

Instruction for Use

Weight and Balance Data - Basic Weight and Moments - MOD Form 702

Record of Removal/Refitment of Items Included in the Aircraft Basic Weight - MOD Form 702A

Record of the Fitting/Removal of Items Not Included in the Aircraft Basic Weight - MOD Form 702B

Current Operating Data Calculation Sheet - MOD Form 702C

Standard Role Fit Component Parts and/or List of Permanent Fit Items Not Included in the Aircraft Basic Weight - MOD Form 702D

Weight and Balance Data - Basic Weight and Moments - MOD Form 702

1. 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. 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 (column b). [MOD Form 702C(VC10) for VC10 aircraft].

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

2. 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, the new total is to be transferred to MOD Form 702C (column c). [MOD Form 702C(VC10) for VC10 aircraft].

d. When the current MOD Form 702A is full any entries relating to items not fitted are to be transferred to the subsequent MOD Form 702A 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

3. 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, MOD Form 702D is 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 the new total is to be transferred to the MOD Form 702C (column d). [MOD Form 702C(VC10) for VC10 aircraft].

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

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

4. 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 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, personal details and, if required, SNOW or Page and Line.
- b. **Column b.** Enter the aircraft basic weight and moment from MOD Form 702.
- c. **Column c.** Enter the total weight and moment of items included in the basic weight of the aircraft but not fitted from MOD Form 702A.
- d. **Column d.** Enter the total weight and moment of items fitted but not included in the basic weight of the aircraft from MOD Form 702B.
- 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 4e for the longitudinal moment.
- g. Carry out a similar exercise to the actions in sub para 4e for the lateral/vertical moments if required.
- h. Update MOD Form 702CA (if used).

* **Note:** For VC10 aircraft refer to MOD Form 799/9(W & B)(VC10)

Weight and Balance Data - Standard Role Fit Component Parts and List of Permanent Fit Items Not Included in the Aircraft Basic Weight - MOD Form 702D.

5. This form is to be raised by individual operators to list the component parts of their particular standard role fits and/or produce a list of permanent fit items not included in the

basic weight thereby enabling changes to be recorded as single line entries on MOD Form 702B.

Role Fits

- a. Enter the Role Fit description in column a.
- b. Enter the individual component parts of the role fit and their weight and moment effect in the respective column b, c, d and e.
- c. Once all the component parts have been listed, underline the list and calculate the total effect of the Role Fit.
- d. The total effect of the Role Fit can then be transferred to the MOD Form 702B as a single entry as required.

Permanent Fit Items Not Included in the Aircraft Basic Weight

- a. Enter the weight and moment effect of items that are permanently fitted to the aircraft but not included in the basic weight of the aircraft, in respective column b, c d and e.
- b. Once all the items have been listed, underline the list and calculate the total effect of items permanently fitted to the aircraft but not included in the basic weight.
- c. The total effect of items permanently fitted to the aircraft but not included in the basic weight can then be transferred to the MOD Form 702B.

NOTE: IT IS THE RESPONSIBILITY OF THE AIRCRAFT OPERATOR TO ENSURE THAT ANY MOD FORM 702Ds RAISED ARE MAINTAINED TO THE CORRECT AMENDMENT STATE.

Several sheets may be required to record the above information, current MOD Form 702Ds are to be retained with the aircraft documentation for reference purposes.