

Calculations by Coffey..

$$h^{0.3-1} = h^{-0.7} = \frac{1}{h^{0.7}} \quad \left\{ \begin{array}{l} \text{NOIC.} \\ V_1 = 3.5 \text{ mph} \\ V_2 = 4.5 \text{ mph} \end{array} \right. \quad \text{change to m/sec}$$

$$\frac{1}{h^{0.7}} = \frac{2.3 (V^2)^{0.3}}{g^{0.3} L} \quad \text{or} \quad \frac{1}{h^{0.7}} = \frac{2.3 V^{0.6}}{g^{0.3} L}$$

DATA FROM PAGE "V"

$V_1 = 1.34$ meters/sec	(3mph)
$V_2 = 1.788$ " "	(4mph)
$V_3 = 2.235$ " "	(5mph)
$V_4 = 2.682$ " "	(6mph)

$$g = 9.8 \text{ meters/sec}^2$$

$$L \approx 2.52 \text{ meters}$$

$$\frac{1}{h^{0.7}} = \frac{2.3 V_1^{0.6}}{g^{0.3} L} = \frac{2.3 (1.34)^{0.6}}{(9.8 \text{ m/sec}^2)^{0.3} L}$$

$$\frac{1}{h^{0.7}} = \frac{2.3 (1.34)^{0.6}}{(9.8 \text{ m/sec}^2)^{0.3} (2.52)} = \frac{2.3 \left[\frac{(1.34)^{0.6}}{(9.8 \text{ m/sec}^2)^{0.3}} \right]}{2.52}$$

$$\frac{1}{h^{0.7}} = .9126 \frac{(1.34)^{0.6}}{(9.8 \text{ m/sec}^2)^{0.3}} ; \quad \frac{1}{h^{0.7}} = \frac{.9126 (1.19)}{1.98}$$

$$\frac{1}{h^{0.7}} = \frac{1.086}{1.98} ; \quad \frac{1}{h^{0.7}} = \frac{.55}{1} ; \quad .55 h^{0.7} = 1$$

$$\frac{.55 h^{0.7}}{.55} = \frac{1}{.55} ; \quad h^{0.7} = 1.818181 \text{ meters} \approx 71.58'' \div 12 \approx 5.965' \approx 6'$$

This is for 3mph only