



WEIGHT AND CENTRE OF GRAVITY SCHEDULE

Reference:-	ST 3325	A/C Type:-	MD 500N
Registration:-	N520EA	Serial Number:-	LN062

Maximum Total Weight Authorised:- 3350 lbs

Part A - Basic Weight

The basic weight of the helicopter as calculated from Eastern Atlantic Helicopters weighing report no. 010390/EA dated 12 November 2019 & amendments is-	1826.0 lbs
The longitudinal centre of gravity of the helicopter in the same condition at the above weight is	<u>113.15 inches</u> aft of the datum
The total moment about the datum in this condition is:-	206,613.3 lb inches
This datum is the one defined in the flight manual as	100 inches forward of the Main Rotor Hub centre line

The Centre Of Gravity Limitations Are :-

Gross Weight Lbs	Longitudinal C of G limits		Lateral C of G limits	
	Station Inches		(+) right	(-) left
***3850	Fwd 99.0 ins	Aft 104.0 ins	+3.0 ins	-3.0 ins
3350	Fwd 99.0 ins	Aft 105.5 ins	+3.0 ins	-3.0 ins
2600	Fwd 99.0 ins	Aft 107.8 ins	+3.0 ins	-3.0 ins
2000	Fwd 100.8 ins	Aft 109.6 ins	+3.0 ins	-3.0 ins
**1796	Fwd 101.4 ins	Aft 110.3 ins	+2.2 ins	-2.2 ins

** Minimum Flying Weight

*** Weights between 3350 & 3850 must be external and jettisonable

The aft longitudinal centre of gravity limit varies linearly from a gross weight of 3850 lbs at station 104.0 to 1796 lbs at station 110.3.

The basic weight includes:- Weight of unusable fuel & full engine and transmission oil tanks & the weight of the following items:-

Radio equipment:-

Garmin GTN650 GPS / Nav / Com
Garmin GTX 345 Transponder
Artex ME406 ELT
Avionics Master Switch

Garmin GTR 225A Com
Garmin GMA345 Audio Panel
Guardian Avionics USB Power Supply

SkyTech Helicopters Ltd

SYWELL AERODROME, SYWELL, NORTHAMPTON, NN6 0BL
Approval No. UK.145.01140



N520EA **s/n LN062** **ST 3325**

Installed equipment:-

Flight Manual	Fire Extinguisher	First Aid Kit
Dual Controls	Concorde Lead-acid Battery	Facet Auxiliary Oil Filter Kit
Anti-Collision Lights	Navigation Lights	Extended Landing Gear
4 x Paravion Door Actuators	Fargo Auxiliary Fuel Tank	Engine Wash Kit
Raingutter Kit	Metal Leg Fairings	Custom Aircraft Interior
Clock	4 x Bose Headsets	Aft utility steps
Flight Trails Fwd Eqpt Tray		Heli-Tech Engine Gearbox Breather
A.A. Fuselage Windows		A.A. Cabin Door Windows with slide
Tech-Tool Fuselage Windows (Dark)		Tech-Tool Cabin Door Windows with slide
Shadin Digiflow Flowmeter		Magellan Aerospace Wire Strike Protection
Cert. Tech. Rapid Removal Engine Doors		

Part B - Variable Load

The weight and lever arms (measured aft of the C of G datum defined in part A) of the variable load are shown below. The variable load depends on the equipment carried for the particular role.

ITEM	WEIGHT - Lbs	MOMENT ARM - Inches	MOMENT
Pilot	Use Actual	73.5 ins	Use Actual
Co-Pilot	Use Actual	73.5 ins	Use Actual
Dual Controls	11.3 lbs	51.8 ins	585 " lbs
Centre Seat	5.1 lbs	73.0 ins	372 " lbs
Centre Pax Harness	0.6 lbs	75.0 ins	45 " lbs

Part C - Loading Information (Disposable Load)

Information is given below to enable the disposable load to be distributed in such a manner that the centre of gravity is maintained in accordance with Sect 6 of the Rotorcraft Flight Manual.

ITEM	WEIGHT - Lbs	MOMENT ARM - Inches	MOMENT
Passenger Centre Fwd	Use Actual	71.5 ins	Use Actual
Fuel - Main Tank	435.0 lbs	Refer to CSP-520N-1 flight manual, page 6-6. Fuel C of G varies with fuel quantity	Use Actual
Fargo Aux Fuel Tank	136.5 lbs	119.0 ins	16243.5 " lbs
Rear Passengers	Use Actual	105.0 ins	Use Actual
Fwd Baggage	50.0 lbs	55.0 ins	2750.0 " lbs

Note: Fuel density 6.8 lbs / US gallon (8 lbs/ Imp gallon)

To obtain the total loaded weight of the aircraft, add to the Basic Weight to the weights of the Variable Load and the Disposable Load to be carried for the particular role.

NOTE: It is a requirement of the Air Navigation Order that the Commander of an aircraft registered in the United Kingdom shall satisfy him/herself, before take-off, that the load carried is of such weight and is so distributed and secured, that it may be carried safely on the intended flight. Refer to the ANO, Article 28.

This schedule was prepared on the 15 December 2021 & supercedes all previous issued.

Signed	Auth. No.	A. Holmes, A&P 3428771 IA	Date	15 December 2021
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