

4. Appendices

Appendix A. Adaptor Assembly

Appendix B. Galvanic Series: Anodic or Least Noble--Active

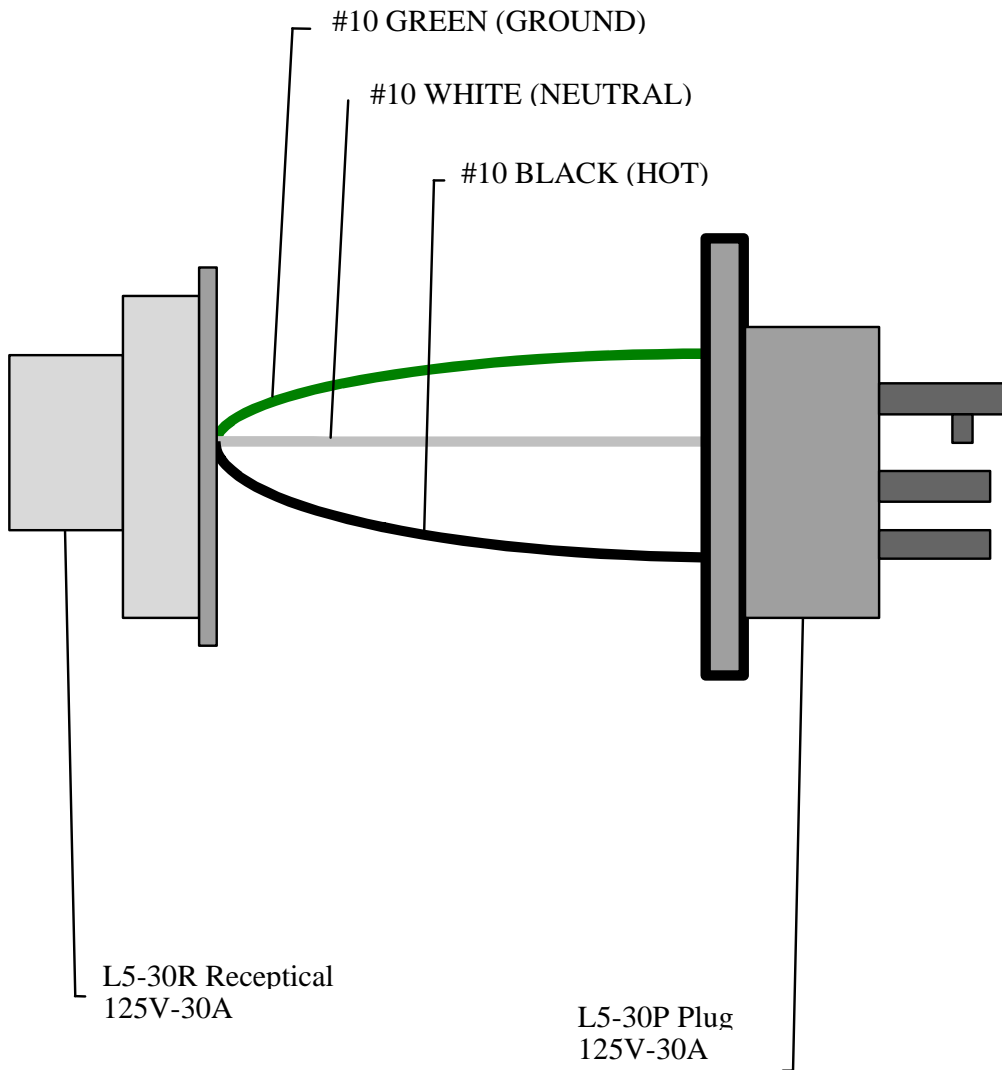
Appendix C. Galvanic Series: Corrosion Potentials in Flowing Seawater

Appendix D. Tables and Charts of Load Data

Appendix E. Watts Per Lineal Foot of Stall

Appendix F. Watts Per Outlet

4.1. Appendix A. Adaptor Assembly



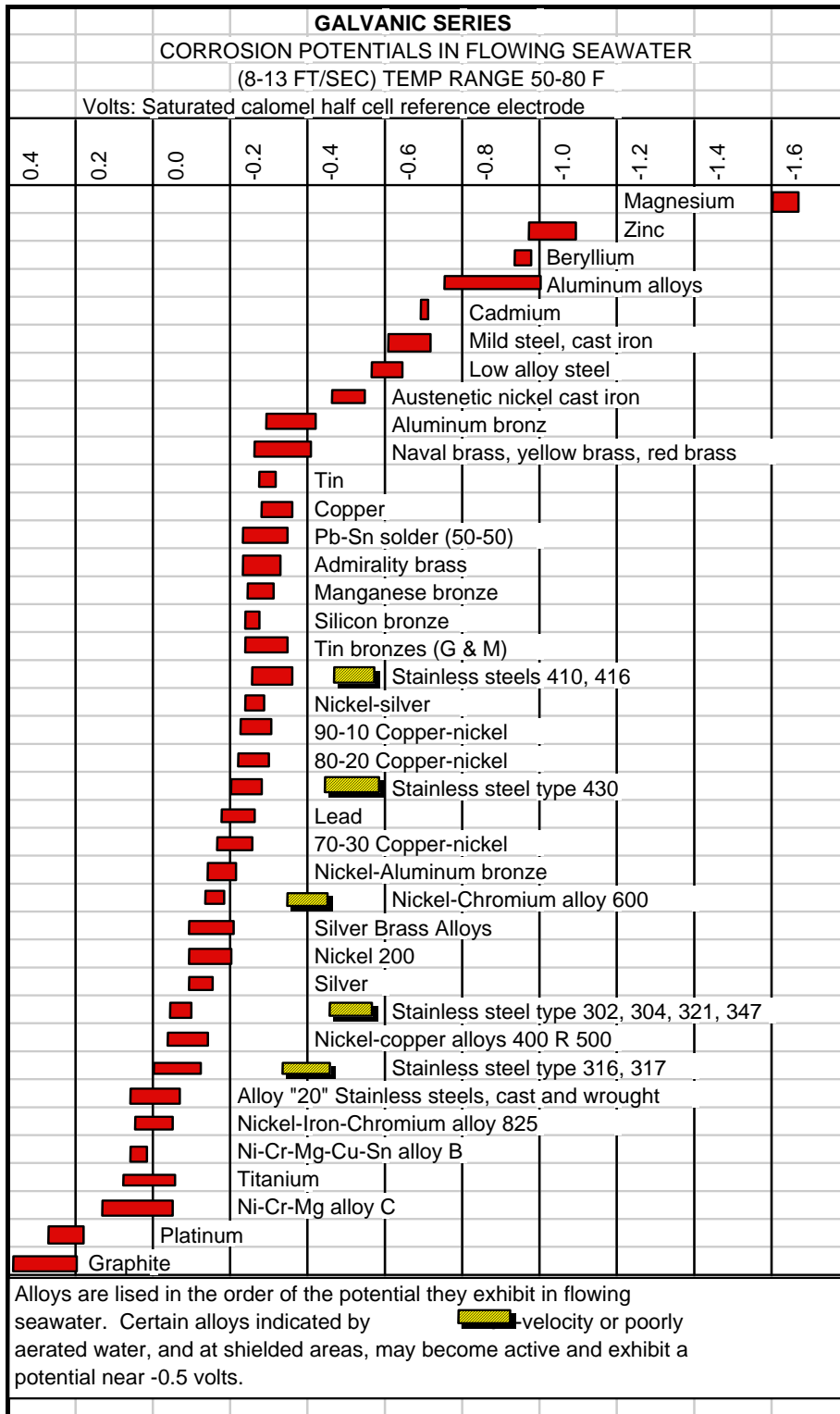
ADAPTOR ASSEMBLY
Not to scale

4.2. Appendix B. Galvanic Series

Anodic or Least Noble--Active

1. Magnesium and magnesium alloys
2. CB75 aluminum anode alloy
3. Zinc
4. B605 aluminum anode alloy
5. Galvanized steel or galvanized wrought iron
6. Aluminum 7072 (cladding alloy)
7. Aluminum 5456
8. Aluminum 5086
9. Aluminum 5052
10. Aluminum 3003, 1100, 6061, 356
11. Cadmium
12. 2117 aluminum rivet alloy
13. Mild steel
14. Wrought iron
15. Cast Iron
16. Ni-Resist
17. 13% chromium stainless steel, type 410 (active)
18. 50-50% lead tin solder
19. 18-8 stainless steel, type 304 (active)
20. 18-83% NO stainless steel, type 316 (active)
21. Lead
22. Tin
23. Muntz metal
24. Manganese bronze
25. Naval Brass (60% copper-39% zinc)
26. Nickel (active)
27. 78% nickel,13.5% chromium, 6% iron (Inconel) (Active)
28. Yellow brass (65% copper-35% zinc)
29. Admiralty brass
30. Aluminum bronze
31. Red brass (85% copper-15% zinc)
32. Copper
33. Silicone bronze
34. copper-20% nickel-5% zinc
35. copper-10% nickel
36. copper- 30% nickel
37. CU.27.Zn-10% Sn. (composition G bronze)
38. copper 3% zinc-6.5% Sn-1.5% PB (composition M-bronze)
39. Nickel (passive)
40. Nickel-13.5% chromium-6% iron (Inconel) (passive)
41. nickel-30% copper
42. 18-8 stainless steel type 304 (passive)
43. Mo. stainless steel, type 316 (passive)
44. Hastelloy C
45. Titanium
46. Platinum

4.3. Appendix C. Galvanic Series Corrosion Potentials in Flowing Seawater



4.4. Appendix D. Tables and Charts of Load Data

Table 1 Whittier

Table 2 Ketchikan

Table 3 Hoonah

4.4.1 Table 1. Whittier

Date	KW Power	Lights	Total	Watts/lf stall	watts/ outlet
Jun-90	35.2	(7.8)	27.4	6.7	360.5
Jul	35.2	(7.8)	27.4	6.7	360.5
Aug	36.8	(7.8)	29.0	7.1	381.6
Sep	40.0	(7.8)	32.2	7.9	423.7
Oct	54.4	(7.8)	46.6	11.4	613.2
Nov	64.0	(7.8)	56.2	13.7	739.5
Dec	68.8	(7.8)	61.0	14.9	802.6
Jan-91	68.8	(7.8)	61.0	14.9	802.6
Feb	68.8	(7.8)	61.0	14.9	802.6
Mar	67.2	(7.8)	59.4	14.5	781.6
Apr	67.2	(7.8)	59.4	14.5	781.6
May	64.0	(7.8)	56.2	13.7	739.5
Jun	56.0	(7.8)	48.2	11.8	634.2
Jul	41.6	(7.8)	33.8	8.3	444.7
Aug	41.6	(7.8)	33.8	8.3	444.7
Sep	54.4	(7.8)	46.6	11.4	613.2
Oct	54.4	(7.8)	46.6	11.4	613.2
Nov	68.8	(7.8)	61.0	14.9	802.6
Dec-91	73.6	(7.8)	65.8	16.1	865.8
data gap					
Jan-96	54.4	(7.8)	46.6	11.4	613.2
Feb	56.0	(7.8)	48.2	11.8	634.2
Mar	56.0	(7.8)	48.2	11.8	634.2
Apr	44.8	(7.8)	37.0	9.0	486.8
May	43.2	(7.8)	35.4	8.7	465.8
Jun	32.0	(7.8)	24.2	5.9	318.4
Jul	30.4	(7.8)	22.6	5.5	297.4
Aug	35.2	(7.8)	27.4	6.7	360.5
Sep	28.8	(7.8)	21.0	5.1	276.3
Oct					
Nov	51.2	(7.8)	43.4	10.6	571.1
Dec	52.8	(7.8)	45.0	11.0	592.1

Floats D,E,F, &G totaling 4089.5 lineal feet of stall floats
 76 metered slips with 30A~120V Outlets with 20A/1~ C.B.
 Data does not include lights (7.8 KW)

4.4.2 Table 2. Ketchikan

Date	#1 KW	#2 KW	Lights	Total	Watts/lf stall	watts/ outlet
Dec-95	70.0	19.0	(8.0)	81.0	9.4	627.9
Jan-96	69.0	19.0	(8.0)	80.0	9.3	620.2
Feb	71.0	20.0	(8.0)	83.0	9.6	643.4
Mar	57.0	16.0	(8.0)	65.0	7.5	503.9
Apr	50.0	12.0	(8.0)	54.0	6.3	418.6
May	31.0	10.0	(8.0)	33.0	3.8	255.8
Jun	23.0	9.0	(8.0)	24.0	2.8	186.0
Jul	26.0	8.0	(8.0)	26.0	3.0	201.6
Aug	18.0	6.0	(8.0)	16.0	1.9	124.0
Sep	26.0	7.0	(8.0)	25.0	2.9	193.8
Oct	25.0	9.0	(8.0)	26.0	3.0	201.6
Nov	58.0	14.0	(8.0)	64.0	7.4	496.1

Floats D,E,F, &G totaling 8268 lineal feet of stall floats
 129 metered slips with 30A~120V Outlets with 20A/1~ C.B.

4.4.3 Table 3. Hoonah

Date	Float B&C	Float D&E	Lights	Total	Watts/lf stall	watts/ outlet
Jan-94	22.4	7.6	(10.2)	19.8	3.4	126.9
Feb	24.4	7.6	(10.2)	21.8	3.7	139.7
Mar	24.8	7.6	(10.2)	22.2	3.8	142.3
Apr	19.6	6.4	(10.2)	15.8	2.7	101.3
May	20.0	5.6	(10.2)	15.4	2.6	98.7
Jun	17.2	2.4	(10.2)	9.4	1.6	60.3
Jul	20.4	5.2	(10.2)	15.4	2.6	98.7
Aug	21.6	5.6	(10.2)	17.0	2.9	109.0
Sep	16.8	6.4	(10.2)	13.0	2.2	83.3
Oct	27.2	4.4	(10.2)	21.4	3.7	137.2
Nov	18.8	6.8	(10.2)	15.4	2.6	98.7
Dec	22.8	9.6	(10.2)	22.2	3.8	142.3
Jan-95	26.4	8.4	(10.2)	24.6	4.2	157.7
Feb	22.4	7.6	(10.2)	19.8	3.4	126.9
Mar	23.2	7.6	(10.2)	20.6	3.5	132.1
Apr	22.8	5.6	(10.2)	18.2	3.1	116.7
May	18.8	4.4	(10.2)	13.0	2.2	83.3
Jun	18.8	5.6	(10.2)	14.2	2.4	91.0
Jul	27.2	6.4	(10.2)	23.4	4.0	150.0
Aug	27.6	5.2	(10.2)	22.6	3.9	144.9
Sep	23.6	6.8	(10.2)	20.2	3.5	129.5
Oct	14.8	4.4	(10.2)	9.0	1.5	57.7
Nov	16.0	6.4	(10.2)	12.2	2.1	78.2
Dec	24.8	9.2	(10.2)	23.8	4.1	152.6
Jan-96	23.2	7.2	(10.2)	20.2	3.5	129.5
Feb	23.2	10.4	(10.2)	23.4	4.0	150.0
Mar	21.6	9.2	(10.2)	20.6	3.5	132.1
Apr	18.0	6.4	(10.2)	14.2	2.4	91.0
May	16.0	4.8	(10.2)	10.6	1.8	67.9
Jun	18.4	7.6	(10.2)	15.8	2.7	101.3
Jul	27.2	5.6	(10.2)	22.6	3.9	144.9
Aug	24.4	5.6	(10.2)	19.8	3.4	126.9
Sep	18.4	4.4	(10.2)	12.6	2.2	80.8
Oct	18.8	5.6	(10.2)	14.2	2.4	91.0

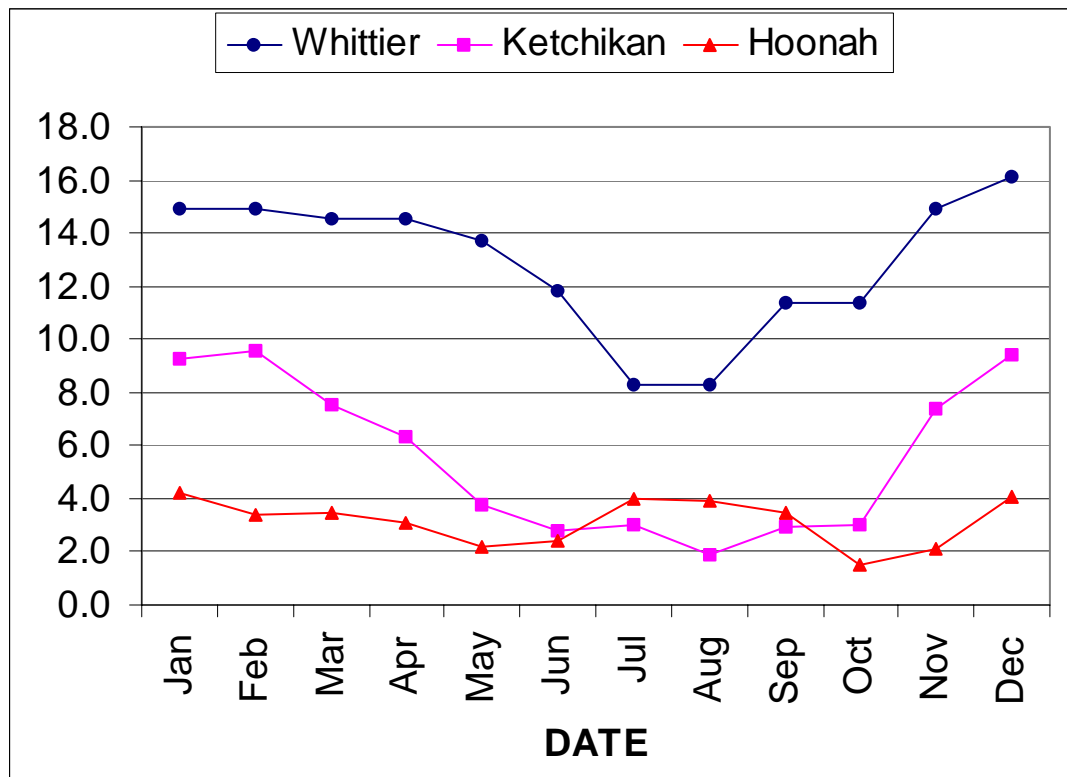
Floats D,E,F, &G totaling 4089.5 lineal feet of stall floats
 76 metered slips with 30A~120V Outlets with 20A/1~ C.B.
 Data does not include lights (7.8 KW)

4.5. Appendix E

Date	WHITTIER	WHITTIER	KETCHIKAN	KETCHIKAN	HOONAH	HOONAH
	WATTS PER LF STALL	WATTS PER OUTLET	WATTS PER LF STALL	WATTS PER OUTLET	WATTS PER LF STALL	WATTS PER OUTLET
Jan	14.9	802.6	9.3	620.2	4.2	157.7
Feb	14.9	802.6	9.6	643.4	3.4	126.9
Mar	14.5	781.6	7.5	503.9	3.5	132.1
Apr	14.5	781.6	6.3	418.6	3.1	116.7
May	13.7	739.5	3.8	255.8	2.2	83.3
Jun	11.8	634.2	2.8	186.0	2.4	91.0
Jul	8.3	444.7	3.0	201.6	4.0	150.0
Aug	8.3	444.7	1.9	124.0	3.9	144.9
Sep	11.4	613.2	2.9	193.8	3.5	129.5
Oct	11.4	613.2	3.0	201.6	1.5	57.7
Nov	14.9	802.6	7.4	496.1	2.1	78.2
Dec	16.1	865.8	9.4	627.9	4.1	152.6

Note: Whittier is 1991 data

Watts per Lineal Foot of Stall



4.6. Appendix F

