AIRCRAFT WEIGHT & BALANCE	Pacific Flying Club www.PacificFlying.com	FORM OPF-006

Aircraft Type _____ Aircraft Registration _____

Loading Area	Weight (Lbs)	Arm	Moment
Empty Weight			
Pilot & passenger			
Passengers (rear)			
Baggage			
Total (Zero Fuel Wt)			
Useable Fuel 6.0 lb/US gal			
Total (Take-off Wt)			
Enroute Fuel Burn			
Total (Landing Wt)			

Weights

MAX GROSS WEIGHTS	
C152:	1670 lb
C172P:	2400 lb
C172R:	2450 lb
C172SP:	2550 lb

STANDARD PASSENGER WEIGHTS		
Summer (Mar 15 - Dec 14)		Winter (Dec 15 - Mar 14)
206 lb	Male / Gender X (>12 yrs)	212 lb
172 lb	Female (>12 yrs)	178 lb
75 lb	Child (2-11 yrs)	75lb
30 lb	* Infant *(<2 yrs)*	30 lb
* Add in where infant exceeds 30 lb		
Reduce wt by 13 lb if no carry-on baggage for male/female		
ACTUAL WEIGHTS <u>SHOULD BE USED</u>		

Vref Calculation:

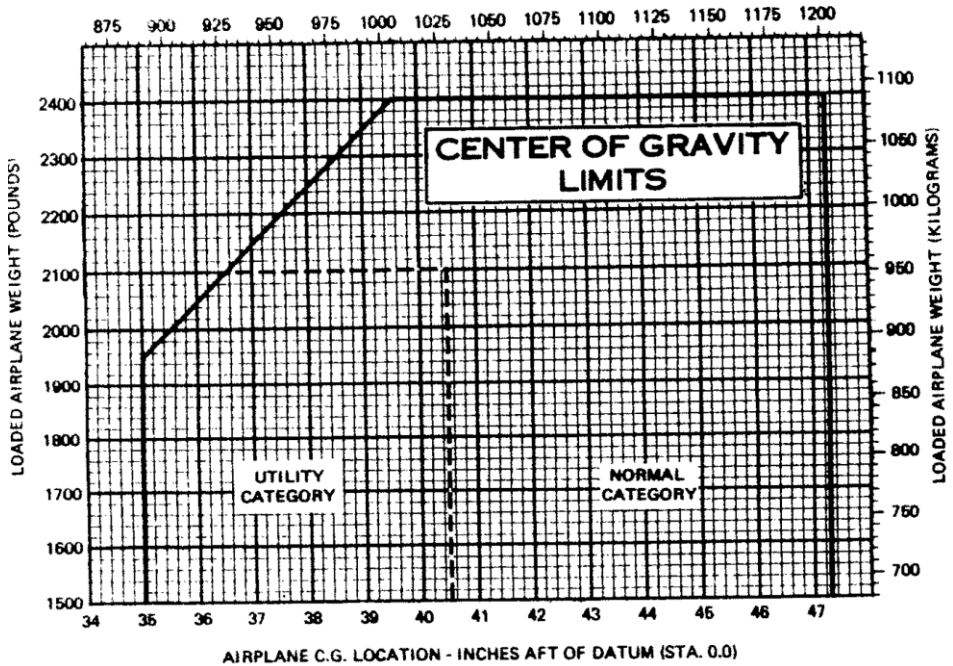
The purpose of the Vref Calculation is to find the calm wind final approach speed adjusted for the lower landing weight.

1. Vso KCAS at Max Gross Wt & forward C of G = _____ x 1.3 = _____ Vref KCAS Calm wind at Max Gross Weight.
2. Vref KCAS at Max Gross Wt _____ x $\sqrt{\frac{Landing\ Wt}{Max\ Gross\ Wt}}$ _____ = _____ Vref KCAS Calm wind at Landing Weight.
3. Using the POH/AFM convert the adjusted Vref KCAS _____ to Vref KIAS _____

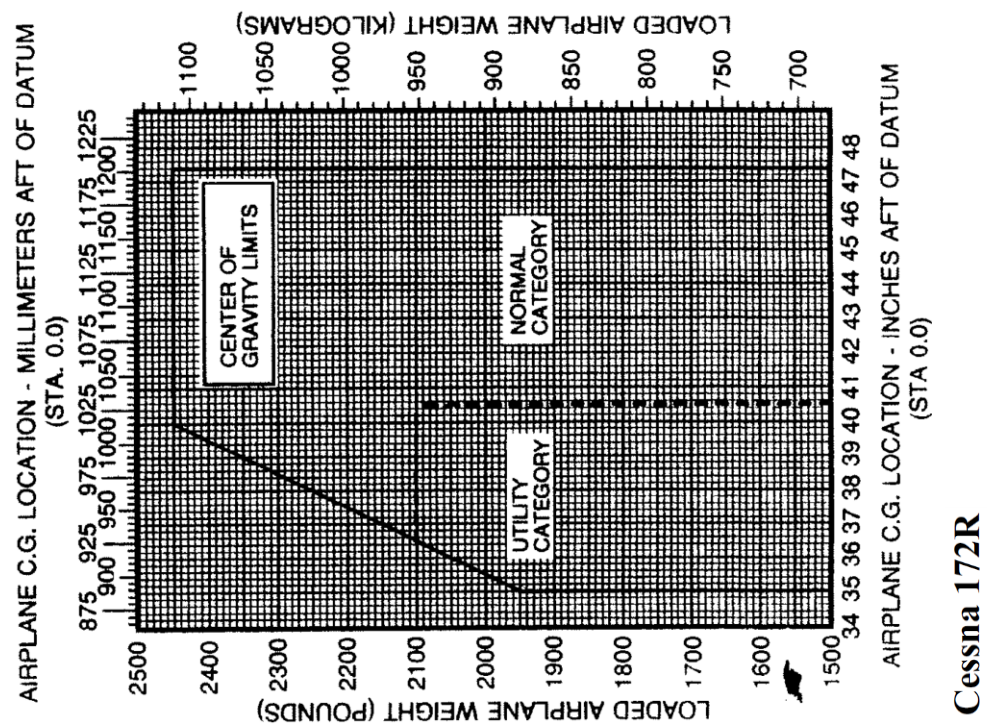
Note:

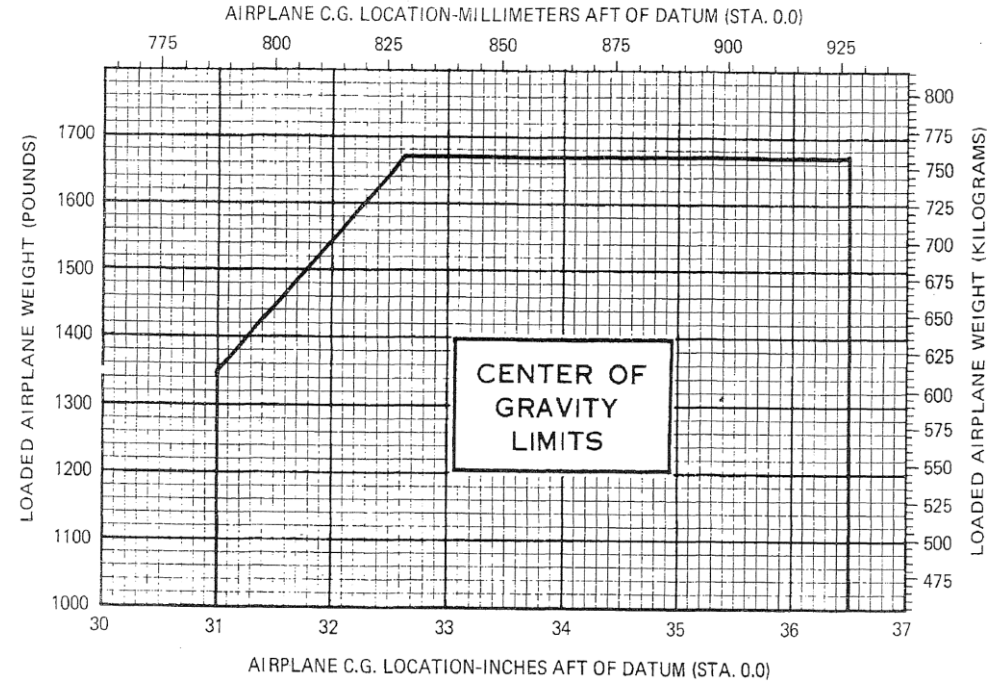
Convert KIAS to and from KCAS by using the POH/AFM airspeed calibration chart.

Always apply KCAS to the above formula. In most cases, applying *indicated airspeed* (KIAS) to the formula will result in a speed that is too slow.

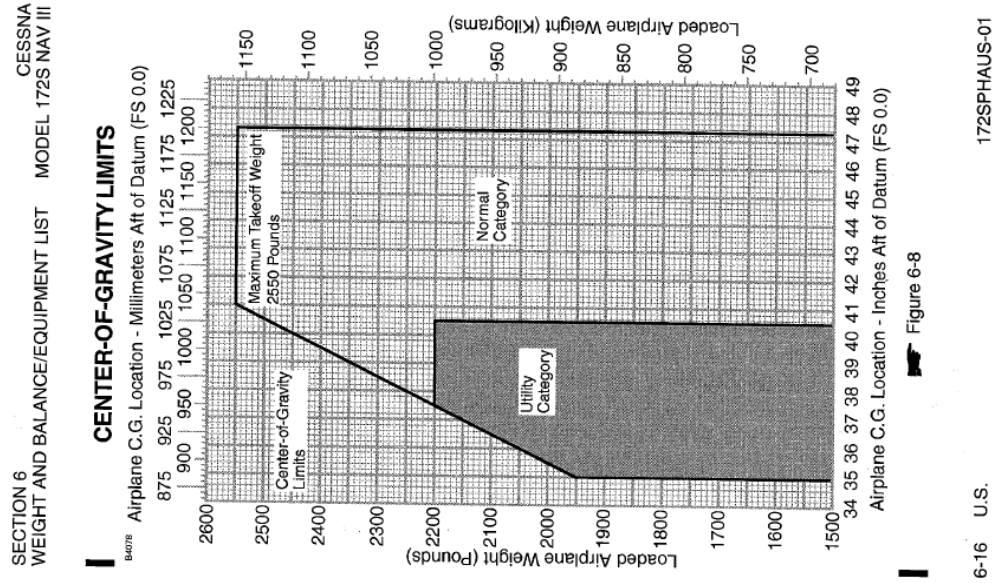


Cessna 172 P





Cessna 152



Cessna 172SP