

Time Diff	Dist (Feet)	Height				
		90 deg	80 deg	70 deg	45 deg	25 deg
0.1	112.5 ft	112.5 ft	110.79 ft	105.72 ft	79.55 ft	47.54 ft
0.2	225. ft	225. ft	221.58 ft	211.43 ft	159.1 ft	95.09 ft
0.3	337.5 ft	337.5 ft	332.37 ft	317.15 ft	238.65 ft	142.63 ft
0.4	450. ft	450. ft	443.16 ft	422.86 ft	318.2 ft	190.18 ft
0.5	562.5 ft	562.5 ft	553.95 ft	528.58 ft	397.75 ft	237.72 ft
0.6	675. ft	675. ft	664.75 ft	634.29 ft	477.3 ft	285.27 ft
0.7	787.5 ft	787.5 ft	775.54 ft	740.01 ft	556.85 ft	332.81 ft
0.8	900. ft	900. ft	886.33 ft	845.72 ft	636.4 ft	380.36 ft
0.9	1012.5 ft	1012.5 ft	997.12 ft	951.44 ft	715.95 ft	427.9 ft
1	1125. ft	1125. ft	1107.91 ft	1057.15 ft	795.5 ft	475.45 ft
1.1	1237.5 ft	1237.5 ft	1218.7 ft	1162.87 ft	875.04 ft	522.99 ft
1.2	1350. ft	1350. ft	1329.49 ft	1268.59 ft	954.59 ft	570.53 ft
1.3	1462.5 ft	1462.5 ft	1440.28 ft	1374.3 ft	1034.14 ft	618.08 ft
1.4	1575. ft	1575. ft	1551.07 ft	1480.02 ft	1113.69 ft	665.62 ft
1.5	1687.5 ft	1687.5 ft	1661.86 ft	1585.73 ft	1193.24 ft	713.17 ft
1.6	1800. ft	1800. ft	1772.65 ft	1691.45 ft	1272.79 ft	760.71 ft
1.7	1912.5 ft	1912.5 ft	1883.44 ft	1797.16 ft	1352.34 ft	808.26 ft
1.8	2025. ft	2025. ft	1994.24 ft	1902.88 ft	1431.89 ft	855.8 ft
1.9	2137.5 ft	2137.5 ft	2105.03 ft	2008.59 ft	1511.44 ft	903.35 ft
2	2250. ft	2250. ft	2215.82 ft	2114.31 ft	1590.99 ft	950.89 ft
2.1	2362.5 ft	2362.5 ft	2326.61 ft	2220.02 ft	1670.54 ft	998.44 ft
2.2	2475. ft	2475. ft	2437.4 ft	2325.74 ft	1750.09 ft	1045.98 ft
2.3	2587.5 ft	2587.5 ft	2548.19 ft	2431.45 ft	1829.64 ft	1093.52 ft
2.4	2700. ft	2700. ft	2658.98 ft	2537.17 ft	1909.19 ft	1141.07 ft
2.5	2812.5 ft	2812.5 ft	2769.77 ft	2642.89 ft	1988.74 ft	1188.61 ft
2.6	2925. ft	2925. ft	2880.56 ft	2748.6 ft	2068.29 ft	1236.16 ft
2.7	3037.5 ft	3037.5 ft	2991.35 ft	2854.32 ft	2147.84 ft	1283.7 ft
2.8	3150. ft	3150. ft	3102.14 ft	2960.03 ft	2227.39 ft	1331.25 ft
2.9	3262.5 ft	3262.5 ft	3212.94 ft	3065.75 ft	2306.94 ft	1378.79 ft
3	3375. ft	3375. ft	3323.73 ft	3171.46 ft	2386.49 ft	1426.34 ft

$$D = \Delta T * 1125$$

Speed of Light in Air 9.83629x10⁸

Speed of Sound in Air 1125 ft/sec

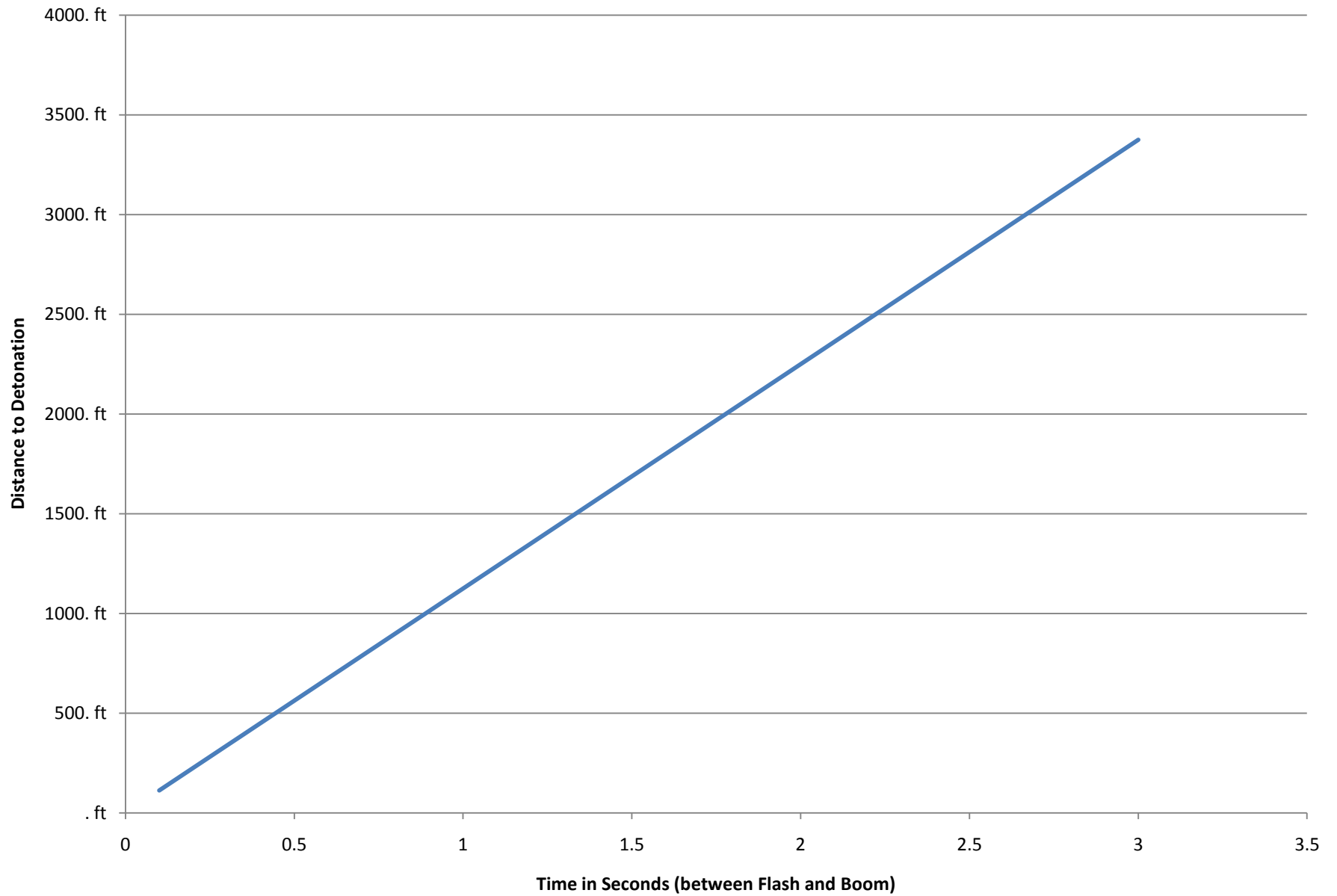
$$\text{time flash} = d / 9.83629 \times 10^8 \text{ ft/sec}$$

$$\text{time sound} = d / 1125 \text{ ft/sec}$$

$$\text{time sound} - \text{time flash} = d (9.83628 \times 10^8 / 1125)$$

$$d = (\text{time sound} - \text{time flash}) * 1125$$

Distance to Fireworks (D vs. Time)



Height of Fireworks

