 17 13 297 156 61 111 1104 99 113 75 4 117 106 74 54 117 106 94 95 113 110 110 110 110 110 110 110 110 110	33 29 20 10 10 15 83 3 41 47 47 34 39 32 21 21 21 30 30 30 21 21 21 21 21 21 21 21 21 21 21 21 21	70 634458693 8476602352 449865553 49866755313	FABRJ	14 A A C A A C A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 ainea, Re; 1,177,893 Liberia	7528 210 218 218 76 392 125 p. of 1536	9 50 23 63 17 46 23 79	11 85 39 115 19 43 38 182	4X4FV 4X4MA 4X4FA 4X4DH 4X4WF JA17X JA17X JA17X JA17X JA18TG JA18TG JA3BEA JA9TS JA16FQ JA1FHK JA2FH JA1AS JA1AS JA1AS JA1AS JA1AS		A 21 147 3.5 A A A	Japan 36,784 8888 173,855 117,810 8019 Japan 310,453 272,799 103,621 85,239 60,390 54,705 42,408 19,926 12,455 10,824 9945 7350 6868 6273 6248 5891 3861	143 69 567 533 84 680 637 478 317 253 208 217 685 600 744 69	26 13 29 20 7 7 16 47 35 6 41 43 36 39 21 24 25 16 16 19 21	62 31 807 26 98 97 586 60 40 22 32 22 32 22 32 22 32 32 32 32 32 32
W7YY 14 W7PCS 4 W7PCS 4 W7BTH 4 W7BTH 4 W7DLR 4 W7DLR 4 W7DLR 1 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RIM 4 W8KSR 4 W8IQS 4 W8	85,284 59,073 16,200 7680 5400 3584 3534 46,368 33,109 28,012 25,452 17,460 12,444 25,857 20,860 12,139 5880 102,398 8512 1150	288 203 117 69 49 45 38 17 156 111 104 99 113 75 4 117 106 74 167 332 60 60 74 17 106 74 17 18 18 18 18 18 18 18 18 18 18 18 18 18	33 290 1620 105 83 41 47 47 47 47 47 47 47 47 47 47 47 47 47	70 634458693 847766023552 48986575313 1257	KP4AAO KP4CC FA8RJ CR6DA 9Q5AAA SM5ARQ/	14 A A C A A C A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 congo, Rer 95,230 20,374 ainea, Re 1,177,893 Liberia 5313	7528 210 218 218 76 392 125 p. of 1536	9 50 23 63 17 46 23 79	11 85 39 115 19 43 38	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA18K JA1YX JA2AEY JA7AD JA36KI JA1BTG JA37S JA16CY JA11FFQ JA16FK JA16CY JA16FK JA1AS JA1AS JA1AS JA1AS JA1AS JA1AS JA1AS JA1AS		A 21 147 3.5 A A A	Israel 36,784 8173,855 117,810 810,453 272,790 103,621 85,239 60,390 54,705 10,824 9945 7350 6868 6273 6248 5891 3861 33348	143 69 567 533 84 680 637 478 309 253 217 105 117 63 850 74 63 639 418 639 418 639 439 439 439 439 439 439 439 439 439 4	26 13 29 20 7 7 64 73 56 41 43 45 36 39 21 31 22 20 20 10 11 12 12 13 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	62185726 989758600428575822309
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7DLR 16 W7DLR 16 W7DLR 17 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RMK 17 W8KSR 17 W8LOS 17 W8L	85,284 59,073 16,200 7680 5400 3584 3534 46,368 33,109 25,452 17,460 12,444 23,857 20,860 12,139 5880 36,889 8515 1150 115,520 2451 1419	288 203 169 49 45 388 17 156 111 104 99 113 75 74 117 106 74 157 332 207 20 20 20 20 20 20 20 20 20 20 20 20 20	33 290 1620 105 83 41 47 47 47 47 47 47 47 47 47 47 47 47 47	70 634458693 877660235228498655313 125	FABRJ	14 A. A. C. A. A. G. A.	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 ainea, Re; 1,177,893 Liberia	773 528 210 218 76 76 392 125 125 77	9 50 23 63 17 46 23 79	11 85 39 115 19 43 38 182	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA18K JA17X JA2AEY JA3EEA JA3EEA JA3EEA JA1EFHK JA1EFHK JA1AS	0/3	A11773.5 AAAA	Japan 36,784 8173,855 117,810 810 310,453 272,790 103,621 85,230 54,705 4,705 4,705 10,824 945 7350 6868 6868 687 687 688 688 689 689 689 689 689 689 689 689	143 699 5533 84 6807 478 317 105 117 105 63 643 643 643 643 643 643 643 643 643	26 13 29 20 7 71 643 456 339 211 324 255 169 221 230 218 19 117	621 8576 9897 7586 64428 575 64428 7582 7586 7586 7586 7586 7586 7586 7586 7586
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7DLR 16 W7DLR 17 K7LCI 16 W7DLR 18 W7DLR 18 W7DLR 18 W8LY 18 W8KSR 16 W8KSR 17 W8KSR 18 W8KSR 17 W8WSK 18 W8KT 18 W8WSK 17 W9DYG 17	85,284 59,073 16,200 7680 5400 3584 3534 4544 24 103,125 46,368 33,109 28,012 25,452 17,460 12,139 5880 36,860 12,139 5880 36,860 102,399 1150 115,520 5590 2451 1490	288 203 169 49 49 45 38 17 13 297 1156 1111 104 9 1133 75 4 4 117 106 9 20 20 225 45 45 24 24 25 45 45 45 45 45 45 45 45 45 45 45 45 45	33 290 162 2016 158 3 41 47 47 47 43 49 47 47 47 47 47 47 47 47 47 47 47 47 47	70 634458693 84766023528893867353 12572	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ / 7G1A EL4A 5A1TW	14 A A C A A G A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 sinea, Re- 1,177,893 Libya 353,007	173 528 210 218 218 76 392 125 125 77 654	50 23 63 17 46 23 79 8	11 85 39 115 19 43 38 182 15	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA18H JA19H JA3CHI JA3CHI JA18H JA18)/3	A1473.5 AAA	Israel 36,784 8888 173,855 117,810 8988 173,855 117,810 810,453 272,799 185,300 54,705 42,408 19,926 12,32 6868 6273 6248 5891 3861 3861 3861 3861 32520 2486 2132	143 699 5533 84 6807 478 309 253 2217 105 117 63 850 744 633 323 333 492	26 13 29 7 7 1 673 556 413 359 321 324 225 169 221 220 188 199 18 177 133	62 31 80 57 6 98 89 7 75 8 66 00 42 8 35 7 25 8 22 30 19 7 19 00 9 9 13
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7BTH 16 W7DLR 17 K7ICI 17 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RIMK 17 W8KSR 17 W8KSR 17 W8KSR 17 W8KSR 17 W8KIM 28 W8TIM 28 W8TIM 28 W8TIM 31 W8KIM 31 W8FGX 17 W8VIM 31 W8FGM 47 W8VIM 31 W9GMS 11 W9	85,284 59,073 16,200 7680 3584 3534 4544 103,125 46,368 33,109 28,012 25,452 17,460 12,139 8512 1150 102,398 8512 1150 115,520 2451 1419 240 31,930	288 203 69 45 388 17 13 297 156 60 111 104 117 106 60 20 225 45 244 222 81 142	33 290 162 2016 158 3 417 477 473 493 263 321 216 303 321 216 303 216 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 216 303 303 303 303 303 303 303 303 303 30	708 634 245 188 166 93 3 84 7 7 666 602 533 355 2 489 386 655 755 13 125 227 7	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ / 7G1A EL4A 5A1TW	14 A A C A A G A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 20,374 ainea, Rei 1,177,893 Liberia 5313 Libya 353,007	173 528 210 218 218 76 392 125 125 77 654	50 23 63 17 46 23 79 8	11 85 39 115 19 43 38 182 15	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA18K JA17KL JA2AEY JA3EBG JA7KD JA3EBG JA2CA JA16FG JA2CA JA16FG JA2CA JA16FG JA1ACA JA9NB JA1ACA JA9NB JA1ACA JA2HH JA1ACA JA1AC	0/3	A 21 147 3.5 A A A A	Israel 36,784 8888 173,855 117,810 8019 Japan 310,459 103,621 85,239 60,390 54,705 42,408 19,926 6868 6273 6248 5891 3861 3535 3348 2200 2486 2132 2106 2207	143 699 5533 84 6837 478 319 2253 2217 1055 606 743 639 522 333 491 323 333 492 333 333	26 13 29 20 7 71 644 756 413 425 166 191 223 208 198 187 133 133	62 31 80 57 6 98 89 7 75 8 60 40 42 8 35 7 25 8 22 23 0 19 7 19 0 11 4 16
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 W7BTH 16 W7DLR 17 K7ICI 17 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RMK 17 W8KSR 17 W8IQS 17 W8IQS 17 W8KIX 17 W8VIX 17 W8V	85,284 59,073 16,200 7680 5400 3584 3534 544 103,125 46,368 33,109 28,012 25,452 17,460 12,139 8512 1150 115,520 2451 1419 240 31,950 2451 1419 240 31,953	288 203 69 45 388 17 13 297 156 60 99 113 75 4 117 106 60 74 54 167 74 54 117 106 20 225 45 244 242 88 1421 98 88	33 290 162 2016 2015 158 3 417 4747 4747 4747 4747 4747 4747 474	708 634 245 186 193 847 666 623 535 248 499 386 655 735 125 227 77 513 440	FABRJ FABRJ CRGDA 9Q5AAA 9M5ARQ / 7G1A EL4A 5A1TW	14 A A C A A C A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 sinea, Re 1,177,893 Liberia 5313 Libya 353,007 Madagas 18,786	173 528 210 218 76 392 125 77 654 654 654 654 654 654 654 654 654 654	50 23 63 17 46 23 79 8 76 24	11 85 39 115 19 43 38 182 15	4X4FV 4X4MJ 4X4FA 4X4WF 4X4WF JA18K JA17KL JA2AEY JA3BES JA3BES JA16CY J	0/3	A11473.5 AAA	36,784 36,784 8888 173,855 117,810 8019 Japan 310,453 272,799 185,390 103,621 85,239 60,390 54,705 42,408 19,926 12,455 10,824 9945 7350 6868 6273 3613 3613 3613 36248 5891 3613	143 699 5677 533 84 680 6377 4317 3099 208 2105 1105 1105 1105 1105 1105 1105 1105	26 13 29 7 7 14 43 56 19 12 20 8 18 8 17 3 21 12 20 18 18 17 13 31 15 12 20 8 18 7 17 17 17 17 17 17 17 17 17 17 17 17 1	52 31 80 57 26 98 89 97 75 58 60 42 22 35 27 21 22 31 14 14 16 11 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14
W7YY 14 W7PCS 15 K7MVR 11 W7CAB 16 K7MVR 17 W7CAB 17 W7DLR 17 K7CAD 3.5 K7CAD 3.5 K7CKD 1.8 W8JIN A K8RMK 17 W8KSR 17 W8LQS 17 W8UGS 17 W8UGS 17 W8UGS 17 W8UMR 17 W8KC 17 W8WRT 17 W8W	85,284 59,073 16,200 7680 5400 3584 3534 544 103,125 46,368 33,109 28,310 22,451 12,444 21,139 5880 102,398 15150 115,520 2451 1419 240 31,950 2451 1419 2440 31,950 23,114	288 203 69 45 49 45 49 45 17 13 297 156 111 104 99 113 77 47 1106 74 167 332 207 225 48 142 242 288 999 129 88 999	33 220 160 210 158 3 447 474 474 474 474 474 474 474 474 4	70 63 42 12 18 19 3 8 47 66 66 62 53 53 52 49 84 93 84 12 77 77 53 42 49 83 12 77 77 77 77 77 77 77 77 77 77 77 77 77	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ / 7G1A EL4A 5A1TW	14 A A C A A A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 congo. Rer 95,230 20,374 ainea, Rei 1,177,893 Liberia 5313 Libya 353,007 Madagasi 18,786 Moroccc 60,146	173 528 210 218 76 392 125 125 125 77 654 77 654 332	50 23 63 17 46 23 79 8 76 24	11 85 39 115 19 43 38 182 15	4X4FV 4X4FV 4X4FA 4X4DH 4X4WF JA18K JA1YX JA17X JA17X JA18TG JA18TG JA3BEA JA9TS JA16FQ JA1FHK JA2TH JA1AS)/3 M	A 21 147 3.5 A A A A	Israel 36,784 88 173,855 117,810 8019 ISS,300 103,621 85,239 60,390 54,705 10,824 9945 10,824 9945 10,824 9945 24,868 82,660 2520 2486 2132 2106 660 540	143 699 567 533 84 680 637 317 309 3253 208 217 105 117 105 117 105 32 33 34 34 34 32 32 33 33 34 34 32 34 34 34 34 34 34 34 34 34 34 34 34 34	26139207 7164366 4134456 4132208 4198187 11311111111111111111111111111111111	52 31 80 57 26 98 89 7 75 58 60 42 22 35 27 18 22 23 20 19 11 14 16 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
W7YY 14 W7PCS 15 K7MVR 11 W7CAB 12 K7MVR 11 W7CAB 13 W7DLR 16 K7CAD 3.5 K8CA 14 W8LOS 16 W8LOS 17 W8LO	85,284 59,073 7680 7680 5400 3584 3534 24 103,125 46,368 46,368 46,368 12,444 15 23,857 21,460 12,444 15 23,857 21,450 115,520 15,520 2451 1419 2451 25,452 215,309 31,769 31,769 31,769 31,769 31,769 31,769 31,769	288 203 69 49 45 388 17 13 297 156 6 111 104 9 113 75 4 117 106 74 5167 332 6 20 225 454 22 131 988 999 72 424	33 220 160 210 158 3 447 474 434 397 63 221 221 65 221 221 222 223 221 222 223 221 222 222	70 634 245 186 9 3 84 776 60 60 60 60 60 60 60 60 60 60 60 60 60	FASRJ FASRJ CR6DA 9Q5AAA SM5ARQ/9Q5 7G1A EL4A 5A1TW 5R8AD CN8EU	14 A A A A A A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 ainea, Rei 1,177,893 Liberia 5313 Libya 353,007 Madagasi 18,786 Morocci 60,146 Mozambia 62,910	173 528 210 218 76 392 125 125 1536 77 654 654 6332 281	9 50 23 63 17 46 23 79 8 76 24 19	11 85 39 115 19 43 38 182 15 107 38 42 51	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA18K JA1YL JA2AEY JA7ACH JA1BTG JA1BTG JA1EFA JA1CCA JA1FA JA1AS JA1AS JA1AS JA1AS JA1AS JA2CA)/3 M	A 21 147 3.5 A A A A A A A A A A A A A A A A A A A	Japan 36,784 8173,855 117,810 810,453 272,799 103,621 85,239 54,705 10,926 12,926 12,926 12,926 12,926 13,926 14,9	143 695 533 84 680 637 317 2253 2208 319 2253 2217 105 743 69 323 349 323 349 323 323 323 323 323 323 323 323 323 32	26 139 20 7 71 64 7 7 7 64 7 7 7 64 7 7 7 7	52 31 80 57 26 98 89 7 75 58 60 42 22 35 22 19 11 20 19 11 20 19 11 20 10 10 10 10 10 10 10 10 10 10 10 10 10
W7YY 14 W7PCS 16 W7PCS 16 W7PCS 17 W7CAB 17 W7CAB 17 W7CAB 17 W7DLR 17 W7DLR 18 W7DL	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109 28,012 25,452 17,460 12,444 15 23,857 20,857 21,150 115,520 115,520 115,520 115,520 115,520 11,307 4588 71,307 57,873	288 203 69 49 45 388 17 13 297 111 104 9113 75 4 117 107 4 117 108 4 117 225 4 131 888 97 224 224 2240 2260 176	33 220 160 210 158 3 447 447 4349 447 4349 447 4349 447 4349 447 447 447 447 447 447 447 447 447 4	708 634 245 186 93 847 766 602 533 535 248 248 248 248 258 268 275 277 272 277 277 511 532 533 535 535 535 535 535 535	FABRJ FABRJ CRGDA 9Q5AAA 9M5ARQ / 7G1A EL4A 5A1TW	14 A A A A A A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rep 95,230 20,374 sinea, Rep 1,177,893 Liberia 5313 Libya 353,007 Madagas-18,786 Morocco 60,146	173 528 210 218 76 392 125 125 1536 77 654 654 6332 281	9 50 23 63 17 46 23 79 8 76 24 19	11 85 39 115 19 43 38 182 15 107 38 42 51	4X4FV 4X4MJ 4X4FA 4X4UH 4X4WF JA18K JA17KL JA2AEY JA3ENG JA2TH JA18FG JA2TH JA18FG JA14FCA JA2TH JA1ACA JA9NB JA1HPC JA2AIT JA2AIT JA2AIT JA3ACA JA3A	0/3	A 21 147 3.5 A A A A A A A A A A A A A A A A A A A	Japan 36,784 8173,855 117,810 810,453 272,799 103,621 85,239 54,705 10,926 12,926 12,926 12,926 12,926 13,926 14,9	143 699 5677 533 844 680 6378 3177 3208 2217 1057 11057 332 349 363 333 349 363 363 363 363 363 363 363 363 363 36	26 13 29 20 7 7 1 643 7 56 4 4 3 3 9 2 1 1 2 4 5 5 3 9 1 2 1 2 2 3 2 2 1 8 9 1 1 7 1 1 3 1 1 1 1 2 1 1 6 6 1 1 0 6 4 2 2 2 2 2	62 31 80 57 6 98 89 7 75 8 660 0 42 8 35 7 2 18 2 2 3 0 1 9 9 1 3 4 16 4 12 5 10 8 31 8 32 1
W7YY 14 W7PCS 16 K7MVR 16 W7PCS 17 W7CAB 17 W7CAB 18 W7DLR 18 W7DLR 18 W7CAD 3.5 K7EKD 1.8 W8JIN A K8RIM 47 W8KSR 17 W8KIM 28 W8TTN 21 W8WK 18 W9WK 19 WYK 19 WWK 19 WYK 19 WWK 19 WYK 19 WWK 19 WK 19	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109 28,012 25,452 17,460 12,490 5880 36,860 12,139 5880 36,860 121,399 5880 102,399 1150 115,520 5590 2451 1419 28,314 71,152 15,309 11,307 47,319 57,873 40,388 71,390 55,2436	288 203 69 45 388 17 13 297 156 111 104 913 75 4 117 13 297 113 75 4 117 207 4 117 207 4 117 207 4 117 207 4 117 207 4 117 207 207 207 207 207 207 207 207 207 20	33 220 160 105 105 105 105 105 105 105 105 105 10	708 634 245 186 93 847 766 602 535 535 22 489 386 655 755 13 125 222 17 751 533 399 280 771 644 538	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ/9Q5 7G1A EL4A 5R8AD CN8EU CR7IZ CR7CI	14 A A C A A C A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 sinea, Re- 1,177,893 Libya 353,007 Madagas- 18,786 Morocc- 60,146 Mozambid 62,910	173 528 210 218 76 392 125 1536 77 654 654 12 211 2 21 17	9 50 23 63 17 46 23 79 8 76 24 19	111 85 39 1115 19 43 38 182 15 107 38 42 51 3	4X4FV 4X4MJ 4X4FA 4X4WF JA14K JA17KL JA2AEY JA17KL JA2AEY JA16FG JA2CA JA16FK JA17KY JA16FG JA16FK JA17KY JA16FK JA17KY JA16FK JA17KY JA18FK JA18KY JA18FK JA18KY JA18FK JA18KY JA18FK JA18KY JA18FK JA18KY JA18FK JA18KY JA18FK JA18KY JA18FK JA18KY JA18FK J)/3	A11473.5 AAAA	Israel 36,784 8888 173,855 117,810 8019 185,300 103,621 85,339 60,390 54,705 42,408 19,926 6,73 6,248 6273 6248 6273 6248 6273 6248 6273 6248 6273 6248 6273 6248 610,824 62,385 11,200 660 504 22,385 17,220 14,360 13,090	143 699 567 533 84 680 637 431 7309 850 744 633 850 744 633 323 333 341 323 324 323 324 323 324 325 324 325 325 325 325 325 325 325 325 325 325	26 13 29 20 7 7 1 64 3 7 5 6 6 4 1 3 3 9 2 1 1 6 2 4 2 2 2 1 9 7 1 1 3 3 1 1 5 5 1 3 2 4 5 6 6 4 1 9 1 1 3 3 1 1 5 1 3 2 1 6 6 4 2 2 2 1 9 7 1 1 3 3 1 1 5 1 3 2 1 6 6 6 2 4 2 2 1 9 7 1 1 3 3 1 1 5 1 3 2 1 6 6 6 7 1 6 7 1 6 7 1 6 7 1 7 1 7 1 7	52 31 80 57 26 98 89 97 75 58 60 42 22 35 27 51 82 22 20 19 19 19 19 19 19 19 19 19 19 19 19 19
W7YY 14 W7PCS 14 W7PCS 15 K7MYR 16 W7PCS 16 W7BTH 16 K7ICI 17 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RIMK 17 W8KSR 17 W8KIM 28 W8TIM 28 W8TIM 28 W8TIM 21 W8KIM 21 W8KIM 25 W8KIM 3.5 W9ROM 4 W9FCS 17 W9	85,284 59,073 16,200 7680 5400 3584 3534 544 24 103,125 46,368 33,109 28,012 25,452 17,460 12,446 15,23,857 20,860 12,139 5890 36,860 102,399 1155 115,520 5590 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1419 2451 1451 2451 2451 2451 2451 2451 2451	288 203 69 45 49 45 318 17 13 297 156 156 167 44 117 74 167 332 205 44 167 20 225 45 45 45 40 20 240 240 240 240 29 888 99 72 49 399 899	33 220 160 105 183 417 474 33 376 33 22 213 33 22 216 216 22 22 216 216 216 216 216 21	708 634 644 660 622 655 751 644 642 653 751 751 751 751 751 751 751 751	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ/9Q5 7G1A EL4A 5A1TW 5R8AD CR7IZ CR7CI 5N2LKZ 5N2JKO	14 A A A A A A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 sinea, Re- 1,177,893 Libya 353,007 Madagas- 18,786 Morocc- 60,146 Mozambid 62,910	173 528 210 218 76 392 125 1536 77 654 654 12 211 2 21 17	9 50 23 63 17 46 23 79 8 76 24 19	111 85 39 1115 19 43 38 182 15 107 38 42 51 3	4X4FV 4X4FA 4X4FA 4X4FA 4X4FA 4X4UH 4X4WF JA18K JA17XL JA2AEY JA2AEY JA18FA JA18C JA16CYQ JA11FA JA16CYQ JA11FA JA1AS JA1AS JA1AS JA1AS JA1AS JA1AS JA2WB JA	0/3 M	A11473.5 AAAA	Israel 36,784 88 173,855 117,810 89 103,621 85,239 103,621 85,239 103,621 103,	143 699 567 533 84 680 637 317 208 317 208 317 105 63 416 32 33 34 34 32 33 33 34 31 31 31 31 31 31 31 31 31 31 31 31 31	26 13 29 20 7 7 1 64 3 5 5 6 4 4 3 5 5 6 4 4 3 5 5 6 6 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	52 31 80 57 26 98 89 7 75 58 60 42 22 35 27 51 82 22 32 21 91 17 91 17 19 19 19 19 19 19 19 19 19 19 19 19 19
W7YY 14 W7PCS 16 K7MVR 16 W7PCS 17 W7CAB 17 W7CAB 17 W7CAB 18 W7DLR 18 W7DL	85,284 59,073 16,200 7680 5400 3584 3584 3584 103,125 46,368 33,109 25,452 17,460 12,444 23,857 20,860 12,139 5880 36,869 82,121 1150 240 11,520 2451 1419 240 28,314 17,152 28,314 17,152 28,314 17,152 28,314 17,152 28,314 17,152 31,950 28,314 17,152 28,314 17,152 31,950 28,314 17,152 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,763 31,950 31,9	288 203 69 49 45 388 17 13 297 151 104 9113 755 4 117 106 20 225 45 24 222 8 142 216 105 399 138 108	33 220 160 105 105 105 105 105 105 105 105 105 10	708 634 245 186 9 3 847 766 602 533 552 489 388 265 753 125 272 217 751 533 284 403 339 243 403 403 403 403 403 403 403 403 403 4	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ / 9Q5 7G1A EL4A 5A1TW SR8AD CR7IZ CR7IZ CR7CI	14 A A A A A A A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 ongo, Rer 95,230 20,374 ainea, Rer 1,177,893 Liberia 5313 Libya 353,007 Madagas-18,786 Morocco-60,146 Mor	173 528 210 218 76 392 125 77 654 211 1282 31 238 31 238	9 50 23 63 17 46 23 79 8 76 24 19	11 85 39 115 19 43 38 182 15 107 38 42 51 3	4X4FV 4X4MJ 4X4FA 4X4DH 4X4WF JA19KL JA2AEY JA3ACKI JA3ETA JA3ETA JA3ETA JA3ETA JA3ETA JA1EA JA1	0/3 M	A11473.5 AAAA	Israel 36,784 88 173,855 117,810 89 120,20 103,621 85,239 60,390 54,705 10,824 9945 7350 6868 6273 212,79 1200 620 103,000 103,000 103,000 103,000 103,000 103,000 9850 7056 6560 6668	143 567 533 84 680 637 317 2253 2208 317 105 743 652 323 349 323 323 323 324 311 116 634 317 317 317 317 317 317 317 317 317 317	263 29 20 7 71 643 556 443 556 443 556 122 20 189 187 133 1153 126 110 642 22 22 117 13 119 62 12 12 12 12 12 12 12 12 12 12 12 12 12	52 31 80 57 26 98 89 7 75 58 60 42 82 35 27 51 82 22 30 11 7 12 10 10 11 11 11 11 11 11 11 11 11 11 11
W7YY 14 W7PCS 14 W7PCS 14 W7PCS 15 K7MYR 16 W7DLR 16 W7DLR 17 K7CAD 3.5 K7EKD 1.8 W8JIN A K8RMK 16 W8JIN 17 W8KSR 16 W8JIN 17 W8KSR 17 W8KIA 17 W8KIA 17 W8WHM 17 W8KIA 17 W8VSK 17 W8V	85,284 59,073 16,200 7680 5400 3584 3584 3584 103,125 46,368 33,109 225,452 17,460 12,444 23,857 20,860 12,139 5880 36,869 18,251 150 2451 1419 240 28,314 17,152 28,314 17,152 28,314 17,152 48,510 28,314 17,152 2451 2410 31,950 28,314 17,152 2451 31,950 28,314 17,152 2451 31,950 2451 31,769 71,390 57,873 40,388 71,390 57,873 40,388 22,436 5922 48,510 30,324 24,948	288 203 699 45 388 17 13 297 111 104 9113 75 4 117 107 4 117 107 4 117 332 225 45 242 22 8 142 21 888 97 22 131 105 49 399 113 319	33 220 160 105 105 105 105 105 105 105 105 105 10	708 634 245 186 93 847 766 602 533 535 248 489 388 655 751 533 295 533 295 533 295 403 403 403 403 403 403 403 403	FABRJ FABRJ CR6DA 9Q5AAA SM5ARQ/9Q5 7G1A EL4A 5A1TW 5R8AD CR7IZ CR7CI 5N2LKZ 5N2JKO	14 A A C A A C A A A A A A A A A A A A A	3880 Puerto Ric 85,995 12,636 Africo Algeria 110,894 Angola 7560 congo, Rer 95,230 20,374 ainea, Rer 1,177,893 Liberia 5313 Libya 353,007 Madagasi 18,786 Morocc 60,146 Mozambio 432 Nigeria 77,155 437,338 1 32,793	173 528 210 218 218 76 392 125 125 128 218 218 218 218 218 218 218 218 218	9 50 23 63 17 46 23 79 8 76 24 19 39 5 63 19	111 85 39 115 19 43 38 182 15 107 38 42 142 140 32	4X4FV 4X4FA 4X4FA 4X4FA 4X4FA 4X4WF JA18EA JA19EA JA2EA JA3EEA JA3EEA JA3EEA JA3EEA JA3EEA JA3EEA JA3EEA JA3EEA JA3EEA JA3EEA JA3EA	20/3 20/3 3	A11473.5 AAAA A A A A A A A A A A A A A A A A	Israel 36,784 88 173,855 117,810 88 193,855 117,810 89 193,621 85,239 12,799 12	143 567 533 84 680 637 317 2253 2217 105 635 640 317 323 341 323 349 326 333 349 326 333 349 326 333 349 349 349 349 349 349 349 349 349	26 139 20 7 714 643 561 443 639 1 125 169 213 220 189 187 133 115 126 116 624 229 173 119 119 119 119 119 119 119 119 119 11	62 31 80 57 6 98 89 7 75 8 66 00 2 2 3 5 7 5 8 66 00 2 2 3 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 8 66 00 2 2 5 7 5 7 5 8 66 00 2 2 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7

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JA1FTE JAØHC JA2JW JA1BLC JA2JW JA1BLC JA2JW JA1FQ JA2DN JA5AI JA3CUK JA1MJ JA8GR JA1CG JA1MJ JA8GR JA2XW JA3AI JA2AIR JA2XW JA3AIR JA2XW JA6BCV JA7WB JA6PA JA7WB JA5AI JA7WB JA5AC JA1DUH JA7EZ JA6AC JA1DUH JA7EZ JA6AC JA1DUH JA1EL JA1DUH JA5AC JA1DUH JA1C JA1CUW JA1CV	44 44 44 44 44 44	1640 92,988 4 54,600 129,450 26,448 223,312 20,915 115,561 116,527 116	45 56 50 50 48 22 35	21	544 30 327 391 225 28 120 200 200 208 106 103	
		194,098				
			039	30	′′	
HM1AP HM4AQ	A 14	Korea 1428 20,645	62 225	7 17	10 20	
KR6LJ	A	Ryukyu Is 280,368	559	81	127	
VS1KF VS1JY	21 14	Singapore 3276 8848	54 93	16 18	20 38	
HS1R	A	Thailand 50,295	229	43	61	
UA9WL UA8AG UA8JU UA8TN UA8UH UA8SL UA9SS UA9DN UA8SB UA9OB UA9CE UA9XG UA9BZ	A	U.S.S.R. Asiatic 95,142 92,127 24,420 10,458 8625 7955 13,452 2739 274,412 28,594 15,680 1863 1134 14,063	359 317 249 145 175 106 105 35 815 217 121 57 23 131	26 40 20 16 10 20 18 16 34 17 12 11	77 83 24 26 15 23 41 17 90 40 39 11 16 32	
UG6AW	A	Armenia 72,297	284	19	68	
UD6AM	A	Zerbaijan 28,875	143	24	53	



EP2BB—After a poor Phone week-end Bill ran up a respectable score in the C.W. section. This in spite of a broken rotator and a temporary illness during the contest.

UL7FA A UL7HB '' UL7CH '1 UL7HV 14 UM8AT 14 UJ8AK 14	Kazakh 121,950 38,852 17,955 232 Kirghiz 4270 Tadzhik 752	325 172 121 13 57	51 32 20 4 14	99 56 37 4 21	OK2OU " 814 39 6 OK3DG 3.5 18,300 341 10 OK1ZA " 7749 212 8 OK1PG " 6498 177 8 OK1KKJ " 3684 128 4 OK3CAF " 760 52 4	16 40 33 32 28 15 12 7 5 6 3
0E1RZ A 0E3WB 14 0E1W0 7 0N5AG A 0N4AD 4 0N4CE 21	Austria 141,882 7224 4448 Belgium 15,939 8,265 720 Bulgaria	277 137 116 122 112 26	66 11 7 29 16 7	148 32 25 40 41 9	OZ5MF " 15,714 125 30 6 OZ3CF " 14,170 147 17 OZ3LI " 2158 77 10 1 OZ6HS " 1218 28 12 1 OZ7G 21 8398 82 15 2 OZ3Y " 4158 49 15 2 OZ3Y " 4158 49 15 2 OZ5DX 14 9786 114 15 OZ9N " 7473 89 14	58 67 48 16 17 23 27 27
LZ1CW 21	18,915 Crete 36,378	166 321	21 24	44 70	0Z7KV " 1705 34 10 2 0Z5WJ " 1007 36 6 1 0Z1GW 7 12 3 2	23 21 15 2
OK1ZL A OK2GR A OK2GR A OK3AL " OK2YL " OK2YL " OK1JX " OK1JX " OK1RX " OK1RX " OK1RX " OK1RX " OK1RY " OK1EV " OK1EV " OK1EJ " OK1EJ " OK1BMW 14 OK1KJ " OK2KGZ " OK2KGZ "	echoslova 236,210 92,798 83,433 79,790 44,354 39,160 27,930 16,880 10,836 4928 56,595 36,360 26,163 18,090 29,896 27,805 12,392 11,913 10,965	506 379 515 313 205 199 363 194 165 158 775 167 119 211 168 129	72 47 29 44 47 40 25 28 21 27 15 18	158 116 108 110 111 94 85 67 48 40 59 63 64 32 56 33 37	G3KHT " 38,065 179 46 6 G3HZL " 23,214 155 31 7 G3HZY " 11,356 101 24 4 G3MWZ " 768 22 10 1 G3PEU 21 22,656 168 22 4 G3O1Z " 8010 37 15 3 G4CP 14 131,145 502 33 7 G2AJB " 18,304 202 13 3 G3POG " 9660 183 9 2 G2HDR " 1848 38 10 1 G3WP " 1140 35 8 2 G3HZY " 19,604 257 14 4 G3ESF " 15,848 200 13 4 G8DI " 3193 95 6 G8IVI 3.5 3128 91 6 2	89544820296722455
OK2BBC " OK2ABU " OK1AVD " OK1NH " OK1KM 7 OK1GA " OK1FV " OK1GA " OK1GA " OK1GA " OK1GA " OK1GA " OK1GA " OK2GBN " OK2CBBI "	51,282 37,765 15,390 15,128 9050 9018 6952	132 98 34 23 553 462 370 231 206 137 189 134 173	11 7 10 6 19 19 24 14 16 12 10 10	26 25 9 13 53 58 59 43 45 38 34 35 32	OH2FS A 92,368 323 47 13 OH2BZ A 61,502 274 44 11' OH7OU 442,826 173 41 99 OH9NV 31,312 168 31 72 OH1VA 26,500 203 24 86 OH2SF 19,749 163 24 66 OH7NW 18,139 133 31 86 OH3PF 6669 67 20 33 OH2SB 45 6669 67 20 33 OH2SB 45 6669 67 20 33 OH2SB 45 6669 67 20 33 OH2SB 46 6669 67 20 33 OH2SB 47 68 68 92 15 34 OH2A 48 2832 35 18 34 OH2YL 1851 41 11 26	7 2 2 2 3 6 7 6 6 0

OH2CD " OH5TM " OH3PC " OH3PC " OH2BH 21 OH5RZ " OH2BF " OH2BK " OH2BF " OH3PC " OH3PG " OH3PG " OH3PG " OH3PG " OH3PH " OH4PC " OH3PH " OH5PG " OH7PF 7 OH2BQ " OH7PG " OH7PG " OH7PG " OH5PG	5500 2480 1058 20,952 16,848 10,672 9400 7225 3745 1034 893 25 24,339 10,863 2020 338 266	29 10 12 6 12 5 143 22 772 14 48 10 25 4 4158 22 203 17 131 131 131 154 12 773 17 773 17 5 5 5 2 280 16 179 27 3 3 19 4 4 3 172 4	21 110 97 536 216 507 37 45 42 27 47 47 48 210 33 21	DL3OJ	13,041 12,726 8418 6218 6218 6218 960 629 544 160 42,886 22,751 16,705 4480 15,105 4480 15,792 22,140 10,746 7728 7380	130 94 107 66 59 47 22 15 49 127 111 116 51 236 296 112 75 137 119 75 138	18 23 23 21 12 16 6 31 26 21 20 20 20 21 22 15 12 24 15 12 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	51 788 382 302 105 51 51 51 527 618 303 303 903 903 903 903 903 903 903 903	
F8TM A F90Q " F2PO " F3PK " F2QH " F8VO " F2AS " F9BB " F2SQ 21 F8HO "	37,620 29,029	377 54 196 30 184 22 148 28 83 17 37 15 60 10 52 9 36 8 14 2	110 60 69 50 26 19 23 24 16	D17JV " DL9YC " D17JW 7 D12AA " D15JH " D18DF " DM3KB " DM3KB " DM3KB " DM2BDN " DM2BDN " D13WE 3.5 D12SX "	774 48,516 42,300 7050 1800 576 295 140 17,028	25 365 334 99 45 36 19 12 366 114	5 19 18 11 8 4 4 4 8 5	13 59 57 36 17 12 11 6 36	
DJ3KR A DJ1PN A DJ2HH A DJ21B '' DL1JF '' DJ4DN '' DJ6LV ''	167,904 113,826 112,726 108,150 102,758 71,980	440 77 417 55 358 55 323 50 282 58 311 59 354 38	158 143 128 107 117 132 80	DL5HI A DL5DU 14 DL4DZ 14 DL4DO 1 DL5DJ 3.5	304,644 40,250 67,680 627 720 Gibralter 43,193	639 165 373 27 40	67 39 26 6 3	145 76 54 13 15	
DL7BQ DL7BK DL7BK DJ5BVA DJ5BVA DL7CW DL7CW DL7CW DL7CW DL7CW DL7CW DM2ATL DM2ATL DL8BS DJ2II DJ2BO DJ4VO DM3EL DM2BCN DM2BCN DM2BCN DJ1UE	62,752 61,056 58,362 51,975 47,012 34,902 34,650 33,855 26,980 24,570 24,115	292 41 216 45 189 49 324 33 340 30 176 45 166 37 195 31 194 19 196 32 175 23 194 19 196 22 175 23 194 19 1940 21 1940 21 1940 21 1940 21	95 103 1104 75 101 89 79 79 53 46 71 65 58 42 46 67	SVØWB	Greece 4590 Hungary 23,465 22,016 12,580 8967 8136 5974 5537 5400 63 3900 893 2068	200 222 133 135 106 81 107 104 6 71 47 96	29 20 18 15 22 20 15 14 3 11	32 66 66 50 46 50 38 40 5 29 14	

17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	41
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THE THAT THE	
RHADES	

SVØWI/R—The rig that was used for a limited period on 14 & 7 mc during the first day of the contest.

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TF3AB A	Icelαnd 40,734	234	19	5 4
TF2WGA 14	13,631	152	12	31
E15AJ 14	Ireland 59,708	430	17	42
11TEB A 11ZCN 3.5	Italy 24,360 5,449	149 180	34 5	71 26
ZB1HC 21	Malta 65,807	418	23	56
DAGTAN A	Tetherland 176,800	ls 386	61	147
PAØPN "	83.390	386 263	54 32	101 72
PAØVDV "	35,568 35,160	222 200	34	86
PAØYN "	13,056 7446	115 73 43	20 16	44 18
PAØPAN "	4181 10,992	43 1 01	14 18	23 30
PAØNIR "	5434	77 243	13 20	25 57
PAGATY "	47,090 12,558 6556	160	12	34
PAØBEA " PAØLV 3.5	6556 12,005	99 339	11 5	33 30
GI3IVJ No	rthern Irel 127,980	and 437	50	130
G131VJ A		437	ου	130
LATEE A	Norway 31,920	212	27	43
LAGU " LASPH " LA4LG " LA2B " LA9KF " LA6VC 14 LA7JF " LA2Q "	17,226 10,797	112 139	25 17	62 44
LA4LG " LA2B "	4539 3218	60 29	17 22	34 20
LA9KF "	240 42,750	20	17	9
LA6VC 14 LA7JF "	42,750 21,750	361 212	15	33 34
LA2Q " LA4ZB 7	21,750 3060 1207	106 7 5	ŧ	22 13
LA4KC 3.5	1316	47	5	23
	Poland	400		400
SPGFZ A SPGAAT A	149,145 112,578	409 354	57 50 29	126 124
SP5ADZ "	52 625	354 320 252	31	96 86
	23,621 20,099	200 149	23 29	56 72
SP3KKJ "	17,524 11,480	243	12	40
SP5GX "	9880	84 81	28 20	42 45
SP2GS " SP9DN "	7434	106 104	16 19	39 45
SP9RJ "	3400	100	9	25
SP2TG "	1440	56 40	11	22 22
SP3PK " SP5AIB "	20	18 4	11 2	13 3
SP8JA 21	41,100	226 121	25 22	50 37
00000	12,700	86	22	40
SP5BR "SP6LB "	11,703 990	94 23	9	32 9
SP4JF 14	38,786 33,288	305 263	27 24	59 49
31 303	33,288 25,840	263 200 78	24 24	56 38
SP9UH "	4200	101	17	38 35
3F3H1	760	74 36 31	6 7	18 12
SP4AEQ 7		405	5 19	11 55
SP5ZA 7 SP7JX 1	25,004	238 236 282	20 14	56 51
SP8MJ "	20.414	282	13	46 50
SP2CO SP1ADM	11.0/4	255 202	14 10	39
SP3HC '	6320	117 144	11	38 32
SP9KJ	5650	144 57 108	16 9	34
SP5ALI "	3600	70 112	9	35 27
SP8AJK 'SP9ALG '	3264	93	7	26 25
SP5AHW 'SP3AKA 'SP7QO 'SP5AHZ '	2424	93 71 100	7 4	25 25 20
SP700 *	2108	51 16 25 3	7	24
SP51A 3.5	11.825	253	5 7 7 4 7 4 9 5 4	34
SP6TQ "	5088 1976	151 76	4	27 22
SP8HR '	846	47 41	4	14 13
SI VILIMA	037	7.4	•	

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SVØWI/R A	Rhodes 3960 Roumani	87 iα		28	HB9MC HB9QA HB9MC) 	11	53,064 32,640 22,616	279 221 162	39 31		UB5WF UB5FJ UB5PG	. "	315,060 41.810	901 751	68
Y02BU A Y02BB A Y06XI '' Y02KAB '' Y06AW '' Y04KCA ''	119,572 70,140 42,895 37,595 34,272 16,660	347 329 227 222 167	29 27 30	122 100 86 76 82 48	HB9JG		21 14	13,685 3375 14,344 4300 2142	38 129 67 41	8 14 11 9		UB5ZE UB5NS UB5MZ UB5NQ	. 14	15,477 3486 37,410 2856	161 65 290 103	16 11
Y02KAC Y09WL Y08ME Y02CD Y09IA 14	15,280 15,150 2880 2730 14,160	200 137 90 35 164	18 27 7 16	54 48 25 26 45	GW3JI			3567 Wales 171,384		-	112	UC2WP	21 14	32,800	89 204 521 138	17 25 36 17
Y03FN " Y08CF " Y02CJ " Y03LM 7 Y02FU 7	12,644 3636 874 40,300 10,580	147 69 44 472 186	16 8 4 15	42 28 15 50 36	YU1AG YU3AB YU3WP YU1AH YU1SF	C	A	25,056	300 285 130 285	15 14	89 77 42 44	UC2CS		3000	115	6
Y09CN " Y08DD "	9936 9503	157 168	13	33	10131			2064	103	4	20		C)cean		
Y08MG "	9030	192	8 7	35 36				U.S.S.R. European				VK2GW	А	Australia 237,276		67
Y03AC "	4828 4428	121 77	7 12	27 29	UA1DH UA1CE		Ą	69,905	301	48	107	VK2ADE	- "	5520 27,805	40	18
Y02CY " Y03RR "	2790 2430	134 63	7	24 24	UA4QA		A	69,20 1 52,668	386 270	29 36	70 97	VK3RJ	. А	19,964	137 92	27 38
YD9HH "	2158	63	6	20	UA3LI UA1CC		44	51,414 49,300	341 276	30 31	84 85	VK3AH1 VK3ADB	14	97,152 78,588	368 448	31 24
Y09HE "	1250 1100	42 44	7	18 18	UW3ME UA1CI		44	39,015 22,841	265 163	29 27	56	VK4FH VK4SD	14	6336 2590	76 32	11 12
Y04CT "	624 390	23 26	7	17 11	UA3RX	****	4	6670	112	13	64 33	VK4XW	. ?	3652	63	9
Y05AF " Y09IG "	323 48	15 6	5 3	12 5	UA1FJ UA6BU		**	6106 4655	110 77	13 12	30 37	VK5JS	14	3834 19,380	60 123	14 21
		-	3	3	UA3SC UA3YI		21	3822 23,716	48 170	15 22	34 55	VK5RX VK6RU	A	10,166 69,250	77 201	17 48
GM3FJP A	Scotland 11,700	127	18	32	UA1MA UA4PA		14	1352 52,224	40 258	8 26	18 70	VK6SM VK7SM	A	64,372 104,500	200 317	52 51
GM3JDR 14	37,737	364	19	44	UASTZ		7.	29,250	252	21	54					31
ITITAL A	Sicily 85,008	298	46	115			41	15,235 8404	151 120	15 10	40 34	ZK1AR	A	ook Islan 106,151		44
IT1TAI A IT1AGA 7	12,716	206	22	67	UA1DF UA3GH		41	6625 3354	72 40	15 12	38 27		1	Fiji Island	ls	
F10111 04	Spain				UA1DZ UA6FL		7.	68,400 9360	512 147	25 9	65 36	VR2DK	A	44,733	213	40
EA3IH 21 EA2CR "	26,208 2496	232	18 7	45	UASXN		"	6512	138	9	28	KH61J		Hawaii	1220	82
		62	,	17	HACDE											
		62	,	17	UA6BE UA301		#4	840 234	36 22	6 5	15 8	KH6DMW	4.4	791,840 29,744	182	29
SM5BPJ A	Sweden 374,949	911	67	176	UA6BE		#4						14			
SM5CCE A SM7ID "	Sweden 374,949 80,542 56,700	911 315 240	67 50 41	176 104 109	UA6BE UA301 UA4PW	 3	.5	234 4576 Estonia	127 127	5	2 ⁸	KH6DMW KH6DLF	14	29,744 205,816 39,123	182 728 264	29 35
SM5CCE A SM7ID " SM3VE " SM6CMU "	Sweden 374,949 80,542 56,700 47,064 15,984	911 315 240 243 214	67 50 41 41 16	176 104 109 107 56	UAGBE UA301 UA4PW UR2AT UR2BU	3	.5 A 21	234 4576 Estonia 76,881 6116	127 127 340 62	5 5 40 16	27 107 28	KH6DMW KH6DLF KH6BCX	14 N N	29,744 205,816 39,123 etherlandew Guine	182 728 264 ds	29 35 24
SM5CCE A SM7ID '' SM3VE '' SM6CMU '' SM6SV '' SM6ARH	Sweden 374,949 80,542 56,700 47,064	911 315 240 243	67 50 41 41	176 104 109 107 56 46	UA6BE UA301 UA4PW	3	.5 A 21	234 4576 Estonia 76,881 6116 39,692	127 340	5 5 40	27 107	KH6DMW KH6DLF	14 N N 14	29,744 205,816 39,123 etherland rew Guint 7296	182 728 264 ds 	29 35
SM5CCE A SM7ID	Sweden 374,949 80,542 56,700 47,064 15,984 11,584 11,304 11,242	911 315 240 243 214 140 120 131	67 50 41 41 16 18 22 21	176 104 109 107 56 46 50	UA4PW UR2AT UR2BU UR2AO	3	.5 A 21 14	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540	22 127 340 62 299	5 5 40 16 19	27 107 28	KH6DMW KH6DLF KH6BCX	14 N N 14 N	29,744 205,816 39,123 etherlandew Guine	182 728 264 ds 	29 35 24
SM5CCE SM71D " SM3VE " SM6CMU " SM6SV " SM6ARH " SM5CZK " SM5BIM " SM5IIO "	Sweden 374,949 80,542 56,700 47,064 15,984 11,584 11,304 11,242 9159 8856	911 315 240 243 214 140 120 131 99 143	67 50 41 41 16 18 22 21 21 16	176 104 109 107 56 46 50 56 50 38	UA4PW UR2AT UR2BU UR2AO UQ2KBA	s	.5 A 21 14	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888	22 127 340 62 299 460 424	5 5 40 16 19 46 24	8 27 107 28 49 126 73	KH6DMW KH6DLF KH6BCX JZØML ZL1NG	14 N N 14 N	29,744 205,816 39,123 etherland lew Guin 7296 ew Zeala 125,646 91,866	182 728 264 ds 54 nd 348 293	29 35 24 14 59 52
SM5CCE A SM7ID " SM9VE " SM6CMU " SM6SCW " SM5CZK " SM5EIM " SM5BIM " SM5UQ " SM5CW " SM5CW "	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336	911 315 240 243 214 140 120 131 99 143 72 73	67 50 41 41 16 18 22 21 21 16 19	176 104 109 107 56 46 50 556 50 38 29 41	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2BP UQ2BA	3	.5 A 21 14	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888 18,722 14,112	340 62 299 460 424 179 168	5 5 40 16 19 46 24 26 17	107 28 49 126 73 48 55	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL4BO ZL2GS ZL2AWJ	14 N N 14 N	29,744 205,816 39,123 etherland rew Guind 7296 ew Zeala 125,646 91,866 22,607 52,560	182 728 264 ds 54 nd 348 293 177 225	29 35 24 14 59 52 19 31
SM5CCE A SM7ID	Sweden 374,949 80,542 56,700 47,064 15,984 11,584 11,242 9159 8556 7920 7336 5088 3375	911 315 240 243 214 140 120 131 99 143 72 73 104 33	67 50 41 41 16 18 22 21 21 16 19 15 10	176 104 109 107 56 46 50 56 50 38 29	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP	3	.5 A 21 14 A	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888 18,722 14,112 5016	340 62 299 460 424 179 168 123	5 5 40 16 19 46 24 26	8 27 107 28 49 126 73 48	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS	14 N N 14 N A 21	29,744 205,816 39,123 etherland few Guint 7296 ew Zealaa 125,646 91,866 22,607 52,560 44,400	182 728 264 ds 54 nd 348 293 177 225 223	29 35 24 14 59 52 19
SM5CCE A SM71D " SM3VE " SM6CMU " SM6SY " SM6ARH " SM5CZK " SM5ECW " SM6CWP " SM5ACM " SM6JY " SM6JY " SM6JY " SM5ACW " SM5ACW " SM5ACW " SM5ACW " SM5ACW "	Sweden 374,949 80,542 56,700 47,064 15,984 11,584 11,242 9159 8856 7920 7336 5088 3375 1410	911 315 240 243 214 140 120 131 99 143 72 73 104 33 50	67 50 41 41 16 18 22 21 21 16 19 15 10	176 104 109 107 56 46 50 56 50 38 29 41 38 26 23	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2BP UQ2BA	3	.5 A 21 14 A	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888 18,722 14,112	340 62 299 460 424 179 168 123	5 5 40 16 19 46 24 26 17	107 28 49 126 73 48 55	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL4BO ZL2GS ZL2AWJ	14 N N 14 N A 21 14	29,744 205,816 39,123 etherland rew Guind 7296 ew Zeala 125,646 91,866 22,607 52,560	182 728 264 ds 54 nd 348 293 177 225 223	29 35 24 14 59 52 19 31
SM5CCE A SM7ID SM3VE SM6CMU SM6SV SM6ARH SM5CZK SM5DQ SM5UQ SM6CWP SM6DWP SM6CWP SM6DWP SM6CWP SM6DWP SM6DWP SM6DWP SM6DWP SM6DWP	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 5088 3375 1410 1000 651	911 315 240 243 214 140 120 131 72 73 104 33 50 38 15	67 50 41 41 16 18 22 21 21 16 19 15 10 19	176 104 109 107 56 46 50 38 29 41 38 26 23 16	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	s	1.5 A 21 14 A	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 24 26 17 9	107 28 49 126 73 48 55 24	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2ES ZL2AWJ ZL4LB VK5XK/VK9	14 N N 14 N A 21 14 N A W	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 91,866 22,607 52,560 44,400 orfolk Isla 7052	182 728 264 ds 	29 35 24 14 59 52 19 31 23
SM5CCE A SM71D " SM3VE " SM6CMU " SM6SV " SM6ARH " SM5CZK " SM5EIM " SM5CW " SM6ACW " SM6ACW " SM6ACW " SM5ACW "	Sweden 374,949 80,542 56,700 47,064 15,984 11,304 21,304 21,304 3375 1410 100 651 588 3375 1410	911 315 240 243 214 140 120 131 99 143 72 73 104 33 50 38 15 20	67 50 41 41 16 18 22 21 119 15 10 19 7 9 10 57	176 104 109 107 56 46 50 56 50 38 29 41 38 26 23 16 11	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2BP UQ2BA UQ2CO	s	1.5 A 21 14 A	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 24 26 17 9	107 28 49 126 73 48 55 24	JZØML ZL1NG ZL4B0 ZL2AWJ ZL4LB	14 N N 14 N A 21 14 N A W	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 91,866 22,607 52,560 44,400 orfolk Isla 7052	182 728 264 ds 	29 35 24 14 59 52 19 31 23
SM5CCE A SM71D " SM3VE " SM6CMU " SM6SY " SM6ARH " SM5CZK " SM5BIM " SM5UQ " SM6CWP " SM5ACM " SM6CY " SM5ACM " SM6CY " SM5ACQ " SM5ACQ " SM5ACQ " SM5ACQ " SM5ACQ " SM5BHW " SM5US " SM5BHW "	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 7920 7336 1000 651 588 38,52 123,522	911 315 240 243 214 120 131 99 143 72 73 104 33 50 38 15 31 20 172 113	67 50 41 16 18 22 21 16 19 15 10 5 7 25 19	176 104 109 107 56 46 50 58 29 41 38 26 23 16 11 16 15 56	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	s	1.5 A 21 14 A	234 4576 Estonia 76,881 6116 39,692 Latvia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 24 26 17 9	107 28 49 126 73 48 55 24	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2ES ZL2AWJ ZL4LB VK5XK/VK9	14 N N 14 N A 21 14 N A W	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 91,866 22,607 52,560 44,400 orfolk Isla 7052	182 728 264 ds 	29 35 24 14 59 52 19 31 23
SM5CCE A SM7ID " SM6CMU " SM6CWU " SM6SV " SM6SCX " SM5CZK " SM5UQ " SM5UQ " SM6CWP " SM5UQ " SM6CWP " SM6CW " SM6CW " SM6CW " SM6Y " SM6Y " SM5V " SM5SEW " SM5US "	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 7920 7336 1000 651 588 38,502 28,512 13,328 1624 17,304	911 315 240 243 214 140 120 131 72 73 104 33 50 38 15 31 20 172 113 22	67 50 41 16 18 22 11 16 19 7 9 10 5 7 25 19 12	176 104 109 107 56 46 50 58 29 41 38 26 23 16 11 16	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2ES ZL2AWJ ZL4LB VK5XK/VK9	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7JD " SM7JD " SM8JVE " SM6CMU " SM6SY " SM6ARH " SM5CZK " SM5BIM " SM5CZK " SM5BIM " SM5CWP " SM5ACM " SM6JY " SM5ACW " SM5BHW " SM5ACW " SM5BHW " SM5BHW " SM5BHW " SM5BUS " SM5BHW " SM5BHW " SM5BHW " SM5BHW " SM5BCQW " SM5BHW " SM5BCQW " SM5BHW " SM5CQW " SM5BCQW " SM5CQW "	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 7920 7336 1000 651 588 38,502 28,512 13,328 1624 17,304	911 315 240 243 140 120 131 143 72 73 104 33 50 38 15 31 20 113 22 21 113 22 23 18 33	67 50 41 16 18 22 11 16 19 7 9 10 5 7 25 19 12	176 104 109 107 56 50 38 24 138 23 16 11 56 11 57 77 42 41	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM710 " SM3VE " SM6CMU " SM6SY " SM6ARH " SM5CZK " SM5BIM " SM5CZK " SM5BIM " SM5CWP " SM5ACM " SM6CWP " SM5ACW " SM5ACQ " SM5ACQ " SM5BHW " SM5US " SM5BHW " SM5CAW " SM5BHW " SM5CAW " SM5BHW " SM5CAW " SM5CAW " SM5CAW " SM5CAW " SM5CAW " SM5CAW " SM5ACU "	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 598 3375 1410 651 588 360 28,512 13,328 1624 17,304 11,290 9516	911 315 240 243 140 120 131 99 143 72 73 104 33 104 33 15 20 172 122 239 183 138 138 131	67 50 41 41 41 11 11 11 11 11 11 11 11 11 11	176 104 107 566 550 38 29 138 263 161 116 116 116 116 116 117 117 117 117	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM71D " SM3VE " SM6CMU " SM6SY " SM6ARH " SM5CZK " SM5BIM " SM5UQ " SM6CWP " SM5ACM " SM6Y " SM6Y " SM5ACQ " SM6Y " SM5ACQ " SM5BHW " SM5ACQ " SM5BHW " SM5SHW " SM5SHW " SM5SHW " SM5BHW " SM5BHW " SM5BHW " SM5BHW " SM5CAW " SM5BHW " SM5CAW " SM5AHL "	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 651 1000 651 588 360 28,512 13,328 1624 17,304 11,900 9516 8580 306	911 315 240 214 140 131 99 143 72 73 38 15 31 104 33 50 172 22 239 183 131 118	67 50 41 416 18 221 216 19 10 7 9 10 5 7 5 7 10 11 11 11 11 11 11 11 11 11 11 11 11	176 104 107 56 50 550 38 29 41 38 223 16 11 16 15 42 43 43 43 43 43 43 43 43 43 43 43 43 43	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7ID	Sweden 374,949 80,542 56,700 47,064 15,984 11,584 11,242 9159 8856 7920 7336 3375 1410 000 651 1000 651 13,328 1624 17,304 11,900 11,200 11,200 306 21,516 856 856 21,516 856 856 856 867 868 868 868 868 868 868 868 868 86	911 315 240 214 140 131 120 131 143 72 73 104 33 104 33 113 22 239 131 113 22 239 131 118 141 120 131 143 143 144 145 145 145 145 145 145 145 145 145	67 50 41 41 41 41 41 41 41 41 41 41	176 104 107 566 50 50 389 41 386 23 41 16 567 17 42 41 39 57 47	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7ID " SM8CMU " SM8CMU " SM6CMU " SM6ARH " SM5CZK " SM5LQ " SM6ARH " SM5CZK " SM5ACM " SM6JY " SM5ACQ " SM5ACQ " SM5ACW " SM5ACQ " SM5CQ " SM5C	Sweden 374,949 80,542 56,700 47,064 15,984 11,394 11,394 11,242 9159 8508 3375 1000 611 588 3375 11,200 1000 611 11,200 9516 8580 362 11,200 9516 8580 306 21,510 6248	911 315 240 243 214 120 131 199 143 773 104 33 50 8 15 31 20 172 239 183 138 131 18 141 18 24 18 24 24 36 37 37 37 37 37 37 37 37 37 37 37 37 37	670 411 162 221 197 105 775 112 114 117 118 119 119 119 119 119 119 119 119 119	176 104 107 566 50 50 389 41 386 23 41 16 567 17 42 41 39 57 47	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7ID " SM3VE " SM6CMU " SM6SV " SM6ARH " SM5CZK " SM5BIM " SM5UQ " SM6CWP " SM5ACM " SM6CY " SM5ACQ " SM5ACQ " SM5ACQ " SM5BHW " SM5US " SM5BHW " SM5US " SM5BHW " SM5BHW " SM5BHW " SM5CAW " SM5BHW " SM5BHW " SM5CAW " SM5BHW " SM5BHW " SM5BHW " SM5ACQ " SM5CAW " SM5BHW " SM5ALD " SM5CAW " SM5ALD " SM5CAW " SM5ALD " SM5CAW " SM5ALD " SM5CAW " SM5ALD " SM5CEQ 14 SM5CAW " SM5ALD " SM5A	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 611 1000 6518 3375 1410 9516 88,512 13,328 1624 17,304 11,290 9516 858 306 21,514 7910 6405 6248	911 315 240 243 214	670 411 162 221 197 105 775 112 114 117 118 119 119 119 119 119 119 119 119 119	176 104 107 566 50 50 389 41 386 23 41 16 567 17 42 41 39 57 47	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7ID	Sweden 374,949 80,542 56,700 47,064 15,984 11,384 11,394 11,242 1955 8856 7920 7336 3375 1410 600 651 13,328 1624 17,304 11,290 11,200 306 21,514 6405 6405 6405 6405 6405 6405 6405 640	911 315 240 243 2140 120 120 131 99 172 73 104 33 20 20 183 131 131 131 131 131 131 131 131 131	670 411 162 221 197 105 775 112 114 117 118 119 119 119 119 119 119 119 119 119	176 104 107 107 107 56 50 50 329 41 38 26 23 21 11 16 11 16 37 17 42 43 43 43 43 43 43 43 43 43 43 43 44 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 22,607 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7ID SM6CMU SM6SV SM6CMU SM6SV SM6ARH SM5CZK SM5ACM SM5ACM SM5ACM SM5ACM SM5ACM SM5BHW SM5ACM SM5BHW SM5BHW SM5BHW SM5BHW SM5BHW SM5BHW SM5ACM SM3BBA SM5KV 21 SM5ACM SM5BHW SM5BHW SM5BHW SM5BHW SM5BHW SM5BHW SM5BHW SM5ACM SM3BHW SM5ACM SM3ATW SM5ACM SM3TW SM7AVD SM5ACM SM3TW SM5ACM SM3TW SM7AVD SM5ACM SM3ATG SM3AT	Sweden 374,949 80,542 56,700 47,064 15,984 11,394 11,394 11,242 9159 8508 3375 1000 651 5088 3375 1000 611 1,200 9516 8580 362 11,200 9516 8580 306 21,510 6408 21,910 6408 814 777	911 315 240 243 140 120 120 120 131 99 172 704 33 103 143 172 239 183 131 131 143 143 143 143 143 143 143 14	670 411 1682 221 197 105 775 112 114 117 118 119 119 119 119 119 119 119 119 119	176 104 107 107 107 56 50 50 329 41 38 26 23 21 11 16 11 16 37 17 42 43 43 43 43 43 43 43 43 43 43 43 44 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 21,866 22,807 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM71D " SM8VE " SM8CMU " SM8SV " SM6ARH " SM5CZK " SM5EUQ " SM5ACM " SM6ACM " SM5ACW " SM5ACU " SM5ACW " SM5ACW " SM5ACW " SM5ACW " SM5ACW " SM5ACW " SM5ALU " SM5BHW " SM5BHW " SM5BHW " SM5BHW " SM5BHW " SM5ALU " SM3BBA " SM5CAK " SM3ATW " SM5AHL	Sweden 374,949 80,542 56,700 47,064 11,584 11,304 11,242 9159 8856 7920 7336 611 1000 611 588 360 28,512 13,328 1624 17,304 11,900 9516 858 306 21,514 7910 6405 6248 969 10,588 969 10,588 969 11,200 9516 8856 8856 8856 8858 969 8858 8858 8858	911 315 240 243 214 40 120 120 140 131 199 143 151 120 123 183 131 118 1253 142 147 185 142 147 147 185 142 147 147 147 147 147 147 147 147 147 147	670 411 1682 221 197 105 775 112 114 117 118 119 119 119 119 119 119 119 119 119	176 104 107 107 107 56 50 50 329 41 38 26 23 21 11 16 11 16 37 17 42 43 43 43 43 43 43 43 43 43 43 43 44 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 21,866 22,807 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20
SM5CCE A SM7ID	Sweden 374,949 80,542 56,700 47,064 15,984 11,394 11,394 11,242 1955 8856 5088 3375 1000 651 11,200 28,512 13,328 1624 11,900 11,200 11,200 11,200 21,514 6405 6405 6405 6405 6405 6405 6405 640	911 315 240 243 140 120 120 120 131 99 172 704 33 103 143 172 239 183 131 131 143 143 143 143 143 143 143 14	67 50 41 41 41 41 41 41 41 41 41 41	176 104 107 566 50 50 389 41 386 23 41 16 567 17 42 41 39 57 47	UA4PW UR2AT UR2BU UR2AO UQ2AS UQ2KBA UQ2BP UQ2BP UQ2BQ UQ2BQ UQ2CO	3	1.5 A114 A:::4 A A	234 4576 Estonia 76,881 6116 39,692 Lavia 119,540 48,888 18,722 14,112 5016 Lithuania 18,800 Moldavia 8190	22 127 340 62 299 460 424 179 168 123	5 5 40 16 19 46 226 17 9	8 27 107 28 49 126 73 48 55 24 61	KH6DMW KH6DLF KH6BCX JZØML ZL1NG ZL4BO ZL2GS ZL2AWJ ZL4LB VK5XK/VK9 KW6DG	14 N N 14 N N A 21 14 N N A W A	29,744 205,816 39,123 etherland few Guint 7296 ew Zeala 125,646 21,866 22,807 52,560 44,400 orfolk Islan 841,334	182 728 264 ds ds 54 nd 348 293 177 225 223 nd 94	29 35 24 14 59 52 19 31 23 20

SM5BGB ... SM5MX

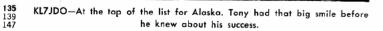
HB9NL HB9EU HB9ZY

322 24

Switzerland A 253,736 519 " 179,450 439 " 166,057 394

11

55 64





KW6DG-The big signal from out in the Pacific. Layne came mighty close to winning the All-Band Trophy. In the future he will be signing KØSLD.

Sou	th Am		α		W8NG0	76,960	235 (W8NG0	43 , K8	87 YEI)
	Argentino	274	43	63	W9YT	208,302	(K9ELT		
LU5AQ LU5ABL 1	A 74,200 4 8008		23	33			(VAEL)	, 119.	3ZK)
LUSABL I	4 0000	34	23	33					
	Page 1					Alaska			
PY1ADA	Brazil A 398,936	724	66	122	KL7BCW	90,727	659	35	56
	1 105,616		25	57	KEI DOW	30,727	(KL7B		
PY40D 1			36	91			(1/12/12	···, ·	,
PY2VB	7366		24	34		Canad	σ		
PY4#P	7 12,204		13	23	VE3BWY	30,192	112	49	62
11474	, ,,,,,,,,,					,	(VE3B)	VY. E	WY)
	Chile				VE4JB	23,460	171	23	28
CE1AD	A 262,950	611	64	86		-	(VE4	JB, 4	IMF)
	22,264		23	23					
01.201	22,204	1,0		20					
	Colombia					w			
HK7BE	A 46,276		24	22		Afric	α		
	43,125		35	34					
HK3AH	" 19,872		21	25		Kenyo			
HK7YC	" 1296		9	7	VQ4RF	431,538	711	68	145
HK1AAF 1	4 150,728	610	30	53			(VQ4RF,	DT,	DW)
	Ecuador					Asic	•		
HC1AGI	A 460,782	988	65	94		11010	•		
norman	A 400,702	300	••	54		Japan			
No	th orlands A	ntilles			JA2YAB	42,316	220	34	37
	therlands A: A 33,766		28	31		,	(Clu	b Sta	tion)
PJ2AE	A 33,700	130	20	31	KA2MA	77,988	417	26	41
		_					(K2J0Z	, кз	PAG)
ZP9AY	Paraguay A 27,880	້ານາ	21	20					
2F 5 M 1	A 27,000	232	٠.	20		audi Arc			
	••				HZ1AB	73,710	242	36	69
CX2CO	Uruguay A 856,416	1117	94	170			(W1TYQ	, W81	GCN)
	" 136,160	417	48	67					
CX1RY CX7CO	" 51,192		38	43		U.S.S.F	₹.		
CX7CO CX2BT	" 38.428	250	16	36	(lub Stat	ions		
CX1FB	" 19,971		35	28					
CX10P	" 434	19	7	7		Asiati	_		
	28 4470	55	14	16	UAGKZA	148,887	812	26	45
CX1BZ 1		30	ii	ii	UAGKZA UAGKQA	143,412	375	43	105
OMIDE	2010	-			UAØKJA	69,290	495	26	39
	Venezuel	_			UA9KOA	67 304	423	44	50
YV5DE	A 246.648	647	51	78	UA9KAG	67,304 51,378	375	37	92
YV5AGD	139,248		60	84	UAØKDA	13 452	224	19	19
YV5AK 1		178	16	25	UAØKYA	13,452 12,720	139	17	31
	1- 21,020	.,,			UAØKCA	9310	141	20	18
					UAØKKM	7480	122	16	24
					UAØKUA	7330	107	22	27
MIII.'	[I-OPE]	RAT	.O.	R	UAØKSB	3861	65	10	17
Sinal	le Tran	ısmi	tte	r		Armen			
					UGBKAA	96,733	381	23	67
IAOI	rth Am	eric	α						

		`		-	
UL7KAA UL7KBA	Kazakh 38,036 21,600	216 170	26 15	48 33	
UM8KAA UM8KAB	Kirghiz 230,202 35,510	645 293	45 21	1 02 46	
UJ8KAA	Tadzhil 239,940	536	55	125	
UHBKAA	Turkomo 70,408	m 445	31	73	
U18KAD	Uzbek 169,974 71,040	398 308	55 30	11 6 66	
	Europ	е			
	Bulgario	CII			
LZ1KSV LZ1KBA LZ1KSZ LZ1KNB LZ1KBD LZ1KDP LZ2KWR LZ2KWR	Club Stati 452,782 407,130 358,581 260,538 140,361 75,255 50,882 10,332	960 848 817 846 568 389 429 217	81 69 75 55 47 41 26	161 177 192 118 136 104 77 34	
LZ2KRS	10,332	217	8	34	
OK2KJU OK3KAB OK2KGV OK1KPR OK3KAS OK1KFG OK2KAJ OK1KSL OK2KVI OK3KHE OK2KVI OK3KHE	zechoslov Club Stati 265,306 175,392 80,660 71,724 48,762 46,964 12,986 4554 3478 1872 1775 1235	akia 650 617 363 472 310 303 291 139 68 88 95 89	61 65 48 31 39 33 7 5 11 5	157 159 100 108 90 85 36 28 28 22 21	
0Z70F	Denmar 26,010	k 271 (0270F	20	70 YH)	
OH5AC	Finland 100,082	423	46	117	
OH2AA	96,960	334	15SN, 52	140	
OH6AA	0H2) 57,912 0H6)	LP, KH 290 OP, OY	I, KK 43 (, PJ,	, SB) 84 SU)	
	German	v			
DJ2XP	267,264	587	74	182	
DLØFT		(D12)	e To	171K)	
	127,887 (DL1GV	(DJ2X 384 V HA	(P, D 50 HH	J7IK) 91 3X7	
DJ2JE	(DL1GV 88,404	(DJ2X 384 V, HA, DJ2Y 302	(P, D 50 HH, (Y, D.	J7IK) 91 3XZ, J5HL) 91	
DJ2JE	(DL1GV 88,404 (DJ2JE, 5	(DJ2X 384 V, HA, DJ2Y 302 LE, DL	(P, D 50 HH, Y, D. 48 3YQ,	J7IK) 91 3XZ, J5HL) 91 9VN) 89	
	(DL1GV 88,404 (DJ2JE, 5 59,875 (DJ4FZ 52,576	(DJ2X 384 V, HA, DJ2Y 302 LE, DL 272 Z, SO,	(P, D 50 HH, Y, D 48 3YQ, 36 5AW,	J7IK) 91 3XZ, J5HL) 91 9VN) 89 6TK)	
DJ4FZ	(DL1GV 88,404 (DJ2JE, 5 59,875 (DJ4FZ 52,576	(DJ2X) 384 V, HA, DJ2Y 302 LE, DL 272 2, SO, 152	(P, D 50 HH, Y, D 48 3YQ, 36 5AW, 39 31W,	J7IK) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV)	
DJ4FZ DLØLL	(DL1GV 88,404 (DJ2JE, 5) 59,875 (DJ4FZ 52,576 (D 31,680 (DL3Z 30,900	(DJ2X) 384 V, HA, DJ2Y 302 LE, DL 272 2, SO, 272 DJ1TT, 162 (H, 6FG	(P, D 50 HH, Y, D 48 37Q, 36 5AW, 5AW, 40 10,	J71K) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV) 70 9JJ)	
DJ4FZ DLØLL DLØIB	(DL1GV 88,404 (DJ2JE, 5) 59,875 (DJ4FZ 52,576 (D.32 30,900 (DL3Z 30,900	(DJ2X) 384 V, HA, DJ2Y 302 LE, DL, 272 C, SO, 272 DJ1TT, 162 CH, 666 27P, DJ	(P, D 50 HH, Y, D 38 39 39 31W, 40 11Y, 47	J71K) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV) 70 9JJ) 72 4AN)	
DJ4FZ DLØLL DLØIB DL9YP	(DL1GV 88,404 (DJ2JE, 5) 59,875 (DJ4FZ 52,576 (D 31,680 (DL3Z 30,900	(DJ2X) 384 V, HA, DJ2Y 302 LE, DL, 272 C, SO, 272 DJ1TT, 162 CH, 666 27P, DJ	(P, D 50 HH, Y, D 38 39 39 31W, 40 11Y, 47	J71K) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV) 70 9JJ) 72 4AN)	
DJ4FZ DLØLL DLØIB DL9YP	(DL1GV 88,404 (DJ2JE, 5 59,875 (DJ4FZ 52,576 31,680 (DL3Z 30,900 (DL5Z 115,580	(DJ2X) 384 V, HA DJ2Y 302 LE, DL 272 272 J1TT, 162 CH, 6FG 238 YPP, DJ 416 (DL4A) LU, D	(P, D 50 HH, Y, D 38 39 39 31W, 40 11Y, 47	J71K) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV) 70 9JJ) 72 4AN)	
DJ4FZ DLØLL DLØIB DL9YP	(DL1GV 88,404 (DJ2JE, 5) 59,875 (DJ4FZ 52,576 (D.32 30,900 (DL3Z 30,900	(DJ2X) 384 V, HA DJ2Y 302 LE, DL 272 272 J1TT, 162 CH, 6FG 238 YPP, DJ 416 (DL4A) LU, D	(P, D 50 HH, Y, D 38 39 39 31W, 40 11Y, 47	J71K) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV) 70 9JJ) 72 4AN)	
DJ4FZ DLØLL DLØIB DL9YP DL5BR HA1KSA HA5KFR HA3KMF	(DL1GV 88,404 (DJ2JE, 5 59,875 (DJ4F2 52,576 (DL3Z 30,900 (DL3Z 30,900 (DLSZ 115,580 Hungar Club Statt 143,934 40,560 8165	(DJ2) 384 V, HA, DJ2) 302 LE, DL 272 C, SO, 162 238 DYP, DJ 416 (DL4A) LU, D 489 130 103 nds 292	(P, D 500	J71K) 91 3XZ, J5HL) 91 9VN) 89 6TK) 85 5AV) 70 9JJ) 72 4AN) 101 11 43 48	
DJ4FZ DLØLL DLØIB DL9YP DL5BR HA1KSA HA5KFR HA3KMF HA6KVB	(DL1GV 88,404 (DJ2JE, 5 59,875 (DJ4F2 52,576 (DL32 30,900 (DL32 30,900 (DL32 40,560 Hungar Club Statt 143,934 40,560 8165 5883 Netherla	(BJ23 V, HA, DJ22 LE, DL 272 C, SO, C, S	(P, D 500	J71K) 91 3XZ, J5HL) 91N) 89 6TK) 70 9JJ) 72 4AN) 101 433 488 39	

72

Azerbaijan

Georgia 64,824 326

70,788

UD6KAB

UF6KAE

K7ADL

United States 87,500 187 68 107 (W5AZB, OSJ, OSW) 57,132 201 46 62 (K7ADL, W7TML)

Combact Ifrom page 721	Europe	Yugoslavia
Contest [from page 72]		YU3HY 131,772 496 45 113
Latvia	(DJ3JZ, 1BP, 1BZ, 4L1,	U.S.S.R. Club Stations European
UQ2KAR 15,318 204 19 50	UB5KBB1,203,350 1858 114 296	U.S.S.R.
UQ2KAX 11,625 135 17 58	(Club Station)	Club Stations
	OK1KKS 371,448 1107 71 181	European
Lithuania HP2KNP 87.616 375 40 108	(Club Station)	UA4KHW 245,100 582 64 194
UP2KNP 87,616 375 40 108 UP2KBC 72,565 381 37 78	OH1AA 370,237 743 63 170	UA1KAC 230,560 708 56 164 UA3KAB 142,550 630 55 155
UP2RBC 72,305 381 37 78	(Club Station)	UA3KAB 142,550 630 55 155 UA6KTB 113,778 366 52 137
Moldavia	G3JUL 50,400 247 40 100 (G3JUL, KGM, LOV, OLN)	UA4KYA 67,584 370 31 101
UQ5KAA 64,974 543 26 76	G30HM 26,264 180 25 42	UA3KND 58.850 310 30 77
	(G31TH, KDB, LNS, NXV,	UA3KMB 53,046 296 29 97
Ukraine	OVA, 5SS)	UA3KYA 36,844 226 35 87
UB5KAG 198,592 510 67 165 UB5KED 155,220 522 63 132		UA1KMD 29,700 220 34 65
UB5KED 155,220 522 63 132 UB5KA1 122,670 568 45 129	Poland Club Stations	UAIKIA 23,424 226 19 45 UA6KAA 22,515 182 29 66
UB5KEP 27,552 242 25 71	Club Stations	10 CFC 101 00 FC
UB5KAU 12,383 182 18 49	SP9KAD 67,832 315 45 94	UA6KAB 19,532 203 17 59
•	SP3KAU 43,575 299 31 74 SP87R 17,628 285 10 42	UADVED 10 450 010 10 50
White Russia		UA3KIB 16,280 201 19 55
UC2KAC 29,610 263 24 63	SP3KET 7548 97 17 34 SP9KDE 252 20 3 11	UA4KKU 12,505 152 14 47
•	3F3NDE 232 20 3 11	UA1KAY 6/08 153 1/ 45
Oceania	Roumania	UA6KAE 3588 84 18 34
Australia	Club Stations	Estonia
VK5NQ 709,000 1001 83 167	YO3KPA 83,709 341 35 96	UR2KAM 858 37 5 17
(VK5NQ, NO)	Y07KAJ 49,572 306 24 78	
	YO9KAG 18,634 185 20 57 YO6KAF 8840 153 15 37	Karelo-Finnish
MULTI-OPERATOR	YO6KAF 8840 153 15 37 YO4KBJ 3654 81 11 31	UN1KAA 851 67 9 14
	104NB) 3034 61 11 31	Our thanks to the following sta-
Multi-Transmitter	Sweden	tions for sending us their logs for
North America	SM6VR 120,554 361 48 110	checking purposes: DOK: H30, EL1C,
North America	(SM6VR, ANC, BSK,	G3MIX, G8PL, K9IWS, LA5HE/M,
W3MSK1,405,767 1126 138 313	CSC, CWD, VQ)	LA7SG, OK1AAE, AAZ, AJT, ADP,
(W3MSK, FYS, KDP, KZQ,	SM5BFE 64,944 262 47 97	AMS, GS, HHW, KAY, KIX, KNH,
MCG, PZW, W6HOH/3)	(SM5BFE, CMM, CPU) SL2ZA 39,625 253 32 93	KNV, NK, KPU, KRF, KSL, TI, TJ, YV, OK2BBI, BBQ, BDJ, ABU,
W6RW 538,486 638 110 188 (W6RW, BXL, JZH,	(SM2ALT, BJS, CFE)	KEZ, KNP, KOJ, LE, OK3CAW,
KGERT, PJY)	01 CD11 00 ECO 3EO 1E 4E	
W2JT 521,554 604 99 203	(SM5CTY, 6AMD, CKU,	SP9CS, PT, SM3CJD, SM4CDO,
	VY, 7CUY)	
W4KXV 326,435 442 102 171	SL6BF 14,688 294 27 41	
(W4KXV, K3EST)	(SM6CKV, CWP)	
W4NUC 273,304 409 89 165	Vertigen City	IP, W3PVZ, W4NO, ZQK, W3ARJ, WA6IVM, W8HA, MCC, W9HT, LZ, YO2-Ø31, YO2-1511, YO5-195.
(W4NUC, FFV, 3AFM, IPO)	HV1CN 529.356 1437 52 134	LZ. YO2-#31, YO2-1511, YO5-195.
K6EVR 145,860 302 82 113 (K6EVR, W6GFE)	(W9IOP, W8DUS)	YV5ANT, ZE1AK, and ZL2HY.
(NOLIN, WOOD E	,	

OSCAR Orbit [from page 59]

passages. This points out the importance of knowing the period as accurately as possible. Each time the period is revised, be sure to revise the parameters in equations 2 through 6 accordingly.

Another factor must also be taken into account when making orbital predictions beyond a few days in advance. For every 8 revolutions

:1		Pre	dicted a	nd Obs	erved	Orbits,	GMT		
38		Night P	asses	1	I		Day Po	asses	
1961			2317	0049			1024 1023	1156 1155	1328 R
7		2217 R	2349 2344	0121 0117			1055 1049	1227 1221	1400 R
8		2343 R	0015 0012	0147 0144		0947 0944	1119 1116	1251 R	
9		2307 2306	0039 0037	0211 R		1011 1012	$\frac{1143}{1142}$	1318 R	
0	2202 R	2334 2332	0106 0105		0907 R	1039 1037	1209 1209		

Fig. 2—Based only on the observed pass of 2317 GMT on Dec. 16, 11BMV was able to predict future passes of OSCAR I as shown above. Italic figures indicate predicted-time; other, observed time. "R" indicates signals not heard, as satellite was out of range. Note how new family of passes came into range as an old family of of orbits passes out out of range. For example, the 1400 GMT pass on Dec. 17 was replaced by a new family beginning at 0944 GMT on Dec. 18.

OSCAR makes (requiring 12 hours and 16 minutes for a 92 minute period), the earth revolves on its axis 184 degrees. This means that if OSCAR passes directly overhead on a morning orbit, it will pass 4° further west as it crosses the equator on a corresponding evening passage, and 4 more degrees to the west on the next morning's orbit, etc. With each successive corresponding orbit, the satellite gets further and further out of range. After several

days, a particular family of orbits moves out of range completely, and a new family of passes comes into range.

In summary, we were able to predict the times when OS-CAR I would appear over or near our QTH by using equation (2) for successive orbits; equation (4) for corresponding day-to-night orbits; equation (5) for corresponding night-to-day orbits; and equation (6) for corresponding day-to-day and night-to-night orbits over several days. The accuracy of the predictions, although variable, were quite good. Accuracy, depended, for the most part, upon a precise determination of the satellite's period.