

Barge ID	Barge Number	UOM	Gauge Type	Date Strapped	Strapped By	Comment
MAP	618	BARRELS	INNAGE	09/20/04	INSPECTORATE	BARGE SHOULD BE ON EVEN LEVEL KEEL WHEN GAUGES ARE TAKEN.

Barge ID	Barge Number	Comp	Gauge Height
MAP	618	1 PORT	185.500
MAP	618	1 STAR	185.500
MAP	618	2 PORT	186.000
MAP	618	2 STAR	185.750
MAP	618	3 PORT	185.750
MAP	618	3 STAR	185.750

MAP 618

PORT 1

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.16	340.48	702.75	1,069.28	1,435.81	1,802.33	2,168.86	2,535.39	2,901.92	3,266.45	3,634.97	4,001.50	4,368.03	4,734.56	5,101.09
1/4	22.02	347.81	710.39	1,076.91	1,443.44	1,809.97	2,176.50	2,543.03	2,909.55	3,276.08	3,642.61	4,009.14	4,375.67	4,742.19	5,108.71
1/2	26.87	355.15	718.02	1,084.55	1,451.08	1,817.36	2,184.13	2,550.86	2,917.19	3,283.72	3,650.25	4,016.77	4,383.30	4,749.83	5,115.25
3/4	31.73	362.48	725.66	1,092.71	1,458.71	1,825.24	2,191.77	2,558.30	2,924.83	3,291.35	3,657.88	4,024.41	4,390.94	4,757.47	5,122.33
1	36.59	369.81	733.29	1,099.82	1,466.35	1,832.88	2,199.41	2,565.93	2,932.46	3,298.99	3,665.52	4,032.05	4,398.57	4,765.10	5,129.41
1/4	42.75	377.15	740.39	1,107.46	1,473.99	1,840.51	2,207.04	2,573.57	2,940.10	3,306.63	3,673.15	4,039.68	4,406.21	4,772.74	5,135.25
1/2	48.90	384.48	748.57	1,115.09	1,481.62	1,848.15	2,214.68	2,581.21	2,947.73	3,314.26	3,680.79	4,047.32	4,413.85	4,780.37	5,141.10
3/4	55.49	391.82	756.20	1,122.73	1,489.26	1,855.79	2,222.31	2,588.84	2,955.37	3,321.90	3,688.43	4,054.95	4,421.48	4,788.01	5,146.95
2	62.07	399.15	763.84	1,130.37	1,496.89	1,863.42	2,229.95	2,596.48	2,963.01	3,328.53	3,696.06	4,062.59	4,429.12	4,795.65	5,152.79
1/4	68.78	406.61	771.47	1,138.09	1,504.53	1,871.06	2,237.59	2,604.11	2,970.64	3,337.17	3,703.70	4,070.23	4,436.75	4,803.28	5,157.61
1/2	75.49	414.07	779.11	1,145.54	1,512.17	1,878.69	2,245.22	2,611.75	2,978.28	3,344.81	3,711.33	4,077.86	4,444.39	4,810.92	5,162.42
3/4	82.20	421.52	786.75	1,153.27	1,519.80	1,886.33	2,252.86	2,619.39	2,985.91	3,352.44	3,718.97	4,085.50	4,452.03	4,818.55	5,167.23
3	88.91	428.98	794.38	1,160.91	1,527.44	1,893.97	2,260.49	2,627.02	2,993.55	3,360.08	3,726.61	4,093.13	4,459.66	4,826.19	5,172.05
1/4	95.63	436.44	802.02	1,168.55	1,535.09	1,901.60	2,268.13	2,634.66	3,001.19	3,367.71	3,734.24	4,100.77	4,467.30	4,833.83	5,175.72
1/2	102.63	443.90	809.65	1,176.18	1,542.71	1,909.24	2,275.77	2,642.66	3,008.82	3,375.35	3,741.88	4,108.41	4,474.93	4,841.46	5,179.40
3/4	109.05	451.38	817.29	1,183.82	1,550.35	1,916.87	2,283.40	2,649.93	3,016.46	3,382.99	3,749.51	4,116.04	4,482.57	4,849.10	5,183.08
4	115.76	458.81	824.93	1,191.45	1,557.98	1,924.51	2,291.04	2,657.57	3,024.09	3,390.62	3,757.15	4,123.68	4,490.21	4,856.73	5,186.76
1/4	122.59	466.40	832.56	1,198.09	1,565.62	1,932.15	2,298.67	2,665.20	3,031.73	3,398.26	3,764.79	4,131.31	4,497.84	4,864.37	5,189.31
1/2	129.43	473.98	840.20	1,206.73	1,573.25	1,939.79	2,306.31	2,672.84	3,039.37	3,405.89	3,772.42	4,138.95	4,505.48	4,872.01	5,191.85
3/4	136.26	481.57	847.83	1,214.36	1,580.89	1,947.20	2,313.95	2,680.47	3,047.00	3,413.53	3,780.06	4,146.59	4,513.11	4,879.64	5,194.40
5	143.10	489.15	855.47	1,222.00	1,588.63	1,955.05	2,321.58	2,688.11	3,054.64	3,421.17	3,787.69	4,154.22	4,520.75	4,887.28	5,196.95
1/4	149.93	496.73	863.11	1,229.63	1,596.16	1,962.69	2,329.22	2,696.75	3,062.27	3,428.80	3,795.33	4,161.86	4,528.39	4,894.91	5,198.36
1/2	156.77	504.32	870.74	1,237.27	1,603.80	1,970.33	2,336.85	2,703.38	3,069.94	3,436.44	3,802.97	4,169.49	4,536.03	4,902.55	5,199.78
3/4	163.60	511.90	878.38	1,244.91	1,611.47	1,977.96	2,344.94	2,711.02	3,077.55	3,444.07	3,810.60	4,177.13	4,543.66	4,910.19	5,201.20
6	170.44	519.49	886.01	1,252.54	1,619.07	1,985.60	2,352.13	2,718.65	3,085.18	3,451.71	3,818.24	4,184.77	4,551.29	4,917.82	5,202.61
1/4	177.40	527.12	893.65	1,260.18	1,626.71	1,993.23	2,359.76	2,726.29	3,092.82	3,459.35	3,825.87	4,192.40	4,558.93	4,925.46	5,203.04
1/2	184.36	534.76	901.29	1,267.81	1,634.37	2,000.87	2,367.40	2,733.93	3,100.45	3,466.98	3,833.51	4,200.04	4,566.57	4,933.09	5,203.48
3/4	191.32	542.39	908.92	1,275.45	1,641.98	2,008.51	2,375.03	2,741.56	3,108.09	3,474.62	3,841.15	4,207.67	4,574.20	4,940.73	5,203.88
7	198.28	550.03	916.56	1,283.09	1,649.61	2,016.14	2,382.67	2,749.20	3,115.73	3,482.25	3,848.78	4,215.31	4,581.84	4,948.37	
1/4	205.24	557.67	924.19	1,290.72	1,657.25	2,023.79	2,390.31	2,756.83	3,123.36	3,489.89	3,856.42	4,222.95	4,589.47	4,956.00	
1/2	212.20	565.30	931.83	1,298.36	1,664.89	2,031.41	2,397.94	2,764.47	3,131.00	3,497.53	3,864.05	4,230.58	4,597.11	4,963.64	
3/4	219.12	572.94	939.47	1,305.99	1,672.52	2,039.05	2,405.58	2,772.11	3,138.63	3,505.16	3,871.69	4,238.22	4,604.75	4,971.27	
8	226.13	580.57	947.10	1,313.63	1,680.16	2,046.69	2,413.21	2,779.74	3,146.27	3,512.80	3,879.33	4,245.85	4,612.38	4,978.91	
1/4	233.21	588.21	954.74	1,321.27	1,687.79	2,054.32	2,420.85	2,787.38	3,153.91	3,520.43	3,886.96	4,253.49	4,620.02	4,986.55	
1/2	240.30	595.85	962.37	1,328.80	1,695.43	2,061.96	2,428.49	2,795.01	3,161.54	3,528.07	3,894.60	4,261.13	4,627.65	4,994.18	
3/4	247.38	603.48	970.01	1,336.54	1,703.07	2,069.59	2,436.12	2,802.65	3,168.18	3,535.71	3,902.23	4,268.76	4,635.29	5,001.82	
9	254.47	611.12	977.65	1,344.17	1,710.70	2,077.23	2,443.78	2,810.29	3,176.81	3,543.34	3,909.89	4,278.40	4,642.93	5,009.45	
1/4	261.55	618.75	985.28	1,351.81	1,718.34	2,084.87	2,451.39	2,817.92	3,184.45	3,550.98	3,917.51	4,284.03	4,650.56	5,017.09	
1/2	268.84	626.39	992.92	1,359.45	1,725.97	2,092.50	2,459.03	2,825.56	3,192.09	3,558.61	3,925.14	4,291.67	4,658.20	5,024.73	
3/4	275.72	634.03	1,000.55	1,367.08	1,733.61	2,100.14	2,466.67	2,833.19	3,199.72	3,566.25	3,932.78	4,299.31	4,665.83	5,032.36	
10	282.81	641.86	1,008.19	1,374.72	1,741.25	2,107.77	2,474.30	2,840.83	3,207.36	3,573.89	3,940.41	4,306.94	4,673.47	5,040.00	
1/4	290.02	649.30	1,015.83	1,382.35	1,748.88	2,115.41	2,481.94	2,848.47	3,214.99	3,581.52	3,948.05	4,314.58	4,681.11	5,047.63	
1/2	297.22	656.93	1,023.46	1,389.99	1,756.52	2,123.05	2,489.57	2,856.10	3,222.63	3,589.16	3,955.69	4,322.21	4,688.74	5,055.27	
3/4	304.43	664.57	1,031.10	1,397.63	1,764.15	2,130.68	2,497.21	2,863.74	3,230.20	3,596.79	3,963.32	4,329.85	4,696.38	5,062.94	
11	311.64	672.21	1,038.73	1,405.26	1,771.79	2,138.32	2,504.85	2,871.37	3,237.90	3,604.43	3,970.96	4,337.49	4,704.01	5,070.54	
1/4	318.85	679.84	1,046.37	1,412.90	1,779.43	2,145.95	2,512.48	2,879.01	3,245.54	3,612.07	3,978.59	4,346.12	4,711.65	5,078.18	
1/2	326.06	687.48	1,054.01	1,420.53	1,787.08	2,153.59	2,520.12	2,888.65	3,253.17	3,619.70	3,986.23	4,352.76	4,719.29	5,085.81	
3/4	333.27	695.11	1,061.84	1,428.17	1,794.70	2,161.23	2,527.75	2,894.28	3,260.81	3,627.34	3,993.87	4,360.39	4,726.92	5,093.45	

MAP 618

STAR 1

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.16	340.48	702.75	1,069.28	1,435.81	1,809.33	2,168.86	2,535.39	2,901.92	3,266.45	3,634.97	4,001.50	4,368.03	4,734.56	5,101.09
1/4	22.02	347.81	710.39	1,076.91	1,443.44	1,809.97	2,176.50	2,543.03	2,909.55	3,276.08	3,642.61	4,009.14	4,375.67	4,742.19	5,108.72
1/2	26.87	355.15	718.02	1,084.55	1,451.08	1,817.36	2,184.13	2,550.86	2,917.19	3,283.72	3,650.25	4,016.77	4,383.30	4,749.83	5,115.25
3/4	31.73	362.48	725.66	1,092.22	1,458.71	1,825.24	2,191.77	2,558.30	2,924.83	3,291.35	3,657.88	4,024.41	4,390.94	4,757.47	5,122.33
1	36.59	369.81	733.29	1,099.82	1,466.35	1,832.88	2,199.41	2,565.93	2,932.46	3,298.99	3,665.52	4,032.05	4,398.57	4,765.10	5,129.41
1/4	42.75	377.15	740.39	1,107.46	1,473.99	1,840.51	2,207.04	2,573.57	2,940.10	3,306.63	3,673.15	4,039.68	4,406.21	4,772.74	5,135.25
1/2	48.90	384.48	748.57	1,115.09	1,481.62	1,848.15	2,214.68	2,581.21	2,947.73	3,314.26	3,680.79	4,047.32	4,413.85	4,780.37	5,141.10
3/4	55.49	391.82	756.20	1,122.73	1,489.26	1,855.79	2,222.31	2,588.84	2,955.37	3,321.90	3,688.43	4,054.95	4,421.48	4,788.01	5,146.95
2	62.07	399.15	763.84	1,130.37	1,496.89	1,863.42	2,229.95	2,596.48	2,963.01	3,328.53	3,696.06	4,062.59	4,429.12	4,795.65	5,152.79
1/4	68.78	406.61	771.47	1,138.09	1,504.53	1,871.06	2,237.59	2,604.11	2,970.64	3,337.17	3,703.70	4,070.23	4,436.75	4,803.28	5,157.61
1/2	75.49	414.07	779.11	1,145.54	1,512.17	1,878.69	2,245.22	2,611.75	2,978.28	3,344.81	3,711.33	4,077.86	4,444.39	4,810.92	5,162.42
3/4	82.20	421.52	786.75	1,153.27	1,519.80	1,886.33	2,252.86	2,619.39	2,985.91	3,352.44	3,718.97	4,085.50	4,452.03	4,818.55	5,167.23
3	88.91	428.98	794.38	1,160.91	1,527.44	1,893.97	2,260.49	2,627.02	2,993.55	3,360.08	3,726.61	4,093.13	4,459.66	4,826.19	5,172.05
1/4	95.63	436.44	802.02	1,168.55	1,535.09	1,901.60	2,268.13	2,634.66	3,001.19	3,367.71	3,734.24	4,100.77	4,467.30	4,833.83	5,175.72
1/2	102.63	443.90	809.65	1,176.18	1,542.71	1,909.24	2,275.77	2,642.66	3,008.82	3,375.35	3,741.88	4,108.41	4,474.93	4,841.46	5,179.40
3/4	109.05	451.36	817.29	1,183.82	1,550.35	1,916.87	2,283.40	2,649.93	3,016.46	3,382.99	3,749.51	4,116.04	4,482.57	4,849.10	5,183.08
4	115.76	458.81	824.93	1,191.45	1,557.98	1,924.51	2,291.04	2,657.57	3,024.09	3,390.62	3,757.15	4,123.68	4,490.21	4,856.73	5,186.76
1/4	122.59	466.40	832.56	1,199.09	1,565.62	1,932.15	2,298.67	2,665.20	3,031.73	3,398.26	3,764.79	4,131.31	4,497.84	4,864.37	5,189.31
1/2	129.43	473.98	840.20	1,206.73	1,573.25	1,939.79	2,306.31	2,672.84	3,039.37	3,405.89	3,772.42	4,138.95	4,505.48	4,872.01	5,191.85
3/4	136.26	481.57	847.83	1,214.36	1,580.89	1,947.20	2,313.95	2,680.47	3,047.00	3,413.53	3,780.06	4,146.59	4,513.11	4,879.64	5,194.40
5	143.10	489.15	855.47	1,222.00	1,588.63	1,955.05	2,321.58	2,688.11	3,054.64	3,421.17	3,787.69	4,154.22	4,520.75	4,887.28	5,196.95
1/4	149.93	496.73	863.11	1,229.63	1,596.16	1,962.29	2,329.22	2,695.75	3,062.27	3,428.80	3,795.33	4,161.86	4,528.39	4,894.91	5,198.36
1/2	156.77	504.32	870.74	1,237.27	1,603.80	1,970.33	2,336.85	2,703.38	3,069.94	3,436.44	3,802.97	4,168.49	4,536.03	4,902.55	5,199.78
3/4	163.60	511.90	878.38	1,244.91	1,611.43	1,977.96	2,344.43	2,711.02	3,077.55	3,444.07	3,810.60	4,177.13	4,543.66	4,910.19	5,201.20
6	170.44	519.49	886.01	1,252.54	1,619.07	1,985.60	2,352.13	2,718.65	3,085.18	3,451.71	3,818.24	4,184.77	4,551.29	4,917.82	5,202.61
1/4	177.40	527.12	893.65	1,260.18	1,626.71	1,993.23	2,359.76	2,726.29	3,092.82	3,459.35	3,825.87	4,192.40	4,558.93	4,925.46	5,203.04
1/2	184.36	534.76	901.29	1,267.81	1,634.37	2,000.87	2,367.40	2,733.93	3,100.45	3,466.98	3,833.51	4,200.04	4,566.57	4,933.09	5,203.48
3/4	191.32	542.39	908.92	1,275.45	1,641.98	2,008.51	2,375.03	2,741.56	3,108.09	3,474.62	3,841.15	4,207.67	4,574.20	4,940.73	5,203.88
7	198.28	550.03	916.56	1,283.09	1,649.61	2,016.14	2,382.67	2,749.20	3,115.73	3,482.25	3,848.78	4,215.31	4,581.84	4,948.37	
1/4	205.24	557.67	924.19	1,290.72	1,657.25	2,023.79	2,390.31	2,756.83	3,123.36	3,489.89	3,856.42	4,222.95	4,589.47	4,956.00	
1/2	212.20	565.30	931.83	1,298.36	1,664.89	2,031.41	2,397.94	2,764.47	3,131.00	3,497.53	3,864.05	4,230.58	4,597.11	4,963.64	
3/4	219.12	572.94	939.47	1,305.99	1,672.52	2,039.05	2,405.58	2,772.11	3,138.63	3,505.16	3,871.69	4,238.22	4,604.75	4,971.27	
8	226.13	580.57	947.10	1,313.63	1,680.16	2,046.69	2,413.21	2,779.74	3,146.27	3,512.80	3,879.33	4,245.85	4,612.38	4,978.91	
1/4	233.21	588.21	954.74	1,321.27	1,687.79	2,054.32	2,420.85	2,787.38	3,153.91	3,520.43	3,886.96	4,253.49	4,620.02	4,986.55	
1/2	240.30	595.85	962.37	1,328.80	1,695.43	2,061.96	2,428.49	2,795.01	3,161.54	3,528.07	3,894.60	4,261.13	4,627.65	4,994.18	
3/4	247.38	603.48	970.01	1,336.54	1,703.07	2,069.59	2,436.12	2,802.65	3,168.18	3,535.71	3,902.23	4,268.76	4,635.29	5,001.82	
9	254.47	611.12	977.65	1,344.17	1,710.70	2,077.23	2,443.78	2,810.29	3,176.81	3,543.34	3,909.89	4,278.40	4,642.93	5,009.45	
1/4	261.55	618.75	985.28	1,351.81	1,718.34	2,084.87	2,451.39	2,817.92	3,184.45	3,550.98	3,917.51	4,284.03	4,650.56	5,017.09	
1/2	268.84	626.39	992.92	1,359.45	1,725.97	2,092.50	2,459.03	2,825.56	3,192.09	3,558.61	3,925.14	4,291.67	4,658.20	5,024.73	
3/4	275.72	634.03	1,000.55	1,367.08	1,733.61	2,100.14	2,466.67	2,833.19	3,199.72	3,566.25	3,932.78	4,299.31	4,665.83	5,032.36	
10	282.81	641.86	1,008.19	1,374.72	1,741.25	2,107.77	2,474.30	2,840.83	3,207.36	3,573.89	3,940.41	4,306.94	4,673.47	5,040.00	
1/4	289.02	649.30	1,015.83	1,382.35	1,748.88	2,115.41	2,481.94	2,848.47	3,214.99	3,581.52	3,948.05	4,314.58	4,681.11	5,047.63	
1/2	297.22	656.93	1,023.46	1,389.99	1,756.52	2,123.05	2,489.57	2,856.10	3,222.63	3,589.16	3,956.69	4,322.21	4,688.74	5,055.27	
3/4	304.43	664.57	1,031.10	1,397.63	1,764.15	2,130.68	2,497.21	2,863.74	3,230.20	3,596.79	3,963.32	4,329.85	4,696.38	5,062.94	
11	311.64	672.21	1,038.73	1,405.26	1,771.79	2,138.32	2,504.85	2,871.37	3,237.90	3,604.43	3,970.96	4,337.49	4,704.01	5,070.54	
1/4	318.85	679.84	1,046.37	1,412.90	1,779.43	2,145.95	2,512.48	2,879.01	3,245.54	3,612.07	3,978.59	4,346.12	4,711.65	5,078.18	
1/2	326.06	687.48	1,054.01	1,420.53	1,787.08	2,153.59	2,520.12	2,888.65	3,253.17	3,619.70	3,986.23	4,352.76	4,719.29	5,085.81	
3/4	333.27	695.11	1,061.84	1,428.17	1,794.70	2,161.23	2,527.75	2,894.28	3,260.81	3,627.34	3,993.87	4,360.39	4,726.92	5,093.45	

MAP 618

PORT 2

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	16.37	351.63	696.18	1,040.72	1,385.27	1,729.81	2,074.35	2,418.90	2,763.44	3,107.99	3,452.53	3,797.07	4,141.62	4,486.16	4,827.99
1/4	21.49	356.81	703.36	1,047.90	1,392.44	1,736.99	2,081.53	2,426.08	2,770.62	3,115.16	3,459.71	3,804.25	4,148.80	4,493.34	4,834.58
1/2	26.61	365.99	710.53	1,055.08	1,399.62	1,744.17	2,088.71	2,433.25	2,777.80	3,122.34	3,466.89	3,811.43	4,155.97	4,500.52	4,841.17
3/4	31.73	373.17	717.71	1,062.26	1,406.80	1,751.34	2,095.89	2,440.43	2,784.98	3,129.52	3,474.06	3,818.61	4,163.15	4,507.64	4,847.76
1	36.84	380.35	724.89	1,069.43	1,413.98	1,758.52	2,103.07	2,447.61	2,792.15	3,136.70	3,481.24	3,825.79	4,170.33	4,514.76	4,854.34
1/4	43.50	387.52	732.07	1,076.61	1,421.16	1,765.70	2,110.24	2,454.79	2,799.33	3,143.88	3,488.42	3,832.96	4,177.51	4,521.87	4,859.92
1/2	50.16	394.70	739.25	1,083.79	1,428.33	1,772.88	2,117.42	2,461.97	2,806.51	3,151.05	3,495.60	3,840.14	4,184.69	4,528.99	4,865.49
3/4	57.34	401.88	746.42	1,091.97	1,435.61	1,780.06	2,124.60	2,469.14	2,813.69	3,158.23	3,502.78	3,847.32	4,191.86	4,536.11	4,871.06
2	64.51	409.06	753.60	1,098.15	1,442.69	1,787.23	2,131.78	2,476.32	2,820.87	3,165.41	3,509.95	3,854.50	4,199.04	4,543.23	4,876.64
1/4	71.68	416.24	760.78	1,105.32	1,449.87	1,794.41	2,138.96	2,483.50	2,828.04	3,172.59	3,517.13	3,861.68	4,206.22	4,550.35	4,881.15
1/2	78.87	423.41	767.96	1,112.50	1,457.05	1,801.59	2,146.13	2,493.68	2,835.22	3,179.77	3,524.31	3,868.85	4,213.40	4,557.47	4,885.68
3/4	86.05	430.59	775.14	1,119.68	1,464.22	1,808.77	2,153.31	2,497.86	2,842.40	3,186.94	3,531.49	3,876.03	4,220.58	4,564.59	4,890.17
3	93.23	437.77	782.31	1,126.86	1,471.40	1,815.95	2,163.49	2,505.03	2,849.58	3,194.12	3,538.67	3,883.21	4,227.75	4,571.71	4,894.68
1/4	100.40	444.95	789.49	1,134.04	1,478.98	1,823.12	2,167.67	2,512.21	2,856.76	3,201.36	3,545.84	3,890.39	4,234.93	4,578.83	4,898.13
1/2	107.58	452.13	796.67	1,141.21	1,485.76	1,830.30	2,174.85	2,519.30	2,863.93	3,208.48	3,553.02	3,897.57	4,242.11	4,585.95	4,901.58
3/4	114.76	459.30	803.85	1,148.39	1,492.94	1,837.48	2,182.02	2,526.57	2,871.11	3,215.66	3,560.20	3,904.74	4,249.29	4,593.06	4,905.03
4	121.94	466.48	811.03	1,155.57	1,500.11	1,844.56	2,189.20	2,533.76	2,878.29	3,222.83	3,567.38	3,911.92	4,256.47	4,600.18	4,908.48
1/4	129.12	473.66	818.20	1,162.75	1,507.29	1,851.84	2,196.38	2,540.92	2,885.47	3,230.01	3,574.56	3,919.10	4,263.64	4,607.30	4,910.87
1/2	136.29	480.84	825.38	1,169.93	1,514.47	1,859.01	2,203.56	2,548.10	2,892.65	3,237.19	3,581.73	3,926.28	4,270.82	4,614.42	4,913.25
3/4	143.47	488.02	832.56	1,177.10	1,521.65	1,866.19	2,210.74	2,555.28	2,899.82	3,244.37	3,588.91	3,933.46	4,278.00	4,621.54	4,915.64
5	150.65	495.19	839.74	1,184.28	1,528.83	1,873.37	2,217.91	2,562.45	2,907.00	3,251.55	3,596.09	3,940.63	4,285.18	4,628.66	4,918.03
1/4	157.83	502.37	846.92	1,191.46	1,536.00	1,880.55	2,225.09	2,569.64	2,914.18	3,258.72	3,603.27	3,947.81	4,292.36	4,635.78	4,919.35
1/2	165.01	509.55	854.09	1,198.64	1,543.18	1,887.73	2,232.27	2,576.81	2,921.36	3,265.90	3,610.45	3,954.99	4,299.53	4,642.90	4,920.58
3/4	172.18	516.73	861.27	1,205.82	1,550.36	1,894.90	2,239.45	2,583.99	2,928.54	3,273.08	3,617.62	3,962.17	4,306.71	4,650.02	4,922.00
6	179.36	523.91	868.45	1,212.99	1,557.54	1,902.08	2,246.63	2,591.17	2,935.71	3,280.26	3,624.84	3,969.35	4,313.89	4,657.14	4,923.32
1/4	186.54	531.08	875.63	1,220.17	1,564.72	1,909.26	2,253.80	2,598.35	2,942.89	3,287.44	3,631.98	3,976.52	4,321.07	4,664.25	4,923.72
1/2	193.72	539.26	882.81	1,227.35	1,571.89	1,916.44	2,260.98	2,605.53	2,950.07	3,294.61	3,639.16	3,983.70	4,328.25	4,671.37	4,924.11
3/4	200.90	545.44	889.98	1,234.53	1,579.07	1,923.62	2,268.16	2,612.70	2,957.25	3,301.79	3,646.34	3,990.88	4,335.42	4,678.49	4,924.51
7	208.07	552.62	897.16	1,241.71	1,586.25	1,930.79	2,275.34	2,619.88	2,964.43	3,308.97	3,653.53	3,998.06	4,342.60	4,685.61	
1/4	215.25	559.80	904.34	1,248.88	1,593.43	1,937.97	2,282.52	2,627.06	2,971.60	3,316.15	3,660.69	4,005.24	4,349.78	4,692.73	
1/2	222.43	565.97	911.52	1,256.06	1,600.61	1,945.15	2,289.69	2,634.24	2,978.78	3,323.33	3,667.87	4,012.41	4,356.96	4,699.85	
3/4	229.61	574.15	918.70	1,263.24	1,607.78	1,952.33	2,296.67	2,641.42	2,985.96	3,330.50	3,675.05	4,019.59	4,364.14	4,706.97	
8	236.79	581.33	925.87	1,270.42	1,614.96	1,959.51	2,304.05	2,648.59	2,993.14	3,337.68	3,682.23	4,026.77	4,371.31	4,714.09	
1/4	243.96	588.51	933.05	1,277.60	1,622.14	1,966.68	2,311.23	2,655.77	3,000.32	3,344.86	3,689.40	4,033.95	4,378.49	4,721.21	
1/2	251.14	595.69	940.23	1,284.77	1,629.32	1,973.86	2,318.41	2,662.95	3,007.49	3,352.04	3,696.58	4,041.13	4,385.67	4,728.33	
3/4	258.32	602.86	947.41	1,291.95	1,636.50	1,981.04	2,325.58	2,670.13	3,014.67	3,359.22	3,703.76	4,048.30	4,392.85	4,735.44	
9	265.50	610.04	954.59	1,299.13	1,643.67	1,988.22	2,332.76	2,677.31	3,021.85	3,366.37	3,710.94	4,055.48	4,400.03	4,742.58	
1/4	272.68	617.22	961.76	1,306.31	1,650.85	1,995.40	2,339.94	2,684.48	3,029.03	3,373.57	3,718.12	4,062.55	4,407.20	4,749.68	
1/2	279.85	624.40	968.94	1,313.49	1,658.03	2,002.57	2,347.12	2,691.66	3,036.21	3,380.75	3,725.29	4,069.84	4,414.38	4,756.80	
3/4	287.03	631.58	976.12	1,320.66	1,665.21	2,009.76	2,354.30	2,698.84	3,043.38	3,387.93	3,732.47	4,077.02	4,421.56	4,763.92	
10	294.21	636.75	983.30	1,327.84	1,672.39	2,016.93	2,361.48	2,706.02	3,050.56	3,395.11	3,739.65	4,084.19	4,428.74	4,771.04	
1/4	301.39	645.93	990.48	1,335.02	1,679.56	2,024.11	2,368.65	2,713.20	3,057.74	3,402.28	3,746.83	4,091.39	4,435.92	4,778.16	
1/2	308.57	653.11	997.65	1,342.20	1,686.74	2,031.29	2,375.83	2,720.37	3,064.92	3,409.46	3,754.01	4,098.55	4,443.09	4,785.28	
3/4	315.74	660.28	1,004.83	1,349.38	1,693.92	2,038.46	2,383.01	2,727.55	3,072.10	3,416.64	3,761.18	4,105.73	4,450.27	4,792.40	
11	322.92	667.47	1,012.01	1,356.55	1,701.10	2,045.64	2,390.19	2,734.73	3,079.27	3,423.82	3,768.36	4,112.91	4,457.45	4,799.52	
1/4	330.10	676.64	1,019.19	1,363.73	1,708.26	2,052.82	2,397.36	2,741.91	3,086.45	3,431.00	3,775.54	4,120.08	4,464.63	4,806.63	
1/2	337.28	681.82	1,026.37	1,370.91	1,715.45	2,060.00	2,404.54	2,749.09	3,093.63	3,438.17	3,782.72	4,127.26	4,471.81	4,813.75	
3/4	344.46	689.00	1,033.54	1,378.09	1,722.63	2,067.18	2,411.72	2,756.26	3,100.81	3,445.35	3,789.90	4,134.44	4,478.98	4,820.87	

MAP 618

STAR 2

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	16.37	351.63	696.18	1,040.72	1,385.27	1,729.81	2,074.35	2,418.90	2,763.44	3,107.99	3,452.53	3,797.07	4,141.62	4,486.16	4,827.99
1/4	21.49	358.81	703.36	1,047.90	1,392.44	1,736.99	2,081.53	2,426.08	2,770.62	3,115.16	3,459.71	3,804.25	4,148.80	4,493.34	4,834.58
1/2	26.61	365.99	710.53	1,055.08	1,399.62	1,744.17	2,088.71	2,433.25	2,777.80	3,122.34	3,466.89	3,811.43	4,155.97	4,500.52	4,841.17
3/4	31.73	373.17	717.71	1,062.26	1,406.80	1,751.34	2,095.89	2,440.43	2,784.98	3,129.52	3,474.06	3,818.61	4,163.15	4,507.64	4,847.76
1	36.84	380.35	724.89	1,069.43	1,413.98	1,758.52	2,103.07	2,447.61	2,792.15	3,136.70	3,481.24	3,825.79	4,170.33	4,514.76	4,854.34
1/4	43.50	387.52	732.07	1,076.61	1,421.16	1,765.70	2,110.24	2,454.79	2,799.33	3,143.88	3,488.42	3,832.96	4,177.51	4,521.87	4,859.92
1/2	50.16	394.70	739.25	1,083.79	1,428.33	1,772.88	2,117.42	2,461.97	2,806.51	3,151.05	3,495.60	3,840.14	4,184.69	4,528.99	4,865.49
3/4	57.34	401.88	746.42	1,091.97	1,435.51	1,780.06	2,124.60	2,469.14	2,813.69	3,158.23	3,502.78	3,847.32	4,191.86	4,536.11	4,871.06
2	64.51	409.06	753.60	1,098.15	1,442.69	1,787.23	2,131.78	2,476.32	2,820.87	3,165.41	3,509.95	3,854.50	4,199.04	4,543.23	4,876.64
1/4	71.68	416.24	760.78	1,105.32	1,449.87	1,794.41	2,138.96	2,483.50	2,828.04	3,172.59	3,517.13	3,861.68	4,206.22	4,550.35	4,881.15
1/2	78.87	423.41	767.96	1,112.50	1,457.05	1,801.59	2,146.13	2,490.68	2,835.22	3,179.77	3,524.31	3,868.85	4,213.40	4,557.47	4,885.68
3/4	86.05	430.59	775.14	1,119.68	1,464.22	1,808.77	2,153.31	2,497.86	2,842.40	3,186.94	3,531.49	3,876.03	4,220.58	4,564.59	4,890.17
3	93.23	437.77	782.31	1,126.86	1,471.40	1,815.95	2,160.49	2,505.03	2,849.58	3,194.12	3,538.67	3,883.21	4,227.75	4,571.71	4,894.68
1/4	100.40	444.95	789.49	1,134.04	1,478.58	1,823.12	2,167.67	2,512.21	2,856.76	3,201.36	3,545.84	3,890.39	4,234.93	4,578.83	4,898.13
1/2	107.58	452.13	796.67	1,141.21	1,485.76	1,830.30	2,174.85	2,519.30	2,863.93	3,208.48	3,553.02	3,897.57	4,242.11	4,585.95	4,901.58
3/4	114.76	459.30	803.85	1,148.39	1,492.84	1,837.48	2,182.02	2,526.57	2,871.11	3,215.66	3,560.20	3,904.74	4,249.29	4,593.06	4,905.03
4	121.94	466.48	811.03	1,155.57	1,500.11	1,844.56	2,189.20	2,533.76	2,878.29	3,222.83	3,567.38	3,911.92	4,256.47	4,600.18	4,908.48
1/4	129.12	473.66	818.20	1,162.75	1,507.29	1,851.84	2,196.38	2,540.92	2,885.47	3,230.01	3,574.56	3,919.10	4,263.64	4,607.30	4,910.87
1/2	136.29	480.84	825.38	1,169.93	1,514.47	1,859.01	2,203.56	2,548.10	2,892.65	3,237.19	3,581.73	3,926.28	4,270.82	4,614.42	4,913.25
3/4	143.47	488.02	832.56	1,177.10	1,521.65	1,866.19	2,210.74	2,555.28	2,899.82	3,244.37	3,588.91	3,933.46	4,278.00	4,621.54	4,915.64
5	150.65	495.19	839.74	1,184.28	1,528.83	1,873.37	2,217.91	2,562.45	2,907.00	3,251.55	3,596.09	3,940.63	4,285.18	4,628.66	4,918.03
1/4	157.83	502.37	846.92	1,191.46	1,536.00	1,880.55	2,225.09	2,569.64	2,914.18	3,258.72	3,603.27	3,947.81	4,292.36	4,635.78	4,919.35
1/2	165.01	509.55	854.09	1,198.64	1,543.18	1,887.73	2,232.27	2,576.81	2,921.36	3,265.90	3,610.45	3,954.99	4,299.53	4,642.90	4,920.58
3/4	172.18	516.73	861.27	1,205.82	1,550.36	1,894.90	2,239.45	2,583.99	2,928.54	3,273.08	3,617.62	3,962.17	4,306.71	4,650.02	4,922.00
6	179.36	523.91	868.45	1,212.99	1,557.54	1,902.08	2,246.63	2,591.17	2,935.71	3,280.26	3,624.80	3,969.35	4,313.89	4,657.14	4,923.32
1/4	186.54	531.08	875.63	1,220.17	1,564.72	1,909.26	2,253.80	2,598.32	2,942.89	3,287.44	3,631.98	3,976.52	4,321.07	4,664.25	4,923.72
1/2	193.72	539.26	882.81	1,227.35	1,571.89	1,916.44	2,260.98	2,605.53	2,950.07	3,294.61	3,639.16	3,983.70	4,328.25	4,671.37	4,924.11
3/4	200.90	545.44	889.98	1,234.53	1,579.07	1,923.62	2,268.16	2,612.70	2,957.25	3,301.79	3,646.34	3,990.88	4,335.42	4,678.49	4,924.51
7	208.07	552.62	897.16	1,241.71	1,586.25	1,930.79	2,275.34	2,619.88	2,964.43	3,308.97	3,653.53	3,998.06	4,342.60	4,685.61	
1/4	215.25	559.80	904.34	1,248.88	1,593.43	1,937.97	2,282.52	2,627.06	2,971.60	3,316.15	3,660.69	4,005.24	4,349.78	4,692.73	
1/2	222.43	565.97	911.52	1,256.06	1,600.61	1,945.15	2,289.69	2,634.24	2,978.78	3,323.33	3,667.87	4,012.41	4,356.96	4,699.85	
3/4	229.61	574.15	918.70	1,263.24	1,607.78	1,952.33	2,296.87	2,641.42	2,985.96	3,330.50	3,675.05	4,019.59	4,364.14	4,706.97	
8	236.79	581.33	925.87	1,270.42	1,614.96	1,959.51	2,304.05	2,648.59	2,993.14	3,337.68	3,682.23	4,026.77	4,371.31	4,714.09	
1/4	243.96	588.51	933.05	1,277.60	1,622.14	1,966.68	2,311.23	2,655.77	3,000.32	3,344.86	3,689.40	4,033.95	4,378.49	4,721.21	
1/2	251.14	595.69	940.23	1,284.77	1,629.32	1,973.86	2,318.41	2,662.95	3,007.49	3,352.04	3,696.58	4,041.13	4,385.67	4,728.33	
3/4	258.32	602.86	947.41	1,291.95	1,636.50	1,981.04	2,325.58	2,670.13	3,014.67	3,359.22	3,703.76	4,048.30	4,392.85	4,735.44	
9	265.50	610.04	954.59	1,299.13	1,643.67	1,988.22	2,332.76	2,677.31	3,021.85	3,366.37	3,710.94	4,055.48	4,400.03	4,742.58	
1/4	272.68	617.22	961.76	1,306.31	1,650.85	1,995.40	2,339.94	2,684.48	3,029.03	3,373.57	3,718.12	4,062.55	4,407.20	4,749.68	
1/2	279.85	624.40	968.94	1,313.49	1,658.03	2,002.57	2,347.12	2,691.66	3,036.21	3,380.75	3,725.29	4,069.84	4,414.38	4,756.80	
3/4	287.03	631.58	976.12	1,320.66	1,665.21	2,009.76	2,354.30	2,698.84	3,043.38	3,387.93	3,732.47	4,077.02	4,421.56	4,763.92	
10	294.21	638.75	983.30	1,327.84	1,672.39	2,016.93	2,361.47	2,706.02	3,050.56	3,395.11	3,739.65	4,084.19	4,428.74	4,771.04	
1/4	301.39	645.93	990.48	1,335.02	1,679.56	2,024.11	2,368.65	2,713.20	3,057.74	3,402.28	3,746.83	4,091.39	4,435.92	4,778.16	
1/2	308.57	653.11	997.65	1,342.20	1,686.74	2,031.29	2,375.83	2,720.37	3,064.92	3,409.46	3,754.01	4,098.55	4,443.09	4,785.28	
3/4	315.74	660.29	1,004.83	1,349.38	1,693.92	2,038.46	2,383.01	2,727.55	3,072.10	3,416.64	3,761.18	4,105.73	4,450.27	4,792.40	
11	322.92	667.47	1,012.01	1,356.55	1,701.10	2,045.64	2,390.19	2,734.73	3,079.27	3,423.82	3,768.36	4,112.91	4,457.45	4,799.52	
1/4	330.10	674.64	1,019.19	1,363.73	1,708.26	2,052.82	2,397.36	2,741.91	3,086.45	3,431.00	3,775.54	4,120.08	4,464.63	4,806.63	
1/2	337.28	681.82	1,026.37	1,370.91	1,715.45	2,060.00	2,404.54	2,749.09	3,093.63	3,438.17	3,782.72	4,127.26	4,471.81	4,813.75	
3/4	344.46	689.00	1,033.54	1,378.09	1,722.63	2,067.18	2,411.72	2,756.26	3,100.81	3,445.35	3,789.90	4,134.44	4,478.98	4,820.87	

MAP 618

PORT 3

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.37	372.53	737.16	1,100.37	1,466.49	1,828.62	2,192.75	2,556.88	2,921.01	3,285.13	3,629.48	3,911.10	4,187.85	4,464.28	4,740.71
1/4	22.80	380.14	744.72	1,107.95	1,472.08	1,836.21	2,200.34	2,564.46	2,928.59	3,292.72	3,635.44	3,916.96	4,193.60	4,470.04	4,746.03
1/2	28.23	387.74	752.28	1,115.54	1,479.67	1,843.79	2,207.92	2,572.05	2,936.18	3,300.31	3,922.83	3,964.10	4,199.36	4,475.80	4,751.36
3/4	33.66	395.34	759.85	1,123.12	1,487.25	1,851.38	2,215.51	2,579.64	2,943.76	3,307.89	3,647.27	3,928.69	4,205.12	4,481.55	4,756.68
1	39.09	402.95	767.41	1,130.71	1,494.84	1,858.97	2,223.09	2,587.22	2,951.35	3,315.48	3,653.13	3,934.45	4,210.88	4,487.31	4,762.01
1/4	46.15	410.55	774.97	1,138.20	1,502.42	1,866.55	2,230.68	2,594.81	2,958.94	3,323.06	3,658.90	3,941.21	4,216.64	4,493.07	4,766.46
1/2	53.21	418.15	782.54	1,145.88	1,510.01	1,874.14	2,238.28	2,602.39	2,966.52	3,330.65	3,664.86	3,945.97	4,222.40	4,498.83	4,771.92
3/4	60.81	425.76	790.10	1,153.47	1,517.60	1,881.12	2,245.85	2,609.98	2,974.11	3,338.24	3,670.72	3,951.73	4,228.16	4,504.59	4,775.37
2	68.41	433.36	797.66	1,161.05	1,525.18	1,889.31	2,253.44	2,617.57	2,981.69	3,345.82	3,676.58	3,957.49	4,233.92	4,510.35	4,779.83
1/4	76.02	440.96	805.22	1,168.64	1,532.77	1,896.90	2,261.02	2,625.15	2,989.28	3,353.41	3,682.44	3,963.24	4,239.68	4,516.11	4,783.42
1/2	83.62	448.56	812.79	1,176.23	1,540.35	1,904.48	2,268.61	2,632.74	2,996.87	3,360.99	3,688.31	3,969.00	4,245.44	4,521.87	4,787.00
3/4	91.22	456.17	820.35	1,183.81	1,547.94	1,912.07	2,276.20	2,640.32	3,004.45	3,368.58	3,694.17	3,974.76	4,251.19	4,527.63	4,790.59
3	98.83	463.77	827.91	1,191.40	1,555.53	1,919.65	2,283.78	2,647.91	3,012.04	3,376.17	3,700.30	3,980.52	4,256.95	4,533.39	4,794.17
1/4	106.43	471.37	835.48	1,198.95	1,563.11	1,927.24	2,291.37	2,655.50	3,019.62	3,383.75	3,705.90	3,986.28	4,262.71	4,539.14	4,796.89
1/2	114.03	478.98	843.04	1,206.57	1,570.70	1,934.83	2,298.05	2,663.08	3,027.21	3,391.34	3,711.78	3,992.04	4,268.47	4,544.90	4,799.61
3/4	121.64	486.58	850.60	1,214.16	1,578.28	1,942.41	2,306.54	2,670.67	3,034.80	3,396.92	3,717.62	3,997.50	4,274.23	4,550.66	4,802.32
4	129.24	494.18	858.17	1,221.74	1,585.87	1,950.00	2,314.13	2,678.25	3,042.38	3,406.51	3,723.48	4,003.56	4,279.99	4,556.42	4,805.04
1/4	136.84	501.79	865.73	1,229.33	1,593.46	1,957.58	2,321.73	2,685.84	3,049.97	3,414.10	3,729.35	4,009.32	4,285.75	4,562.18	4,806.89
1/2	144.44	509.39	873.29	1,235.91	1,601.04	1,965.17	2,329.30	2,693.43	3,057.55	3,421.68	3,735.21	4,015.88	4,291.51	4,567.94	4,808.74
3/4	152.05	516.99	880.85	1,244.50	1,608.63	1,972.76	2,336.88	2,701.01	3,065.14	3,429.27	3,741.07	4,020.83	4,297.27	4,573.70	4,810.59
5	159.65	524.59	888.42	1,252.09	1,616.21	1,980.34	2,344.47	2,708.60	3,072.73	3,436.85	3,746.94	4,026.59	4,303.03	4,579.46	4,812.43
1/4	167.25	532.20	895.98	1,259.67	1,623.80	1,987.83	2,352.06	2,716.18	3,080.31	3,444.44	3,752.80	4,032.35	4,308.78	4,585.22	4,813.41
1/2	174.86	539.80	903.54	1,267.26	1,631.39	1,995.51	2,359.64	2,723.77	3,087.90	3,452.03	3,758.66	4,038.11	4,314.54	4,590.98	4,814.39
3/4	182.46	547.40	911.11	1,274.84	1,638.97	2,003.10	2,367.29	2,731.36	3,095.48	3,459.61	3,764.53	4,043.87	4,320.30	4,596.30	4,815.37
6	190.06	555.01	918.67	1,282.43	1,646.56	2,010.69	2,374.81	2,738.94	3,103.07	3,467.09	3,770.39	4,049.63	4,326.06	4,602.49	4,816.35
1/4	197.67	562.61	926.23	1,290.98	1,654.14	2,018.27	2,382.40	2,746.56	3,110.66	3,474.56	3,776.25	4,055.39	4,331.82	4,608.25	4,816.57
1/2	205.27	570.21	933.80	1,297.60	1,661.73	2,025.86	2,389.99	2,754.11	3,118.24	3,482.03	3,782.12	4,061.15	4,337.59	4,614.01	4,816.79
3/4	212.87	577.82	941.36	1,305.19	1,669.32	2,033.44	2,397.57	2,761.70	3,125.83	3,489.51	3,787.98	4,066.91	4,343.34	4,619.77	4,817.00
7	220.47	585.42	948.92	1,312.77	1,676.90	2,041.03	2,405.16	2,769.29	3,133.41	3,496.72	3,793.84	4,072.67	4,349.10	4,625.53	
1/4	228.08	593.02	956.48	1,320.36	1,684.49	2,048.62	2,412.74	2,776.80	3,141.00	3,503.94	3,799.70	4,078.42	4,354.88	4,631.29	
1/2	235.68	600.06	964.05	1,327.95	1,692.07	2,056.20	2,420.33	2,784.46	3,148.59	3,511.16	3,805.57	4,084.18	4,360.62	4,637.05	
3/4	243.28	608.23	971.61	1,335.53	1,699.66	2,063.79	2,427.92	2,792.04	3,156.17	3,518.37	3,811.43	4,089.94	4,366.37	4,642.81	
8	250.89	615.83	979.17	1,343.12	1,707.26	2,071.67	2,435.50	2,799.63	3,163.76	3,525.33	3,817.29	4,095.70	4,372.13	4,648.57	
1/4	258.49	623.43	986.74	1,350.70	1,714.83	2,078.86	2,443.09	2,807.22	3,171.34	3,532.29	3,823.16	4,101.46	4,377.89	4,654.32	
1/2	266.09	631.04	994.30	1,358.29	1,722.42	2,086.55	2,450.67	2,814.80	3,178.93	3,539.25	3,829.02	4,107.22	4,383.65	4,660.08	
3/4	273.70	638.64	1,001.86	1,365.86	1,730.00	2,094.13	2,458.26	2,822.38	3,186.52	3,548.21	3,834.88	4,112.98	4,389.41	4,665.84	
9	281.30	646.24	1,009.43	1,373.46	1,737.59	2,101.72	2,465.85	2,829.97	3,194.10	3,552.91	3,840.75	4,118.74	4,395.17	4,671.60	
1/4	288.90	653.84	1,016.99	1,381.05	1,745.18	2,109.30	2,473.43	2,837.56	3,201.69	3,559.61	3,846.61	4,124.50	4,400.93	4,677.36	
1/2	296.50	661.45	1,024.55	1,388.63	1,752.76	2,116.89	2,481.02	2,845.15	3,209.27	3,566.31	3,852.47	4,130.26	4,406.69	4,683.12	
3/4	304.11	669.05	1,032.12	1,396.22	1,760.35	2,124.48	2,488.60	2,852.73	3,216.86	3,573.01	3,858.33	4,136.01	4,412.45	4,688.88	
10	311.71	676.65	1,039.68	1,403.81	1,767.93	2,132.06	2,496.19	2,860.32	3,224.45	3,579.41	3,864.20	4,141.77	4,418.21	4,694.64	
1/4	319.31	684.22	1,047.26	1,411.39	1,775.52	2,139.65	2,503.78	2,867.90	3,232.03	3,585.80	3,870.06	4,147.53	4,423.96	4,700.40	
1/2	326.92	691.78	1,054.85	1,418.98	1,783.11	2,147.23	2,511.36	2,875.49	3,239.62	3,592.34	3,875.92	4,153.29	4,429.72	4,706.16	
3/4	334.52	699.34	1,062.44	1,426.56	1,790.69	2,154.82	2,518.95	2,883.08	3,247.20	3,598.78	3,881.79	4,159.05	4,435.48	4,711.91	
11	342.12	706.91	1,070.02	1,434.15	1,798.58	2,162.41	2,526.53	2,890.66	3,254.79	3,604.97	3,887.65	4,164.81	4,441.24	4,717.67	
1/4	349.73	714.48	1,077.61	1,441.74	1,805.86	2,169.99	2,534.12	2,898.25	3,262.39	3,611.15	3,893.51	4,170.57	4,447.00	4,723.43	
1/2	357.33	722.03	1,085.19	1,449.32	1,813.45	2,177.58	2,541.71	2,906.83	3,269.96	3,617.34	3,899.38	4,176.33	4,452.76	4,729.19	
3/4	364.93	729.59	1,092.78	1,456.91	1,821.04	2,185.16	2,549.29	2,913.42	3,277.55	3,623.52	3,905.24	4,182.09	4,458.52	4,734.95	

MAP 618

STAR 3

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.37	372.53	737.16	1,100.37	1,464.49	1,828.62	2,192.75	2,556.88	2,921.01	3,285.13	3,629.48	3,911.10	4,187.85	4,464.28	4,740.71
1/4	22.80	380.14	744.72	1,107.95	1,472.08	1,836.21	2,200.34	2,564.46	2,928.58	3,292.72	3,635.44	3,916.96	4,193.60	4,470.04	4,746.03
1/2	28.23	387.74	752.28	1,115.54	1,479.67	1,843.79	2,207.92	2,572.05	2,936.18	3,300.31	3,641.40	3,922.83	4,199.36	4,475.80	4,751.36
3/4	33.66	395.34	759.85	1,123.12	1,487.25	1,851.38	2,215.51	2,579.64	2,943.76	3,307.89	3,647.27	3,928.69	4,205.12	4,481.55	4,756.68
1	39.09	402.95	767.41	1,130.71	1,494.84	1,858.97	2,223.08	2,587.22	2,951.35	3,315.48	3,653.13	3,934.45	4,210.88	4,487.31	4,762.01
1/4	46.15	410.55	774.97	1,138.20	1,502.42	1,866.55	2,230.69	2,594.81	2,958.94	3,323.06	3,660.99	3,941.21	4,216.64	4,493.07	4,766.46
1/2	53.21	418.15	782.54	1,145.88	1,510.01	1,874.14	2,238.28	2,602.39	2,966.52	3,330.65	3,664.86	3,945.97	4,222.40	4,498.83	4,771.92
3/4	60.81	425.76	790.10	1,153.47	1,517.60	1,881.12	2,245.85	2,609.98	2,974.11	3,338.24	3,670.72	3,951.73	4,228.16	4,504.59	4,775.37
2	68.41	433.36	797.66	1,161.05	1,525.18	1,889.31	2,253.44	2,617.57	2,981.69	3,345.82	3,676.58	3,957.49	4,233.92	4,510.35	4,779.83
1/4	76.02	440.96	805.22	1,168.64	1,532.77	1,896.90	2,261.02	2,625.15	2,989.28	3,353.41	3,682.44	3,963.24	4,239.68	4,516.11	4,783.42
1/2	83.62	448.56	812.79	1,176.23	1,540.35	1,904.48	2,268.61	2,632.74	2,996.87	3,360.99	3,688.31	3,969.00	4,245.44	4,521.87	4,787.00
3/4	91.22	456.17	820.35	1,183.81	1,547.94	1,912.07	2,276.20	2,640.32	3,004.45	3,368.58	3,694.17	3,974.76	4,251.19	4,527.63	4,790.59
3	98.83	463.77	827.91	1,191.40	1,555.53	1,919.65	2,283.78	2,647.91	3,012.04	3,376.17	3,700.30	3,980.52	4,256.95	4,533.39	4,794.17
1/4	106.43	471.37	835.48	1,198.95	1,563.11	1,927.24	2,291.37	2,655.50	3,019.62	3,383.75	3,705.90	3,986.28	4,262.71	4,539.14	4,796.89
1/2	114.03	478.98	843.04	1,206.57	1,570.70	1,934.83	2,298.05	2,663.08	3,027.21	3,391.34	3,711.78	3,992.04	4,268.47	4,544.90	4,799.61
3/4	121.64	486.58	850.60	1,214.16	1,578.28	1,942.41	2,306.54	2,670.67	3,034.80	3,396.92	3,717.62	3,997.50	4,274.23	4,550.66	4,802.32
4	129.24	494.18	858.17	1,221.74	1,586.87	1,950.00	2,314.13	2,678.25	3,042.38	3,406.51	3,723.48	4,003.56	4,279.99	4,556.42	4,805.04
1/4	136.84	501.79	865.73	1,229.33	1,593.46	1,957.58	2,321.73	2,685.84	3,049.97	3,414.10	3,729.35	4,009.32	4,285.75	4,562.18	4,808.89
1/2	144.44	509.39	873.29	1,235.91	1,601.04	1,965.17	2,329.30	2,693.43	3,057.55	3,421.68	3,735.21	4,015.88	4,291.51	4,567.94	4,808.74
3/4	152.05	516.99	880.85	1,244.50	1,608.63	1,972.76	2,336.88	2,701.01	3,065.14	3,429.27	3,741.07	4,020.83	4,297.27	4,573.70	4,810.59
5	159.65	524.59	888.42	1,252.09	1,616.21	1,980.34	2,344.47	2,708.60	3,072.73	3,436.85	3,746.94	4,026.59	4,303.03	4,579.46	4,812.43
1/4	167.26	532.20	895.98	1,259.67	1,623.80	1,987.83	2,352.06	2,716.18	3,080.31	3,444.44	3,752.80	4,032.35	4,308.78	4,585.22	4,813.41
1/2	174.86	539.80	903.54	1,267.26	1,631.39	1,995.64	2,359.64	2,723.77	3,087.90	3,452.03	3,758.66	4,038.11	4,314.54	4,590.98	4,814.39
3/4	182.46	547.40	911.11	1,274.84	1,638.97	2,003.10	2,367.29	2,731.36	3,095.48	3,459.61	3,764.53	4,043.87	4,320.30	4,596.30	4,815.37
6	190.06	555.01	918.67	1,282.43	1,646.56	2,010.69	2,374.81	2,738.94	3,103.07	3,467.09	3,770.39	4,049.63	4,326.06	4,602.49	4,816.35
1/4	197.67	562.61	926.23	1,290.08	1,654.14	2,018.27	2,382.40	2,748.53	3,110.66	3,474.56	3,776.25	4,055.39	4,331.82	4,608.25	4,816.57
1/2	205.27	570.21	933.80	1,297.60	1,661.73	2,025.86	2,389.99	2,754.11	3,118.24	3,482.03	3,782.12	4,061.15	4,337.59	4,614.01	4,816.79
3/4	212.87	577.82	941.36	1,305.19	1,669.32	2,033.44	2,397.57	2,761.70	3,125.83	3,489.51	3,787.98	4,066.91	4,343.34	4,619.77	4,817.00
7	220.47	585.42	948.92	1,312.77	1,676.90	2,041.03	2,405.16	2,769.28	3,133.41	3,496.72	3,793.84	4,072.67	4,349.10	4,625.53	
1/4	228.08	593.02	956.48	1,320.36	1,684.49	2,048.62	2,412.74	2,776.80	3,141.00	3,503.94	3,799.70	4,078.42	4,354.88	4,631.29	
1/2	235.68	600.06	964.05	1,327.95	1,692.07	2,056.20	2,420.33	2,784.46	3,148.59	3,511.16	3,805.57	4,084.18	4,360.62	4,637.05	
3/4	243.28	608.23	971.61	1,335.53	1,699.66	2,063.79	2,427.92	2,792.04	3,156.17	3,518.37	3,811.43	4,089.94	4,366.37	4,642.81	
8	250.89	615.83	979.17	1,343.12	1,707.26	2,071.67	2,435.50	2,799.63	3,163.76	3,525.33	3,817.29	4,095.70	4,372.13	4,648.57	
1/4	258.49	623.43	986.74	1,350.70	1,714.83	2,078.96	2,443.09	2,807.22	3,171.34	3,532.29	3,823.16	4,101.46	4,377.89	4,654.32	
1/2	266.09	631.04	994.30	1,358.29	1,722.42	2,086.55	2,450.67	2,814.80	3,178.93	3,539.25	3,829.02	4,107.22	4,383.65	4,660.08	
3/4	273.70	638.64	1,001.86	1,365.86	1,730.00	2,094.13	2,458.26	2,822.39	3,186.52	3,548.21	3,834.88	4,112.98	4,389.41	4,665.84	
9	281.30	646.24	1,009.43	1,373.46	1,737.59	2,101.72	2,465.85	2,829.97	3,194.10	3,552.91	3,840.75	4,118.74	4,395.17	4,671.60	
1/4	288.90	653.84	1,016.99	1,381.05	1,745.18	2,109.30	2,473.43	2,837.56	3,201.69	3,559.61	3,846.61	4,124.50	4,400.93	4,677.36	
1/2	296.50	661.45	1,024.55	1,388.63	1,752.76	2,116.89	2,481.02	2,845.15	3,209.27	3,566.31	3,852.47	4,130.26	4,406.69	4,683.12	
3/4	304.11	669.05	1,032.12	1,396.22	1,760.35	2,124.48	2,488.60	2,852.73	3,216.86	3,573.01	3,858.33	4,136.01	4,412.45	4,688.88	
10	311.71	676.65	1,039.68	1,403.81	1,767.93	2,132.06	2,496.19	2,860.32	3,224.45	3,579.41	3,864.20	4,141.77	4,418.21	4,694.64	
1/4	319.31	684.22	1,047.26	1,411.39	1,775.52	2,139.65	2,503.78	2,867.90	3,232.03	3,585.80	3,870.06	4,147.53	4,423.96	4,700.40	
1/2	326.92	691.78	1,054.85	1,418.98	1,783.11	2,147.23	2,511.31	2,875.49	3,239.62	3,592.34	3,875.92	4,153.29	4,429.72	4,706.16	
3/4	334.52	699.34	1,062.44	1,426.56	1,790.69	2,154.82	2,518.95	2,883.08	3,247.20	3,598.78	3,881.79	4,159.05	4,435.48	4,711.91	
11	342.12	706.91	1,070.02	1,434.15	1,798.58	2,162.41	2,526.53	2,890.66	3,254.79	3,604.97	3,887.65	4,164.81	4,441.24	4,717.67	
1/4	349.73	714.48	1,077.61	1,441.74	1,805.86	2,169.99	2,534.12	2,898.25	3,262.39	3,611.15	3,893.51	4,170.57	4,447.00	4,723.43	
1/2	357.33	722.03	1,085.19	1,449.32	1,813.45	2,177.58	2,541.71	2,905.83	3,269.96	3,617.34	3,899.38	4,176.33	4,452.76	4,729.19	
3/4	364.93	729.59	1,092.78	1,456.91	1,821.04	2,185.16	2,549.29	2,913.42	3,277.55	3,623.52	3,905.24	4,182.09	4,458.52	4,734.95	