

Thranda DHC-2 Beaver Weight & Balance

Pilot In Command must verify all information is correct according to aircraft POH

Date	Mission No	Type	H.P.	Tail. No	CAPF No
<input type="text"/>					

Sortie No: Weight x Arm = Moment

Basic Empty Weight: 3246 x -1.7 = -5518.2

Pilot _____ x -7.29 = _____

Co-Pilot _____ x -7.29 = _____

Passenger 1 _____ x 20.55 = _____

Passenger 2 _____ x 20.55 = _____

Passenger 3 _____ x 53.03 = _____

Passenger 4 _____ x 53.03 = _____

Baggage area (1250 Lbs MAX) _____ x 94 = _____

Fuel tank:

Front _____ x 6 lbs / Gallon = _____ x -3.34 = _____

Cap. 35 Gal

Middle _____ x 6 lbs / Gallon = _____ x -3.34 = _____

Cap. 35 Gal

Rear _____ x 6 lbs / Gallon = _____ x 20.94 = _____

Cap. 25 Gal

Belly _____ x 6 lbs / Gallon = _____ x 10.47 = _____

Cap. 43 Gal

Wing tip _____ x 6 lbs / Gallon = _____ x 10.79 = _____

Cap. 42 Gal

Total Weight & Moment _____

AC Color: _____ / _____ = _____
 Total Moment Total Weight C.G.

Taxi Fuel: _____ x 6 lbs / Gallon = _____ x 15.78 = _____

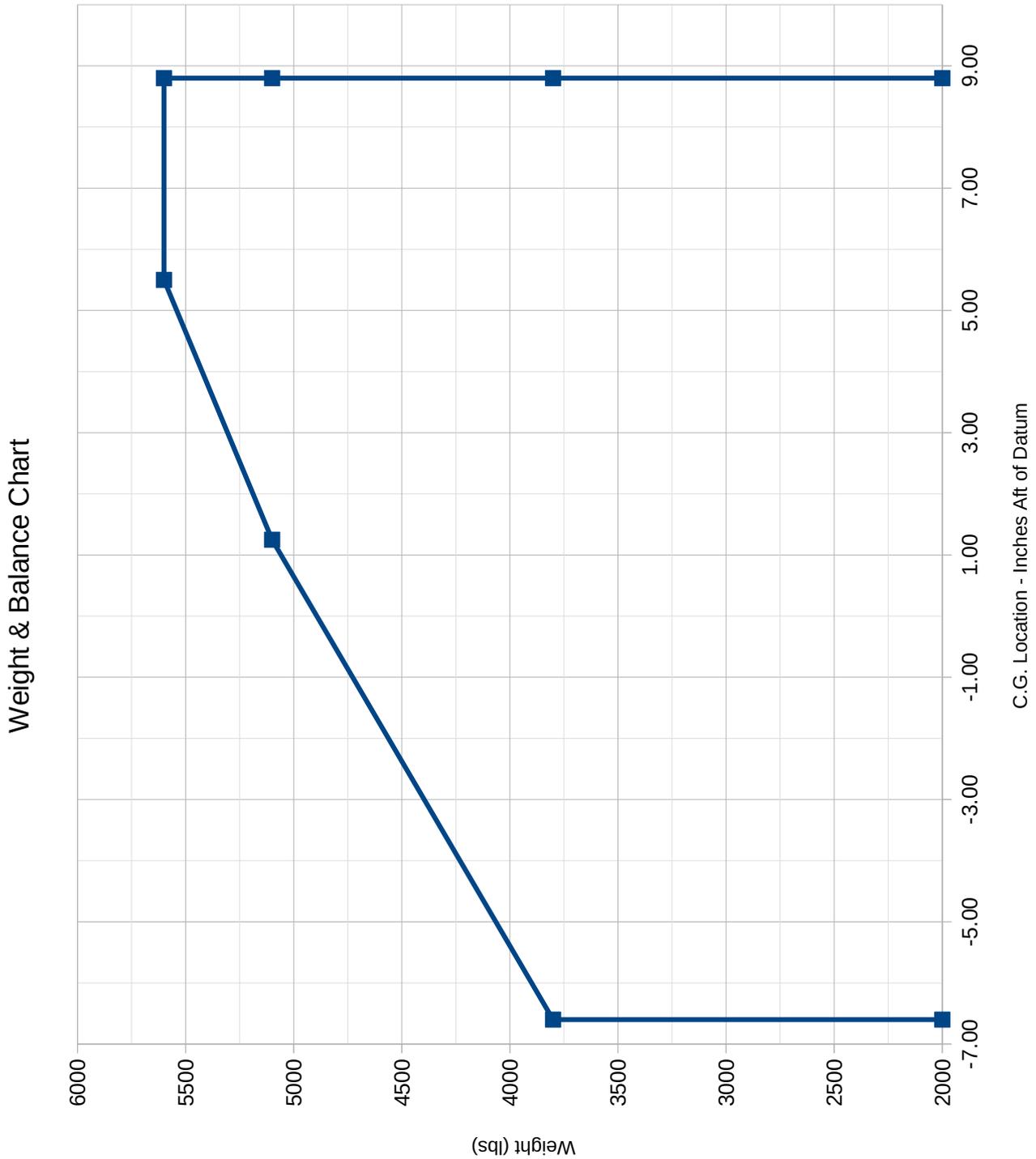
TakeOff Condition: _____ / _____ = _____
 Total Moment Total Weight C.G.

Trip Fuel: _____ x 6 lbs / Gallon = _____ x 15.78 = _____

Landing Condition: _____ / _____ = _____
 Total Moment Total Weight C.G.

STANDARD AIRPLANE WEIGHTS

Basic Empty Weight (Sea plane):	
Basic Empty Weight (Land plane / Ski plane):	3246 Lbs
Maximum Useful Load (Sea plane):	
Maximum Useful Load (Land plane / Ski plane):	
Maximum Takeoff Weight (Sea plane):	5500 Lbs
Maximum Takeoff Weight (Land plane / Ski plane):	5600 Lbs
Maximum Landing Weight (when OAT < -25 degrees C):	5100 Lbs



You should know

Intended for simulation purposes only!

The weights used in this sheet are adjusted to match the Thranda DHC-2 Beaver for X-Plane 11.

The CG diagram and the Arms of loading stations (Pilot, fuel tanks...) were build upon values from manual for Thranda DHC-2 Beaver and by own computations. I watched how the final CG will change while changing weight on all respective stations using the Thandra Weight and Balance dialog and form that I computed the CG location of respective station. Even though there is still some error, the values are not completely off as they were when used CG locations from generic POH. The Weight and Load panel in the simulator probably account forward and aft limit of each station, therefore, its calculations are more precise. The CG location values in this sheet account for fully loaded station (fuel tanks, seats were computed with weight about 185 lbs).

If you find any error, have some suggestion, improvement, built sheets for other aircraft based on this one... I will be happy if you let me know at admin@mouseviator.com.