

## Summary Propagation Tables for Marshall Islands (Kwajalein)

SSN Ultra High	SSN Very High	SSN High	SSN Medium	SSN Low	SSN Very Low
<a href="#">January</a>	<a href="#">January</a>	<a href="#">January</a>	<a href="#">January</a>	<a href="#">January</a>	<a href="#">January</a>
<a href="#">February</a>	<a href="#">February</a>	<a href="#">February</a>	<a href="#">February</a>	<a href="#">February</a>	<a href="#">February</a>
<a href="#">March</a>	<a href="#">March</a>	<a href="#">March</a>	<a href="#">March</a>	<a href="#">March</a>	<a href="#">March</a>
<a href="#">April</a>	<a href="#">April</a>	<a href="#">April</a>	<a href="#">April</a>	<a href="#">April</a>	<a href="#">April</a>
<a href="#">May</a>	<a href="#">May</a>	<a href="#">May</a>	<a href="#">May</a>	<a href="#">May</a>	<a href="#">May</a>
<a href="#">June</a>	<a href="#">June</a>	<a href="#">June</a>	<a href="#">June</a>	<a href="#">June</a>	<a href="#">June</a>
<a href="#">July</a>	<a href="#">July</a>	<a href="#">July</a>	<a href="#">July</a>	<a href="#">July</a>	<a href="#">July</a>
<a href="#">August</a>	<a href="#">August</a>	<a href="#">August</a>	<a href="#">August</a>	<a href="#">August</a>	<a href="#">August</a>
<a href="#">September</a>	<a href="#">September</a>	<a href="#">September</a>	<a href="#">September</a>	<a href="#">September</a>	<a href="#">September</a>
<a href="#">October</a>	<a href="#">October</a>	<a href="#">October</a>	<a href="#">October</a>	<a href="#">October</a>	<a href="#">October</a>
<a href="#">November</a>	<a href="#">November</a>	<a href="#">November</a>	<a href="#">November</a>	<a href="#">November</a>	<a href="#">November</a>
<a href="#">December</a>	<a href="#">December</a>	<a href="#">December</a>	<a href="#">December</a>	<a href="#">December</a>	<a href="#">December</a>

Each of the month names in the above table is a hyperlink to the corresponding page of this document. Click on the one you want to jump to.











Mar., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	1	1	6	-	-	9	4	5	8	9	6	3*	9	7	6	8	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	6	-	-	9	5	5	5	9	7	2*	9	8	4	8	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	-	8	2	1	9	7	5	5	9+	8	2*	9	8	6*	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	6	-	-	-	-	1	5	5	-	1	9	6	5	9	8	7	6	9+	9	3*	9+	9	7*	8	9+	9	3
4	-	-	-	-	-	-	-	-	-	8	-	-	4	1	4	8	8	5	1	9+	9	6	9+	9	8	8	9+	9+	6	9+	9	7	9	9+	9+	4
5	-	-	-	-	-	-	-	-	-	9	-	-	8	4	6	9	9	8	2	9+	9	6	9+	9	8	8	9+	9+	8	9+	9+	7*	9	9+	9	5
6	-	-	-	-	-	5	1	-	2	6	-	-	9	7	8	9+	9	8	4	9+	9+	7	9+	9+	8	9	9+	9+	8	9+	9+	8*	9	9+	9	6
7	-	-	9	-	-	8	2	-	7	9	1	-	9+	8	7	9+	9	8	8	9+	9+	8	9+	9+	8	9	9+	9+	8	9+	9+	7	9	9+	9	7
8	-	3	2	-	-	9	5	-	9	8	1	1	9+	9	7	9+	9+	8	9	9+	9+	8	9+	9+	9	9+	9+	9+	8	9+	9	8	9	9+	9	8
9	-	8	6	-	-	9+	8	-	9+	8	6	5	9+	9	7	9+	9+	8	9+	9+	9+	8	9+	9+	9	9+	9+	9+	9	9+	9	9	9	9+	8	9
10	-	9	6	-	2	9+	9	-	9+	8	6	8	9+	9+	5	9+	9+	4	9+	9+	9+	8	9+	9	8	9+	9+	9	9	9+	7	9	9+	9+	6	10
11	-	9	5	2	6	9+	9	-	9+	8	7	8	9+	9+	7	9+	9	7	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	8	9	9+	9+	3*	11
12	-	9	-	-	7	9+	9	1	9+	7	-	9	9+	9+	8	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	8	9	9+	8	9	9+	9+	4*	12
13	-	9	-	-	8	9	9	1	9+	4	-	9	9+	9+	9	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	7	9	9+	9	9	9+	9+	4*	13
14	-	9	-	-	8	9	9	4	9+	-	5	9	9+	9+	9	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	6	14
15	-	9	-	-	8	9	9	5	9+	-	7	9	9+	9	9	9+	6	9	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	8	9	9+	9+	8	15
16	1	9	-	4	7	9	8	6	9+	-	6	9	9+	9	9	9+	2	9	9+	9+	9	9	9+	7	9	9+	9+	8	7	9+	4*	9	9	9+	3*	16
17	2	9	-	5	7	8	3	7	9+	-	8	9	9+	9	9	9+	1	9	9+	9+	9+	8	9+	4	9	9+	9+	6	5*	9	5*	9	9	8	3*	17
18	1	9	-	2	6	8	-	7	9+	-	8	9	9	6	9	9+	1*	9	9+	9+	9+	8	9+	5*	9	9	9	9	5*	5	4	7*	2	9	4	18
19	1	8	-	1	5	6	-	6	9	-	6	8	9	5	9	9+	5*	9	9+	9+	9+	8	9	4*	9	8	9+	9+	7*	5*	7	8*	5*	9+	9	19
20	-	3	-	-	2	1	-	5	9	-	5	8	8	-	9	9+	5*	9	9+	9+	9	6	9+	8*	9	9	9+	9+	5*	7	7	9	5*	9+	9	20
21	-	-	-	-	-	-	-	2	6	-	3	4	4	-	8	9+	5*	9	9	9+	7	4	9+	8*	9	9	9+	9	4*	9+	8*	9	5*	9+	9	21
22	-	-	-	7	-	-	-	-	1	-	-	-	-	-	6	9	1*	7	8	9	2	2*	9+	7	8	9+	9+	9	5*	9+	8*	9	6	9+	9	22
23	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	8	-	5	5	7	-	1	9+	4*	7	9	9+	7	4*	9+	7	8	8	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Apr., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	1	5	1	2	9	4	4	7	9	6	2*	9	7	7	8	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	5	1	2	9	5	2	5	9	7	2*	9+	8	5	8	9	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	8	2	4	9	7	5	5	9+	8	3*	9+	8	6	8	9+	9	2
3	-	-	1	-	-	-	-	-	-	7	-	-	-	-	-	5	5	1	-	9	6	5	9	8	7	6	9+	9	5	9	9	7	8	9+	9	3
4	-	-	-	-	-	-	-	-	-	8	-	-	4	-	3	8	8	5	1	9+	8	5*	9+	9	8	8	9+	9+	7	9+	9	7	9	9+	9	4
5	-	-	9	-	-	-	-	-	-	9	-	-	8	3	4	9	9	7	2	9+	9	6	9+	9+	8	8	9+	9+	8	9+	9	7	9	9+	9	5
6	-	-	9	-	-	4	1	-	2	9	-	-	9	7	9	9+	9	8	5	9+	9+	8	9+	9+	8	9	9+	9+	8	9+	9+	7*	9	9+	9	6
7	-	-	-	-	-	8	1	-	6	7	-	-	9+	8	6	9+	9	8	6	9+	9+	8	9+	9+	8	9	9+	9+	8	9+	9+	8*	9+	9+	9	7
8	-	2	2	-	-	9	5	-	9	8	-	-	9+	9	6	9+	9+	7	9	9+	9+	8	9+	9+	9	9+	9+	9+	8	9+	9+	8	9	9+	9	8
9	-	6	2	-	-	9+	8	-	9	8	7	5	9+	9	4	9+	9+	6	9	9+	9+	9	9+	9+	9	9+	9+	9+	8	9+	9	9	9+	9+	9	9
10	-	9	6	-	1	9+	8	-	9+	8	6	7	9+	9	5	9+	9+	5	9+	9+	9+	9	9+	9+	8	9+	9+	9+	8	9+	8	9	9+	9+	8	10
11	-	9	1	3	4	9+	9	-	9+	8	8	8	9+	9	5	9+	9+	8	9+	9+	9+	9	9+	9	9	9+	9+	9+	9	9+	9	9	9	9+	6	11
12	-	9+	-	-	7	9	9	-	9+	6	-	8	9+	9	7	9+	9	8	9+	9+	9+	8	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	4*	12
13	-	9+	-	-	8	9+	9	1	9+	3	9	9	9+	9	8	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	5*	13
14	-	9+	-	-	6	9	9	2	9+	-	6	9	9+	9+	9	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	8	14
15	-	9+	-	1	7	9	8	3	9+	-	7	9	9+	9	9	9+	6	9	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	9	15
16	-	9	-	5	7	9	3	5	9+	-	7	9	9+	9	9	9+	3	9	9+	9+	9+	9	9+	8	9	9+	9+	9	9	9+	5	9	9+	9+	4*	16
17	-	9	-	4	8	9	-	6	9+	-	8	9	9+	8	9	9+	-	9	9+	9+	9+	9+	9+	6	9	9+	9+	9	8	9+	6*	9	9	9	4	17
18	-	8	-	2	6	8	-	7	9	-	8	8	9	6	9	9+	2*	9	9+	9+	9+	9	9+	6*	9	9+	9+	9	7	9	7	8	8	9+	8	18
19	-	6	-	1	5	6	-	5	9	-	7	9	9	3	9	9+	4*	9	9+	9+	9	9	9+	7*	9	9	9+	9	7*	9	7	8	6	6	9	19
20	-	2	-	-	-	1	-	3	8	-	5	7	7	-	9	9+	4*	9	9+	9+	9	8	9+	8*	9	9	9+	9	6*	5*	7*	9*	9	9+	9	20
21	-	-	-	-	-	-	-	-	4	-	4	2	2	-	8	9+	3*	8	9	9+	7	8	9+	8	9	9+	9	6*	9+	8*	9	9	9+	8	21	
22	-	-	-	-	-	-	-	-	-	-	2	-	-	-	5	9	1*	7	8	9	3	6	9+	8	8	9	9+	9	5*	9+	7	9	9	9+	9	22
23	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	7	-	4	4	6	1	3	9	4*	7	8	9	7	4*	9+	7	8	9	9	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



**May, Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	1	5	1	3	9	4	5	6	9	6	1*	9+	7	5	8	9+	7	0				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	5	1	3	8	5	3	6	9	6	1*	9	7	5	7	9+	8	1				
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	7	2	4	9	7	4	6	9+	7	2*	9	8	6	8	9+	8	2				
3	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	5	5	-	-	9	5	5	9	8	6	7	9+	9	4*	9+	9	7	8	9+	9	3				
4	-	-	6	-	-	-	-	-	-	-	-	-	3	-	2	7	8	5*	1	9+	8	5	9+	9	8	9	9+	9	3*	9+	9	7	8	9+	9	4				
5	-	-	8	-	-	-	-	-	-	1	-	-	8	2	2	9	9	6	2	9+	9	7	9+	9	8	8	9+	9+	4*	9+	9	8	9	9+	9	5				
6	-	-	-	-	-	4	-	-	1	5	-	-	9	6	9	9+	9	8	4	9+	9	8	9+	9+	8	8	9+	9+	5*	9+	9	8	9	9+	9	6				
7	-	-	-	-	-	8	1	-	5	7	-	-	9+	8	3	9+	9	7	6	9+	9+	7	9+	9+	8	9	9+	9+	6*	9+	9	8*	9	9+	9	7				
8	-	1	9+	-	-	9	6	-	8	8	-	-	9+	8	2	9+	9+	7	8	9+	9+	8	9+	9+	9	9	9+	9+	6	9+	9	8	9	9+	9	8				
9	-	5	5	-	-	9	8	-	9	8	4	3	9+	9	3	9+	9+	6	9	9+	9+	8	9+	9+	8	9+	9+	9+	6	9+	9	8	9	9+	9	9				
10	-	9	6	-	-	9+	8	-	9+	8	6	6	9+	9	4	9+	9+	5	9	9+	9+	8	9+	9+	8	9+	9+	9+	7	9+	8	9	9	9+	8	10				
11	-	9	2	3	2	9+	8	-	9+	7	8	8	9+	9	5	9+	9+	8	9	9+	9+	8	9+	9	9	9+	9+	9+	7	9+	6	9	9	9+	7	11				
12	-	9	-	-	6	9+	8	-	9+	6	-	8	9+	9	6	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	5	12				
13	-	9	-	-	7	9+	8	-	9+	1	2	8	9+	9	6	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	5*	13				
14	-	9	-	-	8	9+	8	1	9+	-	6	8	9+	9	8	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	7	14				
15	-	9	-	2	6	9+	3	2	9+	-	8	9	9+	9	8	9+	6	9	9+	9+	9+	9	9+	9	9	9+	9+	9	7	9+	8	9	9	9+	8	15				
16	-	9	-	5	6	9	-	3	9+	-	8	8	9+	8	9	9+	4	9	9+	9+	9	9	9+	8	9	9+	9+	9	7	9+	6	9	9+	9	6	16				
17	-	9	-	2	6	9	-	4	9+	-	8	8	9+	7	9	9+	1	9	9+	9+	9	9	9+	6	9	9+	9+	9	7	9+	7*	9	9	7	4	17				
18	-	8	-	2	4	8	-	4	9	-	8	8	9	4	9	9+	4*	9	9+	9+	9	9	9+	7*	9	9+	9+	8	7	9+	7*	8	9	9	6	18				
19	-	5	-	1	1	5	-	2	9	-	7	7	9	-	8	9+	3*	9	9+	9+	9	9	9+	8*	9	9+	9+	9	8*	9	8	7	8	9+	9	19				
20	-	1	-	-	-	-	-	2	7	-	4	5	6	-	8	9+	3*	9	9+	9+	8	8	9+	8*	9	9+	9+	9	7*	9+	7	9*	8	8	9	20				
21	-	-	-	-	-	-	-	-	2	-	4	-	2	-	7	9+	4*	8	9	9+	6	7	9+	8	9	9+	9+	9	6*	6	8*	9	9	9+	8	21				
22	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4	9	-	5	6	9	3	7	9+	7	8	9	9+	8	4*	7	7	9	8	9+	9	22				
23	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	7	-	1	4	6	1	5	9	4	7	8	9	7	2*	9	7	8	8	9	8	23				
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA					



Jun., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	1	5	1	2	8	4	3	8	9	6	1*	9	7	4	6	9	7	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	5	1	2	9	5	2	8	9	7	1*	9	7	3	6	9+	7	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	8	2	3	9	7	3	7	9+	7	1*	9	8	4	8	9+	8	2
3	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	5	5	-	1	9	5	4	9	8	5	8	9+	9	1*	9+	9	7	7	9+	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	3	-	1*	7	8	5*	1	9+	8	5	9	9	8	9	9+	9	1*	6	9	7	8	9+	8	4
5	-	-	-	-	-	-	-	-	-	-	-	-	8	2	2	9	8	6*	1	9+	9	5*	9+	9	8	8	9+	9	2*	7	9	7	8	9+	8	5
6	-	-	-	-	-	4	-	-	-	5	-	-	9	6	4	9	9	7*	5	9+	9+	5*	9+	9+	8	9	9+	9+	3*	9	9	8*	8	9+	8	6
7	-	-	9	-	-	8	2	-	4	7	-	-	9+	8	2	9+	9	5	4	9+	9+	5	9+	9+	8	9	9+	9+	5*	9+	9	8	8	9+	8	7
8	-	-	9	-	-	9	5	-	7	8	-	-	9+	8	2	9+	9+	6	7	9+	9+	6	9+	9+	8	9	9+	9+	4*	9	9	8*	9	9+	8	8
9	-	4	7	-	-	9+	8	-	9	8	1	1	9+	9	2	9+	9+	3	9	9+	9+	7	9+	9+	8	9	9+	9+	4*	9+	8	8*	9	9+	6	9
10	-	8	7	-	-	9+	8	-	9	8	6	5	9+	9	4	9+	9+	7	9	9+	9+	7	9+	9+	9	9	9+	9+	3*	9+	6	9	9	9+	5	10
11	-	9	5	4	1	9+	8	-	9+	7	8	8	9+	9	5	9+	9+	8	9+	9+	9+	8	9+	9	9	9	9+	9	3*	9+	5*	9	9	9+	2	11
12	-	9	-	7	5	9+	8	-	9+	6	1	7	9+	9	5	9+	9	8	9	9+	9+	8	9+	9	9	9+	9+	9	3*	9+	8	9	9	9+	1*	12
13	-	9	-	-	7	9+	7	-	9+	4	2	7	9+	9	5	9+	9	9	9+	9+	9+	8	9+	9	9	9+	9+	9	3*	9+	8	9	9	9+	4*	13
14	-	9	-	9	8	9+	4	-	9+	1	9	8	9+	9	7	9+	8	9	9+	9+	9+	8	9+	9	9	9+	9+	9	3*	9+	8	8	9	9	7	14
15	-	9	-	3	7	9+	-	1	9+	-	7	8	9+	8	8	9+	7	9	9+	9+	9+	8	9+	8	9	9+	9+	9	2*	9	7	8	9	8	5	15
16	-	9	-	6	7	9+	-	2	9+	-	7	9	9+	7	9	9+	5	9	9+	9+	9	9	9+	7	9	9+	9+	8	-	9	5*	8	8	4*	2*	16
17	-	9	-	4	7	9	-	3	9+	-	8	8	9+	2	8	9+	3	9	9+	9+	9	9	9+	6*	9	9+	9+	8	-	8	5*	7	8	1	-	17
18	-	8	-	2	4	8	-	2	9	-	7	8	9	-	8	9+	5*	9	9+	9+	9	9	9+	7*	9	9	9+	9	1	6	4	3	5	7	2	18
19	-	4	-	-	1	5	-	1	9	-	6	6	9	-	8	9+	4*	9	9	9+	8	9	9	7*	9	9	9	9	7*	5*	8	7*	6*	9+	6	19
20	-	-	-	-	-	-	-	-	6	-	3	4	7	-	8	9+	3*	8	9	9+	7	8	9+	8	9	9+	9+	8	6*	8	8	9*	7*	9+	7	20
21	-	-	-	-	-	-	-	-	1	-	-	1	2	-	6	9	2*	7	8	9	5	7	9+	8	9	9	9+	8	5*	9+	8	8*	6	9+	7	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	-	3	6	8	3	5	9	5	8	9	9+	8	4*	9+	7	8	5	9+	6	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	2	6	1	3	9	4	6	8	9	7	2*	9	8	5*	5	9	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Jul., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	1	5	1	2	8	4	5	8	9	7	1*	9	7	4	6	9	6	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	1	5	1	2	9	5	2	7	9	7	1*	9	7	4	6	9+	7	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	8	2	3	9	7	4	7	9+	7	2*	9	8	5	7	9+	8	2
3	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	6	5	-	-	9	5	4	9	9	6	7	9+	9	2*	7	9	6	6	9+	8	3
4	-	-	6	-	-	-	-	-	-	-	-	-	4	-	1	8	8	3*	1	9+	8	5	9	9	8	9	9+	9	1*	7	9	7	7	9+	8	4
5	-	-	-	-	-	-	-	-	-	1	-	-	8	2	3	9	9	6	1	9+	9	6	9+	9	8	8	9+	9	1*	8	9	6	8	9+	8	5
6	-	-	9	-	-	4	-	-	-	5	-	-	9	6	4	9+	9	8	4	9+	9+	7	9+	9+	8	9	9+	9+	4*	9	9	7*	8	9+	9	6
7	-	-	9	-	-	8	2	-	5	7	-	-	9+	8	4	9+	9	6	5	9+	9+	6	9+	9+	8	9	9+	9+	5*	9+	9	7	8	9+	9	7
8	-	1	9	-	-	9	5	-	8	8	-	-	9+	8	4	9+	9+	5	8	9+	9+	8	9+	9+	8	9	9+	9+	5*	9	9	8*	9	9+	8	8
9	-	6	7	-	-	9	8	-	9	8	5	2	9+	9	3	9+	9+	3	9	9+	9+	7	9+	9+	8	9	9+	9+	4*	9	8	8	9	9+	8	9
10	-	9	6	-	-	9+	8	-	9+	8	6	6	9+	9	4	9+	9+	5	9	9+	9+	8	9+	9+	9	9+	9+	9+	3*	9+	6	9	9	9+	6	10
11	-	9+	1	4	2	9+	8	-	9+	8	-	8	9+	9	5	9+	9+	5	9	9+	9+	9	9+	9	9	9+	9+	9	3*	9+	5*	9	9	9+	3	11
12	-	9+	-	-	5	9+	8	-	9+	6	-	8	9+	9	5	9+	9	8	9+	9+	9+	8	9+	9	9	9+	9+	9	4	9+	8	8	9	9+	2*	12
13	-	9+	-	-	7	9+	8	-	9+	1	2	8	9+	9	6	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	9	2*	9+	8	8	9	9+	2*	13
14	-	9+	-	1	8	9+	7	-	9+	-	7	8	9+	9	7	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	2*	9+	9	8	9	9+	5	14
15	-	9+	-	2	7	9+	2	1	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	9+	9	9+	8	9	9+	9+	9	1	9+	7	8	9	9	7	15
16	-	9	-	6	8	9+	-	4	9+	-	8	9	9+	8	9	9+	3	9	9+	9+	9	9	9+	7	9	9+	9+	9	2	9	5*	8	8	5	2*	16
17	-	9	-	4	6	9	-	4	9+	-	8	9	9+	4	9	9+	1*	9	9+	9+	9	9	9+	6*	9	9+	9+	8	5	9	5*	7	8	2*	-	17
18	-	8	-	2	4	8	-	5	9+	-	8	8	9	1	9	9+	4*	9	9+	9+	9	9	9+	7*	9	9+	9+	8	4	8	4	4	6	6	1	18
19	-	5	-	-	2	5	-	2	9	-	6	7	9	-	8	9+	3*	9	9	9+	8	9	9	7*	9	9	9+	9	4*	6	8	7*	6*	9+	6	19
20	-	1	-	-	-	1	-	-	7	-	3	4	7	-	7	9+	3*	8	9	9+	8	9	9+	8	9	9+	9+	9	6*	8	7	8*	6*	9+	7	20
21	-	-	-	-	-	-	-	-	2	-	-	-	2	-	6	9	2*	7	8	9	6	8	9+	8	9	9	9+	8	6*	9	7	8*	6*	9+	6	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	-	4	6	9	3	6	9	4	8	9	9	8	4*	9+	6*	8	6	9+	6	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	2	6	1	4	9	4	7	9	9	7	2*	9	8	6	6	9	7	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Aug., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	1	4	-	1	9	4	5	6	9	6	2*	9	7	4	7	9	7	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	5	1	1	8	5	1	7	9	6	2*	9	8	4	7	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	8	3	3	8	7	4	7	9+	8	2*	9	8	4	8	9+	8	2
3	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	5	5	-	-	9	6	5	9	8	6	7	9+	9	1*	8	9	6	8	9+	9	3
4	-	-	7	-	-	-	-	-	-	-	-	-	4	-	2	8	8	5*	1	9+	8	6	9+	9	7	9	9+	9	3	9	9	6	8	9+	9	4
5	-	-	9	-	-	-	-	-	-	1	-	-	8	3	4	9	9	7	1	9+	9	6	9+	9+	8	8	9+	9	2	9+	9	6	8	9+	9	5
6	-	-	9	-	-	5	1	-	2	6	-	-	9	6	8	9+	9	7	5	9+	9+	8	9+	9+	8	9	9+	9+	5*	9+	9	7*	8	9+	9	6
7	-	-	9	-	-	8	4	-	6	7	-	-	9+	8	6	9+	9	7	5	9+	9+	8	9+	9+	8	9	9+	9+	5*	9+	9	7	8	9+	8	7
8	-	2	2	-	-	9	6	-	9	8	-	-	9+	8	4	9+	9+	6	8	9+	9+	8	9+	9+	9	9	9+	9+	6*	9+	9	8*	9	9+	8	8
9	-	7	7	-	-	9+	8	-	9	8	5	4	9+	9	4	9+	9+	5	9	9+	9+	8	9+	9+	8	9	9+	9+	4*	9+	8	8	9	9+	6	9
10	-	9	6	-	1	9+	8	-	9+	8	6	6	9+	9	4	9+	9+	4	9	9+	9+	8	9+	9	9	9+	9+	9	4*	9	5*	9	9	9+	3	10
11	-	9	1	4	4	9+	8	-	9+	8	-	8	9+	9	5	9+	9+	7	9	9+	9+	8	9+	8	9	9+	9+	9	5	9	5*	9	9	9+	2*	11
12	-	9	-	-	6	9+	8	-	9+	5	-	7	9+	9	6	9+	9	9	9+	9+	9+	9	9+	8	9	9+	9+	8	6	9	8	9	9	9+	2*	12
13	-	9	-	-	8	9+	8	-	9+	1	9	8	9+	9	8	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	9	5	9+	8	9	9	9+	2*	13
14	-	9+	-	-	8	9+	8	1	9+	-	6	8	9+	9	9	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	4	9+	9	9	9	9+	5	14
15	-	9	-	2	8	9+	6	3	9+	-	8	8	9+	9	8	9+	6	9	9+	9+	9	9	9+	9	9	9+	9+	9	4*	9+	8	9	9	9+	5	15
16	-	9	-	2	7	9	1	5	9+	-	8	9	9+	8	9	9+	2	9	9+	9+	9	9	9+	7	9	9+	9+	8	3	9+	5*	9	8	7	1*	16
17	-	9	-	5	6	9	-	4	9+	-	8	9	9+	7	9	9+	-	9	9+	9+	9	9	9+	5*	9	9+	9+	7	2	9	5*	7	8	1*	-	17
18	-	8	-	2	5	8	-	6	9+	-	7	8	9	2	9	9+	3*	9	9+	9+	9	9	9	7*	9	9	9+	8	1	5	3	2	5	8	2	18
19	-	5	-	1	2	5	-	3	9	-	6	8	9	-	8	9+	4*	9	9	9+	9	9	9	7*	9	9	9+	9	7*	6*	7	6*	6*	9+	7	19
20	-	2	-	-	-	1	-	1	8	-	4	4	7	-	8	9+	3*	9	9	9+	8	9	9+	7	9	9	9+	9	7*	5*	7	9*	5*	8	7	20
21	-	-	-	-	-	-	-	-	3	-	1	1	3	-	8	9+	4*	8	9	9	6	7	9+	8	9	9	9+	8	6*	9+	7*	8	6*	9+	7	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	-	4	7	9	2	5	9+	7	8	9	9	7	4*	8	7*	8	5	9+	8	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	3	8	1	2	9	4	7	8	9	7	3*	9	8	6	6	9	7	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Sep., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	5	-	-	8	4	5	7	9	5	2*	9	7	4*	7	9+	8	0
1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	6	-	-	9	5	3	5	9	6	2*	9	8	5*	8	9+	8	1
2	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	3	2	-	-	8	2	3	9	7	4*	4	9	8	2*	9	9	6	7	9+	8	2
3	-	-	-	-	-	-	-	-	-	7	-	-	-	-	1	5	5	-	-	9	6	5	9	8	6	6	9+	9	2*	9	9	6*	8	9+	9	3
4	-	-	-	-	-	-	-	-	-	8	-	-	4	1	3	8	8	5*	1	9+	8	5	9+	9	7	8	9+	9	6	9+	9	7	8	9+	9	4
5	-	-	-	-	-	1	-	-	-	3	-	-	8	4	5	9	9	7	2	9+	9	6	9+	9	8	8	9+	9+	7	9+	9	6*	9	9+	9	5
6	-	-	-	-	-	5	2	-	2	6	-	-	9	7	9	9+	9	8	4	9+	9+	7*	9+	9+	8	9	9+	9+	8	9+	9+	7*	9	9+	9	6
7	-	-	1	-	-	8	2	-	7	7	-	-	9+	8	5	9+	9	8	7	9+	9+	7	9+	9+	8	9	9+	9+	8	9+	9+	8*	9	9+	9	7
8	-	3	2	-	-	9	7	-	9	8	-	1	9+	8	6	9+	9+	7	9	9+	9+	8	9+	9+	9	9+	9+	9+	8	9+	9	8	9	9+	8	8
9	-	8	6	-	-	9+	8	-	9	8	5	6	9+	9	4	9+	9+	5	9	9+	9+	8	9+	9+	8	9+	9+	9+	8	9+	9	8	9	9+	8	9
10	-	9	6	-	2	9+	8	-	9+	8	7	7	9+	9	5	9+	9+	5	9+	9+	9+	8	9+	9	8	9+	9+	9	8	9+	5	8	9	9+	6	10
11	-	9	1	4	5	9+	8	-	9+	8	-	8	9+	9	7	9+	9	8	9+	9+	9+	8	9+	9	9	9+	9+	9	8	9+	8	9	9	9+	2*	11
12	-	9	-	-	7	9+	9	-	9+	6	-	8	9+	9	7	9+	9	8	9+	9+	9+	8	9+	9	9	9+	9+	8	8	9+	8	9	9+	9+	4*	12
13	-	9	-	-	8	9+	8	1	9+	1	1	9	9+	9	8	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	8	8	9+	9	9	9+	9+	5*	13
14	-	9	-	-	8	9+	9	2	9+	-	6	9	9+	9	9	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	9	9	9+	9+	8	14
15	-	9	-	2	8	9+	8	4	9+	-	8	9	9+	9	9	9+	5	9	9+	9+	9	9	9+	8	9	9+	9+	9	8	9+	8	9	9	9+	8	15
16	1	9	-	1	8	9	5	5	9+	-	8	9	9+	9	9	9+	2	9	9+	9+	9	9	9+	6	9	9+	9+	8	8	9+	5*	9	9+	9+	4*	16
17	1	9	-	4	7	9	-	6	9+	-	8	9	9+	8	9	9+	-	9	9+	9+	9+	9	9+	4	9	9+	9+	7	5	9	6*	9	9	5	1	17
18	-	9	-	2	5	8	-	7	9+	-	7	9	9	6	9	9+	2*	9	9+	9+	9	9	9+	6*	9	9	8	9	5*	7	5	4	4	9	6	18
19	-	6	-	-	5	6	-	4	9	-	6	8	9	2	9	9+	4*	9	9+	9+	9	9	8	7	9	8	9+	9	7*	7	7	7*	5*	5*	8	19
20	-	2	-	-	-	1	-	2	8	-	4	6	7	-	8	9+	5*	9	9+	9+	8	8	9+	8*	9	9	9+	9	6*	5*	6	9*	5*	7	9	20
21	-	-	-	-	-	-	-	-	4	-	1	2	2	-	8	9+	4*	8	9	9+	6	6	9+	8	9	9+	9+	9	5*	9+	8*	9	5*	9+	8	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	1*	6	7	9	2	2	9+	7	8	9	9+	8	5*	9+	8*	9	9	9+	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	3	3	6	-	1	9	3*	7	8	9	7	3*	9	7	7	7	9	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Oct., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	1	4	-	-	9	3	6	7	9	7	2*	9	7	6	8	9	8	0
1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	5	1	-	9	5	5	5	9	7	2*	9	8	4*	8	9+	9	1
2	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	4	2	-	-	8	3	2	9	7	4	6	9+	9	2*	9	8	6*	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	7	-	-	-	-	1	6	5	-	1	9	7	6	9	9	6	7	9+	9	4	9+	9	7*	8	9+	9	3
4	-	-	-	-	-	-	-	-	-	8	-	-	4	1	4	8	8	5	1	9+	9	5	9+	9	8*	8	9+	9+	8	9+	9	7*	8	9+	9	4
5	-	-	9	-	-	2	-	-	-	9	-	-	8	5	6	9	9	7	3	9+	9+	7	9+	9+	8*	8	9+	9+	7	9+	9	7*	9	9+	9	5
6	-	-	-	-	-	6	2	-	4	9	-	-	9	8	7	9+	9	7	6	9+	9+	8	9+	9+	8*	9	9+	9+	8	9+	9	7*	9	9+	9	6
7	-	1	1	-	-	9	3	-	8	9	1	-	9+	8	7	9+	9	8	8	9+	9+	8	9+	9+	8	9	9+	9+	8	9+	9+	8*	9	9+	8	7
8	-	5	3	-	-	9+	5	-	9	8	-	4	9+	9	7	9+	9+	8	9	9+	9+	8	9+	9+	9	9+	9+	9+	8	9+	9	8	9	9+	8	8
9	-	8	3	-	1	9+	6	-	9	8	7	6	9+	9	7	9+	9+	7	9	9+	9+	9	9+	9+	9	9+	9+	9	8	9+	9	9	9+	9+	6	9
10	-	9	6	-	4	9+	8	-	9+	8	7	8	9+	9	7	9+	9+	4	9+	9+	9+	9	9+	9	8	9+	9+	9	8	9+	9	9	9	9+	3*	10
11	-	9	5	4	6	9+	8	1	9+	8	8	9	9+	9	8	9+	9	7	9+	9+	9+	9	9+	9	9	9+	9+	7	8	9+	9	9	9+	9+	3*	11
12	-	9	-	-	8	9	8	1	9+	6	-	8	9+	9	8	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	6	9	9+	9	9	9+	9+	4*	12
13	-	9	-	-	8	9	8	3	9+	2	1	9	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	7	9	9+	9	9	9+	9+	3*	13
14	-	9	-	-	7	9+	9	4	9+	-	5	9	9+	9	9	9+	8	9	9+	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	8	14
15	1	9	-	-	7	9	9	5	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	9	9	9+	9	9	9+	9+	9	8	9+	8	9	9+	9+	7	15
16	1	9	-	2	7	9	4	6	9+	-	8	9	9+	8	9	9+	2	9	9+	9+	9	9	9+	6	9	9+	9+	4	5	9+	4*	9	9	9+	3*	16
17	1	9	-	4	6	8	2	6	9+	-	8	9	9	8	9	9+	-	9	9+	9+	8	8	9+	5	9	9+	9+	4*	4*	9	6*	9	9	8	4*	17
18	1	9	-	3	6	8	-	6	9+	-	8	8	9	5	9	9+	2*	9	9+	9+	9	7	9	6*	9	9	9+	8	5*	4	5	7*	3	9+	5	18
19	1	6	-	1	5	6	-	5	9	-	6	8	9	4	9	9+	5*	9	9+	9+	9	9	9+	6*	9	9	9+	9+	7*	5	6	9*	3*	5	9	19
20	-	2	-	-	1	1	-	3	9	-	5	7	7	-	9	9+	5*	9	9+	9+	9	8	9+	8*	9	9	9+	9	6*	9+	7	9*	5*	9+	9	20
21	-	-	-	-	-	-	-	1	5	-	1	2	4	-	8	9+	5*	8	9	9+	7	7	9+	8*	9	9	9+	9	6*	9+	8*	9	5*	9+	9	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	9	1*	7	8	9	3	4	9+	8	9	9	9+	8	5*	9+	8*	9	9	9+	9	22
23	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	7	-	2	4	7	1	1	9	4*	8	9	9+	7	3*	9+	6	8	9	9+	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Nov., Marshall Islands (Kwajalein), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	1	4	-	-	9	4	6	8	9	7	1*	9+	7	7	8	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	5	1	-	9	5	5	6	9	8	1*	9	8	6	8	9+	9	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	-	1	8	4	-	9	7	4*	6	9+	9	2*	9	8	7	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	6	-	-	-	-	2	7	5	1	1	9	7	6	9+	8	6*	7	9+	9	-	9+	9	7*	8	9+	9	3
4	-	-	6	-	-	-	-	-	-	8	-	-	5	1	5	9	8	5	2	9+	9	6	9+	9	8*	8	9+	9+	8	9+	9	7*	9	9+	9	4
5	-	-	-	-	-	3	-	-	1	9	-	-	8	5	7	9	9	6	5	9+	9+	8	9+	9+	8*	9	9+	9+	8	9+	9+	7	9	9+	8	5
6	-	-	-	-	-	6	1	1	5	9	1	-	9	8	7	9+	9	7	7	9+	9+	8	9+	9+	8*	9	9+	9	8	9+	9	8*	9	9+	6	6
7	-	2	1	-	-	9	4	1	8	7	4	1	9+	9	8	9+	9+	8	9	9+	9+	9	9+	9+	8*	9+	9+	9	9	9+	9	8*	9	9+	2	7
8	-	7	4	-	-	9+	6	1	9	8	-	5	9+	9	8	9+	9+	8	9	9+	9+	9	9+	9+	9	9+	9+	9	9	9+	9	8	9+	9+	3	8
9	-	9	5	-	2	9+	7	1	9+	8	7	7	9+	9	8	9+	9+	7	9+	9+	9+	9	9+	9+	9	9+	9+	8	9	9+	9	9	9	9+	1	9
10	-	9	7	-	6	9+	8	1	9+	8	8	8	9+	9	8	9+	9	5	9+	9+	9+	9	9+	9+	8	9+	9+	6	9	9+	9	9	9+	9+	2*	10
11	-	9	5	4	7	9+	9	2	9+	8	8	9	9+	9	9	9+	9	6	9+	9+	9+	9	9+	9	9	9+	9+	2	9	9+	9	9	9+	9+	4*	11
12	-	9	-	-	8	9+	9	3	9+	6	-	9	9+	9	9	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	5	9	9+	9	9	9+	9+	4*	12
13	-	9	-	-	8	9+	9	5	9+	3	-	9	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	3	8	9+	9	9	9+	9+	3*	13
14	1	9	-	-	8	9+	9	6	9+	-	5	9	9+	9	9	9+	8	9	9+	9+	9	9	9+	9	9	9+	9+	9	7	9+	9	9	9+	9+	6	14
15	2	9	-	1	8	9+	9	7	9+	-	7	9	9+	9	9	9+	6	9	9+	9+	9	9	9+	8	9	9+	9+	9	5	9+	7	9	9	9+	4	15
16	2	9	-	3	8	9	9	7	9+	-	7	9	9+	9	9	9+	3	9	9+	9+	9	8	9+	5	9	9+	9+	2*	4*	9+	4*	9	9	9+	4*	16
17	4	9	-	4	8	9	5	7	9+	-	8	9	9+	8	9	9+	-	9	9+	9+	8	5	9+	4	9	9	9+	4*	4*	9	5*	9	6	9	5*	17
18	2	9	-	3	7	8	1	6	9+	-	8	9	9	7	9	9+	2*	9	9	9+	9+	5	9+	5	9	8	9+	9	5*	3*	5	8*	3*	9+	6	18
19	1	8	-	1	6	7	-	6	9+	-	7	9	9	6	9	9+	5*	9	9	9+	9+	2*	9	6	9	7	9+	9+	6*	5*	7	9*	5*	9+	9	19
20	-	4	-	-	2	2	-	4	9	-	5	8	8	1	9	9+	5*	9	9	9+	9	4*	9+	8*	9	5	9+	9+	6*	9+	7	9*	5*	9+	9	20
21	-	-	-	-	-	-	-	1	7	-	1	4	5	-	8	9+	4*	9	9	9+	8	2*	9+	8*	9	5	9+	9	6*	9+	8*	9*	3*	9+	9	21
22	-	-	-	6	-	-	-	-	1	-	-	-	1	-	6	9	1*	7	8	9	4	1	9+	8	9	9	9+	9	2*	9+	8*	9	1*	9+	9	22
23	-	-	-	1	-	-	-	-	-	-	2	-	-	-	1	8	-	2	5	7	1	-	9+	5*	8	9	9+	8	3*	9+	6	8	7	9+	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA















Mar., Marshall Islands (Kwajalein), for SSN = Very High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	1	2	7	1	-	9	5	7	8	9	8	3*	9+	8	5*	8	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	2	7	1	-	9	6	5	7	9	8	2*	9+	8	5*	8	9+	9	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	-	1	8	4	1*	9	8	5	7	9+	9	2*	9+	9	6*	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	7	-	-	-	-	1	6	5	2*	1	9	7	5	9	9	6	7	9+	9	1*	9+	9	6*	8	9+	9	3
4	-	-	7	-	-	-	-	-	-	8	-	-	5	1	4	8	8	5	2	9+	9	6	9+	9	7	8	9+	9+	4	9+	9	8	8	9+	9	4
5	-	-	9	-	-	1	-	-	-	4	-	-	8	5	5	9	9	8	3	9+	9+	6	9+	9+	7	9	9+	9+	8	9+	9	7	9	9+	9	5
6	-	-	9	-	-	5	-	-	3	6	-	-	9	7	6	9+	9	7	5	9+	9+	7	9+	9+	6*	9	9+	9+	8	9+	9	7*	9	9+	8	6
7	-	1	9	-	-	8	2	-	7	7	2	-	9	8	7	9+	9	8	8	9+	9+	8	9+	9+	8*	9	9+	9+	8	9+	9	8	9	9+	8	7
8	-	4	2	-	-	9	6	1	9	8	-	2	9+	9	7	9+	9+	8	9	9+	9+	8	9+	9+	9	9+	9+	9+	8	9+	9	8	9	9+	8	8
9	-	8	5	-	-	9+	8	-	9	8	6	6	9+	9	8	9+	9+	7	9+	9+	9+	8	9+	9+	9	9+	9+	9	9	9+	8	8	9+	9+	5	9
10	-	9	6	-	4	9+	9	-	9+	8	-	8	9+	9+	7	9+	9+	5	9+	9+	9+	8	9+	9	8	9+	9+	9	9	9+	6*	9	9	9+	3	10
11	-	9	5	-	6	9+	9	-	9+	8	-	8	9+	9+	8	9+	9	7	9+	9+	9+	9	9+	9	9	9+	9+	8	9	9+	8	9	9	9+	3*	11
12	-	9+	-	5	8	9	9	1	9+	7	8	9	9+	9+	8	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	6	9	9+	9	9	9+	9+	4*	12
13	-	9+	-	-	9	9	9	2	9+	4	1	9	9+	9+	9	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	4	8	9+	9	9	9+	9+	5*	13
14	-	9	-	-	8	9	9	4	9+	-	6	9	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9	9+	4*	14
15	1	9	-	1	8	9	9	6	9+	-	7	9	9+	9	9	9+	7	9	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	7	9	9	9+	5	15
16	2	9	-	3	8	9	8	7	9+	-	7	9	9+	9	9	9+	5	9	9+	9+	9	9	9+	5	9	9+	9+	5	5*	9	5*	9	9	7	5*	16
17	4	9	-	1	7	9	3	7	9+	-	8	9	9+	8	9	9+	1	9	9+	9+	9	8	9+	4*	9	9+	9+	2	3*	7	3*	7	6	2*	3*	17
18	2	9	-	3	7	9	-	7	9+	-	8	9	9	6	9	9+	2*	9	9+	9+	9	5*	9	5	8*	7	9+	8	3*	1*	2	3*	1*	6	1	18
19	1	8	-	1	5	7	-	6	9	-	7	8	9	5	9	9+	5*	9	9	9+	9+	5	8	6	9	4	9+	9	6*	6*	7	5*	5*	9+	8	19
20	-	4	-	-	2	2	-	5	9	-	5	8	8	1	8	9+	4*	9	9+	9+	9	5*	6	6*	8	5	9+	9+	6*	5*	8	9	5*	8	9	20
21	-	-	-	-	-	-	-	1	7	-	2	5	5	-	8	9+	4*	9	9+	9+	7	4*	9+	6	9	8	9+	9	5*	4*	8*	9*	5*	9+	9	21
22	-	-	-	-	-	-	-	-	1	-	-	1	1	-	5	9+	1*	8	9	9	4	2*	9+	7	8	9	9+	9	5*	9+	8*	9	4*	9+	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	5	6	8	1	1*	9+	5*	8	9	9+	8	4*	9+	8	7	9	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Apr., Marshall Islands (Kwajalein), for SSN = Very High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	1	2	7	2	1*	9	5	7	8	9	8	3*	9	8	5	8	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	1	7	2	1*	9	6	5	7	9	8	2*	9+	8	5	8	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	-	-	8	4	5	9	8	6	7	9+	9	3*	9+	9	6	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	5	2*	1	9	7	6	9	9	7	7	9+	9	2*	9+	9	7	8	9+	9	3
4	-	-	7	-	-	-	-	-	-	7	-	-	4	-	4	8	8	5	2	9+	8	6	9+	9	8	8	9+	9+	5	9+	9	7	9	9+	9	4
5	-	-	9	-	-	-	-	-	-	6	-	-	8	4	6	9	9	7	3	9+	9	7	9+	9+	8	9	9+	9+	7	9+	9	7	9	9+	9	5
6	-	-	9	-	-	5	-	-	2	6	-	-	9	7	8	9+	9	7	5	9+	9+	8	9+	9+	8	9	9+	9+	8	9+	9	7	9	9+	9	6
7	-	-	9	-	-	8	2	-	6	7	-	-	9+	8	6	9+	9	7	7	9+	9+	8	9+	9+	8	9	9+	9+	8	9+	9	7	9+	9+	9	7
8	-	2	2	-	-	9	5	-	9	8	-	1	9+	9	7	9+	9+	7	9	9+	9+	9	9+	9+	9	9+	9+	9+	8	9+	9	8	9	9+	8	8
9	-	7	4	-	-	9+	8	-	9	8	-	5	9+	9	5	9+	9+	7	9	9+	9+	9	9+	9+	9	9+	9+	9+	8	9+	9	8	9	9+	8	9
10	-	9	7	-	1	9+	9	-	9+	8	-	7	9+	9	5	9+	9+	5	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	5	9	9+	9+	6	10
11	-	9	5	-	5	9+	9	-	9+	8	-	8	9+	9	6	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	7	9	9	9+	4*	11
12	-	9+	-	-	7	9	9	-	9+	7	-	8	9+	9	7	9+	9	9	9+	9+	9+	8	9+	9	9	9+	9+	8	8	9+	9	9	9+	9+	4*	12
13	-	9+	-	-	8	9+	9	1	9+	4	1	9	9+	9	9	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	8	8	9+	9	9	9+	9+	5*	13
14	-	9+	-	-	7	9+	9	3	9+	-	6	9	9+	9+	9	9+	8	9	9+	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9	9+	7	14
15	-	9+	-	2	8	9	8	4	9+	-	8	9	9+	9	9	9+	7	9	9+	9+	9+	9	9+	9	9	9+	9+	9	8	9+	8	9	9	9+	7	15
16	1	9	-	1	8	9	5	5	9+	-	7	9	9+	9	9	9+	4	9	9+	9+	9+	9	9+	7	9	9+	9+	8	8	9+	5*	9	9+	8	4*	16
17	1	9	-	1	8	9	1	7	9+	-	8	9	9+	7	9	9+	1	9	9+	9+	9+	9	9+	6	9	9+	9+	7	5	9	5*	8	8	4	3*	17
18	-	9	-	3	6	9	-	5	9+	-	8	9	9	5	9	9+	1*	9	9+	9+	9+	9	9+	6*	9	9	9+	9	4	6	6	4*	3	9	6	18
19	-	7	-	1	4	7	-	5	9	-	7	8	9	4	9	9+	4*	9	9	9+	9	9	8	6*	9	9	9+	9	7*	6*	7	6*	6*	9+	9	19
20	-	2	-	-	1	1	-	3	8	-	4	7	8	-	9	9+	8	9	9+	9+	9	7	9+	8*	9	9	9+	9	6*	5*	7	9	6*	4*	9	20
21	-	-	-	-	-	-	-	1	5	-	1	2	3	-	8	9+	5*	8	9	9+	8	5	9+	7	9	9+	9+	9	6*	8	8*	9	6	9+	9	21
22	-	-	-	-	-	-	-	-	1	-	-	-	-	-	6	9	1*	7	8	9	5	3	9+	7	8	9	9+	9	5*	9+	8*	9	9	9+	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	5	5	7	2	2*	9+	5	8	9	9	8	4*	9	8	8	8	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



































**Jan., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	1	1	5	8	4	1*	9	7	5	7	9	8	-	9	7	5*	5	5	9	0
1	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	7	2	-	3	8	5	1*	9	7	3*	8	9+	8	-	9	9	2*	6	8	9	1
2	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	8	5	-	3	9	7	-	9	8	5	8	9+	9	-	9	9	1*	8	9	8	2
3	-	-	3	-	-	-	-	-	-	7	-	-	1	-	1	9	6	4	4	9+	9	-	9+	9	6	8	9+	9	-	8	9	6	8	9+	4	3
4	-	-	7	-	-	-	-	-	-	8	-	-	6	2	5	9	9	6*	5	9+	9	-	9+	9	7	9	9+	9	-	8	9	6	9	9+	4	4
5	-	-	9	-	-	2	-	1	2	8	-	-	8	6	8	9+	9	7*	7	9+	9	8	9+	9	7	9	9+	7	-	9+	9	6	9	9+	-	5
6	-	-	9	-	-	7	2	3	6	8	1	-	9	8	7	9+	9	8	9	9+	9	9	9+	9+	8	9	9+	6	5	9+	8	8	9	9+	-	6
7	-	3	1	-	-	8	5	5	9	8	5	3	9	9	8	9+	9	6	9	9+	9	9	9+	9	7	9	9+	5	8	9+	5	8	9	9+	-	7
8	-	7	5	-	-	9	7	3	9	8	2	6	9+	9	8	9+	9+	8	9	9+	9	9	9+	9	7	9	9+	2	9	9+	1	9	9	9+	-	8
9	-	9	7	-	4	9+	9	2	9+	8	-	8	9+	9	9	9+	9	8	9	9+	9	9	9+	8	9	9	9+	1	9	9+	1*	8	9	9	-	9
10	-	9	7	-	8	9+	9	2	9+	9	-	9	9+	9	9	9+	9	7	9	9+	9	9	9+	8	9+	9+	-	8	9	4*	8	9	9+	-	10	
11	-	9	6	-	8	9+	9	4	9+	8	-	9	9+	9	9	9+	9	8	9	9+	8	9	9+	9	9	9+	9+	2*	7	8	6	8	9	9	-	11
12	-	9	1	-	8	9+	9	5	9+	8	-	9	9+	9	9	9+	9	8	9+	9+	7	9	9+	8	9	9+	9+	2*	4*	7	6*	8	8	9	5*	12
13	1	9	-	-	8	9+	9	6	9+	5	2	9	9+	9+	9	9+	8	9	9+	9+	7	7	9+	9	9	9	9+	2*	3*	5	5*	7	7	8	5*	13
14	4	9	-	-	8	9+	9	7	9+	-	6	9	9+	9	8	9+	8	9	9+	9+	9	5	9+	8	9	9	9+	2*	2*	5	2*	6	5	8	2*	14
15	6	9	-	2	8	9+	9	7	9+	-	8	9	9+	9	8	9+	6	9	9	9+	8	5	9	4	9	8	9+	2*	1*	3	-	5	1	3	2*	15
16	6	9	-	2	8	9+	9	7	9+	-	8	9	9+	9	9	9+	1	9	9	9+	5	2*	9	1*	9	6	9	2*	-	1	-	3	-	2	1*	16
17	6	9+	-	5	8	9	9	7	9+	-	8	9	9+	9	8	9+	-	9	9	9+	2	2*	5	1*	8	1	7	2*	-	-	-	1*	-	-	-	17
18	5	9+	-	4	7	9	5	7	9	-	8	8	9	8	6	9	1	9	6	9+	8	3*	1*	1	6*	1*	7	3*	-	-	-	-	-	-	-	18
19	2	9	-	1	7	8	1	8	9	-	8	9	9	8	6	5	1	9	4	9+	9+	6*	5*	7	8*	2*	9+	9	-	2*	1	2*	-	-	2	19
20	1	7	-	1	5	6	-	5	9	-	6	8	8	4	7	9	5*	9	7	9+	9	4*	4*	6	9*	2*	9+	9	5*	1*	8	7*	4*	8	9	20
21	-	1	-	-	1	1	-	3	8	-	3	6	7	-	2	9+	5*	9	5	9	9	5*	5	8*	9	2*	9+	9	5*	-	8	8*	5*	8	9	21
22	-	-	-	-	-	-	-	-	4	-	-	2	2	-	1	9+	2*	8	4	9	7	4*	9+	7*	8	3*	9+	9	2*	2	8	7*	4*	5	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	6	7	9	5	2*	9+	6	6	5	9+	9	-	7	8	6*	-	5	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Feb., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	1	1	4	7	2	1*	9	6	5	8	9	8	-	9	8	6*	6	7	9	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	1	-	2	8	4	1*	9	7	4*	8	9+	8	-	9	8	5*	7	9	9	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	4	-	2	9	6	2*	9	8	6	8	9+	9	-	9	9	5*	8	9+	9	2
3	-	-	4	1	-	-	-	-	-	-	-	-	1	-	3	8	6	4	3	9	8	1*	9+	9	6*	8	9+	9	-	9	9	5*	9	9+	9	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	2	3	9	8	6	3	9+	9	6	9+	9	6	8	9+	9	-	9+	9	7	9	9+	7	4
5	-	-	-	-	-	1	-	-	1	4	-	-	8	5	5	9	9	6	5	9+	9+	8	9+	9	7	9	9+	9+	3	9+	9	7	9	9+	5	5
6	-	-	-	-	-	6	1	1	5	6	1	-	9	7	6	9+	9	8	8	9+	9	8	9+	9+	7*	9	9+	9	8	9+	9	8	8	9+	5	6
7	-	2	9+	-	-	8	5	1	8	8	4	1	9	9	8	9+	9+	7	9	9+	9	9	9+	9+	8*	9	9+	8	9	9+	8	8	9	9+	1	7
8	-	6	2	-	-	9	7	1	9	8	1	5	9+	9	8	9+	9+	8	9	9+	9+	9	9+	9	8	9+	9+	7	9	9+	4	7	9	9+	-	8
9	-	8	6	-	2	9	8	1	9+	8	5	8	9+	9	8	9+	9+	8	9+	9+	9	9	9+	8	9	9	9+	5	9	9+	2*	8	9	9+	-	9
10	-	9	7	-	6	9+	9	1	9+	8	5	9	9+	9	8	9+	9	6	9+	9+	9	9	9+	8	8	9+	9+	2	9	9+	5*	8	9	9+	-	10
11	-	9	6	3	8	9+	9	2	9+	8	-	9	9+	9	9	9+	9	7	9	9+	9	9	9+	9	9	9+	9+	2*	8	9	7	8	9	9+	2*	11
12	-	9+	-	-	9	9+	9	3	9+	8	1	9	9+	9+	9	9+	9	8	9+	9+	9	9	9+	9	9	9+	9+	2*	7	9	8	9	9	9+	5*	12
13	-	9+	-	-	9	9+	9	5	9+	5	2	9	9+	9+	9	9+	8	9	9+	9+	8	9	9+	9	9	9+	9+	2*	5	9	8	8	9	9+	5*	13
14	1	9+	-	-	9	9+	9	6	9+	1	6	9	9+	9+	9	9+	8	9	9+	9+	9	8	9+	9	9	9	9+	4	4*	8	7	8	8	9	4*	14
15	2	9+	-	2	9	9+	9	7	9+	-	8	9	9+	9	9	9+	7	9	9+	9+	9	7	9+	7	9	9	9+	6	3*	7	2*	8	7	8	4*	15
16	5	9+	-	1	9	9	9	8	9+	-	8	9	9+	9	8	9+	3	9	9+	9+	6	5	9	3*	9	9	9	1*	2*	5	1*	7	3	2	2*	16
17	5	9+	-	5	8	9	6	8	9+	-	8	9	9+	8	8	9+	1	9	9	9+	2	3*	8	2*	9	7	8	2*	-	-	-	3	-	4	-	17
18	5	9+	-	3	8	9	3	7	9	-	8	8	9	8	6	9	1	9	8	9	7	5*	1*	4	7	1*	9	3*	-	-	-	-	-	-	-	18
19	1	9	-	1	5	8	-	7	9	-	8	8	9	6	7	8	1*	9	5	9+	9+	6*	5*	6	8*	3*	4*	9	2*	4*	3	4*	2*	7	3	19
20	1	6	-	-	4	5	-	5	9	-	6	8	8	2	5	9	8	9	9	9+	9	5*	4*	5	9	2*	9+	9	7*	3*	8	7*	6*	9+	9	20
21	-	1	-	-	-	-	-	2	8	-	2	5	7	-	3	9+	4*	9	8	9	8	4*	7	7*	9	1	9+	9	6*	1*	8	8*	5*	9+	9	21
22	-	-	-	-	-	-	-	-	3	-	-	2	2	-	1	9+	2*	8	6	9	6	5*	9+	7*	8	1*	9+	9	5*	4	8	8*	5*	8	9	22
23	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	9	-	5	7	9	3	3*	9+	6	7	7	9+	8	2*	9	8	7*	2*	6	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



Mar., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	1	4	8	2	1*	9+	6	6	8	9	8	2*	9	8	5*	6	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	2	8	4	1*	9+	7	4*	8	9+	8	2*	9	8	5*	8	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	4	-	1	8	5	2*	9	8	6	7	9+	8	1*	9+	9	5*	8	9+	9	2
3	-	-	-	1	-	-	-	-	-	-	-	1	-	-	1	8	6	2	3	9	8	3*	9+	9	6*	8	9+	9	-	9+	9	6*	8	9+	9	3
4	-	-	7	-	-	-	-	-	-	-	-	-	5	1	2*	8	8	6*	2	9+	9	7	9+	9	6*	8	9+	9	1	9+	9	8	9	9+	8	4
5	-	-	-	-	-	1	-	-	-	4	-	-	8	5	5	9	9	7	4	9+	9	8	9+	9	6*	9	9+	9+	2	9+	9	8	9	9+	7	5
6	-	-	-	-	-	6	1	-	3	5	-	-	9	7	9	9+	9	8	5	9+	9+	8	9+	9+	6*	9	9+	9	8	9+	9	8	9	9+	6	6
7	-	1	1	-	-	8	4	-	8	7	1	-	9	8	7	9+	9	8	8	9+	9+	8	9+	9+	8*	9	9+	9	8	9+	9	8	9	9+	7	7
8	-	5	2	-	-	9	7	-	9	8	-	4	9+	9	7	9+	9+	8	9	9+	9+	8	9+	9+	8	9	9+	9	8	9+	8	8	9	9+	3	8
9	-	8	5	-	1	9	9	-	9	8	-	7	9+	9	8	9+	9+	7	9+	9+	9+	8	9+	9	9	9	9+	9	9	9+	4*	8	9	9+	1	9
10	-	9	7	-	5	9+	9	-	9+	8	-	8	9+	9+	8	9+	9	6	9+	9+	9+	8	9+	8	9	9	9+	8	9	9+	6*	8	9	9+	-	10
11	-	9	6	-	7	9+	9	1	9+	8	7	9	9+	9+	8	9+	9	8	9+	9+	9+	8	9+	9	9	9+	9+	6	8	9+	7	9	9	9+	3*	11
12	-	9+	-	-	8	9+	9	1	9+	7	-	9	9+	9+	9	9+	9	8	9+	9+	9	9	9+	9	9	9+	9+	2*	8	9+	8	9	9	9+	5*	12
13	-	9	-	-	9	9	9	3	9+	5	1	9	9+	9+	8	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	2*	8	9+	8	9	9	9+	4*	13
14	-	9+	-	-	8	9	9	5	9+	1	6	9	9+	9+	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	8	7	9+	8	9	9	9+	5*	14
15	1	9+	-	2	9	9	9	6	9+	-	6	9	9+	9	9	9+	7	9	9+	9+	9	9	9+	8	9	9+	9+	9	4*	9	6	9	8	9	5*	15
16	4	9+	-	1	8	9	8	7	9+	-	7	9	9+	9	9	9+	5	9	9+	9+	8	8	9+	4	9	9+	9+	2	3*	8	3*	8	8	6	4*	16
17	5	9	-	5	8	9	4	8	9+	-	8	9	9+	8	9	9+	2	9	9	9+	7	4	9	4*	9	9	9	2*	2*	5	1*	6	5	2	2*	17
18	4	9	-	4	8	9	1	7	9+	-	8	9	9	7	9	9	2*	9	9	9+	9	5*	6	5	7*	6	9+	7	2*	1*	2	2*	1*	6	2	18
19	1	9	-	1	5	8	-	7	9	-	8	8	9	6	9	9	4*	9	9	9+	9+	6*	4*	6	8	2*	9+	9	5*	5*	6	5*	5*	9	8	19
20	-	5	-	-	3	4	-	5	9	-	5	8	8	1	8	9+	8	9	9	9+	9	5*	6	5	9	2*	9+	9+	7*	5*	8	8	6*	9+	9	20
21	-	1	-	-	-	-	-	2	7	-	2	5	5	-	5	9+	4*	8	9	9	8	5*	9+	8*	9	7	9+	9	6*	2*	8	9*	6*	9+	8	21
22	-	-	-	4	-	-	-	-	2	-	-	1	1	-	2	9+	2*	8	8	9	5	5*	9+	6	8	9	9+	9	5*	9	8	8	4*	9+	8	22
23	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	9	-	5	7	8	2	3*	9+	6	8	8	9+	8	4*	9	8	6*	7	9	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



**Apr., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	1	3	8	3	1*	9+	6	6	8	9	8	3*	9	8	5*	7	9+	9	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	1	8	4	1*	9	7	5	7	9	8	2*	9	8	5*	8	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	4	-	1	9	5	2*	9	8	6	8	9+	9	2*	9+	9	5*	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	7	6	3*	2	9	8	6	9+	9	7	8	9+	9	-	9+	9	6*	9	9+	9	3
4	-	-	7	-	-	-	-	-	-	-	-	-	5	1	2	8	8	6*	2	9+	9	6	9+	9	6	9	9+	9	2	9+	9	8	9	9+	9	4
5	-	-	9	-	-	2	-	-	-	4	-	-	8	5	5	9	9	7	3	9+	9	7	9+	9	6*	9	9+	9	2	9+	9	8	9	9+	8	5
6	-	-	-	-	-	5	-	-	3	6	-	-	9	7	7	9+	9	8	5	9+	9+	8	9+	9+	6	9	9+	9	5	9+	9	8	9	9+	8	6
7	-	-	-	-	-	8	2	-	7	7	-	-	9	8	7	9+	9	8	8	9+	9+	8	9+	9+	8	9	9+	9	6*	9+	9	8	9	9+	7	7
8	-	3	9+	-	-	9	6	-	9	8	-	2	9+	9	8	9+	9+	7	9	9+	9+	9	9+	9+	8	9	9+	9	7	9+	9	8	9	9+	6	8
9	-	7	5	-	-	9	8	-	9	8	-	6	9+	9	7	9+	9+	7	9	9+	9+	9	9+	9+	9	9	9+	9	8	9+	7	8	9	9+	4	9
10	-	9	7	-	2	9+	9	-	9+	8	6	7	9+	9	6	9+	9+	6	9+	9+	9+	9	9+	8	9	9	9+	9	8	9+	6*	9	9	9+	2	10
11	-	9	5	-	6	9+	9	-	9+	8	7	8	9+	9	7	9+	9	8	9+	9+	9+	9	9+	8	9	9+	9+	8	8	9	6*	9	9	9+	2*	11
12	-	9+	-	-	8	9+	9	1	9+	7	8	8	9+	9	8	9+	9	8	9+	9+	9+	9	9+	9	9	9+	9+	5	8	9	9	9	9	9+	3*	12
13	-	9+	-	-	8	9+	9	1	9+	4	2	9	9+	9	9	9+	9	9	9+	9+	9+	9	9+	9	9	9+	9+	5	8	9+	9	9	9	9+	5*	13
14	-	9+	-	1	8	9+	9	4	9+	-	7	9	9+	9	8	9+	8	9	9+	9+	9	9	9+	9	9	9+	9+	9	7	9+	8	9	9	9+	6*	14
15	-	9+	-	3	8	9+	8	5	9+	-	7	9	9+	9	9	9+	7	9	9+	9+	9	9	9+	8	9	9+	9+	9	6	9+	6	9	9	9	5	15
16	1	9+	-	5	9	9	6	6	9+	-	7	9	9+	9	9	9+	5	9	9+	9+	9	9	9+	5	9	9+	9+	5	4	8	4*	8	9	7	4*	16
17	1	9+	-	5	7	9	1	6	9+	-	8	9	9+	8	9	9+	2	9	9+	9+	9	9	9	5*	9	9	9	5	1	5	2*	6	7	3	1*	17
18	1	9	-	4	6	9	-	6	9+	-	8	9	9	5	9	9+	2*	9	9	9+	9	8	8	6	8	8	9+	8	1*	2*	5	3*	2*	8	6	18
19	-	8	-	1	4	7	-	5	9	-	7	8	9	5	9	9+	5*	9	9	9+	9	7	6	6	8	7	9+	9	6*	5*	8	6*	6*	9+	9	19
20	-	3	-	-	1	2	-	3	8	-	6	7	8	-	8	9+	7	9	9	9+	9	6*	7	8*	9*	9	9+	9	6*	4*	8	8*	7*	1*	8	20
21	-	-	-	-	-	-	-	1	5	-	1	3	4	-	8	9+	4*	8	9	9+	8	5*	9+	7*	9	9	9+	9	5*	3*	8	9*	6*	9+	8	21
22	-	-	-	-	-	-	-	-	1	-	-	-	1	-	5	9	1*	7	8	9	6	4*	9+	6	8	9	9+	9	5*	9	8	8	6*	9+	8	22
23	-	-	-	1	-	-	-	-	-	-	-	-	-	-	4	9	-	4	6	8	4	3*	9+	6	8	9	9+	8	4*	9	8	7	7	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



May, Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	1	2	8	3	1*	9+	6	5	8	9+	8	1*	9	8	5*	4	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	-	2	8	3	1*	9	7	5	8	9+	7	1*	9+	8	4*	7	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	4	-	2	9	5	3	9	8	5	9	9+	8	1*	3	9	4	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	7	2*	4	9	7	5	9	9	6	8	9+	9	-	5	9	6	8	9+	9	3
4	-	-	-	-	-	-	-	-	-	-	-	-	4	-	3	9	8	5*	4	9+	9	6	9+	9	7	8	9+	9	-	8	9	8	8	9+	8	4
5	-	-	-	-	-	1	-	-	-	4	-	-	8	5	6	9	9	7	5	9+	9	7	9+	9	7	9	9+	9	-	9+	8	8	8	9+	8	5
6	-	-	-	-	-	5	-	-	2	6	-	-	9	7	8	9+	9	8	6	9+	9	7	9+	9+	8	9	9+	9	-	9+	8	8	8	9+	7	6
7	-	-	1	-	-	8	2	-	6	7	-	-	9+	8	6	9+	9	7	7	9+	9+	8	9+	9+	8	9	9+	9	2*	9+	8	8	8	9+	6	7
8	-	2	1	-	-	9	7	-	8	8	-	1	9+	8	4	9+	9+	7	8	9+	9+	8	9+	9+	8	9	9+	9	3*	9+	7	9	9	9+	5	8
9	-	7	7	-	-	9+	8	-	9	8	-	5	9+	9	6	9+	9+	7	9	9+	9+	8	9+	9	8	9	9+	9	3*	9	6	9	9	9+	4	9
10	-	9	7	-	1	9+	8	-	9+	8	6	7	9+	9	6	9+	9+	6	9	9+	9+	8	9+	9	8	9	9+	9	4	9+	6*	9	9	9+	2	10
11	-	9	5	3	5	9+	8	-	9+	8	7	7	9+	9	6	9+	9	8	9	9+	9+	9	9+	8	9	9	9+	9	5*	9+	6*	9	8	9+	1*	11
12	-	9	-	6	7	9+	8	-	9+	7	8	7	9+	9	7	9+	9	8	9	9+	9	9	9+	9	9	9+	9+	7	4*	9	8	8	8	9+	2*	12
13	-	9	-	-	8	9+	8	1	9+	4	3	8	9+	9	7	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	7	5	9	6	8	8	9	1*	13
14	-	9	-	1	7	9+	8	1	9+	1	7	8	9+	9	8	9+	8	9	9+	9+	9	9	9+	9	9	9+	9+	9	5	9	7	7	8	9	2	14
15	-	9	-	4	8	9+	6	4	9+	-	8	9	9+	9	8	9+	7	9	9+	9+	9	9	9+	8	9	9+	9+	9	4	9	5	7	8	8	5	15
16	-	9	-	7	8	9+	2	5	9+	-	8	9	9+	8	9	9+	5	9	9+	9+	9	9	9+	5	9	9	9	8	5	6	4*	7	8	3	1	16
17	-	9	-	5	7	9	-	5	9+	-	8	9	9+	8	9	9+	3	9	9+	9+	9	8	9	5*	9	9	8	7	2	4	2*	5	6	1*	1	17
18	-	9	-	4	5	9	-	5	9+	-	8	9	9	3	9	9+	4*	9	9	9+	9	9	8	6	9	9	9+	8	1	1*	3	1	2	6	4	18
19	-	6	-	1	3	7	-	4	9	-	8	7	9	1	9	9+	5*	9	9	9+	9	8	7	7	8	8	5	9	4*	1*	7	6*	6*	9	4	19
20	-	3	-	-	-	1	-	1	8	-	5	5	8	-	8	9+	8	9	9	9+	8	8	8	7*	9	9	9+	9	7*	2	8	8*	5*	9+	6	20
21	-	-	-	-	-	-	-	-	5	-	1	1	4	-	8	9+	4*	8	9	9+	8	5*	9+	8*	9	9	9+	9	4*	-	8	8*	5*	9+	6	21
22	-	-	-	-	-	-	-	-	1	-	-	-	-	-	6	9	1*	6	8	9	5	3*	9	6	8	8	9+	8	2*	9+	8	7*	2*	9+	7	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	-	3	5	8	4	2*	9	6	7	8	9+	9	1*	9	8	5*	3	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



**Jun., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	4	8	3	2	9+	6	4	8	9	8	-	8	7	3*	3	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	-	2	8	3	1*	9	7	4	8	9	7	-	9	8	2*	6	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	3	-	3	9	4	2	8	8	4	8	9+	8	-	9+	8	2*	5	9+	8	2
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	8	6	1	2	9	7	2	9	9	6	8	9+	9	-	9+	8	2	5	9+	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	-	2	8	8	4*	5	9+	9	3	9	9	5	8	9+	9	-	5	8	8	5	9+	8	4
5	-	-	-	-	-	1	-	-	-	3	-	-	8	4	4	9	9	5	5	9+	9	3*	9+	9	5	8	9+	9	-	6	7	8	7	9+	6	5
6	-	-	-	-	-	5	-	-	1	5	-	-	9	7	4	9+	9	8	6	9+	9	4*	9+	9	6*	9	9+	9	1*	7	7	8	8	9+	5	6
7	-	-	-	-	-	8	1	-	5	7	-	-	9+	8	5	9+	9	8	7	9+	9+	5*	9+	9	8	9	9+	9	2*	8	6	8	9	9+	4	7
8	-	2	2	-	-	9	6	-	8	8	-	-	9+	9	5	9+	9+	5	8	9+	9+	5	9+	9	8	9	9+	9	4*	8	3	8	9	9+	2	8
9	-	5	7	-	-	9+	8	-	9	8	5	4	9+	9	5	9+	9+	5	8	9+	9+	6	9+	9	8	9	9+	9	3*	9+	2*	9	8	9	1	9
10	-	8	7	-	-	9+	8	-	9	8	5	6	9+	9	6	9+	9+	7	9	9+	9+	7	9+	8	9	9	9+	9	2*	9	4*	9	8	9	-	10
11	-	9	6	4	2	9+	8	-	9+	8	6	7	9+	9	6	9+	9	8	9+	9+	9+	7	9+	8	9	9	9+	8	2*	8	4*	8	5	9	-	11
12	-	9	1	7	4	9+	8	-	9+	7	7	8	9+	9	7	9+	9	9	9+	9+	9+	7	9+	8	9	9	9+	8	1*	6	4*	7	5	8	1	12
13	-	9	-	-	5	9+	8	-	9+	5	6	8	9+	9	7	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	8	-	6	4	6	4	6	1	13
14	-	9	-	2	6	9+	6	1	9+	1	6	8	9+	9	8	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	9	-	5	3	4	3	4	5	14
15	-	9	-	2	7	9+	2	2	9+	-	8	9	9+	9	9	9+	7	9	9+	9+	9	8	9+	8	8	9	9+	8	-	4	3	1	5	6	3	15
16	-	9	-	7	8	9+	-	4	9+	-	8	9	9+	8	8	9+	5	9	9	9+	9	8	9+	5	8	9	8	7	1	6	1*	3	4	1*	1	16
17	-	9	-	7	7	9	-	4	9+	-	8	9	9+	4	8	9+	4	9	9	9+	9	8	7	5	8	8	6	7	1	1	1*	1	2	-	-	17
18	-	9	-	3	5	9	-	6	9+	-	8	8	9	1	9	9+	4*	9	9	9+	9	8	6	6	7	8	9	8	1	1*	2	1	1*	3	3	18
19	-	6	-	1	2	7	-	2	9	-	7	7	9	-	8	9+	6	9	9	9+	8	7*	6	8	7	8	4*	9	-	1*	5	2*	4*	4	-	19
20	-	2	-	-	-	1	-	-	8	-	5	5	8	-	8	9+	8	9	9	9+	8	8	7	7	8	8	9+	8	6*	1	8	7*	1*	9+	1	20
21	-	-	-	-	-	-	-	-	4	-	1	1	4	-	7	9	2*	8	8	9+	6	6	8	7*	8	9	9+	8	4*	-	8	7*	3	9+	4*	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	1*	5	7	9	5	4	9	8	8	8	9+	8	1*	8	7	6*	2	9+	4*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	1	4	8	4	2*	9	6	5	8	9	8	1*	6	7	4*	2	9+	7	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Jul., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-	4	8	2	1*	9+	6	4	8	9	8	-	7	8	4*	2	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	-	2	8	4	1*	9	7	4	8	9	8	-	8	8	2*	4	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	4	-	2	9	5	1*	9	8	5	8	9+	8	-	9	8	2*	4	9+	8	2
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	7	1	3	9	7	2*	9+	9	5	8	9+	9	-	9+	8	1*	5	9+	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	-	3	9	8	4	3	9+	9	3	9+	9	6	8	9+	9	-	9+	8	7	4	9+	8	4
5	-	-	-	-	-	1	-	-	-	4	-	-	8	5	4	9	9	7	5	9+	9	4	9+	9	5	8	9+	9	-	6	6	8	7	9+	6	5
6	-	-	-	-	-	6	-	-	1	6	-	-	9	7	8	9+	9	8	6	9+	9+	5*	9+	9	6*	8	9+	9	-	7	6	8	8	9+	5	6
7	-	-	1	-	-	8	2	-	6	7	-	-	9+	8	6	9+	9	7	7	9+	9+	6	9+	9	7	8	9+	9	2*	8	5	8	8	9+	4	7
8	-	2	2	-	-	9	7	-	8	8	-	1	9+	9	6	9+	9+	7	8	9+	9+	6	9+	9	8	9	9+	9	2*	8	2	8	8	9+	2	8
9	-	6	7	-	-	9	8	-	9	8	5	5	9+	9	5	9+	9+	6	9	9+	9+	8	9+	9	9	9	9+	9	3*	9+	1	8	8	9	1	9
10	-	9	7	-	1	9+	8	-	9+	8	-	7	9+	9	6	9+	9+	4	9	9+	9+	8	9+	8	9	9	9+	8	2*	9	6*	8	8	9	-	10
11	-	9	6	-	2	9+	8	-	9+	8	-	8	9+	9	6	9+	9	8	9+	9+	9+	8	9+	6	9	9	8	7	3*	8	4*	7	5	9	-	11
12	-	9	-	-	5	9+	8	-	9+	7	1	8	9+	9	7	9+	9	8	9+	9+	9	8	9+	9	9	9	9+	8	1*	6	6	5	4	9	-	12
13	-	9	-	-	5	9+	8	1	9+	4	5	8	9+	9	8	9+	9	9	9+	9+	9	8	9+	9	8	9	9+	8	-	5	4	4	3	7	1*	13
14	-	9	-	1	6	9+	8	1	9+	1	7	8	9+	9	9	9+	8	9	9+	9+	9	8	9+	9	8	9	9+	9	-	3	3	1	1	5	3	14
15	-	9+	-	6	7	9+	5	4	9+	-	8	9	9+	9	8	9+	7	9	9+	9+	9	8	9+	8	8	9	9+	9	3	2	4	1	4	7	4	15
16	-	9	-	7	8	9+	1	4	9+	-	8	9	9+	8	8	9+	4	9	9+	9+	9	8	9+	5	8	9	9	7	2	6	1*	2	5	2	1	16
17	-	9+	-	5	7	9	-	5	9+	-	8	9	9+	6	9	9+	2	9	9	9+	9	8	7	4	8	8	7	6	1	1	1*	1	2	-	-	17
18	-	9	-	1	6	9	-	4	9+	-	8	8	9	2	9	9+	4*	9	9	9+	9	8	5	5	7	7	9	8	1	1*	2	1*	1*	4	2	18
19	-	6	-	1	2	7	-	4	9	-	7	7	9	-	8	9+	7	9	9	9+	8	6*	5	7	7	7	4*	8	-	1*	7	4*	2*	6	-	19
20	-	3	-	-	-	2	-	1	8	-	5	5	8	-	9	9+	8	9	9	9+	8	8	6	6	8	6	9+	8	6*	-	7	7*	1*	9+	1	20
21	-	-	-	-	-	-	-	-	5	-	-	1	4	-	8	9+	5*	8	9	9	6	6	7	8*	9	8	9+	8	3*	-	7	7*	1	4	4*	21
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	9	1*	5	7	9	5	3*	8	8	8	8	9+	8	2*	6	7	6*	2	9+	4*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	-	2	5	8	3	2*	9	5	6	8	9	8	1*	5	7	5*	3	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Aug., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	-	2	7	2	1*	9	6	4	8	9	8	-	9	8	4*	2	9+	8	0				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	-	2	8	4	1*	9	7	3	8	9+	8	-	9	8	3*	6	9+	8	1				
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	5	-	3	9	5	2*	9	8	4*	8	9+	9	-	9+	8	3*	6	9+	8	2				
3	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	8	7	2	3	9	8	3	9	9	6	8	9+	9	-	5	8	4	6	9+	8	3				
4	-	-	-	-	-	-	-	-	-	-	-	-	5	1	2	9	8	5	4	9+	9	5	9+	9	6	8	9+	9	-	6	7	8	6	9+	8	4				
5	-	-	-	-	-	1	-	-	-	4	-	-	8	5	5	9	9	7	5	9+	9	6	9+	9	5*	9	9+	9	-	7	6	8	8	9+	5	5				
6	-	-	-	-	-	6	1	-	3	6	-	-	9	7	8	9+	9	8	6	9+	9	7	9+	9	6*	9	9+	9	-	8	5	8	8	9+	3	6				
7	-	1	1	-	-	8	3	-	7	8	-	-	9+	8	6	9+	9	8	7	9+	9+	8	9+	9	7	9	9+	9	2*	9	4	8	9	9+	2	7				
8	-	4	2	-	-	9	7	-	9	8	-	2	9+	9	6	9+	9+	7	8	9+	9+	8	9+	9	9	9	9+	9	3*	9	1	8	9	9+	-	8				
9	-	8	7	-	-	9	8	-	9	8	-	6	9+	9	7	9+	9+	7	9	9+	9+	8	9+	8	9	9	9+	8	3*	9	2*	8*	9	9+	-	9				
10	-	9	7	-	2	9+	8	-	9+	8	-	8	9+	9	6	9+	9+	6	9	9+	9+	9	9+	7	8	9+	9+	8	3*	9+	6*	8	8	9+	-	10				
11	-	9	5	-	6	9+	8	-	9+	8	-	6	9+	9	7	9+	9	8	9	9+	9+	9	9+	7	9	9	9+	6	4*	9	5*	8	8	9+	-	11				
12	-	9	-	-	7	9+	8	1	9+	7	1	8	9+	9	8	9+	9	9	9	9+	9	9	9+	8	9	9	9	6	3*	8	7	7	7	9	-	12				
13	-	9	-	-	7	9+	8	1	9+	4	3	8	9+	9	8	9+	9	9	9+	9+	9	9	9+	9	9	9	9	6	2*	8	5	7	6	9	1*	13				
14	-	9	-	1	7	9+	8	3	9+	-	7	8	9+	9	9	9+	8	9	9+	9+	9	9	9+	9	9	9	9+	9	1*	6	4	5	5	7	2*	14				
15	-	9	-	4	7	9+	8	4	9+	-	7	8	9+	9	9	9+	7	9	9+	9+	9	9	9+	8	9	9	9+	8	2	4	3	2*	3	7	3	15				
16	-	9	-	7	8	9+	4	5	9+	-	8	9	9+	9	9	9+	4	9	9+	9+	8	8	9+	5	9	9	9	6	2	6	1*	4	5	2	1*	16				
17	1	9+	-	5	7	9	-	6	9+	-	8	9	9+	6	9	9+	2	9	9	9+	9	8	7	4*	8	8	8	5	1	1	1*	1	2	-	-	17				
18	-	9	-	1	6	9	-	6	9+	-	8	9	9	4	9	9	4*	9	9	9+	9	7	4	6	6	7	9+	8	-	1*	3	1*	1*	6	2	18				
19	-	7	-	1	4	7	-	5	9	-	7	7	9	1	9	9+	5*	9	9	9+	9	6*	5*	6	7	6	5*	8	2*	1*	7	5*	5*	9	-	19				
20	-	4	-	-	-	2	-	1	9	-	5	5	8	-	8	9+	7	9	9	9+	8	8	4*	6	9*	4	9+	8	7*	-	7	8*	3*	8	3	20				
21	-	-	-	-	-	-	-	-	5	-	1	2	4	-	8	9+	3*	8	9	9+	7	5*	8	7*	9	8	9+	8	4*	-	7	8*	2*	8	5*	21				
22	-	-	-	-	-	-	-	-	1	-	-	-	-	-	6	9	1*	6	8	9	5	3*	9	6*	8	8	9+	8	2*	-	8	6*	1*	9+	4*	22				
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	-	2	5	8	3	2*	9	6	7	7	9	8	1*	8	7	5*	3	9+	7	23				
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA					



Sep., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	1	2	8	2	1*	9+	6	3*	8	9	7	1*	9	8	5*	8	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	1	8	2	1*	9	7	4*	7	9	8	-	9	8	5*	8	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	5	-	1	9	5	2*	9	8	6	7	9+	9	-	7	9	5*	8	9+	9	2
3	-	-	5	-	-	-	-	-	-	-	-	1	-	-	1	8	7	3	2	9+	8	5	9+	9	6*	9	9+	9	-	9	9	8	8	9+	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	1	2*	9	8	6	2	9+	9	7	9+	9	6*	8	9+	9	-	9+	9	8	8	9+	8	4
5	-	-	-	-	-	3	-	-	-	4	-	-	8	5	5	9	9	7	3	9+	9	7	9+	9	6*	9	9+	9	-	9+	9	8	8	9+	6	5
6	-	-	-	-	-	6	1	-	4	6	-	-	9	7	6	9+	9	8	6	9+	9	8	9+	9	6*	9	9+	9	4	9+	9	8	8	9+	7	6
7	-	1	1	-	-	8	4	-	8	8	1	-	9+	8	7	9+	9	8	8	9+	9+	8	9+	9+	8	9	9+	9	6	9+	8	8	9	9+	5	7
8	-	5	2	-	-	9	7	-	9	8	-	4	9+	9	8	9+	9+	8	9	9+	9+	8	9+	9+	8	9	9+	9	6*	9+	6	8*	9	9+	2	8
9	-	8	6	-	1	9	8	-	9	8	5	6	9+	9	7	9+	9+	7	9	9+	9+	9	9+	9	9	9	9+	8	7	9+	5*	8	9	9+	1	9
10	-	9	7	-	4	9+	8	-	9+	8	6	7	9+	9	6	9+	9	6	9	9+	9+	9	9+	6	9	9	9+	8	7	9	6*	9	9	9+	-	10
11	-	9	5	-	7	9+	8	1	9+	8	-	8	9+	9	8	9+	9	8	9	9+	9	9	9+	9	9	9+	9+	6	6	9+	6*	8	9	9+	2*	11
12	-	9	-	-	8	9+	8	1	9+	6	-	9	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	2*	5*	9+	6	8	9	9+	4*	12
13	-	9	-	-	7	9+	8	2	9+	4	5	9	9+	9	8	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	4	5	9	7	8	9	9	5*	13
14	-	9	-	1	8	9+	9	4	9+	-	6	9	9+	9	8	9+	8	9	9+	9+	9	9	9+	9	9	9+	9+	9	5	9	5	8	8	6	4*	14
15	1	9+	-	3	8	9+	9	6	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	9	9	9+	7	9	9+	9+	8	2	7	2	7	6	7	1*	15
16	2	9	-	6	8	9+	7	7	9+	-	8	9	9+	9	9	9+	4	9	9+	9+	8	8	9+	4*	9	9	9	2	-	6	2*	7	8	2*	1*	16
17	3	9+	-	6	7	9	2	6	9+	-	8	9	9+	8	9	9+	1	9	9	9+	9	7	8	4*	8	9	8	2*	-	2	1*	2	3	-	-	17
18	2	9	-	3	6	9	-	6	9+	-	8	8	9	5	9	9	4*	9	9	9+	9	5*	4	5	4	5	9+	7	1*	1*	4	2*	1*	8	4	18
19	-	8	-	1	4	8	-	5	9	-	7	8	9	4	9	9+	5*	9	9	9+	9	6*	3*	6	8	2	9	9	6*	4*	7	6*	6*	9+	7	19
20	-	3	-	-	1	2	-	3	8	-	5	7	8	1	8	9+	8	9	9	9+	9	5*	6	5	9*	7	9+	9	6*	1*	8	8*	7*	-	8	20
21	-	-	-	-	-	-	-	1	5	-	1	2	4	-	7	9+	4*	8	9	9+	8	5*	9+	7*	9	5	9+	9	5*	-	8	8*	6*	9+	8	21
22	-	-	-	-	-	-	-	-	1	-	-	-	1	-	4	9	1*	6	8	9	5	2*	9+	6*	8	7	9+	8	3*	6	8*	7*	5*	9+	8	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	-	3	5	8	3	2*	9+	6	6	8	9	8	1*	9	8	6*	8	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



**Oct., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	1	3	7	2	1*	9	6	6	8	9	8	1*	9	8	5*	7	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	-	2	8	4	1*	9	7	5	8	9+	8	1*	9	8	5*	8	9+	9	1
2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	8	3	-	2	9	6	2*	9+	8	6*	8	9+	9	1*	9+	9	5*	8	9+	9	2
3	-	-	5	1	-	-	-	-	-	7	-	-	1	-	1	8	6	4	2	9	8	5	9+	9	7*	8	9+	9	-	9+	9	7	8	9+	9	3
4	-	-	8	1	-	-	-	-	-	-	-	-	6	2	3	9	9	6	3	9+	9	8	9+	9	7*	8	9+	9	4	9+	9	8	8	9+	7	4
5	-	-	9	-	-	4	-	-	1	5	-	-	8	5	8	9	9	7*	5	9+	9	8	9+	9	7*	9	9+	9	8	9+	9	7	9	9+	5	5
6	-	-	9	-	-	7	1	-	5	6	1	-	9	8	6	9+	9	8	8	9+	9	8	9+	9+	7*	9	9+	9	8	9+	9	8	9	9+	5	6
7	-	2	1	-	-	9	5	-	8	8	2	1	9+	8	7	9+	9	8	9	9+	9+	9	9+	9+	8*	9	9+	9	9	9+	9	8	9	9+	4	7
8	-	7	1	-	-	9+	7	-	9	8	-	5	9+	9	7	9+	9+	8	9	9+	9+	9	9+	9+	9	9	9+	9	9	9+	6	8*	9	9+	1	8
9	-	9	7	-	2	9+	8	-	9	8	-	7	9+	9	8	9+	9+	7	9	9+	9+	8	9+	9	9	9	9+	8	9	9+	6*	8	9	9+	-	9
10	-	9	7	-	6	9+	9	-	9+	8	-	8	9+	9	8	9+	9	6	9	9+	9+	9	9+	9	9	9+	9+	7	9	9+	6	8	9	9+	1*	10
11	-	9	6	-	8	9+	9	1	9+	8	8	8	9+	9	8	9+	9	8	9	9+	9	9	9+	9	9	9+	9+	3	9	9+	8	8	9	9+	4*	11
12	-	9	-	-	8	9+	9	3	9+	7	1	9	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	2*	8	9+	8	9	9	9+	5*	12
13	-	9	-	-	7	9	9	4	9+	4	5	9	9+	9	9	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	2*	7	9+	8	9	9	9+	5*	13
14	1	9	-	-	8	9+	9	5	9+	-	7	9	9+	9	9	9+	8	9	9+	9+	9	9	9+	9	9	9+	9+	9	5	9+	7	9	9	9	4*	14
15	2	9	-	2	8	9	9	7	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	9	8	9+	7	9	9+	9+	8	4*	9+	4*	9	7	9	5*	15
16	4	9	-	5	8	9	4	7	9+	-	8	9	9+	9	9	9+	4	9	9+	9+	7	7	9+	4*	9	9	9+	2*	2*	9	5*	9	3	7	3*	16
17	5	9	-	2	8	9	4	7	9+	-	8	9	9	8	9	9+	2	9	9+	9+	7	4*	9	4*	9	9	9	3*	1*	6	2*	7	-	2	1*	17
18	3	9	-	3	7	9	-	6	9+	-	8	8	9	7	9	9	3*	9	9	9+	9	4*	6	6	8*	6	9+	8	3*	3*	5	3*	2*	8	5	18
19	1	8	-	1	5	8	-	6	9	-	7	8	9	5	9	9	5*	9	9	9+	9+	5*	5	6	9*	4	9+	9+	6*	5*	8	6*	5*	9+	8	19
20	-	4	-	-	2	3	-	4	9	-	5	7	8	1	8	9+	8	9	9	9+	9	5*	6	6	9*	5	9+	9	6*	4*	8	9*	6*	9+	9	20
21	-	-	-	-	-	-	-	1	7	-	2	4	5	-	7	9+	4*	9	8	9+	8	4*	9+	7*	9	4	9+	9	6*	2	8	9	6*	9+	9	21
22	-	-	-	3	-	-	-	-	1	-	-	-	1	-	3	9+	1*	7	9	9	6	2*	9+	6*	8	7	9+	9	5*	9+	8	8	5*	9	9	22
23	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	9	-	4	6	8	3	2*	9+	6	7	9	9+	8	2*	9	8	6*	7	9+	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	







**Dec., Marshall Islands (Kwajalein), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	1	1	5	7	4	1*	9+	6	6	8	9	9	1*	9+	8	4*	7	7	8	0
1	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	7	2	-	4	8	5	1*	9	7	4*	8	9	9	-	9	8	3*	7	8	8	1
2	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	8	5	1	3	9	7	1*	9	8	6	8	9+	9	-	9	8	3*	8	9+	9	2
3	-	-	3	-	-	-	-	-	-	7	-	-	2	-	4	9	6	4	4	9+	9	-	9+	9	6	9	9+	9	-	9	9	6	9	9+	5	3
4	-	-	7	-	-	-	-	-	-	8	-	-	6	3	6	9	9	6	6	9+	9	-	9+	9	7	9	9+	9	-	9	9	6	9	9+	6	4
5	-	-	-	-	-	4	-	1	3	5	1	-	8	6	7	9+	9	8	8	9+	9	8	9+	9	7	9	9+	8	-	9+	9	7	9	9+	4	5
6	-	1	9	-	-	7	3	4	7	9	3	1	9	8	8	9+	9	8	9	9+	9	9	9+	9+	8	9	9+	8	5	9+	9	8	9	9	1	6
7	-	5	2	-	-	9	6	5	9	8	4	5	9+	9	8	9+	9+	7	9	9+	9	9	9+	9+	8	9+	9+	7	8	9+	7	8	9	9	-	7
8	-	8	4	-	2	9+	7	5	9	8	3	7	9+	9	9	9+	9+	9	9+	9+	9	9	9+	9	8	9	9+	5	9	9+	3	8	9	9	-	8
9	-	8	7	-	6	9+	8	3	9+	8	5	8	9+	9	9	9+	9+	8	9	9+	9	9	9+	8	9	9+	9+	3	9	9+	2*	9	9	9	-	9
10	-	9	7	-	8	9+	8	3	9+	8	-	9	9+	9	9	9+	9	7	9	9+	9	9	9+	9	8	9	9+	1*	8	9	5*	9	9	9	-	10
11	-	9	6	-	7	9+	8	5	9+	8	-	9	9+	9	9	9+	9	7	9+	9+	8	9	9+	9	9	9+	9+	2*	7	8	7	8	9	9	2*	11
12	1	9+	1	-	8	9+	8	6	9+	8	-	9	9+	9	9	9+	9	8	9	9+	8	9	9+	9	9	9+	9+	2*	7	8	5*	8	9	9	5*	12
13	3	9+	-	-	8	9+	8	7	9+	5	2	9	9+	9	9	9+	9	9	9+	9+	7	8	9+	9	9	9+	9+	2*	5	7	6	8	8	8	3*	13
14	5	9+	-	-	8	9+	9	8	9+	-	6	9	9+	9	8	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	6	2	5	4*	6	5	9	2*	14
15	6	9+	-	2	8	9+	9	8	9+	-	8	9	9+	9	9	9+	7	9	9+	9+	9	8	9+	5	9	9	9+	6	1*	4	1*	4	2	2	1*	15
16	6	9+	-	2	8	9	9	8	9+	-	8	9	9+	9	9	9+	3	9	9+	9+	7	5	9	3*	9	8	9	2*	-	2	1*	4	-	2	1*	16
17	6	9+	-	5	8	9	8	8	9+	-	8	9	9+	9	8	9+	2	9	9	9+	6	2*	7	2*	8	4	8	3*	-	-	-	1*	-	-	-	17
18	5	9	-	3	7	9	6	7	9+	-	8	9	9	9	8	9	2	9	8	9+	9	4*	2*	5	7*	2*	9	5	-	-	1	-	-	1	-	18
19	3	9	-	1	5	7	2	8	9+	-	8	9	9	8	8	9	2*	9	6	9+	9+	5*	5*	8	8*	2*	9+	9	1*	5*	7	6*	2*	4	8	19
20	1	7	-	-	4	4	-	6	9	-	5	8	8	4	8	9+	6*	9	9	9+	9+	4*	5*	6	8	2*	9+	9	4*	2*	8	6*	5*	9	9	20
21	-	1	-	-	-	-	-	3	8	-	3	6	7	1	6	9+	5*	9	7	9+	9	3*	9+	8*	9	1*	9+	9+	5*	-	8	6*	4*	9+	9	21
22	-	-	-	-	-	-	-	1	4	-	-	2	2	-	1	9+	2*	8	8	9+	7	3*	9+	7*	8	-	9+	9	4*	8	8	6	2*	9+	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	-	6	8	8	5	1*	9+	6	7	8	9+	9	2*	9+	8	5*	2*	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Jan., Marshall Islands (Kwajalein), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	2	4	6	8	5	-	9	7	4*	7	9	8	-	9	8	2*	1	1	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	3	1	5	8	6	-	9	7	2*	8	9+	9	-	5	8	-	7	7	6	1
2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	8	6	1*	4	9	8	-	9	8	4	8	9+	8	-	5	8	-	7	8	1	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	9	7	4	5	9+	9	-	9+	9	6	9	9+	9	-	4	7	3	8	9	-	3
4	-	-	-	-	-	1	-	-	1	1	-	-	6	2	6	9	8	6	6	9+	9	-	9+	9	7	9	9+	5	-	7	7	5	9	9	-	4
5	-	-	-	-	-	5	-	1	3	5	-	-	8	6	6	9+	9	8	8	9+	9	4	9+	9	8	9	9+	2	-	9	4	5	8	9	-	5
6	-	1	-	-	-	7	3	2	6	7	1	-	9	8	8	9+	9	8	9	9+	9	7	9+	9	7	9	9+	1	-	9+	1	7	9	9	-	6
7	-	4	2	-	-	9	7	5	9	8	4	4	9	9	8	9+	9	6*	9	9+	9	9	9+	8	7	9	9+	1	-	9+	-	8	9	9	-	7
8	-	8	5	-	1	9	8	3	9	8	2	7	9+	9	8	9+	9	8	9	9+	9	9	9+	5	8	9	9+	1	6*	9	-	9	9	9	-	8
9	-	9	7	-	5	9+	9	3	9+	9	-	8	9+	9	8	9+	9	8	9	9+	9	9	9+	3*	8	9	9+	1	5	8	-	7	8	8	-	9
10	-	9	8	-	7	9+	9	3	9+	8	-	9	9+	9	8	9+	9	8	9	9+	9	9	9+	4*	8	9	9+	-	5*	7	3*	5	8	7	-	10
11	-	9	7	-	8	9+	9	3	9+	8	-	9	9+	9	8	9+	9	8	9	9+	8	8	9+	8	9	9+	3*	5*	4	2*	5*	8	7	-	11	
12	-	9	1	-	8	9+	9	5	9+	8	1	9	9+	9	9	9+	9	9	9	9+	7	5	9	8	9	9	9+	4*	2*	3	1*	5	3	5	1*	12
13	2	9+	-	-	8	9+	9	6	9+	5	5	9	9+	9	9	9+	8	9	9	9+	6	4	8	8	8	8	9+	3*	1*	1	-	3	1	2	1*	13
14	5	9+	-	-	8	9+	9	7	9+	2	6	9	9+	9	8	9+	8	9	9	9+	9	1*	8	5	8	7	9	2*	-	-	-	1*	-	2	1*	14
15	6	9+	-	2	8	9+	9	8	9+	-	8	9	9+	9	8	9+	5	9	9	9+	8	1	7	2	8	5	8	2*	-	-	-	1*	-	-	1*	15
16	6	9+	-	3	9	9+	9	8	9+	-	8	9	9+	9	8	9	1	9	9	9+	4	2*	6	1*	7	1	6	1*	-	-	-	1*	-	-	-	16
17	6	9+	-	7	8	9	7	7	9+	-	8	9	9+	8	6	9	1	9	9	9+	1*	1*	1	-	5	-	4	1*	-	-	-	-	-	-	-	17
18	6	9+	-	6	7	9	5	7	9	-	8	8	9	8	3	4	2	8	2	9+	7	2*	1*	1	4*	1*	7	1*	-	-	-	-	-	-	-	18
19	2	9	-	2	7	9	1	7	9	-	8	8	8	8	1*	1	1	8	1	9+	9	5*	5*	7	6*	2*	9	8	-	-	-	1*	-	-	-	19
20	1	7	-	1	5	6	-	6	9	-	6	8	8	5	6	5	8	9	4	9+	9	6*	2*	7	8*	5*	9+	9	-	-	8	6*	1*	6	8	20
21	-	2	-	-	1	1	-	4	8	-	3	7	8	-	2*	9+	5*	9	5	9	9	5*	1*	7	8*	4*	9+	8	-	-	8	6*	-	7	8	21
22	-	-	-	-	-	-	-	1	4	-	1	2	3	-	1	9+	3*	8	4	9+	8	2*	9+	7	8	3*	9+	9	-	-	8	5*	-	2	8	22
23	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	9	1	6	6	9	6	-	9+	6	5*	1*	9+	9	-	1	7	4*	-	-	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	











**Apr., Marshall Islands (Kwajalein), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	1	1	4	8	4	2*	9	7	5*	8	9+	8	1*	9	9	5*	8	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	2	1	2	8	5	2*	9	8	4*	8	9+	8	-	8	8	5*	7	9	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	5	1	2	9	6	1*	9	8	5	8	9+	9	-	6	9	5*	8	9+	9	2
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	8	7	3	2	9	8	2	9+	9	6	8	9+	9	-	9	8	6	8	9+	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	1	3	9	8	5	4	9+	9	6	9+	9	6	8	9+	9	-	9+	8	8	8	9+	7	4
5	-	-	-	-	-	3	-	-	1	4	-	-	8	5	5	9	9	6	5	9+	9	7	9+	9	6	9	9+	9	-	9+	7	8	8	9+	6	5
6	-	-	-	-	-	6	1	-	4	6	-	-	9	7	5	9+	9	8	7	9+	9	8	9+	9	7*	8	9+	9	-	9+	6	8	8	9+	2	6
7	-	1	1	-	-	8	3	-	7	8	-	-	9+	8	6	9+	9	8	8	9+	9+	8	9+	9	7*	9	9+	8	2	9+	6	8	9	9+	1	7
8	-	4	4	-	-	9	7	-	9	8	-	4	9+	9	7	9+	9+	8	9	9+	9+	8	9+	9	8	9	9+	8	5*	9+	4	9	9	9+	-	8
9	-	8	6	-	-	9	8	-	9	8	-	6	9+	9	7	9+	9+	7	9	9+	9+	9	9+	9	9	9	9+	7	6	9	2*	9	9	9+	-	9
10	-	9	7	-	3	9+	9	-	9+	8	-	8	9+	9	7	9+	9	6	9+	9+	9+	9	9+	6	9	9	9+	6	6*	9+	6*	9	9	9+	-	10
11	-	9	6	-	6	9+	9	1	9+	8	-	8	9+	9	8	9+	9	8	9+	9+	9	9	9+	8	9	9	9+	5*	5*	9	6*	9	8	9+	-	11
12	-	9+	1	-	8	9+	9	1	9+	7	1	9	9+	9	9	9+	9	9	9+	9+	9	9	9+	8	9	9+	9+	3*	5*	9	8	8	8	9+	1*	12
13	-	9+	-	-	8	9+	9	2	9+	5	2	9	9+	9	8	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	4*	3*	8	6	8	8	9	2*	13
14	-	9+	-	1	8	9+	9	2	9+	1	7	9	9+	9	8	9+	9	9	9+	9+	9	9	9+	9	9	9+	9+	8	2*	7	5	7	7	9	4*	14
15	1	9+	-	4	8	9+	9	5	9+	-	7	9	9+	9	9	9+	7	9	9+	9+	9	8	9+	8	9	9+	9+	7	2*	6	2	5	5	7	2*	15
16	-	9+	-	7	9	9+	2	6	9+	-	8	9	9+	9	9	9+	5	9	9+	9+	8	7	9	3*	9	9	9	4*	-	5	1*	6	6	1	2*	16
17	2	9+	-	6	8	9	2	6	9+	-	8	9	9+	8	9	9+	3	9	9	9+	7	4	8	3*	8	8	7	3	-	1	-	2	1	-	-	17
18	2	9	-	4	7	9	-	6	9+	-	8	9	9	6	9	9	4*	9	9	9+	9	2*	4	6	4	5	9	8	-	1*	4	1*	1*	4	2	18
19	1	8	-	2	4	8	-	6	9	-	8	8	9	5	9	9	5*	9	9	9+	9	6*	4*	7	7	3*	7	9	1*	2*	7	5*	5*	9	6	19
20	-	4	-	-	1	3	-	4	9	-	6	7	8	-	8	9+	8	9	9	9+	9	6*	4	6	9*	4*	9+	9	6*	-	8	7*	5*	9+	8	20
21	-	1	-	-	-	-	-	1	7	-	2	4	5	-	6	9+	5*	8	9	9+	8	5*	9+	8*	9	6	9+	9	1*	-	8	8*	5*	9+	8	21
22	-	-	-	-	-	-	-	-	2	-	-	-	1	-	2	9+	2*	7	8	9	6	4*	9+	7*	8	8	9+	9	1*	1	8	7*	5*	9+	8	22
23	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	9	-	5	6	9	5	3*	9+	6	7	8	9+	8	1*	9	8	6*	6	9	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



















**Sep., Marshall Islands (Kwajalein), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	1	1	4	8	3	1*	9	7	4*	8	9	8	-	9+	9	5*	4	9	9	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	2	1	2	9	4	1*	9	8	4*	8	9	8	-	8	8	3*	5	9	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	5	1	2	9	7	-	9	8	6	7	9+	9	-	3	9	2*	7	9+	8	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	3	8	8	4*	4	9+	8	-	9	9	7	9	9+	9	-	5	8	5	8	9+	5	3
4	-	-	-	-	-	-	-	-	-	-	-	-	6	1	2	9	9	5	4	9+	9	4	9+	9	6	8	9+	9	-	9+	8	8	8	9+	2	4
5	-	-	-	-	-	4	-	-	1	5	-	-	8	4	9	9	9	8	4	9+	9	7	9+	9	6	9	9+	9	-	9+	6	8	8	9+	1	5
6	-	-	-	-	-	7	1	-	5	7	-	-	9	8	6	9+	9	7	7	9+	9	8	9+	9	7	9	9+	7	1	9+	5	8	8	9+	-	6
7	-	2	2	-	-	8	5	-	8	8	1	1	9+	8	7	9+	9	8	9	9+	9	8	9+	9	7*	9	9+	6	1*	9+	1	8	9	9+	-	7
8	-	6	6	-	-	9	8	-	9	8	-	5	9+	9	7	9+	9+	8	9	9+	9+	8	9+	8	8	9	9+	5	5*	9	-	8	9	9+	-	8
9	-	8	7	-	1	9	8	-	9	9	-	7	9+	9	8	9+	9	7	9	9+	9+	8	9+	5	8	9	9+	5	5	9	4*	8*	9	9+	-	9
10	-	9	7	-	5	9+	8	-	9+	8	-	8	9+	9	7	9+	8	6	9	9+	9	9	9+	3*	9	9	9+	4	5*	8	5*	8	8	9	-	10
11	-	9	6	-	7	9+	8	-	9+	8	-	8	9+	9	9	9+	9	8	9	9+	9	8	9+	8	9	9	9+	4*	4*	8	5*	7	6	9	-	11
12	-	9	-	-	8	9+	8	2	9+	7	1	9	9+	9	8	9+	9	9	9	9+	9	8	9+	8	9	9	9+	3*	2*	6	5*	7	5	8	1*	12
13	-	9	-	-	8	9+	8	2	9+	5	6	9	9+	9	8	9+	9	9	9+	9+	9	7	9+	8	9	9	9+	4*	-	5	2*	6	4	5	1*	13
14	-	9+	-	1	8	9+	9	5	9+	-	7	9	9+	9	9	9+	8	9	9+	9+	9	7	9	8	9	9	9+	8	-	3	1*	5	2	1	1*	14
15	1	9+	-	6	8	9+	9	6	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	9	6	9	5	9	9	9	5	-	1	-	1*	-	1	-	15
16	4	9+	-	7	8	9+	8	7	9+	-	8	9	9+	9	9	9+	3	9	9+	9+	7	5	8	2*	8	8	6	2*	-	1	-	1	2	-	-	16
17	5	9+	-	7	8	9	2	7	9+	-	8	9	9+	8	9	9	2	9	9	9+	5	1	4	1*	4	5	5	1	-	-	-	-	-	-	-	17
18	3	9	-	6	7	9	-	7	9+	-	8	8	9	6	8	6	2*	8	8	9	9	3*	3*	5	4*	2*	9	7	-	-	2	1*	-	5	1	18
19	1	8	-	1	5	8	-	6	9	-	8	8	8	5	9	8	2*	8	8	9+	9	5*	4*	7	7	2*	4*	8	2*	-	6	5*	4*	9	2	19
20	-	4	-	-	1	4	-	4	9	-	5	7	8	1	8	9+	7	9	9	9+	9	6*	2*	7	9*	4*	9+	9	4*	-	8	7*	3*	9+	7	20
21	-	-	-	-	-	-	-	1	6	-	1	3	5	-	4	9+	4*	8	8	9+	8	5*	8	8*	9	5*	9+	9	1*	-	8	8*	2*	9+	6	21
22	-	-	-	-	-	-	-	-	2	-	-	-	1	-	1	9	2*	6	8	9	5	2*	9+	6	7*	8	9+	8	-	-	7	7*	-	9+	6	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	5	6	8	4	1*	9	6	5*	7	9+	8	-	8	8	6*	3	9+	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Oct., Marshall Islands (Kwajalein), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	1	1	4	8	4	1*	9	7	4*	8	9+	8	-	9	8	5*	6	8	8	0				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	2	1	4	8	5	1*	9	8	4*	8	9+	9	-	9	8	5*	8	9+	9	1				
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	6	1	3	9	7	1*	9	8	7	8	9+	9	-	9	8	5*	9	9+	7	2				
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	4	9	7	4	4	9+	8	1*	9+	9	7	8	9+	9	-	9+	9	5	8	9+	4	3				
4	-	-	-	-	-	1	-	-	-	-	-	-	6	2	4	9	9	6	5	9+	9	7	9+	9	6	8	9+	8	-	9+	9	8	8	9+	1	4				
5	-	-	-	-	-	4	-	-	2	5	-	-	8	6	7	9+	9	9	6	9+	9	8	9+	9	6*	9	9+	8	3	9+	9	7	9	9+	-	5				
6	-	-	-	-	-	7	2	-	6	7	-	-	9	8	7	9+	9	8*	8	9+	9	8	9+	9	6	9	9+	6	7	9+	8	8	9	9+	-	6				
7	-	3	9+	-	-	9	5	-	9	8	2	2	9+	9	8	9+	9	8	9	9+	9	9	9+	9	8*	9	9+	6	8	9+	5	8	9	9+	-	7				
8	-	7	5	-	-	9	8	1	9	8	1	6	9+	9	8	9+	9+	8	9	9+	9+	9	9+	9	9	9	9+	5	8	9+	-	8	9	9+	-	8				
9	-	9	7	-	3	9+	8	1	9	9	-	8	9+	9	8	9+	9	8	9	9+	9+	8	9+	6	8	9	9+	5	8	9+	6*	8	9	9+	-	9				
10	-	9	7	-	6	9+	9	1	9+	8	-	8	9+	9	8	9+	9	6	9+	9+	9	9	9+	8	9	9	9+	4	6	9	6*	8	9	9+	-	10				
11	-	9	6	-	8	9+	9	2	9+	8	-	9	9+	9	8	9+	9	8	9	9+	9	9	9+	9	9	9+	9+	4*	5*	9	7	8	9	9+	2*	11				
12	-	9+	1	-	7	9	9	4	9+	7	1	9	9+	9	9	9+	9	9	9	9+	9	9	9+	9	9	9+	9+	4*	5*	9	6	8	9	9+	5*	12				
13	-	9+	-	-	8	9	9	5	9+	5	2	9	9+	9	9	9+	9	9	9+	9+	9	8	9+	9	9	9	9+	4*	4*	8	6	8	8	9	6*	13				
14	1	9+	-	1	8	9+	9	6	9+	1	7	9	9+	9	9	9+	8	9	9+	9+	9	6	9+	8	9	9	9+	8	2*	8	3*	8	7	7	4*	14				
15	3	9+	-	3	8	9	9	7	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	8	6	9+	5	9	9	9+	5	2*	7	2*	8	-	5	3*	15				
16	5	9+	-	7	9	9+	4	7	9+	-	8	9	9+	9	9	9+	2	9	9	9+	4	3*	9	4*	9	6	9	2*	-	6	2*	7	-	2	2*	16				
17	5	9+	-	6	8	9	5	7	9+	-	8	9	9	8	9	9+	2	9	9	9+	5	2*	8	3*	8	2	7	3*	-	2	-	3	-	1	-	17				
18	4	9+	-	4	8	9	1	7	9+	-	8	9	9	8	8	8	3*	9	9	9+	9	5*	3*	6	6*	2*	9+	6	1*	2*	4	2*	1*	6	2	18				
19	1	9	-	1	5	8	-	6	9	-	8	8	9	6	8	8	3*	8	8	9+	9	6*	3*	7	8	2*	9+	9	4*	2*	7	7*	5*	9	8	19				
20	-	5	-	-	2	4	-	5	9	-	6	8	8	2	7	9+	7	9	9	9+	9	5*	4*	6	9*	2*	9+	9	5*	1*	8	8*	6*	9+	9	20				
21	-	1	-	-	-	-	-	2	7	-	2	5	5	-	3	9+	5*	8	9	9+	8	4*	9+	8*	9	2*	9+	9	2*	-	8	9*	6*	9	8	21				
22	-	-	-	-	-	-	-	-	2	-	-	1	1	-	1	9+	2*	6	8	9	7	2*	9+	6	8	8	9+	8	1*	7	8	7*	4*	7	8	22				
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	4	7	8	5	2*	9+	6	6*	8	9+	8	-	9	8	6*	6	7	8	23				
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA					







**Dec., Marshall Islands (Kwajalein), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	3	6	8	5	1*	9+	7	3*	7	9	9	-	9	9	4*	1	2	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	3	1	5	8	6	1*	9	7	3*	8	9+	9	-	6	9	2*	2	8	6	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	5	2	5	9	8	-	9	8	6	9	9+	9	-	5	8	1*	8	9	1	2
3	-	-	5	-	-	-	-	-	-	-	-	-	3	1	-	9	7	5	5	9+	9	-	9+	9	6	9	9+	9	-	5	8	5	9	9+	-	3
4	-	-	-	-	-	-	-	-	1	2	-	-	7	4	6	9	8	6	7	9+	9	-	9+	9	7	9	9+	5	-	9	8	6	9	9	-	4
5	-	-	-	-	-	4	1	1	4	2	1	-	8	7	7	9+	9	6	8	9+	9	-	9+	9	8	9	9+	2	-	9	8	7	8	9	-	5
6	-	2	-	-	-	8	3	3	7	7	3	1	9	8	8	9+	9	8	9	9+	9	8	9+	9	8	9	9+	1	-	9+	5	7	9	9	-	6
7	-	5	2	-	-	9	6	5	9	8	4	5	9+	9	9	9+	9+	6	9	9+	9	9	9+	9	8	9	9+	-	1*	9+	2	8	9	9	-	7
8	-	8	5	-	3	9	8	6	9	8	3	7	9+	9	9	9+	9+	8	9	9+	9	9	9+	8	8	9	9+	-	6*	9	-	9	9	9	-	8
9	-	8	7	-	6	9+	8	4	9+	8	1	8	9+	9	8	9+	9	8	9	9+	9	8	9+	6	8	9	9+	-	5*	7	1*	8	9	9	-	9
10	-	9	8	-	8	9+	9	4	9+	8	-	9	9+	9	9	9+	9	8	9	9+	9	8	9+	7	8	9	9+	-	5*	5	4*	7	8	8	-	10
11	1	9+	6	-	8	9+	8	5	9+	8	-	9	9+	9	9	9+	9	8	9	9+	8	7	9+	8	9	9	9+	4*	5*	4	4*	6	8	8	-	11
12	2	9+	1	-	8	9+	8	6	9+	8	1	9	9+	9	9	9+	9	8	9	9+	6	7	9+	8	9	9	9+	4*	3*	4	3*	6	6	6	1*	12
13	4	9+	-	-	8	9+	8	7	9+	5	2	9	9+	9	8	9+	9	9	9+	9+	6	6	9	8	9	9	9+	2*	1*	2	2	5	2	3	2*	13
14	6	9+	-	1	8	9+	9	8	9+	1	6	9	9+	9	8	9+	8	9	9	9+	9	4	8	6	8	7	9	2*	-	-	1*	1*	-	3	1*	14
15	7	9+	-	2	8	9+	9	8	9+	-	8	9	9+	9	8	9+	6	9	9	9+	8	3	8	2*	8	4	9	2*	1*	-	-	2*	-	-	1*	15
16	7	9+	-	4	8	9	9	8	9+	-	8	9	9+	9	9	9+	2	9	9	9+	4	1*	7	1*	8	1	7	2*	-	-	-	1*	-	-	1*	16
17	6	9+	-	7	8	9	8	8	9+	-	8	9	9+	8	5	9	1	9	8	9+	4	1*	2	1	5*	-	6	1*	-	-	-	-	-	-	-	17
18	6	9+	-	6	8	9	7	7	9	-	8	8	9	8	5	6	2	8	6	9	8	4*	1*	4	5*	1*	9	3	-	-	1	-	-	1	-	18
19	4	9	-	2	6	8	2	7	9	-	8	8	9	8	4	5	2	9	5	9+	9+	4*	5*	8	6*	2*	9+	9	-	2*	3	4*	1*	2	4	19
20	1	8	-	-	4	5	-	6	9	-	6	8	8	5	6	8	8	9	7	9+	9+	5*	5*	7	8*	2*	9+	9	1*	-	8	7*	4*	8	9	20
21	-	2	-	-	1	1	-	4	8	-	4	6	7	1	1*	9+	5*	9	5	9	9	5*	7	8*	9	2*	9+	9	-	-	8	6*	4*	7	9	21
22	-	-	-	-	-	-	-	1	5	-	1	2	2	-	-	9+	3*	8	5	9	8	3*	9+	7	8	2*	9+	9	-	1	9	5	1*	4	8	22
23	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	9	1	6	8	9	6	2*	9+	7	5*	4	9+	9	-	6	9	5*	-	5	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Jan., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	2	6	8	6	-	9	7	3*	6	9	8	-	4	7	-	-	9	6	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	4	3	5	9	6	-	9	8	1*	7	9	8	-	2	7	-	4	6	2	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	5	3	5	9	8	-	9+	8	1	8	9+	6	-	1	3	-	7	7	-	2
3	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	9	8	5	5	9+	9	-	9+	8	6	9	9+	4	-	2*	2	2	8	9	-	3
4	-	-	-	-	-	1	-	-	1	2	-	-	7	3	6	9	9	6	7	9+	9	-	9+	9	7	9	9+	1	-	4	-	2	9	9	-	4
5	-	-	-	-	-	5	1	1	3	4	-	-	8	6	6	9+	9	9	9	9+	9	-	9+	8	7	9	9+	-	-	6	-	2	9	9	-	5
6	-	1	-	-	-	7	3	2	7	7	2	1	9	8	8	9+	9	7	9	9+	8	5	9+	8	7	9	9+	-	-	9	-	5	9	9	-	6
7	-	4	9+	-	-	9	7	3	9	8	3	4	9	9	8	9+	9	6*	9	9+	9	8	9+	6	8	9	9+	-	-	8	-	7	9	8	-	7
8	-	8	5	-	1	9	8	3	9	8	3	7	9+	9	8	9+	9	8	9	9+	9	8	9+	1	8	9	9+	1	2	7	-	6	8	8	-	8
9	-	9	8	-	5	9+	9	3	9+	8	1	8	9+	9	8	9+	9	8	9	9+	9	6	9+	2*	8	9	9+	-	3*	5	-	4*	5	6	-	9
10	-	9	8	-	8	9+	9	3	9+	8	-	9	9+	9	9	9+	9	7	9	9+	9	6	9+	5*	8	9	9+	-	4*	4	-	3	1*	2	-	10
11	-	9	7	-	8	9+	9	3	9+	8	-	9	9+	9	9	9+	9	8	9	9+	8	6	9	7	8	9	9+	1*	1*	1	-	3*	-	2	-	11
12	1	9+	1	-	8	9+	9	6	9+	7	1	9	9+	9	9	9+	9	9	9	9+	5	2*	8	7	8	8	9	4*	1*	-	-	2*	-	1	-	12
13	2	9+	-	-	8	9+	9	8	9+	4	5	9	9+	9	7	9+	8	9	9	9+	4	1*	6	4	7	4	8	5*	-	-	-	1*	-	-	-	13
14	5	9+	-	1	8	9+	9	7	9+	2	7	9	9+	9	7	9+	8	9	9	9+	8	1*	4	1	6	1	8	1*	-	-	-	-	-	-	-	14
15	6	9+	-	3	9	9+	9	8	9+	-	8	9	9+	9	8	9	5	9	9	9+	8	1*	2	-	3*	-	4	1*	-	-	-	-	-	-	-	15
16	7	9+	-	3	9	9+	9	8	9+	-	8	9	9+	9	8	9	1	9	9	9+	3	-	2	-	3*	1	3	1*	-	-	-	-	-	-	-	16
17	7	9+	-	7	8	9	8	8	9+	-	9	9	9	8	4	6	1	8	7	9	1*	-	-	-	2*	-	1	-	-	-	-	-	-	-	-	17
18	5	9+	-	7	8	9	5	7	9	-	8	8	9	8	1	1*	3	5*	1*	9+	4	1*	-	1	1*	-	5	-	-	-	-	-	-	-	18	
19	4	9	-	3	7	9	1	7	9	-	8	8	9	8	1*	1*	2	8	-	9+	9	4*	4*	5	5*	3*	9	7	-	-	-	-	-	-	-	19
20	1	7	-	1	5	7	-	6	9	-	6	8	7	5	5	1*	8	8	5	9+	9	4*	1*	8	8*	4*	9+	9	-	-	6	5*	-	4	7	20
21	-	2	-	-	1	1	-	4	8	-	4	6	8	1	2*	9+	5*	8	5	9	9	1*	-	7	8*	2*	9+	8	-	-	8	4*	-	5	8	21
22	-	-	-	-	-	-	-	1	5	-	-	3	4	-	-	9+	3*	7	3	9	8	-	8	7	7*	1*	9+	9	-	-	7	2*	-	-	8	22
23	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	9	1	4	6	9	6	-	9+	6	5*	-	9+	8	-	-	7	1*	-	8	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Feb., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	2	1	6	8	5	-	9	8	5*	7	9+	8	-	4	8	4*	1	1	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	3	2	5	8	6	-	9	8	4*	8	9+	8	-	7	8	2*	4	8	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	5	2	4	9	8	-	9	8	4*	8	9+	9	-	2	8	-	7	8	4	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	9	7	4	5	9+	9	-	9+	9	7	9	9+	9	-	4	7	3	8	9	-	3
4	-	-	-	-	-	1	-	-	-	1	-	-	6	2	5	9	8	6	5	9+	9	-	9+	9	7	9	9+	9	-	7	6	3	9	9+	-	4
5	-	-	-	-	-	4	-	-	2	4	-	-	8	5	6	9+	9	8	6	9+	9	-	9+	9	7	9	9+	1	-	9	3	2	8	9+	-	5
6	-	-	-	-	-	7	2	1	5	7	1	-	9	8	7	9+	9	7	8	9+	9	7	9+	9	7	9	9+	1	-	9+	-	5	8	9+	-	6
7	-	3	2	-	-	8	5	1	9	8	2	2	9	9	8	9+	9	7*	9	9+	9	8	9+	7	7	9	9+	2	-	9+	-	7	9	9	-	7
8	-	7	6	-	-	9	8	1	9	8	2	6	9+	9	8	9+	9	8	9+	9+	9	9	9+	3	8*	9	9+	1	4*	9	-	8	9	9	-	8
9	-	9	7	-	4	9	9	1	9+	9	-	8	9+	9	8	9+	9	8	9	9+	9	8	9+	4*	8*	9	9+	1	6*	8	-	7	9	9	-	9
10	-	9	7	-	7	9+	9	1	9+	8	-	9	9+	9	8	9+	8	7	9	9+	9	8	9+	4*	8	9	9+	1	5*	6	3*	5*	8	9	-	10
11	-	9+	7	-	8	9+	9	3	9+	8	-	9	9+	9	8	9+	9	8	9	9+	9	8	9+	8	9	9	9	4*	5*	3	3*	4	5	9	-	11
12	-	9+	1	-	9	9+	9	3	9+	7	1	9	9+	9	9	9+	9	9	9	9+	8	6	9	8	9	9	8	4*	4*	3	4*	5*	4	9	-	12
13	1	9+	-	-	9	9+	9	5	9+	4	5	9	9+	9+	9	9+	9	9	9	9+	7	2	9	9	9	9	9+	4*	2*	1	2*	2*	1	7	2*	13
14	2	9+	-	1	9	9	9	8	9+	2	7	9	9+	9	8	9+	9	9	9	9+	8	1*	8	7	8	8	9+	2*	-	-	-	1*	-	5	1*	14
15	5	9+	-	2	9	9+	9	8	9+	-	8	9	9+	9	8	9+	6	9	9	9+	8	1*	7	3	8	6	8	3*	-	-	-	1*	-	-	-	15
16	6	9+	-	2	9	9	9	8	9+	-	8	9	9+	9	8	9+	2	9	9	9+	2	1*	6	1*	7	-	6	1*	-	-	-	-	-	-	-	16
17	6	9+	-	7	8	9	7	7	9+	-	8	9	9+	8	5	9	1*	9	9	9	2*	-	2	-	4	1	3	-	-	-	-	-	-	-	-	17
18	6	9+	-	7	8	9	4	7	9	-	8	8	9	8	1	5	2	7	2	9+	4	1*	-	1	1*	-	5	-	-	-	-	-	-	-	-	18
19	2	9	-	3	7	9	-	7	9	-	8	8	8	6	2*	1*	1	7	-	9+	9	4*	4*	7	5*	2*	9	6	-	-	-	-	-	-	-	19
20	1	7	-	1	5	6	-	5	9	-	6	8	8	4	1	3	7	8	5	9+	9	6*	2*	7	8	5*	8	9	-	-	6	6*	2*	7	7	20
21	-	2	-	-	1	1	-	4	8	-	4	6	8	-	1*	9+	5*	9	6	9	9	4*	-	7	8*	5*	9+	9	-	-	8	6*	1*	7	8	21
22	-	-	-	-	-	-	-	1	4	-	1	2	3	-	-	9+	3*	8	8	9	8	1*	9+	7	8*	4*	9+	9	-	-	8	7*	-	3	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	5	8	9	6	-	9+	7	6*	5	9+	9	-	-	8	6*	-	1*	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Mar., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	1	5	8	4	1*	9+	7	5*	6	9	8	-	6	9	5*	2	5	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	2	1	4	8	5	1*	9	7	4*	8	9+	8	-	6	8	5*	4	9+	9	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	5	2	3	9	7	1*	9	8	4*	8	9+	9	-	5	9	4*	7	9+	7	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	4	8	7	4	3	9	8	-	9+	9	6	8	9+	9	-	8	8	2*	8	9+	-	3
4	-	-	-	-	-	-	-	-	-	-	-	-	6	1	3	9	8	5	4	9+	9	2	9+	9	7	8	9+	9	-	9+	8	5	8	9+	-	4
5	-	-	-	-	-	2	-	-	1	3	-	-	8	5	8	9	9	5	5	9+	9	7	9+	9	6	8	9+	8	-	9+	7	6	8	9+	-	5
6	-	-	-	-	-	6	1	-	4	6	-	-	9	8	6	9+	9	7	6	9+	9	8	9+	9	7*	8	9+	5	1	9+	7	5	8	9+	-	6
7	-	2	2	-	-	8	5	-	8	8	2	1	9	9	7	9+	9	7	9	9+	9	8	9+	9	7	9	9+	3	2	9+	2	8	9	9+	-	7
8	-	6	4	-	-	9	8	1	9	8	1	5	9+	9	8	9+	9	8	9	9+	9	9	9+	8	8*	9	9+	2	4*	9	-	8	9	9+	-	8
9	-	9	7	-	1	9	9	1	9	9	-	7	9+	9	8	9+	9	8	9	9+	9	9	9+	3	8	9	9+	2	6*	9	-	9	9	9+	-	9
10	-	9	7	-	5	9	9	-	9+	8	-	8	9+	9	8	9+	8	7	9+	9+	9	9	9+	4*	9	9	9+	2	6*	8	5*	9	9	9+	-	10
11	-	9	6	-	8	9+	9	1	9+	8	-	9	9+	9	8	9+	8	8	9+	9+	9	8	9+	8	9	9	9+	4*	5*	6	5*	7*	7	9+	-	11
12	-	9+	1	-	8	9	9	3	9+	8	1	9	9+	9	8	9+	9	9	9+	9+	8	8	9+	8	9	9	9+	5*	5*	5	7	8	6	9+	1*	12
13	-	9+	-	-	8	9	9	5	9+	5	2	9	9+	9+	9	9+	9	9	9+	9+	8	7	9+	9	9	9	9	4*	3*	5	4*	6	7	9	1*	13
14	1	9+	-	1	9	9	9	5	9+	2	7	9	9+	9+	9	9+	9	9	9+	9+	9	5	9+	8	9	9	9	3*	1*	4	2*	5	1	9	2*	14
15	2	9+	-	3	9	9	9	8	9+	-	8	9	9+	9	9	9+	7	9	9	9+	8	2*	9	6	9	8	9+	4*	1*	1	1*	3*	-	5	1*	15
16	5	9+	-	7	8	9+	5	8	9+	-	7	9	9+	8	9	9+	4	9	9	9+	4	2*	8	2*	8	3	6	3*	-	2	-	3	-	-	1*	16
17	6	9+	-	7	8	9	5	7	9+	-	8	9	9+	8	8	9	1	9	9	9	2	1*	5	1*	6	5	6	1*	-	-	-	-	-	-	-	17
18	5	9+	-	7	8	9	2	7	9	-	8	9	9	7	4	7	2	8	7	7	7	1*	2*	3	1*	1*	8	5	-	-	-	-	-	-	-	18
19	2	9	-	3	6	9	-	7	9	-	8	8	9	5	7	4	1	7	5	9+	9	5*	5*	6	5*	2*	9+	8	-	2*	2	2*	-	-	1	19
20	1	5	-	-	4	6	-	5	9	-	7	8	8	2	3	8	6	9	8	9+	9	5*	5*	7	9*	5*	9+	9	2*	1*	8	6*	6*	9	8	20
21	-	1	-	-	-	1	-	2	8	-	3	6	7	-	2*	9+	9	8	7	9+	8	5*	3	8*	9	4*	9+	9	-	-	8	8*	4*	9	8	21
22	-	-	-	-	-	-	-	-	4	-	1	1	2	-	1*	9+	3*	8	8	9	7	3*	9+	7*	8*	3*	9+	8	-	-	8	8*	2*	5	9	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	5	8	9	5	1*	9+	8	6*	9	9+	8	-	1	9	6*	1*	2	9	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



Apr., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	1	2	5	8	5	1*	9	7	5*	8	9+	8	-	9	9	4*	3	9	9	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	3	1	3	9	5	1*	9	7	4*	8	9+	8	-	8	9	3*	5	9	9	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	5	1	3	9	6	-	9	8	5*	8	9+	9	-	2	8	2*	6	9+	9	2
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	8	7	3	5	9	8	-	9	9	7	8	9+	9	-	6	7	2	8	9+	6	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	1	3	9	8	5	5	9+	9	4	9+	9	7	8	9+	9	-	9+	4	8	8	9+	5	4
5	-	-	-	-	-	3	-	-	-	4	-	-	8	3	9	9	9	5	5	9+	9	6	9+	9	6	8	9+	8	-	9+	2	8	8	9+	-	5
6	-	-	-	-	-	7	1	-	4	6	-	-	9	7	8	9+	9	8	6	9+	9	7	9+	9	6	8	9+	8	-	9+	1	8	8	9+	-	6
7	-	1	2	-	-	8	4	-	8	8	-	-	9	8	5	9+	9	7	8	9+	9+	8	9+	9	7	8	9+	6	-	9+	-	8	9	9+	-	7
8	-	5	4	-	-	9	7	-	9	8	-	4	9+	9	7	9+	9	8	9	9+	9	8	9+	8	8	9	9+	4	1*	9+	-	8	9	9+	-	8
9	-	9	8	-	1	9	8	-	9	9	-	6	9+	9	7	9+	9	8	9	9+	9	8	9+	5	9	9	9+	3	3*	9	-	9	9	9+	-	9
10	-	9	8	-	1	9+	9	-	9+	8	-	7	9+	9	7	9+	8	7	9	9+	9	9	9+	4*	9	9	9+	2	4*	8	6*	9	8	9+	-	10
11	-	9	6	-	4	9+	9	-	9+	8	-	8	9+	9	8	9+	9	8	9	9+	9	8	9+	7	9	9	9+	3*	5*	6	5*	8	4	9+	-	11
12	-	9+	1	-	6	9+	9	1	9+	7	1	9	9+	9	9	9+	9	9	9+	9+	8	7	9+	9	9	9	8	4*	2*	4	6	7	4*	9	-	12
13	-	9+	-	-	7	9+	9	3	9+	5	5	9	9+	9	9	9+	9	9	9+	9+	9	5	9+	8	9	9	8	5*	1*	4	5*	6	1*	8	-	13
14	-	9+	-	1	8	9+	9	3	9+	2	7	9	9+	9	9	9+	9	9	9+	9+	9	4	9	8	9	9	9+	6	-	2	1*	4	-	4	1*	14
15	1	9+	-	6	8	9+	9	5	9+	-	8	9	9+	9	9	9+	7	9	9+	9+	8	4	9	5	9	8	9	3*	1*	1	-	1*	-	4	-	15
16	1	9+	-	7	9	9+	3	6	9+	-	8	9	9+	8	9	9+	4	9	9	9+	5	2	8	2*	8	8	6	2*	-	2	-	2	1	1*	-	16
17	4	9+	-	7	8	9	2	7	9+	-	8	9	9+	8	8	9	4	9	9	9	5	-	5	1*	6	6	3	1	-	-	-	-	-	-	-	17
18	2	9	-	7	7	9	-	6	9	-	8	8	9	6	7	6	3	8	8	9	8	1*	4*	5	2*	2*	9	7	-	-	2	1*	-	1	1	18
19	1	8	-	2	4	8	-	6	9	-	8	8	9	5	9	5	6	8	8	9+	9	5*	4*	7	6*	4*	3*	8	-	-	5	2*	2*	5	1	19
20	-	4	-	-	1	4	-	4	9	-	6	7	8	1	8	9+	8	9	9	9+	8	6*	3*	7	8	4*	9	9	4*	-	8	6*	1*	9+	5	20
21	-	1	-	-	-	-	-	1	7	-	2	4	5	-	4	9+	5*	8	8	9+	8	4*	5	8*	9	5*	9+	9	-	-	8	8*	1*	9+	5	21
22	-	-	-	-	-	-	-	-	3	-	-	1	2	-	1	9+	3*	7	9	9	6	2*	9	7	8	8	9+	8	-	-	8	7*	1*	9	5	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	4	7	9	5	1*	9	7	7	7	9+	8	-	1	8	5*	1	9	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



**May, Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	2	3	6	9	5	-	9	7	2	8	9	8	-	8	8	-	-	9+	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	3	2	4	9	5	-	9	7	1	8	9+	8	-	8	8	-	3	9	9	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	5	2	4	9	6	-	9	8	2	8	9+	9	-	9+	8	-	4	9	9	2
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	9	7	3	4	9	8	1	9+	9	7	8	9+	9	-	8	6	-	3	9+	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	1	5	9	9	5	5	9+	9	2	9+	8	7	8	9+	9	-	4*	2	4	3	9+	6	4
5	-	-	-	-	-	3	-	-	-	4	-	-	8	5	6	9	9	6	6	9+	9	3	9+	8	7	9	9+	8	-	6	-	7	7	9+	1	5
6	-	-	-	-	-	7	1	-	3	6	-	-	9	7	6	9+	9	7	6	9+	9	4	9+	7	7	9	9+	9	-	8	-	6	9	9+	2	6
7	-	1	2	-	-	9	3	-	7	8	-	-	9+	8	7	9+	9	7	8	9+	9	5*	9+	8	7	9	9+	8	-	9	-	7	9	9+	-	7
8	-	4	4	-	-	9	7	-	9	8	-	3	9+	9	7	9+	9	7	9	9+	9+	7	9+	6	8	9	9+	8	-	9	-	8	9	9	-	8
9	-	8	8	-	-	9+	8	-	9	9	-	6	9+	9	7	9+	9+	7	9	9+	9+	8	9+	5	8	9	9+	5	-	8	-	8	8	7	-	9
10	-	9	7	-	1	9+	9	-	9+	9	-	7	9+	9	7	9+	9	7	9	9+	9	8	9+	4*	9	9	9+	3*	-	4	2*	6	5	3	-	10
11	-	9	6	-	2	9+	8	-	9+	8	-	8	9+	9	8	9+	9	8	9	9+	9	7	9	6*	9	8	9+	4*	-	2	-	5	1	3	-	11
12	-	9+	1	-	5	9+	8	-	9+	7	1	9	9+	9	9	9+	9	9	9	9+	9	5	9	7	8	7	9	4*	-	-	-	3	-	-	-	12
13	-	9	-	-	6	9+	8	1	9+	5	6	9	9+	9	9	9+	9	9	9	9+	9	4	7	8	8	5	9	4*	-	-	1	1	-	-	-	13
14	-	9+	-	2	7	9+	8	3	9+	2	6	9	9+	9	9	9+	9	9	9	9+	9	3	7	6	7	4	8	7	-	-	-	-	-	-	-	14
15	-	9+	-	6	8	9+	8	5	9+	-	8	9	9+	9	9	9+	7	9	9	9	9	4	1	5	3	2	8	5	-	-	-	-	-	-	-	15
16	-	9+	-	7	8	9	2	6	9+	-	8	9	9+	8	9	9	5	9	9	9	7	4	4	1	5	5	2	1	-	-	-	-	-	-	-	16
17	1	9	-	7	8	9	-	6	9+	-	8	9	9	7	9	9	4	9	9	9	7	2	1	1	2	3	-	2	-	-	-	-	-	-	-	17
18	1	9	-	6	6	9	-	6	9+	-	8	9	9	4	8	7	4	8	9	9	9	1	3*	6	2*	3*	8	7	-	-	-	-	-	-	1	18
19	-	7	-	2	4	8	-	5	9	-	8	8	9	2	9	9	6	8	9	9+	9	6*	-	8	6*	5*	9+	8	-	-	1	-	-	-	-	19
20	-	5	-	-	-	4	-	2	9	-	6	5	8	-	8	9+	7	9	9	9+	8	6*	-	8	8	4*	5	8	5*	-	7	3*	-	9	-	20
21	-	1	-	-	-	-	-	-	6	-	1	1	5	-	7	9+	3*	8	9	9+	7	4*	5	8	8	4	9+	8	2*	-	8	8*	-	9+	2*	21
22	-	-	-	-	-	-	-	-	2	-	-	-	1	-	6	9	3*	7	8	9	7	2*	9	7	7	8	9+	8	-	-	7*	5*	-	9	5*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	1	5	7	9	5	1*	9	8	5*	7	9	8	-	3	6	2*	1	9	4	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



Jun., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	2	3	6	9	5	1*	9+	9	2	8	9	8	-	4	7	-	-	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	3	2	6	9	6	-	9+	9	1	8	9+	8	-	6	8	-	1	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	5	2	5	9	6	1	6	8	1*	8	9+	9	-	8	7	-	2	9+	8	2
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	8	7	2	6	9+	8	1	7	9	5	8	9+	9	-	9	5	-	1	9	8	3
4	-	-	-	-	-	-	-	-	-	-	-	-	5	-	4	9	8	4	7	9+	9	2	8	9	7	8	9+	9	-	9+	2	1	1*	9+	5	4
5	-	-	-	-	-	2	-	-	-	4	-	-	8	5	8	9	9	7	7	9+	9	1	9+	8	7	8	9+	9	-	9	-	5	4	9+	2	5
6	-	-	-	-	-	7	-	-	2	6	-	-	9	7	8	9+	9	7	8	9+	9+	4*	9+	8	8	8	9+	9	-	5	-	4	6	9+	-	6
7	-	1	1	-	-	9	2	-	7	8	-	-	9	8	8	9+	9	7	8	9+	9+	5*	9+	6	8	8	9	8	-	6	-	6	8	9	-	7
8	-	3	4	-	-	9	7	-	8	8	-	2	9+	9	7	9+	9	7	8	9+	9+	6*	9+	3	8	9	9+	8	2*	7	-	7	8	8	-	8
9	-	8	8	-	-	9	8	-	9	9	-	5	9+	9	6	9+	9+	6	9	9+	9+	4	9+	4*	9	9	9+	6	-	7	-	6	8	1	-	9
10	-	8	7	-	-	9+	9	-	9+	9	-	4	9+	9	7	9+	9	7	9	9+	9+	4	9	3*	8	9	9	3	-	3	1*	3	2	-	-	10
11	-	9	6	-	2	9+	8	-	9+	8	-	7	9+	9	8	9+	9	8	9	9+	9	3	8	5*	9	7	9	2*	-	-	-	2	-	-	-	11
12	-	9	5	-	4	9+	8	-	9+	8	2	8	9+	9	8	9+	9	9	9	9+	9	2	5	6	7	1	7	1*	-	-	-	-	-	-	-	12
13	-	9	-	-	6	9+	8	-	9+	6	6	9	9+	8	9	9	9	9	9	9+	9	1	2	5	5	-	-	2	-	-	-	-	-	-	-	13
14	-	9	-	3	7	9+	7	1	9+	2	8	9	9+	8	9	9	8	9	9	9+	9	-	1	-	2	-	-	1	-	-	-	-	-	-	-	14
15	-	9+	-	7	7	9+	4	2	9+	1	8	9	9+	9	9	9	7	8	9	9+	9	4	-	1	2	1	2	4	-	-	-	-	-	-	-	15
16	-	9	-	7	8	9+	-	3	9+	-	8	9	9+	7	9	8	4	8	9	8	7	4	-	-	1	1	-	-	-	-	-	-	-	-	-	16
17	-	9	-	7	8	9	-	4	9+	-	8	9	9	5	9	7	3	8	9	8	6	2	-	-	1	-	-	-	-	-	-	-	-	-	-	17
18	-	9	-	6	7	9	-	7	9+	-	8	9	9	2	9	6	5	8	8	9+	9	1	2*	4	1	2*	5	4	-	-	-	-	-	-	-	18
19	-	7	-	1	4	8	-	4	9	-	8	8	9	-	8	7	5	8	8	9+	8	2*	1*	8	6*	6*	9+	8	-	-	1	-	-	-	-	19
20	-	4	-	-	-	3	-	-	9	-	6	6	8	-	9	9	8	9	9	9+	8	7*	2	8	8	2*	8	8	1*	-	5	-	-	8	-	20
21	-	-	-	-	-	-	-	-	6	-	1	1	5	-	8	9+	5*	8	9	9+	7	5*	4	7	8	4	9+	8	3*	-	7	6*	-	9	1*	21
22	-	-	-	-	-	-	-	-	2	-	-	-	1	-	6	9	2*	7	8	9	6	3*	5	7	7	7	9+	8	1*	-	3*	4*	-	9	1*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	2	5	7	9	6	1*	9+	7	5*	8	9+	9	-	-	6	1*	-	9	4	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Jul., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	2	3	6	8	6	-	9	8	1*	7	9+	8	-	2	6	-	-	8	7	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	3	2	5	9	6	-	9+	9	-	8	9+	8	-	4	7	-	-	9	7	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	6	2	6	9	7	-	9	8	-	8	9+	9	-	7	6	-	1	9+	7	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	5	8	8	3	6	9+	8	-	6	8	5	8	9+	9	-	9	1	-	1	9+	6	3
4	-	-	-	-	-	-	-	-	-	-	-	-	6	-	5	9	9	5	7	9+	9	-	7	8	7	8	9+	9	-	9	-	1	1*	9	2	4
5	-	-	-	-	-	3	-	-	1	5	-	-	8	6	8	9	9	6	7	9+	9	-	9	5	8	8	9+	8	-	9	-	2	2	9	-	5
6	-	-	-	-	-	7	1	-	3	6	1*	-	9	7	8	9+	9	7	7	9+	9	2*	9	5	8	9	9+	9	-	9+	-	4	6	9	-	6
7	-	1	2	-	-	9	3	-	7	8	-	-	9	8	7	9+	9	8	8	9+	9+	4*	9+	2	8	8	8	7	-	9+	-	7	7	9	-	7
8	-	5	4	-	-	9	7	-	9	8	-	3	9+	9	8	9+	9	7	9	9+	9+	5*	9+	-	8*	9	9+	5	1*	7	-	5	8	6	-	8
9	-	8	8	-	-	9	8	-	9	9	-	6	9+	9	8	9+	9	7	9	9+	9+	5*	9+	3*	9	9	9+	4	-	6	-	5	6	1	-	9
10	-	9	8	-	-	9+	9	-	9+	9	-	6	9+	9	8	9+	9	6	9	9+	9	2	9	5*	9	9	9	1*	-	2	2*	2	1	-	-	10
11	-	9	6	-	3	9+	8	-	9+	8	-	8	9+	9	8	9+	8	8	9	9+	9	1	8	4*	9	6	8	1*	-	-	-	1	-	-	-	11
12	-	9+	1	-	5	9+	8	-	9+	7	1	9	9+	9	8	9+	9	9	9	9+	9	-	2	5	7	1	5	1*	-	-	-	-	-	-	-	12
13	-	9+	-	-	6	9+	8	1	9+	5	6	9	9+	9	8	9+	9	9	9	9+	9	-	-	5	5	-	4	1	-	-	-	-	-	-	-	13
14	-	9+	-	2	7	9+	8	2	9+	1	8	9	9+	9	9	9+	8	9	9	9+	9	-	-	-	1	-	2	5	-	-	-	-	-	-	-	14
15	-	9+	-	1	8	9+	7	5	9+	-	8	9	9+	9	9	9+	7	8	9	9+	9	1	-	1	-	2	2	2	-	-	-	-	-	-	-	15
16	-	9+	-	7	8	9+	2	5	9+	-	8	9	9+	8	9	8	4	8	9	9	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	1	9+	-	7	8	9	1	8	9+	-	8	9	9	7	9	5	3	8	8	8	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	1	9	-	6	6	9	-	6	9+	-	8	9	9	4	8	4	4	7	8	9+	8	-	1*	4	1	1*	6	4	-	-	-	-	-	-	-	18
19	-	8	-	1	5	8	-	5	9	-	8	8	9	1	8	4	7	8	8	9+	8	4*	1*	8	6*	4*	9+	6	-	-	-	-	-	-	-	19
20	-	5	-	-	-	3	-	1	9	-	6	5	8	-	9	9	8	8	9	9+	8	7*	-	7	7*	1	9+	8	-	-	2	-	-	8	-	20
21	-	-	-	-	-	-	-	-	7	-	1	1	5	-	8	9+	5*	8	9	9+	7	5*	1	7	7*	2	9+	6	1*	-	7	6*	-	9	-	21
22	-	-	-	-	-	-	-	-	2	-	-	-	1	-	6	9+	2	7	8	9	7	2*	4	7*	6*	6	9+	7	-	-	4*	2*	-	9	1*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	2	5	6	9	5	1*	9	7	4*	4	9+	7	-	-	5	-	-	9	3*	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Aug., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	2	1	5	8	6	-	9+	9	2*	7	9+	8	-	4	7	-	-	9	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	4	1	5	9	5	-	9	8	1*	8	9+	8	-	7	8	-	-	9+	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	6	2	5	9	7	-	8	9	1*	8	9+	9	-	9	7	-	1	9	8	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	4	9	8	3	6	9+	8	-	9	8	6	8	9+	9	-	9+	1	-	1	9	5	3
4	-	-	-	-	-	-	-	-	-	-	-	-	6	2	4	9	9	4	6	9+	9	-	9+	6	7	8	9+	8	-	9	-	6	1	9	-	4
5	-	-	-	-	-	3	-	-	1	5	-	-	8	6	9	9+	9	9	7	9+	9	1	9+	2	7	8	9+	7	-	5	-	3	3	9	-	5
6	-	-	-	-	-	7	1	-	5	7	1*	-	9	8	6	9+	9	7	7	9+	9	2*	9+	1	8	8	9+	8	-	6	-	7	6	9+	-	6
7	-	2	2	-	-	9	5	-	8	8	1	1	9	8	7	9+	9	8	8	9+	9+	5*	9+	-	8	8	9+	5	-	8	-	7	8	9+	-	7
8	-	6	6	-	-	9	8	-	9	8	-	4	9+	9	8	9+	9	8	9	9+	9+	5*	9+	-	8*	8	9+	2	1*	8	-	7	8	9	-	8
9	-	8	8	-	1	9	8	-	9	9	-	6	9+	9	8	9+	9	7	9	9+	9+	5*	9+	4*	9	9	9+	-	1*	8	1*	7	8	5	-	9
10	-	9	8	-	1	9+	9	-	9+	9	-	7	9+	9	8	9+	8	6	9	9+	9	5*	9+	3*	9	9	9+	-	1*	6	1*	5	4	1	-	10
11	-	9	6	-	4	9+	9	-	9+	8	-	9	9+	9	9	9+	8	8	9	9+	9	3*	9	6*	9	8	9+	2*	-	-	-	2	-	-	-	11
12	-	9	1	-	6	9+	8	1	9+	7	1	9	9+	9	9	9+	9	9	9	9+	8	1*	6	5*	8	1*	9	3*	-	-	-	1	-	-	-	12
13	-	9	-	-	7	9+	8	2	9+	5	6	9	9+	9	8	9+	9	9	9	9	9	-	3	6	7	-	6	3*	-	-	-	-	-	-	-	13
14	-	9	-	1	8	9+	8	5	9+	2	8	9	9+	9	8	9	9	9	9	8	9	-	1	1*	5	-	8	5	-	-	-	-	-	-	-	14
15	1	9	-	6	8	9+	8	6	9+	-	8	9	9+	9	8	9	7	9	7	9+	9	-	-	1	1	-	5	2	-	-	-	-	-	-	-	15
16	1	9+	-	7	8	9+	7	8	9+	-	8	9	9+	9	9	8	3	8	8	9	7	1	-	-	2	-	1	-	-	-	-	-	-	-	-	16
17	3	9+	-	7	8	9	1	7	9+	-	8	9	9	7	8	7	2	8	8	8	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	2	9	-	6	8	9	-	7	9+	-	8	9	9	5	7	2	3	7	6	8	8	-	1*	4	1*	1*	7	5	-	-	-	-	-	-	-	18
19	1	8	-	2	4	8	-	5	9	-	8	8	9	1	8	5	6	8	8	9+	8	6*	1*	8	6*	5*	9+	8	-	-	-	-	-	-	-	19
20	-	5	-	-	1	4	-	3	9	-	6	5	8	-	8	9	7	9	9	9+	9	6*	-	8	8*	-	3	8	3*	-	2	2*	-	9	-	20
21	-	1	-	-	-	-	-	-	7	-	1	2	5	-	7	9+	2*	8	8	9	8	5*	1	8	8*	-	9+	8	1*	-	5	7*	-	9+	-	21
22	-	-	-	-	-	-	-	-	3	-	-	-	1	-	3	9	2*	7	8	9	7	1*	6	7*	6*	6	9+	7	-	-	5*	5*	-	9	1*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	9	1	4	8	9	6	-	9	8	5*	6	9+	9	-	-	6	2*	-	9	4	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Sep., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters								
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	1	5	8	4	-	9	7	4*	7	9	8	-	9	8	4*	1	8	9	0	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	4	-	4	8	5	-	9	8	4*	8	9+	8	-	9+	9	1*	1	8	8	1	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	6	2	4	9	7	-	9	8	4*	8	9+	9	-	8	8	-	5	9+	8	2	
3	-	-	-	-	-	-	-	-	-	-	-	-	3	-	4	9	8	4	5	9+	8	-	9+	9	7	8	9+	9	-	5*	6	1	7	9+	1	3	
4	-	-	-	-	-	1	-	-	-	2	-	-	7	2	4	9	9	5	5	9+	9	1	9+	9	7	8	9+	8	-	9	3	6	8	9+	-	4	
5	-	-	-	-	-	4	-	-	1	5	-	-	8	5	8	9	9	8	6	9+	9	5	9+	9	7	9	9+	5	-	9+	2	7	8	9+	-	5	
6	-	-	-	-	-	7	2	-	5	7	-	-	9	8	6	9+	9	8	6	9+	9	7	9+	8	6*	9	9+	5	-	9+	1	6	9	9+	-	6	
7	-	2	2	-	-	9	5	-	8	8	1	1	9	9	6	9+	9	8	8	9+	9	8	9+	7	7	9	9+	1	-	9+	-	7	9	9+	-	7	
8	-	7	6	-	-	9	8	-	9	8	-	5	9+	9	7	9+	9	8	9	9+	9	8	9+	4	8	9	9+	1	2*	9	-	7	9	9+	-	8	
9	-	9	8	-	2	9	8	-	9	9	-	7	9+	9	7	9+	9	8	9	9+	9	8	9+	3*	8	9	9+	1	3*	9	2*	8*	8	9	-	9	
10	-	9	8	-	5	9+	9	-	9+	8	-	8	9+	9	8	9+	8	6	9	9+	9	8	9+	4*	9	9	9+	1*	4*	7	3*	6	6	9	-	10	
11	-	9	6	-	5	9+	8	1	9+	8	-	9	9+	9	9	9+	8	8	9	9+	9	5	9+	8	9	9	9	3*	3*	3	1*	5	1	8	-	11	
12	-	9	1	-	6	9+	8	2	9+	7	1	9	9+	9	8	9+	9	9	9	9+	8	2*	9	8	9	9	9+	4*	-	2	3*	5	-	5	-	12	
13	-	9+	-	-	7	9+	8	4	9+	5	6	9	9+	9	8	9+	9	9	9	9+	9	2*	9	8	8	8	9	5*	-	1	1*	4	-	-	-	13	
14	-	9+	-	1	8	9+	9	5	9+	1	8	9	9+	9	9	9+	8	9	9	9+	9	-	8	6	8	7	8	3*	-	-	-	1	-	-	-	14	
15	2	9+	-	6	8	9+	9	8	9+	-	8	9	9+	9	9	9+	6	9	9+	9+	8	1	6	4	7	5	7	1*	-	-	-	-	-	-	-	15	
16	5	9+	-	7	8	9+	5	7	9+	-	8	9	9+	8	9	9	2	9	9	9	2	-	5	1*	5	6	1*	1*	-	-	-	-	-	-	-	-	16
17	5	9+	-	7	8	9	3	7	9+	-	8	9	9	8	7	7	2	8	8	9	4	-	-	-	1	-	2	-	-	-	-	-	-	-	-	17	
18	3	9+	-	6	7	9	-	7	9	-	8	8	9	6	6	1*	2	6	3	8	8	2*	2*	5	2*	2*	9	6	-	-	1	-	-	2	-	18	
19	1	8	-	2	5	8	-	6	9	-	8	8	9	5	9	2	6	8	6	9+	9	5*	2*	7	5*	5*	1*	9	-	-	4	3*	1*	6	-	19	
20	-	4	-	-	1	5	-	4	9	-	6	7	8	1	7	9+	8	9	8	9+	9	5*	-	7	9	3*	8	8	3*	-	7	6*	-	9+	3	20	
21	-	1	-	-	-	-	-	1	7	-	2	4	5	-	2	9+	5*	8	9	9+	7	2*	3	8*	9	4*	7	8	-	-	7	8*	-	9+	3*	21	
22	-	-	-	-	-	-	-	-	2	-	-	1	1	-	-	9+	2*	7	8	9	5	-	9	7	6*	5	9+	8	-	-	7	7*	-	8	3	22	
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	4	7	9	4	-	9	7	5*	6	9	8	-	2	8	5*	-	9+	7	23	
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA		

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



**Oct., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	1	6	8	5	-	9+	7	5*	9	9+	8	-	9	9	5*	2	6	8	0				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	3	3	4	9	6	-	9+	8	4*	8	9+	9	-	9	8	4*	8	9+	9	1				
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	6	2	4	9	8	-	9+	8	6	8	9+	9	-	7	9	2*	8	9+	5	2				
3	-	-	-	-	-	-	-	-	-	-	-	-	3	-	4	9	7	5	5	9+	9	-	9+	9	7	8	9+	8	-	9+	8	2	8	9+	-	3				
4	-	-	-	-	-	1	-	-	1	2	-	-	7	4	4	9	9	6	6	9+	9	5	9+	9	6	8	9+	9	-	9+	8	7	8	9+	-	4				
5	-	-	-	-	-	5	-	-	2	5	-	-	8	5	6	9+	9	8	7	9+	9	8	9+	9	6	9	9+	2	-	9+	7	6	8	9+	-	5				
6	-	-	-	-	-	7	2	1	6	7	1	-	9	8	7	9+	9	7*	8	9+	9	8	9+	9	7	9	9+	1	-	9+	5	7	9	9+	-	6				
7	-	4	2	-	-	9	5	1	9	8	4	3	9+	9	8	9+	9	8	9	9+	9	8	9+	8	8*	9	9+	2	4*	9+	1	8	9	9+	-	7				
8	-	8	6	-	-	9	8	1	9	8	1	6	9+	9	8	9+	9	8	9	9+	9	9	9+	5	8	9	9+	1	6*	9+	-	8	9	9+	-	8				
9	-	9	8	-	4	9+	8	1	9	8	-	7	9+	9	8	9+	9	8	9	9+	9	8	9+	4	8	9	9+	2	6*	9	5*	8	9	9	-	9				
10	-	9	8	-	6	9+	9	1	9+	8	-	8	9+	9	8	9+	9	7	9	9+	9	8	9+	8	9	9	9+	2*	5*	9	7*	8	9	9	-	10				
11	-	9	6	-	8	9+	9	3	9+	8	-	9	9+	9	8	9+	9	8	9	9+	9	7	9+	9	9	9	9+	3*	5*	8	6*	7*	8	9	1*	11				
12	-	9+	1	-	7	9	9	5	9+	8	1	9	9+	9	9	9+	9	9	9	9+	8	7	9+	8	9	9	9+	4*	4*	8	4*	7	8	9	3*	12				
13	-	9+	-	-	8	9	9	5	9+	5	6	9	9+	9	9	9+	9	9	9+	9+	9	5	9+	9	9	9	9+	4*	2*	7	4	7	4	7	4*	13				
14	2	9+	-	1	8	9+	9	7	9+	1	7	9	9+	9	9	9+	8	9	9	9+	9	2	9+	7	9	9	9+	3*	-	5	1*	5	4	7	1*	14				
15	4	9+	-	4	8	9	9	7	9+	-	8	9	9+	9	9	9+	6	9	9	9+	8	2*	9	2*	9	5	9	3*	1*	4	-	4	-	1	1*	15				
16	6	9+	-	7	9	9+	5	7	9+	-	8	9	9+	9	8	9+	3	9	9	9+	3	2*	8	3*	9	-	8	2*	-	5	-	5	-	-	-	16				
17	6	9+	-	7	8	9	6	8	9+	-	8	9	9+	8	8	9	2	9	9	9+	3	-	4	1*	8	-	4	1*	-	-	-	1	-	-	-	17				
18	4	9+	-	6	8	9	2	7	9	-	8	8	9	8	6	8	2	8	7	9	8	4*	4*	5	3*	3*	9	5	-	1*	3	1*	-	3	1	18				
19	1	9	-	2	5	7	-	6	9	-	8	8	9	6	7	7	1	8	7	9+	9	6*	4*	8	7	2*	6	9	2*	-	6	6*	4*	8	5	19				
20	-	5	-	-	2	5	-	5	9	-	6	8	8	2	4	9+	6	9	9	9+	9	5*	3*	7	9*	2*	9+	9	1*	-	8	7*	5*	9+	9	20				
21	-	1	-	-	-	-	-	2	8	-	2	5	5	-	2*	9+	5*	8	8	9+	9	4*	9+	8*	9	3*	9+	8	-	-	8	8*	3*	8	9	21				
22	-	-	-	-	-	-	-	-	3	-	-	1	1	-	-	9+	2*	7	9	9	7	2*	9+	7	8	5	9+	8	-	4	8	7*	1*	4	9	22				
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	4	8	9	5	1*	9+	7	6*	8	9	8	-	7	9	6*	3	3	9	23				
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA					



Nov., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	4	6	8	5	-	9+	7	4*	9	9+	8	-	9	8	5*	1	1	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	4	3	5	8	6	-	9	8	4*	8	9+	8	-	9	8	2*	6	6	5	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	5	2	4	9	8	-	9+	8	6	9	9+	8	-	7	8	2*	8	9+	1	2
3	-	-	-	-	-	-	-	-	-	-	-	-	3	-	2	9	7	5	5	9+	9	-	9+	9	7	9	9+	1	-	7	8	1*	9	9+	-	3
4	-	-	-	-	-	1	-	-	1	2	-	-	7	3	6	9	8	6	6	9+	9	1	9+	9	7	9	9+	5	-	9	7	3	8	9+	-	4
5	-	-	-	-	-	5	1	1	3	4	-	-	8	6	7	9+	9	8	9	9+	9	5	9+	9	7	9	9+	1	-	9+	5	2	8	9+	-	5
6	-	1	-	-	-	8	3	2	7	7	2	1	9	8	8	9+	9	7	9	9+	9	8	9+	9	7	9	9+	1	-	9+	4	6	9	9+	-	6
7	-	5	9+	-	-	9	6	4	9	8	5	4	9+	9	8	9+	9	7	9	9+	9	9	9+	8	8*	9	9+	1	2*	9+	1	8	9	9+	-	7
8	-	8	5	-	1	9	8	2	9	8	2	7	9+	9	8	9+	9	8	9	9+	9	9	9+	6	8	9	9+	-	7*	9	-	8	9	9	-	8
9	-	9	8	-	5	9+	8	2	9+	8	-	8	9+	9	8	9+	9	8	9	9+	9	8	9+	6	8	9	9+	-	7*	8	2*	7	8	9	-	9
10	-	9	8	-	8	9+	9	3	9+	8	-	9	9+	9	8	9+	9	7	9	9+	9	8	9+	8	8	9	9+	1*	5*	6	3*	6	6	8	-	10
11	-	9+	6	-	7	9+	9	4	9+	8	-	9	9+	9	9	9+	9	8	9	9+	8	7	9	8	8	9	9+	3*	5*	4	5	7	2*	9	-	11
12	1	9+	1	-	8	9+	8	6	9+	8	1	9	9+	9	9	9+	9	9	9	9+	8	2*	9	8	9	9	9+	4*	5*	4	2*	6	6	8	1*	12
13	2	9+	-	-	8	9+	8	8	9+	5	5	9	9+	9	8	9+	9	9	9	9+	8	2*	9	8	9	9	9+	4*	2*	2	2	5	2	4	3*	13
14	5	9+	-	1	8	9+	8	7	9+	1	7	9	9+	9	8	9+	8	9	9	9+	9	2*	9	6	9	5	9+	5	-	1	-	2	-	5	1*	14
15	6	9+	-	3	8	9+	8	8	9+	-	8	9	9+	9	8	9+	6	9	9	9+	7	2*	8	4	8	-	9	2*	1*	-	-	2*	-	-	1*	15
16	7	9+	-	4	8	9+	8	8	9+	-	8	9	9+	9	8	9+	4	9	9	9+	2	2*	6	1*	8	-	7	2*	-	-	-	1*	-	1	-	16
17	6	9+	-	7	8	9	8	8	9+	-	8	9	9+	9	4	9	4	9	8	9+	4	2*	1	1	6	-	6	1*	-	-	-	-	-	-	-	17
18	5	9+	-	7	8	9	5	7	9	-	8	8	9	8	2	6	2	8	5	9	7	4*	2*	5	6*	2*	9	4	1*	1*	2	1*	-	4	-	18
19	3	9	-	2	6	7	1	7	9	-	8	8	9	7	1*	4	2	8	3	9+	9	6*	4*	7	7*	3*	4	9	2*	-	2	4*	-	2	1	19
20	1	7	-	-	3	5	-	6	9	-	6	8	8	4	1*	9	8	9	7	9+	9	4*	2*	7	9*	5*	9+	9	-	-	8	7*	2*	8	8	20
21	-	2	-	-	-	-	-	3	8	-	3	6	6	-	1*	9+	5*	8	4	9+	9	4*	7	8*	9	5*	9+	9	-	-	8	8*	1*	5	8	21
22	-	-	-	-	-	-	-	1	4	-	1	2	2	-	-	9+	3*	7	8	9+	8	2*	9+	7	8	3*	9+	9	-	-	9	7*	-	2*	8	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	6	8	9	6	1*	9+	6	6*	7	9+	9	-	6	8	6*	-	2	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



## Dec., Marshall Islands (Kwajalein), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	4	7	8	6	-	9+	7	3*	3	9	9	-	9	8	2*	-	5	7	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	4	4	6	8	7	-	9	8	2*	8	9+	9	-	5	9	1*	-	7	2	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	6	2	6	9	8	-	9+	8	6	8	9+	5	-	2*	8	-	7	8	-	2
3	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	9	8	4	6	9+	9	-	9+	9	7	9	9+	2	-	3	8	4	8	9	-	3
4	-	-	-	-	-	1	-	-	1	1	-	-	7	4	3	9	9	5	8	9+	8	-	9+	9	7	9	9+	-	-	9	7	4	9	9	-	4
5	-	-	-	-	-	5	1	-	4	4	1	-	8	7	7	9+	9	8	8	9+	8	-	9+	9	7	9	9+	-	-	9	4	6	9	9	-	5
6	-	2	-	-	-	8	4	3	7	7	4	2	9	8	8	9+	9	7	9	9+	8	3	9+	9	8	9	9+	-	-	9+	3	6	9	9	-	6
7	-	6	2	-	-	9	6	5	9	8	4	5	9+	9	9	9+	9+	6*	9	9+	8	5*	9+	9	8	9	9+	-	-	9+	1	7	9	9	-	7
8	-	9	5	-	4	9	8	6	9	8	4	7	9+	9	9	9+	9+	8	9	9+	8	8	9+	7	8	9	9+	-	5*	8	-	8	9	9	-	8
9	-	8	8	-	7	9+	9	4	9+	8	1	8	9+	9	8	9+	9	8	9	9+	8	7	9+	5*	8	9	9+	-	3*	6	-	5	8	8	-	9
10	-	9	8	-	7	9+	9	5	9+	8	-	9	9+	9	9	9+	9	7	9	9+	8	5	9+	6	8	9	9+	-	4*	2	1*	4*	4	6	-	10
11	1	9+	7	-	8	9+	9	6	9+	8	-	9	9+	9	9	9+	9	8	9	9+	7	4	9	8	8	9	9+	1*	4*	1	1	4*	4	6	-	11
12	2	9+	1	-	8	9+	8	8	9+	8	1	9	9+	9	8	9+	9	9	9	9+	6	3	8	7	8	9	9+	5*	2*	1	-	3*	2	2	-	12
13	5	9+	-	-	8	9+	8	8	9+	6	5	9	9+	9	8	9+	9	9	9	9+	5	1*	7	6	7	7	9	2*	-	-	-	1*	-	-	1*	13
14	7	9+	-	1	8	9+	9	8	9+	2	7	9	9+	9	8	9+	8	9	9	9+	8	1*	5	1	5	2	8	1*	-	-	-	-	-	-	-	14
15	7	9+	-	3	8	9+	9	8	9+	-	8	9	9+	9	8	9+	5	9	9	9+	8	1*	3	1	4*	-	6	1*	-	-	-	1*	-	-	-	15
16	7	9+	-	5	8	9+	9	8	9+	-	8	9	9+	8	6	9	2	9	8	9+	1	1*	3	-	5	-	5	1*	-	-	-	-	-	-	-	16
17	7	9+	-	7	8	9	8	8	9+	-	8	9	9+	8	1	7	2	8	5	9+	1*	1*	-	-	3*	-	2	1*	-	-	-	-	-	-	-	17
18	6	9+	-	7	8	9	7	7	9	-	8	8	9	8	1*	1	2	6	1	8	6	2*	1*	3	3*	1*	8	3	-	-	-	-	-	-	-	18
19	4	9	-	2	7	8	2	8	9+	-	8	8	8	8	1*	1	3	8	1	9+	9	5*	5*	8	6*	4*	9+	9	-	-	1	1*	-	-	1	19
20	2	8	-	1	4	6	-	6	9	-	6	8	8	5	2	5	8	8	5	9+	9	4*	3*	8	8*	5*	9+	9	-	-	7	7*	1*	6	8	20
21	-	4	-	-	1	1	-	4	8	-	4	6	8	1	1*	9+	5*	9	2	9	9	4*	1	8	8*	4*	9+	8	-	-	8	7*	-	5	8	21
22	-	-	-	-	-	-	-	1	6	-	1	2	3	-	-	9+	3*	8	2	9+	8	2*	9+	7	8	3*	9+	9	-	-	8	5*	-	1	8	22
23	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	9	2	6	6	9	7	1*	9+	6	5*	2*	9+	9	-	1	8	4*	-	1	8	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	



**Jan., Marshall Islands (Kwajalein), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV**

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	3	-	7	8	6	-	9	8	1*	6	9	8	-	-	5	-	-	9+	2	0				
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	4	4	7	9	7	-	9	8	-	5	9	9	-	-	2	-	-	9	-	1				
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	6	4	5	9	8	-	9	8	-	8	9+	7	-	1*	-	-	1	6	-	2				
3	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	9	8	5	6	9+	8	-	9+	7	7	9	9+	-	-	1*	-	1	5	8	-	3				
4	-	-	-	-	-	2	-	-	1	2	-	-	7	4	1	9	9	6	7	9+	8	-	9+	7	7	9	9+	-	-	2*	-	1	8	9	-	4				
5	-	-	-	-	-	5	1	1	4	4	-	-	8	7	7	9+	9	9	8	9+	7	-	9+	7	7	9	9+	-	-	2	-	1	8	9	-	5				
6	-	1	1	-	-	8	4	2	7	7	2	1	9	8	8	9+	9	7	9	9+	8	1	9+	5	8	9	9+	-	-	6	-	4	8	8	-	6				
7	-	5	3	-	-	9	7	4	9	8	3	5	9	8	8	9+	9	6*	9	9+	8	6	9+	1	8	9	9+	-	-	7	-	3*	8	7	-	7				
8	-	8	6	-	2	9	9	4	9	8	3	7	9+	9	8	9+	9	8	9	9+	9	7*	9+	1	8	9	9+	-	-	6	-	2	5	5	-	8				
9	-	9	8	-	6	9+	8	3	9+	9	1	8	9+	9	8	9+	8	7	9	9+	9	5*	9	1*	8*	8	9+	-	1*	3	-	2	2*	1	-	9				
10	-	9	8	-	5	9+	9	4	9+	9	-	8	9+	9	7	9+	8	6	9	9+	9	5*	8	1*	8	6	9	-	1*	-	-	1*	-	-	-	10				
11	-	9	7	-	8	9+	9	5	9+	8	-	9	9+	9	8	9+	9	8	9	9+	8	2*	7	4*	7	4*	9	-	-	-	-	1*	-	-	-	11				
12	1	9+	2	-	8	9+	9	6	9+	8	1	9	9+	9	6	9	8	9	9	9+	5	2*	5	2	7	1	7	3*	-	-	-	-	-	-	-	12				
13	2	9+	-	-	8	9+	9	8	9+	4	5	9	9+	9	6	9	7	9	8	9+	2	1*	1	-	4	-	4	2*	-	-	-	-	-	-	-	13				
14	5	9+	-	1	8	9+	9	7	9+	3	7	9	9+	9	6	8	5	8	7	9+	7	-	-	-	1*	-	2	-	-	-	-	-	-	-	-	14				
15	7	9+	-	4	8	9+	9	8	9+	-	8	9	9+	9	7	8	2	8	6	9	7	-	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	15			
16	7	9+	-	7	9	9+	9	8	9+	-	8	9	9+	9	6	5	-	8	7	8	1	-	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	16			
17	7	9+	-	8	8	9	8	8	9	-	9	9	9	8	2	1	-	5	4	7	2*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17				
18	6	9+	-	8	8	9	6	7	9	-	9	8	9	7	1*	1*	2	5*	1*	9+	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	18				
19	4	9	-	4	7	9	1	7	9	-	8	8	9	8	2*	2*	3	7*	-	9+	9	-	2*	3	4*	2*	8	5	-	-	-	-	-	-	-	19				
20	2	8	-	-	6	7	-	6	9	-	7	8	7	5	4	1*	7	8	1	9+	9	-	-	8	7*	-	9+	9	-	-	2	2*	-	1	3	20				
21	-	2	-	-	1	2	-	4	8	-	4	7	8	1	2*	9+	8	8	5	9+	9	-	-	7	7*	-	9+	8	-	-	6	2*	-	1	8	21				
22	-	-	-	-	-	-	-	1	5	-	-	4	4	-	-	9+	4*	7	3	9	8	-	4	7	6*	-	9+	8	-	-	7	-	-	1	7	22				
23	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	9	2	3	6	9	7	-	8	8	4*	-	8	8	-	-	5	-	-	9+	5	23				
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA					























Jul., Marshall Islands (Kwajalein), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8	4	1	7	9	7	-	9	8	-	7	9+	8	-	-	6	-	-	6	6	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	4	1	6	9	7	-	9	8	-	8	9+	9	-	1	5	-	-	8	6	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	6	3	6	9	7	-	9+	9	-	8	9+	9	-	5	5	-	-	9	6	2
3	-	-	-	-	-	-	-	-	-	-	-	-	2	-	5	9	8	2	7	9+	8	-	9	7	2	8	9+	9	-	7	-	-	-	9+	4	3
4	-	-	-	-	-	-	-	-	-	-	-	-	6	1	6	9	8	3	7	9+	9	-	7	1	8	8	9+	9	-	8	-	2	-	9	-	4
5	-	-	-	-	-	4	-	-	1	5	-	-	8	6	7	9	9	9	8	9+	9	-	8	-	8	9	9+	8	-	9	-	1	1	9	-	5
6	-	-	-	-	-	7	1	-	4	7	1*	-	9	8	7	9+	9	6	8	9+	9	1*	9	-	8	9	9+	5	-	9	-	5	4	9	-	6
7	-	2	2	-	-	9	5	-	8	8	1	1	9	9	8	9+	9	8	8	9+	9	3*	9+	-	8	9	8	-	-	2	-	6	6	8	-	7
8	-	6	7	-	-	8	8	-	9	8	-	4	9+	9	8	9+	9	8	8	9+	9+	5*	9+	-	8	9	9+	2	-	5	-	4	6	1	-	8
9	-	9	8	-	-	9	9	-	9	9	-	6	9+	9	8	9+	9	7	9	9+	9+	1	9	2*	8	9	9	1	-	5	-	4	4	-	-	9
10	-	9	8	-	1	9	9	-	9+	9	-	7	9+	9	9	9+	6	6	9	9+	9	2	9	6*	9	8	6	-	-	1	1*	-	-	-	-	10
11	-	9	7	-	4	9+	9	-	9+	8	-	9	9+	9	8	9+	8	8	9	9+	9	-	5	1*	4	1	-	-	-	-	-	-	-	-	-	11
12	-	9+	2	-	5	9+	8	1	9+	8	2	9	9+	9	6	9	9	9	8	9+	9	-	-	2	-	-	-	-	-	-	-	-	-	-	-	12
13	-	9+	-	-	7	9+	8	1	9+	6	6	9	9+	9	5	9	9	9	7	9+	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
14	-	9+	-	3	7	9+	8	2	9+	1	8	9	9+	9	5	7	7	8	6	8	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
15	-	9+	-	2	8	9+	7	5	9+	-	8	9	9+	9	8	7	5	7	6	9	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
16	-	9+	-	8	9	9+	2	6	9+	-	8	9	9	8	7	2	3	5	6	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	2	9+	-	7	8	9	-	5	9+	-	8	9	9	7	7	2	2	5	5	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	1	9	-	6	8	9	-	6	9	-	8	8	9	5	7	3	5	6	4	9+	7	-	-	2	1*	-	2	2	-	-	-	-	-	-	-	18
19	-	8	-	2	5	9	-	3	9	-	8	8	9	2	8	5	6	6	6	9+	9	1*	-	6	4*	1*	9	2	-	-	-	-	-	-	-	19
20	-	5	-	-	-	4	-	2	9	-	6	6	8	-	8	6	8	9	9	9+	8	6*	-	8	7*	-	9	6	-	-	-	-	-	2	-	20
21	-	1	-	-	-	-	-	-	7	-	1	3	5	-	7	9	8	8	8	9+	8	4*	2	8	7*	-	9	5*	-	-	-	3*	-	7	-	21
22	-	-	-	-	-	-	-	-	4	-	-	-	2	-	5	9	4	6	8	9	7	1*	4	7	4	3	9+	6	-	-	1	-	-	6	-	22
23	-	-	-	-	-	-	-	-	1	-	-	-	-	-	5	9	4	4	8	9	6	-	4	7	-	1	9+	7	-	-	2	-	-	9	1	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Aug., Marshall Islands (Kwajalein), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	2	-	6	8	7	-	9	8	-	4	9+	8	-	1	6	-	-	8	7	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	9	4	-	5	9	7	-	9+	8	-	8	9+	8	-	4	8	-	-	9	7	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	6	2	5	9	8	-	9	9	-	8	9+	9	-	8	6	-	-	9+	6	2
3	-	-	-	-	-	-	-	-	-	-	-	-	3	-	4	9	8	2	6	9+	8	-	7	8	5	8	9+	9	-	9	-	-	-	8	2	3
4	-	-	-	-	-	-	-	-	-	2	-	-	7	3	4	9	8	2	6	9+	9	-	9	-	8	8	9+	8	-	9+	-	5	-	8	-	4
5	-	-	-	-	-	4	-	-	2	5	-	-	8	5	8	9+	8	9	7	9+	9	-	9+	-	7	8	9+	5	-	4	-	3	1*	9	-	5
6	-	-	-	-	-	7	1	-	5	7	1*	-	9	8	7	9+	8	7	8	9+	9	1	9+	-	8	8	9+	1	-	5	-	6	4	9	-	6
7	-	2	3	-	-	9	5	-	8	8	1	1	9	8	7	9+	8	8	8	9+	9	3*	9+	-	8	8	9+	1	-	6	-	6	8	9	-	7
8	-	7	7	-	-	9	8	-	9	9	-	5	9+	9	8	9+	6	8	9	9+	9	5*	9+	-	8*	9	9+	-	-	8	-	7	8	6	-	8
9	-	9	8	-	1	9	9	-	9	9	-	7	9+	9	8	9+	6	8	9	9+	9	4*	9+	4*	8	9	9+	-	-	8	-	7	7	2	-	9
10	-	9+	8	-	1	9+	9	-	9+	9	-	8	9+	9	8	9+	5	5	9	9+	8	1	9	3*	9	9	9	-	-	4	-	3	-	-	-	10
11	-	9	7	-	5	9+	9	-	9+	9	-	8	9+	9	7	9+	8	8	9	9+	6	-	7	2*	8	2	6	-	-	-	-	1	-	-	-	11
12	-	9+	1	-	6	9+	8	1	9+	8	2	9	9+	9	3	9	7	9	8	9	6	-	1	1*	5	-	1	-	-	-	-	-	-	-	-	12
13	-	9+	-	-	8	9+	8	3	9+	6	6	9+	9+	9	1	8	8	9	1*	9+	7	-	2	-	1	-	-	-	-	-	-	-	-	-	-	13
14	-	9+	-	3	9	9+	8	5	9+	2	8	9	9+	9	-	9	8	9	1*	9+	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
15	1	9+	-	7	9	9+	8	7	9+	-	8	9	9+	9	6	8	6	8	1	9	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
16	1	9+	-	8	9	9+	3	7	9+	-	8	9	9+	8	7	6	1	7	3	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	4	9+	-	8	8	9	1	7	9+	-	8	9	9	7	6	3	2	4	3	4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	3	9+	-	7	8	9+	-	7	9+	-	8	9	9	5	5	4	5	5	2*	9+	7	-	-	2	1*	-	3	3	-	-	-	-	-	-	-	18
19	1	8	-	2	6	8	-	6	9	-	8	9	9	2	8	5	6	7	5	9+	8	3*	-	8	5*	-	9+	7	-	-	-	-	-	-	-	19
20	-	5	-	-	1	5	-	3	9	-	6	6	8	1	9	6	7	9	8	9+	9	6*	-	7	6*	-	-	8	2*	-	1	-	-	5	-	20
21	-	1	-	-	-	-	-	1	8	-	1	2	5	-	7	9+	5*	8	8	9	8	3*	1	7	8*	-	9	6	-	-	-	6*	-	8	-	21
22	-	-	-	-	-	-	-	-	3	-	-	-	2	-	1*	9	4*	6	7	9	7	-	2	8	6*	4	9+	5*	-	-	1*	1*	-	7	-	22
23	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	9	2	4	8	9	7	-	8	8	2*	7	9+	8	-	-	4	-	-	9	1	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA



Sep., Marshall Islands (Kwajalein), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

	80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	-	5	8	5	-	9	8	4*	5	9+	8	-	6	8	2*	-	8	8	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	4	-	4	9	5	-	8	8	2*	8	9+	8	-	9	9	-	-	7	8	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	6	3	5	9	7	-	9+	9	1*	8	9+	9	-	8	8	-	1	9	6	2
3	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4	9	8	3	5	9+	8	-	9+	9	7	8	9+	8	-	4*	1	-	4	9+	-	3
4	-	-	-	-	-	1	-	-	-	1	-	-	7	2	5	9	9	4	5	9+	9	-	9+	8	7	8	9+	7	-	8	-	2	6	9+	-	4
5	-	-	-	-	-	5	-	-	2	5	-	-	8	5	7	9	9	8	5	9+	9	1	9+	7	7	8	9+	2	-	9+	-	4	8	9+	-	5
6	-	-	1	-	-	8	2	-	5	7	1	-	9	8	7	9+	9	7	7	9+	9	5	9+	5	7	8	9+	1	-	9+	-	4	8	9+	-	6
7	-	3	3	-	-	9	5	-	9	8	2	2	9	9	6	9+	9	7	8	9+	9	7	9+	-	9	9	9+	-	-	9+	-	6	9	9+	-	7
8	-	7	7	-	-	9	8	-	9	9	1	5	9+	9	6	9+	9	8	9	9+	8	8	9+	-	9	9	9+	-	-	9	-	7	9	9+	-	8
9	-	9	8	-	2	9	9	1	9	9	-	7	9+	9	8	9+	8	8	9	9+	8	8	9+	5*	8	9	9+	-	-	8	-	7	8	9	-	9
10	-	9	8	-	2	9+	9	-	9+	9	-	8	9+	9	8	9+	8	6	9	9+	8	5*	9+	4*	8	9	9+	-	2*	5	-	5	1	8	-	10
11	-	9	6	-	5	9+	9	1	9+	8	-	9	9+	9	6	9+	8	8	9	9+	7	4*	9	7	9	7	9+	2*	-	-	-	2	-	5	-	11
12	-	9+	1	-	7	9+	8	3	9+	7	1	9	9+	9	2	9+	9	9	9	9+	5	2*	9	6	8	3	9	3*	-	-	1*	2	-	-	-	12
13	-	9+	-	-	8	9+	8	5	9+	5	6	9	9+	9	1	9+	9	9	9	9+	6	-	6	6	8	-	8	3*	-	-	-	1	-	-	-	13
14	1	9+	-	1	8	9+	9	6	9+	2	7	9	9+	9	2	9	8	9	9	9+	9	-	3	1	4	-	2	1*	-	-	-	-	-	-	-	14
15	3	9+	-	6	9	9+	7	8	9+	-	8	9	9+	8	5	9	5	9	9	9+	5	-	-	-	-	-	2	-	-	-	-	-	-	-	-	15
16	5	9+	-	7	8	9+	6	7	9+	-	8	9	9+	8	5	8	1	8	8	8	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	6	9+	-	8	8	9	4	7	9	-	8	9	9	7	1	1	1	6	4	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	4	9+	-	7	8	9	-	7	9	-	8	8	9	7	4	-	3	4	2*	7	7	1*	1*	5	1*	1*	8	5	-	-	-	-	-	-	-	18
19	1	9	-	2	6	8	-	6	9	-	8	8	8	6	7	1*	6	7	2	9+	9	5*	-	7	5*	4*	-	8	-	-	1	-	-	1	-	19
20	-	5	-	-	1	5	-	5	9	-	6	8	8	2	5	7	7	8	6	9+	9	5*	-	7	8	1*	4	8	1*	-	5	4*	-	9	-	20
21	-	1	-	-	-	-	-	1	7	-	2	4	6	-	1*	9+	4*	8	6	9+	7	1*	-	7	8*	-	1*	7	-	-	3	7*	-	8	1*	21
22	-	-	-	-	-	-	-	-	3	-	-	1	2	-	-	9+	3*	7	7	9	6	-	4	8	7*	1	9+	8	-	-	6	7*	-	6	1*	22
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	1	4	7	9	5	-	9	9	5*	2	9	9	-	-	8	6*	-	9	4	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA











