

Weight & Balance / Take Off and Landing Performance

1lt = 0.71kg
1kg = 1.4 lt

In. units = $\frac{\text{Weight} \times \text{Arm}}{1000}$

Arm = $\frac{\text{Index units} \times 1000}{\text{Weight}}$

Aircraft	TAS kts	Fuel Flow Plan lts/hr	Usable Fuel lts
BNM C150	95	25	141

Aircraft Speeds	
Cruise	95
Vx	55
Vy	67
Vs	48
Vs Flaps	43
Glide	60
Approach Flaps 30°	65

Item	Weight/kg	Arm/mm	Index Units
Basic Weight			
Row 1			
Row 2			
Baggage 1			
Baggage 2			
Zero Fuel Weight			
Fuel _____ lt			
TOW			
MTOW			
Fuel Burn _____ lt			
Landing Weight			
Is the aircraft in balance at ZFW and TOW?			Yes / No

Take off distance required for	
Take off weight	kg
Take off dist available	m
Temperature	°C
QNH	Hpa
Pressure height	feet
Density height	feet
Wind component	kt
X wind component	kt
Slope	% up / down
Surface	
Climb weight limit	kg
Take off distance required	m
Vtoss	kt

Landing distance required for	
Landing weight	kg
Landing distance available	m
Temperature	°C
QNH	Hpa
Pressure height	feet
Density height	feet
Wind component	kt
X wind component	kt
Slope	% up / down
Climb weight limit	kg
Landing distance required	m
Min safe approach speed	kt

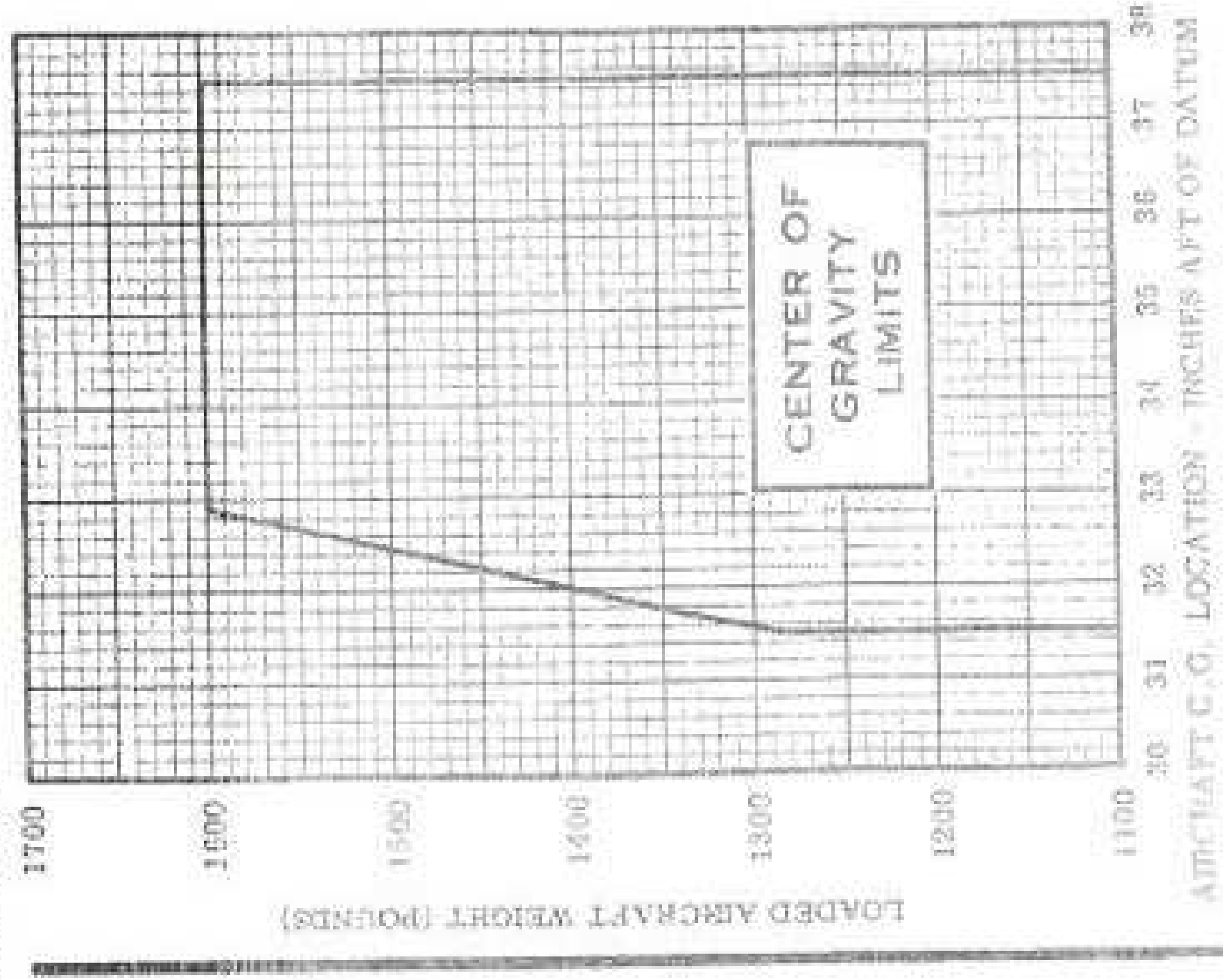
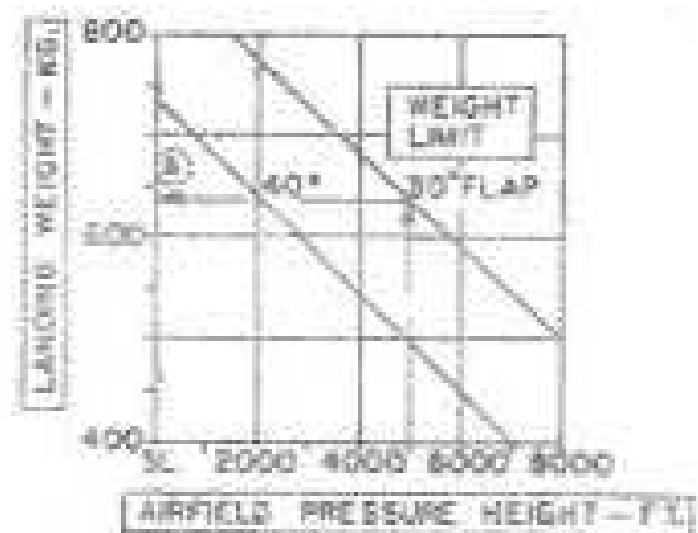
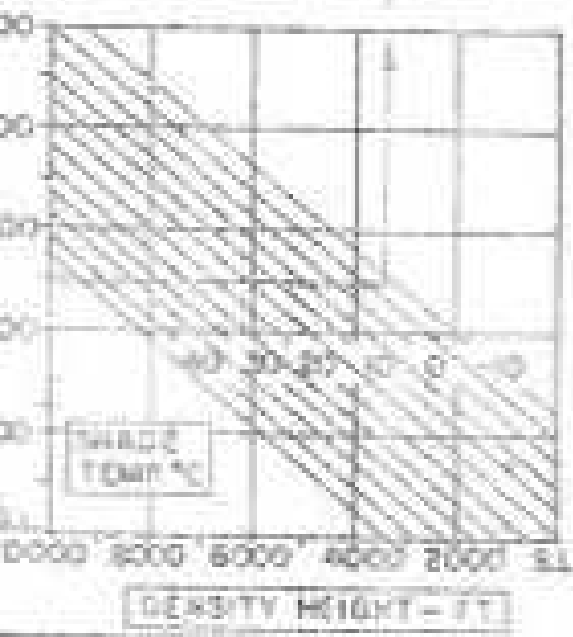
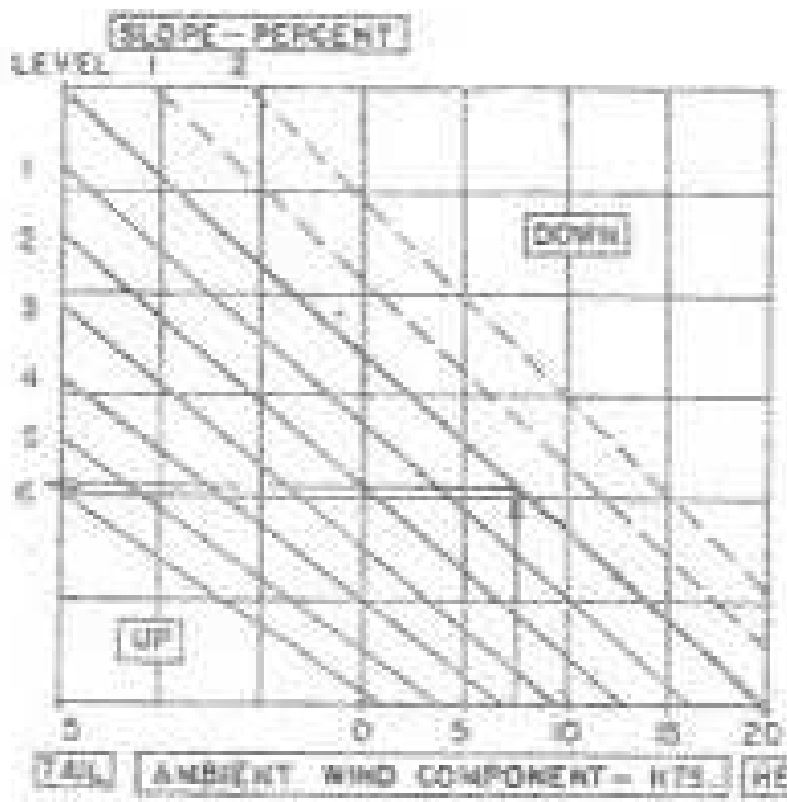
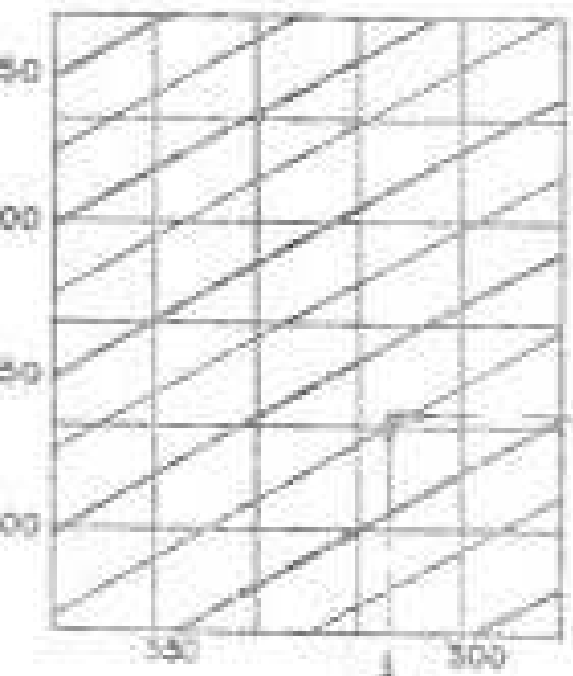


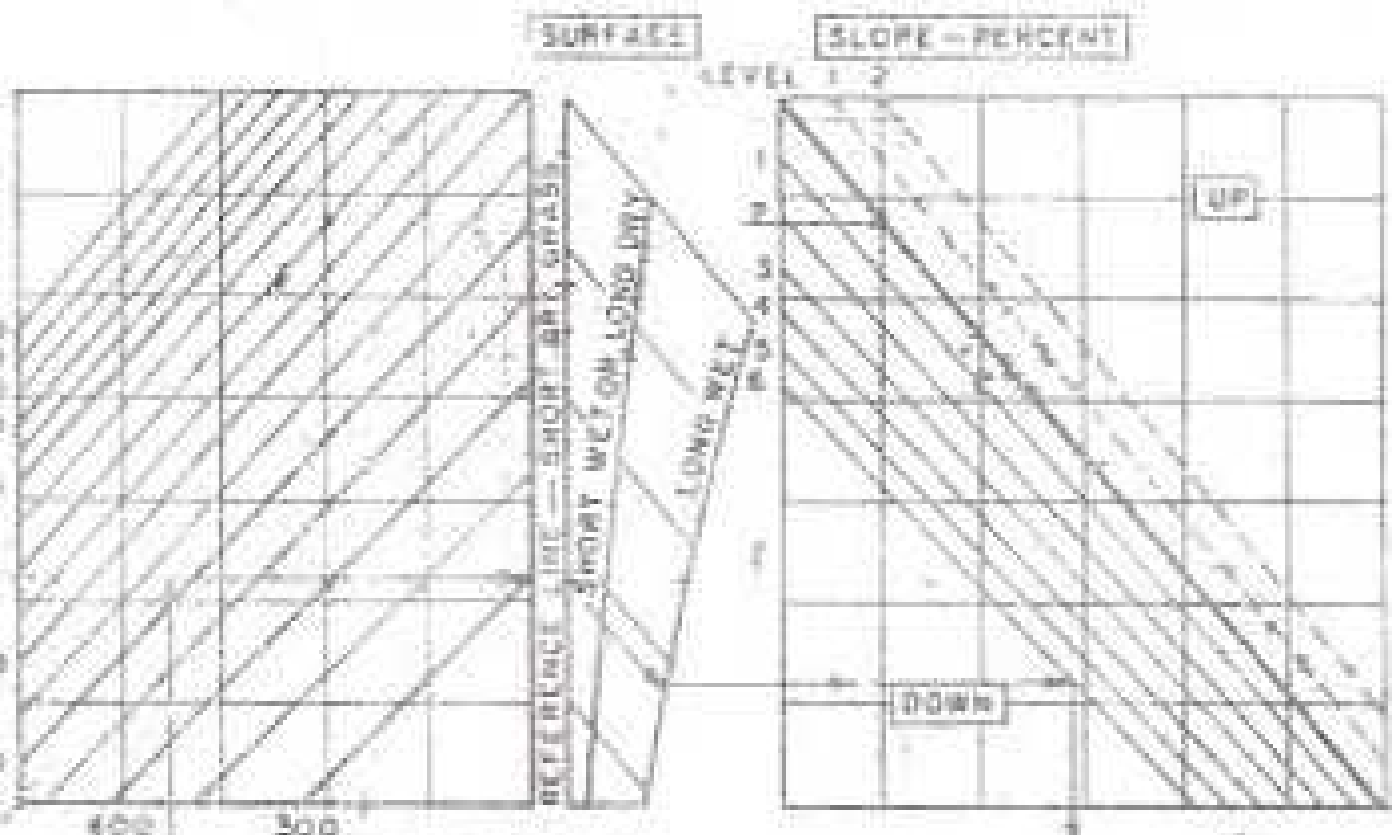
Figure 6-9. Center of Gravity Limits



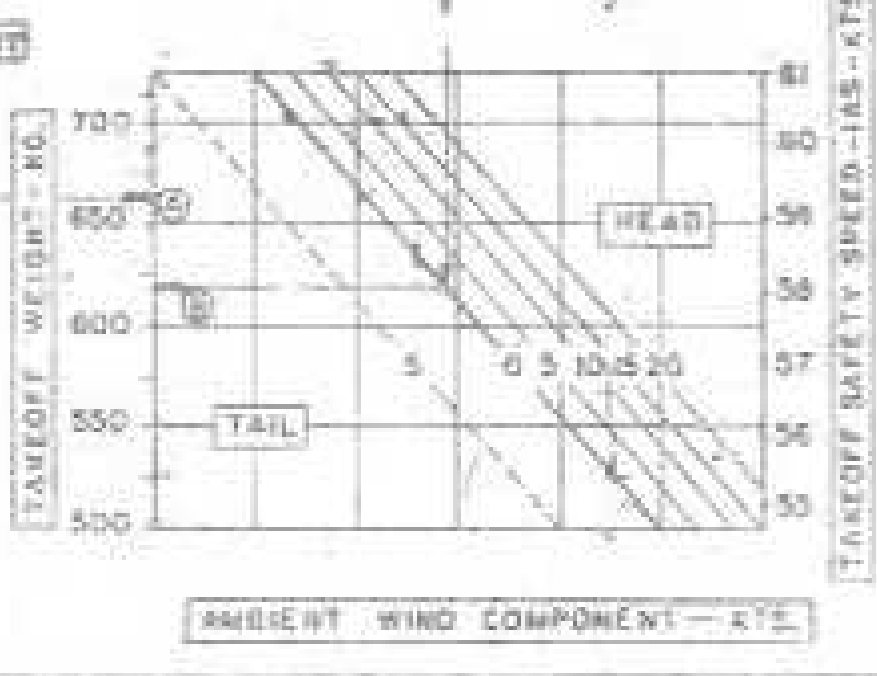
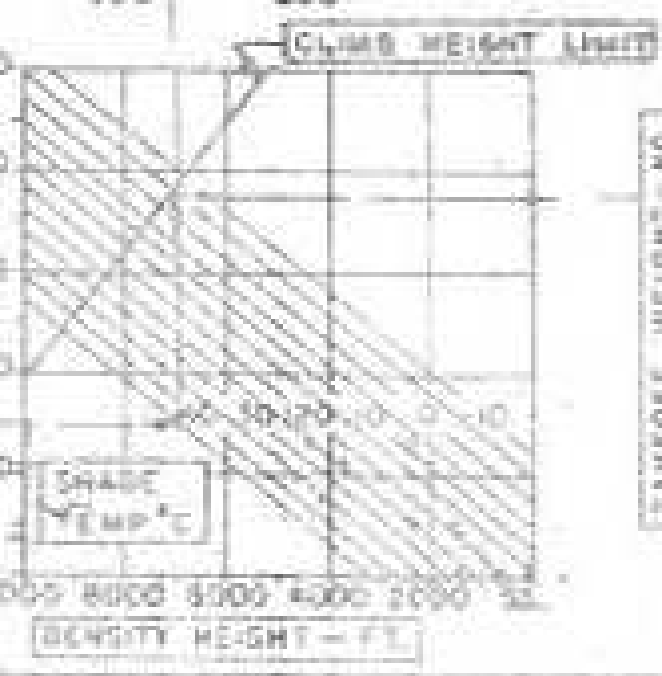
NOTES

- (1) THE GROSS WEIGHT AT LANDING SHALL NOT EXCEED (2)
- (2) RUNWAY DISTANCE REQUIRED DOES NOT VARY WITH WEIGHT
- (3) DISTANCES ON THIS CHART ARE BASED ON 30° FLAPS, WITH 40° FLAPS, DISTANCE REQUIRED IS 5% LESS.

DEPARTMENT OF CIVIL AVIATION	
LANDING CHART	
CESSNA 150IM 8-150	
FLAP SETTING	30-40
APPROACH SPEED	55 KTS
LANDING DISTANCE FACTOR	1.15



—NOTE—
 THE GROSS WEIGHT
 AT TAKEOFF SHALL
 NOT EXCEED THE
 LESSER OF (A)
 OR (B).



DEPARTMENT OF CIVIL AVIATION	
TAKEOFF WEIGHT CHART	
CESSNA 150M 150	
FLAP SETTING	0
TAKEOFF SAFETY SPEED	50
TAKEOFF DISTANCE FACTOR	1.1