

Instruction for Use

Weight and Balance Data - Basic Weight and Moments - MOD Form 702(Hercules) Record of Removal/Refitment of Items Included in the Aircraft Basic Weight - MOD Form 702A(Hercules) Record of the Fitting/Removal of Items Not Included in the Aircraft Basic Weight - MOD Form 702B(Hercules) Current Operating Data Calculation Sheet - MOD Form 702C(Hercules)

1. **General.** MOD Form 702(Hercules) series of forms are used to record the aircraft Basic Weight and Moments, Removal/Refitment of Items Included in the Aircraft Basic Weight, the Fitting/Removal of Items Not Included in the Aircraft Basic Weight and the Aircraft's Current Operating Data Calculation. These forms are used in conjunction with AP101B-0704-9, AP101B-0705-9 and DAP101B-0704/0705-9A.

2. **Insertion and Removal.** MOD Form 702(Hercules) series forms are to be inserted into, and removed from the MOD Form 700C iaw the instructions for controlled forms on MOD Form 799/1. Sheet numbers are to run from 001 to 999.

Weight and Balance Data - Basic Weight and Moments - MOD Form 702(Hercules)

3. This form is to be raised when the MOD Form 700 is initially raised for an aircraft, entering the appropriate units. This form is to be used for recording changes to the Basic Weight, Moment and CG of the aircraft and **not as a record of role equipment changes**. Any changes to the Basic Weight and Moment caused by the embodiment/removal of a modification, change of major component/assembly or metal repairs, are to be entered on this form (see DAP101B-0704/0705-9A, Hercules C Mk 4 - Weight and Balance Data Calculation Help Guide, or Hercules C Mk 5 - Weight and Balance Data Calculation Help Guide). Whenever the aircraft is reweighed the details of the weighing are to be entered on this form in red ink. When the basic weight and moment figures are amended the new figures are to be transferred to **MOD Form 702C(Hercules) (column b)**.

Note: The information recorded on this form should always reflect the information recorded on the relevant aircraft MOD Form 751.

Weight and Balance Data - Record of Removal/Refitment of Items Included in the Aircraft Basic Weight - MOD Form 702A(Hercules)

4. This form is to be used to record the removal and refitment of items included in the basic weight of the aircraft.

a. When an item included in the basic weight of the aircraft is removed from the aircraft, it is to be recorded on this form. The weight and moment effect of that item is to be entered and added to the previous total effect of items not fitted to provide a new total effect of items not fitted that are included in the basic weight of the aircraft.

b. When an item included in the basic weight of the aircraft, previously removed, is refitted it is to be recorded on this form. The weight and moment effect of that item is to be entered and subtracted from the previous total effect of items not fitted to provide a new total effect of items not fitted that are included in the basic weight of the aircraft.

c. When a new total effect of items not fitted is calculated (see DAP101B-0704/0705-9A, Hercules C Mk 4 - Weight and Balance Data Calculation Help Guide, or Hercules C Mk 5 - Weight and Balance Data Calculation Help Guide), the new total is to be transferred to **MOD Form 702C(Hercules) (column c)**.

d. When the current MOD Form 702A(Hercules) is full, any entries relating to items not fitted are to be transferred to the subsequent MOD Form 702A(Hercules) and the weight and moment totals confirmed.

Weight and Balance Data - Record of the Fitting/Removal of Items NOT Included in the Aircraft Basic Weight - MOD Form 702B(Hercules)

5. This form is to be used to record the fitting and removal of items that are **NOT** included in the basic weight of the aircraft.

a. Examples of the type of equipment to be included on this form are Role Equipment, Ballast (not included in the basic weight) and permanent fit items (not included in the basic weight). Where possible any change should be a

single line entry. AP101B-0704-9 and AP101B-0705-9 are provided to itemise the Role fit component parts or list permanent fit items.

b. When an item not included in the basic weight of the aircraft is fitted it is to be recorded on this form. The weight and moment effect of that item is to be entered and added to the previous total effect of items fitted to provide a new total effect of items fitted but not included in the basic weight of the aircraft.

c. When an item not included in the basic weight of the aircraft is removed it is to be recorded on this form. The weight and moment effect of that item is to be entered and subtracted from the previous total effect of items fitted to provide a new total effect of items fitted but not included in the basic weight of the aircraft.

d. When a new total effect of items fitted but not included in the basic weight of the aircraft is calculated (see DAP101B-0704/0705-9A, Hercules C Mk 4 - Weight and Balance Data Calculation Help Guide, or Hercules C Mk 5 - Weight and Balance Data Calculation Help Guide) the new total is to be transferred to the MOD Form **702C(Hercules)** (column d).

e. When the current MOD Form 702B(Hercules) is full any entries relating to items fitted are to be transferred to the subsequent **MOD Form 702B(Hercules)** and the weight and moment totals confirmed.

Weight and Balance Data - Current Operating Data Calculation Sheet - MOD Form 702C

6. This form is to be used to calculate the Current Operating Weight and Moment(s) of the aircraft. The information in columns b, c and d are to be transferred from the relevant MOD Form 702(Hercules) series documents. When new figures are entered in any of these columns the Current Operating Data is to be re-calculated. The procedure to calculate the Current Operating Data is:

a. **Column a.** Enter date, Rank / Grade, Name and SNOW or Page and Line.

b. **Column b.** Enter the aircraft basic weight, Trim Index and Load Station from MOD Form 702(Hercules).

c. **Column c.** Enter the total Weight and Trim Index of items included in the basic weight of the aircraft but not fitted from MOD Form 702A(Hercules).

d. **Column d.** Enter the total Weight and Trim Index of items fitted but not included in the basic weight of the aircraft from MOD Form 702B(Hercules).

e. **Column e.** Subtract the weight of items included in the basic weight but not fitted (**column c**) from the basic weight (**column b**). Then add the weight of items fitted but not included in the basic weight (**column d**). Enter the result in the weight cell in **column e**.

f. Carry out a similar exercise to the actions in sub para 5e for the Trim Index.

g. Calculate and enter the Load Station (in). (see DAP101B-0704/0705-9A, Hercules C Mk 4 - Weight and Balance Data Calculation Help Guide, or Hercules C Mk 5 - Weight and Balance Data Calculation Help Guide).

h. Calculate and enter the Load Station Index. (see DAP101B-0704/0705-9A, Hercules C Mk 4 - Weight and Balance Data Calculation Help Guide. or Hercules C Mk 5 - Weight and Balance Data Calculation Help Guide)

Notes.

1. Ensure the trim Figures for columns **(b), (c), and (d)** have the correct positive or negative value.

2. MOD Form 702D - Weight and Balance Data - Standard Role Fit Component Parts and List of Permanent Fit Items Not Included in the Aircraft Basic Weight, is not Required for the Hercules C130J. Tables of particular standard role fits and/or permanent fit items not included in the aircraft basic weight are contained within AP101B-0704-9 and AP101B-0705-9. These AP's are to be used when adding single line entries on MOD Form 702B(Hercules).