



- (11) Crossover → Projected
 Straight → 'DE'
 Curved → Triangular

(12) Hauling Capacity = $U \cdot W \cdot N$

(13) $R_{T1} + R_{T2} + R_{T3} + R_g + R_c \leq \frac{H_c / TE}{\min}$

$R_{T1} = 0.0016W$

$R_{T2} = 0.00008WV$

$R_{T3} = 0.0000006WV^2$

$R_g = W \tan \theta$

$R_c = 0.0004 D^\circ \cdot W$ — BG
 $0.0003 D^\circ \cdot W$ — MG

(1) $V_{max} = 4.35 \sqrt{R - 67}$

(2) $R = 1720 / D^\circ$

(3) $e_{act} / e_{eq} / avg = \frac{G \cdot V_{max}^2}{127R}$
 $e_{act} \nlessdot 16.5cm$

(4) $e_{th} = e_{act} + CD$
 $C.D \nlessdot 7.6cm$

(5) $e_{th} = \frac{G V_{max}^2}{127R}$

(6) $e_{BT} = -e_{MT} \quad e \propto \frac{1}{R}$

(7) $y = \frac{x^3}{6RL}$

(8) $L = 7.2e$

$L = 0.073 e \cdot V_{max}$ } max

$L = 0.073 CD \cdot V_{max}$ }

(9) Gradient = $mg \sin \theta$

(10) $CL = 2GN$

$R_0 = 1.5G + 2GN^2$

$R_1 = R_0 - \frac{G}{2}$

$SL = \sqrt{2R_0 d}$

$L = CL - SL$

(14) Landing → Elevⁿ

(15) Takoff → Elevⁿ } maximum
 • T°C
 • Gradient

(16) $R = \frac{V^2}{125f}$

$R = \frac{0.0388 W^2}{\frac{f}{2} - S}$ } Max

$R \geq 180$

$R \geq 120m$

New series

$$B.G. = 1.750$$

$$1 \text{ Chain} = 30.5 \text{ m}$$

$$\frac{30.5}{2\pi R} = \frac{D^\circ}{360}$$

$$R = \frac{1750}{D^\circ}$$

$$V_{\max} = 4.4 \sqrt{R-70}$$

$$e_{\text{act}} / e_{\text{equill}} = \frac{G \cdot V_{\max}^2}{127R}$$

$$e_{\text{th}} = \frac{G V_{\max}^2}{127R}$$

$$V_{\max} = \sqrt{\frac{e_{\text{th}} \cdot 127R}{G}}$$

$$= \sqrt{\frac{(e_{\text{act}} + e_{\text{D}}) 127R}{G}}$$

$$= \sqrt{\frac{(e_{\text{act}} + e_{\text{D}}) 127R}{1.750 \times 1000}}$$

$$= 0.27 \sqrt{(e_{\text{act}} + e_{\text{D}}) \times R}$$

Length of Transition Curve

$$L = 0.72 e$$

$$L = 0.008 e \cdot V_{\max}$$

$$L = 0.008 \cdot CD \cdot V_{\max}$$

$$V_{\max} - \text{km/hr}$$

$$e_{\text{act}} = \text{mm}$$

$$e_{\text{D}} = \text{in mm}$$