

# Instructions for Use

MOD Form 799/4(RC-135W)

(Revised Aug 22)

Sheet 1 of 3

PPQ = 10

## Flight Servicing Certificate - MOD Form 705(RC-135W)

## Flight and Equipment Running Log - MOD Form 725(RC-135W)

## Hydraulic System Supplementary Record - MOD Form 726HSSR(RC-135W)

### Flight Servicing Certificate- MOD Form 705(RC-135W)

1. **General.** MOD Forms 705(RC-135W) are used for the certification of flight servicing, fuel and LOX states. Provision is made to record up to 4 flight servicings, 4 fuel state changes, and 4 LOX state changes on each form. Responsibility for completion is detailed in the following paragraphs.
2. **Insertion and Removal of MOD Form 705(RC-135W).** MOD Forms 705(RC-135W) are to be inserted and removed from the MOD Form 700C iaw the instructions for controlled forms on MOD Form 799/1. At the beginning of each month the Sheet No. is to be reset back to '1'. The indicated month is to be transferred to the MOD Form 713 along with the Sheet No. and is used as a management aid for retention purposes. The authorized person removing the form, is to ensure that the last completed PR details on the removed form, are transferred to the newly inserted form, into the 'Previous PR TDM (iaw 2(R)1)' row. Remove the completed form and retain iaw the retention stated in MAM-D Part 1 Chapter 2.3.
3. **After Flight Declaration (Lines 1 to 5).** The Responsible Aircrew Member's after flight signature returns the responsibility for the Aircraft to the engineering organization and certifies that:
  - a. **Lines 1 and 2** have been completed.
  - b. Any Aircrew accepted faults, the Serial Number of Works (SNOWs) for which are listed in the 'Accepted Faults' block (**Line 3**), are annotated in his After Flight Declaration.
  - c. A MOD Form 707A entry has been raised for each fault that became evident whilst they were responsible for the Aircraft including preflight faults.
  - d. The results of any Flying Requirements undertaken have been entered in the relevant line of the MOD Form 707B(AFRC) iaw MOD Form 799/5(AFRC).
  - e. The Flying and Equipment Running Log MOD Form 725(RC-135W) has been completed.
  - f. The RC-135W Engine / Usage Running Log MOD Form 726(RC-135W) has been completed.
4. **Flight Servicings (Lines 6 to 20)** (MAM-P, Chapter 4.2 Paragraph 13.2).

a. **Flight Servicing Co-ordinator.** The Flight Servicing Co-ordinator is to define the type of flight servicing required in **Line 6** (PR, TH, QT, or TH\$) and complete the TDM details in **Line 18**, the time is in line with the flight servicing's completion as laid down in Topic 2(R)1. They are also responsible for:

(1) Ensuring the Flying Hours are recorded correctly on the Flying and Equipment Running Log MOD Form 725(RC-135W). All the entries are to be checked to ensure that calculations are correct from the previous inputs. The following information is to be transferred from the MOD Form 725(RC-135W) and entered onto the RC-135W Engine and JFS Running Log MOD Form 726(RC-135W):

(a) Flight Duration, this figure is to be entered into the 'Aircraft Sortie Duration' column and then the 'Total Running Hours' for each engine is to be calculated and entered into the relevant column. 'B/F (FDR) Aircraft Hours' is to be taken directly from DDTU download when possible.

(b) Engine starts are to be transferred to the appropriate engine column and the total calculated.

(2) Identify, at **Line 17**, any Flight Servicing Schedules, eg hydraulic replenishment, which they have delegated to tradespersons other than those directed to undertake the flight servicing.

(3) Striking through any designated or spare lines not required.

(4) Ensuring that, on completion of their task detailed in local orders, all tradespersons involved in the flight servicing, including any delegated tasks annotated in the 'Spares' blocks, have signed for their work in the appropriate signature blocks and are authorised to do so.

(5) Entering the valid until, TDM in **Line 20**. If servicing being carried out is a Thru Flight or Quick Turn, **Line 20** 'Servicing Valid Until TDM' is to reflect that of the current Preflight. If the Preflight has expired **Line 20** is to be lined through.

b. **Flight Servicing Co-ordinator.** The Flight Servicing Co-ordinator is to sign in **Line 19** to certify the Flight Servicing Certificate and confirm they are

satisfied that:

- (1) A MOD Form 707A entry has been raised for each fault found during the flight servicing.
- (2) The Flight Servicing Team has been supervised during the task and its associated operations to ensure all elements of the flight servicing have been carried out.
- (3) The associated MOD Form 705(SSC) columns have been completed.
- (4) All aspects of the servicing have been carried out following the guidelines in local orders and signed for on **Lines 7 to 13**.
- (5) Fuel and LOX contents are recorded at **Lines 7 to 9**, as a check only. Any fuel and LOX replenishments are to be carried out and recorded on the reverse of MOD Form 705(RC-135W).
- (6) Mission System debrief has been carried out post flight, iaw the tasks detailed in the Topic 2(R)1, by a tradesperson with the suitable security clearance and signed at **Line 14**.
- (7) Aircraft urinal and toilet servicing has been carried out by authorised personnel and signed on **Line 15**.
- (8) DDTU Download has been carried out by an authorised tradesperson and signed for at **Line 16**.
- (9) Any additional tasks identified at **Line 17** have been carried out and signed for, if applicable.
- (10) If an FSCC has been carried out it is to be signed for at **Line 17** in the 'spare' column and annotate "**FSCC Tradesperson(A-E)**" specifying which element of the servicing it was carried out against.
- (11) The Flying Hours and component usage have been recorded, in the Flying Log and Equipment Running Log MOD Form 725(RC-135W) and the RC-135W Engine and JFS Running Log MOD Form 726(RC-135W), have been calculated correctly from the previous sortie details and totals prior to that sortie.
- (12) A careful check of oil state figures and accumulator pressures has been made and recorded on the Hydraulic System Supplementary Record MOD Form 726HSSR(RC-135W) and Oil Replenishment / Sampling Record for CM56 / F108-CF-201 Turbo Fan Engines MOD Form 737(RC-135W) paying particular attention to oil quantities put in.

c. **Engineering Tradespersons.** Engineering tradespersons are to undertake the work as detailed by the Flight Servicing Co-ordinator and sign in the appropriate blocks. A signature in the Flight Servicing Certificate block certifies that the flight servicing has been undertaken in accordance with the appropriate Flight Servicing Schedule and the relevant Annex in local orders.

It also signifies that the Hydraulic System Supplementary Record MOD Form 726HSSR(RC-135W) has been updated and, where required, engine oil replenishments undertaken have been recorded on the Oil Replenishment / Sampling Record for CFM56 / F108-CF-201 Turbo Fan Engines (MOD Form 737(RC-135W)). Additionally, certification on the MOD Form 705(RC-135W) by a tradesperson signifies that any hand tools, used for that aspect of the flight servicing they have undertaken, have been accounted for.

#### Notes:

**1. Delegated Flight Servicing Items.** When delegating Flight Servicing Schedules are to be specified separately on the Flight Servicing Certificate, the tradesperson who is delegated to carry out these items is to sign in the appropriate block.

**2. Fuel and LOX Replenishment (Ref. Paragraph 12).** Tradespersons carrying out fuel and LOX replenishments are to complete the appropriate certificate on the reverse of the Flight Servicing Certificate MOD Form 705(RC-135W).

d. **Waiver of Flight Servicing.** Waiving of flight servicing is not authorised for UK RC-135W, refer to AP-101B-8400-2(R)1.

e. **Continuous Charge.** Continuous charging is not authorised for UK RC-135W, refer to AP-101B-8400-2(R)1.

f. **The Effect on a Flight Servicing by Subsequent Maintenance.** A person holding the appropriate authorization (MAMP-G701) is to determine whether a current flight servicing has been invalidated by subsequent Maintenance (See MAM-P, Chapter 4.2 Paragraph 11.3) and is to either:

(1) Rule through unused blocks of the current flight servicing.

(2) Endorse the next Flight Servicing block of the current Flight Servicing Certificate MOD Form 705(RC-135W) with the following statement,

**"No Flight Servicing Required following work at SNOW:[enter SNOW(s) of work carried out]"**

and certify this entry at **Line 19**.

Or:

(1) Overwrite the signature at **Line 19** with the word "**CANCELLED**" and initial the amendment.

(2) Rule through unused blocks of the current Flight Servicing.

(3) In the next available column, enter at **Line 6** "**Partial Flight Servicing to be carried out**" and certify this entry.

(4) Inform the Flight Servicing Co-ordinator who is to restore the validity of the flight servicing(s) by tasking a team to carry out those parts of the

servicing(s) that are considered to have been affected.

**Notes:**

1. Unless the flight servicing is re-applied in-toto, the validity of the flight servicing is not altered by the re-application of a part.
2. On completion of either of the above the MOD Form 700C is to be Co-ordinated iaw Paragraph 6.

5. **Water Sediment Check (Lines 21 and 22).** Provision is made for a water sediment check to be recorded before each flight. The validity of a water sediment check maybe carried forward if the Aircraft has either not flown or been refuelled since the last water sediment check.

6. **MOD Form 700 Co-ordinator (Lines 24 and 25)(MAM-P, Chapter 4.2 Paragraph 13.3).** The MOD Form 700 Co-ordinator is to certify at **Line 24** that the Aircraft is in a fit condition and ready for flight. The MOD Form 700 is not to be Co-ordinated after a flight servicing has been invalidated by subsequent Maintenance, in these instances **Lines 24 to 30** are to be lined through. The MOD Form 700 Co-ordinator's signature certifies they are satisfied that:

- a. There is no outstanding corrective or preventive Maintenance work.
- b. No Limitations in Section 2 or Acceptable Deferred Faults in Section 3 of the MOD Form 700 are due for rectification/removal before completion of the next planned sortie.
- c. No Scheduled or Out of Phase Maintenance requirements are due or will become due during the next planned sortie.
- d. All entries in the Acceptable Deferred Husbandary Faults Log MOD Form 704A have been certified by a person holding Authorization MAMP-G703.
- e. All hand tools have been accounted for iaw MAM-P, Chapter 4.13.1.
- f. The appropriate Flight Servicing is valid, and Fuel and LOX Certificate has been completed in full, with both tradesperson's and supervisor's signature, if a replenishment has been carried out. They are to ensure that the recorded fuel and LOX states meet the requirements or the next tasking.
- g. The Flying Hours and component usage are recorded in the Flying Log and Equipment Running Log MOD Form 725(RC-135W) and the Engine and JFS Running Log MOD Form 726(RC-135W) have been calculated correctly from the previous sortie details and the totals prior to that sortie.
- h. The last MWO is identified by SNOW in the 'Last SNOW' block (**Line 23**).
- i. Any Flying Requirements are identified by SNOW in the 'Flying

Requirements' block (**Line 27**).

- i. Any Aircrew Accepted Faults are identified by SNOW in the 'Aircrew Accepted Faults' block (**Line 28**) if the servicing carried out was a Quick Turn.

7. **Subsequent Maintenance After MOD Form 700 Co-ordination.** Should any corrective Maintenance be required on the Aircraft after completion of the co-ordinating signature, the procedure at Paragraph 4f is to be followed, with the exception that the word "**CANCELLED**", if applicable, is to overwrite the signature at **Line 24**.

8. **Dispatch Check (Line 26).** A Dispatch Check is to be undertaken when directed by Unit Management, iaw local instructions.

9. **Aircrew Acceptance Certificate (Lines 28 to 30)(MAM-P Chapter 4.2 Paragraph 13.4).** For normal operations the Responsible Aircrew Member is to accept responsibility for the Aircraft by signing and printing their name at **Line 29** and complete the TDM column. The Responsible Aircrew Member's signature certifies that:

- a. Any Limitations are acceptable to them, and if applicable their crew, for the intended sortie.
- b. They are aware of any Acceptable Deferred Faults, identified by the Maintenance Organization in the MOD Form 700, to be of interest to Aircrew.
- c. The recorded state of the Aircraft in respect of fuel, LOX etc, is acceptable to them for the intended sortie.
- d. The document check of the MOD Form 700C has been carried out and the corresponding Co-ordinating column of the Flight Servicing Certificate MOD Form 705 has been signed.
- e. Any flying and/or ground run requirements are acceptable to them and they have been adequately briefed on any special tests required. For flying requirements, they have completed the relevant fields of the associated MOD Form 707B(AFRC).
- f. If applicable, any Aircrew accepted faults, as entered in the Aircraft Maintenance Log (AML), are acceptable to them, and if applicable to their crew, for the intended sortie.

10. **Pre-Flight (Dispatch) Faults.** Refer to MOD Form 799/5.

11. **Aircrew Acceptable Faults.** Refer to MOD Form 799/5.

12. **Fuel and LOX Certificate (Reverse of MOD Form 705(RC-135W)).** The certificate permits up to 4 changes of fuel and/or LOX states to be recorded.

a. **Fuelling Certificate.** Any change of fuel state shall be captured in this area, including post EGR. The tradesperson/Aircrew detailed to undertake either a Refuel or Defuel are to complete Paragraph 12a in complete. If a fuel state check is to be carried out, in addition to that on the front of the Flight Servicing Certificate MOD Form 705(RC-135W), then Paragraph 12a steps (5), (7), (11) and (12) are to be complete:

(1) Enter fuel required for the next tasking in the top row - 'Fuel Load Required'.

(2) Before a Refuel/Defuel operation has commenced a note of the remaining fuel in each individual tank as indicated by the Aircraft Multi-Function Display (MFD) is to be made, this figure is to be entered into the relevant block on the Fuel Certificate in the 'Fuel in tanks **before**' column and enter the total Pounds (lbs) at (a).

(3) In addition, the fuel density provided by the MFD is to be documented on the Fuel Certificate for recording purposes. This figure is to be entered into the 'Fuel Density (MFD)' block.

(4) The tradesperson/Aircrew is to make a note of the total fuel delivered by the metered source. They are then to complete the 'Fuel put in\*/taken out\* (**metered source**)' column (d) as follows:

(a) Enter the Fuel Type and Specific Gravity (SG).

(b) Dependant on the metered source unit of measure, complete the appropriate conversion to ascertain the delivered fuel total in lbs. If the metered source unit of measure is already in lbs, then enter the value into the conversion table at (d).

(c) Any unused blocks or rows are to be lined through.

(5) Once a Refuel, Defuel or check has been carried out a note of the fuel contents in each tank as indicated by the MFD is to be made, this figure is to be entered in the 'Fuel in tanks **after** Refuel\*/Defuel\*/Check' column and then enter the total in lbs at (b).

(6) Calculate the fuel load put in/taken out figure (c) by subtracting figure (a), fuel load before Refuel/Defuel, from figure (b), fuel load after Refuel/Defuel, ie  $c = b - a$ .

(7) Record the Standard Fuel Load Chart (SFLC) reference used in TO 1C-135-5-1, Section 4, Appendix K. The SFLC used is to be circled on the Fuel Certificate and all others are to be struck through.

(8) Input the Technical Order reference Chapter and Change No. used during the fuelling operation.

(9) Calculate the discrepancy between the fuel delivered by the 'Metered Source' (d) and the fuel load put in/taken out figure (c). This figure is calculated as follows:  $\text{Discrepancy} = c - d$ . This figure is to be entered in

the discrepancy field and is to be annotated as a plus (+) or minus (-) figure.

**Note:** The fuel discrepancy must not exceed +/-4000lbs. If this value is exceeded, then the remedial action contained in the TO 1C-135-2-2-2 is to be taken.

(10) Complete the Fuel Uplifts Undertaken Away from Parent Unit MOD Form 706B(T)(RC-135W) for fuel uplifts with fuel not containing Fuel System Icing Inhibitor (FSII) and/or Lubricity Additive iaw MOD Form 799/4A(RC-135W) if applicable.

(11) Sign the certificate in the signature block and complete the TDM.

(12) Flight Servicing Co-Ordinator is to sign the supervisor's block certifying they have supervised the fuelling action carried out. Alternatively, if an independent supervisor was present, they are to sign the supervisor's block.

b. **LOX Certificate.** The tradesperson detailed to undertake either a replenishment or check of the LOX system is to:

(1) Input the Technical Order reference Chapter and Change No. used during LOX operation.

(2) Record the Quantities of LOX indicated by the MFD for each pot and the system total.

(3) Complete the TDM block.

(4) If applicable, record the Serial No. of the LOX trolley used in this LOX operation.

(5) Sign the certificate in the tradesperson's signature block.

(6) Flight Servicing Co-Ordinator is to sign the supervisor's block, certifying they have supervised the LOX operation carried out. Alternatively, if an independent supervisor was present, they are to sign the supervisor's block.

## Flying and Equipment Running Log - MOD Form 725(RC-135W)

13. **General.** MOD Forms 725(RC-135W) are used to record the Aircraft flight details and measurable parameters. It is essential that the data blocks are completed accurately and legibly.

14. **Insertion and Removal.** MOD Forms 725(RC-135W) are to be inserted and removed from the MOD Form 700C iaw the instructions for the controlled forms on the MOD Form 799/1. Sheet numbers in the series 001 to 999 are to be used.

15. Authorized personnel are to close the MOD Form 725(RC-135W) and raise a new one as follows:

a. Raise the next MOD Form 725(RC-135), populating the 'Sheet No' field with the next number in the series.

- b. Enter the Aircraft Tail Number.
- c. Undertake the actions in Paragraph 18.
- d. Complete the Transfer Certificate on the reverse of the old form.
- e. Remove the completed form and retain in accordance with the retention stated in the MAM-D Part 1 Chapter 2.3

**16. Responsible Aircrew Member.** After each sortie the Responsible Aircrew Member is to complete the required flight details, ensuring that the data recorded is as accurate as reasonably possible. The Responsible Aircrew Member is to complete the MOD Form 725(RC-135W) as follows:

**a. Flight Details block:**

- (1) Enter the date the flight began.
- (2) Enter the 'Take Off and Landing Time', this is to be recorded in Zulu time.
- (3) Complete the 'Flight Duration' in hours and decimal hours, then calculate and enter the value in the 'Total Aircraft Hours' field.

**Note:** Flying Hours are to be recorded in hour decimal format, this is determined using the following conversion chart.

Minutes	Hour/10 <sup>ths</sup>	Minutes	Hour/10 <sup>ths</sup>
1 thru 2	0.0	34 thru 39	0.6
3 thru 8	0.1	40 thru 45	0.7
9 thru 14	0.2	46 thru 51	0.8
15 thru 20	0.3	52 thru 57	0.9
21 thru 26	0.4	58 thru 60	Next Whole Number
27 thru 33	0.5		

- (4) Calculate and record the 'Total Aircraft Hours' by adding the 'Flight Duration' to the 'B/F Aircraft Hours'.
- (5) Enter the number of 'Engine Starts' for each individual engine.
- (6) If used, enter the number of 'JFS Starts'. If unused strike through this box.

**Note:** If the JFS is used the Maintenance Organization must be notified.

- (7) Record all 'Cabin Pressurizations' that occurred during the sortie and then calculate and enter the 'Total Pressurizations'.

- (8) Record all 'AAR Contacts' for this sortie and then calculate and enter the 'Total AAR Contacts'.

**b. Weight (lbs) block:**

- (1) Record the 'Total Fuel at Take-Off' amount in lbs.
- (2) Enter the total amount of fuel received via AAR operations in lbs, if applicable, in the 'Fuel Received' field.
- (3) Record the 'Fuel Qty Jettisoned' in lbs, during the sortie, if applicable.
- (4) Annotate the relevant box(es) with a cross to indicate locations of any fuel jettisoned. (See Example below).

Example: Fuel jettison over sea at 20,000ft. (L-Land, S-Sea)

Jettison Location	L		S	X	Above 10000 Ft	X
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**c. Landings block:**

- (1) Enter the number of 'Rollers this Flight' and calculate and record the 'Total Rollers'.
- (2) Enter the total number of 'Full Stops this Flight' and calculate and record the 'Total Full Stops'.

**d. Remaining Rows:**

- (1) Enter the total 'Number of O<sup>2</sup> Drills' carried out this sortie.
- (2) Record the 'LOX Qty Cease Flying' in Litres.
- (3) Using the SPC Table below, complete the 'Flt Sortie Codes'.

**SPC Table**

SPC	Description
<b>11</b>	Transit/Mission (no AAR)
<b>12</b>	Transit/Mission (single AAR)
<b>13</b>	Transit/Mission (multiple AAR)
<b>14</b>	General Handling/Pilot Training (no AAR)
<b>15</b>	General Handling/Pilot Training (with AAR)
<b>16</b>	Functional Check Flight

**Note:** If 2 or more SPCs were achieved during the sortie then only enter the SPC in which the majority of the SPC took place.

- (4) Enter the number of 'Overshoots/go-arounds' for each SPC.
- (5) Record the 'Sortie Length (Hrs)' in hours for each SPC.
- (6) Enter the number of 'Rollers' for each SPC.
- (7) Enter the 'Station of Landing'.
- (8) The 'Captain's Name' is then to be recorded in block capitals.

17. During any period away from the Parent Unit, the authorized 'Responsible Aircrew Member' is to assume the role of the NCO Flight Servicing and carry out their role and responsibilities as detailed in Paragraph 18.

18. **NCO Flight Servicing.** After flight, the NCO Flight Servicing is to ensure the MOD Form 725(RC-135W) is complete and the data entered is realistic and logical and is to carry forward the following details:

**Flight Details block:**

- a. 'Total Aircraft Hours' to 'B/F (FDR) Aircraft Hours'.
- b. 'Total Pressurizations' to 'B/F Pressurizations' of the 'Flight Details' block.
- c. 'Total Fuel at Landing'.

**Weight (lbs):**

- d. 'Total AAR Contacts' to 'B/F AAR Contacts'.

**Landings:**

- e. 'Total Rollers' to 'B/F Rollers'.
- f. 'Total Full Stop' to 'B/F Full Stop'.

19. **Ground Pressurizations.** If there is a requirement to carry out a cabin pressurization on the ground for Maintenance purposes, then this event is to be recorded on the MOD Form 725(RC-135W). The tradesperson/Aircrew are to complete the following fields on the next available block:

- a. Enter the date of the pressurization in the 'Flight Details' block.
- b. Enter the number of pressurization events in the 'Pressurizations this Flight' field and calculate the 'Total Pressurizations'.
- c. Enter either the Engineering Supervisor's or Aircrew's name in the 'Captain's Name' field in block capitals.
- d. Strike through any unused fields.
- e. Undertake the actions in Paragraph 18 Steps a-e.

**Note:** All instances of engine starts and JFS starts during ground pressurization(s) are to be recorded on the RC-135W Engine and JFS Running Log MOD Form 726(RC-135W) by the Engineering Supervisor or Aircrew.

## **Hydraulic System Supplementary Record - MOD Form 726HSSR(RC-135W)**

20. **General.** MOD Forms 726HSSR(RC-135W) are to be used to record accumulator pressures, reservoir contents levels, surge tank contents post flight and system differentials and will assist with the detection of hydraulic system faults.

21. **Insertion and Removal of MOD Forms 726HSSR(RC-135W).** MOD Forms 726HSSR(RC-135W) are to be inserted into, and removed from, the MOD Form 700C iaw the instructions for controlled forms on MOD Form 799/1.

22. **Responsibilities.** MOD Forms 726HSSR(RC-135W) are to be completed as follows:

a. **Flight Line Tradesperson.** When carrying out a flight servicing the next available row of the MOD form 726HSSR(RC-135W) is to be populated. They are to record the associated MOD Form 705(RC-135W) sheet and line number, on which the servicing was carried out, in the work order details.

b. **Aircraft Technician.** When carrying out a replenishment identified post Aircraft servicing or Scheduled Maintenance, the relevant accumulator and/or hydraulic reservoir quantities are to be documented on the next available row of the MOD Form 726HSSR(RC-135W). They are to record the SNOW associated with the task in the work order row.

23. **Retention Instructions.** The authorized individual removing the form is to ensure that the previously completed MOD Form 726HSSR(RC-135W) is removed and forwarded to the Engineering Record Section iaw MOD Form 799/1, and that a copy is sent to the Mechanical Trade Manager. The Mechanical Trade Manager is then to retain this copy of the form until receipt of the next completed form.