

Instructions for Use

AV Flight Servicing Certificate - MOD Form 705(Protector RG-1)(AV) Role Equipment and Expendable Stores State - MOD Form 706A(Protector RG-1)(AV) Record of Fuel Uplifts Away From Parent Unit - MOD Form 706B(H) Flying Log and Fatigue Data Sheet - MOD Form 725(Protector RG-1)(AV)

AV Flight Servicing Certificate - MOD Form 705(Protector RG-1)(AV)

1. **General.** MOD Form 705(Protector RG-1)(AV) is used for the certification of flight servicing's and fuel states. Provision is made to record up to 4 flight servicing on each form. Responsibilities for completion are detailed in the following paragraphs.
2. **Insertion and Removal.** MOD Forms 705(Protector RG-1)(AV) are to be inserted and removed from the MOD Form 700C in accordance with the instructions for controlled forms on MOD Form 799/1, except that the person removing the form is to ensure that the last Post Flight Servicing (Post F) and the Next Maintenance Due details have been carried forward. 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.
3. **After Flight Declaration Confirmation (Lines 1 to 4).** Confirmation that the Air System Commander has communicated After Flight Declaration and authorized the MOD Form 700C Co-Ordinator to print the Aircrew name at **Line 2** and to sign and print their name at **Line 3** and enter the relevant TDM at **Line 4** to pass responsibility for the Aircraft to the engineering organization and certify that:
 - a. They have returned the Aircraft to the finally armed state in accordance with the Aircraft Flight Reference Cards (FRC) or that no explosive armament stores are fitted.
 - b. They had accepted those faults, the Serial Number of Work (SNOWs) for which are listed in the 'Accepted Faults' block (**Line 1**) against their After Flight Declaration.
 - c. An Aircraft Maintenance Log (AML) (MOD Form 707A) entry has been raised for each fault that became evident whilst responsible for the Aircraft, including pre-flight faults and RPAS In-flight Log faults reported on MOD Form 777H(Protector RG-1)(GCS) and 777HC(Protector RG-1)(GCS) iaw MOD Form 799/4C(Protector RG-1)(GCS).
 - d. Either the relevant Flying Log and Fatigue Data Sheet (MOD Form 725(Protector RG-1)(AV)) or GOLDesp has been completed and a MOD Form 707A entry has been raised for any discrepancy or limit exceedance.
 - e. Where applicable the Record of Fuel Uplifts (MOD Form 706B(H)) are to be completed for any refuels carried out whilst they were responsible for the Aircraft.
4. **Armament Clearance (Line 5).** The tradesperson responsible is to sign in **Line 5** to certify that the Aircraft has been returned to the initially armed state in accordance with the approved procedure or that no explosive armament stores are fitted.
5. **GOLDesp Update (Line 6) (if applicable).** The individual is to certify in **Line 6** to indicate that the previous sortie details have been entered in to GOLDesp.
6. **Flight Servicing (Lines 7 to 18).**
 - a. **Flight Servicing Co-Ordinator.** The Flight Servicing Co-Ordinator is to define the type of flight servicing required in **Line 7** and enter the commenced Time Day Month (TDM) in **Line 8**. They are also responsible for:
 - (1) Entering any additional requirements in the numbered spare **Lines 14 and 15** and detailing the appropriate tradesperson to undertake and sign for the work.
 - (2) Identifying in the spare **Lines 14 and 15**, any items contained in the Flight Servicing Schedules (eg Brake Oil replenishment) which they have delegated to a tradesperson 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 tasks, all tradespersons involved in the Flight Servicing (including any delegated tasks) have signed for their work in the appropriate signature blocks and are authorized to do so.

(5) Enter the 'Servicing Valid Until TDM / Airframe Hours' at **Lines 17 and 18**, as defined in accordance with the Flight Servicing Validity policy in the Topic 2(R)1, in order to determine the Servicing Valid Until Airframe Hours metric.

b. The Flight Servicing Co-Ordinator is to sign in **Line 16** to certify that they have satisfied themselves that:

(1) An AML entry (MOD Form 707A) has been raised for each fault found during the flight servicing.

(2) The flight servicing has been completed satisfactorily.

(3) The appropriate MOD Form 705(SSC) columns have been completed.

(4) If applicable, flight servicing details have been updated in GOLDesp.

(5) Recorded fuel state meets the figure requested for the next planned sortie.

(6) The flying hours and component running hours recorded in the Flying Log and Equipment Running Log have been calculated correctly from the previous sortie details and the totals prior to that sortie.

(7) A careful check of oil state figures has been made, paying particular attention to the amount 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 flight servicing 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, where required, oil replenishments undertaken have been recorded on the Oil Replenishment Record (MOD Form 737). Additionally, certification of the MOD Form 705 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 delegated flight servicing items are specified separately on the Flight Servicing Certificate, the tradesperson who completes these items are to sign in the appropriate block.

(2) Supervised Flight Servicing. When a tradesperson under training is carrying out a flight servicing, they are to be supervised by an appropriately authorised person in accordance with MAM-P. In this instance the Flight Servicing Co-Ordinator is to annotate a spare line(s) with the wording:

"2nd Sig [insert details of the element of the flight servicing(s) being supervised]".

The tradesperson undertaking the flight servicing is to complete the

appropriate flight servicing field as normal and the individual undertaking the supervisory aspects of the flight servicing is to sign the block identified by the Flight Servicing Co-Ordinator.

d. **Waiver of Flight Servicing.** When operational circumstances demand and provided the conditions of MAM-P Chapter 4.2 Paragraph 10 are met, flight servicing between successive flights may be waived. The statement:

"Flight servicing waived by: Authority Level J/Aircraft Commander*: [Insert Name]" (* Delete as applicable).

is to be entered in the flight servicing block on the relevant MOD Form 705. This entry is to be counter-signed by the authority level J, appropriately authorised person, or the Aircraft Commander. Any mandatory checks detailed in the Topic 2(R)1 are to be carried out.

e. **Flight Servicing Invalidated by Subsequent Maintenance.** A person holding the appropriate authorization(s) is to determine whether a current flight servicing has been invalidated by subsequent Maintenance (see MAM-P Chapter 4.2. Paragraph 11) and either:

No Flight Servicing Required.

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

(2) Endorse the next flight servicing block of the current MOD Form 705 with

"No Flight Servicing Required Following Work at SNOW(s): [Enter SNOW(s) of any work carried out]" and certify this entry.

Or:

"No Flight Servicing Required Following Cancelled / Aborted* Flight" (* Delete as applicable).

f. **Partial Flight Servicing.** If a partial flight servicing will restore the currency of the existing flight servicing, the FSC is to be annotated with the following statement and signed by an individual authorized:

"Partial Flight Servicing to be carried out: [enter details of elements to be completed]".

In addition, the Tradesperson who carries out this work is to sign the FSC.

7. **MOD Form 700C Co-Ordinator (Line 24) (MAM-P Chapter 4.2 Paragraph 13.3).** The MOD Form 700C Co-Ordinator is to certify in **Line 24** that the Aircraft is cleared for flight. The MOD Form 700C is not to be co-ordinated after a Post Flight Servicing (Post F) or when a completed flight servicing has been invalidated by subsequent Maintenance, in these instances **Lines 24 to 31** are to be ruled through. The MOD Form 700C Co-Ordinator's signature certifies they have satisfied themselves that:

- a. A life limiting enquiry has been carried out to establish:
- (1) No scheduled or out of phase Maintenance is due before completion of the next planned sortie.
 - (2) No Limitations or Deferments are due before completion of the next planned sortie.
 - (3) When the next flying/calendar or other interval-based activities are due.
- b. No scheduled or out of phase Maintenance requirements are due before the Aircraft is next expected to land.
- c. No Limitations (MOD Form 703) in Section 2 or Acceptable Deferred Faults (MOD Form 704) in Section 3 are due for rectification/removal before completion of the next sortie.
- d. All entries in the Acceptable Deferred Husbandry Log (MOD Form 704A) have been certified by a person with 2nd signatory authorization.
- e. All hand tools have been accounted for iaw MAM-P Chapter 4.13.1 Paragraph 2.
- f. The flight servicing are valid and the fuel and role states are as requested for the task.
- g. The next 'Maintenance Due' block has been updated to reflect when the next preventive Maintenance operation becomes due. For calendar-based Maintenance insert TDM, for flying hours-based Maintenance insert hours remaining until Maintenance becomes due.
- h. The last Maintenance Work Order is identified by SNOW in the 'Last SNOW' block **Line 23**.
- i. The DTC is in a condition required for use appropriate to the Aircraft Mk.
- j. The current role state is recorded on the MOD Form 706A and the sheet is annotated at **Line 19 (if in use)**.
- k. Any Flying Requirements are identified by SNOW in the 'Flying Requirement' block at **Line 26**.
- l. Independent AV walk-round Inspection signature is annotated in **Line 27**. The signature certifies that the AV has been visually inspected by the authorized Shift Supervisor. The signature releases the AV as fit for flight and ready for the AV Commander.
- m. Any Aircrew Accepted Faults are identified by SNOW in the 'Aircrew Accepted Faults' block at **Line 28**.
- n. Associated GOLDesp data had been updated.
8. Should any corrective Maintenance be required on the Aircraft after completion of the Co-Ordinating signature, the procedure at Paragraph 6e is to be followed, with the exception that the word '**CANCELLED**', if applicable, is to overwrite the signature at **Line 24**.
9. **Aircrew Acceptance Certificate Confirmation (Lines 28 to 31) (MAM-P Chapter 4.2 Paragraph 13.4)**. Air System Commander has communicated acceptance of the Aircraft and authorized the MOD Form 700C Co-Ordinator to print the accepting Aircrew name at **Line 29** and to sign and print their name at **Line 30** and enter the relevant TDM at **Line 31** confirming Aircrew acceptance that:
- a. Any Limitations (MOD Form 703) are acceptable to them, and if applicable their crew, for the intended flight.
 - b. They are aware of any Acceptable Deferred Faults (MOD Form 704), identified by the Maintenance Organization to be of interest to Aircrew.
 - c. The recorded state of the Aircraft in respect of fuel etc, is acceptable to them for the intended flight.
 - d. The armament state of the Aircraft, as certified on the appropriate MOD Form 725 or MOD Form 706A, is as ordered by the authorizing officer.
 - e. The documentary check of the MOD Form 700C has been carried out and the Co-Ordinating Certificate of MOD Form 705 has been signed by the MOD Form 700C Co-Ordinator at **Line 24**.
 - f. Any flying or ground run requirements are acceptable to them and they have been adequately briefed on the relevant fields of the associated MOD Form 707B(AFRC). If applicable, any Aircrew-accepted faults, as entered in the AML (MOD Form 707A), are acceptable to them, and if applicable their crew, for the intended flight.
 - g. The Commander checks the Independent AV walk-round Inspection has been carried out by the authorized shift supervisor, accepting that a visual inspection has been carried out of the AV prior to flight **Line 27**.
10. **Pre-Flight Faults**. Refer to MOD Form 799/5.
11. **Aircrew Accepted Faults**. Refer to MOD Form 799/5.
12. **Fuel Certificate – Reverse of MOD Form 705(Protector RG-1)(AV)**. This certificate permits up to 6 changes of the fuel state to be recorded. The tradesperson/Aircrew detailed to undertake a Refuel/Defuel/Check is to:
- a. Indicate the type of operation being undertaken.

- b. Enter the fuel remaining as indicated by the AV gauges in the 'Fuel Remaining' block.
- c. Undertake the Refuel/Defuel/Check iaw DAP101B-9401-OR and enter the new fuel state in the 'Total Fuel in AV' block as indicated on the AV gauges.

Note: This block is also to be completed after a fuel check.

- d. From the readings noted in Paragraphs 12b and 12c calculate and enter the Total Put in/Taken Out in the 'Total Put in/Take Out' block to provide value (a).
- e. When the AV is refuelled or defuelled from/by a metered source the amount of fuel put in or taken out as indicated by the source if in Litres, is to be converted into lbs (Litres x 2.2) then entered in the '(Metered Source) Put in/Taken out' block to provide value (b).
- f. The discrepancy between values (a) and (b) on the fuel certificate are calculated and entered in the 'Discrepancy' block as a percentage of the 'Total Put in/Taken Out' as indicated by the AV gauges against the Metered Source.

$$\frac{|(a - b)|}{(a + b) / 2} \times 100 = \%$$

Note: If the maximum permitted discrepancy figure exceeds limits then follow up action is to be taken in accordance with SOPs.

- g. Enter the type of fuel in the 'Type' block.
- h. Print name and sign the certificate to certify that the Refuel/Defuel/Check has been undertaken iaw DAP101B-9401-OR and complete the TDM block.

Note: If the AV is refuelled with fuel not containing Fuel System Icing Inhibitor (FSII), then an entry is to be made on MOD Form 706B(H) iaw the instructions given on this MOD Form 799/4A for Record of Fuel Uplifts Away From Parent Unit.

Role Equipment and Expendable Stores State - MOD Form 706A(Protector RG-1)(AV)

13. **General.** MOD Form 706A(Protector RG-1)(AV) is used to certify the fitment of role equipment and expendable stores. Provision is made to record multiple flights on each form.

14. **Insertion and Removal.** MOD Form 706A(Protector RG-1)(AV) is to be inserted and removed from the MOD Form 700C iaw the instructions for Controlled Forms on the MOD Form 799/1.

15. **Expendable Stores States Checking / Loading / Downloading.** On completion of any checking/loading/unloading operation the weapons NCO is to complete the next available block on the MOD Form 706A(Protector RG-1)(AV) and is responsible for:

- a. Entering the current loaded state as fitted to the AV using the approved configuration profile for the mission (Table 1) in the appropriate boxes. They are to annotate with the appropriate Stores State Code (Table 2).

- b. Completing the appropriate Check/Load/Download box with an 'X' to indicate the weapons/role fit activities carried out.
- c. Printing their name in the 'Name' block.
- d. Entering Time, Day and Month in 'TDM' block.

Note: Where AGMs are being loaded on the pylon LAU Station, the station box (7/3) are annotated with the letter 'A'. Then the AGM load configuration is to be annotated on the appropriate box relating to the LAU Station.

Approved Configurations									
Station	1 (Port)	2	3	4	5	6	7	8	9 (Stbd)
Combat ISR 1	C	C	A/B*	P	F	P	A/B*	O	C
Combat ISR 1a	C	C	A/B*	P	F	C/X*	A/B*	O	C
Combat ISR 1b	C	C	A/B*	C/X*	F	C/X*	A/B*	O	C
ISR (OD only)	C	C	C	C	F	C	C	O	C
Combat	C	C	A/B*	P	C	P	A/B*	C	C
Clean 1 (with pylons)	C	C	X	X	C	X	X	C	C
Clean 2 (no pylons)	C	C	C	C	C	C	C	C	C

Table 1 - Approved Configurations

* Optional Fit

Stores State Codes	
C	Clean
X	Pylon Only
A	Pylon + AGML
B	Brimstone 3
P	Pylon + Paveway
O	Outdragon
F	Fin

Table 2 - Stores State Codes

Record of Fuel Uplifts Away From Parent Unit - MOD Form 706B(H)

16. **General.** MOD Form 706B(H) is used to record all fuel uplifts away from the Parent Unit. Where, due to operational circumstances, (eg field operations), it would cause unnecessary delays to complete the MOD Form 706B(H), the Air System Commander may waive the requirement to enter the fuel uplifts at that time, but the MOD Form 706B(H) is to be completed on completion of the mission/return to base.

17. AV engines are not at risk from fuel not containing lubricity additives*. When fuel containing Fuel System Icing Inhibitor (FSII) is not available, fuel not containing FSII may be uplifted for up to 14 days, provided that the period without FSII is immediately followed by an equivalent period of fuel with FSII.

18. **Insertion and Removal.** MOD Form 706B(H) is to be inserted and removed from the MOD Form 700C iaw the instructions for Controlled Forms on MOD Form 799/1. The person removing the old form is to ensure that the details of the last uplift of non FSII fuel have been carried forward to the next MOD Form 706B(H), 'Non FSII Fuel' block.

19. **Person Undertaking Refuel.** The person undertaking the refuel is to complete the next line on the MOD Form 706B(H) unless the requirement has been waived iaw Paragraph 16. If the MOD Form 700C is unavailable at the Aircraft refuel location, the filled in 706B(H) is to be scanned and electronically sent to the Aircraft MOB for action.

Flying Log and Fatigue Data Sheet - MOD Form 725(Protector RG-1)(AV)

20. **General.** MOD Form 725(Protector RG-1)(AV) Flying Log and Fatigue Data Sheet is used to record flight details.

21. **Insertion and removal.** MOD Forms 725(Protector RG-1)(AV) are to be inserted and removed from the MOD Form 700C iaw the instructions for Controlled Forms on MOD Form 799/1.

22. The following information is to be brought forward into the 'Pre F AV Hours' and 'Pre F Landings' rows when inserting a new sheet with the completed transfer certificate:

- a. Total AV Hours.
- b. Post F Landings.

23. **Take Off Stores.** Insert the Expendable Stores and Role Equipment at StartUp using codes from Table 4.

24. **Air System Commander.** The Air System Commander is to communicate the following data to the MOD Form 700C Co-Ordinator to complete MOD Form 725(Protector RG-1)(AV):

- a. **Date.** Enter the date of the Sortie Line 1. Insert Day/Month/Year in UK format, i.e. 10/01/19 for 10 Jan 2019.
- b. **Take off Time.** Insert the take off time of the sortie **Line 2**.
- c. **Flight Duration (Hrs Mins).** Enter the duration of the sortie **Line 4**. The flying hours are to be taken from the GCS(s) Data logger(s).
Note: Where multiple GCSs are used for a single sortie the hours from each GCS are to be added together.
- d. **Total AV Hours.** Calculate the Total AV Hours (Hrs Mins) **Line 5**.
- e. **Sortie Profile Code (SPC).** The Air System Commander must accurately classify each sortie with the appropriate SPC from Table 3 and communicate this to the MOD Form 700C Co-Ordinator to enter the appropriate SPC on **Line 6**.
- f. **AV Landings.** Add the number of landings to the 'Pre F Landings' **Line 7** and enter the total number of landings in the 'Post F Landings' row **Line 8**.
- g. **Fuel at Start-Up.** Enter the Fuel at Start-Up **Line 10**.
- h. **Fuel at Shut-Down.** Enter the Fuel at Shut-Down **Line 11**.
- i. **Landing Stores.** Insert the Expendable Stores and Role Equipment at Shut-Down using codes from Table 5 **Lines 13 to 17** as required.
- j. **Captain's Name.** Air System Commander is to provide their name to be included on **Line 18** by the MOD Form 700C Co-Ordinator.

25. **MOD Form 700C Co-Ordinator.** The MOD Form 700C Co-Ordinator is to sign and print their name on **Line 19** to confirm the Air System Commander has communicated all Flying Log and Fatigue Data required to complete the MOD Form 725(Protector RG-1)(AV).

26. **GOLDesp Sortie Profile Codes (SPC).** In order to maintain Continuing Airworthiness and Structural Integrity of the Aircraft, the Air System Commander must be familiar with the criteria for each SPC for the AV and accurately classify each sortie appropriately from Table 3. The person updating GOLDesp is to ensure the SPC is correct for the sortie.

27. **GOLDesp Update.** The Aircraft's usage record in GOLDesp must record the Aircrew reported Sortie Profile Code with its associated Flying Hours and landings. The entry must be prefixed with the Protector RG-1 Item Acronym Code (ie Still to be defined M3, M3I, M3A or M4) from the dropdown list. The individual responsible for updating GOLDesp is to certify that it has been carried out by printing their name and signing on **Line 20**.

28. **Flight Servicing Co-Ordinator (FSC).** After each flight the FSC is to check the correctness of the details entered and update GOLDesp iaw JAP(D) 100A-0409-1 (update and usage process). On completion of the day's planned flying they are also to:

- a. Ensure that details of equipment's for which life histories are required are recorded on the relevant MOD form 725(Protector RG-1)(AV).
- b. If the next flight servicing required is a Post F Servicing, the FSC is to increment 'OP if flown' count in GOLDesp by one.
- c. The FSC's final signature, post flight, certifies that they have entered all Aircraft and equipment details into GOLDesp iaw JAP(D) 100A-0409-1 (update and usage process) and entered the sequence number in the GOLDesp SEQ column.

29. **GOLDesp Off-Line Procedure and Subsequent Recovery.** All entries made in the Flying Log and Equipment Running Logs are to be entered in to GOLDesp during the recovery to on-line working. Care is to be taken to ensure that this is carried out in conjunction with the generation and completion of a GOLDesp MWO for MOD Form 707A entries at the correct date/usage counts.

Sortie Profile Codes		
01	Developmental Flight Test of UK Assets	Notes: Further explanation of the Sortie Profile Codes can be found in the Protector RG-1 Statement of Operating Intent AP101B-9400-15S
02	ISTAR	
03	ISTAR/STRIKE	
04	Training	
05	Maritime	

Table 3 - Sortie Profile Codes (SPC)

Start-Up Stores Codes	
C	Clean
X	Pylon Only
A	Pylon + AGML
B	Brimstone 3
P	Pylon + Paveway
O	Outdragon
F	Fin

Table 4 - Start-Up Stores Codes

Shut Down Stores Codes	
D	Store Discharged
J	Store Jettisoned
N	No Change

Table 5 - Shut-Down Stores Codes