

**MIDWAY** Known possible A3 signal sources within 15 kHz of 3105 kHz  
 Minimum noise level: -163.6 dBw (ITU-R P.372-8 Quiet Rural Man-made noise)  
 Sunset 0650Z  
 Sunrise 1657Z

Name	Quarry Hts	Melbourne	Navarin	Stalino	Gardner	Oust-Kiakhta	San Diego	L.A.	SanFran	Seattle	Billings
Call Sign	(Army Air)	3AR	UGU1	RW26	KHAQQ	UTC	SAN	LAX	SFO	SEA	UQP1
Freq, kHz	3100	3100	3100	3104	3105	3105	3105	3105	3105	3105	3110
Latitude	8-57N	38-47S	62-17N	47-59N	4-40S	50-13N	32-48N	34-06N	37-48N	47-48N	69-53N
Longitude	79-33W	144-58E	179-04E	37-48E	174-32W	106-17E	117-06W	118-24W	122-24W	122-18W	176-05E
Sunset	2341Z	0712Z	0954Z	1731Z	0538Z	1307Z	0300Z	0309Z	0335Z	0408Z	SSSS
Sunrise	1104Z	2136Z	1420Z	0134Z	1747Z	2051Z	1245Z	1247Z	1253Z	1219Z	SSSS
Bearing	79	210	357	337	175	315	69	67	63	49	357
Distance, nmi	5566	4499	2097	5852	1941	3653	3105	3021	2775	2791	2539
Power, W	75	70	40	600	50	60	50	50	50	50	40
Power, dBw	18.8	18.5	16.0	27.8	17.0	17.8	17	17	17	17	16.0
Rcvr Sel Loss, dB	23	23	23	0	0	0	0	0	0	0	23
Min Loss (FS) db	122.5	120.7	114.0	123.0	112.8	118.9	117.5	117.2	116.5	116.5	115.7
Max SNR (FS) dB	36.8	38.4	42.6	68.4	67.8	62.5	63.1	63.4	64.1	64.1	40.9

July 4 1437Z	No bearing. Very weak wobbly signal, possibly phone. Also heard at Wake, but not at Mokapu.										
Required SNR dB	41	41	41	41	41	41	41	41	41	41	41
Mean SNR dB	-273		19	-102	12	-16	-20	-18	-12	-15	12
Adj Mean SNR dB	-296		-4	-102	12	-16	-20	-18	-12	-15	-11
90th Pctile incr dB	9.5		11.0	24.2	11.0	10.6	10.0	10.1	10.7	11.2	10.2
Sigma SNR dB	7.4		8.6	18.9	8.6	8.3	7.8	7.9	8.4	8.8	8.0
Std Devs Rqrd	45.4		5.2	7.6	3.4	6.9	7.8	7.5	6.3	6.4	6.5
Reception case	2	1	2	2	2	2	2	2	2	2	2
Reception Prob	2.07E-450	0.00	8.19E-08	1.96E-14	3.68E-04	2.93E-12	2.90E-15	3.79E-14	1.15E-10	7.77E-11	3.39E-11

**MIDWAY**

	Quarry Hts	Melbourne	Navarin	Stalino	Gardner	Oust-Kiakhta	San Diego	L.A.	SanFran	Seattle	Billings
<b>July 4 1512Z</b>	No bearing. Very faint broad signal, apparently A3. Midway log says Mokapu took bearing 175; not in Mokapu log.										
Required SNR dB	41	41	41	41	41	41	41	41	41	41	41
Mean SNR dB	-273		19	-102	12	-0	-20	-18	-12	-15	12
Adj Mean SNR dB	-296		-4	-102	12	-0	-20	-18	-12	-15	-11
90th Pctile incr dB	9.5		11.0	24.2	11.0	10.6	10.0	10.1	10.7	11.2	10.2
Sigma SNR dB	7.4		8.6	18.9	8.6	8.3	7.8	7.9	8.4	8.8	8.0
Std Devs Rqrd	45.4		5.2	7.6	3.4	5.0	7.8	7.5	6.3	6.4	6.5
Reception case	2	1	2	2	2	2	2	2	2	2	2
Reception Prob	2.07E-450	0.00	8.19E-08	1.96E-14	3.68E-04	3.26E-07	2.90E-15	3.79E-14	1.15E-10	7.77E-11	3.39E-11

<b>July 4 1553Z</b>	No bearing. Weak signal, "apparently the same one", far too weak to identify.										
Required SNR dB	41	41	41	41	41	41	41	41	41	41	41
Mean SNR dB	-402		13	-59	20	1	-57	-53	-28	-28	8
Adj Mean SNR dB	-425		-10	-59	20	1	-57	-53	-28	-28	-15
90th Pctile incr dB	10.7		11.9	11.7	10.9	10.9	10.9	11.9	10.4	10.7	10.9
Sigma SNR dB	8.4		9.3	9.1	8.5	8.5	8.5	9.3	8.1	8.4	8.5
Std Devs Rqrd	55.7		5.5	10.9	2.5	4.7	11.5	10.1	8.5	8.3	6.6
Reception case	2	1	2	2	2	2	2	2	2	2	2
Reception Prob	6.87E-682	0.00	2.06E-08	3.70E-28	6.57E-03	1.32E-06	5.99E-31	2.47E-24	1.01E-17	7.64E-17	2.41E-11

<b>July 5 0638Z</b>	Bearing approx 201, quick shot, on faint wobbly phone between NRUI and NECR on dial. Duration too short to narrow down.										
Required SNR dB	42	42	42	42	42	42	42	42	42	42	42
Mean SNR dB	-16		13	-328	28	-102	9	9	11	14	12
Adj Mean SNR dB	-39		-10	-328	28	-102	9	9	11	14	-11
90th Pctile incr dB	11.2		11.6	10.6	11.5	10.8	14.5	14.3	18.8	16.2	11.2
Sigma SNR dB	8.8		9.1	8.3	9.0	8.4	11.3	11.2	14.7	12.7	8.8
Std Devs Rqrd	9.3		5.7	44.7	1.6	17.1	2.9	3.0	2.1	2.2	6.1
Reception case	2	1	2	2	2	2	2	2	2	2	2
Reception Prob	1.05E-20	0.00	4.79E-09	0.00E+00	3.74E-03	1.31E-65	1.77E-03	1.55E-03	1.54E-02	1.24E-02	6.93E-10

<b>July 5 1105Z</b>	Bearing 175 on strong carrier near 3105, lasting over 2 hours. Proved to be some UID station probably in South America or Russia, and definitely disregarded.										
Required SNR dB	45	45	45	45	45	45	45	45	45	45	45
Mean SNR dB	-37		5	-217	10	-9	-4	-4	-1	0	7
Adj Mean SNR dB	-60		-18	-217	10	-9	-4	-4	-1	0	-16
90th Pctile SNR dB	7.2		18.2	7.9	10.4	7.4	15.5	16.6	15.8	15.7	10.9
Sigma SNR dB	5.6		14.2	6.2	8.1	5.8	12.1	13.0	12.3	12.3	8.5
Std Devs Rqrd	18.7		4.4	42.5	4.3	9.3	4.0	3.8	3.7	3.7	7.2
Reception case	2	1	2	2	2	2	2	2	2	2	2
Reception Prob	4.62E-78	0.00	4.69E-06	0.00E+00	8.24E-06	4.79E-21	2.60E-05	7.88E-05	9.69E-05	1.22E-04	3.94E-13

