

Barge ID	Barge Number	UOM	Gauge Type	Date Strapped	Strapped By	Comment
MAP	617	BARRELS	INNAGE	09/02/04	INSPECTORATE	BARGE SHOULD BE ON EVEN LEVEL KEEL WHEN GAUGES ARE TAKEN.

Barge ID	Barge Number	Comp	Gauge Height
MAP	617	1 PORT	185.750
MAP	617	1 STAR	186.250
MAP	617	2 PORT	185.750
MAP	617	2 STAR	186.000
MAP	617	3 PORT	184.750
MAP	617	3 STAR	184.750

MAP 617

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	702.80	1,069.42	1,802.67	2,169.29	2,535.96	2,902.54	3,269.17	3,635.79	4,002.41	4,369.04	4,735.66	5,102.29	
1/4	22.02	347.81	710.44	1,077.06	1,443.68	1,810.31	2,176.93	2,543.56	2,910.18	3,276.80	3,643.43	4,010.05	4,376.68	4,743.30	5,109.37
1/2	26.87	355.15	718.07	1,084.70	1,451.32	1,817.95	2,184.57	2,551.19	2,917.82	3,284.44	3,651.07	4,017.69	4,384.31	4,750.94	5,116.45
3/4	31.73	362.48	725.71	1,092.34	1,458.96	1,825.58	2,192.21	2,558.83	2,925.46	3,292.08	3,658.70	4,025.33	4,391.95	4,758.58	5,123.53
1	36.59	369.81	733.35	1,099.97	1,466.60	1,833.22	2,199.85	2,566.47	2,933.09	3,299.72	3,666.34	4,032.97	4,399.59	4,766.21	5,130.61
1/4	42.75	377.15	740.99	1,107.61	1,474.24	1,840.86	2,207.48	2,574.11	2,940.73	3,307.36	3,673.98	4,040.60	4,407.23	4,773.85	5,136.45
1/2	48.90	384.48	748.63	1,115.25	1,481.87	1,848.50	2,215.12	2,581.75	2,948.37	3,314.99	3,681.52	4,048.24	4,414.87	4,781.49	5,142.30
3/4	55.49	391.82	756.26	1,122.89	1,489.51	1,856.14	2,222.76	2,589.38	2,956.01	3,322.63	3,689.26	4,055.88	4,422.50	4,789.13	5,148.15
2	62.07	399.15	763.90	1,130.53	1,497.15	1,863.77	2,230.40	2,597.02	2,963.65	3,330.27	3,696.89	4,063.52	4,430.14	4,796.77	5,153.99
1/4	68.78	406.61	771.54	1,138.16	1,504.79	1,871.41	2,238.04	2,604.66	2,971.28	3,337.91	3,704.53	4,071.16	4,437.78	4,804.40	5,158.81
1/2	75.49	414.07	779.18	1,145.80	1,512.43	1,879.05	2,245.67	2,612.30	2,978.92	3,345.55	3,712.17	4,078.79	4,445.42	4,812.04	5,163.62
3/4	82.20	421.52	786.82	1,153.44	1,520.06	1,886.69	2,253.31	2,619.94	2,986.56	3,353.18	3,719.81	4,086.43	4,453.06	4,819.68	5,168.43
3	88.91	428.98	794.45	1,161.08	1,527.70	1,894.33	2,260.95	2,627.57	2,994.20	3,360.82	3,727.45	4,094.07	4,460.69	4,827.32	5,173.24
1/4	95.63	436.44	802.09	1,168.72	1,535.34	1,901.96	2,268.59	2,635.21	3,001.84	3,368.46	3,736.08	4,101.71	4,468.33	4,834.96	5,176.92
1/2	102.34	443.90	809.73	1,176.35	1,542.98	1,909.60	2,276.23	2,642.85	3,009.70	3,376.10	3,742.72	4,109.35	4,475.97	4,842.59	5,180.60
3/4	109.05	451.36	817.37	1,183.99	1,550.62	1,917.24	2,283.86	2,650.49	3,017.11	3,383.74	3,750.36	4,116.98	4,483.61	4,850.23	5,184.28
4	115.76	458.81	825.01	1,191.63	1,558.25	1,924.88	2,291.50	2,658.13	3,024.75	3,391.37	3,758.00	4,124.62	4,491.25	4,857.87	5,187.96
1/4	122.59	466.40	832.64	1,199.27	1,565.89	1,932.52	2,299.14	2,665.76	3,032.39	3,399.01	3,765.64	4,132.26	4,498.88	4,865.51	5,190.51
1/2	129.43	473.98	840.28	1,206.91	1,573.63	1,940.15	2,306.78	2,673.40	3,040.03	3,406.65	3,773.27	4,139.90	4,506.52	4,873.15	5,193.05
3/4	136.26	481.57	847.92	1,214.54	1,581.17	1,947.79	2,314.42	2,681.04	3,047.66	3,414.29	3,780.91	4,147.54	4,514.16	4,880.78	5,195.60
5	143.10	489.15	855.56	1,222.18	1,588.81	1,955.43	2,322.05	2,688.68	3,055.30	3,421.93	3,788.55	4,155.17	4,521.80	4,888.42	5,198.15
1/4	149.93	496.73	863.20	1,229.82	1,596.44	1,963.07	2,329.59	2,696.32	3,063.94	3,429.55	3,796.19	4,162.81	4,529.44	4,896.06	5,199.56
1/2	156.77	504.32	870.83	1,237.46	1,604.08	1,970.71	2,337.33	2,703.95	3,070.58	3,437.20	3,803.83	4,170.45	4,537.07	4,903.70	5,200.98
3/4	163.60	511.90	878.47	1,245.13	1,611.72	1,978.34	2,344.97	2,711.59	3,078.22	3,444.84	3,811.46	4,178.09	4,544.71	4,911.34	5,202.40
6	170.44	519.49	886.11	1,252.73	1,619.36	1,985.98	2,352.61	2,719.23	3,085.85	3,452.48	3,819.10	4,185.73	4,552.35	4,918.97	5,203.81
1/4	177.40	527.12	893.75	1,260.37	1,627.00	1,993.62	2,360.24	2,726.87	3,093.49	3,460.12	3,826.74	4,193.36	4,559.99	4,926.61	5,204.23
1/2	184.36	534.76	901.39	1,268.01	1,634.63	2,001.26	2,367.88	2,734.51	3,101.13	3,467.75	3,834.38	4,201.00	4,567.63	4,934.25	5,204.66
3/4	191.32	542.40	909.02	1,275.65	1,642.27	2,008.90	2,375.52	2,742.14	3,108.77	3,475.39	3,842.02	4,208.64	4,575.26	4,941.89	5,205.08
7	198.28	550.04	916.66	1,283.29	1,649.91	2,016.53	2,383.16	2,749.78	3,116.41	3,483.03	3,849.65	4,216.28	4,582.90	4,949.53	
1/4	205.24	557.68	924.30	1,290.92	1,657.55	2,024.17	2,390.80	2,757.42	3,124.04	3,490.67	3,857.29	4,223.92	4,590.54	4,957.16	
1/2	212.20	565.31	931.94	1,298.56	1,665.19	2,031.81	2,398.43	2,765.06	3,131.68	3,498.31	3,864.93	4,231.55	4,598.18	4,964.80	
3/4	219.17	572.95	939.58	1,306.20	1,672.82	2,039.45	2,406.07	2,772.70	3,139.32	3,505.94	3,872.57	4,239.19	4,605.82	4,972.44	
8	226.13	580.59	947.21	1,313.84	1,680.46	2,047.09	2,413.71	2,780.33	3,146.96	3,513.58	3,880.21	4,246.83	4,613.45	4,980.08	
1/4	233.21	588.23	954.85	1,321.48	1,688.10	2,054.72	2,421.35	2,787.97	3,154.60	3,521.22	3,887.84	4,254.47	4,621.09	4,987.72	
1/2	240.30	595.87	962.49	1,329.11	1,695.74	2,062.36	2,428.99	2,795.61	3,162.23	3,528.86	3,895.48	4,262.11	4,628.73	4,995.35	
3/4	247.38	603.50	970.13	1,336.75	1,703.38	2,070.00	2,436.62	2,803.25	3,169.87	3,536.50	3,903.12	4,269.74	4,636.37	5,002.99	
9	254.47	611.14	977.77	1,344.39	1,711.01	2,077.64	2,444.26	2,810.89	3,177.51	3,544.13	3,910.76	4,277.38	4,644.01	5,010.63	
1/4	261.55	618.78	985.40	1,352.03	1,718.65	2,085.28	2,451.90	2,818.52	3,185.15	3,551.77	3,918.40	4,285.02	4,651.64	5,018.27	
1/2	268.64	626.42	993.04	1,359.67	1,726.29	2,092.91	2,459.54	2,826.16	3,192.79	3,559.41	3,926.03	4,292.66	4,659.28	5,025.91	
3/4	275.72	634.06	1,000.68	1,367.30	1,733.93	2,100.55	2,467.18	2,833.80	3,200.42	3,567.05	3,933.67	4,300.30	4,666.92	5,033.54	
10	282.81	641.69	1,008.32	1,374.94	1,741.57	2,108.19	2,474.81	2,841.44	3,208.06	3,574.69	3,941.31	4,307.93	4,674.56	5,041.18	
1/4	290.02	649.33	1,015.96	1,382.58	1,749.20	2,115.83	2,482.45	2,849.08	3,215.70	3,582.32	3,948.95	4,315.57	4,682.20	5,048.82	
1/2	297.22	656.97	1,023.69	1,390.22	1,756.84	2,123.47	2,490.09	2,856.61	3,223.34	3,589.96	3,956.59	4,323.21	4,689.83	5,056.46	
3/4	304.43	664.61	1,031.23	1,397.86	1,764.48	2,131.10	2,497.73	2,864.35	3,230.98	3,597.60	3,964.22	4,330.85	4,697.47	5,064.10	
11	311.64	672.25	1,038.67	1,405.49	1,772.12	2,138.74	2,505.37	2,871.99	3,238.61	3,605.24	3,971.86	4,338.49	4,705.11	5,071.73	
1/4	318.65	679.68	1,046.51	1,413.13	1,779.76	2,146.38	2,513.00	2,879.63	3,246.25	3,612.88	3,979.50	4,346.12	4,712.75	5,079.37	
1/2	326.06	687.52	1,054.15	1,420.77	1,787.39	2,154.02	2,520.64	2,887.27	3,253.89	3,620.51	3,987.14	4,353.76	4,720.39	5,087.01	
3/4	333.27	695.16	1,061.78	1,428.41	1,795.03	2,161.66	2,528.28	2,894.90	3,261.53	3,628.15	3,994.78	4,361.40	4,728.09	5,094.65	

MAP 617

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	702.80	1,069.42	1,436.05	1,802.31	2,169.29	2,535.92	2,902.54	3,269.17	3,635.79	4,002.41	4,369.04	4,735.66	5,102.29
1/4	22.02	347.81	710.44	1,077.06	1,443.68	1,810.31	2,176.93	2,543.56	2,910.12	3,276.80	3,643.43	4,010.05	4,376.68	4,743.30	5,109.37
1/2	26.87	355.15	718.07	1,084.70	1,451.32	1,817.95	2,184.57	2,551.19	2,917.82	3,284.44	3,651.07	4,017.69	4,384.31	4,750.94	5,116.45
3/4	31.73	362.48	725.71	1,092.34	1,458.96	1,825.21	2,192.21	2,558.83	2,925.46	3,292.08	3,658.70	4,025.33	4,391.95	4,758.58	5,123.53
1	36.59	369.81	733.35	1,099.97	1,466.60	1,833.22	2,199.85	2,566.47	2,933.09	3,299.72	3,666.34	4,032.97	4,399.59	4,766.21	5,130.61
1/4	42.75	377.15	740.99	1,107.61	1,474.24	1,840.86	2,207.48	2,574.11	2,940.73	3,307.36	3,673.98	4,040.60	4,407.23	4,773.85	5,136.45
1/2	48.90	384.48	748.63	1,115.25	1,481.87	1,848.50	2,215.12	2,581.75	2,948.37	3,314.99	3,681.52	4,048.24	4,414.87	4,781.49	5,142.30
3/4	55.49	391.82	756.26	1,122.89	1,488.51	1,856.14	2,222.76	2,589.38	2,956.01	3,322.63	3,689.26	4,055.88	4,422.50	4,789.13	5,148.15
2	62.07	399.15	763.90	1,130.53	1,497.15	1,863.77	2,230.40	2,597.02	2,963.65	3,330.27	3,696.89	4,063.52	4,430.14	4,796.77	5,153.99
1/4	68.78	406.61	771.54	1,138.16	1,504.79	1,871.41	2,238.04	2,604.66	2,971.28	3,337.91	3,704.53	4,071.16	4,437.78	4,804.40	5,158.81
1/2	75.49	414.07	779.18	1,145.80	1,512.43	1,879.05	2,245.67	2,612.30	2,978.92	3,345.55	3,712.17	4,078.79	4,445.42	4,812.04	5,163.62
3/4	82.20	421.52	786.82	1,153.44	1,520.06	1,886.69	2,253.31	2,619.94	2,986.56	3,353.18	3,719.81	4,086.43	4,453.06	4,819.68	5,168.43
3	88.91	428.98	794.45	1,161.08	1,527.70	1,894.33	2,260.95	2,627.57	2,994.20	3,360.82	3,727.45	4,094.07	4,460.69	4,827.32	5,173.24
1/4	95.63	436.44	802.09	1,168.72	1,535.34	1,901.96	2,268.59	2,635.21	3,001.84	3,368.46	3,736.08	4,101.71	4,468.33	4,834.96	5,176.92
1/2	102.34	443.90	809.73	1,176.35	1,542.98	1,909.60	2,276.23	2,642.85	3,009.70	3,376.10	3,742.72	4,109.35	4,475.97	4,842.59	5,180.80
3/4	109.05	451.36	817.37	1,183.99	1,550.62	1,917.24	2,283.86	2,650.49	3,017.11	3,383.74	3,750.36	4,116.98	4,483.61	4,850.23	5,184.28
4	115.76	458.81	825.01	1,191.63	1,558.25	1,924.88	2,291.50	2,658.13	3,024.75	3,391.37	3,758.00	4,124.62	4,491.25	4,857.87	5,187.96
1/4	122.59	466.40	832.64	1,199.27	1,565.89	1,932.52	2,299.14	2,665.76	3,032.39	3,399.01	3,765.64	4,132.26	4,498.88	4,865.51	5,190.51
1/2	129.43	473.98	840.28	1,206.91	1,573.63	1,940.15	2,306.78	2,673.40	3,040.03	3,406.65	3,773.27	4,139.90	4,506.52	4,873.15	5,193.05
3/4	136.26	481.57	847.92	1,214.54	1,581.17	1,947.79	2,314.42	2,681.04	3,047.66	3,414.29	3,780.91	4,147.54	4,514.16	4,880.78	5,195.60
5	143.10	489.15	855.56	1,222.18	1,588.81	1,955.43	2,322.05	2,688.62	3,055.30	3,421.93	3,788.55	4,155.17	4,521.80	4,888.42	5,198.15
1/4	149.93	496.73	863.20	1,229.82	1,596.32	1,963.09	2,329.59	2,696.32	3,062.94	3,429.55	3,796.19	4,162.81	4,529.44	4,896.06	5,199.56
1/2	156.77	504.32	870.83	1,237.46	1,604.08	1,970.71	2,337.33	2,703.95	3,070.58	3,437.20	3,803.83	4,170.45	4,537.07	4,903.70	5,200.98
3/4	163.60	511.90	878.47	1,245.11	1,611.72	1,978.34	2,344.97	2,711.59	3,078.82	3,444.84	3,811.46	4,178.09	4,544.71	4,911.34	5,202.40
6	170.44	519.49	886.11	1,252.73	1,619.36	1,985.98	2,352.61	2,719.23	3,085.85	3,452.48	3,819.10	4,185.73	4,552.35	4,918.97	5,203.81
1/4	177.40	527.12	893.75	1,260.37	1,627.00	1,993.62	2,360.24	2,726.87	3,093.49	3,460.12	3,826.74	4,193.36	4,559.99	4,926.61	5,204.23
1/2	184.36	534.76	901.39	1,268.01	1,634.63	2,001.26	2,367.88	2,734.51	3,101.13	3,467.75	3,834.38	4,201.00	4,567.63	4,934.25	5,204.66
3/4	191.32	542.40	909.02	1,275.65	1,642.27	2,008.90	2,375.52	2,742.14	3,108.77	3,475.39	3,842.02	4,208.64	4,575.26	4,941.89	5,205.08
7	198.28	550.04	916.66	1,283.29	1,649.91	2,016.53	2,383.16	2,749.78	3,116.41	3,483.03	3,849.65	4,216.28	4,582.90	4,949.53	
1/4	205.24	557.68	924.30	1,290.92	1,657.55	2,024.17	2,390.80	2,757.42	3,124.04	3,490.67	3,857.29	4,223.92	4,590.54	4,957.16	
1/2	212.20	565.31	931.94	1,298.56	1,665.19	2,031.81	2,398.43	2,765.06	3,131.68	3,498.31	3,864.93	4,231.55	4,598.18	4,964.80	
3/4	219.17	572.95	939.58	1,306.20	1,672.82	2,039.45	2,406.07	2,772.70	3,139.32	3,505.94	3,872.57	4,239.19	4,605.82	4,972.44	
8	226.13	580.59	947.21	1,313.84	1,680.46	2,047.09	2,413.71	2,780.33	3,146.96	3,513.58	3,880.21	4,246.83	4,613.45	4,980.08	
1/4	233.21	588.23	954.85	1,321.48	1,688.10	2,054.72	2,421.35	2,787.97	3,154.60	3,521.22	3,887.84	4,254.47	4,621.09	4,987.72	
1/2	240.30	595.87	962.49	1,329.11	1,695.74	2,062.36	2,428.99	2,795.61	3,162.23	3,528.86	3,895.48	4,262.11	4,628.73	4,995.35	
3/4	247.38	603.50	970.13	1,336.75	1,703.38	2,070.00	2,436.62	2,803.25	3,169.87	3,536.50	3,903.12	4,269.74	4,636.37	5,002.99	
9	254.47	611.14	977.77	1,344.39	1,711.01	2,077.64	2,444.26	2,810.89	3,177.51	3,544.13	3,910.76	4,277.38	4,644.01	5,010.63	
1/4	261.55	618.78	985.40	1,352.03	1,718.65	2,085.28	2,451.90	2,818.52	3,185.15	3,551.77	3,918.40	4,285.02	4,651.64	5,018.27	
1/2	268.64	626.42	993.04	1,359.67	1,726.29	2,092.91	2,459.54	2,826.16	3,192.79	3,559.41	3,926.03	4,292.66	4,659.28	5,025.91	
3/4	275.72	634.06	1,000.68	1,367.30	1,733.93	2,100.55	2,467.18	2,833.80	3,200.42	3,567.05	3,933.67	4,300.30	4,666.92	5,033.54	
10	282.81	641.69	1,008.32	1,374.94	1,741.57	2,108.19	2,474.81	2,841.44	3,208.06	3,574.69	3,941.31	4,307.93	4,674.56	5,041.18	
1/4	290.02	649.33	1,015.96	1,382.58	1,749.20	2,115.83	2,482.45	2,849.08	3,215.70	3,582.32	3,948.95	4,315.57	4,682.20	5,048.82	
1/2	297.42	656.97	1,023.69	1,390.22	1,756.84	2,123.47	2,490.09	2,856.71	3,223.34	3,589.96	3,956.59	4,323.21	4,689.83	5,056.46	
3/4	304.43	664.61	1,031.23	1,397.86	1,764.48	2,131.10	2,497.73	2,864.35	3,230.98	3,597.60	3,964.22	4,330.85	4,697.47	5,064.10	
11	311.64	672.25	1,038.67	1,405.49	1,772.12	2,138.74	2,505.37	2,871.99	3,238.61	3,605.24	3,971.86	4,338.49	4,705.11	5,071.73	
1/4	318.85	679.88	1,046.51	1,413.13	1,779.76	2,146.38	2,513.00	2,879.63	3,246.25	3,612.88	3,979.50	4,346.12	4,712.75	5,079.37	
1/2	326.06	687.52	1,054.15	1,420.77	1,787.39	2,154.02	2,520.64	2,887.27	3,253.89	3,620.51	3,987.14	4,353.76	4,720.39	5,087.01	
3/4	333.27	695.16	1,061.78	1,428.41	1,795.03	2,161.66	2,528.28	2,894.90	3,261.53	3,628.15	3,994.78	4,361.40	4,728.09	5,094.65	

MAP 617

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	351.72	696.36	1,041.00	1,385.64	1,730.28	2,074.92	2,419.56	2,764.20	3,108.84	3,453.48	3,798.12	4,142.76	4,487.40	4,829.23
1/4	21.49	358.90	703.54	1,048.18	1,392.82	1,737.46	2,082.10	2,426.74	2,771.36	3,116.02	3,460.66	3,805.30	4,149.94	4,494.58	4,835.82
1/2	26.61	366.08	710.72	1,055.36	1,400.00	1,744.64	2,089.28	2,433.92	2,778.56	3,123.20	3,467.84	3,812.48	4,157.12	4,501.76	4,842.41
3/4	31.73	373.26	717.90	1,062.54	1,407.18	1,751.82	2,096.46	2,441.10	2,785.74	3,130.38	3,475.02	3,819.58	4,164.30	4,508.88	4,849.00
1	36.84	380.44	725.08	1,069.72	1,414.36	1,759.00	2,103.64	2,448.28	2,792.92	3,137.56	3,482.20	3,826.84	4,171.48	4,516.00	4,855.58
1/4	43.50	387.62	732.26	1,076.90	1,421.54	1,766.18	2,110.82	2,455.46	2,800.10	3,144.74	3,489.38	3,834.02	4,178.66	4,523.11	4,861.16
1/2	50.16	394.80	739.44	1,084.08	1,428.72	1,773.36	2,118.00	2,462.64	2,807.28	3,151.92	3,496.56	3,841.20	4,185.84	4,530.23	4,866.73
3/4	57.34	401.98	746.62	1,091.26	1,435.90	1,780.54	2,125.18	2,469.82	2,814.46	3,159.10	3,503.74	3,848.38	4,193.02	4,537.35	4,872.30
2	64.52	409.16	753.80	1,098.44	1,443.08	1,787.72	2,132.36	2,477.00	2,821.64	3,166.28	3,510.92	3,855.56	4,200.20	4,544.47	4,877.88
1/4	71.70	416.34	760.98	1,105.62	1,450.26	1,794.90	2,139.54	2,484.18	2,828.82	3,173.46	3,518.10	3,862.74	4,207.38	4,551.59	4,882.39
1/2	78.88	423.52	768.16	1,112.80	1,457.44	1,802.08	2,146.72	2,491.36	2,836.00	3,180.64	3,525.28	3,869.92	4,214.58	4,558.71	4,886.90
3/4	86.06	430.70	775.34	1,119.98	1,464.62	1,809.26	2,153.90	2,498.54	2,843.18	3,187.82	3,532.46	3,877.10	4,221.74	4,565.83	4,891.41
3	93.24	437.88	782.52	1,127.16	1,471.80	1,816.44	2,161.08	2,505.72	2,850.36	3,195.00	3,539.64	3,884.28	4,228.92	4,572.95	4,895.92
1/4	100.42	445.06	789.70	1,134.34	1,478.98	1,823.62	2,168.26	2,512.90	2,857.54	3,202.18	3,546.82	3,891.46	4,236.10	4,580.07	4,899.37
1/2	107.60	452.24	796.88	1,141.52	1,486.16	1,830.80	2,175.44	2,520.08	2,864.72	3,209.36	3,554.00	3,898.64	4,243.26	4,587.19	4,902.82
3/4	114.78	459.42	804.06	1,148.70	1,493.34	1,837.98	2,182.62	2,527.26	2,871.90	3,216.54	3,561.18	3,905.82	4,250.46	4,594.30	4,906.27
4	121.96	466.60	811.24	1,155.88	1,500.52	1,845.16	2,189.80	2,534.44	2,879.08	3,223.72	3,568.36	3,913.00	4,257.64	4,601.42	4,909.72
1/4	129.14	473.78	818.42	1,163.06	1,507.70	1,852.34	2,196.98	2,541.62	2,886.26	3,230.90	3,575.54	3,920.18	4,264.82	4,608.54	4,912.11
1/2	136.32	480.96	825.60	1,170.24	1,514.86	1,859.52	2,204.16	2,548.80	2,893.44	3,238.08	3,582.72	3,927.36	4,272.00	4,615.66	4,914.49
3/4	143.50	488.14	832.78	1,177.42	1,522.08	1,866.70	2,211.34	2,555.98	2,900.62	3,245.26	3,589.90	3,934.54	4,279.18	4,622.78	4,916.88
5	150.68	495.32	839.96	1,184.60	1,529.24	1,873.88	2,218.52	2,563.16	2,907.80	3,252.44	3,597.08	3,941.72	4,286.36	4,629.90	4,919.27
1/4	157.86	502.50	847.14	1,191.78	1,536.42	1,881.06	2,225.70	2,570.34	2,914.98	3,259.62	3,604.26	3,948.98	4,293.54	4,637.02	4,920.59
1/2	165.04	509.68	854.32	1,198.96	1,543.60	1,888.24	2,232.88	2,577.52	2,922.16	3,266.80	3,611.44	3,956.08	4,300.72	4,644.14	4,921.92
3/4	172.22	516.86	861.50	1,206.14	1,550.78	1,895.42	2,240.06	2,584.70	2,929.34	3,273.98	3,618.62	3,963.26	4,307.90	4,651.26	4,923.24
6	179.40	524.04	868.68	1,213.32	1,557.96	1,902.60	2,247.24	2,591.88	2,936.52	3,281.16	3,625.80	3,970.44	4,315.08	4,656.38	4,924.56
1/4	186.58	531.22	875.86	1,220.50	1,565.14	1,909.78	2,254.42	2,599.06	2,943.70	3,288.34	3,632.98	3,977.62	4,322.26	4,665.49	4,924.96
1/2	193.76	538.40	883.04	1,227.68	1,572.32	1,916.96	2,261.60	2,606.24	2,950.88	3,295.52	3,640.16	3,984.80	4,329.44	4,672.61	4,925.35
3/4	200.94	545.58	890.22	1,234.86	1,579.50	1,924.14	2,268.78	2,613.42	2,958.06	3,302.70	3,647.34	3,991.98	4,336.62	4,679.73	4,925.75
7	208.12	552.76	897.40	1,242.04	1,586.68	1,931.32	2,275.96	2,620.60	2,965.24	3,309.88	3,654.52	3,999.16	4,343.80	4,686.85	
1/4	215.30	559.94	904.58	1,249.22	1,593.86	1,938.50	2,283.14	2,627.78	2,972.42	3,317.06	3,661.70	4,006.34	4,350.98	4,693.97	
1/2	222.48	567.12	911.76	1,256.40	1,601.04	1,945.68	2,290.32	2,634.96	2,979.60	3,324.24	3,668.88	4,013.52	4,358.16	4,701.09	
3/4	229.66	574.30	918.94	1,263.58	1,608.22	1,952.86	2,297.50	2,642.14	2,986.78	3,331.42	3,676.06	4,020.70	4,365.34	4,708.21	
8	236.84	581.48	926.12	1,270.76	1,615.40	1,960.04	2,304.68	2,649.32	2,993.96	3,338.60	3,683.24	4,027.88	4,372.52	4,715.33	
1/4	244.02	588.66	933.30	1,277.94	1,622.56	1,967.22	2,311.86	2,656.50	3,001.14	3,345.78	3,690.42	4,035.06	4,379.70	4,722.45	
1/2	251.20	595.84	940.48	1,285.12	1,629.76	1,974.40	2,319.04	2,663.68	3,008.32	3,352.95	3,697.60	4,042.24	4,386.88	4,729.57	
3/4	258.38	603.02	947.66	1,292.30	1,636.94	1,981.58	2,326.22	2,670.88	3,015.50	3,360.14	3,704.78	4,049.42	4,394.06	4,736.68	
9	265.56	610.20	954.84	1,299.48	1,644.12	1,988.76	2,333.40	2,678.04	3,022.68	3,367.32	3,711.96	4,056.60	4,401.24	4,743.80	
1/4	272.74	617.38	962.02	1,306.66	1,651.30	1,995.94	2,340.58	2,685.22	3,029.86	3,374.50	3,719.14	4,063.78	4,408.42	4,750.92	
1/2	279.92	624.56	969.20	1,313.84	1,658.48	2,003.12	2,347.76	2,692.40	3,037.04	3,381.68	3,726.32	4,070.96	4,415.60	4,758.04	
3/4	287.10	631.74	976.38	1,321.02	1,665.66	2,010.30	2,354.94	2,699.58	3,044.22	3,388.86	3,733.50	4,078.14	4,422.78	4,765.16	
10	294.28	638.92	983.56	1,328.20	1,672.84	2,017.48	2,362.12	2,706.76	3,051.40	3,396.04	3,740.68	4,085.32	4,429.96	4,772.26	
1/4	301.46	646.10	990.74	1,335.38	1,680.02	2,024.66	2,369.30	2,713.94	3,058.58	3,403.22	3,747.86	4,092.50	4,437.14	4,779.40	
1/2	308.64	653.28	997.92	1,342.56	1,687.20	2,031.84	2,376.48	2,721.12	3,065.78	3,410.40	3,755.04	4,099.68	4,444.32	4,786.52	
3/4	315.82	660.46	1,005.10	1,349.74	1,694.38	2,039.02	2,383.66	2,728.30	3,072.94	3,417.58	3,762.22	4,106.86	4,451.50	4,793.64	
11	323.00	667.64	1,012.26	1,356.92	1,701.56	2,046.20	2,390.84	2,735.48	3,080.12	3,424.76	3,769.40	4,114.04	4,458.88	4,800.76	
1/4	330.18	674.82	1,019.46	1,364.10	1,708.74	2,053.38	2,398.02	2,742.66	3,087.30	3,431.94	3,776.58	4,121.22	4,465.86	4,807.87	
1/2	337.36	682.00	1,026.64	1,371.28	1,715.92	2,060.56	2,405.20	2,749.84	3,094.48	3,439.12	3,783.76	4,128.40	4,473.04	4,814.99	
3/4	344.54	689.18	1,033.83	1,378.46	1,723.10	2,067.74	2,412.38	2,757.02	3,101.66	3,446.30	3,790.94	4,135.58	4,480.22	4,822.11	

MAP 617

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	351.72	696.36	1,041.00	1,385.64	1,730.28	2,074.92	2,419.56	2,764.20	3,108.84	3,453.48	3,798.12	4,142.76	4,487.40	4,832.03
1/4	21.49	358.90	703.54	1,048.18	1,392.82	1,737.46	2,082.10	2,426.74	2,771.36	3,116.02	3,460.66	3,805.30	4,149.94	4,494.58	4,839.22
1/2	26.61	366.08	710.72	1,055.36	1,400.00	1,744.64	2,089.28	2,433.92	2,778.56	3,123.20	3,467.84	3,812.48	4,157.12	4,501.76	4,846.40
3/4	31.73	373.26	717.90	1,062.54	1,407.18	1,751.82	2,096.46	2,441.10	2,785.74	3,130.38	3,475.02	3,819.58	4,164.30	4,508.88	4,853.42
1	36.84	380.44	725.08	1,069.72	1,414.36	1,759.00	2,103.64	2,448.28	2,792.92	3,137.56	3,482.20	3,826.84	4,171.48	4,516.00	4,860.52
1/4	43.50	387.62	732.26	1,076.90	1,421.54	1,766.18	2,110.82	2,455.46	2,800.10	3,144.74	3,489.38	3,834.02	4,178.66	4,523.11	4,867.65
1/2	50.16	394.80	739.44	1,084.08	1,428.72	1,773.36	2,118.00	2,462.64	2,807.28	3,151.92	3,496.56	3,841.20	4,185.84	4,530.23	4,874.77
3/4	57.34	401.98	746.62	1,091.26	1,435.90	1,780.54	2,125.18	2,469.82	2,814.46	3,159.10	3,503.74	3,848.38	4,193.02	4,537.35	4,881.89
2	64.52	409.16	753.80	1,098.44	1,443.08	1,787.72	2,132.36	2,477.00	2,821.64	3,166.28	3,510.92	3,855.56	4,200.20	4,544.77	4,889.31
1/4	71.70	416.34	760.98	1,105.62	1,450.26	1,794.90	2,139.54	2,484.18	2,828.82	3,173.46	3,518.10	3,862.74	4,207.38	4,551.59	4,896.13
1/2	78.88	423.52	768.16	1,112.80	1,457.44	1,802.08	2,146.72	2,491.36	2,836.00	3,180.64	3,525.28	3,869.92	4,214.58	4,558.71	4,903.25
3/4	86.06	430.70	775.34	1,119.98	1,464.62	1,809.26	2,153.90	2,499.54	2,843.18	3,187.82	3,532.46	3,877.10	4,221.74	4,565.83	4,909.37
3	93.24	437.88	782.52	1,127.16	1,471.80	1,816.44	2,161.08	2,505.72	2,850.36	3,195.00	3,539.64	3,884.28	4,228.92	4,572.95	4,915.51
1/4	100.42	445.06	789.70	1,134.34	1,478.98	1,823.62	2,168.26	2,512.90	2,857.54	3,202.18	3,546.82	3,891.46	4,236.10	4,580.07	4,921.61
1/2	107.60	452.24	796.88	1,141.52	1,486.16	1,830.80	2,175.44	2,520.08	2,864.72	3,209.36	3,554.00	3,898.64	4,243.26	4,587.19	4,928.75
3/4	114.78	459.42	804.06	1,148.70	1,493.34	1,837.98	2,182.62	2,527.26	2,871.90	3,216.54	3,561.18	3,905.82	4,250.46	4,594.30	4,935.89
4	121.96	466.60	811.24	1,155.88	1,500.52	1,845.16	2,189.80	2,534.44	2,879.08	3,223.72	3,568.36	3,913.00	4,257.64	4,601.42	4,942.99
1/4	129.14	473.78	818.42	1,163.06	1,507.70	1,852.34	2,196.98	2,541.62	2,886.26	3,230.90	3,575.54	3,920.18	4,264.82	4,608.54	4,950.13
1/2	136.32	480.96	825.60	1,170.24	1,514.86	1,859.52	2,204.16	2,548.80	2,893.44	3,238.08	3,582.72	3,927.36	4,272.00	4,615.66	4,957.27
3/4	143.50	488.14	832.78	1,177.42	1,522.08	1,866.70	2,211.34	2,555.98	2,900.62	3,245.26	3,589.90	3,934.54	4,279.18	4,622.78	4,964.41
5	150.68	495.32	839.96	1,184.60	1,529.24	1,873.88	2,218.52	2,563.16	2,907.80	3,252.44	3,597.08	3,941.72	4,286.36	4,629.90	4,971.55
1/4	157.86	502.50	847.14	1,191.78	1,536.42	1,881.06	2,225.70	2,570.30	2,914.98	3,259.62	3,604.26	3,948.90	4,293.54	4,637.02	4,978.69
1/2	165.04	509.68	854.32	1,198.96	1,543.60	1,888.24	2,232.88	2,577.52	2,922.16	3,266.80	3,611.44	3,956.08	4,300.72	4,644.14	4,985.83
3/4	172.22	516.86	861.50	1,206.14	1,550.78	1,895.42	2,240.06	2,584.70	2,929.34	3,273.98	3,618.62	3,963.26	4,307.90	4,651.26	4,992.97
6	179.40	524.04	868.68	1,213.32	1,557.96	1,902.60	2,247.24	2,591.88	2,936.52	3,281.16	3,625.80	3,970.44	4,315.08	4,658.38	4,999.11
1/4	186.58	531.22	875.86	1,220.50	1,565.14	1,909.78	2,254.42	2,599.06	2,943.70	3,288.34	3,632.98	3,977.62	4,322.26	4,665.49	5,006.25
1/2	193.76	538.40	883.04	1,227.68	1,572.32	1,916.96	2,261.60	2,606.24	2,950.88	3,295.52	3,640.16	3,984.80	4,329.44	4,672.61	5,013.39
3/4	200.94	545.58	890.22	1,234.86	1,579.50	1,924.14	2,268.78	2,613.42	2,958.06	3,302.70	3,647.34	3,991.98	4,336.62	4,679.73	5,020.53
7	208.12	552.76	897.40	1,242.04	1,586.68	1,931.32	2,275.96	2,620.60	2,965.24	3,309.88	3,654.52	3,999.16	4,343.80	4,686.85	5,027.67
1/4	215.30	559.94	904.58	1,249.22	1,593.86	1,938.50	2,283.14	2,627.78	2,972.42	3,317.06	3,661.70	4,006.34	4,350.98	4,693.97	5,034.81
1/2	222.48	567.12	911.76	1,256.40	1,601.04	1,945.68	2,290.32	2,634.96	2,979.60	3,324.24	3,668.88	4,013.52	4,358.16	4,701.09	5,041.95
3/4	229.66	574.30	918.94	1,263.58	1,608.22	1,952.60	2,297.50	2,642.14	2,986.78	3,331.42	3,676.06	4,020.70	4,365.34	4,708.21	5,049.09
8	236.84	581.48	926.12	1,270.76	1,615.40	1,960.04	2,304.68	2,649.32	2,993.96	3,338.60	3,683.24	4,027.88	4,372.52	4,715.33	5,056.23
1/4	244.02	588.66	933.30	1,277.94	1,622.56	1,967.22	2,311.86	2,656.50	3,001.14	3,345.78	3,690.42	4,035.06	4,379.70	4,722.45	5,063.37
1/2	251.20	595.84	940.48	1,285.12	1,629.76	1,974.40	2,319.04	2,663.68	3,008.32	3,352.95	3,697.60	4,042.24	4,386.88	4,729.57	5,070.51
3/4	258.38	603.02	947.66	1,292.30	1,636.94	1,981.58	2,326.22	2,670.86	3,015.50	3,360.14	3,704.78	4,049.42	4,394.06	4,736.69	5,077.65
9	265.56	610.20	954.84	1,299.48	1,644.12	1,988.76	2,333.40	2,678.04	3,022.68	3,367.32	3,711.96	4,056.60	4,401.24	4,743.80	5,084.79
1/4	272.74	617.38	962.02	1,306.66	1,651.30	1,995.94	2,340.58	2,685.22	3,029.86	3,374.50	3,719.14	4,063.78	4,408.42	4,750.92	5,091.93
1/2	279.92	624.56	969.20	1,313.84	1,658.48	2,003.12	2,347.76	2,692.40	3,037.04	3,381.68	3,726.32	4,070.96	4,415.60	4,758.04	5,099.07
3/4	287.10	631.74	976.38	1,321.02	1,665.66	2,010.30	2,354.94	2,699.58	3,044.22	3,388.86	3,733.50	4,078.14	4,422.78	4,765.16	5,106.21
10	294.28	638.92	983.56	1,328.20	1,672.84	2,017.48	2,362.12	2,706.76	3,051.40	3,396.04	3,740.68	4,085.32	4,429.96	4,772.26	5,113.35
1/4	301.46	646.10	990.74	1,335.38	1,680.02	2,024.66	2,369.30	2,713.94	3,058.58	3,403.22	3,747.86	4,092.50	4,437.14	4,779.40	5,120.49
1/2	308.64	653.28	997.92	1,342.56	1,687.20	2,031.84	2,376.48	2,721.12	3,065.78	3,410.40	3,755.04	4,099.68	4,444.32	4,786.52	5,127.63
3/4	315.82	660.46	1,005.10	1,349.74	1,694.36	2,039.02	2,383.66	2,728.30	3,072.94	3,417.58	3,762.22	4,106.86	4,451.50	4,793.64	5,134.77
11	323.00	667.64	1,012.26	1,356.92	1,701.56	2,046.20	2,390.84	2,735.48	3,080.12	3,424.76	3,769.40	4,114.04	4,458.88	4,800.76	5,141.91
1/4	330.18	674.82	1,019.46	1,364.10	1,708.74	2,053.38	2,398.02	2,742.66	3,087.30	3,431.94	3,776.58	4,121.22	4,466.06	4,807.87	5,149.05
1/2	337.36	682.00	1,026.64	1,371.28	1,715.92	2,060.56	2,405.20	2,749.84	3,094.48	3,439.12	3,783.76	4,128.40	4,473.04	4,814.99	5,156.19
3/4	344.54	689.18	1,033.83	1,378.46	1,723.10	2,067.74	2,412.38	2,757.02	3,101.86	3,446.30	3,790.94	4,135.58	4,480.22	4,822.11	5,163.33

MAP 617

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	1,100.58	1,466.01	1,831.43	2,196.55	2,562.28	2,927.70	3,293.13	3,658.10	3,919.71	4,196.46	4,472.69	4,749.32
1/4	22.80	380.14	744.72	1,108.20	1,473.62	1,839.04	2,204.47	2,569.89	2,935.31	3,300.74	3,644.06	3,925.58	4,202.22	4,478.65	4,754.65
1/2	28.23	387.74	752.28	1,115.61	1,481.23	1,846.66	2,212.08	2,577.50	2,942.93	3,308.35	3,650.02	3,931.44	4,207.98	4,484.41	4,759.97
3/4	33.66	395.34	759.85	1,123.42	1,488.85	1,854.27	2,219.69	2,585.12	2,950.54	3,315.96	3,655.88	3,937.30	4,213.74	4,490.17	4,765.29
1	39.06	402.95	767.41	1,131.03	1,496.47	1,861.88	2,227.31	2,592.73	2,958.15	3,323.58	3,661.74	3,943.06	4,219.49	4,495.93	4,770.62
1/4	46.15	410.55	774.97	1,138.65	1,504.07	1,869.90	2,234.92	2,600.34	2,965.77	3,331.19	3,667.61	3,948.82	4,225.25	4,501.69	4,775.07
1/2	53.21	418.15	782.54	1,146.26	1,511.68	1,877.11	2,242.53	2,607.96	2,973.38	3,338.80	3,673.47	3,954.58	4,231.01	4,507.44	4,779.53
3/4	60.81	425.76	790.10	1,153.87	1,519.30	1,884.72	2,250.15	2,615.57	2,980.99	3,348.42	3,679.33	3,960.34	4,238.77	4,513.20	4,783.99
2	68.41	433.36	797.66	1,161.49	1,526.91	1,892.33	2,257.76	2,623.18	2,988.61	3,354.03	3,685.19	3,966.10	4,242.53	4,518.96	4,788.44
1/4	76.02	440.96	805.22	1,169.10	1,534.52	1,899.95	2,265.37	2,630.79	2,996.22	3,361.84	3,691.06	3,971.96	4,248.29	4,524.72	4,792.03
1/2	83.62	448.56	812.79	1,176.71	1,542.14	1,907.56	2,272.96	2,638.48	3,003.83	3,369.26	3,698.92	3,977.62	4,254.05	4,530.48	4,795.61
3/4	91.22	456.17	820.35	1,184.33	1,549.75	1,915.17	2,280.60	2,646.02	3,011.44	3,376.87	3,702.78	3,983.38	4,259.81	4,538.24	4,799.20
3	98.83	463.77	827.91	1,191.94	1,557.36	1,922.79	2,288.21	2,653.63	3,019.06	3,384.48	3,708.65	3,989.13	4,265.57	4,542.00	4,802.79
1/4	106.43	471.37	835.48	1,199.55	1,564.98	1,930.40	2,295.82	2,661.25	3,026.67	3,392.09	3,714.51	3,994.89	4,271.33	4,547.76	4,805.50
1/2	114.03	478.98	843.04	1,207.16	1,572.59	1,938.01	2,303.44	2,668.86	3,034.28	3,399.71	3,720.37	4,000.65	4,277.08	4,553.52	4,808.22
3/4	121.64	486.56	850.60	1,214.78	1,580.20	1,945.63	2,311.05	2,676.47	3,041.90	3,407.32	3,726.24	4,006.41	4,282.84	4,559.28	4,810.94
4	129.24	494.18	858.17	1,222.39	1,587.81	1,953.24	2,318.66	2,684.09	3,049.51	3,414.93	3,732.10	4,012.17	4,288.60	4,565.03	4,813.65
1/4	136.84	501.79	865.73	1,230.00	1,595.43	1,960.85	2,326.26	2,691.70	3,057.12	3,422.55	3,737.96	4,017.93	4,294.36	4,570.79	4,815.50
1/2	144.44	509.39	873.29	1,237.62	1,603.04	1,968.46	2,333.89	2,699.31	3,064.74	3,430.16	3,743.82	4,023.69	4,300.12	4,576.55	4,817.35
3/4	152.05	516.99	880.85	1,245.23	1,610.65	1,978.08	2,341.50	2,706.92	3,072.35	3,437.77	3,749.69	4,029.45	4,305.88	4,582.31	4,819.20
5	159.65	524.59	888.42	1,252.84	1,618.27	1,983.69	2,349.11	2,714.54	3,079.96	3,445.39	3,755.55	4,035.21	4,311.64	4,588.07	4,821.05
1/4	167.25	532.20	895.98	1,260.46	1,625.88	1,991.30	2,356.73	2,722.15	3,087.57	3,453.00	3,761.41	4,040.97	4,317.40	4,593.83	4,822.03
1/2	174.86	539.80	903.54	1,268.07	1,633.49	1,998.92	2,364.34	2,729.76	3,095.19	3,460.61	3,767.28	4,046.72	4,323.16	4,599.59	4,823.00
3/4	182.46	547.40	911.11	1,275.68	1,641.11	2,006.53	2,371.95	2,737.38	3,102.80	3,468.22	3,773.14	4,052.48	4,328.92	4,605.35	4,823.98
6	190.06	555.01	918.67	1,283.29	1,648.72	2,014.14	2,379.57	2,744.99	3,110.41	3,475.70	3,779.00	4,058.24	4,334.67	4,611.11	4,824.96
1/4	197.67	562.61	926.23	1,290.91	1,656.33	2,021.76	2,387.18	2,752.60	3,118.03	3,483.17	3,784.87	4,064.00	4,340.30	4,616.87	4,825.18
1/2	205.27	570.21	933.80	1,298.52	1,663.94	2,029.37	2,394.79	2,760.22	3,125.64	3,490.65	3,790.75	4,069.76	4,346.19	4,622.62	4,825.39
3/4	212.87	577.82	941.36	1,306.13	1,671.56	2,036.98	2,402.41	2,767.83	3,133.25	3,498.12	3,796.59	4,075.52	4,351.95	4,626.38	4,825.60
7	220.47	585.42	948.92	1,313.75	1,679.17	2,044.59	2,410.02	2,775.44	3,140.87	3,505.34	3,802.45	4,081.28	4,357.71	4,634.14	
1/4	228.08	593.02	956.48	1,321.36	1,686.78	2,052.21	2,417.63	2,783.05	3,148.48	3,512.55	3,808.32	4,087.04	4,363.47	4,639.90	
1/2	235.68	600.62	964.05	1,328.97	1,694.40	2,059.82	2,425.24	2,790.67	3,156.09	3,519.77	3,814.18	4,092.80	4,369.23	4,645.66	
3/4	243.28	608.23	971.61	1,336.59	1,702.01	2,067.43	2,432.86	2,798.28	3,163.70	3,526.98	3,820.04	4,098.56	4,374.99	4,651.42	
8	250.89	615.83	979.17	1,344.20	1,709.62	2,075.05	2,440.47	2,805.89	3,171.32	3,533.94	3,825.91	4,104.31	4,380.75	4,657.18	
1/4	258.49	623.43	986.74	1,351.81	1,717.24	2,082.66	2,448.08	2,813.51	3,178.93	3,540.90	3,831.77	4,110.07	4,386.51	4,662.94	
1/2	266.09	631.04	994.30	1,359.42	1,724.85	2,090.27	2,455.70	2,821.12	3,186.54	3,547.86	3,837.63	4,115.83	4,392.26	4,668.70	
3/4	273.70	638.64	1,001.86	1,367.04	1,732.46	2,097.89	2,463.31	2,828.73	3,194.16	3,554.82	3,843.50	4,121.59	4,398.02	4,674.46	
9	281.30	646.24	1,009.43	1,374.65	1,740.07	2,105.50	2,470.92	2,836.35	3,201.77	3,561.52	3,849.36	4,127.35	4,403.78	4,680.21	
1/4	288.90	653.84	1,016.99	1,382.26	1,747.69	2,113.11	2,478.54	2,843.96	3,209.38	3,568.22	3,855.22	4,133.11	4,409.54	4,685.97	
1/2	296.50	661.45	1,024.55	1,389.88	1,755.30	2,120.72	2,486.15	2,851.57	3,217.00	3,574.92	3,861.08	4,138.87	4,415.30	4,691.73	
3/4	304.11	669.05	1,032.12	1,397.49	1,762.91	2,128.34	2,493.76	2,859.18	3,224.61	3,581.62	3,866.95	4,144.63	4,421.06	4,697.49	
10	311.71	676.65	1,039.68	1,405.10	1,770.53	2,135.95	2,501.37	2,868.80	3,232.22	3,588.07	3,872.81	4,150.39	4,426.82	4,703.25	
1/4	319.31	684.22	1,047.29	1,412.72	1,778.14	2,143.56	2,508.99	2,876.41	3,239.83	3,594.51	3,878.67	4,156.15	4,432.56	4,709.01	
1/2	326.92	691.78	1,054.90	1,420.33	1,785.75	2,151.18	2,516.60	2,882.02	3,247.45	3,600.95	3,884.54	4,161.90	4,438.34	4,714.77	
3/4	334.52	699.34	1,062.52	1,427.94	1,793.37	2,158.79	2,524.21	2,889.64	3,255.06	3,607.66	3,890.40	4,167.66	4,444.10	4,720.53	
11	342.12	706.91	1,070.13	1,435.55	1,800.98	2,166.40	2,531.83	2,897.25	3,262.67	3,613.58	3,896.26	4,173.42	4,449.85	4,726.29	
1/4	349.73	714.47	1,077.74	1,443.17	1,808.59	2,174.02	2,539.44	2,904.86	3,270.29	3,619.77	3,902.13	4,179.18	4,455.61	4,732.05	
1/2	357.33	722.03	1,085.38	1,450.78	1,816.20	2,181.63	2,547.05	2,912.48	3,277.90	3,625.95	3,907.99	4,184.94	4,461.37	4,737.80	
3/4	364.93	729.59	1,092.97	1,458.39	1,823.82	2,189.24	2,554.67	2,920.09	3,285.51	3,632.14	3,913.85	4,190.70	4,467.13	4,743.56	

MAP 617

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	1,100.58	1,466.01	1,831.43	2,196.85	2,562.28	2,927.70	3,293.13	3,658.10	3,919.71	4,196.46	4,472.89	4,749.32
1/4	22.80	380.14	744.72	1,108.20	1,473.62	1,839.04	2,204.47	2,569.89	2,935.31	3,300.74	3,644.06	3,925.58	4,202.22	4,478.65	4,754.65
1/2	28.23	387.74	752.28	1,115.61	1,481.23	1,846.66	2,212.08	2,577.50	2,942.93	3,308.35	3,650.02	3,931.44	4,207.98	4,484.41	4,759.97
3/4	33.66	395.34	759.85	1,123.42	1,488.85	1,854.27	2,219.69	2,585.12	2,950.54	3,315.96	3,655.88	3,937.30	4,213.74	4,490.17	4,765.29
1	39.06	402.95	767.41	1,131.03	1,496.46	1,861.88	2,227.31	2,592.73	2,958.15	3,323.58	3,661.74	3,943.06	4,219.49	4,495.93	4,770.62
1/4	46.15	410.55	774.97	1,138.65	1,504.07	1,869.50	2,234.92	2,600.34	2,965.77	3,331.19	3,667.61	3,948.82	4,225.25	4,501.69	4,775.07
1/2	53.21	418.15	782.54	1,146.26	1,511.68	1,877.11	2,242.53	2,607.96	2,973.38	3,338.80	3,673.47	3,954.58	4,231.01	4,507.44	4,779.53
3/4	60.81	425.76	790.10	1,153.87	1,519.30	1,884.72	2,250.15	2,615.57	2,980.99	3,348.42	3,679.33	3,960.34	4,238.77	4,513.20	4,783.99
2	68.41	433.36	797.66	1,161.49	1,526.91	1,892.33	2,257.76	2,623.18	2,988.61	3,354.03	3,685.19	3,966.10	4,242.53	4,518.96	4,788.44
1/4	76.02	440.96	805.22	1,169.10	1,534.52	1,899.95	2,265.37	2,630.79	2,996.22	3,361.84	3,691.06	3,971.86	4,248.29	4,524.72	4,792.03
1/2	83.62	448.56	812.79	1,176.71	1,542.14	1,907.56	2,272.96	2,638.41	3,003.83	3,369.26	3,696.92	3,977.62	4,254.05	4,530.48	4,795.61
3/4	91.22	456.17	820.35	1,184.33	1,549.75	1,915.17	2,280.60	2,646.02	3,011.44	3,376.87	3,702.78	3,983.38	4,259.81	4,538.24	4,799.20
3	98.83	463.77	827.91	1,191.94	1,557.36	1,922.79	2,288.21	2,653.63	3,019.06	3,384.48	3,708.65	3,989.13	4,265.57	4,542.00	4,802.79
1/4	106.43	471.37	835.48	1,199.55	1,564.98	1,930.40	2,295.82	2,661.25	3,028.67	3,392.09	3,714.51	3,994.89	4,271.33	4,547.76	4,805.50
1/2	114.03	478.98	843.04	1,207.16	1,572.59	1,938.01	2,303.44	2,668.86	3,034.28	3,399.71	3,720.37	4,000.65	4,277.08	4,553.52	4,808.22
3/4	121.64	486.56	850.60	1,214.78	1,580.20	1,945.63	2,311.05	2,676.47	3,041.90	3,407.32	3,726.24	4,006.41	4,282.84	4,559.28	4,810.94
4	129.24	494.18	858.17	1,222.39	1,587.81	1,953.24	2,318.66	2,684.09	3,049.51	3,414.93	3,732.10	4,012.17	4,288.60	4,565.03	4,813.65
1/4	136.84	501.79	865.73	1,230.00	1,595.43	1,960.85	2,326.26	2,691.70	3,057.12	3,422.55	3,737.96	4,017.93	4,294.36	4,570.79	4,815.50
1/2	144.44	509.39	873.29	1,237.62	1,603.04	1,968.46	2,333.89	2,699.31	3,064.74	3,430.16	3,743.82	4,023.69	4,300.12	4,576.55	4,817.35
3/4	152.05	516.99	880.85	1,245.23	1,610.65	1,978.08	2,341.50	2,706.92	3,072.35	3,437.77	3,749.69	4,029.45	4,305.88	4,582.31	4,819.20
5	159.65	524.59	888.42	1,252.84	1,618.27	1,983.69	2,349.11	2,714.54	3,079.96	3,445.39	3,755.55	4,035.21	4,311.64	4,588.07	4,821.05
1/4	167.25	532.20	895.98	1,260.46	1,625.88	1,991.30	2,356.73	2,722.15	3,087.57	3,453.00	3,761.41	4,040.97	4,317.40	4,593.83	4,822.03
1/2	174.86	539.80	903.54	1,268.97	1,633.49	1,998.92	2,364.34	2,729.76	3,095.19	3,460.61	3,767.28	4,046.72	4,323.16	4,599.59	4,823.00
3/4	182.46	547.40	911.11	1,275.68	1,641.11	2,006.53	2,371.95	2,737.38	3,102.80	3,468.22	3,773.14	4,052.48	4,328.92	4,605.35	4,823.98
6	190.06	555.01	918.67	1,283.29	1,648.72	2,014.14	2,379.57	2,744.99	3,110.41	3,475.70	3,779.00	4,058.24	4,334.67	4,611.11	4,824.96
1/4	197.67	562.61	926.23	1,290.91	1,656.33	2,021.76	2,387.18	2,752.60	3,118.03	3,483.17	3,784.87	4,064.00	4,340.30	4,616.87	4,825.18
1/2	205.27	570.21	933.80	1,298.52	1,663.94	2,029.37	2,394.79	2,760.22	3,125.64	3,490.65	3,790.75	4,069.76	4,346.19	4,622.62	4,825.39
3/4	212.87	577.82	941.36	1,306.13	1,671.56	2,036.98	2,402.41	2,767.83	3,133.25	3,498.12	3,796.59	4,075.52	4,351.95	4,626.38	4,825.60
7	220.47	585.42	948.92	1,313.75	1,679.17	2,044.59	2,410.02	2,775.44	3,140.87	3,505.34	3,802.45	4,081.28	4,357.71	4,634.14	
1/4	228.08	593.02	956.48	1,321.36	1,686.78	2,052.21	2,417.63	2,783.05	3,148.48	3,512.55	3,808.32	4,087.04	4,363.47	4,639.90	
1/2	235.68	600.62	964.05	1,328.97	1,694.40	2,059.82	2,425.24	2,790.67	3,156.09	3,519.77	3,814.18	4,092.80	4,369.23	4,645.66	
3/4	243.28	608.23	971.61	1,336.59	1,702.01	2,067.43	2,432.86	2,796.28	3,163.70	3,526.98	3,820.04	4,098.56	4,374.99	4,651.42	
8	250.89	615.83	979.17	1,344.20	1,709.62	2,075.05	2,440.47	2,805.89	3,171.32	3,533.94	3,825.91	4,104.31	4,380.75	4,657.18	
1/4	258.49	623.43	986.74	1,351.81	1,717.24	2,082.66	2,448.08	2,813.51	3,178.93	3,540.90	3,831.77	4,110.07	4,386.51	4,662.94	
1/2	266.09	631.04	994.30	1,359.42	1,724.85	2,090.27	2,455.70	2,821.12	3,186.54	3,547.86	3,837.63	4,115.83	4,392.26	4,668.70	
3/4	273.70	638.64	1,001.86	1,367.04	1,732.46	2,097.89	2,463.31	2,828.73	3,194.16	3,554.82	3,843.50	4,121.59	4,398.02	4,674.46	
9	281.30	646.24	1,009.43	1,374.65	1,740.07	2,105.50	2,470.92	2,836.35	3,201.77	3,561.52	3,849.36	4,127.35	4,403.78	4,680.21	
1/4	288.90	653.84	1,016.99	1,382.26	1,747.69	2,113.11	2,478.54	2,843.96	3,209.38	3,568.22	3,855.22	4,133.11	4,409.54	4,685.97	
1/2	296.50	661.45	1,024.55	1,389.88	1,755.30	2,120.72	2,486.15	2,851.57	3,217.00	3,574.92	3,861.08	4,138.87	4,415.30	4,691.73	
3/4	304.11	669.05	1,032.12	1,397.49	1,762.91	2,128.34	2,493.76	2,859.18	3,224.61	3,581.62	3,866.95	4,144.63	4,421.06	4,697.49	
10	311.71	676.65	1,039.68	1,405.10	1,770.53	2,135.95	2,501.37	2,866.80	3,232.22	3,588.07	3,872.81	4,150.39	4,426.82	4,703.25	
1/4	319.31	684.22	1,047.29	1,412.72	1,778.14	2,143.56	2,508.99	2,874.41	3,239.83	3,594.51	3,878.67	4,156.15	4,432.56	4,709.01	
1/2	326.92	691.78	1,054.90	1,420.33	1,785.75	2,151.18	2,516.60	2,882.02	3,247.45	3,600.95	3,884.54	4,161.90	4,438.34	4,714.77	
3/4	334.52	699.34	1,062.52	1,427.94	1,793.37	2,158.79	2,524.21	2,889.64	3,255.06	3,607.40	3,890.40	4,167.66	4,444.10	4,720.53	
11	342.12	706.91	1,070.13	1,435.55	1,800.98	2,166.40	2,531.83	2,897.25	3,262.67	3,613.58	3,896.26	4,173.42	4,449.85	4,726.29	
1/4	349.73	714.47	1,077.74	1,443.17	1,808.98	2,174.02	2,539.44	2,904.86	3,270.29	3,619.72	3,902.13	4,179.18	4,455.61	4,732.05	
1/2	357.33	722.03	1,085.38	1,450.78	1,816.20	2,181.63	2,547.05	2,912.48	3,277.90	3,625.95	3,907.99	4,184.94	4,461.37	4,737.80	
3/4	364.93	729.59	1,092.97	1,458.39	1,823.82	2,189.24	2,554.67	2,920.09	3,285.51	3,632.14	3,913.85	4,190.70	4,467.13	4,743.56	