

WEIGHT & BALANCE EXERCICE - 1

Con i Seguenti dati calcolare il "Weight and Balance" per l'elicottero
Huges H-269 (S/N 1742).
Per semplicità si prenda 1 [USGal] = 6 [ibs].
Fare riferimento all '**Annex-1**.

Pilot : 83 [kg]
Co-Pilot : 73 [kg]
Pass. center : 45 [kg]
Glow Box : 8 [kg]
Main tank : 34 [USGal]
Aux tank : 2 [USGal]
Helicopter : 890 [lbs]

Scegliere il risultato più vicino

- A) Mass: 1415.8 [ibs] Arm long: 95.05 [inch] Arm lat: 2.09 [inch]
- B) Mass: 1566.8 [ibs] Arm long: 95.45 [inch] Arm lat: 2.07 [inch]
- C) Mass: 1434.8 [ibs] Arm long: 95.85 [inch] Arm lat: 1.97 [inch]
- D) Mass: 1389.8 [ibs] Arm long: 96.25 [inch] Arm lat: 2.07 [inch]

	Weight (lbs)	Long. Arm (inch)	Moment	Lat. Arm (inch)	Moment
Empty weight					
Pilot					
Co-Pilot					
Pass. center					
Glow Box					
Main tank					
Aux tank					
Take-off weight					
		C.G. Long.		C.G. Long.	

WEIGHT & BALANCE EXERCICE - 1 SOLUTION

	Weight (lbs)	Long. Arm (inch)	Moment	Lat. Arm (inch)	Moment
Empty weight	890.00	100.00	89000.00	0.00	0.00
Pilot	182.98	83.20	15224.24	-13.80	-2525.17
Co-Pilot	160.94	83.20	13389.99	13.80	2220.94
Pass. center	99.21	80.00	7936.64	0.75	74.41
Glow Box	17.64	50.30	887.14	0.00	0.00
Main tank	204.00	107.00	21828.00	18.00	3672.00
Aux tank	12.00	107.00	1284.00	-17.20	-206.40
Take-off weight	1566.77	95.45	149550.01	2.07	3235.77
		C.G. Long.		C.G. Lat.	