

Performance - All factors

Take-off

Performance factors

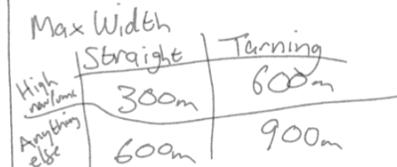
Regulatory factors

Surface	factor	<u>Unbalanced</u>			<u>Balanced</u> 1.25
		TOA	TODA	ASDA	
Paved	1				
Paved + Wet	1		1.15	1.3	
Grass	1.2				
Grass + Wet	1.3				
1% Upslope	1.05 (5%)				

To calculate slope:
 Difference in threshold elevation
 TORA x 100

<u>Takeoff speed</u>		
	VR	V ₂
V _{mc}	1.05	1.1
V _s	1.1	1.13 Class A 1.2 Class B 1.08 - downstop pop

Class B Regs
 X AEO gradient by 0.77
 $(\frac{1}{2} \text{ wingspan}) + 60 + (0.125d)$



Class A - Take-off factors

Net safety factor:
 0.8% - 2 eng
 0.9% - 3 eng
 1% - 4 eng

V_r:
 Class A = 1.05 (V_{mc})
 B = 1.1 (V_s)

Net to flight path				
Engine	Sector			
	1	2	3	4
2	0	2.4	1.2	1.2
3	0.3	2.7	1.5	1.5
4	0.5	3	1.7	1.7



The Landing

Performance factors

Surface	factor
Paved, dry	1
Paved, wet	1.15
Grass, dry	1.15
Grass, wet	1.15 x 1.15
1% of downslope	1.05 (5%)

Regulatory factors

Jet = 1.67

Prop = 1.43

V_{app} = 1.33 V_s

V_{ref} = class A = 1.23 V_{so}
 B = 1.3 V_{so}

Go-Around

Missed Approach

Class A - reg gradient:
 OEI:
 no of engines
 2 - 2.1
 3 - 2.4
 4 - 2.7

Class B = 0.75%

Baulked Landing

Class A:
 OEI: 2.5%
 AEI: 3.2%
 Class B:
 AEO = 2.5%

