



# Port Refrew

British Columbia, Canada

48°33.18'N 124°25.14'W

All times have been adjusted for daylight saving time on the appropriate dates.

For use with *Ports and Passes, 2012*.

For detailed instructions on reading these tables, consult page 11 of your *Ports and Passes*.

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# January 2012 February

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	6:11a 1:18p 6:18p 11:41p	9.4 5.3 6.9 5.2	2.9 1.6 2.1 1.6	16	5:35a 12:48p 6:16p 11:24p	10.2 4.3 7.2 5.0	3.1 1.3 2.2 1.5	1	6:38a 2:38p 9:09p	9.5 4.4 6.7	2.9 1.3 2.0	16	12:02a 7:04a 2:57p 9:36p	6.0 10.3 3.1 7.3	1.8 3.1 0.9 2.2
2	6:57a 2:29p 8:04p	9.5 4.8 6.7	2.9 1.5 2.0	17	6:29a 2:08p 8:06p	10.5 3.7 6.9	3.2 1.1 2.1	2	12:20a 7:35a 3:35p 10:22p	6.3 9.7 3.9 7.0	1.9 3.0 1.2 2.1	17	1:30a 8:15a 3:58p 10:35p	6.2 10.3 2.7 7.8	1.9 3.1 0.8 2.4
3	12:29a 7:43a 3:28p 9:43p	5.7 9.7 4.2 6.8	1.7 3.0 1.3 2.1	18	12:23a 7:29a 3:19p 9:42p	5.6 10.7 3.0 7.2	1.7 3.3 0.9 2.2	3	1:38a 8:31a 4:22p 11:05p	6.5 9.9 3.3 7.4	2.0 3.0 1.0 2.3	18	2:57a 9:20a 4:49p 11:19p	6.1 10.4 2.4 8.3	1.9 3.2 0.7 2.5
4	1:24a 8:28a 4:16p 10:47p	6.1 10.0 3.6 7.1	1.9 3.1 1.1 2.2	19	1:35a 8:30a 4:17p 10:48p	6.0 11.0 2.4 7.7	1.8 3.4 0.7 2.3	4	2:50a 9:22a 5:02p 11:38p	6.5 10.2 2.8 7.8	2.0 3.1 0.9 2.4	19	4:07a 10:17a 5:32p 11:57p	5.8 10.5 2.3 8.7	1.8 3.2 0.7 2.7
5	2:23a 9:11a 4:57p 11:32p	6.4 10.3 3.1 7.5	2.0 3.1 0.9 2.3	20	2:50a 9:29a 5:08p 11:39p	6.1 11.2 1.9 8.1	1.9 3.4 0.6 2.5	5	3:50a 10:10a 5:38p	6.2 10.5 2.4	1.9 3.2 0.7	20	5:04a 11:08a 6:09p	5.3 10.5 2.3	1.6 3.2 0.7
6	3:19a 9:52a 5:34p	6.4 10.5 2.6	2.0 3.2 0.8	21	3:59a 10:23a 5:54p	6.0 11.4 1.6	1.8 3.5 0.5	6	12:08a 4:43a 10:56a 6:12p	8.1 5.8 10.7 2.1	2.5 1.8 3.3 0.6	21	12:31a 5:54a 11:53a 6:42p	9.0 4.9 10.3 2.5	2.7 1.5 3.1 0.8
7	12:08a 4:09a 10:32a 6:09p	7.8 6.4 10.8 2.2	2.4 2.0 3.3 0.7	22	12:23a 4:58a 11:13a 6:34p	8.5 5.8 11.4 1.5	2.6 1.8 3.5 0.5	7	12:37a 5:31a 11:40a 6:45p	8.5 5.4 10.8 2.0	2.6 1.6 3.3 0.6	22	1:02a 6:40a 12:35p 7:11p	9.3 4.6 10.1 2.8	2.8 1.4 3.1 0.9
8	12:41a 4:56a 11:12a 6:42p	8.1 6.2 11.0 1.9	2.5 1.9 3.4 0.6	23	1:02a 5:51a 11:59a 7:11p	8.9 5.6 11.2 1.6	2.7 1.7 3.4 0.5	8	1:07a 6:20a 12:25p 7:16p	9.0 4.9 10.7 2.1	2.7 1.5 3.3 0.6	23	1:31a 7:22a 1:15p 7:37p	9.5 4.3 9.7 3.2	2.9 1.3 3.0 1.0
9	1:14a 5:41a 11:52a 7:15p	8.3 6.0 11.1 1.8	2.5 1.8 3.4 0.5	24	1:39a 6:41a 12:43p 7:44p	9.1 5.3 10.9 1.9	2.8 1.6 3.3 0.6	9	1:38a 7:09a 1:10p 7:47p	9.4 4.5 10.4 2.3	2.9 1.4 3.2 0.7	24	1:58a 8:04a 1:55p 8:02p	9.6 4.1 9.2 3.7	2.9 1.3 2.8 1.1
10	1:46a 6:26a 12:33p 7:48p	8.6 5.8 11.0 1.8	2.6 1.8 3.4 0.5	25	2:13a 7:29a 1:25p 8:15p	9.3 5.2 10.3 2.4	2.8 1.6 3.1 0.7	10	2:10a 8:02a 1:57p 8:18p	9.8 4.1 9.9 2.8	3.0 1.3 3.0 0.9	25	2:26a 8:46a 2:34p 8:26p	9.6 4.1 8.6 4.2	2.9 1.3 2.6 1.3
11	2:19a 7:12a 1:15p 8:19p	8.8 5.5 10.7 2.0	2.7 1.7 3.3 0.6	26	2:46a 8:18a 2:06p 8:42p	9.4 5.1 9.7 3.0	2.9 1.6 3.0 0.9	11	2:45a 8:58a 2:48p 8:51p	10.1 3.8 9.2 3.4	3.1 1.2 2.8 1.0	26	2:54a 9:30a 3:16p 8:51p	9.6 4.1 8.1 4.7	2.9 1.3 2.5 1.4
12	2:53a 8:03a 2:00p 8:51p	9.1 5.3 10.2 2.4	2.8 1.6 3.1 0.7	27	3:18a 9:08a 2:48p 9:09p	9.5 5.1 8.9 3.6	2.9 1.6 2.7 1.1	12	3:23a 9:59a 3:44p 9:26p	10.4 3.7 8.4 4.1	3.2 1.1 2.6 1.3	27	3:24a 10:18a 4:03p 9:18p	9.6 4.2 7.5 5.2	2.9 1.3 2.3 1.6
13	3:28a 9:00a 2:49p 9:23p	9.4 5.2 9.5 2.9	2.9 1.6 2.9 0.9	28	3:50a 10:03a 3:32p 9:36p	9.5 5.1 8.2 4.2	2.9 1.6 2.5 1.3	13	4:06a 11:08a 4:51p 10:06p	10.5 3.7 7.6 4.8	3.2 1.1 2.3 1.5	28	3:59a 11:15a 5:03p 9:49p	9.5 4.3 7.0 5.7	2.9 1.3 2.1 1.7
14	4:06a 10:07a 3:44p 9:58p	9.7 5.0 8.7 3.6	3.0 1.5 2.7 1.1	29	4:25a 11:04a 4:23p 10:04p	9.5 5.1 7.5 4.8	2.9 1.6 2.3 1.5	14	4:56a 12:24p 6:19p 10:55p	10.4 3.6 7.1 5.5	3.2 1.1 2.2 1.7	29	4:40a 12:22p 6:29p 10:30p	9.4 4.4 6.7 6.1	2.9 1.3 2.0 1.9
15	4:48a 11:24a 4:49p 10:37p	9.9 4.7 7.8 4.3	3.0 1.4 2.4 1.3	30	5:03a 12:13p 5:30p 10:36p	9.5 5.0 6.9 5.4	2.9 1.5 2.1 1.6	15	5:55a 1:44p 8:09p	10.4 3.4 7.0	3.2 1.0 2.1				
				31	5:47a 1:28p 7:09p 11:18p	9.5 4.8 6.6 5.9	2.9 1.5 2.0 1.8								



March				2012				April							
DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	5:33a	9.2	2.8	16	1:07a	6.2	1.9	1	2:01a	6.3	1.9	16	4:22a	5.0	1.5
	1:34p	4.2	1.3		7:43a	9.6	2.9		8:06a	8.6	2.6		10:00a	8.2	2.5
Thu	8:20p	6.8	2.1	Fri	3:24p	3.1	0.9	Sun	3:33p	3.5	1.1	Mon	4:26p	3.6	1.1
	11:37p	6.4	2.0		10:12p	7.7	2.3		10:22p	7.8	2.4		11:02p	8.8	2.7
2	6:38a	9.2	2.8	17	2:51a	6.1	1.9	2	3:28a	5.8	1.8	17	5:19a	4.3	1.3
	2:40p	3.9	1.2		9:01a	9.4	2.9		9:22a	8.6	2.6		11:05a	8.2	2.5
Fri	9:36p	7.1	2.2	Sat	4:25p	3.1	0.9	Mon	4:21p	3.3	1.0	Tue	5:09p	3.9	1.2
					11:04p	8.1	2.5		10:57p	8.3	2.5		11:35p	9.2	2.8
3	1:12a	6.5	2.0	18	4:16a	5.7	1.7	3	4:34a	5.0	1.5	18	6:06a	3.7	1.1
	7:48a	9.3	2.8		10:12a	9.3	2.8		10:27a	8.8	2.7		12:00p	8.2	2.5
Sat	3:33p	3.5	1.1	Sun	5:15p	3.0	0.9	Tue	5:03p	3.2	1.0	Wed	5:45p	4.1	1.3
	10:20p	7.5	2.3		11:46p	8.5	2.6		11:30p	8.9	2.7				
4	2:36a	6.3	1.9	19	5:20a	5.1	1.6	4	5:30a	4.1	1.3	19	12:05a	9.4	2.9
	8:53a	9.5	2.9		11:12a	9.3	2.8		11:26a	9.0	2.7		6:48a	3.1	0.9
Sun	4:18p	3.1	0.9	Mon	5:57p	3.1	0.9	Wed	5:42p	3.2	1.0	Thu	12:47p	8.2	2.5
	10:52p	7.9	2.4										6:17p	4.4	1.3
5	3:41a	5.7	1.7	20	12:20a	8.9	2.7	5	12:02a	9.6	2.9	20	12:33a	9.6	2.9
	9:49a	9.8	3.0		6:11a	4.5	1.4		6:22a	3.1	0.9		7:25a	7.7	2.3
Mon	4:56p	2.8	0.9	Tue	12:04p	9.3	2.8	Thu	12:21p	9.2	2.8	Fri	1:29p	8.2	2.5
	11:22p	8.4	2.6		6:33p	3.2	1.0		6:19p	3.3	1.0		6:47p	4.7	1.4
6	4:36a	5.1	1.6	21	12:51a	9.2	2.8	6	12:35a	10.3	3.1	21	12:59a	9.8	3.0
	10:40a	10.0	3.1		6:56a	4.0	1.2		7:12a	2.3	0.7		8:00a	2.4	0.7
Tue	5:32p	2.6	0.8	Wed	12:49p	9.3	2.8	Fri	1:15p	9.2	2.8	Sat	2:09p	8.1	2.5
	11:51p	9.0	2.7		7:04p	3.5	1.1		6:57p	3.5	1.1		7:15p	4.9	1.5
7	5:27a	4.4	1.3	22	1:18a	9.5	2.9	7	1:11a	10.8	3.3	22	1:26a	9.9	3.0
	11:30a	10.1	3.1		7:36a	3.6	1.1		8:02a	1.6	0.5		8:34a	2.3	0.7
Wed	6:05p	2.6	0.8	Thu	1:31p	9.1	2.8	Sat	2:08p	9.1	2.8	Sun	2:47p	8.0	2.4
					7:31p	3.8	1.2		7:36p	3.9	1.2		7:43p	5.2	1.6
8	12:21a	9.6	2.9	23	1:44a	9.6	2.9	8	1:50a	11.2	3.4	23	1:53a	9.9	3.0
	6:17a	3.6	1.1		8:14a	3.3	1.0		8:52a	1.2	0.4		9:08a	2.2	0.7
Thu	12:18p	10.1	3.1	Fri	2:11p	8.8	2.7	Sun	3:02p	8.8	2.7	Mon	3:25p	7.9	2.4
	6:38p	2.7	0.8		7:56p	4.1	1.3		8:16p	4.3	1.3		8:13p	5.4	1.6
9	12:53a	10.1	3.1	24	2:10a	9.7	3.0	9	2:31a	11.3	3.4	24	2:22a	9.9	3.0
	7:07a	3.0	0.9		8:50a	3.1	0.9		9:43a	1.1	0.3		9:43a	2.3	0.7
Fri	1:07p	9.8	3.0	Sat	2:49p	8.5	2.6	Mon	3:57p	8.5	2.6	Tue	4:06p	7.7	2.3
	7:11p	3.0	0.9		8:21p	4.5	1.4		8:58p	4.8	1.5		8:44p	5.6	1.7
10	1:27a	10.6	3.2	25	2:35a	9.8	3.0	10	3:17a	11.1	3.4	25	2:54a	9.7	3.0
	7:59a	2.6	0.8		9:26a	3.1	0.9		10:36a	1.4	0.4		10:20a	2.5	0.8
Sat	1:58p	9.4	2.9	Sun	3:28p	8.2	2.5	Tue	4:57p	8.1	2.5	Wed	4:51p	7.5	2.3
	7:45p	3.5	1.1		8:46p	4.9	1.5		9:45p	5.2	1.6		9:20p	5.8	1.8
11	3:05a	10.8	3.3	26	3:03a	9.8	3.0	11	4:06a	10.6	3.2	26	3:30a	9.4	2.9
	9:52a	2.4	0.7		10:04a	3.2	1.0		11:31a	1.8	0.5		11:01a	2.7	0.8
Sun	3:52p	8.8	2.7	Mon	4:09p	7.8	2.4	Wed	6:03p	7.8	2.4	Thu	5:42p	7.4	2.3
	9:21p	4.1	1.3		9:13p	5.2	1.6		10:39p	5.6	1.7		10:03p	6.0	1.8
12	3:46a	10.9	3.3	27	3:32a	9.7	3.0	12	5:01a	10.0	3.1	27	4:11a	9.1	2.8
	10:49a	2.4	0.7		10:45a	3.3	1.0		12:32p	2.3	0.7		11:47a	2.9	0.9
Mon	4:51p	8.2	2.5	Tue	4:55p	7.5	2.3	Thu	7:17p	7.7	2.3	Fri	6:41p	7.3	2.2
	10:01p	4.7	1.4		9:43p	5.6	1.7		11:50p	5.9	1.8		10:59p	6.1	1.9
13	4:32a	10.7	3.3	28	4:05a	9.5	2.9	13	6:06a	9.3	2.8	28	5:03a	8.7	2.7
	11:50a	2.6	0.8		11:32a	3.5	1.1		1:36p	2.8	0.9		12:39p	3.1	0.9
Tue	6:00p	7.6	2.3	Wed	5:52p	7.2	2.2	Fri	8:30p	7.8	2.4	Sat	7:43p	7.4	2.3
	10:47p	5.3	1.6		10:19p	5.9	1.8								
14	5:25a	10.4	3.2	29	4:46a	9.2	2.8	14	1:28a	6.0	1.8	29	12:17a	6.1	1.9
	12:59p	2.9	0.9		12:27p	3.7	1.1		7:21a	8.7	2.7		6:09a	8.2	2.5
Wed	7:26p	7.3	2.2	Thu	7:05p	7.0	2.1	Sat	2:39p	3.2	1.0	Sun	1:34p	3.3	1.0
	11:45p	5.9	1.8		11:07p	6.2	1.9		9:32p	8.1	2.5		8:37p	7.7	2.3
15	6:28a	9.9	3.0	30	5:38a	8.9	2.7	15	3:08a	5.6	1.7	30	1:54a	5.8	1.8
	2:13p	3.1	0.9		1:31p	3.7	1.1		8:43a	8.3	2.5		7:30a	7.9	2.4
Thu	8:59p	7.4	2.3	Fri	8:30p	7.1	2.2	Sun	3:36p	3.4	1.0	Mon	2:28p	3.4	1.0
									10:21p	8.5	2.6		9:22p	8.2	2.5
31	12:22a	6.4	2.0												
	6:46a	8.7	2.7												
Sat	2:36p	3.7	1.1												
	9:37p	7.3	2.2												

May

2012

June

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	3:18a 8:53a Tue	5.1 7.8 3.5	1.6 2.4 1.1	16	5:04a 10:55a Wed	3.7 7.2 4.5	1.1 2.2 1.4	1	5:09a 11:12a Fri	2.3 7.3 4.5	0.7 2.2 1.4	16	6:08a 12:33p Sat	2.4 7.0 5.5	0.7 2.1 1.7
2	4:24a 10:09a Wed	4.1 7.9 3.7	1.3 2.4 1.1	17	5:50a 11:54a Thu	3.1 7.3 4.8	0.9 2.2 1.5	2	6:03a 12:16p Sat	1.3 7.6 4.7	0.4 2.3 1.4	17	6:46a 1:15p Sun	2.0 7.2 5.5	0.6 2.2 1.7
3	5:21a 11:16a Thu	3.1 8.1 3.9	0.9 2.5 1.2	18	6:31a 12:43p Fri	2.6 7.5 5.1	0.8 2.3 1.6	3	6:53a 1:13p Sun	0.6 7.9 5.2	0.2 2.4 1.5	18	7:21a 1:52p Mon	1.7 7.4 5.5	0.5 2.3 1.7
4	6:14a 12:17p Fri	2.0 8.3 4.1	0.6 2.5 1.3	19	7:08a 1:25p Sat	2.2 7.6 5.3	0.7 2.3 1.6	4	12:13a 7:42a Mon	11.4 0.1 8.1	3.5 0.0 2.5	19	12:24a 7:56a Tue	10.0 1.5 7.5	3.1 0.5 2.3
5	7:04a 1:14p Sat	1.2 8.4 4.3	0.4 2.6 1.3	20	12:20a 7:42a Sun	9.9 1.9 7.6	3.0 0.6 2.3	5	1:02a 8:29a Tue	11.4 0.0 8.3	3.5 0.0 2.5	20	1:01a 8:29a Wed	10.0 1.4 7.6	3.1 0.4 2.3
6	12:37a 7:53a Sun	11.3 0.6 8.5	3.4 0.2 2.6	21	12:50a 8:16a Mon	10.0 1.7 7.7	3.1 0.5 2.3	6	1:51a 9:15a Wed	11.2 0.2 8.3	3.4 0.1 2.5	21	1:38a 9:02a Thu	9.9 1.4 7.7	3.0 0.4 2.3
7	1:21a 8:42a Mon	11.5 0.3 8.4	3.5 0.1 2.6	22	1:22a 8:50a Tue	10.0 1.7 7.6	3.1 0.5 2.3	7	2:41a 9:37a Thu	10.7 0.6 8.4	3.3 0.2 2.6	22	2:17a 9:35a Fri	9.7 1.5 7.8	3.0 0.5 2.4
8	2:07a 9:31a Tue	11.4 0.4 8.3	3.5 0.1 2.5	23	1:55a 9:24a Wed	9.9 1.7 7.6	3.0 0.5 2.3	8	3:32a 10:42a Fri	10.0 1.2 8.4	3.1 0.4 2.6	23	2:58a 10:07a Sat	9.3 1.8 8.0	2.8 0.5 1.6
9	2:56a 10:19a Wed	11.0 0.8 8.2	3.4 0.2 2.5	24	2:31a 9:59a Thu	9.7 1.9 7.6	3.0 0.6 2.3	9	4:24a 11:24a Sat	9.1 1.9 8.5	2.8 0.6 2.6	24	3:42a 10:41a Sun	8.9 2.1 8.2	2.7 0.6 1.5
10	3:47a 11:09a Thu	10.4 1.3 8.1	3.2 0.4 2.5	25	3:09a 10:35a Fri	9.4 2.1 7.6	2.9 0.6 2.3	10	5:20a 12:06p Sun	8.2 2.7 8.6	2.5 0.8 2.6	25	4:33a 11:16a Mon	8.2 2.6 8.4	2.5 0.8 2.6
11	4:43a 12:00p Fri	9.6 2.0 8.1	2.9 0.6 2.5	26	3:53a 11:14a Sat	9.0 2.3 7.7	2.7 0.7 2.3	11	1:11a 6:25a Mon	4.9 7.4 3.4	1.5 2.3 1.0	26	12:03a 5:33a Tue	4.7 7.6 3.1	1.4 2.3 0.9
12	5:44a 12:52p Sat	8.7 2.6 8.2	2.7 0.8 2.5	27	4:45a 11:55a Sun	8.4 2.7 7.9	2.6 0.8 2.4	12	2:30a 7:43a Tue	4.5 6.8 4.0	1.4 2.1 1.2	27	1:25a 6:48a Wed	4.2 7.0 3.7	1.3 2.1 1.1
13	1:32a 6:55a Sun	5.5 8.0 3.2	1.7 2.4 1.0	28	12:12a 5:47a Mon	5.5 7.9 3.0	1.7 2.4 0.9	13	3:39a 9:14a Wed	4.0 6.5 4.6	1.0 2.0 1.4	28	2:44a 8:19a Thu	3.5 6.6 4.2	1.1 2.0 1.3
14	1:45p 8:43p Mon	5.0 7.4 3.7	1.5 2.3 1.1	29	1:42a 7:04a Tue	5.1 7.4 3.4	1.6 2.3 1.0	14	4:37a 10:39a Thu	3.4 6.5 5.0	1.0 2.0 1.5	29	3:54a 9:54a Fri	2.7 6.6 2.2	0.8 2.0 1.4
15	2:37p 9:30p Tue	8.7 3.7 9.0	2.7 1.1 2.7	30	1:28p 8:25p Wed	8.7 3.4 9.3	2.7 1.0 2.8	15	5:26a 11:44a Fri	2.9 6.7 5.3	0.9 2.0 1.6	30	4:56a 11:13a Sat	1.9 6.9 5.0	0.6 2.1 1.5
	4:08a 9:41a Tue	4.3 7.2 4.2	1.3 2.2 1.3	31	3:03a 8:31a Wed	4.3 7.1 2.1	1.3 2.2 1.2		3:59p 10:37p Fri	5.3 9.4 2.9	1.6 2.9		4:56a 11:13p Sat	1.9 6.9 10.6	0.6 2.1 3.2
	10:11p Tue	9.0	2.7		4:10a 9:57a Thu	3.3 7.1 4.2	1.0 2.2 1.3								



# July 2012 August

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	5:51a 12:15p 4:37p 11:07p	1.1 7.3 5.1 10.9	0.3 2.2 1.6 3.3	16	6:19a 12:54p 5:03p 11:24p	2.1 7.1 5.6 9.7	0.6 2.2 1.7 3.0	1	7:10a 1:35p 6:32p	0.8 8.2 4.6	0.2 2.5 1.4	16	6:56a 1:19p 6:23p	1.9 7.9 4.7	0.6 2.4 1.4
2	6:41a 1:08p 5:38p 11:59p	0.6 7.7 5.0 11.1	0.2 2.3 1.5 3.4	17	6:56a 1:28p 5:49p	1.8 7.3 5.4	0.5 2.2 1.6	2	12:42a 7:50a 2:13p 7:26p	10.6 0.9 8.5 4.3	3.2 0.3 2.6 1.3	17	12:29a 7:28a 1:48p 7:08p	9.8 1.8 8.3 4.2	3.0 0.5 2.5 1.3
3	7:28a 1:56p 6:35p	0.3 8.0 4.9	0.1 2.4 1.5	18	12:04a 7:30a 2:00p 6:34p	9.9 1.5 7.5 5.2	3.0 0.5 2.3 1.6	3	1:29a 8:26a 2:50p 8:18p	10.3 1.2 8.8 4.0	3.1 0.4 2.7 1.2	18	1:12a 7:58a 2:17p 7:55p	9.8 1.9 8.7 3.8	3.0 0.6 2.7 1.2
4	12:50a 8:12a 2:41p 7:30p	11.1 0.2 8.3 4.7	3.4 0.1 2.5 1.4	19	12:44a 8:03a 2:31p 7:17p	10.0 1.4 7.8 4.9	3.1 0.4 2.4 1.5	4	2:15a 8:59a 3:25p 9:09p	9.8 1.7 8.9 3.9	3.0 0.5 2.7 1.2	19	1:56a 8:28a 2:47p 8:44p	9.6 2.1 9.1 3.4	2.9 0.6 2.8 1.0
5	1:39a 8:54a 3:23p 8:24p	10.8 0.5 8.5 4.6	3.3 0.2 2.6 1.4	20	1:24a 8:34a 3:02p 8:02p	9.9 1.4 8.0 4.7	3.0 0.4 2.4 1.4	5	3:00a 9:30a 3:59p 10:01p	9.1 2.3 9.0 3.9	2.8 0.7 2.7 1.2	20	2:41a 9:52a 3:20p 9:37p	9.2 2.5 9.5 3.1	2.8 0.8 2.9 0.9
6	2:28a 9:32a 4:05p 9:21p	10.3 0.9 8.6 4.5	3.1 0.3 2.6 1.4	21	2:05a 9:05a 3:33p 8:50p	9.7 1.6 8.3 4.4	3.0 0.5 2.5 1.3	6	3:45a 9:59a 4:33p 10:55p	8.4 2.9 9.0 3.9	2.6 0.9 2.7 1.2	21	3:30a 9:29a 3:56p 10:34p	8.6 3.0 9.7 3.0	2.6 0.9 3.0 0.9
7	3:16a 10:09a 4:45p 10:21p	9.6 1.5 8.7 4.5	2.9 0.5 2.7 1.4	22	2:48a 9:35a 4:06p 9:43p	9.3 1.9 8.6 4.2	2.8 0.6 2.6 1.3	7	4:33a 10:28a 5:09p 11:53p	7.7 3.6 9.0 3.9	2.3 1.1 2.7 1.2	22	4:24a 10:04a 4:37p 11:37p	8.0 3.6 9.8 3.9	2.4 1.1 3.0 0.9
8	4:04a 10:43a 5:25p 11:26p	8.7 2.3 8.7 4.5	2.7 0.7 2.7 1.4	23	3:34a 10:05a 4:41p 10:43p	8.7 2.3 8.9 4.0	2.7 0.7 2.7 1.2	8	5:26a 11:00a 5:49p	7.0 4.3 8.9	2.1 1.3 2.7	23	5:27a 10:44a 5:25p	7.3 4.3 9.8	2.2 1.3 3.0
9	4:56a 11:17a 6:06p	7.9 3.0 8.8	2.4 0.9 2.7	24	4:26a 10:38a 5:19p 11:51p	8.1 2.9 9.1 3.8	2.5 0.9 2.8 1.2	9	12:56a 6:32a 11:36a 6:34p	4.0 6.5 4.8 8.8	1.2 2.0 1.5 2.7	24	12:47a 6:47a 11:32a 6:22p	2.9 6.8 4.9 9.8	0.9 1.5 2.1 3.0
10	12:35a 5:54a 11:52a 6:49p	4.4 7.1 3.7 8.8	1.3 2.2 1.1 2.7	25	5:26a 11:15a 6:03p	7.4 3.5 9.4	2.3 1.1 2.9	10	2:05a 8:03a 12:22p 7:26p	3.9 6.2 5.3 8.8	1.2 1.9 1.6 2.7	25	2:04a 8:27a 12:37p 7:30p	2.8 6.6 5.4 9.7	0.9 1.6 2.0 3.0
11	1:47a 7:06a 12:32p 7:35p	4.2 6.5 4.4 8.8	1.3 2.0 1.3 2.7	26	1:06a 6:42a 11:59a 6:54p	3.5 6.7 4.2 9.6	1.1 2.0 1.3 2.9	11	3:13a 9:49a 1:25p 8:23p	3.6 6.3 5.7 8.8	1.9 1.9 1.7 2.7	26	3:17a 9:56a 2:02p 8:42p	2.5 6.9 5.6 9.7	0.8 2.1 1.7 3.0
12	2:57a 8:40a 1:19p 8:23p	3.9 6.1 4.9 8.9	1.2 1.9 1.5 2.7	27	2:25a 8:19a 12:55p 7:53p	3.0 6.4 4.8 9.8	0.9 2.0 1.5 3.0	12	4:13a 11:01a 2:40p 9:20p	3.3 6.6 5.9 9.0	1.0 2.0 1.8 2.7	27	4:22a 10:59a 3:30p 9:51p	2.2 7.3 5.5 9.8	0.7 2.2 1.7 3.0
13	4:01a 10:18a 2:14p 9:11p	3.4 6.2 5.3 9.1	1.0 1.9 1.6 2.8	28	3:38a 9:58a 2:04p 8:56p	2.5 6.5 5.2 10.1	0.8 2.0 1.6 3.1	13	5:03a 11:46a 3:49p 10:13p	2.8 6.9 5.8 9.2	0.9 2.1 1.8 2.8	28	5:16a 11:47a 4:43p 10:52p	1.9 7.8 5.1 10.0	0.6 2.4 1.6 3.1
14	4:54a 11:27a 3:14p 9:58p	3.0 6.5 5.6 9.3	0.9 2.0 1.7 2.8	29	4:42a 11:12a 3:20p 9:59p	1.9 6.9 5.3 10.3	0.6 2.1 1.6 3.1	14	5:45a 12:21p 4:46p 11:01p	2.5 7.2 5.5 9.5	0.8 2.2 1.9 2.7	29	6:03a 12:27p 5:43p 11:47p	1.8 8.3 4.6 10.0	0.5 2.5 1.4 3.1
15	5:40a 12:16p 4:11p 10:42p	2.5 6.8 5.7 9.5	0.8 2.1 1.7 2.9	30	5:37a 12:07p 4:32p 10:57p	1.4 7.4 5.2 10.6	0.4 2.3 1.6 3.2	15	6:22a 12:51p 5:36p 11:46p	2.1 7.6 5.1 9.7	0.6 2.3 1.6 3.0	30	6:43a 1:03p 6:36p	1.8 8.7 4.1	0.5 2.7 1.3
				31	6:26a 12:53p 5:35p 11:51p	1.0 7.8 4.9 10.7	0.3 2.4 1.5 3.3					31	12:36a 7:19a 1:37p 7:24p	9.9 2.0 9.0 3.7	3.0 0.6 2.7 1.1

PORT REFRESH



# September 2012 October

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	1:22a 7:51a 2:08p 8:10p	9.6 2.4 9.2 3.4	2.9 0.7 2.8 1.0	16	1:02a 7:15a 1:28p 7:48p	9.4 2.8 9.7 2.7	2.9 0.9 3.0 0.8	1	2:01a 7:39a 1:50p 8:38p	8.8 4.1 9.8 2.6	2.7 1.3 3.0 0.8	16	1:46a 7:08a 1:21p 8:27p	9.0 4.2 11.2 1.2	2.7 1.3 3.4 0.4
2	2:06a 8:21a 2:38p 8:55p	9.2 2.8 9.4 3.2	2.8 0.9 2.9 1.0	17	1:49a 7:47a 2:01p 8:37p	9.3 3.1 10.2 2.2	2.8 0.9 3.1 0.7	2	2:41a 8:06a 2:18p 9:15p	8.5 4.6 9.8 2.7	2.6 1.4 3.0 0.8	17	2:39a 7:48a 2:02p 9:16p	8.8 4.5 11.4 1.1	2.7 1.5 3.4 0.3
3	2:48a 8:48a 3:08p 9:38p	8.8 3.4 9.4 3.2	2.7 1.0 2.9 1.0	18	2:38a 8:21a 2:37p 9:28p	9.0 3.5 10.5 2.0	2.7 1.1 3.2 0.6	3	3:22a 8:33a 2:47p 9:53p	8.2 5.0 9.7 2.8	2.5 1.5 3.0 0.9	18	3:33a 8:31a 2:46p 10:07p	8.6 4.9 11.3 1.3	2.6 1.5 3.4 0.4
4	3:31a 9:15a 3:39p 10:23p	8.2 3.9 9.3 3.3	2.5 1.2 2.8 1.0	19	3:30a 8:57a 3:17p 10:22p	8.5 4.0 10.6 2.0	2.6 1.2 3.2 0.6	4	4:04a 9:02a 3:17p 10:33p	7.8 5.3 9.6 3.0	2.4 1.6 2.9 0.9	19	4:31a 9:18a 3:35p 11:01p	8.3 5.3 10.9 1.7	2.5 1.6 3.3 0.5
5	4:15a 4:11p 11:10p	7.7 9.2 3.5	2.3 2.8 1.1	20	4:28a 4:02p 11:20p	8.0 10.5 2.2	2.4 3.2 0.7	5	4:52a 9:35a 3:52p 11:19p	7.5 5.7 9.3 3.3	2.3 1.7 2.8 1.0	20	5:35a 10:13a 4:31p	8.1 5.7 10.3	2.5 1.7 3.1
6	5:05a 10:12a 4:47p	7.2 5.0 9.0	2.2 1.5 2.7	21	5:34a 10:23a 4:54p	7.6 5.1 10.1	2.3 1.6 3.1	6	5:49a 10:13a 4:33p	7.3 6.0 9.0	2.2 1.8 2.7	21	12:00a 6:45a 11:23a 5:35p	2.2 8.0 6.0 9.6	0.7 2.4 2.8 1.9
7	12:04a 6:06a 10:48a 5:31p	3.7 6.8 5.4 8.9	1.1 2.1 1.6 2.7	22	12:26a 6:54a 11:21a 5:57p	2.4 7.3 5.6 9.7	0.7 2.2 1.7 3.0	7	12:12a 7:00a 11:06a 5:25p	3.6 7.1 6.3 8.7	1.1 2.2 1.9 2.7	22	1:02a 7:56a 1:00p 6:50p	2.7 8.1 6.1 8.9	0.8 2.5 1.9 2.7
8	1:07a 7:30a 11:36a 6:25p	3.8 6.6 5.8 8.7	1.2 2.0 1.8 2.7	23	1:37a 8:22a 12:42p 7:11p	2.7 7.3 5.9 9.4	0.8 2.2 1.8 2.9	8	1:13a 8:19a 12:26p 6:34p	3.7 7.2 6.5 8.4	1.1 2.2 2.0 2.6	23	2:05a 8:59a 2:42p 8:14p	3.1 8.4 5.7 8.5	0.9 2.6 1.7 2.6
9	2:16a 9:09a 12:48p 7:31p	3.8 6.6 6.1 8.6	1.2 2.0 1.9 2.6	24	2:48a 9:36a 2:24p 8:31p	2.8 7.6 5.8 9.2	0.9 2.3 1.8 2.8	9	2:16a 9:21a 2:07p 7:55p	3.7 7.5 6.3 8.2	1.1 2.3 1.9 2.5	24	3:04a 9:51a 3:58p 9:36p	3.5 8.8 5.0 8.3	1.1 2.7 1.5 2.5
10	3:20a 10:18a 2:20p 8:40p	3.6 6.9 6.1 8.6	1.1 2.1 1.9 2.6	25	3:50a 10:31a 3:51p 9:45p	2.8 8.0 5.3 9.1	0.9 2.4 1.6 2.8	10	3:12a 10:04a 3:28p 9:10p	3.7 7.9 5.7 8.3	1.1 2.4 1.7 2.5	25	3:57a 10:33a 4:58p 10:46p	3.8 9.2 4.3 8.3	1.2 2.8 1.3 2.5
11	4:14a 11:01a 3:37p 9:43p	3.3 7.3 5.8 8.8	1.0 2.2 1.8 2.7	26	4:43a 11:14a 4:56p 10:49p	2.8 8.5 4.7 9.2	0.9 2.6 1.4 2.8	11	3:59a 10:38a 4:27p 10:14p	3.6 8.4 5.0 8.5	1.1 2.6 1.5 2.6	26	4:42a 11:09a 5:48p 11:45p	4.1 9.6 3.6 8.4	1.3 2.9 1.1 2.6
12	4:58a 11:34a 4:36p 10:38p	3.0 7.7 5.3 9.1	0.9 2.3 1.6 2.8	27	5:28a 11:51a 5:50p 11:45p	2.9 8.9 4.1 9.2	0.9 2.7 1.3 2.8	12	4:41a 11:08a 5:18p 11:11p	3.6 8.9 4.1 8.7	1.1 2.7 1.3 2.7	27	5:21a 11:42a 6:31p	4.4 9.9 3.0	1.3 3.0 0.9
13	5:37a 12:03p 5:27p 11:28p	2.7 8.1 4.7 9.3	0.8 2.5 1.4 2.8	28	6:07a 12:24p 6:37p	3.1 9.3 3.5	0.9 2.8 1.1	13	5:18a 11:38a 6:05p	3.6 9.6 3.2	1.1 2.9 1.0	28	12:35a 5:56a 12:11p 7:10p	8.4 4.7 10.1 2.6	2.6 1.4 3.1 0.8
14	6:11a 12:30p 6:14p	2.6 8.6 4.0	0.8 2.6 1.2	29	12:34a 6:41a 12:54p 7:20p	9.1 3.4 9.6 3.0	2.8 1.0 2.9 0.9	14	12:04a 5:54a 12:10p 6:52p	8.9 3.7 10.3 2.3	2.7 1.1 3.1 0.7	29	1:19a 6:28a 12:39p 7:46p	8.5 5.0 10.2 2.3	2.6 1.5 3.1 0.7
15	12:15a 6:43a 12:58p 7:01p	9.4 2.6 9.2 3.3	2.9 0.8 2.8 1.0	30	1:19a 7:11a 1:23p 8:00p	9.0 3.7 9.8 2.7	2.7 1.1 3.0 0.8	15	12:55a 6:30a 12:44p 7:39p	9.0 3.9 10.8 1.6	2.7 1.2 3.3 0.5	30	1:59a 6:58a 1:07p 8:20p	8.4 5.3 10.3 2.2	2.6 1.6 3.1 0.7
												31	2:38a 7:27a 1:36p 8:54p	8.3 5.6 10.3 2.3	2.5 1.7 3.1 0.7



# November 2012 December

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	3:17a	8.2	2.5	16	2:31a	8.8	2.7	1	2:45a	8.3	2.5	16	3:07a	9.2	2.8
	7:58a	5.8	1.8		7:14a	5.5	1.7		7:09a	6.3	1.9		8:00a	5.6	1.7
Thu	2:05p	10.2	3.1	Fri	1:26p	11.6	3.5	Sat	1:12p	10.3	3.1	Sun	2:03p	11.0	3.4
	9:28p	2.4	0.7		8:51p	0.9	0.3		8:39p	2.3	0.7		9:13p	1.5	0.5
2	3:57a	8.1	2.5	17	3:26a	8.8	2.7	2	3:23a	8.3	2.5	17	3:54a	9.3	2.8
	8:31a	6.0	1.8		8:07a	5.7	1.7		7:49a	6.4	2.0		9:03a	5.7	1.7
Fri	2:37p	10.0	3.1	Sat	2:17p	11.1	3.4	Sun	1:48p	9.9	3.0	Mon	2:54p	10.1	3.1
	10:04p	2.6	0.8		9:39p	1.4	0.4		9:13p	2.6	0.8		9:54p	2.3	0.7
3	4:41a	7.9	2.4	18	4:22a	8.7	2.7	3	4:03a	8.3	2.5	18	4:41a	9.4	2.9
	9:08a	6.2	1.9		9:09a	5.9	1.8		8:35a	6.4	2.0		10:17a	5.7	1.7
Sat	3:11p	9.7	3.0	Sun	3:11p	10.3	3.1	Mon	2:28p	9.5	2.9	Tue	3:49p	9.1	2.8
	10:43p	2.9	0.9		10:29p	2.1	0.6		9:47p	2.9	0.9		10:34p	3.1	0.9
4	4:31a	7.8	2.4	19	5:19a	8.8	2.7	4	4:46a	8.4	2.6	19	5:29a	9.5	2.9
	8:51a	6.4	2.0		10:26a	6.0	1.8		9:32a	6.4	2.0		11:41a	5.5	1.7
Sun	2:51p	9.3	2.8	Mon	4:12p	9.4	2.9	Tue	3:15p	8.9	2.7	Wed	4:52p	8.1	2.5
	10:26p	3.2	1.0		11:20p	2.8	0.9		10:24p	3.3	1.0		11:15p	3.9	1.2
5	5:27a	7.8	2.4	20	6:17a	8.9	2.7	5	5:29a	8.6	2.6	20	6:18a	9.6	2.9
	8:51a	6.6	2.0		12:03p	5.9	1.8		10:46a	6.3	1.9		1:05p	5.2	1.6
Mon	3:41p	8.8	2.7	Tue	5:23p	8.5	2.6	Wed	4:12p	8.3	2.5	Thu	6:11p	7.4	2.3
	11:14p	3.5	1.1		☉				11:04p	3.7	1.1		11:59p	4.7	1.4
6	6:25a	7.9	2.4	21	12:12a	3.5	1.1	6	6:13a	8.9	2.7	21	7:06a	9.7	3.0
	9:47a	6.6	2.0		7:12a	9.1	2.8		12:18p	5.9	1.8		2:20p	4.6	1.4
Tue	4:45p	8.3	2.5	Wed	1:34p	5.4	1.6	Thu	5:25p	7.7	2.3	Fri	7:51p	7.0	2.1
	☉				6:47p	7.8	2.4		11:49p	4.2	1.3				
7	12:07a	3.8	1.2	22	1:05a	4.2	1.3	7	6:56a	9.3	2.8	22	12:46a	5.3	1.6
	7:17a	8.2	2.5		8:02a	9.4	2.9		1:44p	5.2	1.6		7:54a	9.9	3.0
Wed	12:49p	6.2	1.9	Thu	2:48p	4.7	1.4	Fri	6:56p	7.3	2.2	Sat	3:24p	4.1	1.3
	6:06p	7.9	2.4		8:19p	7.5	2.3						9:29p	7.0	2.1
8	1:00a	4.0	1.2	23	1:56a	4.7	1.4	8	12:39a	4.6	1.4	23	1:39a	5.8	1.8
	8:00a	8.6	2.6		8:46a	9.7	3.0		7:40a	9.9	3.0		8:39a	10.1	3.1
Thu	2:11p	5.5	1.7	Fri	3:47p	4.0	1.2	Sat	2:52p	4.2	1.3	Sun	4:16p	3.5	1.1
	7:32p	7.7	2.3		9:41p	7.5	2.3		8:29p	7.3	2.2		10:39p	7.3	2.2
9	1:50a	4.2	1.3	24	2:44a	5.2	1.6	9	1:33a	5.0	1.5	24	2:34a	6.2	1.9
	8:38a	9.1	2.8		9:25a	10.0	3.1		8:24a	10.5	3.2		9:20a	10.3	3.1
Fri	3:13p	4.6	1.4	Sat	4:36p	3.4	1.0	Sun	3:49p	3.2	1.0	Mon	4:59p	3.0	0.9
	8:50p	7.8	2.4		10:44p	7.7	2.3		9:50p	7.5	2.3		11:30p	7.6	2.3
10	2:37a	4.4	1.3	25	3:28a	5.5	1.7	10	2:29a	5.3	1.6	25	3:25a	6.4	2.0
	9:14a	9.8	3.0		10:00a	10.2	3.1		9:10a	11.1	3.4		9:59a	10.5	3.2
Sat	4:05p	3.5	1.1	Sun	5:18p	2.8	0.9	Mon	4:41p	2.2	0.7	Tue	5:37p	2.7	0.8
	9:58p	8.0	2.4		11:35p	7.9	2.4		10:55p	7.9	2.4				
11	3:21a	4.6	1.4	26	4:09a	5.8	1.8	11	3:25a	5.5	1.7	26	12:11a	7.9	2.4
	9:50a	10.5	3.2		10:32a	10.4	3.2		9:57a	11.7	3.6		4:12a	6.4	2.0
Sun	4:54p	2.5	0.8	Mon	5:55p	2.5	0.8	Tue	5:30p	1.4	0.4	Wed	10:35a	10.6	3.2
	10:58p	8.3	2.5						11:52p	8.3	2.5		6:11p	2.4	0.7
12	4:05a	4.7	1.4	27	12:18a	8.1	2.5	12	4:20a	5.6	1.7	27	12:46a	8.1	2.5
	10:28a	11.2	3.4		4:46a	6.0	1.8		10:45a	12.1	3.7		4:55a	6.4	2.0
Mon	5:42p	1.6	0.5	Tue	11:03a	10.6	3.2	Wed	6:17p	0.8	0.2	Thu	11:11a	10.7	3.3
	11:53p	8.6	2.6		6:30p	2.2	0.7						6:43p	2.2	0.7
13	4:50a	4.9	1.5	28	12:57a	8.2	2.5	13	12:43a	8.6	2.6	28	1:18a	8.2	2.5
	11:09a	11.7	3.6		5:22a	6.1	1.9		5:15a	5.6	1.7		5:35a	6.3	1.9
Tue	6:29p	1.0	0.3	Wed	11:34a	10.6	3.2	Thu	11:34a	12.3	3.8	Fri	11:46a	10.8	3.3
	☉				7:02p	2.1	0.6		7:03p	0.5	0.2		7:14p	2.1	0.6
14	12:46a	8.8	2.7	29	1:33a	8.3	2.5	14	1:32a	8.9	2.7	29	1:49a	8.4	2.6
	5:36a	5.1	1.6		5:57a	6.2	1.9		6:09a	5.6	1.7		6:14a	6.2	1.9
Wed	11:52a	12.0	3.7	Thu	12:06p	10.6	3.2	Fri	12:23p	12.1	3.7	Sat	12:22p	10.7	3.3
	7:16p	0.6	0.2		7:35p	2.1	0.6		7:48p	0.6	0.2		7:44p	2.1	0.6
15	1:39a	8.8	2.7	30	2:08a	8.3	2.5	15	2:20a	9.1	2.8	30	2:21a	8.5	2.6
	6:24a	5.3	1.6		6:32a	6.2	1.9		7:03a	5.6	1.7		6:55a	6.1	1.9
Thu	12:38p	12.0	3.7	Fri	12:38p	10.5	3.2	Sat	1:12p	11.7	3.6	Sun	12:58p	10.5	3.2
	8:03p	0.6	0.2		8:07p	2.2	0.7		8:31p	0.9	0.3		8:14p	2.2	0.7
												31	2:53a	8.6	2.6
												Mon	7:37a	6.0	1.8
													1:35p	10.1	3.1
													8:43p	2.5	0.8

PORT REFRESH

