

2 FLYING TRAINING SCHOOL



AVIATION ENGINEERING STANDING ORDERS

6th Edition
AL1



Intentionally Blank

Amendment Record

[illegible]

Distribution List

1. This book is now completely electronic no hard copies are available. The Master copy can be found HQ 2FTS Orders folder on the RAF Syerston SharePoint site, with a further copy in the 2FTS Document Library area of Bader SharePoint.

NOTE: Any hard copies printed will be uncontrolled. Before use, all hard copies of this publication are to be checked against the master electronic copy for the correct amendment state.

2 FTS AESO 1-1-0-0 – FUNCTION AND ORGANISATION OF ENGINEERING WING (Eng Wg)

Rationale *To define the function and organisation of Eng Wg and the engineering responsibilities for the Flying Squadrons*

<p>Contents</p> <p>ANNEX A</p>	<p>FUNCTION AND ORGANISATION OF ENGINEERING WING (Eng Wg)</p> <ol style="list-style-type: none"> 1. This order is applicable to all personnel employed within the Engineering Wing and those elements of 2FTS that are engaged with engineering in the Military Air Environment (MAE). 2. The engineering organisation of 2FTS is at Annex A.
<p>2 FTS AESO 1-1-0-0</p>	<p>FUNCTION AND ORGANISATION OF ENGINEERING WING (Eng Wg)</p> <ol style="list-style-type: none"> 3. MAE is defined at Reference A. Individuals must have a clear understanding of the definition to ensure that the activities and boundaries associated with the MAE are understood. The following definition expands on that detailed at Reference A and has been authorised for use at 2FTS by OC Eng Wg. <p>“The 2FTS MAE encompasses any and all activities, excluding those activities within the Maintenance Approved Organisation Scheme (MAOS Mil Pt 145) environment, which have the potential to affect the airworthiness of aircraft or associated equipment.”</p>
<p>Acceptable Means of Compliance</p> <p>1-1-0-0</p>	<p>FUNCTION AND ORGANISATION OF ENGINEERING WING (Eng Wg)</p> <ol style="list-style-type: none"> 4. The Engineering Wing (Eng Wg) at No 2 Flying Training School (2FTS) is established to provide engineering support to RAF Syerston and its Volunteer Gliding Squadrons (VGS) in order to deliver the output directed by Commandant 2 FTS in support of RAF Air Cadets. 5. The Wing is divided into: Eng Wg HQ and the Core Continuing Airworthiness Management Organisation (Core CAMO). OC Eng Wg holds QR 640 as the principal Engineer across all 2FTS Units including VGSs and units attached to Eng Wg. OC Eng Wg is delegated MAM-P Level K authority by the Chief Air Engineer to the Operating Duty Holder (22Gp CAE(ODH)).

6. The Engineering community at RAF Syerston and the VGS units operate a Quality Management System (QMS) and follow RAF QMS Policy. The Quality System Owner (QSO) for 2 FTS is the 2FTS Comdt who delegates daily management of the QMS to OC Eng Wg as the Quality System Manager (QSM).

7. CAMO MAM-P Part M authority is delivered separately at OF3 level delegated by OC Eng Wg. The Deputy Continuing Airworthiness Manager (DCAM) provides the day to day lead for Part M requirements iaw RA 4900 series.

Authority for Issue

8. 2FTS – Aviation Engineering Standing Orders (2FTS AESOs) are published in accordance with current guidelines detailed at References A to D. The engineering elements are issued under the authority of 2FTS OC Eng Wg as the level K holder for glider activity in accordance with References A, B and D.

Scope of Content

9. The purpose of these orders is to describe the pan-2FTS air engineering organization and function, and to promulgate 2FTS engineering and logistic orders and processes.

Applicability

10. These AESOs are applicable to all personnel engaged in Engineering and Logistic activities within the 2FTS and AMO, where applicable.

Primacy

11. These AESOs hold primacy within 2FTS. Any AESO issued by individual Volunteer Gliding Squadrons or other organizations within 2FTS are subordinate to this document. These 2FTS AESOs are to be explicitly referenced in any subordinate document.

Structure

12. 2FTS AESOs are arranged into 2 books, each containing 2 Parts:

- a. Book 1, Part 1 - Function, Organization and Responsibilities
- b. Book 1, Part 2 - Duties
- c. Book 2, Part 1 - General Orders

- d. Book 2, Part 2 - Specific Orders

Responsibility.

13. OC CGS and OC VGSs are responsible for:
 - a. Advising the 2FTS OC Eng Wg of all Air Engineering, Ground Engineering and Continuing Airworthiness matters appropriate to their appointment.
 - b. The professional management of engineering resources under their control.
 - c. Ensuring that the required engineering standards and authorised practices are employed,
 - d. The efficient engineering management of the aircraft or other technical equipment for which they are responsible.
 - e. Nominating a Quality and Engineering Standards Officer (QESO) to manage and coordinate engineering training and quality standards across their Area of Responsibility.
14. The AMO Maintenance Managers are responsible for ensuring that:
 - a. The relevant elements of these orders are incorporated into their company orders iaw Reference D.
 - b. 2FTS OC Eng Wg is to be informed in writing of any major changes to their MOE.
 - c. CAMO QM is to be informed of any audit findings and closure proposals.

Reading and Recording

15. Personnel are to sign (F4820A) as having read and understood the Orders and Procedures that are applicable to them. It is mandatory for all personnel to read 2FTS AESO Prelims, as well as the specific orders relating to their role as directed by their Line Manager. This is to take place on the following occasions:
 - a. On arrival.
 - b. Following the issue of a new or amended order.
 - c. Following a change of employment.

d. Annually.

16. It is the responsibility of OC CGS and OC VGS to ensure that their staff have read and understood those 2FTS AESOs that are appropriate to their role.

17. AMO Maintenance Managers are responsible for ensuring that their company orders align with the latest version of the relevant elements of these orders.

**Guidance
Material**

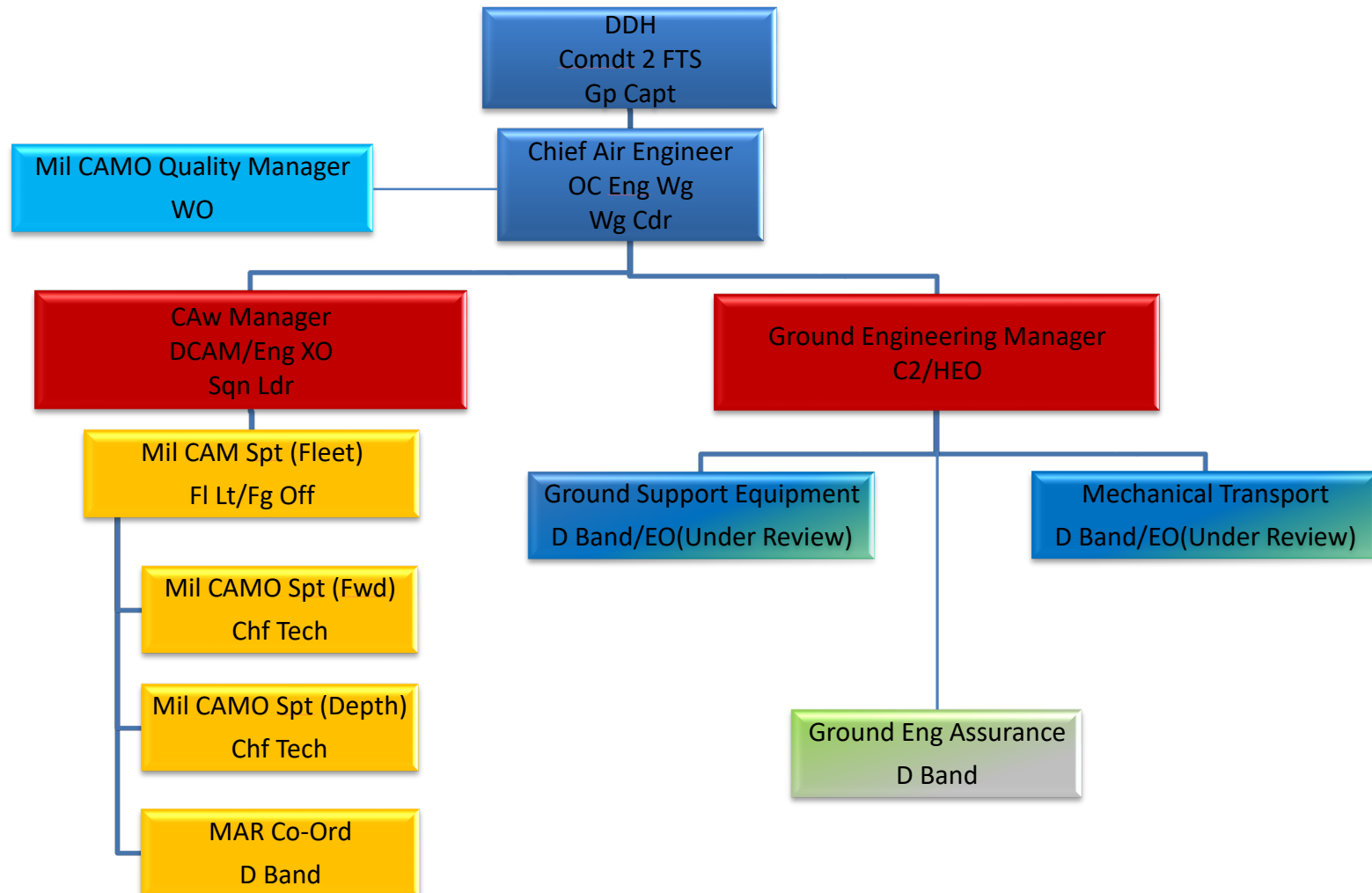
1-1-0-0

References:

- A. ► [King's Regulations Royal Air Force Article J640.](#) ◀
- B. AP 100B-01 Order 1.13 Annex B.
- C. Regulatory Article 4009.
- D. MAM-P Chap 1.1

► K Edge IEng MIMechE (RAF)
Sqn Ldr
2FTS OC Engineering Wing

Date: 01 Nov 23 ◀

ORGANISATION DIAGRAM – ENGINEERING WING (Eng Wg)

6th Edition AESO – Table of Content

Book	Part	Chapter	Order	Title	Order Sponsor
Prelim	-	-	-	Amendment Record	2 FTS OC Eng Wg
Prelim	-	-	-	Distribution list	2 FTS OC Eng Wg
Prelim	-	-	-	Table of Content	2 FTS OC Eng Wg
1	1	0	0	Function And Organisation of Engineering Wing (Eng Wg)	2 FTS OC Eng Wg
1	1	1	0	AESO Issue, Review, Amendment and Withdrawal Procedure	2FTS QSC
1	1	1	1	VGS Quality and Engineering Standards Officer & Deputy Quality and Engineering Standards Officer	2 FTS OC Eng Wg
1	1	1	2	VGS Tech Mechanical Transport	2 FTS Grd Equip Spt
1	1	1	3	VGS Publications Custodian	2 FTS OC Eng Wg
1	2	1	1	Glider Maintenance Section Duty Engineer	2 FTS OC Eng Wg
2	1	1	1	Glider Utilisation Returns	2FTS DCAM
2	1	2	1	Air Or Ground Occurrence Reporting - Engineering Related Defence Air Safety Occurrence Reports (DASOR)	2FTS OC Eng Wg
2	1	2	2	Actions Required on Receipt Of An Airworthiness Issue Outside Normal Working Hours Requiring The Potential Temporary Cessation of Flying	2FTS OC Eng Wg
2	1	2	3	Aircraft Displaying Abnormal Flying Characteristics	2FTS DCAM
2	1	3	1	The Authorisation Of CGS, CFS And VGS Staff to Carry Out Specified Aircraft Engineering Tasking and Ground Based Tasking	2FTS OC Eng Wg
2	1	3	2	Engineering Authorisation Management Utilising Squadron Training Achievement Recording System (STARS)	2FTS DCAM
2	1	3	3	The Authorisation Of CGS, CFS And VGS Personnel to Carry Out Maintenance Activity on The Skylaunch Winch Cable and Associated Strop Assemblies.	2FTS DCAM

2	1	3	4	Competency Checks - Flight Servicing, Maintenance Task and Winch Task	2FTS ECM
2	1	3	5	Aircraft Servicing Standards Checks (ASSC)	2FTS ECM
2	1	4	1	2FTS Tool Management and Control Procedures	2FTS QSC
2	1	4	2	Pre-Issue Checks of Aircraft, Winch and First Response Vehicle Tool Kits for CGS And VGS	2FTS QSC
2	1	5	1	Ground Handling of Aircraft	2FTS DCAM
2	1	5	2	Aircraft Recovery Following Deflated Mainwheel	2FTS DCAM
2	1	5	3	Charging Of Viking Aircraft Batteries at Volunteer Gliding Squadrons	2FTS DCAM
2	1	5	4	Before Issue and Daily Maintenance of B Mk 72 Parachutes	2FTS QSC
2	1	5	5	Removal Of Bodily Fluid Contamination from Aircraft	2FTS OC Eng Wg
2	1	5	6	Supplementary Flight Servicing Task to Inspect and Replace Wing to Fuselage Jointing Tape	2FTS DCAM
2	1	6	1	Mandatory Publications to Be Listed on Individuals F4820A	2FTS QSC
2	1	6	2	Weekly Check of Correct Amendment State - Aviation Related Engineering Documents	2FTS OC Eng Wg
2	1	6	3	Use Of Pre-Printed Maintenance Work Orders	2FTS ECM
2	1	6	4	Returning Aircraft Documentation – F700 Paperwork	2FTS DCAM
2	1	6	5	Documentation Actions Following Engineering Maintenance Work Order Completion	2FTS OC Eng Wg
2	1	6	6	Procedure For Mod F700 Quality Checks	2FTS DCAM
2	1	7	1	OC VGS MT Responsibilities	2FTS GES Mgr
2	1	7	2	Driving Of Service MT By VGS Personnel	2FTS GES Mgr
2	1	7	3	Mechanical Transport Unserviceability	2FTS GES Mgr

2	1	7	4	Utilisation Of Glider Launch Control Caravan (GLCC)	2FTS GES Mgr
2	1	7	5	Refuelling Procedures for Skylaunch Winch	2FTS GES Mgr
2	1	7	6	Daily, Weekly and Refuel Procedures of The Avgas 975 Litre Trailer Tanker Refuelling (Thompson Carmichael)	2FTS GES Mgr
2	1	7	7	Daily, Weekly and Refuel Procedures of The Diesel 975 Litre Trailer Tanker Refuelling (Thompson Carmichael) And Trolley Fuel Replenishment Mk4.	2FTS GES Mgr
2	1	7	8	Pre-Use Checks and Use of Glider Ground Handling Tow Out Kit	2FTS GES Mgr
2	2	1	1	SQUADRON AVIATION ENGINEERING STANDING ORDERS	OC Eng Wg

2FTS AVIATION ENGINEERING STANDING ORDERS

6th Edition



Book 1 Part 1

FUNCTION, ORGANISATION & RESPONSIBILITIES

Book 1, Part 1 – Function, Organisation & Responsibilities**Contents**

Order	Title	Sponsor
0	<u>AESO Issue, Review, Amendment and Withdrawal Procedure</u>	2FTS QSC
1	<u>VGS Quality and Engineering Standards Officer & Deputy Quality and Engineering Standards Officer</u>	2FTS OC Eng Wg
2	<u>VGS Tech Mechanical Transport</u>	2FTS Ground Equip Spt
3	<u>VGS Publications Custodian</u>	2FTS OC Eng Wg

2 FTS AESO 1-1-1-O – AESO ISSUE, REVIEW, AMENDMENT AND WITHDRAWAL PROCEDURE

Rationale *To define and document the process by which AESOs are sponsored, issued, reviewed, amended and withdrawn.*

Contents ANNEX A ANNEX B	AESO ISSUE, REVIEW, AMENDMENT AND WITHDRAWAL PROCEDURE
2 FTS AESO 1-1-1-0	AESO ISSUE, REVIEW, AMENDMENT AND WITHDRAWAL PROCEDURE 1. This order is applicable to all 2FTS personnel.
Acceptable Means of Compliance 1-1-1-0	AESO ISSUE, REVIEW, AMENDMENT AND WITHDRAWAL PROCEDURE 2. AESOs are promulgated electronically on the SharePoint system and Bader. No other hard copies may be held. 3. Sponsor. The sponsor of the AESO is defined as the organisation or role responsible for reviewing, and, if required, amending the specific AESO. Administration of AESOs: Reviewing Orders. Although the contents of 2FTS AESO will be subject to regular amendment, the complete book is to be reviewed annually. Each Order is to be reviewed annually by the Sponsor, to ensure: <ul style="list-style-type: none"> a. Continued validity of the requirement and or task. b. References are correct. c. Compliance with current regulations and legislation. d. Compliance with best practice and safe working practices.

Term	Description	Deadline
Spring	Deadline for fully completed amendment proposals to be received by 2FTS QSC	14 Feb
	Notice of Proposed Amendment (NPA) Issued	1 Mar
	Deadline for NPA comments to be submitted	15 Mar
	New 2FTS AESO amendment formally published	01 Apr
Autumn	Deadline for fully completed amendment proposals to be received by 2FTS QSC	15 Sep
	Notice of Proposed Amendment (NPA) Issued	1 Oct
	Deadline for NPA comments to be submitted	15 Oct
	New 2FTS AESO amendment formally published	1 Nov

e. Effective use of resources.

Table 1. Routine Amendment Timetable

Amending Orders.

5. Any amendment to 2FTS AESO is to be classified as either routine or urgent. An urgent amendment is defined as having safety implications and will be processed for publication immediately. Routine amendments will be processed for publication in accordance with the timetable detailed below. Should a routine amendment be received after the deadline for that term, it will form part of the next term's amendment cycle.

6. Amendments to AESOs are to be carried out whenever content is found to be incorrect, unfit for purpose or when authorized by the Sponsor or OC Eng Wg. Proposed ► amendments ◄ are to be completed by the originator using Annex A or B. Proposals are to be staffed as follows:

- a. The Sponsor is to review the amendment proposed to ensure compliance is maintained.
 - b. Proposals once agreed and endorsed by the Sponsor are to be sent to the Quality System Coordinator (QSC), HQ 2 FTS, RAF Syerston, Newark on Trent, NG23 5NN, who will co-ordinate further action.
 - c. 2FTS OC Engineering Wing will either approve or reject the proposal. If rejected the reason(s) for rejection will be given in the as comments.
 - d. If approved, new orders or amendments to 2FTS AESO are to be returned to the QSC for incorporation.
 - e. A draft of the new amendment of AESOs will be issued to the community as a Notice of Proposed Amendments (NPA). Any NPA comments should be emailed to the 2FTS QSC and SYE-2FTS-HQ-GpMbx@mod.gov.uk prior to the deadline detailed in Table 1 above.
 - f. NPA comments will be reviewed by the 2FTS QSC and order Sponsor, the 2FTS OC Engineering Wing will then either approve or reject the comment(s), the originator will be informed of the decision. Once any required changes have been incorporated the new 2FTS AESO amendment will be formally published.
7. **Deleting Orders.** To maintain the integrity of the AESO back up process Orders deleted orders, AESO versions will be retained for the appropriate period (2 yrs).
8. **Creating Orders.** If a new task or requirement is deemed to require an order, then a sponsor will be appointed by 2FTS OC Engineering Wing (2FTS CAE). The sponsor will draft the order ready for inclusion at the next amendment/review opportunity. Before it is issued, each order is to be ratified by the Owner of AESOs - 2FTS OC Engineering Wing (2FTS CAE), who is in effect confirming that the task is valid, funded and supports the authorised output of 2FTS; or that it is a task authorised at risk.
9. **Layout.** The generic layout and style of 2 FTS AESOs are shown in Annex A and B. In particular:
- a. **Headers and Footers.** The inclusion of headers and footers, which contain electronic copying information, page numbering and the AL state are to be reviewed for currency and accuracy by the editor at each review.
 - b. **Referencing.** References are to be listed in the order that they appear in the document. References must be referred to in the text.

- c. **Font.** 11 Arial will be used in AESOs for normal text.
- d. **Tables and Organizational Diagrams.** There is no standard for Tables and Charts as they must fit the purpose and page size. Sponsors are to make them, as far as possible, accurate, easy to read and easily amendable.
- e. **Tabs.** Default tabs are set at 1 cm.

10. **Warnings, Cautions and Notes.** When including warnings, cautions and notes particular care must be taken in their positioning within the order as the safety of personnel and equipment may be compromised.

- a. **Warnings.** Warnings indicate possible hazards to people. They must always precede the relevant text. The whole warning is typed in bold upper case. **Cautions.** Cautions indicate possible hazards to equipment but no danger to people. They precede the associated text. The caption is typed in bold upper case while the text is in bold lower case.
- b. **Notes.** Notes provide information that is extraneous to the immediate subject of the text. The caption is typed in upper case and the text in lower case.

11. **Conventions.** Reference A and B should be considered when writing AESOs.

Continuous Improvement:

12. The electronic version of AESOs is to be subject to continuous improvement in the content, standard and method of presentation. XO Eng Wg is to:

- a. Maintain a continuous review of the presentation of AESOs and advise OC Eng Wg of possible improvements. Changes to the content of orders are only to be made under formal amendment action.

Guidance Material

1-1-1-0

References:

- A. MAM-P, Chap 1.1
- B. RA 4009

Annexes:

- A. Terms of Reference Template
- B. General Order Template

2 FTS AESO **X-X-X-X** – TERMS OF REFERENCE: **TITLE** (This title is to be 14 Arial, Capitals and Bold)

KEY STAKEHOLDER: insert here in 12 Arial and Bold (If N/A please delete)

Rationale *Terms of Reference are to define the specifics of a role, identifying the responsibilities, key tasks and competencies required to be effective within the position and organisation. (This rationale should **not** be changed)*

Contents

Insert Annex here:

ANNEX A

If no annexes delete

TERMS OF REFERENCE: TITLE (This heading is to be 12 Arial, Capitals and Bold)

The rest of the AESO will be in 11 Arial.

2 FTS AESO

X-X-X-X

TERMS OF REFERENCE: TITLE (This heading is to be 12 Arial, Capitals and Bold)

1. Insert applicability.
 2. Insert Aim.
- 11 Arial

Acceptable Means of Compliance

X-X-X-X

TERMS OF REFERENCE: TITLE (This heading is to be 12 Arial, Capitals and Bold)

3. Insert **implementation** of AESO and remaining of order here in **11 Arial** ensuring the order follows correct indentations numerically and alphabetically as per below:

4. Aligning bullet points.

a. Example of AMC/GM paragraph with one indent. – This is achieved by right clicking the bullet point, so a drop-down menu appears – select '*Paragraph*'. In the indentation section input 1cm in the '*Left*' box & select (none) in the drop-down menu of '*Special*' – then click '*tabs*' – in the '*default tab stop*' ensure that states 1cm & in the '*tab stop position*' ensure that also states 1cm – select ok to complete indentation.

(1) This indentation is the same process as above but with 2cm in the indent '*Left*' box – **do not use the 'tab' to create indentations** – this will interfere with the AESO template.



(a) The same process as above but with 3cm in the indent '*Left*' box.

i. The same process as above but with 4cm in the indent '*Left*' box.

**Guidance
Material**

X-X-X-X

References: (This heading is to be 12 Arial and Bold)

A. Insert reference's here in 11 Arial. (If there are no reference's – insert N/A).

Annexes: (This heading is to be 12 Arial and Bold)

A. Insert annex title here in 11 Arial. (If there are no annexes – insert N/A)

2 FTS AESO X-X-X-X – TITLE (This title is to be 14 Arial, Capitals and Bold)**KEY STAKEHOLDER:** insert here in 12 Arial and Bold. (If N/A please delete)**Rationale** *Insert Aim in 11 Arial, Italic.*

Contents Insert Annex here ANNEX A If no annexes delete	TITLE (This title is to be 12 Arial, Capitals and Bold) The rest of the AESO will be in 11 Arial.
2 FTS AESO X-X-X-X	TITLE (This heading is to be 12 Arial, Capitals and Bold) 1. Insert applicability.
Acceptable Means of Compliance X-X-X-X	TITLE (This heading is to be 12 Arial, Capitals and Bold) 2. Insert implementation of AESO and remaining of order here in 11 Arial ensuring the order follows correct indentations numerically and alphabetically as per below: 3. Aligning bullet points. a. Example of AMC/GM paragraph with one indent. – This is achieved by right clicking the bullet point, so a drop-down menu appears – select ' <i>Paragraph</i> '. In the indentation section input 1cm in the ' <i>Left</i> ' box & select (none) in the drop-down menu of ' <i>Special</i> ' – then click ' <i>tabs</i> ' – in the ' <i>default tab stop</i> ' ensure that states 1cm & in the ' <i>tab stop position</i> ' ensure that also states 1cm – select ok to complete indentation. (1) This indentation is the same process as above but with 2cm in the indent ' <i>Left</i> ' box – do not use the 'tab' to create indentations – this will interfere with the AESO template. (a) The same process as above but with 3cm in the indent ' <i>Left</i> ' box. i. The same process as above but with 4cm in the indent ' <i>Left</i> ' box.

**Guidance
Material**

X-X-X-X

References: (This heading is to be 12 Arial and Bold)

A. Insert reference's here in 11 Arial. (If there are no reference's – insert N/A).

Annexes: (This heading is to be 12 Arial and Bold)

A. Insert annex title here in 11 Arial. (If there are no annexes – insert N/A)

2 FTS AESO 1-1-1-1 – VGS QUALITY AND ENGINEERING STANDARDS OFFICER & DEPUTY QUALITY AND ENGINEERING STANDARDS OFFICER

Rationale *Terms of Reference are to define the specifics of a role, identifying the responsibilities, key tasks and competencies required to be effective within the position and organisation.*

Contents

TERMS OF REFERENCE: VGS QUALITY AND ENGINEERING STANDARDS OFFICER & DEPUTY QUALITY AND ENGINEERING STANDARDS OFFICER

2 FTS AESO 1-1-1-1

TERMS OF REFERENCE: VGS QUALITY AND ENGINEERING STANDARDS OFFICER & DEPUTY QUALITY AND ENGINEERING STANDARDS OFFICER

1. This order is applicable to the Volunteer Gliding Squadron (VGS) Quality and Engineering Standards Officer (QESO) & Deputy QESO.
2. To define the responsibilities of the QESO/Deputy QESO.

Acceptable Means of Compliance 1-1-1-1

TERMS OF REFERENCE: VGS QUALITY AND ENGINEERING STANDARDS OFFICER & DEPUTY QUALITY AND ENGINEERING STANDARDS OFFICER

3. The QESO/Deputy QESO is responsible to the OC VGS for:
 - a. Ensuring personnel are trained, competent and authorised to carry out Glider ► flight servicing ◄ iaw Reference A.
 - b. Ensuring that all parachutes that are issued to staff/passengers flying in VGS gliders have been subjected to Before Issue/Daily Maintenance checks iaw Reference B.
 - c. The training, examination and certification of VGS personnel in ground handling tasks as appropriate to their aircrew category as detailed at Reference C.
 - d. Prepare the authorisation on STARS for 2FTS OC Eng Wg (or their approved delegate) for electronic signature.

- e. For supervising the work undertaken by personnel under their control including ensuring that correct engineering standards and practices are maintained and assuring the quality and regulatory compliance of all work undertaken.
- f. Monitoring documentation standards relating to maintenance activities ensuring that MOD F700 Instructions for Use (MOD Form 799 series) and guidance contained within this publication are correctly applied.
- g. Ensuring all training and maintenance activities are completed in accordance with the quality assurance principles detailed at Reference E.
- h. Ensuring that all Health and Safety rules and guidance applicable to maintenance matters are adhered to.
- i. Compiling weekly Glider Utilisation Returns for each platform accurately, iaw Reference F.
- j. Ensure that all F707A's raised which are subject to a DASOR are annotated in RED with 'DASOR'.
- k. Ensuring all tool checks are carried out on VGS tool kits and any tool issues/returns are completed iaw Reference G.
- l. Upon a change of personnel, the QESO/DepQESO is to inform the 2FTS QSC that the new incumbent is required to sign for control of tool kits issued to their VGS.

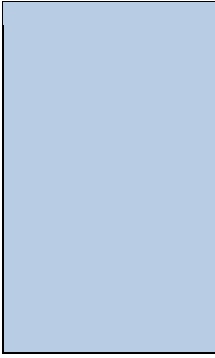
4. 2FTS OC Eng Wg may authorise CGS, CFS and VGS Personnel to undertake specified aircraft flight servicing and maintenance tasks. These tasks may only be carried out following official training, examination and subsequent authorisation by 2FTS OC Eng Wg or their authorised deputy. Annual training and re-authorisation of the QESO/Deputy QESO is mandatory and is to be carried out by the GMS Training Cell. Following initial training, all other personnel are to be re-authorised annually subject to completion of FSCC and MTCC. Personnel are not to work outside of their authorisations.

Reporting Officer (RO) Responsibilities

- 5. There are no RO responsibilities associated with this role.

Training requirements

- 6. Competencies required for this role are separated into essential and desirable:



- a. Essential:
 - (1) SERCO GMS training package
- b. Desirable:
 - (1)

**Guidance
Material
1-1-1-1**

References:

- A. AP 101G-1001-5B1
- B. 2FTS-AESO, Book 2, Part 1, Chapter 5, Order 4
- C. 2FTS-AESO, Book 2, Part 1, Chapter 3, Order 1
- D. 2FTS-AESO, Book 2, Part 1, Chapter 3, Order 4
- E. 2FTS Unit Quality Manual.
- F. 2FTS-AESO, Book 1, Part 1, Chapter 1, Order 0
- G. 2FTS-AESO, Book 2, Part 1, Chapter 4, Order 1

2 FTS AESO 1-1-1-2 – VGS TECH MECHANICAL TRANSPORT

Rationale *Terms of Reference are to define the specifics of a role, identifying the responsibilities, key tasks and competencies required to be effective within the position and organisation.*

Contents

TERMS OF REFERENCE: VGS TECH MECHANICAL TRANSPORT

2 FTS AESO 1-1-1-2

TERMS OF REFERENCE: VGS MECHANICAL TRANSPORT

1. This order is applicable to the Volunteer Gliding Squadron (VGS) Tech Mechanical Transport (MT).
2. To define the responsibilities of the Tech MT.

Acceptable Means of Compliance 1-1-1-2

TERMS OF REFERENCE: VGS MECHANICAL TRANSPORT

3. The Tech MT is responsible for:
 - a. Management of their VGS MT resources in compliance with Reference A, parent unit MT Orders and AESO's.
 - b. Liaison with the parent unit for:
 - (1) MT Serviceability.
 - (2) Maintaining MT records.
 - (3) Defect reporting – Including routine reporting to Parent Unit MT or White Fleet (WF) area office as applicable.
 - (4) Accident reporting.
 - (5) ▶◀
 - (6) ▶◀
 - (7) Advice on current legislation on driver licensing and carriage of cadets in Service vehicles.
 - c. Maintaining MT orders and documentation including a register of qualified drivers. ▶◀

- d. Driving and operating standards of MT.
- e. Ensure that the first line maintenance of all vehicles is carried satisfactorily.
- f. Liaison with 2FTS MTO on MT matters that cannot be resolved at local level.
- g. Ensure completion of weekly GUR, highlighting all MT and GSE issues.
- h. Ensure that ► the Skylog database is updated at the end of each flying day via www.winchlog.co.uk ◀
- i. Carry out (or oversee) post vehicle maintenance FOD checks when vehicles returned to VGS.

Reporting Officer (RO) Responsibilities

- 4. There are no RO responsibilities associated with this role.

Training requirements

- 5. Competencies required for this role are separated into essential and desirable:
 - a. Essential:
 - (1) Hold a UK Driving Licence.
 - b. Desirable:
 - (1)

**Guidance
Material
1-1-1-2**

References:

- A. JSP 800.

2 FTS AESO 1-1-1-3 – VGS PUBLICATIONS CUSTODIAN

Rationale *Terms of Reference are to define the specifics of a role, identifying the responsibilities, key tasks and competencies required to be effective within the position and organisation. Publications include but are not limited to: Air Publications (AP), Digital Air Publications (DAP), Army Equipment Support Publication (AESP) and Sky Launch Manuals*

Contents

TERMS OF REFERENCE: VGS PUBLICATIONS CUSTODIAN

2 FTS AESO 1-1-1-3

TERMS OF REFERENCE: VGS PUBLICATIONS CUSTODIAN

1. This order is applicable to the Volunteer Gliding Squadron (VGS) Publication Custodians.
2. To define the responsibilities of the Publications Custodian.

Acceptable Means of Compliance 1-1-1-3

TERMS OF REFERENCE: VGS PUBLICATIONS CUSTODIAN

3. The Publication Custodian is responsible for:
 - a. All Publications (e.g., Eng Wg, CGS, OPS) in their Area of Responsibility (AoR) are located in a designated area(s) where control can be exercised.
 - b. All Publications are maintained in good condition and are to the current amendment state.
 - c. A Master Publications List is to be maintained and displayed. It is to include all Publications held at the VGS (including any hard copies or extracts of publications printed from electronic documents), their location and their amendment state. To ensure control, all publications are to be numbered on the Master Publications List and this number copied onto the spine/ front cover of the corresponding Publication.
 - d. Amendments are incorporated immediately upon receipt and the amendment action is documented on the AP amendment sheet and the Master Publications list.
 - e. At the end of each day a Publication muster is to be conducted. If any Publication is found missing, no flying is to resume until that Publication is found.



Reporting Officer (RO) Responsibilities

4. There are no RO responsibilities associated with this role.

Training requirements

5. Competencies required for this role are separated into essential and desirable:

a. Essential:
(1)

b. Desirable:

(1)

**Guidance
Material
1-1-1-3**

References:

- A. RA 4810.

Intentionally Blank

2FTS AVIATION ENGINEERING STANDING ORDERS

6th Edition



Book 1 Part 2

DUTIES

2 FTS AESO 1-2-1-1 – GLIDER MAINTENANCE SECTION DUTY ENGINEER

Rationale *The aim of this order is to detail the process for the Duty Engineer, identifying the responsibilities, key tasks and actions to be taken when contacted by the VGSs.*

Contents

PROCEDURE FOR CONTACTING THE GLIDER MAINTENANCE SECTION DUTY ENGINEER

2 FTS AESO 1-2-1-1

PROCEDURE FOR CONTACTING THE GLIDER MAINTENANCE SECTION DUTY ENGINEER

1. This order is applicable to all Volunteer Gliding Squadrons (VGS) and Glider Maintenance Section (GMS).
2. To define the function of the GMS Duty Engineer.

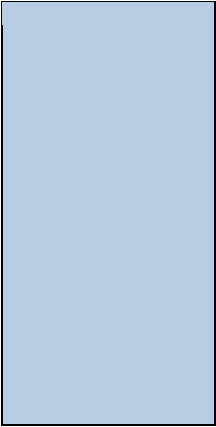
Acceptable Means of Compliance 1-2-1-1

PROCEDURE FOR CONTACTING THE GLIDER MAINTENANCE SECTION DUTY ENGINEER

3. VGS flying operations usually take place at weekends, Bank Holidays and other school holiday periods; GMS may not be working at these times and therefore a Duty Engineer is appointed to provide aircraft engineering advice.
4. The Duty Engineer is normally a senior member of GMS and is contactable on mobile 07973 699194, between 0830 and 1830 on each day during the periods identified in para 3 above. The Duty Engineer is established to provide aircraft engineering advice; however, they will not authorise the following over the phone:
 - a. F703 entries.
 - b. F704 entries.
 - c. Grant maintenance extensions.

NOTE: If an aircraft develops a fault the aircraft captain is to place the aircraft unserviceable and raise a F707A entry. The aircraft will then be recovered the next working day

5. The Duty Engineer is not to be used as a general point of contact for problems which are not related to Viking aircraft engineering issues. All non-engineering issues are to be reported on the GUR at the cessation of flying.

- 
6. The GMS Duty Engineer is to maintain a log of all phone calls made from a VGS and provide an e-mail summary to the SYE-2FTS-HQ-CAMO GpMbx, every Monday with brief details of the issue and resolution.
 7. Before contacting the Duty Eng, VGS staffs are to ensure that the request is a genuine aircraft engineering problem.
 8. On being informed of an airworthiness concern, the GMS Duty Engineer is to confirm the issue and the affected aircraft and carry out actions iaw para 4 of Reference A.

**Guidance
Material
1-2-1-1**

References:

1. 2FTS AESO, Book 2, Part 1, Chapter 2, Order 2

Intentionally Blank

2FTS AVIATION ENGINEERING STANDING ORDERS

6th Edition



Book 2 Part 1

GENERAL ORDERS

BOOK 2, PART 1, CHAPTER 1 – General

Order	Title	Sponsor
1	Glider Utilisation Returns	2FTS DCAM

BOOK 2, PART 1, CHAPTER 2 – Air Safety

Order	Title	Sponsor
1	<u>Air Or Ground Occurrence Reporting - Engineering Related Defence Air Safety Occurrence Reports (DASOR)</u>	2FTS OC Eng Wg
2	<u>Actions Required on Receipt of An Airworthiness Issue Outside Normal Working Hours Requiring The Potential Temporary Cessation of Flying</u>	2FTS OC Eng Wg
3	<u>Aircraft Displaying Abnormal Flying Characteristics</u>	2FTS DCAM

BOOK 2, PART 1, CHAPTER 3 – Authorisations & Competency

Order	Title	Sponsor
1	<u>The Authorisation Of CGS, CFS And VGS Staff to Carry Out Specified Aircraft Engineering Tasking and Ground Based Tasking</u>	2FTS OC Eng Wg
2	<u>Engineering Authorisation Management Utilising Squadron Training Achievement Recording System (STARS)</u>	2FTS OC Eng Wg
3	<u>The Authorisation Of CGS, CFS And VGS Personnel to Carry Out Maintenance Activity on The Skylaunch Winch Cable and Associated Strop Assemblies.</u>	2FTS DCAM
4	<u>Competency Checks - Flight Servicing, Maintenance Task and Winch Task</u>	2FTS ECM
5	<u>Aircraft Servicing Standards Checks (ASSC)</u>	2FTS ECM

BOOK 2, PART 1, CHAPTER 4 – Tool Control

Order	Title	Sponsor
1	<u>2FTS Tool Management and Control Procedures</u>	2FTS QSC
2	<u>Pre-Issue Checks of Aircraft, Winch and First Response Vehicle Tool Kits for CGS And VGS</u>	2FTS OC Eng Wg

BOOK 2, PART 1, CHAPTER 5 – Maintenance Activities

Order	Title	Sponsor
1	Ground Handling of Aircraft	2FTS DCAM
2	Aircraft Recovery Following Deflated Mainwheel	2FTS DCAM
3	Charging Of Viking Aircraft Batteries at Volunteer Gliding Squadrons	2FTS DCAM
4	Before Issue and Daily Maintenance Of B Mk 72 Parachutes	2FTS QSC
5	Removal Of Bodily Fluid Contamination from Aircraft	2FTS OC Eng Wg
▶ 6	Supplementary Flight Servicing Task to Inspect and Replace Wing to Fuselage Jointing Tape	2FTS DCAM
7		

BOOK 2, PART 1, CHAPTER 6 – Documentation

Order	Title	Sponsor
1	<u>Mandatory Publications to Be Listed On Individuals F4820A</u>	2FTS QSC
2	<u>Weekly Check of Correct Amendment State - Aviation Related Engineering Documents</u>	2FTS OC Eng Wg
3	<u>Use Of Pre-Printed Maintenance Work Orders</u>	2FTS ECM
4	<u>Returning Aircraft Documentation – F700 Paperwork</u>	2FTS DCAM
5	<u>Documentation Actions Following Engineering Maintenance Work Order Completion</u>	2FTS OC Eng Wg
6	<u>Procedure For Mod F700 Quality Checks</u>	2FTS DCAM

BOOK 2, PART 1, CHAPTER 7 – MT & GLCC

Order	Title	Sponsor
1	<u>OC VGS MT Responsibilities</u>	2FTS GES Mgr
2	<u>Driving Of Service MT By VGS Personnel</u>	2FTS GES Mgr
3	<u>Mechanical Transport Unserviceability</u>	2FTS GES Mgr
4	<u>Utilisation Of Glider Launch Control Caravan (GLCC)</u>	2FTS GES Mgr
5	<u>Refuelling Procedures for Skylaunch Winch</u>	2FTS GES Mgr
6	<u>Daily, Weekly and Refuel Procedures of The Avgas 975 Litre Trailer Tanker Refuelling (Thompson Carmichael)</u>	2FTS GES Mgr
7	<u>Daily, Weekly and Refuel Procedures of The Diesel 975 Litre Trailer Tanker Refuelling (Thompson Carmichael) And Trolley Fuel Replenishment Mk4.</u>	2FTS GES Mgr

Intentionally Blank

2 FTS AESO 2-1-1-1 – GLIDER UTILISATION RETURNS

Rationale *The aim of this order is to detail the procedure for sending weekly glider and operation information to 2FTS Comdt, OC CGS, OC Ops, OC Stds and the Glider Maintenance Section (GMS) Engineering Records (Eng Recs).*

Contents ANNEX A

PROCEDURE FOR GLIDER UTILISATION RETURNS

2 FTS AESO 2-1-1-1

PROCEDURE FOR GLIDER UTILISATION RETURNS

1. This order is applicable to all Volunteer Gliding Squadrons (VGS).

Acceptable Means of Compliance 2-1-1-1

PROCEDURE FOR GLIDER UTILISATION RETURNS

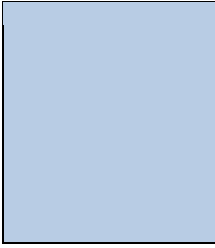
2. Records of glider aircraft operations are maintained to provide an accurate source of fatigue consumption data for each individual aircraft, furthermore they provide the engineers with vital information required to support the fleet. In addition, the operation return highlights any non-aircraft related issues that have affected a VGS's ability to complete its flying programme.

3. To reflect the information required more accurately all Glider Utilisation Returns (GURs) are to be completed on the form at Annex A to this order.

4. Completed GURs are to be submitted to the mailboxes below by 0700 every Monday. Nil returns are required, even if no flying took place, and the form is to be annotated 'not flown'. The email addresses are as follows:

- a. SYE-2FTS-HQ-GpMbx@mod.gov.uk
- b. SYE-2FTS-HQ-CAMOGpMbx@mod.gov.uk
- c. SYE-2FTS-DASOR@mod.gov.uk
- d. SYE-GMS-GpMbx@mod.gov.uk

5. When a continuous course is in progress the GURs over a nine-day period are to be grouped as follows:



- a. The first return is to be Saturday and Sunday only (2 days), by 0700 Monday.
- b. The second return is to be Monday to Sunday (7 days), by 0700 Monday.

**Guidance
Material
2-1-1-1**

Annex:

- A. Glider Utilisation Return

To:	GMS Records RAF Syerston, Newark, Nottinghamshire, NG23 5NN										From:	123 VGS RAF XXXXX		
Email:	SYE-2FTS-HQ-GpMbx@mod.gov.uk SYE-2FTS-HQ-CAMOGpMbx@mod.gov.uk										SYE-2FTS-DASOR@mod.gov.uk SYE-GMS-GpMbx@mod.gov.uk			
08-May-22												Date	XX/XX/XXXX	
<p>1. On completion of a weekend flying period or on completion of a continuous course, details of Viking launches, spins and flying hours are to be recorded below having been extracted from MOD Form F724 (WLG) - Flying and Equipment Running Log.</p> <p>2. Glider returns are to include the aircraft serviceability state (S or U/S) and are to be forwarded to GMS Eng Records before 1700 hrs on the day of completion of a flying period (week end or continuous course). The figures inserted are to accurately reflect the F700 figures. Operations returns are to highlight all VGS operational issues other than aircraft related items.</p>														
Glider Tail Number	Launches		Spins		Flying Hours		Serviceability State (include all faults and corresponding SNOW and if DASOR raised DASOR S/N)							
	Weekly	Total	Weekly	Total	Weekly	Total								
ZEXXX	0	21704	0	2	0:00	2938:33	S							
ZEXXX	0	21363	0	2	0:00	2499:36	U/S							
							?							
							?							
							?							
							?							
Notes:														
Date	XX/XX/XXXX						Appointment:	DS						
Name	Bloggs						Signature:	[Original Signed]						
Tool Check:														
A 100 percent tool/AP check carried out:	All tools/APs are accounted for													
Date	XX/XX/XXXX						Appointment:	DS						
Name	Bloggs						Signature:	[Original Signed]						

6th Edition								2FTS AESO							
Amdt 0															
OPERATIONS RETURN FOR 123 VGS RAF XXXXXXXX															
Date															
Weather															
Operational Statistics	Aircraft Launches		Personnel Hours		Aircraft Launches		Personnel Hours		Launches		Personnel Hours				
Achievements/ Awards	(include flying, ground and administrative awards)														
Safety	(Any incidents of significant events during the operation and DASOR reference if reported)														
Operational	(Any item impacting on the operation outside of safety related issue. Include proposed plans for the following week)														
Engineering	(Aircraft (other than unserviceability), Winch and MT issues)														
Admin & Infra	(Admin and Infra issues that are affecting capacity or capability, including ATP cadet attendance)														
6th Edition								2FTS AESO							
Amdt 0															

2FTS AVIATION ENGINEERING STANDING ORDERS

6th Edition



Book 2 Part 1

Air Safety

2 FTS AESO 2-1-2-1 – AIR OR GROUND OCCURRENCE REPORTING - ENGINEERING RELATED DEFENCE AIR SAFETY OCCURRENCE REPORTS (DASOR)

Rationale *The aim of this Order is to detail the additional requirements to be carried out by CGS, CFS and VGS staff when raising an Air or Ground engineering related DASOR.*

Contents

PROCEDURE FOR AIR OR GROUND OCCURRENCE REPORTING - ENGINEERING RELATED DEFENCE AIR SAFETY OCCURRENCE REPORTS (DASOR)

2 FTS AESO 2-1-2-1

PROCEDURE FOR AIR OR GROUND OCCURRENCE REPORTING - ENGINEERING RELATED DEFENCE AIR SAFETY OCCURRENCE REPORTS (DASOR)

1. This order is applicable to all CGS, CFS, VGS and AMO personnel.

Acceptable Means of Compliance 2-1-2-1

PROCEDURE FOR AIR OR GROUND OCCURRENCE REPORTING - ENGINEERING RELATED DEFENCE AIR SAFETY OCCURRENCE REPORTS (DASOR)

2. When raising a DASOR the originator is to ensure that:
 - a. The DASOR is raised as detailed at Reference A and D.
 - b. The MOD F707A entry has been raised with comprehensive detail of symptoms encountered and photographs (as required).
 - c. The symptom/work required block is to be clearly annotated DASOR in red ink iaw Reference B.
 - d. The DASOR Reference Number is clearly annotated in the Management Aid Block of the F707B (AMO personnel only).
3. **VGS ONLY.** The DASOR is to be brought to the attention of the Glider Maintenance Section via the Glider Utilisation Return iaw Reference C.

**Guidance
Material
2-1-2-1**

References:

- A. RA 1410
- B. MAM-P Chap 9.1
- C. AESO, Book 2, Part 1, Chapter 1, Order 1
- D. DHO 1410(1)

2 FTS AESO 2-1-2-2 – ACTIONS REQUIRED ON RECEIPT OF AN AIRWORTHINESS ISSUE OUTSIDE NORMAL WORKING HOURS REQUIRING THE POTENTIAL TEMPORARY CESSATION OF FLYING

Rationale *This order is to ensure all relevant personnel are informed of the actions to take outside GMS normal working hours on receipt of any flight safety or airworthiness issue including but not limited to SI(T), CAMO tasking directive or reported by a VGS that require engineering or operational actions ‘Before Next Flight’.*

Contents

ANNEX A
ANNEX B
ANNEX C

ACTIONS REQUIRED ON RECEIPT OF AN AIRWORTHINESS ISSUE OUTSIDE NORMAL WORKING HOURS REQUIRING THE POTENTIAL TEMPORARY CESSATION OF FLYING

2 FTS AESO 2-1-2-2

ACTIONS REQUIRED ON RECEIPT OF AN AIRWORTHINESS ISSUE OUTSIDE NORMAL WORKING HOURS REQUIRING THE POTENTIAL TEMPORARY CESSATION OF FLYING

1. This order is applicable to all CGS, CFS, VGS and AMO personnel.

Acceptable Means of Compliance 2-1-2-2

ACTIONS REQUIRED ON RECEIPT OF AN AIRWORTHINESS ISSUE OUTSIDE NORMAL WORKING HOURS REQUIRING THE POTENTIAL TEMPORARY CESSATION OF FLYING

2. If a potential significant air safety concern has been identified, the Mil CAMO is to determine whether the issue is a flight safety or airworthiness concern. Once identified they are to decide if operations need to be paused and flying of affected aircraft cease pending appropriate remedial action, in consultation with OC Eng and OC Ops.
3. On being informed of a flight safety or airworthiness concern the GMS Duty Engineer is to confirm the issue and the aircraft affected and carry out the following:
 - a. Inform OC CGS and all OC VGS of the affected aircraft by both telephone and email as per Annex C that all flying is to cease with immediate effect. If the OC VGS cannot be contacted, then the Deputy OC and/or QESO is to be informed.
 - b. Ensure all applicable aircraft on each operational VGS are placed unserviceable and a F707A entry raised for each aircraft detailing the

fault/issue. (GMS duty engineer is to dictate the exact wording, so all entries are the same).

c. Complete the form at Annex A as each VGS is informed and indicate who was informed.

d. Email OC Eng, OC Ops and CAMO and inform Duty Exec of all actions taken.

4. Each OC VGS is to ensure all the applicable aircraft on their VGS are placed unserviceable using the exact wording as dictated by the GMS Duty Engineer, complete the form at Annex B and forward to CAMO HQ (SYE-2FTS-HQ-CAMOGpMbx@mod.gov.uk) and the email address provided by the GMS Duty Eng by 08.00 the following day.

**Guidance
Material
2-1-2-2**

References:

1. RA 1430

Annexes

- A. Duty Eng Cessation of Flying Call Register
- B. VGS Cessation of Flying Aircraft Return
- C. Duty Personnel and VGS Contact Details

DUTY ENG VGS CESSATION OF FLYING CALL REGISTER

Duty Eng to insert exact wording for F707A entry:

VGS No	Person(s) Informed	How Informed	Signature	DTG
611				
615				
621				
622				
626				
632				
637				
644				
645				
661				
CGS				

VGS CESSATION OF FLYING AIRCRAFT RETURN

From _____ VGS

VGS to insert exact wording for F707A entry as dictated by GMS Duty Eng:

Aircraft No	SNOW No	DTG	Comment

DUTY PERSONNEL AND VGS CONTACT DETAILS

OC Ops Mobile 07769 930904
OC CGS Mobile 07771 942452
GMS Duty Eng Mobile 07973 699194
OC Eng Mobile 07342 087941

611 VGS Tel To be announced
Mobile 07776 226957
OC OC.611VGS@rafac.mod.gov.uk
Dep OC depoc.611VGS@rafac.mod.gov.uk
QESO techoff.611VGS@rafac.mod.gov.uk

615 VGS Tel 0208 645 9784
Mobile 07920 782194
OC OC.615VGS@rafac.mod.gov.uk
Dep OC depoc.615VGS@rafac.mod.gov.uk
QESO techoff.615VGS@rafac.mod.gov.uk

621 VGS Tel 01451 810078
Mobile 07775 942741
OC OC.621VGS@rafac.mod.gov.uk
Dep OC
QESO techoff.621VGS@rafac.mod.gov.uk

622 VGS Tel 01980 615286 / 94344 5286
Mobile 07776 227277
OC OC.622VGS@rafac.mod.gov.uk
Dep OC depoc.622VGS@rafac.mod.gov.uk
QESO techoff.622VGS@rafac.mod.gov.uk

626 VGS Tel 01326 241197 or 93781 2318/9
Mobile 07776 227318
OC OC.626VGS@rafac.mod.gov.uk
Dep OC depoc.626VGS@rafac.mod.gov.uk
QESO techoff.626VGS@rafac.mod.gov.uk

632 VGS Tel 01630 698329 / 94462 8329
Mobile 07776 227346
OC OC.632VGS@rafac.mod.gov.uk
Dep OC depoc.632VGS@rafac.mod.gov.uk
QESO techoff.632VGS@rafac.mod.gov.uk

637 VGS Tel 01451 810078
Mobile 07786 504892

OC OC.637VGS@rafac.mod.gov.uk
Dep OC
QESO techoff.637VGS@rafac.mod.gov.uk

644 VGS Tel 01400 264533 / 95751 4533
Mobile 07867 585517 or 07976 683218

OC OC.644VGS@rafac.mod.gov.uk
Dep OC depoc.644VGS@rafac.mod.gov.uk
QESO techoff.644VGS@rafac.mod.gov.uk

645 VGS Tel 01845 595345 / 94712 5345
Mobile 07776 227349 or 07825 100132

OC OC.645VGS@rafac.mod.gov.uk
Dep OC depoc.645VGS@rafac.mod.gov.uk
QESO techoff.645VGS@rafac.mod.gov.uk

661 VGS Tel 01506 880280
Mobile 07920 782209

OC OC.661VGS@rafac.mod.gov.uk
Dep OC depoc.661VGS@rafac.mod.gov.uk
QESO techoff.661VGS@rafac.mod.gov.uk

2 FTS AESO 2-1-2-3 – AIRCRAFT DISPLAYING ABNORMAL FLYING CHARACTERISTICS

Rationale *The aim of this order is to define the local organisation, responsibilities and processes for the investigation of Un-commanded Flying Control Movements (UFCM), Control Restrictions (CR), Unusual Occurrences (UO) or other unacceptable flying characteristics that pose potentially serious airworthiness risks.*

Contents
ANNEX A
ANNEX B

ACTIONS REQUIRED ON AN AIRCRAFT DISPLAYING ABNORMAL FLYING CHARACTERISTICS

AESO
2-1-2-3

ACTIONS REQUIRED ON AN AIRCRAFT DISPLAYING ABNORMAL FLYING CHARACTERISTICS

1. This order is applicable to all maintenance personnel employed on Viking TMk1.

Acceptable Means of Compliance
2-1-2-3

ACTIONS REQUIRED ON AN AIRCRAFT DISPLAYING ABNORMAL FLYING CHARACTERISTICS

Procedure

2. Initial Actions - Instances in which Uncommanded Flying Control Movements (UFCMs), Control Restrictions (CRs), Unusual Occurrences (UOs) are experienced will be subject to the following immediate action:
 - a. The aircraft is to be transferred to the Line hangar, quarantined, and rendered immediately u/s providing safe to do so. (If considered unsafe/unfeasible to move, then Engineering advice is to be sought).
 - b. The Aircrew are to notify the AMO of the issue experienced. The AMO will suspend all maintenance beyond that necessary to render the aircraft safe and maintain the aircraft in a state as close as possible to that in which the ► **Abnormal Flying Characteristic (AFC)** ◀ occurred. They will conduct an immediate de-brief of the Aircraft Commander and capture photographic evidence or otherwise record the state of pertinent aircraft structures/systems before any configuration changes are subsequently made.

- c. The AMO is to engage with the CAMO, at which point it will be agreed if the occurrence constitutes a genuine AFC (as opposed to an occurrence such as a control obstruction).
- d. When a suspected AFC incident occurs, the AMO will be directed to nominate an Investigating Officer (IO); ensuring the appointed individual is SQEP to undertake the IO role and have them commence the AFCI. The AFC report is not to be used as a replacement to existing F700 series documentation to certify work.
- e. The Aircrew are to raise a DASOR pertaining to the incident for tracking by the Air Safety Management Team (ASMT).

3. Subsequent Actions

- a. The CAMO will ensure that the occurrence is raised on the AFCI Page of the DASOR Tracker, with all pertinent information entered.
- b. The IO is to direct the AFCI, using Reference A as a framework for recording all elements of the investigation. Progress will be tracked through the Engineering Occurrence Meeting (EOM).
- c. The IO is to ensure a robust and methodical investigation is conducted, ensuring that the root cause(s) are identified. All remedial action in the form of component replacement and/or repair is to be undertaken and documented.
- d. Should it be necessary to release an aircraft for test flight as part of the investigation, then authority is to be sought from the MilCAM.

Reporting

- 4. Once the IO considers the investigation to be complete, with all remedial maintenance action taken as necessary, they are to ensure that Annex A is completed and signed. Annex B is then to be completed, with any recommended changes to publications (MOD F765) or narrative fault reporting (F760) detailed. These should be raised iaw extant procedures. Annex A and B are then to be passed to the AMO Chf Eng for review.
- 5. The AMO Chf Eng will review and accept the investigation is complete. In this circumstance, they will add their comments and recommendations to Annex A and B, passing them to the CAMO for review. If the AMO Chf Eng considers further investigation and/or report detail is required, then it will be returned to the IO with further direction given.
- 6. Once received within the CAMO, the Annex A and B will be reviewed by a SQEP team member and then passed to the 2FTS OC Eng Wg with details of any further activity considered necessary to close out the investigation. Liaison

between the CAMO and AMO will be maintained until mutually agreed that no further investigation or detail is needed.

7. The CAMO complete Annex B, which will be passed to OC Eng Wg as the Level K holder, for authorisation. Once content that the investigation is complete and the aircraft is in a proven serviceable condition, the Annex B will be signed, and returned to the AMO providing clearance for the aircraft to be released for unrestricted flight.

The CAMO will e-file Annexes A and B within 'CAMO Responsibility I' of the CAMO SP page as a closed record, upload a copy of these documents to the associated DASOR and close out the related entry on the AFCI page of the DASOR tracker.

Rogue Aircraft

8. In the event that an AFCI cannot conclusively identify the root cause or remedial action is unable to resolve the AFC, the AMO Chf Eng is to designate it a rogue aircraft and this is to be clearly articulated in the Annex A. The Mil CAMO is to be consulted in all such occasions so that further investigative or management actions can be determined.

Authorisation Unrestricted Flight

9. Notwithstanding the restrictions placed by higher level orders, an aircraft may not be released for unrestricted flight without prior authorisation of the Aircraft Level K (MAM-P K1007 Holder or MAM-P K1017)

Release of Quarantined Components

10. The AFC IO is to inform CAMO of any components placed into quarantine (providing the name, part and serial numbers) as part of the investigation. These components are only to be released from quarantine when approved by the Aircraft Level K.

Guidance Material 2-1-2-3

References:

- A. RA 1410
- B. MAM-P Chapter 3.3

Annexes

- A. Post-Shutdown Debrief Proforma – AFC Event
- B. AFC Investigation Report

POST-SORTIE DEBRIEF PROFORMA – ABNORMAL FLYING CHARACTERISTIC EVENT

Introduction

1. The debrief proforma is to be conducted/completed once the aircraft has landed
 2. The debrief proforma attempts to capture every detail that may aid in the AFC investigation, however, if any part is not relevant, write “N/A”, or if the facts are not known, write “N/K.”
- Otherwise, delete “Yes/No” as appropriate and write in full where necessary. Aircrew are to complete all paras asap and send to the AMO:

Add GMB address here for AMO and CAMO

DEBRIEF PROFORMA					
Type of Event: UFCM / CR / UO:					
Aircraft No:		Date:		Location:	
VGS:					
SPC:					
Time of take-off:		Time of incident:		Time of landing:	
Aircraft total flying Hours at time of incident:					
Sortie Type, i.e. GIF, GS, SCT:					
DASOR Number:					
SNOW:					
Met Conditions.					
QFE:		OAT:			
Turbulence: Nil / Light / Moderate / Severe.					
Flight Conditions Immediately Prior to Incident.					
Airspeed:		Windspeed (actual on Ground and estimated at height:			
Height AGL:		Pitch:		Roll:	
Yaw – Rate of Movement:				Heading	
Were the controls reflective of the attitude of the aircraft?					

Nature of Incident.					
Control effect:					
Pitch Yes / No		Roll Yes/ No		Yaw Yes / No	
Was the initial movement that led to the uncommanded flight path/attitude change:					
Rapid/Progressive/Steady					
Description of event:					

Viking T Mk1 Abnormal Flying Characteristic Investigation							
AFC Ref No.							
DASOR Ref No.							
SNOW		AC Tail Number		Date of Occurrence		AFC IO	
Section 1: Aircrew Debrief							
Debrief conducted by:		Aircraft Commander Name		Aircraft 2nd Aircrew Name			
<p><i>Reference the Aircrew UFCM Proforma if occurrence at VGS.</i></p>							
Section 2: Maintenance Organisation Investigation							
Recent maintenance or repair work that could have contributed to the event:							
<p><i>Provide SNOWs and summary of work and reason why this may have an effect on the event.</i></p>							

Local technical instructions (CAMO Instructions) that may have a bearing on the event:

Fault investigation - *Detail diagnostic tests/checks carried out reproduce the reported symptom(s) or to eliminate possible causes. List all checks/tests by DAP/TO and/or to reference and record the results:*

--

Adjustments - Detail any adjustment necessary and record whether adjustment to within limits cleared the symptom/fault:

SNOW	Adjustment	Result	Fault Cleared?

Component Replacements - List any components replaced, results of any bay testing and whether replacement cleared symptom/fault:

SNOW	Component Ref Ser No/Part No.	Reason For Removal	Conditioned	Fault Cleared?

Symptom Confirmation and Fault Clearance

a. Symptom Reproduced?

b. Fault Cleared?	Yes/No
c. Confirmation by reporting Pilot?	Yes/No
d. Did adjustments alone clear the fault?	Yes/No
e. Did component replacement alone clear the fault?	Yes/No
Recommendations	
a. Could a simple pre-flight check be introduced to provide system/aircrew confidence? (If Yes, give details on a continuation sheet)	Yes/No
b. Could preventative maintenance be introduced to highlight, eliminate, or reduce similar occurrences? (If Yes, raise RAF Form 765, list details on a continuation sheet and forward to the DT).	Yes/No
c. Could fault be the result of inadequate, or lack of, specific procedures in aircraft maintenance manuals? (If Yes, raise RAF Form 765, list details on a continuation sheet and forward to the relevant Project Team).	Yes/No
d. Narrative fault report(s) raised? (If Yes, give F760 serial number(s) on continuation sheet).	Yes/No
Maintenance Organisation AFC IO Report	
<p><i>The AFC Investigating Officer (OI) is to compile and submit this post AFC investigation report within 10 working days of concluding the investigation. However, when it has not been possible to complete a post investigation flight for other reasons i.e. that the aircraft has entered scheduled maintenance an interim report should be submitted within 15 days and a final report submitted containing the remaining details on completion of the investigation and flight test.</i></p> <p><i>The post investigation report should include reference to any F760, F765 or other Technical Forms raised as a result of the investigation.</i></p>	

	Signature	
	Name	
	Post	
	Date	
Maintenance Organisation Chf Eng Comments		
	Signature	
	Name	
	Post	
	Date	
Lvl K Auth (K1007 or K1017) Comments		

	Signature	
	Name	
	Post	
	Date	

Intentionally Blank

2FTS AVIATION ENGINEERING STANDING ORDERS

6th Edition



Book 2 Part 1

Authorisations & Competency

2 FTS AESO 2-1-3-1 – THE AUTHORISATION OF CGS, CFS AND VGS STAFF TO CARRY OUT SPECIFIED AIRCRAFT ENGINEERING TASKING AND GROUND BASED TASKING

Rationale *The aim of this order is to specify the aircraft flight servicing and maintenance tasks that may be undertaken by authorised CGS, CFS and VGS staff.*

Contents

ANNEX A

ANNEX B

THE AUTHORISATION OF CGS, CFS AND VGS STAFF TO CARRY OUT SPECIFIED AIRCRAFT ENGINEERING TASKING AND GROUND BASED TASKING

2 FTS AESO 2-1-3-1

THE AUTHORISATION OF CGS, CFS AND VGS STAFF TO CARRY OUT SPECIFIED AIRCRAFT ENGINEERING TASKING AND GROUND BASED TASKING

1. This order is applicable to all CGS, CFS and VGS staff that hold Specified Authority to Maintain (AM) and/or Authority to Flight Service (AFS) as defined at Reference A.

Acceptable Means of Compliance

2-1-3-1

THE AUTHORISATION OF CGS, CFS AND VGS STAFF TO CARRY OUT SPECIFIED AIRCRAFT ENGINEERING TASKING AND GROUND BASED TASKING

2. **Authorisation.** The 2FTS CAE may authorise CGS, CFS and VGS staff to undertake specified aircraft flight servicing and maintenance tasks. These tasks may only be carried out following official training, examination, and subsequent authorisation by 2FTS CAE or their deputy. Annual training and re-authorisation of the QESO or deputy QESO is mandatory and is to be carried out by GMS Training Cell. Following initial training all other personnel are to be re-authorised annually subject to completion of satisfactory FSCC and if required MTCC checks on AM tasks. Personnel are not to work outside their authorisations.

3. For VGS aircrew personnel who are holding ground posts but have an aviation engineering background or relevant previous experience then a SQEP assessment to carry out flight servicing/maintenance tasks may be obtained from 2FTS CAE (See Annex B). This assessment will only be granted upon production of documentary evidence/experience to OC Eng WG.

4. On completion of the SQEP proforma a supporting comment is to be added to the individuals STARS account: Personnel, General Remarks and in the Limitations on the authorisation line:

****SQEP Proforma approved and signed [insert date]****

5. **GMS Training Syllabus.** The GMS training syllabus for staff carrying out AFS and AM engineering tasks is to be reviewed and re-authorised annually by the GMS trainer. In addition, 2FTS CAMO are to carry out an independent audit of the training syllabus.

6. **Damage Assessment.** CGS, CFS and VGS staff are not permitted to carry out damage assessment of a 2FTS aircraft following an incident or accident, nor are they authorised to declare the aircraft airworthy, or to attempt any repair. An unserviceable aircraft is to be returned to the hangar, having been Flight Serviced with the appropriate documentation raised and Glider Maintenance Section (GMS) informed. Moreover, this order is particularly applicable when there is a possibility of hidden damage following an incident such as a heavy landing. If there is any doubt, damage is to be assumed until GMS investigates and determines otherwise.

7. **Fault Arisings.** In the event of a fault or a malfunction, CGS, CFS and VGS staff are not authorised to dismantle the aircraft or fittings (including survival equipment or associated supporting equipment), alter any settings or make any adjustments. Engineering investigations, fault diagnosis and rectification is the sole responsibility of GMS.

8. **Ground Handling.** If authorised, the QESO/Deputy QESO may train nominated staff in aircraft ground handling. The training is to cover all aspects of Chapter 4 of the aircraft Topic 1 (ground handling) and Reference B. It is to be noted that all aircraft ground handling is to be under the overall supervision of a member of staff holding current ground handling supervisory status. When the aircraft is signed out on F705(WLG), the Aircraft Commander is in overall charge of any ground handling regardless of the aircraft's location. During ground handling training the following is to be emphasised:

- a. The duties and responsibilities of the Supervisor.
- b. The responsibilities of a Wing Tip person and aircraft pusher.
- c. Safe opening/closing of canopies.
- d. "No push" areas.

► Local Engineering Authorisations (LEAs)

9. All LEAs for 2FTS are detailed at Annex A. If any new LEAs are required, the proposal is to submit to 2FTS Eng HQ who will then review the request prior to submission to OC Eng Wg. ◀

**Guidance
Material
2-1-3-1**

References:

- A. MAM-P, Chapter 2.2.3
- B. AESO, Book 2, Part 1, Chapter 5, Order 1

Annexes:

- A. Viking Aircrew Authorisations Tables.
- B. SQEP Assessment for VGS Aircrew Ground Personnel to Carry out Viking Glider Flight Servicing/Maintenance Tasks.

► TABLE 1 –Local Engineering Authorisations (LEAs) And MAM-P Authorisations Table

LEA/MAM-P	Description	Validity	Cleared Assessor
AM001 SYE	Parachute Daily Maintenance	12 mths	
►◄	►◄	►◄	►◄
AM003 SYE	Supervision of gnd handling of ac	5 yrs	Yes
AM005 SYE	Remove/fit ac batteries	12 mths	
AM006 SYE	De rig ac	12 mths	
AM007 SYE	Assisting load/unload ac trailer	12 mths	
AM008 SYE	Assist rigging ac for static display only	12 mths	
AM009 SYE	Supervise ac de-rig	12 mths	
AM010 SYE	Supervise load/unload ac trailer	12 mths	
AM011 SYE	Supervise ac rig for static display only	12 mths	
AM012 SYE	Supervisory 2nd signature	12 mths	
AM013 SYE	MOD F707 co-ord (3rd) signature parachute maint only	12 mths	
B011 SYE	MTCC - Successful	12 mths	QESO/DQESO
E001 SYE	Carry out duties of Winch Standards Officer (WSO)	12 mths	
AFS01	Aircrew authorized to carry out specified AFS activity and complete associated MOD Form 700C or Technical Log documentation.	12 mths	QESO/DQESO
AM01 SYE	Aircrew authorized to carry out specified AM activity (excluding Maintenance deferral) and complete associated MOD Form 700C or Technical Log documentation (excluding Certification of Air System Release for Flight).	12 mths	
AM03 SYE	Aircrew authorized to certify Air System Release for Flight. MOD F705 co-ordination (3rd) signature.	12 mths	
MAMP-B210	Aircraft ground movement vehicle driver or device operator.	5 Years	Yes
MAMP-C308	Undertake FSCC checker duties.	12 mths	
►◄	►◄	►◄	►◄

TABLE 2 – ► Winch Local Engineering Authorisations (LEAs) ◀

► LEA ◀	► ◀Description	Validity	Cleared Assessor
SYE C005	► Skylaunch Winch operator ◀	12 mths	Yes
SYE E004	► Skylaunch Winch Instructor ◀	12 mths	Yes
SYE C003	Examine operators (tick cleared to assess on SYE C005)	12 mths	Yes
SYE B007	Carry out ►repair◀ of Glider Aerotow ropes	12 mths	
SYE B008	Carry out ►repair◀ of Glider retrieve ropes	12 mths	
SYE C009	Supervise ►repair◀ of Glider retrieve and Aerotow ropes	12 mths	
SYE C006	Winch cable retrieve duties	5yrs	Yes

SQEP Assessment for VGS Aircrew Ground Personnel to Carry out Viking Glider Flight Servicing/Maintenance Tasks.**Applicant:**

Surname	
Forename(s)	
Rank	
Service Number:	
VGS	

Authorizations requested:

Ac Type	Authorization Code	Description	Limitations
Viking T1	<i>{This should include the specific auths required, i.e. MAM-P or Local Auths}</i>	<i>{Title of the Auth Required}</i>	<i>(Include any specific Limitations that may apply, if applicable)</i>

Supporting Narrative:

<p><i>Statement from OC to provide evidence of what level of training has been undertaken. Provide a summary of the suitability of personnel being put forward, qualifications to be included, time on VGS, etc.</i></p> <p><i>Justification as to why the individual should be award the detailed auths; what training and length of time on VGS and any other support evidence to aid OC Eng Wg decision.</i></p>	
Rank:	
Service no.:	
Forename(s):	
Surname:	

Level K Statement:

Rank:	
Service no.:	
Forename(s):	
Surname:	
Signed:	

Note:

1. On completion this proforma is to be stored in a Ltd Folder within 2FTS SharePoint.
2. A statement is to be added to the persons STARS account to confirm the SQEP assessment has been approved iaw para 4 of this order.

Intentionally Blank

2 FTS AESO 2-1-3-2 – ENGINEERING AUTHORISATION MANAGEMENT UTILISING SQUADRON TRAINING ACHIEVEMENT RECORDING SYSTEM (STARS)

Rationale *The aims of this order are to:*

- a. *Detail the management and utilisation of STARS for awarding and recording of Eng Auths for personnel across 2FTS.*
- b. *List Local Engineering Authorisations (LEAs) approved for use across 2FTS by OC Eng Wg.*

Contents

Annex A

ENGINEERING AUTHORISATION MANAGEMENT UTILISING SQUADRON TRAINING ACHIEVEMENT RECORDING SYSTEM (STARS)

2FTS AESO

2-1-3-2

ENGINEERING AUTHORISATION MANAGEMENT UTILISING SQUADRON TRAINING ACHIEVEMENT RECORDING SYSTEM (STARS)

1. This Order is applicable to all 2FTS personnel, including aircrew undertaking maintenance activities IAW Reference A, when utilising STARS as their sole Administration Information System (AIS) for recording Engineering Authorisations (Eng Auths). FSCC
2. All personnel delivering an engineering output under 2FTS.

Acceptable Means of Compliance

2-1-3-2

ENGINEERING AUTHORISATION MANAGEMENT UTILISING SQUADRON TRAINING ACHIEVEMENT RECORDING SYSTEM (STARS)

3. Ref B details the requirements for awarding and recording Eng Auths. The compliant system employed for management of Engineering Authorisations at 2FTS is STARS. ►◄

Engineering Authorisations

4. All personnel must be trained and assessed competent before being awarded an Eng Auth.

Monitoring of Authorisations

5. OC VGSs and QESOs are to ensure that personnel under their command hold Eng Auths that are relevant and current. **It remains the responsibility of the supervisor of the task to confirm the ► tradesperson ◄ under ►their ◄command are correctly authorised for the task they are undertaking, IAW MAM-P Chap 2.4, para 4.2**

Defence STARS Roles and Responsibilities

6. 2FTS personnel holding a Defence STARS User Account/Personal Profile, are to be trained to enable them to take responsibility for their authorisations. Within the

system, specific roles are assigned to tier levels and form a management hierarchy dependent on rank, position, and responsibility.

- a. **STARS Station Administrator.** Nominated by MilCAM/OC Eng WG, usually a post/person within the 2FTS Eng Wg HQ will be responsible for the overall management of Eng Auths on STARS. This includes the allocation of STARS permissions and editing scope for STARS Unit Administrators.
- b. **STARS Unit Administrator.** Nominated by the OC VGSs and appointed by MilCAM/OC Eng Wg via the STARS Station Administrator. Appointed to manage a sections STARS folder, including the posting in & out of personnel and creation of new accounts. This role will usually be delegated to the QESO or suitability competent person.
- c. **Manager User.** Can be appointed by the STARS Unit Administrator, usually the OC of the VGS.
- d. **Eng Auth Authoriser.** An individual that is required to manage VGS personnel's engineering authorisations. Usually someone who can provide training of a particular task, i.e. winch operator.
- e. **STARS User.** An individual who is required to undertake an activity that requires formal authorisation. Once their training has been undertaken and they are competent to undertake the designated task they acknowledge this Eng Auth by ticking the 'Acknowledge Auth' box on STARS. In doing so they are electronically signing the following declaration:

"I certify I that I have read the MAM-P Chapter, relevant orders and procedures (as applicable) relating to the task(s) that I am acknowledging, and I understand the responsibilities associated with them"¹
- f. **Eng Auth STARS Assessor.** The assessor is responsible for confirming the competence of operators. An assessor may carry out this function within the section, or across 2FTS dependant on their editing scope granted. The award of these assessor privileges does not negate any mandatory MAM-P requirement to hold a specific auth for training or assessing.
- g. The recording of the assessment of competence on STARS is carried out by ticking the 'Assess Confirm' box; in doing so, the assessor is confirming that they have assessed the competency of the operator and they have met the criteria detailed within the relevant up to date training. There is no requirement to compile hardcopy records as STARS provides the required electronic certificate of competence.
- h. If the assessor has deemed the individual competent to become an Assessor, they are to tick the 'Cleared Assessor' box of the relevant authorisation.
- i. 2FTS Assurance will conduct a review of all authorisations prior to OC Eng Wg authorisation. This is to ensure;

¹ MAM-P Chap 0.6

- i. The SQEP proforma, if required, has been annotated in the General Remarks box.
- ii. The expiry date is set appropriately, usually 12mths.
- iii. They are being assessed as an 'Assessor/trainer.'

j. **STARS Authoriser.** This will be OC Eng Wg or in their absence a nominated person holding MAMP-K1017 may authorise. Authorising on STARS is carried out by ticking the 'Auth Confirm' box. In addition to this the Level K is responsible for confirming and authorising the individual can be an assessor, if the 'Cleared assessor' box has been ticked.

7. **Permissions.** To enable personnel to undertake individual roles they must be assigned permissions within STARS. STARS Managers are responsible for assigning individual permissions at the request of the OC. All STARS users must hold a primary permission, but single permissions are only required to enable specific roles. The permissions allocated to enable each role are shown in the table below:

Primary Permission	STARS Station Administrator	STARS Unit Administrators	Manager User	Eng Auth Admin	Eng Auth Authoriser	STARS User
Eng Auth Admin	X	X		X		
Eng Auth Authoriser	X	X			X	
Personnel Management	X	X	X			
Single Permission						
Eng Auth Admin			X		X	X
Eng Auth Authoriser			X	X		X
Personnel Management				X	X	X

8. **Editing Scope.** Personnel with STARS accounts and relevant Permissions must be assigned 'Editing Scope' to allow them to undertake their role in a specified area. SNCO STARS is responsible for assigning individuals' Editing Scope at the request of Authorisers or Administrators. The editing scope is to be set to '2FTS'.

9. **Passwords.** Temporary Passwords are to be allocated to all personnel once they are trained; at first login all users are to change their password. Passwords must include a capital letter, number or symbol and must be kept secure to the individual and not shared under any circumstance with other personnel iaw SyOps. **All users are to be aware that transactions on STARS are recorded and form an auditable history against each individual.**

10. **Training.** STARS has an inbuilt training manual once login. However, 2FTS has created a Bader Teams channel to enhance the VGSs to undertake local training and provide 'How 2' guides. Initial instruction for any new incumbent should be provided by the QESO.

11. **Business Continuity & Detachments.** STARS is hosted on ACE Cloud platform, which is a Microsoft AZURE provided by Defence Digital, in the event of failure the hosting environment could be replicated at an alternative Data Centre, this

should be achievable within a 12-hour period. Prolonged system failure can be mitigated against by utilising Reference C for new authorisation transactions. Once complete they are to be retained by Sqn Administrators until STARS is available, at which point information will be uploaded and hard copies archived.

Serco Utilisation of Training/Assessment

12. The MRP145 (Serco) training cell have been assessed by their own processes SQEP to conduct and deliver VGS personnel engineering training. Therefore, STARS accounts are required to confirm individuals have been trained to the required standard.

Guidance Material

2-1-3-2

References:

- A. RA 4806 supported by MAM-P Chap 2.3.
- B. RA 4806(5) and RA 4807(10) (11) supported by MAM-P Chap 2.1.
- C. MAM-P Chap 0.6.

2 FTS AESO 2-1-3-3 – THE AUTHORISATION OF 2FTS PERSONNEL TO CARRY OUT MAINTENANCE ACTIVITY ON THE SKYLAUNCH WINCH CABLE AND ASSOCIATED STROP ASSEMBLIES.

Rationale

The aim of this order is to specify the maintenance tasks that may be undertaken by authorised 2FTS personnel on Skylaunch winch cables and associated strop assemblies.

Contents ANNEX A

THE AUTHORISATION OF 2FTS PERSONNEL TO CARRY OUT MAINTENANCE ACTIVITY ON THE SKYLAUNCH WINCH CABLE AND ASSOCIATED STROP ASSEMBLIES.

2 FTS AESO 2-1-3-3

THE AUTHORISATION OF 2FTS PERSONNEL TO CARRY OUT MAINTENANCE ACTIVITY ON THE SKYLAUNCH WINCH CABLE AND ASSOCIATED STROP ASSEMBLIES.

1. This order is applicable to all 2FTS personnel that hold Specified Authority to carry out Maintenance activity on the Skylaunch Winch, cable, and associated strop assemblies.

Acceptable Means of Compliance 2-1-3-3

THE AUTHORISATION OF 2FTS PERSONNEL TO CARRY OUT MAINTENANCE ACTIVITY ON THE SKYLAUNCH WINCH CABLE AND ASSOCIATED STROP ASSEMBLIES.

2. **Authorisation.** ► 2FTS OC Eng may authorise ◀, through a local Airfield Engineering Authorization, a Winch Standards Officer (WSO) who is to have delegated responsibility for training/examining 2FTS and CFS personnel to undertake specified winch and associated strop maintenance tasks. 2FTS and CFS personnel undertaking winch operating, training, and examining duties are granted a Local Airfield Engineering Authorization by 2FTS OC Eng, once declared competent by a WSO or delegated Examiner. Such authorizations are recorded on STARS.

3. The specified maintenance tasks may only be carried out by personnel who have undergone instruction and examination by authorised WSO/ CGS/VGS Instructors/Examiners.

4. Annual re-authorisation is mandatory. No personnel are to work outside their authorisations. The WSO will delegate responsibilities down to 3 separate levels as required, these are:

a. Examiners.

- b. Instructors.
- c. Operators.

5. Winch operator qualifications and authority to carry out Launching Equipment maintenance tasks are to be recorded on STARS.

6. **Training.** Training for operation and associated maintenance of the Skylaunch Winch and associated equipment is detailed in Reference ►A◄. The WSO/ OC VGS are to keep a record of training and authorisation. All trained winch operators will be awarded a certificate of competency, and their training will be recorded in their personnel Training Folder and Flying Logbook. F4820B's should be kept in the personal training folders.

7. **Winch Standards Officer.** The WSO will carry out their duties as detailed at Reference ►B◄. In order to fulfil their delegated authority, the WSO must be a qualified, experienced, and competent Winch Operator/Examiner. The WSO will control all of the training records and training of maintenance practices on the Skylaunch Winch and associated equipment, as detailed below:

- a. Winch daily inspection.
- b. Winch guillotine tests.
- c. Winch cable repair.
- d. Weak link attachment, checking, replacing as required.
- e. Major component replacement of the strop system.
- f. Aerotow rope and the glider retrieval rope manufacture
- g. Winch Cable change procedure.

Equipment

8. **Winch Strop Assy.** These items are provided as complete assemblies and will require no fabrication/manufacture. Maintenance consists of replacement of component assemblies and replacement of the weak link or its holder. Details of the components are detailed in Reference ►C◄.

9. **Aerotow rope/ Retrieve rope Assy.** ► The Aerotow and Glider retrieve rope assemblies ◄ are Commercial Off the Shelf items supplied through ►Serco ◄. Maintenance consists of replacement of the weak link or its holder, the Skyball or a cable repair. Authorisations for the maintenance of both ropes are to be recorded on STARS.

10. **Winch.** Training and authorisation for the Operation of the Winch is detailed in Reference ►A◄ and ►D◄. The following procedures are detailed in Reference F:

- a. Winch daily inspection.
- b. Winch guillotine tests.
- c. Winch cable repair

d. Winch cable change procedure.

11. **QA.** The processes, management system and recording of all maintenance training will be subject to audit under the 2FTS QA system during audits of CGS and VGS iaw Reference ►E◄.

Wear Limits

12. **Dyneema Winch Cable.** Reference ►F²◄ refers to the acceptable damage limits allowed on Dyneema cable. All repairs are to be carried out in iaw Reference ►D◄³ by an authorised individual. All repairs to the cable are to be recorded on the Winch Launch Log Sheet and on Skylog.

Guidance Material 2-1-3-3

References:

- A. ►2 FTS Duty Holders Orders
- B. TORs – CGS -Winch Standards Officer AVO 1
- C. DAP 101G-1001-2(R)1
- D. AESP 1720-G-106-201
- E. 2FTS Unit Quality Manual
- F. AESP 1720-G-106-601 ◄.

Annexes

- A. Table Containing STARS Winch Authorisations.

►² Annex A ◄

³ Chap 4, para 15

TABLE 1 - STARS Winch Authorisations.

LEA	Description	Validity	Cleared Assessor
SYE C005	Skylaunch Winch operator	12 mths	Yes
SYE E004	Skylaunch Winch Instructor	12 mths	Yes
SYE C003	Examine operators (tick cleared to assess on SYE C005)	12 mths	Yes
SYE B007	Carry out repair of Glider Aerotow ropes	12 mths	
SYE B008	Carry out repair of Glider retrieve ropes	12 mths	
SYE C009	Supervise repair of Glider retrieve and Aerotow ropes	12 mths	
SYE C006	Winch cable retrieve duties	5yrs	Yes ◀

Intentionally Blank

2 FTS AESO 2-1-3-4 – COMPETENCY CHECKS - FLIGHT SERVICING, MAINTENANCE TASK AND WINCH TASK

Rationale *The aim of this order is to define the procedure undertaken to ensure that the personnel who carry out flight servicing and/or maintenance tasks and/or winch operations, maintain the required standards. Flight Servicing and its associated maintenance tasks are one of the principal processes utilised within the Military Air Environment (MAE) to maintain the airworthiness of aircraft. It is therefore imperative that high standards are employed at all times when carrying out these activities.*

Contents
ANNEX A
ANNEX B

COMPETENCY CHECKS - FLIGHT SERVICING, MAINTENANCE TASK AND WINCH TASK

**2 FTS
AESO
2-1-3-4**

COMPETENCY CHECKS - FLIGHT SERVICING, MAINTENANCE TASK AND WINCH TASK

1. This order complements Reference A and B and is applicable to all CGS, CFS and VGS aircrew who have been authorised to carry out aircraft Flight Servicing, Maintenance and Winch Operation tasks on Viking aircraft.

**Acceptable
Means of
Compliance
2-1-3-4**

COMPETENCY CHECKS - FLIGHT SERVICING, MAINTENANCE TASK AND WINCH TASK

2. All competency checks should be a practical check; however, it is acknowledged that this is not always possible and in these cases a theory test of the individual's knowledge is to be carried out.

3. **Flight Servicing Competency Checks (FSCC) Periodicity.** Reference A stipulates individuals that carry out Flight Servicing must be checked at least every 12 months. 2FTS CAE (DDH) requires OC CGS and OC VGS's to ensure that all aircrew undertake a FSCC, at least every 12 months by the VGS QESO, their nominated deputy or GMS FSCC checker, see Reference C.

4. On initial training from Serco for Flight Servicing the authorisation, AFS01 will be awarded for 6mths to allow a FSCC to be carried to ensure the individual has consolidated their training and fully competent.

5. **Maintenance Task Competency Checks (MTCC) Periodicity.** Reference B stipulates individuals that carry out maintenance tasks must be checked at least every 12 months. 2FTS CAE (DDH) requires OC CGS and OC VGS's to ensure that all aircrew undertake a MTCC check on all the Viking

Maintenance Tasks they are authorised to carry out, at least every 12 months by the VGS QESO, their nominated deputy or GMS MTCC Checker. See Reference C:

6. **Winch Task Competency Checks (WTCC) Periodicity.** WTCC are the responsibility of the Winch Standards Officer (WSO) and are carried out at the frequency detailed in Reference D.
7. **GMS Training Syllabus.** The GMS training syllabus for staff carrying out AFS and AM engineering tasks is to be reviewed and re-authorised annually by the GMS trainer. In addition, 2FTS CAMO are to carry out an independent audit of the training syllabus.
8. **Authorisation.** The VGS QESO and their nominated deputy(s) will be trained by GMS training cell and authorised to carry out FSCC/MTCC by 2FTS CAE (DDH) or their authorised deputy, and will be reassessed, updated, and authorised at the QESO annual recertification training with MAM-P auth C308 for FSCC. Personnel authorised to carry out FSCC/MTCCs are to remain current for both Flight Servicing's and FSCCs otherwise their authority to carry out FSCC/MTCCs will lapse.
NOTE: CGS and CFS aircrew who are authorised to carry out Flight Servicing and/or maintenance tasks, will have their FSCC/MTCC carried out by the GMS authorised FSCC/MTCC Checker.
9. Personnel authorised to carry out FSCCs are to conduct the FSCC iaw Reference A.
10. Personnel authorised to carry out MTCCs are to conduct the MTCC iaw the Aircraft Document Set (ADS). The QESO is to ensure VGS personnel have a valid MTCC (12monthly).
11. Any deterioration of flight servicing or maintenance task standards by any individual is to be reported to the 2FTS Eng Wg. Any individual that fails FSCC/MTCC will require retraining by GMS training cell.
12. Every 12 months the QESO is to report to the 2FTS Eng Wg on the overall competency of FSCC/MTCC checks, highlighting any trends.
13. Any personnel whose FSCC/MTCC has lapsed will not be able to carry out Flight Servicing or Maintenance Tasks until they have had FSCC/MTCC successfully carried out.
14. **Recording Action.** A record of competency is to be maintained on the individuals STARS account. For FSCC the QESO is to create a new AFS01 authorisation and annotate that they have carried out an FSCC. For MTCC the QESO is to create a new B011 SYE MTCC authorisation on STARS and annotate what tasks have been checked. The check is to be performed out of phase with training and certification.

**Guidance
Material
2-1-3-4**

References:

- A. MAM-P, Chapter 2.2
- B. MAM-P, Chapter 2.3
- C. AESO Book 2, Part 1, Chapter 3, Order 1, Annex A
- D. DHO 2310(D4) Para 103 -106

2 FTS AESO 2-1-3-5 – AIRCRAFT SERVICING STANDARDS CHECKS (ASSC)

Rationale *To define the procedure undertaken to provide additional, independent assurance and feedback to engineering management that standards of aircraft flight servicing are maintained to an acceptable level, by carrying out no-notice Aircraft Servicing Standards Checks (ASSC) and assist in the assurance of a high standard via these independent standards checks of the aircraft fleet. These checks supplement Flight Servicing Competency Checks.*

Contents ANNEX A

AIRCRAFT SERVICING STANDARDS CHECKS (ASSC)

2 FTS AESO 2-1-3-5

AIRCRAFT SERVICING STANDARDS CHECKS (ASSC)

1. This order is applicable to all CGS, CFS and VGS aircrew who have been authorised to carry out aircraft flight servicing tasks at VGS locations.

Acceptable Means of Compliance 2-1-3-5

AIRCRAFT SERVICING STANDARDS CHECKS (ASSC)

2. **Periodicity.** 2FTS Eng Personnel (suitably trained and authorised person) will conduct unannounced ASSC checks on each individual VGS every 12 months, or as instructed by 2FTS OC Eng Wg.

3. **Authorisation.** 2FTS Eng Wg personnel will be trained by GMS training cell and authorised to carry out ASSC by 2FTS OC Eng Wg or their authorised deputy. Personnel authorised to carry out ASSC are to remain current for Flight Servicing's otherwise their authority to carry out ASSCs will lapse.

4. ASSC are only to be carried out on an aircraft with a valid Flight Servicing and is not to be carried out on an aircraft where the valid flight servicing was the subject of an FSCC. The condition of the aircraft is to be checked as far as practically possible and must not invalidate the flight servicing. Where levels are found to be outside tolerance, restoration actions are to be tasked to the VGS to re-validate the flight servicing or place the aircraft unserviceable.

5. Where levels are found to be unsatisfactory, authorisation is to be removed from the individual responsible for the flight servicing, who will be subject to remedial training by GMS Training Cell and reauthorized by 2FTS OC Eng Wg. The individuals VGS management are to also be informed.

6. **Recording.** A record of aircraft and personnel undergoing ASSC is to be maintained using the template at Annex A and a record kept within the 2FTS Eng Wg HQ MODNET site.

7. The QESO or their nominated deputy is responsible for ensuring that all aircraft flight servicing's on their VGS are managed in order that all aircraft can be subjected to ASSC checks.

8. **Trending.** 2FTS OC Eng Wg is to be informed of any unsatisfactory trend.

**Guidance
Material
2-1-3-5**

References:

- A. 2FTS-AESO Book 2, Part 1, Chapter 3, Order 4
- B. AP100B-01, Order 2.2.27(6)
- C. 2FTS-AESO Book 2, Part 1, Chapter 3, Order 1

Annex:

- A. Aircraft Servicing Standards Check (ASSC) Register.

2FTS AIRCRAFT SERVICING STANDARDS CHECK (ASSC) REGISTER

2FTS AIRCRAFT SERVICING STANDARDS CHECK (ASSC) REGISTER 2023							
VGS	Aircraft Serial Number	Date of Flt Servicing	Rank/Name of Individual (Flt Servicing)	Independent Checker		Result (Satis/Unsatis)	Comments
				Name	Appt		
611	Aircraft 1	10 Jan 21	Flg Off J Tanner	Bloggs	2FTS ECM	Unsatis	Requires remedial training.
615	Aircraft 3	07 Mar 21	Flt Lt S Smith	Bloggs	2FTS ECM	Satis	
621	Aircraft 2	08 Nov 21	Flt Sgt L Evans	Bloggs	2FTS ECM	Satis	
622	Aircraft 4	01 Dec 21	Flg Off K Stewart	Bloggs	2FTS ECM	Satis	
626							
632							
637							
644	ZE123	Today	Bloggs	Bingham	OC Eng WG	Satis	
645							
661							

NOTES:

1. This table is to be in electronic format as an Excel Workbook.
2. The recording of ASSC's is to be in the format of the table above with each year in a separate tab within the register.
3. The Excel Workbook is to be maintained in the 2FTS QA page within the 2FTS Eng, Logs & QA SharePoint site.

2FTS OC Eng Wg is to be informed of any unsatisfactory trend.

Intentionally Left Blank

2 FTS AESO 2-1-4-1 – 2FTS TOOL MANAGEMENT AND CONTROL PROCEDURES

Rationale *The aim of this order is to identify the top-level documents which prescribe the management, control, and provisioning for tools throughout the RAF and to detail the local tool control procedures to be implemented at 2FTS iaw References A to E.*

Contents

ANNEX A

ANNEX B

▶ ANNEX

C ◀

2FTS TOOL MANAGEMENT AND CONTROL PROCEDURES

2 FTS

AESO

2-1-4-1

2FTS TOOL MANAGEMENT AND CONTROL PROCEDURES

1. This order is applicable to Central Gliding School (CGS) Central Flying School (CFS), Volunteer Gliding Squadron (VGS) staff and 2FTS MT.

Acceptable Means of Compliance

2-1-4-1

2FTS TOOL MANAGEMENT AND CONTROL PROCEDURES

Implementation.

2. The control of tool resources is an essential element of good engineering management and flight safety. Maintenance tool kits are to be purpose designed, lockable containers holding the minimum number of tools required to carry out the glider maintenance activities listed at Annex A; plus, provision for a tool tally system outlined in this document. Tool kits are not to include any other items other than tools, i.e. weak links, shackles, etc and under NO circumstances are any tool kits to be located in the airfield caravan. The only exception to the above is the winch tool kit which is to be located in the winch cab when in use and is only to contain the items listed at Annex B. When not issued to the winch, this tool kit is to be kept in a secure area at the VGS.

3. **Privately owned hand tools.** All personnel subject to this order are to note that personally issued or privately-owned hand tools are **NOT** to be used on aircraft or aircraft associated equipment, nor are they to be used in any environment in which aircraft are operated. Spot checks are to be carried out by the QESO or their nominated deputy on a regular basis, to ensure this policy is strictly adhered to.

Responsibilities.

4. **Tool Custodian.** All VGS tool kits are to be under the control of the QESO or their nominated deputy.

Tool Kit Management

5. **Contents list.** Each tool kit is to contain a contents list to identify each hand tool contained within. Contents lists are to include the tool kit code and VGS No in the heading.

6. **Deficiency list.** References A and B state that all hand tools are to have a register to identify authorised missing hand tools (U/S, On Cal, Det or LOAN). All VGS are to use the mandated MOD F757B for this purpose. The F757B is to be kept within the tool kit and is to show all tools authorised to be removed from that kit. A separate F757B is to be used for each tool kit.

7. **Security.** When not in use, tool kits are to be locked and the keys kept in a secure location. Every time a tool kit is opened or closed a 100% tool check of that kit is to be carried out and signed for. Each tool kit is to have its own F757A tool kit log and contents list. **All** tool kits are to be checked prior to starting work and again at cease work. Any tool kit issued or opened during the day is to have a 100% tool check upon opening/issue and again on closing/return.

NOTE: 100% tool checks include:

- Accounting for all items in the tool kit e.g., tags, tools etc.
- Ensuring that no additional items are present e.g., FOD
- All tools are serviceable, in good condition and have no missing parts

8. **Independent Tool Kit Checks.** In addition to the above, independent tool kit checks are to be carried out on an Ad Hoc basis at least once a month for each tool kit.

9. **Husbandry.** All tool kits are to be kept clean, tidy, FOD free and in a serviceable condition. All tool kit checks (pre issue, return and independent) are to include a check of tool serviceability and that the canopy cleaning cloths are clean and fit for use.

10. **Marking of hand tools.** All tools located within the tool kit are to be individually etched, preferably on the metal surface, with their own unique identity code number, i.e., SYN-VK-01. Where more than one identical tool is located on the kit, then a supplementary letter is to be included in the identity code, i.e., SYN-VK-01-A, SYN-VK-01-B etc. Items of TME are to be etched prior to calibration. Where etching is not available annotation using a permanent marker e.g., sharpie is permitted.

11. **Shadowing of tools.** In order to immediately identify a missing tool from the kit, every individual tool or line kit is to have its location identified with a dayglo shadow. As above this shadow is to be identified as A, B, etc if identical tools are located on the kit.

Tool tallies.

12. **Tool Tallies (LTT).** The aircraft tool kits have sets of LTTs within them to identify the user of a tool. An individual using tools is to use LTTs of the same set.

13. **Non routine removal tallies (NRRT).** Tool tallies that indicate U/S, Cal, Det or Loan are known as NRRT. NRRT's are to be strictly controlled by the tool custodian. They are to be kept in a lockable cabinet with the tool kit tallies.

Documentation

14. **MoD F757A (Tools) completion.** Instructions for completing MoD F757A (Tools) are at Reference B. In addition, each VGS is to add the following information:

- | | |
|---------------------------------|--|
| a. Issue Centre Identity | Insert VGS No. |
| b. Sheet No | Start at 1 and run to 99 then repeat. |
| c. Tool Kit Serial No | Insert Serial No of tool kit (delete other options). |

15. Reference B gives instructions on how the VGS are to complete F757A (Tools) on each of the following occasions.

- a. On initial opening and closing of tool kit prior to flying.
- b. On issue and return of Line Tool Kits.
- c. Opening and closing of tool kit during working day.
- d. Opening and closing of tool kit prior to cease work.

16. F757A's are to be kept in a folder within the tool kit.

17. Because of the infrequency of use, all lines of F757A (Tools) are to be used before a new sheet is started. In order to clarify one month's checks from the previous months a blank line is to be left before starting the next month's checks. This line is to be crossed out and N/A written in.

18. **Independent tool checks.** Independent tool checks are to be carried out on an Ad Hoc basis at least once a month by the QESO or their nominated

deputy and are to be recorded on the next available line of the F757A (Tools) in **RED** ink.

19. **MoD F757B (Tools) completion.** Instructions for completing MOD F757B (Tools) for U/S, Cal, Det or Loan tools are at Reference B. All lines on F757B (Tools) are to be used. In addition, each VGS is to add the following information:

- a. **Issue Centre Identity** insert VGS No.
- b. **Sheet No** start at 1 and run to 99 then repeat.

20. **Retention of documentation.** F757A (Tools) and F757C (Tools) are Cat E documents and shall be retained for a period of 12 months once completed. F757B (Tools) is a Cat A document and shall be retained for the life of the air system or product, parts and appliances plus 5 years.

Actions following discovery of a missing Hand Tool.

21. When it is identified that a hand tool may be or is missing it is to be treated as a loose article. **Immediate action is to stop flying operations** to reduce the likelihood of the hand tool being present in any of the aircraft. An initial search of the tool kit and surrounding area is to be conducted to confirm that it is a loose article that may endanger the safe operation of the air system. Once it has been confirmed missing the GMS Duty Engineer is to be informed immediately. If it is known which aircraft the missing tool is in the aircraft is to be placed U/S and a F707A entry made in the F700. If it is not known where the missing item was lost all flying activities are to cease and the matter reported to the GMS Duty Engineer ► **and/or** ◄ 2FTS Mil CAM immediately.

22. **NOTE:** MAM-P Chapter 4.14 applies to all tools whether used on-aircraft or off-aircraft. Any off-aircraft (Winch kits, FRV kits) tools that are found missing, the same actions apply and are to be adhered to.

Control of consumable items

23. Consumable items used on aircraft are required to be controlled as follows:

- a. Canopy cleaning cloths, sponges, buckets, chamois leather etc not accounted for in the tool kits but used in the aircraft environment are to be controlled and accounted for in a documented local procedure.
- b. FLAP is to be controlled by tagging when used on aircraft.

In Use Tools

24. In use tools are to be managed as follows:

- a. **Master Maintenance Tally/Master Line Tally (MMT/MLT).** Each aircraft has a MMT and MLT which are to be held in the aircraft F700.
- b. **Flight servicing.** Prior to accessing tools required for flight servicing the supervisor is to identify which aircraft are required to be flight serviced iaw the days flying programme.
- (1) Once the tool cabinet is opened a 100% tool check against the tool cabinet contents list (See relevant Annex for details) is to be carried out and signed for on the F757A.
 - (2) Nominated flight servicing personnel are to place their aircraft MLT and insert their name against a set of Line Tool Tallies (LTT) held in the tool kit.
 - (3) An LTT is to be placed on the 'shadow' of the line tool kit to be used and an entry made on the F757A for the removal of the line kit which includes 100% contents check of the line kit.
 - (4) If additional tools are required to supplement line tool kits for the flight servicing, then an LTT is to be exchanged for a hand tool on a one-for-one basis (place LTT on the tool 'shadow').
 - (5) When flight servicing activity has been completed and tools and tallies are returned to their correct locations the individual is to remove the MLT from the tool kit and sign the F757A signifying that a 100% tool check of the line kit has been carried out and it has been returned to the tool cabinet.
 - (6) When all flight servicing activity has been completed, a 100% tool check of the tool cabinet is to be carried out and the F757A is to be signed. The supervisor is then to sign col M to signify all tools have been accounted for. When the tool check is complete all tool kits and cabinets are to be locked. The MLT is returned to the MOD F700 and all relevant MOD F705 entries may then be signed, and the aircraft declared ready.
 - (7) If there are more aircraft requiring flight servicing than there are line tool kits available then no other aircraft MLT is to be issued until a line kit is returned to the tool cabinet, signed back in and that MLT returned to the aircraft F700.
- c. **Aircraft maintenance activity.** Whenever hand tools are required for maintenance activity to be carried out on an aircraft, the MOD F707B is to have the following statement raised:

► Tools in use on aircraft and Master Maintenance Tally issued'.

d. A 100% tool check is carried out as per para 24b. The MMT and the individuals name is to be placed against a row of tallies held within the tool kit. Tallies are then exchanged for tools on a one for one basis. On completion of all maintenance activity, all tools and tallies are to be returned to their correct location within the tool kit. A 100% tool check is carried out as per para 24b. The MMT is then to be placed in the MOD F700. When the maintenance task and documentation are complete the open MOD F707B entry is to be closed with the following:

'No hand tools currently allocated to this aircraft and the Master Maintenance Tally returned in accordance with RA4808(2) and MAM-P Chapter 4.13.1 ◀

e. The MOD F700 coordinator is to ensure that the 100% tool check has been carried out and is to complete the supervisor block of the MOD F707B prior to clearing the MOD F707A and MOD F707B entries and releasing the aircraft.

f. Due to the limited maintenance activities VGS personnel can carry out; only one maintenance task at a time is to be carried out on the same aircraft.

25. A tool may only be used on the individual aircraft that the tool has been drawn against. Under no circumstances is a tool to be used on any other aircraft without being linked by a Line Tool Tally (LTT) and a MMT or MLT.

26. **Off aircraft work.** Whenever tools are required for off aircraft work the individual is to place their name against a set of Line Tool Tallies, tag out the required tools and sign them out on the F757C(Tools). There is no requirement for the use of an MMT/MLT. Upon return of the tools the F757C (Tools) is to be signed by the individual and a supervisor signature in col K.

Fuels, Lubricants and Associated Products (FLAP)

27. When used on aircraft, FLAP is to be tagged out and is subject to the same controls as tools in para 24.

Test and Measuring Equipment

28. Some tools are used specifically for Test and Measuring purposes and are subject to routine calibration checks. Tools within this category include some types of tyre pressure gauge and spring balances. These items **MUST** be registered with the parent unit Test and Measuring Equipment Cell (TMEC) and have a calibration label attached certifying the serviceability state of the tool.

Non-Aircraft Tool Kits

29. All non-aircraft tool kits used by CGS/VGS/MT including Winch and FRV tool kits are subject to this order.

NOTE: Off-aircraft tools are not to be used on-aircraft.

30. **Winch tool kits.** Winch tool kits do not have a tool tag facility and are to have a 100% tool check against the individual tool kit contents list for completeness on the following occasions:

- a. Upon issue by the QESO or winch trained person from the secure area to the winch prior to the commencement of flying using F757A.
- b. Upon return from the winch to the secure area at cease flying by the QESO or winch trained person using F757A.
- c. ► When the tool kit is required for use during flying the tool kit is to have a 100% tool check prior to work commencing and when there is a change of winch operator, these checks are to be signed for on the winch log sheet. ◀

31. Any disposable items in the tool kit (Weak links) that are utilised are to be accounted for at the completion of the task and replaced at the end of that working day or earlier if required.

32. Winch tool kits are to be allocated to an individual winch at the start of flying and the F757A annotated with the winch number. If for any reason the winch in use is changed then a tool check iaw para 29c above is to be carried out and the new winch number annotated on the F757A.

33. **FRV tool kits.** FRV tool kits are to contain the tools listed at Reference E. They are to be subjected to an initial 100% tool check upon issue and then sealed with coloured and numbered security tags. The F757A is to be annotated with the security tag details. All future tool checks of FRV kits are purely to check the case for damage, legibility of notices and security of the tags. The security tag number and colour are to be checked against that registered on the F757A.

- a. Prior to the commencement of flying.
- b. At cessation of flying.

34. If a security tag is found broken or missing, then all security tags are to be removed and a full 100% tool check is to be carried out as per para 30 above until such time as new security tags can be fitted. Any broken security tag is to be noted on the F757A. New security tag numbers are to be added to the F757A upon issue.

35. Several items in the FRV kit have expiry dates and these item details are to be noted in the F757A folder. All FRV kits are to be subject to an annual inspection and the following checks carried out:

- a. Remove all security tags.
- b. Replace life expired item(s).
- c. Replace torch batteries.
- d. Check all tools and lifed items for serviceability.
- e. Carry out 100% tool check and seal with new security tags.
- f. Record the above procedure on F757A and include new security tag colour and serial number.

36. Because the FRV kit is sealed the F757A register is to be kept secured in a convenient area of the ops building.

37. If the FRV kit has to be used circumstances dictate there will not be time for a 100% contents check upon opening, therefore, once the FRV crew is stood down a 100% check of all tools and equipment is to be carried out, used items replenished and new security tags fitted and recorded on the F757A.

Replacement tools

38. Replacement tools for aircraft, winch and FRV kits that are demandable through service sources (i.e. have an NSN) are to be demanded iaw Parent Unit arrangements. Locally Modified/Manufactured Tools (LMT) are to be demanded via 2FTS QSC. All LMT are to be registered by the 2FTS QSC iaw Reference D. Specialised winch kit items that do not have an NSN are to be demanded via the Winch Standards Officer.

39. Upon receipt of a replacement tool from a parent unit it is to be forwarded to HQ 2FTS for etching. After etching the tool will be returned to the relevant VGS. If this is not feasible then the tool can be identified by attaching a dynatape or by using a permanent marker e.g. sharpie.

40. **Visiting Maintenance Teams.** If a requirement for a visiting maintenance team is approved by the engineering management, from within the service or from industry, all tools must be accounted for prior to and completion of work (perform a 100% check). This is to be undertaken iaw MAM-P Chap 4.13.1 para 7.13 and with the AMO MOE.

**Guidance
Material
2-1-4-1****References:**

- A. MAM-P, Chapter 4.13
- B. MAM-P, Chapter 4.13.1
- C. MAM-P, Chapter 4.14, Para 3
- D. AP101G-1001-2(R)1, Leaflet 25
- E. DHO 2310(D10) Annex C

Annexes:

- A. Viking aircraft servicing tool kit contents list.
- B. Winch cable repair tool kit contents list
- C. Wash kit locker contents list.

VIKING AIRCRAFT SERVICING TOOL KIT CONTENTS LIST

Listed below is the contents list of the METS issued Viking aircraft servicing tool kit. Under no circumstances are additional tools to be added or original tools removed from the tool kit without the prior approval of 2FTS Eng Wg.

Viking Aircraft Servicing Tool Kit

NSN	Description	Qty
5140-12-3212569	Gedore 6 Drawer Trolley	1
5340-99-4233445	Padlock and 2 keys	1
Drawer 1	Drawer intentionally not used	
Drawer 2		
Local Manufacture	Name Plate (5 names) [08]	1
9905-99-4495988	Tool Tally	25
METS Supplied	U/S-On Cal Tally	10
METS Supplied	Det-Loan Tally	5
Unit Supplied	A4 Ring Binder	1
Drawer 3		
5120-99-9096447	Magnetic retrieving tool flexible	1
5120-99-1223099	Retriever (Mechanical Fingers)	1
6230-99-9816738	Torch 90 degree	1
6135-99-1099428	Battery (installed in torch)	2
5120-99-9183717	Screwdriver Ratchet	1
5120-99-9105865	Screwdriver Cross Point No 2	1
5110-99-9424741	Scissors	1
5120-99-9105522	Pliers	1
5120-99-9105295	Snips	1
5340-99-1276230	Rule Steel 12"	1
Drawer 4 Line Tool Kits		
5140-99-4809173	Canvass Bag (each containing)	3
6230-99-9816738	Torch 90 degree	1
6135-99-1099428	Battery (installed in torch)	2
5120-99-9105865	Screwdriver Cross Point No 2	1
2640-99-8094074	Tyre Valve Extension (SYN/LMT/06) ► / 1 90° Tyre Extension ◀	
4910-99-8070183	Pressure Gauge Tyre (TME)	1
Local Manufacture	Pull Off Check Tool (SYN/LMT/05)	1
Local Manufacture	Airbrake Lock (SYN/LMT/04)	1
7920-99-2571342	Canopy Cleaning Cloth	2

Drawer 5 ▶ Aircraft Tyre Inflators/Line Tool Kits

LPU	Electric Pump	2 ◀
4320-99-8416038	Foot Pump (SYN/VK/LMT 02)	1
5140-99-4809173	Canvass Bag (each containing)	2
6230-99-9816738	Torch 90 degree	1
6135-99-1099428	Battery (installed in torch)	2
5120-99-9105865	Screwdriver Cross Point No 2	1
2640-99-8094074	Tyre Valve Extension (SYN/LMT/06) ▶ / 1	
	90° Tyre Extension ◀	
4910-99-8070183	Pressure Gauge Tyre (TME)	1
4320-99-8416038	Foot Pump (SYN/VK/LMT 02)	1
Local Manufacture	Pull Off Check Tool (SYN/LMT/05)	1
Local Manufacture	Airbrake Lock (SYN/LMT/04)	1
7920-99-2571342	Canopy Cleaning Cloth	2

Drawer 6 Aircraft Rig/Derig Kit

8145-01-5404450	IM 2050 Storm Case (Containing)	1
5340-99-4233445	Padlock and 2 keys	1
5120-99-9105865	Screwdriver Cross Point No 2	1
5110-99-9424741	Scissors	1
5970-99-1104319	Wing Gap Tape	2
6230-99-9816738	Torch 90 degree	1
6135-99-1099428	Battery	2

Note:

Line Tool Kits, Aircraft Cleaning Kits and Aircraft Rig/Derig Kit are to have individual contents lists with/within the bag/case.

WINCH CABLE REPAIR TOOL KIT CONTENTS LIST

Listed below is the contents list of the METS issued winch cable repair tool kit. Under no circumstances are additional tools to be added or original tools removed from the tool kit without the prior approval of 2FTS ECM.

Winch Cable Repair Tool Kit

NSN/Skylaunch P/N	Description	Qty
8145-01-5404442	iM2200 Storm Case	1
5340-99-4233445	Padlock and 2 keys	1
Base Panel		
5120-01-1393636	Spanner 10mm combination	2
CE-SND	Splicing Fid 4.5mm	1
5120-99-9105522	Pliers	1
5110-99-9105295	Snips	1
Top Panel		
GU-CGRT-B	Guillotine Resetting Tool	1
GU-CGRT-R	Resetting Tool Ratchet Handle	1
5790-99-9400448	Tape Black Nylon	1
CC-DCS	Dyneema Scissors	1
AC-C-024	Weak Links (Red)	10
AC-C-022b	Weak Link Holder	1

The following item is part of the kit but is not contained in the Storm Case:

LPO	Extendable Squeegee	1
-----	---------------------	---

WASH KIT LOCKER CONTENTS LIST

The Aircraft cleaning Kits locker is to have a controlled contents list detailing the quantity of all items. A signature sheet is required to detail a 100% check on opening and again at cease work (closure).

NSN	Description	Qty
8330-99-1327703	Chamois Leather	6
7920-99-1250487	Sponge	6
LPO	Squeegee Blade	6 ◀

2 FTS AESO 2-1-4-2 – PRE-ISSUE CHECKS OF AIRCRAFT, WINCH AND FIRST RESPONSE VEHICLE TOOL KITS FOR CGS and VGS

Rationale *To ensure all tools and containers are serviceable and meet the standards of Reference A prior to delivery to user.*

Contents

PRE-ISSUE CHECKS OF AIRCRAFT, WINCH AND FIRST RESPONSE VEHICLE TOOL KITS FOR CGS AND VGS

2 FTS AESO 2-1-4-2

PRE-ISSUE CHECKS OF AIRCRAFT, WINCH AND FIRST RESPONSE VEHICLE TOOL KITS FOR CGS and VGS

1. This order is applicable to all HQ 2FTS staff involved in the issue of tool kits to CGS and VGS.

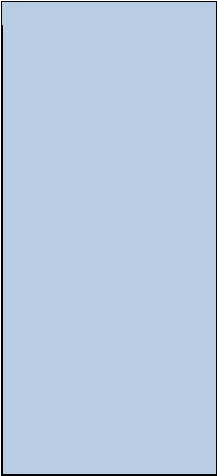
Acceptable Means of Compliance 2-1-4-2

PRE-ISSUE CHECKS OF AIRCRAFT, WINCH AND FIRST RESPONSE VEHICLE TOOL KITS FOR CGS and VGS

Implementation.

2. Upon receipt of a tool kit from the manufacturer it is to be checked for the following before dispatch to the recipient:

- a. Check exterior of container for any signs of damage.
- b. Ensure there are 2 keys for the padlock and they both work.
- c. Check interior of container for any signs of damage especially to the foam inlay.
- d. Check all drawers run smoothly if fitted and they can be removed.
- e. Check the contents are complete and the contents list(s) matches the contents (any deficiencies should be recorded on the contents list).
- f. Check all tools have the correct tool kit code etched on them.
- g. Check any locally manufactured or modified tools meet the specification in the PT locally manufactured register.
- h. Check all tool kits within the main container have their own contents lists.

- 
3. Produce labels as per the 'Glider Tool Kit Folder document at the link below and laminate them:
 - a. [Glider Tool Kit Folder](#)
 4. Before dispatch ensure the documentation folder in the tool kit contains all relevant documentation (F757A, F757B, F757C and further contents lists if required).
 5. Upon issue to the recipient obtain signature(s) for all kits issued on F668.

**Guidance
Material
2-1-4-2**

References:

- A. MAM-P, Chapter 4.13

2 FTS AESO 2-1-5-1 - GROUND HANDLING OF AIRCRAFT

Rationale *This order amplifies on the regulations concerning the ground handling of Viking aircraft.*

Contents
ANNEX A
ANNEX B

GROUND HANDLING OF AIRCRAFT

**2 FTS
AESO
2-1-5-1**

GROUND HANDLING OF AIRCRAFT

1. This order is applicable to all 2FTS and CFS aircrew.

**Acceptable
Means of
Compliance
2-1-5-1**

GROUND HANDLING OF AIRCRAFT

2. **General Procedures.** The general procedures for the ground handling of aircraft are detailed at Reference A.

3. **Movement of Aircraft on the Ground – Team Composition.** All ground movement operations are to be conducted by trained and/or briefed personnel who have been assessed as competent. A ground movement team must consist of:

- a. A ground handling supervisor, unless the aircraft is signed out on the F705(WLG), in which case the aircraft commander assumes the role of ground handling supervisor.
- b. A wing tip handler.
- c. A tow vehicle driver.
- d. Safety personnel as required.
- e. Other personnel as required.

4. **The Supervisor.** The supervisor for ground handling an aircraft is to be either; the aircraft captain who has signed the F705 (G2 pilot or higher). Or, a Ground-based Aircrew that have not signed the Aircraft Captains acceptance certificate holding LEA AM003 SYE authorisation. Additionally, they must ensure that the tow vehicle driver holds the appropriate qualifications and authorisations for the aircraft type and for vehicle being used to conduct the move.

5. **Ground Handling.** When it is necessary to move an aircraft within restrictive areas the supervisor is to employ safety personnel at each wing tip and the fin. When pushing an aircraft backwards an additional safety person is required for the rear of the aircraft. All team members are to be briefed by the supervisor on the intended activity and associated danger areas. Ground handling and safety instructions for the aircraft are detailed in Reference B and are amplified in Annex A.

**Guidance
Material
2-1-5-1**

References:

- A. MAM-P Chapter 3.4, Para 2
- B. AP 101G-1001-1 Chapter 4

Regulatory Governance:

- A. This order supports RA 4054.

Annexes:

- A. Ground Handling of the Viking Aircraft.
- B. Use of Mainwheel Mounted Ground Handling Trolley on the Viking Aircraft.

GROUND HANDLING OF THE VIKING AIRCRAFT

Safety Precautions

1. Aircraft are not to be pulled or pushed by their:
 - a. Control surfaces.
 - b. Trailing edges.
 - c. Tail plane.

They are only to be pushed from strong points such as fuselage sides, nose and/or wing leading edges.

Hangar and Dispersal Ground Movements

2. Whilst in the hangar the aircraft may be ►manoeuvred forwards or backwards by hand◄, but outside the hangar they are to be moved backwards (tail first) with the canopy shut and locked. Aircraft manoeuvring procedures are as follows:

- a. The supervisor is to ensure:
 - (1) That they have sufficient workforce to move the aircraft safely.
 - (2) The handling team is briefed on their duties.
 - (3) That when parked, the aircraft does not obscure fire lanes.
- b. A wing tip handler is to hold the wing tip at waist level. Steering from the wing tip is only permitted when:
 - (1) A tail dolly is fitted (only when the aircraft is being moved, removed when parked/left), or
 - (2) The tail wheel is lifted clear of the ground by a handler pressing down on the nose.
- c. Outside the hangar the aircraft should only be manoeuvred with the canopy shut. The aircraft should always be parked with the canopy hinge line into wind and picketed if required.
- d. When turning an aircraft near an obstacle, the wing tip passing the obstacle is to be staffed.

Airfield Ground Movements

3. Aircraft are not to be towed in the hangar. On the airfield they may be towed but only forward. The following procedures are to be adopted when towing aircraft:
 - a. The tow team supervisor is to ensure:
 - (1) The handling team is briefed on their duties.

- (2) Sufficient personnel are available to meet the prevailing conditions:
 - i. The supervisor is to be positioned at the nose of the aircraft to retard the aircraft to prevent overrun and to release the tow rope.
 - ii. At least one wing tip handler is to be present.
- b. The vehicle is only to tow ONE aircraft at a time.
- c. The ground movements strop is to:
 - (1) Be between 35 and 40 feet in length.
 - (2) Incorporate a 750 lb GREEN coloured weak link.
 - (3) Be attached to the towing ►point◄ of the vehicle: ►
 - i. Ball Hitch. The ground movement strop loop being placed over the ball hitch.
 - ii. NATO Hook. The ground movement strop loop being placed in the NATO hook with jaws closed and secured, and pintle securing pin fitted.
 - iii. No Ball Hitch or NATO Hook fitted. The ground movement strop loop being passed over the towing hook attachment bar, the long end of the ground movement strop is then passed through the ground movement strop loop and pulled tight. ◄
- d. When preparing the aircraft for a vehicle tow the following is to be carried out:
 - (1) Ensure the aircraft is stationary.
 - (2) Open canopy fully.
 - (3) Connect ground movements strop to nose hook and ensure secure.
 - (4) Close canopy and lock.
 - (5) Ensure both canopies are closed and locked but DV panels are open.
 - (6) Ensure towing vehicle windows are open and a clear line of communication can be established.
- e. The towing vehicle speed must not exceed walking pace.
- f. A tail dolly is to be fitted to facilitate turning. If the aircraft is being towed without a tail dolly, then towing is to be in a straight line only.
- g. On completion of the towing operation the following is to be carried out:
 - (1) Ensure the aircraft is stationary.

- (2) Open canopy fully.
 - (3) Disconnect ground movements strop from nose hook.
 - (4) Close canopy and lock.
 - (5) Ensure both canopies are closed and locked and DV panels closed.
 - (6) Driver and supervisor are to visually ensure that the ground movements strop has been physically disconnected from the aircraft and removed from the towing hitch before moving off.
- h. Rough ground, or areas where 3-wheel contact is likely, are to be avoided.

USE OF MAINWHEEL MOUNTED GROUND HANDLING TROLLEY ON THE VIKING AIRCRAFT

Safety Precautions⁴

1. The glider must only be pushed from 'strong' points of its surface such as the fuselage sides and/or wing leading edges. It must never be pushed from any control surface or the trailing edge of the wings or wing tips.
2. ► Castor wheels only to be operated using feet. ◄

Hangar and Dispersal Ground Movements

3. Where an aircraft needs to be manoeuvred sideways through a limited space, e.g. narrow Hangar doors, the Mainwheel Mounted Ground Handling Trolley (MMGHT) can be used. ► ◄ For uneven and outside areas, the MMGHT should be used for the minimum distance required. Glider manoeuvring procedures are as follows:
 - a. The supervisor is to ensure:
 - (1) That they have sufficient personnel to move the aircraft safely, in accordance with the parent AESO to this Annex.
 - (2) The handling team is briefed on their duties.
 - (3) The canopy is shut and locked.
 - (4) A tail dolly is fitted.
 - (5) Pre-use checks for serviceability of the MMGHT are to be carried out: Check all castor wheels for security and freedom of movement, ensure castor brakes lock and release and check securing bolt for freedom of movement and locking in open and closed position.
 - b. A wing tip handler is to hold the wing tip at waist level.
 - c. The MMGHT is positioned in a suitable location, close to the restricted entrance/area but clear from any immediate obstructions and enabling aircraft access to the rear of the MMGHT.
 - d. ► Use foot to ◄ apply brakes to MMGHT wheels.

Caution

It is essential that the aircraft mounts the MMGHT rearwards to avoid the risk of the nose contacting the MMGHT

⁴ DAP101G-1001 Vol 1 Chap 4 Para 1

- e. Move the aircraft rearward onto the MMGHT. Once fully rearward, slide locking pin fully across and ensure locked in place. Insert the chock between the mainwheel and the locking pin, ensuring the mainwheel is secure.
 - f. ► Use foot to ◀ release Castor brakes on MMGHT
 - g. Move the aircraft and MMGHT complete, past obstacles/restrictions to desired location.
 - h. ► Use foot to ◀ apply brakes on the MMGHT wheels.
 - i. Ensure the aircraft is fully rearward, ensuring that the aircraft mainwheel is not resting on the locking pin. Secure the aircraft as appropriate, remove chock, remove locking pin and carefully roll the aircraft off the MMGHT.
 - j. ► Use foot to ◀ release castor brakes on MMGHT.
 - k. Remove MMGHT from the area and complete aircraft ground handling as required.
 - l. Carry out post use checks IAW Para 2.a.(5) above.
4. All personnel using the MMGHT are to be appropriately trained.

2 FTS AESO 2-1-5-2 - AIRCRAFT RECOVERY FOLLOWING DEFLATED MAINWHEEL

Rationale *To define the procedure undertaken to safely recover an aircraft with a deflated mainwheel. The safety of personnel has primacy over all content. At any time, the senior person present feels there is an unjustifiable risk they are to cease the recovery effort and contact the GMS Duty Eng for advice.*

Contents AIRCRAFT RECOVERY FOLLOWING DEFLATED MAINWHEEL

AESO 2-1-5-2 AIRCRAFT RECOVERY FOLLOWING DEFLATED MAINWHEEL

1. This order details the action to be taken in the event of a deflated mainwheel on a Viking aircraft during use.

Acceptable Means of Compliance AIRCRAFT RECOVERY FOLLOWING DEFLATED MAINWHEEL

2. This order defines the policy and guidance for local commanders to take in attempting to recover an aircraft. The order defines the different levels of complexity that operators may face if presented with this situation.

3. **Deflated Mainwheel Noticed.** The initial action on discovering a deflated mainwheel is to attempt to inflate the tyre with the approved pump. Dependent upon the tyre holding pressure dictates the next actions to be taken.

a. **Tyre holds pressure.** Tow the aircraft back to the hangar.

b. **Tyre DOES NOT hold pressure.** After inflating, if it is found the tyre will not hold pressure, use the provided can of 'tyre sealant'⁵. This is to be dispensed into the tyre assembly and the tyre inflated in accordance with the instructions on the packaging. Users are to note that this may or may not require a full can of sealant to achieve a positive seal. If the application of sealant is successful, the aircraft is to be towed back to the hangar.

⁵ Held in the aircraft FLAP locker.

4. Should the tyre not inflate after using the sealant, the glider may be towed back to the hangar, providing an inspection of the mainwheel and tyre gives no concern that there has been a catastrophic failure which could lead to secondary damage under towing. Where there is no such evidence of failure, the aircraft should be towed at a reduced speed with additional personnel used to monitor the aircraft's condition throughout the move. Where there is evidence of catastrophic failure, this is to be treated as a hazardous incident, consideration should be given to derigging the aircraft and loading it into a trailer to aid recovery.

5. **Recording Action.** Once back at the hangar, conduct an AF servicing. A F707A entry is to be raised for the deflated wheel. A F707B is to be raised and the work carried out is to be recorded in the Work Done column on the back. The GMS Duty Engineer is to be informed.

**Guidance
Material
2-1-5-2**

References:

A. N/A

2 FTS AESO 2-1-5-3 - CHARGING OF VIKING AIRCRAFT BATTERIES AT VOLUNTEER GLIDING SQUADRONS

Rationale *To ensure that sufficient serviceable aircraft batteries are available at the start of each flying day to fulfil the flying requirement.*

Contents
ANNEX A

CHARGING OF VIKING AIRCRAFT BATTERIES AT VOLUNTEER GLIDING SQUADRONS

**2 FTS
AESO
2-1-5-3**

CHARGING OF VIKING AIRCRAFT BATTERIES AT VOLUNTEER GLIDING SQUADRONS

1. This order is applicable to all 2FTS Volunteer Gliding Squadrons (VGS).

**Acceptable
Means of
Compliance**
2-1-5-3

CHARGING OF VIKING AIRCRAFT BATTERIES AT VOLUNTEER GLIDING SQUADRONS

2. Each VGS is to hold and control a minimum stock of 2 batteries per aircraft, a maximum of 5 spare batteries and a battery charging kit as detailed at Annex A. Each morning when the VGS is operating the Flight Servicing supervisor is to inform the DS of serviceable battery stock levels. Each VGS is required to maintain a stock of serviceable batteries in the battery charging area, which are to be used to replenish those fitted to aircraft.

Battery Charging

3. Battery Charging is to be carried out in accordance with Annex A to this order. A twice daily check of the Battery Charging Facility is to be carried out by the VGS; any batteries that do not hold their charge or have visible faults are to be replaced.

4. Under no circumstances are VGS personnel to tamper with the aircraft batteries, casings or chargers. Any damaged/faulty chargers are to be quarantined immediately and all battery and charger faults are to be reported to GMS via the weekly Glider Return Form.

5. Battery charging is highly recommended to be carried out only when the VGS is staffed. If practicable, battery chargers are to be switched off when the VGS ceases to operate at the end of each weekend or continuous flying programme.

Location

6. Where practical and possible it is recommended that battery chargers should **not** be stored on the floor, above shoulder height or in communal areas i.e. corridors/briefing rooms/cadet areas, **or** where visitors may come into contact with the batteries and charger. Where the location requirements indicated above cannot be complied with, the location must be well ventilated and activity in the location is to be limited of limited duration.

7. The Manufacturers Leaflet at Reference A is to be kept adjacent to the charger for reference by VGS personnel.

**Guidance
Material
2-1-5-3**

References:

A. Manufacturer's Leaflet

Annex:

A. Viking Battery Charging Procedure for Accumate Pro 5 Chargers

Order 3**VIKING BATTERY CHARGING PROCEDURE FOR ACCUMATE PRO 5 CHARGERS**

Battery charging kit contains:

- a. Accumate pro5 charger.
- b. Manufacturer's leaflet.
- c. Connection lead.
- d. Batteries as required.

1. Battery Charging Set-up.

- a. Ensure the battery charger is turned 'off'.
- b. Ensuring that the plug key way is aligned with the battery socket before inserting the 3-pin plug of the battery charger into the socket on the battery.
- c. Switch the battery charger 'on'.
- d. Ensure the Red light is illuminated.

2. Battery Charging.

- a. When the battery is charging the orange light will be lit. Check orange light is illuminated.

3. Battery Charging Completed.

- a. When the battery is fully charged the green light will be lit check green light is illuminated.
- b. Switch 'off' the battery charger and disconnect the battery from the battery charger.

Intentionally Blank

2 FTS AESO 2-1-5-4 - BEFORE ISSUE AND DAILY MAINTENANCE OF B Mk 72 PARACHUTES

Rationale *To detail the procedural requirements of performing before issue and daily maintenance activity associated with B Mk 72 parachutes including the MOD Format 707A(N/O/A), MOD Format 707B(IS) and MOD Format 707BE documentation process.*

Contents

BEFORE ISSUE AND DAILY MAINTENANCE OF B Mk 72 PARACHUTES

2 FTS AESO 2-1-5-4

BEFORE ISSUE AND DAILY MAINTENANCE OF B Mk 72 PARACHUTES

1. This order is applicable to all CGS, CFS and VGS staff performing before issue and daily maintenance activities associated with B Mk 72 parachutes.

Acceptable Means of Compliance 2-1-5-4

BEFORE ISSUE AND DAILY MAINTENANCE OF B Mk 72 PARACHUTES

2. Before issue and daily maintenance checks are to be carried out on all parachutes intended for use by staff or passengers flying in RAF gliders iaw Reference A and B. Only personnel who have been trained by an authorised instructor by the 2FTS OC Engineering Wing, may carry out the daily maintenance activity.

Notes:

a) Any faults discovered during maintenance checks will render a parachute unserviceable, attach a completed MOD F731 to the unserviceable parachute and inform GMS Syerston.

b) Upon receipt of a Parachute from AFPSU and before Issue to a VGS Reference A, Para 4.4.2 Item iii (Check for security of Ejector Snap hook Staking) is to be carried out by GMS SE Fit Personnel.

3. Before issue and daily maintenance of parachutes is to be fully documented as follows:

Note: Authorized personnel are responsible for insertion and removal of the MOD Form(s) 707A(N/O/A) to and from the MOD Form 700C using a MOD

Form 713 Register of Controlled Forms, which is itself a controlled form. Your VGS number e.g., 6XX VGS, is the Bay Identifier.

a. **MOD Form 707A(N/O/A) (Non/Off/Aircraft Maintenance Work Order Log).** A completed example of MOD F707A form is ► **held on BADER**◄. On raising a MOD F707A(N/O/A) entry (on the first working day of each month) ensure that:

- (1) Print your name in the Originators area, insert your VGS number preceded by a Zero in 'SNOW' box⁶ and complete the date block.
- (2) Complete the 'Symptom/Work Required' statement with the current month.
- (3) All other areas are left blank unless specified in the following paragraphs.

b. **MOD Format 707B(IS) Maintenance Work Order.** A completed example of MOD F707B(IS) form is housed on **BADER** PPMWO. When initially raising a new MOD Format 707B(IS), commence by:

- (1) Copy the SNOW and date from the F707A(N/O/A) entry into the relevant blocks, striking through the 'Aircraft No' block (top left-hand corner).
- (2) Enter the current month in the designated area of the Symptom/Work Required block.
- (3) Enter the Start Time/Date of when the maintenance commenced.
- (4) Check the current amendment state of the Pre-Printed Maintenance Work Order (PPMWO) against the PPMWO master register on Bader. Enter the amendment number and sign for carrying out the check.

Note: If the version amendment number is incorrect print off a copy of the new version for use.

- (5) Enter the serial numbers of all serviceable parachutes to be inspected on the certificate of work, on the rear of the F707B(IS) and cross through the remaining unused lines in the 'Work Done' column.

⁶ For parachute before use and daily inspections this fulfils the requirement of a SNOW iaw Reference C.

- (6) On completion of the inspection, Tradesman (1st Signature) and Supervisor (2nd Signature) are to be inserted as for any other maintenance task.

c. **MOD Format 707BE (Maintenance Work Order Continuation Sheet).** A completed example of MOD F707BE form is ► [held on BADER](#) ◀ and is the continuation sheet for the controlling MOD F707B(IS). It is to be completed as follows:

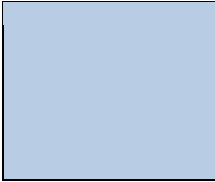
- (1) Copy the SNOW and date from the front of MOD F707B(IS), for that month, into the relevant blocks (top left-hand corner), striking through the 'Aircraft No' block.
- (2) Enter a sequential Sheet No (top right-hand corner) and annotate MOD F707B(IS) with an 'X' on the corresponding number in the 'Continuation Sheets' block. All continuation sheets are to be kept with the corresponding MOD F707B(IS).
- (3) The Certificate of work is to be completed as per the MOD F707B(IS), Para 4.b.(4)-(6) above.
- (4) A new side of the MOD F707BE is to be completed for each day of daily maintenance checks.

d. **End of Month Coordination (MOD F707B(IS)).** At the end of the calendar month the MOD F707B(IS) is to be coordinated iaw MOD F700 Instructions for Use (MOD F799/5A (IS) Para 8) and retained complete with all the associated MOD F707BE. Coordinate the appropriate Month line of the MOD F707A(N/O/A).

e. **Coordinated Documentation.** Ensure that all documentation raised for the previous month has been coordinated. Completed documentation is to be retained for a period of 28 days (iaw reference F, G & H) and then disposed of locally.

Parachute Husbandry

4. Parachutes are to be stored in a location, which provides protection from damp and extremes of temperature. SReference E).
5. When handling parachutes care must be taken to keep them dry, clean and away from rough or sharp edges. During transit, parachutes are to be transported using the parachute bag.
6. Unserviceable parachutes are to be annotated as such using a F731 and placed in a designated area highlighted as for U/S parachutes only. If this is not possible, they are to be removed from the parachute storage area completely.



► [Link to parachute PPMWO - held on BADER](#) ◀

**Guidance
Material
2-1-5-4**

References:

- A. DAP 108C-0160-1, Chap 2.1.
- B. DAP 108D-0503-1, Chap 2, Para 10.1
- C. MOD F799(N/O/A)
- D. MAM-D, Chap 3.1, Para 4.9, Table 3
- E. DAP 108-0007-1
- F. DAP 108A-0006-2(N/A/R)1, Chap 1.4, Para 5
- G. RA 4813
- H. MAM-D Chap 2.3 (Cat B)

2 FTS AESO 2-1-5-5 – REMOVAL OF BODILY FLUID CONTAMINATION FROM AIRCRAFT

Rationale

Due to the nature of Air Cadet Operations, parachutes, harnesses and seats can be contaminated by bodily fluids. This leaflet identifies initial and subsequent decontamination actions required in the event of bodily fluid contamination and the Personal Protective Equipment (PPE) available.

Contents

ANNEX A
ANNEX B

REMOVAL OF BODILY FLUID CONTAMINATION FROM AIRCRAFT

2 FTS AESO 2-1-5-5

REMOVAL OF BODILY FLUID CONTAMINATION FROM AIRCRAFT

1. This order is applicable to all GMS, CGS, CFS and VGS personnel.

Acceptable Means of Compliance 2-1-5-5

REMOVAL OF BODILY FLUID CONTAMINATION FROM AIRCRAFT

2. Body fluids may present not only a biological hazard but also a significant corrosive hazard to aircraft structures and materials. Whilst precautions appropriate to the role and use of aircraft should be taken to prevent any spillage of body fluids leaking into aircraft structures, where leakage occurs, timely and effective removal of such substances is essential to reduce health and corrosion risks. This AESO details the procedures required to recover an aircraft following the spillage of bodily fluids. Although the composite structure of the Viking is more resilient to corrosion from bodily fluids, flying controls, instruments and electrical wiring are susceptible to damage and every effort is to be made to ensure that bodily fluids are removed or neutralised.

3. Body fluids are defined as all bodily materials such as saliva, blood, vomit, urine and faeces from all human and animal sources. In all circumstances, personnel should assume all human and animal body fluids to be potentially infectious.

4. Personal Protective Equipment (PPE), tools and materials are detailed within Annex A and B Water and aircraft cleaning fluid are the only liquids to be used for decontamination. Disinfectant chemicals, cleaning substances or loose absorbent granules ARE NOT to be used, this includes air fresheners and fumigating agents. Enough decontamination equipment is to be held by operating units to conduct the following initial actions.

Initial Decontamination Actions

5. On discovery of contamination, the following general and specific guidance should be followed at Unit Level.
6. General Guidance:
 - a. Aircraft to be declared unserviceable.
 - b. Control access to the area until decontamination is complete.
 - c. Contain or clean up the spill using absorbent cloths/pads followed by dilution with the largest practical amount of water mixed at a ratio of 9:1 with aircraft wash fluid (detergent), using the minimum number of personnel required.
 - d. Take reasonable precautions to prevent direct contact with bodily fluid contamination, with any affected areas washed thoroughly with soap should contact occur. Medical advice/assistance is to be sought as required.
 - e. Details of any bodily fluid spillage and the initial actions taken are to be documented via an entry in the MoD Form 700C, MoD Form 707A/B.
 - f. The GMS Maintenance Control at RAF Syerston is to be notified.
7. Specific Guidance:
 - a. Seat/Harness/Aircraft Cover Contamination. Light contamination by vomit is to be cleaned with 9:1 water to aircraft wash fluid (detergent) using absorbent paper towels. Once the vomit contamination has been removed the component is to be dried with absorbent materials and thoroughly air dried away from direct sunlight or heat. In all other cases of contamination by bodily fluids Aircraft to be declared unserviceable, GMS Maintenance Control is to be informed, and a full decontamination is to be conducted iaw Reference B.
 - b. Parachute Contamination. In all cases of parachutes being contaminated, they are to be double bagged with each bag independently sealed containing a MoD Form 731. The MoD Form 731 is to be attached clearly stating that the parachute is contaminated with bodily fluids, specifying the type of contamination. The asset is to be returned to the AMO at RAF Syerston.

Subsequent Actions

8. Following removal of Light contamination, the aircraft must be thoroughly checked by a designated member of the AMO holding authorization MAM-P

G705, who will ensure that all body fluids, cleaning materials, waste cleaning fluid, absorbent materials and water have been removed. If no further contamination is suspected, the MAMP-G705 holder may authorize this initial action as sufficient and clear the MoD Form 700C entry with 'No further decontamination required'. Full details of the decontamination process and related work must be entered in the MoD Form 700C and the MAMP-G705 holder must certify final completion of full decontamination process following bodily fluids spillage.

9. Where the Initial Decontamination Actions are considered to have been ineffective or where the contamination is beyond the operating unit capabilities the aircraft is to be segregated so that a full decontamination can be undertaken iaw Reference A.

10. **Disposal of Contaminated Waste.** All disposable contaminated waste is to be double bagged and sealed. The contaminated waste is to be disposed of in the General Waste facility.

**Guidance
Material
2-1-5-5**

References:

- A. MAM-P Chapter 4.18.
- B. JSP 375.

Annexes:

- A. Bodily Fluid Contamination - Personal Protective Equipment (PPE).
- B. Bodily Fluid Contamination - Decontamination Tools And Materials.

Order 5**BODILY FLUID CONTAMINATION - PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Item	Size	NSN
Disposable Coveralls	M	8145-99-9784773
	L	8145-99-9784774
	XL	8145-99-9784775
	XXL	8145-99-9784776
Apron		6532-NC-1000981
Disposable Overboots		8430-99-1320939
Black Rubber Gloves	7	8415-99-1309430
	8	8415-99-1309431
	9	8415-99-1309432
	10	8415-99-1309433
	11	8415-99-1309434
Inner Gloves (Cotton)	6-6.5	8415-99-1309436
	7-7.5	8415-99-9757917
	8-8.5	8415-99-9757916
	9-9.5	8415-99-9757915
	10	8415-99-9757914
Latex Gloves	7.5	6515-99-2107205
	8	6515-99-2107206
	8.5	6515-99-2107207
Dust Masks		4220-99-5136200
Filter Mask (Cartridges)		4240-99-9771379
Filter Mask (Disposable)		4240-99-1321426
Goggles		4240-99-5773798

Order 5**BODILY FLUID CONTAMINATION - DECONTAMINATION TOOLS AND MATERIALS**

Item	Size	NSN
Spray Bottle		3740-99-1392473
Kimwipe	Large	8540-99-8829329
	Small	8540-99-1846312
Paper Towels		8540-99-6826597
J-Cloths (green)		7920-99-2127645
Plastic Bucket GP		7240-99-7243398
Hand Shovel		5120-99-5825725
Dustpan		7920-99-1484288
Brush		7920-99-5499147
Scrubbing Brush		7920-996663442
Detergent		7930-99-2204958
Bag		8105-99-1255180
Tie Wrap		5340-99-1926955

Intentionally Blank

► This Order has been substantially re-written: for clarity no change marks are presented – please read the Order in its entirety ◀

2 FTS AESO 2-1-5-6 – SUPPLEMENTARY FLIGHT SERVICING TASK TO INSPECT AND REPLACE WING TO FUSELAGE JOINTING TAPE

Rationale

The aim of this order is to define the procedure to inspect and replace as necessary (IRAN) the wing to fuselage and tailplane jointing tape and the correct wording to be detailed in MF700.

Contents

Annex A

SUPPLEMENTARY FLIGHT SERVICING TASK TO INSPECT AND REPLACE WING TO FUSELAGE JOINTING TAPE

AESO 2-1-5-6

SUPPLEMENTARY FLIGHT SERVICING TASK TO INSPECT AND REPLACE WING TO FUSELAGE AND TAILPLANE JOINTING TAPE

1. This order is applicable to all aircraft engineering personnel employed on the Viking T1 aircraft within the Military Air Environment (MAE) at GMS and 2 Flying Training School and VGS's.

Acceptable Means of Compliance 2-1-5-6

SUPPLEMENTARY FLIGHT SERVICING TASK TO INSPECT AND REPLACE WING TO FUSELAGE AND TAILPLANE JOINTING TAPE

2. When conducting the Flight Servicing the wing to fuselage and tailplane jointing tape has been found to be damaged or torn. This fault has required additional support from the AMO to replace this jointing tape and therefore it has been assessed that VGS personnel that are suitability trained to inspect and replace the wing to fuselage and tailplane jointing tape only, to reduce lack of available aircraft for tasking.

3. An entry is to be made on the MOD Form 705(SSR) to authorise the inspection/replacement of the wing and tailplane jointing tape during the Flight Servicing, Annex A details.

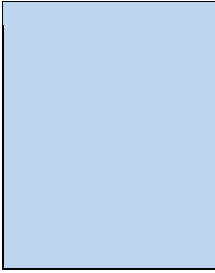
4. The jointing tape (5970-99-1104319) is to be used from the Aircraft Rig/Derig kit and controlled iaw Reference C. No other tape is to be used and no other surfaces are to be taped as this could cause a control restriction if applied incorrectly.

NOTE: Flying control tape is not to be replaced as this could cause a control restriction.

Procedure

5. When replacing the jointing tape this is to be done iaw Reference D.

a. Remove all of the damaged tape and discard.



- b. Apply tape NsN:5970-99-1104319 **only** to the wing fuselage joint or the tailplane joint ensuring it covers the gap fully. Ensure a smooth finish with no gaps or tears.

**Guidance
Material
2-1-5-6**

References:

- A. MAM-P Chap 4.2
- B. MAM-D MF799/4(SFS)
- C. AESO 2-1-4-1
- D. AP101G-1001-1. MP8/1 Para 14.3 – 14.5 incl.

Annex:

- A. Wording to raise on MF705(SSR)

Intentionally Blank

Wording to raise on MF705(SSR)

Authority	Title	Work Required	Trade	Servicing Req.	Supervised Y/N
AESO 2-1-5-6	Inspect/replace wing and tailplane jointing tape	Inspection of wing to fuselage jointing tape and tailplane jointing tape (5970-99-1104319.) for signs of tears or damage. Replace any damaged missing tape iaw DAP101G-1001-1 MP8/1 para 14.3 – 14.5 only.	Any	AF	Y

2 FTS AESO 2-1-6-1 - MANDATORY PUBLICATIONS TO BE LISTED ON INDIVIDUALS F4820A

Rationale *To provide documentary evidence that all personnel have read and signed for mandatory engineering publications.*

Contents **MANDATORY PUBLICATIONS TO BE LISTED ON INDIVIDUALS F4820A**

**2 FTS
AESO
2-1-6-1** **MANDATORY PUBLICATIONS TO BE LISTED ON INDIVIDUALS F4820A**

1. This order is applicable to all 2FTS Engineering Tradespersons and Aircrew, who are required to sign as having read engineering related orders on F4820A.

**Acceptable
Means of
Compliance
2-1-6-1** **MANDATORY PUBLICATIONS TO BE LISTED ON INDIVIDUALS F4820A**

2. A RAF F4820A is to be raised, as an electronic form or paper form, for an engineering tradesperson or for an aircrew member when they arrive at a unit.

3. It is the responsibility of:

a. The VGS QESO or their nominated deputy to ensure that all VGS personnel have the following mandated list of engineering publications, at Table 1, printed on their individual F4820A. VGS staff who are not required to carry out any engineering tasks are only required to read and sign for serial No's 1 and 8 to 11 inclusive of Table 1.

b. The 2FTS QSC is to ensure that all engineering authorised 2FTS aircrew, CGS aircrew and 2FTS Eng Wg HQ personnel have the following mandated list of engineering publications, at Table 1, printed on their individual F4820A.

c. The DCAM is to ensure that all members of the CAMO have the CAMO tailored list of publications annotated on their F4820A (Template available on the [CAM SharePoint](#)).

4. In accordance with Reference A, personnel are to sign for having read and understood the orders applicable to them, specified to order/chapter number and AL state on the following occasions:

- a. On arrival.
- b. Annually.
- c. Following the issue of new or amended orders.
- d. Following a change of employment/role.
- e. Control of this requirement is to be via a minimum of a two colour 'T' card system (or appropriately controlled electronic alternative) with cards available for each member of staff. For example:

(1) Flt Lt Smith - **GREEN CARD** - All signatures current.

(2) Flt Lt Smith - **RED CARD** - Order requires reading/signing.

5. In addition to the mandatory list in Table 1, each OC VGS may add any further engineering orders or publications to individuals F4820A they deem necessary.

6. A template F4820A, for use by VGS, is available on Bader in folder 'VGS QA form and document templates. The 2FTS QSC (or nominated 2FTS HQ personnel) will maintain the revision/amendment states of lines 1-8 inclusive. VGS must insert dates for lines 9-10 and any additional lines they add for their individual Squadron.

1	2 FTS Aviation Engineering Standing Orders (AESO's)
2	MAM-P, Chapters: a. 2.3, 2.4 b. 3.2, 3.3, 3.4 c. 4.2, 4.13, 4.13.1, 4.14, 4.18 d. 9.1, 9.2, 9.3, 9.4
3	AP101G-1001-5A2 (Hazard and Maintenance Information)
4	AP101G-1001-5B1 (Flight Servicing Schedule)
5	AP101G-1001-2(R)1 Lft 1(Para 28), 11, 23, 31, 35, 37, 501, 502
6	RA4806(5)
7	AP100B-01 Order 2.2.1
8	Unit Quality Manual
9	COSHH assessments
10	Risk assessments

Table 1 - Mandated List of Publications and Orders

**Guidance
Material
2-1-6-1**

Reference:

A. AP 100B-01 Order 2.2.1

2 FTS AESO 2-1-6-2 - WEEKLY CHECK OF CORRECT AMENDMENT STATE - AVIATION RELATED ENGINEERING DOCUMENTS

Rationale *To ensure that all copies of aircraft and associated equipment PPMWO and Air Publications (AP), both hard and electronic held on Bader, are to the correct amendment state as per the master documents.*

Contents
ANNEX A

WEEKLY CHECK OF CORRECT AMENDMENT STATE - AVIATION RELATED ENGINEERING DOCUMENTS

2 FTS
AESO
2-1-6-2

WEEKLY CHECK OF CORRECT AMENDMENT STATE - AVIATION RELATED ENGINEERING DOCUMENTS

1. This order is applicable to 2FTS HQ, CGS and VGS staff.

Acceptable
Means of
Compliance
2-1-6-2

WEEKLY CHECK OF CORRECT AMENDMENT STATE - AVIATION RELATED ENGINEERING DOCUMENTS

2. **Authorisation.** 2FTS OC Eng Wg is responsible for ensuring that all PPMWO and publications accessible by 2FTS personnel (HQ, CGS, VGS) are to the current amendment state, regardless of their location or format. The aim of this order is to ensure all copies of documents are at the current amendment state in accordance with References A, B and C.
3. **Authorisation requirements.** OC VGS (or representative) is to nominate an AP Custodian to ensure that all hard copy APs are correct against those promulgated on BADER every week before the commencement of engineering operations.
4. Any printed copies of other electronic documents kept by the VGS are to be checked against the electronic version on BADER and are to be annotated to indicate that it is a printed copy of an electronic document and not subject to amendment.
5. Each printed copy of an electronic document is to be added to the check sheet at Annex A of this order and checked as per para 4 above for currency before operations commence at the weekend. If there is a discrepancy, then all printed copies of that document are to be destroyed and new updated versions printed.

6. 2FTS HQ QSC is to confirm every week prior to VGS weekend flying that the following electronic publications on Bader are at the current amendment state of the master publications:

- a. DAP108C-0160-1 (check against [E&S Aircrew Tech Library](#))
- b. DAP108D-0503-1 (check against [E&S Aircrew Tech Library](#))
- c. All PPMWO's available to VGS personnel
- d. Viking AP101G-1001-5A2
- e. Viking AP101G-1001-5B1
- f. Aviation Engineering Standing Orders
- g. 2FTS Unit Quality Manual
- h. AP100B-01 Order 2.2.1
- i. AESP 2330-Q-002-201
- j. AESP 2330-Q-002-601
- k. AESP 2330-J-601-201
- l. AESP 2330-J-601-601
- m. AESP 1720-G-106-201
- n. AESP 1720-G-106-302
- o. AESP 1720-G-106-601

7. 2FTS HQ QSC is to contact the VGS QESOs and CGS QFP, via email, if there have been any changes to the documents listed in Para ►6◄ and upload the current version to Bader.

8. 2FTS HQ QSC will, in addition to the documents listed in para 7 above, check the revision/amendment state of the following documents, amend the F4820A template on Bader if required, and inform the VGS QESOs of any changes:

- a. AP101G-1001-2(R)1
- b. MAM-P
- c. RA 4806



9. **Recording.** Checks are to be recorded on the form at Annex A and the check sheet kept by the VGS AP custodian for VGS checks and 2FTS QSC for 2FTS checks.

**Guidance
Material
2-1-6-2**

References:

- A. MAM-P Chapter 1.1 Para 1.3
- B. MAM-P Chapter 2.4
- C. Glider AP Master List (Bader)

Annex:

- A. Weekly check of correct amendment state – Aviation related Engineering documents.

[illegible]

Intentionally Blank

2 FTS AESO 2-1-6-3 - USE OF PRE-PRINTED MAINTENANCE WORK ORDERS

Rationale

The aim of this order is to detail the requirements for the use of PPMWOs on Viking T1 aircraft and B Mk 72 Parachute.

Contents

ANNEX A

ANNEX B

USE OF PRE-PRINTED MAINTENANCE WORK ORDERS

2 FTS AESO

2-1-6-3

USE OF PRE-PRINTED MAINTENANCE WORK ORDERS

1. This order is applicable to Serco GMS personnel and CGS/CFS/VGS Aircrew undertaking maintenance tasks utilising Pre-Printed Maintenance Work Orders (PPMWOs).

Acceptable Means of Compliance 2-1-6-3

USE OF PRE-PRINTED MAINTENANCE WORK ORDERS

2. PPMWOs may be used for routine and repetitive 1st and 2nd line maintenance tasks provided that:

a. Sponsorship of the PPMWO has been carried out by the manager directly responsible for the maintenance task being undertaken.

b. The PPMWO has been registered with the PPMWO custodian (2FTS ► Eng ◀) in either the [GMS PPMWO Register](#) (Serco GMS use only) or the ► [2FTS PPMWO Register](#) ◀ (VGS use only B Mk 72 Parachute Documentation ► [BADER PPMWO Register](#) ◀).

c. The user ensures that the PPMWO fully covers the maintenance task, and correctly scopes the task required. The user is responsible for certifying the PPMWO is at the correct AL state and has been checked against the register and the references given are still valid.

3. **Sponsor.** The sponsor for each PPMWO (as detailed on the registers) is responsible for:

a. Informing the PPMWO custodian (2FTS ► Eng Wg ◀) when either a new one is required or an existing PPMWO requires amendment or deleting. Furthermore, a formal request is to be made using the registration/amendment proforma at Annex A ► and update the relevant PPMWO register. ◀

b. Preparing any amendment, wherever possible, a photocopy of the existing PPMWO should be used with the required amendments annotated in red. If the PPMWO must be completely rewritten, then the new version should be attached to the old version with the old version crossed through in red and annotated 'Fully revised'.

c. Carry out an annual review of all PPMWO, on the relevant PPMWO register, that you sponsor, and inform PPMWO custodian (2FTS ►Eng Wg ◄) of any changes.

4. **PPMWO Custodian (2FTS Eng Wg).** The PPMWO custodian is responsible for:

a. Ensuring that, on receipt of a new PPMWO, Part 2 of Annex B is completed and returned.

b. Filing a copy of any PPMWO amendment request.

c. Carrying out a review of PPMWOs to ensure that only the correct AL state of PPMWO is in-use ►during Engineering assurance activities. ◄

5. PPMWO are to be printed from the register iaw Reference A.

**Guidance
Material
2-1-6-3**

References:

A. MAM-D Chap 2.1, Para 2.5

Annexes:

A. PPMWO Registration/Amendment/Deleting Proforma.

B. PPMWO Issue/Receipt/Removal Acknowledgement Proforma.

PPMWO REGISTRATION/AMENDMENT PROFORMA**PART 1. ORIGINATOR'S CERTIFICATE**

I certify that the contents of the PPMWO submitted for registration/amendment/deleting* is correct, complete, and up to the latest amendment state of the source material where applicable.

Rank/Name:

Post:

Signature:

Date:

*Delete as applicable.

PART 2. SPONSOR'S CERTIFICATE

I certify that the content of the PPMWO submitted for registration/amendment/deletion is correct, complete, and to the latest amendment state of the source material, where applicable.

Rank/Name:

Post:

Signature:

Date:

*Delete as applicable.

PART 3. REGISTRATION CERTIFICATE

I certify that the PPMWO submitted has been registered/deleted* and has been allotted into/removed from the relevant register.

GMS - SERIAL No. SYN/...../...../..... Issue No.....

VGS - SERIAL No. 2FTS/...../...../..... Issue No.....

Rank/Name:

Post: **PPMWO Custodian**

Signature:

Date:

*Delete as applicable.

PPMWO ISSUE/RECEIPT/REMOVAL ACKNOWLEDGEMENT FORM

PART 1**To: (Sponsor)**

The following PPMWO(S) have been approved and will be incorporated into/removed from the Master List. Destroy all previous copies (if applicable and return the slip below to the 2 FTS PPMWO custodian)

Rank/Name:

Post:

Signature:

Date:

-----tear here-----

PART 2**To PPMWO Custodian (2FTS Engineering Wg)**

I Confirm that all previous copies of PPMWO

GMS - SERIAL No. SYN/...../...../..... Issue No.....

VGS - SERIAL No. 2FTS/...../...../..... Issue No.....

▶ have been introduced/removed ◀

Rank/Name:

Post:

Signature:

Date:

Intentionally Blank

2 FTS AESO 2-1-6-4 - RETURNING AIRCRAFT DOCUMENTATION – F700 PAPERWORK

Rationale *The aim of this order is to detail the procedure for returning aircraft documentation appertaining to Aircraft F700 to reduce the loss of legally binding paperwork.*

Contents

RETURNING AIRCRAFT DOCUMENTATION – F700 PAPERWORK

2 FTS AESO 2-1-6-4

RETURNING AIRCRAFT DOCUMENTATION – F700 PAPERWORK

1. This order is applicable to all VGS Quality Engineering Standards Officer (QESO) operating aircraft within the Military Air Environment (MAE); No 2 Flying Training School.

Acceptable Means of Compliance 2-1-6-4

RETURNING AIRCRAFT DOCUMENTATION – F700 PAPERWORK

2. Any completed Aircraft F700 paperwork e.g., F705(WLG) or F705(SSC) is to be treated in one of the following ways to ensure its return to GMS Engineering Records at RAF Syerston:

a. Leave completed paperwork in the Aircraft F700, and GMS personnel will remove it on their next visit to the VGS (not longer than 28 days),

OR

b. Remove completed paperwork in accordance with F799/1 General Instructions for use and leave in a pre-agreed secure place for GMS personnel to collect on their next visit to the VGS (not longer than 28 days).

Guidance Material 2-1-6-4

References:

A. N/A

Intentionally Blank

2 FTS AESO 2-1-6-5 - DOCUMENTATION ACTIONS FOLLOWING ENGINEERING MAINTENANCE WORK ORDER COMPLETION

Rationale *The aim of this order is to detail the procedure to ensure that all follow up documentation specific to technical work carried out on the Viking T1 is captured without the need for Maintenance Work Orders to remain open for follow up work at Reference A and B.*

Contents

DOCUMENTATION ACTIONS FOLLOWING ENGINEERING MAINTENANCE WORK ORDER COMPLETION

2 FTS AESO 2-1-6-5

DOCUMENTATION ACTIONS FOLLOWING ENGINEERING MAINTENANCE WORK ORDER COMPLETION

1. This order is applicable to all aircraft engineering personnel employed on the Viking T1 aircraft within the Military Air Environment (MAE) at GMS and 2 Flying Training School.

Acceptable Means of Compliance 2-1-6-5

DOCUMENTATION ACTIONS FOLLOWING ENGINEERING MAINTENANCE WORK ORDER COMPLETION

2. When a task requires the update of any record as defined in this AESO at para 3, 4 and 5, an open entry is to be raised and signed off with the following text by a supervisor:

“No engineering records, documentation or reporting action has been carried out on this MWO. Follow up action will be carried out by GMS Engineering Records at RAF Syerston IAW AESO Book 2, Part 1, Chapter 6, Order 6.”

An entry is to be made in the Management Aid on the front of the F707B(IS) with the next due forecast/forecasts.

3. Completion of Technical Instruction/ / Modification

SECTION 7	Update F700 Section 7
GMS Electronic Databases	Input data into relevant electronic databases
LOG CARDS	Update and check for accuracy F735A, F746, F747, F748, F749 and F751
DT	Reporting all instruction satisfaction IAW relevant SI(T)

4. Completion of Item Replacement / CLR

SECTION 7	Update F700 Section 7
GMS Electronic Databases	Input data into relevant electronic databases

LOG CARDS	Update and check for accuracy F735A, F746, F747, F748, F749 and F751
-----------	--

5. **Completion of OOP / SMR**

SECTION 7	Update F700 Section 7
-----------	-----------------------

6. On receipt of all co-ordinated MWOs, Eng Records are to action the outstanding updates and follow on recording as required.

**Guidance
Material
2-1-6-5**

References:

- A. RA 4806
- B. MAM-P Chap 2.3 and 2.4

Intentionally Blank

2 FTS AESO 2-1-6-6 PROCEDURE FOR MOD F700 QUALITY CHECKS

Rationale *The quality of aircraft documentation has a direct influence on the airworthiness of the aircraft to which it relates and are mandated by Reference A. This order details the requirements for the quality check of MoD F700s for Viking aircraft. The order is intended to detail when and by who and the how these checks are to be carried out. The overall intention is that the F700 is up to date IAW with the relevant publication and instructions, the data contained within is accurate and reflect the physical condition of the aircraft.*

Contents

ANNEX A

ANNEX B

PROCEDURE FOR MOD F700 QUALITY CHECKS

AESO

2-1-6-6

PROCEDURE FOR MOD F700 QUALITY CHECKS

1. This order is applicable to all aircraft engineering managers operating aircraft within the Defence Air Environment at 2 Flying Training School (2 FTS) and Glider Maintenance contractors.

Acceptable Means of Compliance

2-1-6-6

PROCEDURE FOR MOD F700 QUALITY CHECKS

Implementation

2. **The Necessity for Accurate Documentation.** The quality of aircraft documentation has a direct influence on the airworthiness of the aircraft to which it relates. The procedures and documentation for maintaining the quality of specific platform MOD F700 are contained within Reference A and are to be followed without deviation. The required Viking F700 Quality Checks are highlighted in the respective Annex A and B to this document.

3. **Authorisations.** The MOD F700 Quality check is to be carried out by an authorised individual holding minimum Authority MAMP-G703 (limited to F700 Quality Checks Only), MAMP-E515 and MAMP-E516 and under the direction of a full MAMP-G703 holder for cumulative risk analysis. The required Viking F700 Quality Checks are highlighted in the respective Annex A and B to this document. The annual F700 Level K quality Check will be conducted by an individual holding MAMP-K1007 or MAMP-K1017 if delegated. Delegated Level K F700 Quality Checks are not to exceed the annual limited defined in Reference A. This is tracked and monitored via the F700 Quality Check tracking tools held in the [CAMO Responsibility C](#) SharePoint Area. The following guides the required authorisations required to carry out Viking F700 quality checks.

4. **MOD F700 Quality Check.** MOD F700 Quality Check is to be carried out with reference to the requirements at Ref A. Although errors regarding documentation are caused by the initial failure to complete the documentation correctly, it is the function of the Aircraft Maintenance Organisation (AMO) quality system to identify, review and correct these mistakes before they are compounded.
5. **Periodicity.** to ensure the documents are maintained correctly, all 2FTS aircraft are subject to MOD F700 Quality Checks at the following intervals:
 - a. **Every 28 Days.** The MOD F700 Quality Check is to be undertaken by a MAMP-G703 holder every 28 days and managed via each aircraft's MOD F700 Short Forecast Log. Trade assistance may be provided by appropriately SQEP and competent staff.
 - b. **Annual.** IAW Reference A, the MAMP-K1007 holder is to carry out an annual MOD F700 Quality Check on each ac. The timetable of checks will be controlled by the maintenance manager ensuring sufficient notification is given to the level K holder. The F700 is to have a 28-day MAMP-G703 check prior to the level K check⁷.
 - c. **Aircraft Allotment.** A F700 Quality Check is to be undertaken by a MAMP-G703 holder when the aircraft is allotted to and returned from a different maintenance organization.
 - d. **Post Scheduled Maintenance.** An F700 Quality Check is to be undertaken by a MAMP-G703 holder when the aircraft has completed a scheduled maintenance package.
 - e. **Unscheduled.** A F700 Quality Check is to be carried out when requested by Level K or J917 holder.
6. **28 Day F700 Quality Check deferment.** 28 Day F700 Quality Checks are not to be routinely deferred and once expired should be carried out before next flight. Extensions may be granted based on the criteria set in Reference A(5) including AMC and GM, by the nominated MAMP-H802 holder.
7. **Annual Level K F700 Quality Check Deferral / Pause.** Annual Level K F700 Quality Check may only be deferred with authority of a MAMP-K1007 holder. The MAMP-K1007 may elect to defer an Annual Level K F700 Quality Check IAW Reference A (5) Order and AMC guidance. Deferrals to F700 Quality Checks should be submitted using the deferment request procedure at References C & D.

The Procedure for F700 Quality Checks

8. **Procedure for F700 Quality Assurance Check.** The check requires an F707A & B to be raised. A MAMP-E515, MAMP-E516 and MAMP-G703 holder

⁷ Unless carried out within the last 7 days or the ac has not flown since last audit.

(inc limited to F700 Quality Checks) is to check the content of MoD F700s for accuracy. The nominated aircraft MAMP-G703 holder should undertake the responsibilities identified in Reference A(3) Order and AMC. F700 Quality Assurance Check recording is to be carried out as follows:

- a. **Documentation.** Using the appropriate MOD Form 799 series and Ref B, check the issue state of all forms ensuring their correct compilation and complete the proforma at Annex A. All observations are to be recorded at Annex A and rectified before next flight.
 - b. **Physical Survey.** IAW Ref A, all aircraft are required to have a physical survey carried out every 28 days, aligned to the F700 Quality Check and findings are to be documented in the format at Annex B to this order.
9. **Corrective actions.** The nominated MAMP-G703 holder is to ensure that any:
 - a. One set of the completed Annexes are attached to the MWO prior to closure.
 - b. Review F700 Quality Check findings monthly to ensure they have been closed and to bring any issues to the attention of the Glider Maintenance Contractor's Maintenance Manager (and Mil CAM / Level K where appropriate).
 - c. Trending and actions taken to reduce negative trends are to be reported at the 2FTS UQRM by the 2FTS Assurance Coordinator.
10. **AMO Assurance.** Documentation controllers are to ensure the requirements of Reference A (Para 4) are undertaken. The Glider Maintenance Contractor Engineering Records Cell (ERC) is to ensure that:
 - a. One set of the completed Annexes are attached to the MWO prior to closure.
 - b. Review F700 Quality Check findings monthly to ensure they have been closed and to bring any issues to the attention of the Glider Maintenance Contractor's Maintenance Manager (and Mil CAM where appropriate).
11. **AMO Assurance.** AMO QA Staff will provide 1PA assurance that the 28 day F700 Quality Checks are being carried out by authorised and SQEP Staff, and root cause of AMO related findings are appropriately addressed. Any adverse trends are to be notified to the AMO Chf Eng and Mil Level K and overall trending discussed at the UQRM.

12. **2 FTS Assurance.** 2 FTS QA Staff will provide 1PA assurance that the F700 Quality Checks are being carried out by authorised and SQEP Staff, root cause of findings are appropriately addressed.

13. **CAMO Assurance.** The CAMO QM will sample F700 Quality Check SNOWs during appropriate CAMO Audits to assure that F700 Quality Checks:

- a. Are being managed effectively.
- b. Have satisfactorily addressed findings.
- c. Have been carried out by appropriately SQEP staff.

**Guidance
Material
2-1-6-6**

References:

- A. AP100B-01 Order 2.1.17
- B. MAM-D
- C. MAM-P Chap 4.8
- D. AESO, Book 2, Part 1, Chapter 1, Order 3

Annexes:

- A. 2 FTS Aircraft MOD F700 Quality Assurance Review Proforma and Observation and Corrective Action Sheet.
- B. 28 Day Physical Survey of Aircraft Condition and Husbandry.

Intentionally Blank

2 FTS AIRCRAFT MOD F700 QUALITY ASSURANCE REVIEW PROFORMA

SNOW				Tail Number				Date			

Date:	28 Day	Name:
Date:	Annual Level K	Name:
Date:	Airframe Hours:	Launches:
Next Scheduled Maintenance Task: MINOR/MAJOR* Due at:		
Launches:	Date:	
From last F700QA record:	Last F703 Entry:	Last F704 Entry:

Serial	Form	Check Required	28 Day	Annual
General				
1 0.1	Previous F700 QA MWO	Check previous F700 QA Review observations have been closed. Record in the above table, the last F703/F704 details that were checked during the last F700 QA Review.		
2 0.2	MOD F700.	Check the general condition of MOD F700 binder and all contents are acceptable, replacing or repairing all loose, torn or illegible pages and dividers.		
3	All Forms	As directed by this template, check all forms are completed accurately IAW MAM-P, MAM-D, MOD F799 series and MOD F300 poster series guidance.		
0.4		Check all Entered in Error (or EinE of there is a lack of space) entries have both a signature and printed name in accordance with MRP RA 4813(1), MAM-P Chap 4.1 and MAM-D Part 1 Chap 2.2.		
0.5		Check aircraft details are entered correctly for all sheets. Check all entries are in black ink IAW F799/1 Para 4.		
0.6		Check revision state of the form IAW MAM-D (where applicable).		
0.7		Check form serial number against F713 (where applicable).		
Serial	Form	Check Required	28 Day	Annual

Section 1				
1	MOD F707A (AML) Aircraft Maintenance Log	Check all SNOW, Dates, WHF codes, A/F Hours and Originator Names are correctly entered for all in use SNOWs, or the BF box has been initialled.		
1.1.1				
1.1.2		Check all SNOW numbers are sequential. Check F707B boxes are ticked for F707Bs raised.		
1.1.3		Check all co-ordinated MOD F707A entries have appropriate action taken and have a Co-ord printed name.		
2	MOD F707B(AFRC) Aircraft Flying Requirement Certificate	Check any MOD F707B(AFRC) has been raised in accordance with MOD F799/5(AFRC).		
1.2				
Section 2				
1	MOD F703 Limitation Log New Entries	Check all new entries are compiled IAW MOD F799/2, the content is accurate, and the deferred-until period has not been exceeded.		
2.1.1				
2.1.2		Check all new entries are exact copies of the original F707B(IS) held by Eng Records.		
2	MOD F703 Limitation Log	Assess, as a whole, the cumulative impact of entries on the aircraft. Ensure all entries are appropriate. G703 Holder Only		
2.2.1				
2.2.2		Check all entries are written, typed, printed or stamped in legible text. Accuracy of the text and description of the fault is paramount.		
2.2.3		Any periodic examinations are correctly recorded; the frequency and type of examination should be cross- referenced against the appropriate MOD F721B, MOD F727C or MOD F705(SSR).		
2.2.4		Check GMS ADF and Lim trackers accurately reflect the entries in the F700.		
2.2.5		The backstop has not been exceeded and is realistic for the task required. (If awaiting resource, does any delay affected the entry?)		
2.2.6		All cleared entries have a Clearance SNOW and printed name IAW MOD F799/3.		

Serial	Form	Check Required	28 Day	Annual
3 2.3	MOD F703A1 List of MODs and Service Issued Instructions of Direct Operating Interest to Aircrew	Check all entries are up to date and that field (b) reflects accurately the current aircraft Modification state. If applicable, any Modification should be cross referenced to the MOD F702C(WLG) to ensure aircraft weight and moment is amended.		
4 2.4	MOD F703B On-board Software Log	Check all entries are compiled IAW MOD F799/2B.		
Section 3				
1 3.1.1	MOD F704 Acceptable Deferred Faults (ADF) Log New Entries	Check all new entries are compiled IAW MOD F799/2, the content is accurate, and the deferred-until period has not been exceeded.		
3.1.2		Check all new entries are exact copies of the original F707B(IS) held by Eng Records.		
2 3.2.1	MOD F704 Acceptable Deferred Faults (ADF) Log	Assess the cumulative impact of entries on the aircraft. Ensure all entries are appropriate. G703 Holder Only		
3.2.2		Check all entries are written, typed, printed or stamped in legible text. Accuracy of the text and description of the fault is paramount.		
3.2.3		Any periodic examinations are correctly recorded; the frequency and type of examination should be cross- referenced against the appropriate MOD F721B, MOD F727C or MOD F705(SSR).		
3.2.4		Check GMS ADF/Lim tracker accurately reflects the entries in the F700.		
3.2.5		The backstop has not been exceeded and is realistic for the task required.		
3.2.6		All cleared entries have a Clearance SNOW and printed name IAW MOD F799/3.		
3.2.7		If facilities allow, any pages that have 4 or more cancelled entries, are to be rationalized by transferring any current entries to a new page IAW MOD F799/1.		
3.2.8		Review and confirm any deviation related F704 entries are appropriately registered IAW CAMO Pt M order 17 and determine if any F704 entries can be removed due to recent ADS updates. Update Deviation Register as appropriate.		

3 3.3	F704A Acceptable Deferred Faults Husbandry	Check entries and all columns are completed IAW MOD F799/3		
Serial	Form	Check Required	28 Day	Annual
4 3.4.1 3.4.2	MOD F704B Engineering Changes Affecting Maintainability	Check entries and all columns are completed IAW MOD F799/3B		
		All cleared entries have a Clearance SNOW and printed name IAW MOD F799/3B		
5 3.5.1 3.5.2 3.5	MOD F704D PT-Granted Concessions	Check entries and all columns are completed IAW MOD F799/3.		
		All cleared entries have a Clearance SNOW and printed name IAW MOD F799/3.		
		The Concession Backstop has not been exceeded, or N/A has been stated. (Check against Eng Records concession data base).		
Section 4				
1 4.1.1	MOD F724(WLG) Flying and Equipment Running Log	Check Flying Hours/Launches (as applicable) correspond with the Docs Control database. If MOD/Vik/003 is embodied (spin whiskers - F703 entry refers), check NDT has been carried out. (maximum of 2 months/60 spins between NDT examinations).		
2 4.2.1 4.2.2 4.2.3	MOD F705(WLG) Flight Servicing Certificate	Check the flight servicing has the correct validities IAW aircraft Topic 2(R)1.		
		Check all requirements for flight servicing's have been signed for IAW the platform MOD F799/4.		
		If applicable, check that the Continuous Charge Captain's Acceptance Certificate is correctly completed.		
3 4.3	MOD F706(Glider) Role Equipment State	Check details of equipment fitted or removed are current and valid.		
4 4.4	MOD F705(SSR) Supplementary Flight Servicing Register	Check any Limitation and ADF examinations called for are accurate, correctly referenced and still extant.		
5 5.1	MOD F726CB(Glider) Circuit Breaker Trip Record	Check correctly completed IAW Instructions for Use on the rear of the form.		
Section 5				

1 5.1.1	MOD F721B Forecast Sheet	Check each item of maintenance to ensure life has not been exceeded. Compare accuracy with Docs Control database and Section 7.		
Serial	Form	Check Required	28 Day	Annual
1 5.1.2	MOD F721B Forecast Sheet	Check re-forecasted entry lifings are correct and previous entry has been cleared with a SNOW. Check that extensions have been recorded IAW MOD F799/6.		
5.1.3		Check the forecast limit block has been completed correctly in accordance with the MOD F799/6.		
Section 6 - Not In Use				
Section 7				
1 7.1	Held in Docs Control under separate cover	Check condition of Information sheet as per AP100B-01. Check contents IAW Topic 2(R)1 leaflet 01, ERC SI(T) database, Modification database and Topic 2(R)1 Part 3.		
Section 8				
1 8.1	MOD F712A(Glider) Glider Compass Calibration Log	Check correctly completed IAW Instructions for Use on the rear of the form.		
Section 9 - Not In Use				
Section 10				
10 10.1	MOD F770(WLG) Inventory Check	Check correctly completed IAW MOD F799/8(Glider).		
Section 11				
1 11.1	MOD F799/1(WLG) Index (Section 11)	Check that all MOD F700 forms are in the correct order and correct revision state IAW MAM-D.		
2 11.2	MOD F701(Viking)	Check aircraft details entered are accurate and valid.		
3 11.3	MOD F701(Viking)	Check the details have been transposed from the F756C to the F751 (Aircraft Basic Weight and Moment Record) and to the F701. Additionally, ensure that the F756C is valid. (MAM-D Chapter 4.19) (Note: Level K to carry out and sign annual W&B check on F751).		

4 11.4.1 11.4.2	MOD F713 Register of Controlled Forms	Check all controlled forms are listed IAW MOD F799/1(WLG) Index and in-use page numbers correspond with the register. Check form serial number against F713 (where applicable).		
5 11.5	MOD F710 Military Airworthiness Review Certificate	Check document is present, validity of expiry and concurrent with OOP code B9.		
GENERAL				
1 G1	Cockpit Placards (MOD 20) (Weight & Balance only)	Record detail on Annex B to this order Serial Z1.7 and Z1.8.		
2 G2	Physical Survey of Aircraft	Check the aircraft's MOD F700 entries reflect the physical aircraft condition, husbandry, and record IAW Annex B to this order.		

MOD F700 QUALITY CHECK DOCUMENTATION CORRECTIVE ACTION SHEET

28 Day or Annual	SNOW				Tail Number					Date				

Date:	28 Day	Name:
Date:	Annual Level K	Name:

Delete auth if not required:

SECTION FORM PAGE No	OBSERVATION	CORRECTIVE ACTION TAKEN	NAME & SIGNATURE Min MAMP-E516	SNOW (If applicable)

SECTION FORM PAGE No	OBSERVATION	CORRECTIVE ACTION TAKEN	NAME & SIGNATURE Min MAMP-E516	SNOW (If applicable)

Last Entry Details-			
F703	Sht	Line	ORN
F704	Sht	Line	ORN
F704A	Sht	Line	Date

MAMP-E515/MAMP-E516 HOLDER - REVIEW OF CORRECTIVE ACTIONS.

All above corrective actions are appropriate to clearance for flight.

Name:

Signature:

Date:

MAMP-G703 HOLDER - REVIEW OF CORRECTIVE ACTIONS.

All above corrective actions have been reviewed and are appropriate to release the aircraft for flight.

Name:

Signature:

Date:

Level K Holder - Acceptance/Rejection of actions taken. (Level K only)

Comment:

Rank:

Name:

Signature:

Date:

NOTE: Attach this Annex to the MWO.

LEVEL K / 28 DAY PHYSICAL SURVEY OF AIRCRAFT CONDITION AND HUSBANDRY

Auditor Name	SNOW	Tail Number	Date

NOTE:
Attach this Annex to the MWO

Zone	Area	Checklist	Comments / Findings (with SNOW where applicable)	Corrective Actions	► Corrective ◄ Signature Min MAMP-E516
1	Cockpit	Transparencies clean and free from marks and smears			
Z1.1					
Z1.2		Instrument Panel is clean of dust / debris			
1		Instrument Glasses are free from smears			
Z1.3					
1		Seats and harness are in good condition No rips or tears.			
Z1.4					
1		Ensure floor is clean and free of debris			
Z1.5					
1	Baggage Shelf	Examine batteries (if fitted), mounting trays and electrical leads for damage.			
Z1.6					
1	Front Cockpit	(MOD 20) Ensure Placard Weight and MAUW figures reflect F701/F751.	► Placard Weight _____ ◄		
Z1.7					

1 Z1.8	Rear Cockpit	(MOD 20) Ensure Placard Weight and MAUW figures reflect F701/F751.	► Placard Weight _____ ◀		
2 Z2	Left and right hand wing upper & lower surfaces	Check for general cleanliness of external surfaces and degradation of paint finish. Examine for chips, dents and scratches.			
3 Z3.1	Fuselage (Nose to Tail)	Check for general cleanliness of external surfaces. Degradation of paint. Examine for Chips, Dents and scratches			
Z3.2	Undercarriage	Examine for damage, paint erosion and corrosion.			
		► Inspect creep marks on Nose & Main wheels, visible ◀			

HUSBANDRY CHECK

I certify I have carried out a physical Husbandry Check, IAW this Annex to meet the requirements of AP100B-01 Ord 2.1.17. (Min Auth MAMP-G703, limited to F700 Quality Checks)

Name:

Signature:

Date:

CORRECTIVE ACTIONS

I certify that the findings identified above which have made the aircraft U/S have been corrected or appropriately deferred and have been individually recorded in the aircraft F700 Maintenance Log. (Level G703 holder)

Name:

Signature:

Date:

Level K Holder - Acceptance/Rejection of actions taken. (Level K only)

Comment:

Rank:

Name:

Signature:

Date

2 FTS AESO 2-1-7-1 - OC VGS MT RESPONSIBILITIES

Rationale *To detail the area of responsibility of each OC VGS with regard to MT.*

Contents	OC VGS MT RESPONSIBILITIES
-----------------	-----------------------------------

2 FTS AESO 2-1-7-1	OC VGS MT RESPONSIBILITIES 1. This order is applicable to the OC of each VGS.
-----------------------------------	---

Acceptable Means of Compliance 2-1-7-1	OC VGS MT RESPONSIBILITIES 2. The Officer Commanding a VGS is overall responsible for the operational control of all vehicles provided for their use iaw Reference A, they are to ensure that: <ol style="list-style-type: none"> a. MT operations conform to the regulations. b. All personnel on the VGS are fully aware of their responsibilities with regards to the regulations for 1st line maintenance and operation of VGS MT vehicles. c. Prime movers and winches are driven or operated only by authorized personnel in possession of a certificate of competence for winch operations, a current FMT600 and, if co-located on an RAF active airfield, an FMT600A. d. The utmost economy in the use of MT is exercised at all times, consistent with the task. e. The VGS personnel required to operate a prime mover and trailer combination (e.g., 4x4 and refuelling trailer) have been trained and authorized to do so. f. All MT accidents/incidents are reported to the parent unit MTO/Transport Manager and 2FTS MT Grd Spt. g. Only FRV trained personnel are permitted to drive/utilise the FRV vehicle iaw Reference C. 3. It is imperative that accidents are reduced in the interests of safety, operational efficiency, economy, and discipline. In those cases where a driver is found blameworthy, they are to be suspended from duty and the facts are to
---	---



be reported in accordance with Reference B for a decision as to any further action required.

**Guidance
Material
2-1-7-1**

References:

- A. JSP 800 Vol 5.
- B. DAP 3150
- C. DHO 2310(D10)

2 FTS AESO 2-1-7-2 - DRIVING OF SERVICE MT BY VGS PERSONNEL

Rationale

To detail the familiarisation training, authorisations and driving licence requirements for VGS personnel regarding the requirements of References A, B and C.

Contents

ANNEX A

DRIVING OF SERVICE MT BY VGS PERSONNEL

2 FTS AESO

2-1-7-2

DRIVING OF SERVICE MT BY VGS PERSONNEL

1. This order is applicable to all Volunteer Gliding Squadrons (VGS) operating RAF MT vehicles and equipment in support of RAFAC activities.

Acceptable Means of Compliance 2-1-7-2

DRIVING OF SERVICE MT BY VGS PERSONNEL

2. All VGS personnel required to drive MoD funded MT vehicles must hold a DVLA driving licence and be authorized to drive by their Parent Unit (PU) MT section. This authority is recorded, for each individual, by the issue of the MoD MT Drivers Permit (known as the FMT 600) or on MyDrive and their details are held on the PU JAMES/►MyDrive◄ system records. MyDrive will list all vehicles that the holder is authorized to drive, and any restrictions imposed. FMT 600s are to be re-authorised by the PU MT section annually. If a member of the VGS staff does not hold a full DVLA driving licence for the category of vehicle to be driven, then that person cannot drive MOD vehicles.
3. Service MT vehicles should only be driven by VGS adult staff who are authorised to drive Category B vehicles (3.5 tonne and below, e.g., Tractor and 4x4).
4. **Control.** The PU MTO/Tpt Mgr is responsible for maintaining a register of VGS drivers. The PU MTO/Tpt Mgr is responsible for briefing all VGS drivers as to the areas in which they are permitted to drive, and for clear definition on those permitted areas. OC VGS is to discuss and agree the permitted areas with the PU MTO/Tpt Mgr.
5. **Re-validation.** To ensure that driving standards are maintained the PU MTO/Tpt Mgr is responsible for the annual re-validation of VGS drivers who are FMT 600 permit holders ►Drivers who are registered on MyDrive are responsible for ensuring they are in date annual re-sign of MT orders and maintain/upload vehicle currency, competency, and annual upload of their DVLA licence as required. ◄
6. **Airfield Driving Permits (FMT600A).** VGS drivers who require regular access to the aircraft movement area of an operational RAF airfield are to

obtain an FMT600A specific to that airfield. The FMT600A serves to identify those drivers who have been certified as competent to undertake driving duties on the active airfield movement area. FMT600A's are normally issued and authorised by the Senior Air Traffic Controller (SATCO) for that airfield.

7. The table at Annex A outlines the minimum category of DVLA driving licence requirements for the vehicles likely to be driven by VGS personnel.

**Guidance
Material
2-1-7-2**

References:

- A. JSP 800 Vol 5.
- B. DAP 3150, Part 1, Instruction 23
- C. DAP 3150 Part 1, Instruction 16

Annex:

- A. Minimum Category Of DVLA Driving Licence Requirements

MINIMUM CATEGORY OF DVLA DRIVING LICENCE REQUIREMENTS

Vehicle Type	Minimum DVLA Licence Required	Notes
Car (Up to 8 passenger seats)	Category B	
WF 4x4 all variants	Category B	Driving on prepared/maintained areas of grassed airfields is not considered 'off road'
Tractor (WF)	Category B	
Minibus (over 8 passenger seats)	Category B + D1	

Notes:

1. If an individual has been issued a driving licence before 1 January 1997, they are able to drive a vehicle and trailer with a combined weight of up to 8,250kg. If the driving licence was issued after 1 January 1997, they can tow a trailer that weighs up to 3,500kg Maximum Authorised Mass (MAM).
2. The MAM of a vehicle on older vehicles is shown as the Gross Vehicle Weight (GVW) and is the maximum weight allowed.

Intentionally Blank

2 FTS AESO 2-1-7-3 - MECHANICAL TRANSPORT UNSERVICEABILITY

Rationale *To outline the procedures required to report MT vehicle and equipment unserviceability.*

Contents
Annex A

MECHANICAL TRANSPORT UNSERVICEABILITY

**2 FTS
AESO
2-1-7-3**

MECHANICAL TRANSPORT UNSERVICEABILITY

1. This order is applicable to all Volunteer Gliding Squadrons (VGS).

**Acceptable
Means of
Compliance
2-1-7-3**

MECHANICAL TRANSPORT UNSERVICEABILITY

2. OC VGS and the CGS MTO are to ensure that any MT vehicle and equipment unserviceability is reported promptly to the relevant department(s).
3. White Fleet vehicle unserviceability (including white Fleet GLCCs) is to be reported to the VGS Parent Unit MT Section in accordance with locally agreed procedures. ► 2FTS are to be notified of all white fleet GLCC faults via the GUR, along with the current report status, i.e., "reported to parent unit MT section". ◀
4. Green Fleet vehicle unserviceability is to be reported in accordance with the relevant sub para below:
 - a. Skylaunch Winch unserviceability (and usage) is to be reported via ► Winchlog: www.winchlog.co.uk ◀
 - (1) Insert a U/S placard in the window. Lock doors and place keys in blisters.
 - b. VGS equipped with Glider Aircraft Transport Trailer (GATT) loaned from Syerston (622, 632, 621/637 & 645 VGS), are to report unserviceability directly to: SYE-2FTS-ASGGpMbx@mod.gov.uk.
 - c. All other Green Fleet unserviceability is to be reported to the VGS Parent Unit MT Section in accordance with locally agreed procedures. ► 2FTS are to be notified of all green fleet GLCC faults via the GUR, along with their current report status, i.e., "reported to parent unit MT section". ◀

Guidance Material 2-1-7-3
--

Annex:

A. List of Green/White Fleet GLCCs.

ERM	Fleet No	Type (WF/GF)
10AY83	S055	GF
▶◀		
10AY94	S058	GF
TR0821WF	WS023	WF
10AY72	S054	GF
10AY79	P08	GF
TR0822WF		WF
10AY68	GS4	GF
10AY71	HUL14	GF
10AY70	FLT 06	GF
TR0818WF		WF
▶◀		
TR0783WF	WS022	WF
10AY87		GF
10AY81		GF
TR0820WF		WF
TR0824WF		WF

2 FTS AESO 2-1-7-4 - UTILISATION OF GLIDER LAUNCH CONTROL CARAVAN (GLCC)

Rationale

The aim of this order is to outline the procedures to be adopted for the safe use and accountability of the GLCC and its associated equipment.

Contents

ANNEX A

ANNEX B

UTILISATION OF GLIDER LAUNCH CONTROL CARAVAN (GLCC)

2 FTS AESO

2-1-7-4

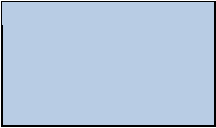
UTILISATION OF GLIDER LAUNCH CONTROL CARAVAN (GLCC)

1. This order is applicable to all authorised 2FTS and CFS staff involved in the use of the GLCC (White and Green Fleet).

Acceptable Means of Compliance 2-1-7-4

UTILISATION OF GLIDER LAUNCH CONTROL CARAVAN (GLCC)

2. The X600 White Fleet tractor is to be used to tow a GLCC on the camp roads and the airfield. ► **WARNING:** When connecting or disconnecting the tractor and GLCC, if any person is to stand between the tractor and GLCC the driver must ensure that the vehicle is in neutral gear with the handbrake applied and the engine switched off. ◀
3. Each VGS is to account for all equipment/items that are taken into and directly on to the airfield within the GLCC. It is important to ensure that no items are left on the airfield as this may pose a FOD hazard and have an environmental impact. ► **At the beginning and end of each flying period all aircraft weights are to be accounted for within the caravan.** ◀
4. At the start of each flying day a DI is to be carried out on the GLCC.
5. Before moving the GLCC onto the airfield at start of the day or returning it from the airfield at cessation of flying the user is to carry out a check on the GLCC as per Annex A and sign for the checks on the form at Annex B. This form is to be kept for a period of 12 months and is to be made available for audit purposes.
6. When a GLCC is to be removed for repair or transfer then all equipment belonging to that VGS or CGS (tie down kits, tools, anemometer etc) are to be removed from the GLCC before it leaves site ► **by the current user.** ◀
7. On cease flying, when the GLCC is returned off the airfield, it is to be connected to the mains for battery charging (where possible).



Note: The GLCC is not designated as a passenger carrying vehicle. Under no circumstances are personnel to be transported in a GLCC.

**Guidance
Material
2-1-7-4**

References:

A. N/A

Annexes:

- A. GLCC Pre and Post Use Checklist.
- B. GLCC Pre and Post Use Checklist Signature Proforma.

GLCC PRE AND POST USE CHECKLIST

Before moving the GLCC to and from the airfield the driver of the prime mover is to ensure that the following checks have been carried out and sign for them on the form at Annex B:

- a. Ensure power cable (charging lead) is disconnected.
- b. All loose items of equipment within the GLCC are secured and correctly stowed.
- c. The user section is to ensure the GLCC is clean and tidy.
- d. The anemometer is lowered to its minimum height for transit.

NOTE: The anemometer is to be removed from the CLCC and stored at the user section prior to the GLCC being collected for off-site maintenance.

- e. Aerials/antenna are correctly stowed, and all electrical appliances switched off.
- f. The signal lamp mast (if fitted) is lowered and secured.
- g. All external doors and windows are closed and secured, and the external steps are correctly stowed.
- h. There are no loose fittings or panels.
- i. The power to any external electrical connections/chargers, have been switched off, and any leads/chargers disconnected and stowed.
- j. All equipment listed on the GLCC contents list is accounted for by the user section.
- k. All tyres are inflated and appear in good condition.
- l. The parking brake is off.

This proforma is to be kept for a period of 12 months once complete and is to be made available on request for audit purposes. If there is a change of GLCC, then this proforma is to be closed off and a new one raised.

VGS	GLCC Reg No

[illegible]

[illegible]

2 FTS AESO 2-1-7-5 - REFUELLING PROCEDURES FOR SKYLAUNCH WINCH

Rationale *To aid the delivery of contamination free diesel to the Skylaunch winch.*

Contents

REFUELLING PROCEDURES FOR SKYLAUNCH WINCH.

2 FTS AESO 2-1-7-5

REFUELLING PROCEDURES FOR SKYLAUNCH WINCH

1. This order is applicable to all 2FTS personnel involved in the refuelling of the Skylaunch winch.

Acceptable Means of Compliance 2-1-7-5

REFUELLING PROCEDURES FOR SKYLAUNCH WINCH

2. All 2FTS personnel detailed to carry out refuelling operations on the Skylaunch winch are to ensure they wear the appropriate Personal Protective Equipment as defined in the COSHH assessment for diesel fuel (MT 54). Winches are to be refuelled by one of the following procedures:

3. **Station Fuel pump.** If the Skylaunch winch is to be refuelled using the station fuel pumps, then the following procedure is to be followed:

- a. Ensure the winch fuel tank filler cap is clean before removing it to refuel.
- b. Visibly check inside the winch fuel tank as far as possible for any particles or contamination.
- c. Ensure the pump refuel nozzle is clean and free from contaminants.
- d. After refuelling is complete recheck the winch fuel tank for signs of contamination and refit the refuel cap.

4. **Jerry cans.** If the Skylaunch winch is to be refuelled using jerry cans, then the following procedure is to be followed:

- a. Ensure the winch fuel tank filler cap is clean before removing it to refuel.
- b. Visibly check inside the winch fuel tank as far as possible for any particles or contamination.

c. Check the jerry can; particularly around the filler neck is clean before use.



d. Check the fuel inside of the jerry can to ensure it is the correct grade/type (Low Sulphur white Diesel) and that the batch is from current issued pack stock. ◀

e. Check the associated flexi nozzle (NSN 7240-99-8205428) is clean both externally and internally ensuring gauze is clean and intact.

f. Fit flexi nozzle to jerry can and place in a drip tray at a suitable place adjacent to the refuel point.

g. Check 5ltr jug (NSN 7240-99-3009559) is free from contamination and particles.

h. Decant diesel fuel into 5ltr jug in drip tray and check fuel for contamination and particles.

i. Refuel winch from 5ltr jug checking all the time for contamination and particles.

j. After refuelling is complete recheck the winch fuel tank for signs of contamination and particles then refit the refuel cap.

k. All spillages are to be cleaned up immediately using the appropriate spill kit and contaminated waste disposed of through the correct channels, in accordance with Reference A.

5. Small amounts of particles should not be of concern as the fuel filtration system will filter these out. Large amounts however could possibly block the filters and cause mechanical failure. Winches with large amounts of contaminants should be placed U/S and the relevant authorities informed.

**Guidance
Material
2-1-7-5**

References:

A. Local Fuel Spillage Plan

2 FTS AESO 2-1-7-6 - DAILY AND WEEKLY REFUEL PROCEDURES OF THE AVGAS 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL)

Rationale *To ensure that contamination free fuel is delivered in a safe manner and that associated risks to the environment are minimised.*

Contents **DAILY AND WEEKLY REFUEL PROCEDURES OF THE AVGAS 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL).**

2 FTS AESO 2-1-7-6 **DAILY AND WEEKLY REFUEL PROCEDURES OF THE AVGAS 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL).**

1. This order is applicable to CGS and 2FTS personnel using the Avgas 975 litre Trailer Tanker Refuelling (TTR).

Note: It is recognised that due to the varying physical make up of each unit it may not always be possible to strictly adhere to this order, however, the spirit of the order is to be complied with and any doubt as to the permitted procedures is to be brought to the attention of the sponsor.

Acceptable Means of Compliance 2-1-7-6 **DAILY AND WEEKLY REFUEL PROCEDURES OF THE AVGAS 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL).**

CAUTION

If it is suspected that aircraft fuel systems have been contaminated, the person in charge of refuelling is to ensure all affected aircraft are grounded, placed unserviceable and GMS Duty Eng informed. Aircraft are to remain grounded until cleared for flight by 2FTS OC Eng Wg.

2. **Prohibitions, Hazards and Warnings.** The person in charge of the refuelling party is to ensure that:

- a. The refuelling team consists of a minimum of 2 qualified personnel.
- b. ► The maintenance checks ◀ of the TTR, detailed at Reference A has been carried out.
- c. The fuel contamination checks detailed at Reference B have been carried out.
- d. ► The flushing procedure for open line refuelling hoses detailed at reference B has been carried out ◀

- e. If a bulk delivery of fuel has been made to the TTR, a minimum settling time of 10 minutes must elapse before a fuel contamination check iaw Reference B is carried out and the TTR cleared for refuelling.
- f. Refuelling does not take place when thunderstorm activity is close to the airfield iaw Reference C.
- g. Refuelling does not take place in rain unless precautions are taken to prevent the ingress of water into the fuel tank.
- h. Refuelling is only carried out in a designated area. A designated area is a hard standing where fuel spills are fully intercepted by the airfield drainage system or the use of a spill kit. Refuelling should never take place on a grassed area.
- i. The prime mover is diesel powered.

Health and Safety at Work

3. **AVGAS.** Ingestion of petroleum spirit can cause intestinal upsets and may be fatal; inhalation of, and skin contact with, petroleum vapour over a long period can affect the bloodstream. A particular danger is that the toxic effects of the lead alkyl vapours are cumulative, i.e., the effect of any previous exposure is added to that of a present exposure. Personnel engaged in refuelling duties are to minimise contact with AVGAS iaw Reference D.

4. **Fuelling Hazard Zone.** The fuelling hazard zone during refuelling extends to a lateral radius of 10m around the fuelling aperture and to a height of 3m within the zone. The fuelling zone ceases to exist one minute after fuel transfer has ceased unless there has been a spillage. Within the zone:

- a. The use of management radios or mobile telephones is prohibited.
- b. Smoking is forbidden.
- c. Personnel are not to carry matches or cigarette lighters on their person.
- d. Personnel are not to wear metal-tipped footwear.
- e. Only qualified personnel directly involved in the refuelling operation are to be present.

5. **Pre-Refuelling Contamination Checks.** Prior to the fuel contamination checks being carried out the person I/C refuelling party is to ensure the following:

- a. Position the TTR on level ground.
- b. Apply the handbrake of the TTR and, using the jockey wheel handle, raise the front of the trailer to give a slight slope to the rear.
- c. If the TTR has been moved, allow at least 10 minutes settling time to elapse before carrying out the checks at para ► 6 ◀ below.

6. **Fuel Contamination Checks.** Drain at least 1 litre of fuel from the drain point into a clean, clear glass container (e.g., NSN 6630-99-2241105) and carry out a single contamination check iaw Reference B on the following occasions:

- a. At the start of every flying day.
- b. On replenishment of the TTR.
- c. On replacement of the TTR.
- d. If the fuels have not been issued to aircraft in the preceding 3 hours.

7. All fuel samples are to be treated as waste fuel and disposed of iaw local FLAP orders.

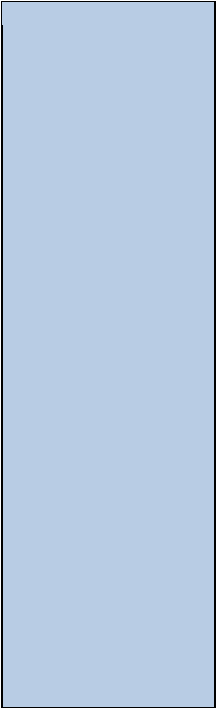
8. If any contamination of the fuel is observed or suspected the advice of your parent unit Supply Sqn is to be sought.

9. The person IC the refuelling party is to ensure that all fuel contamination checks are properly recorded in the relevant documentation as provided by parent unit.

Note: Water-detecting paste or capsules are not to be used. The contamination check is to be limited solely to a visual check iaw Reference B.

10. **Procedures for Refuelling the TTR.** The TTR is not to be refuelled if thunderstorm activity is close to the airfield iaw Reference C or if there is a risk of water ingress. The following procedure is to be adhered to:

- a. The TTR is to be on level ground with the handbrake firmly on.
- b. Ensure the TTR earth strap is touching the ground over a minimum length of 3 inches (8 cm).
- c. Bond the TTR to the bulk supply using either the TTR bonding lead or that of the bulk supply. Ensure that the point of contact is metallic and unpainted.

- 
- d. Remove the dust cover from the TTR lid and insert the refuelling hose.
 - e. Refuel ensuring that the TTR is not overfilled (approx 3% of total capacity should be allowed for expansion due to changes in temperature).
 - f. Replace the dust cover and disconnect the bonding lead.
 - g. Record the details of the refuel, including the specific gravity of the fuel received in the relevant documentation as provided by parent unit.
 - h. Wait 10 minutes for the fuel to settle and carry out contamination checks iaw Para 5 to 8.

11. **Fuel Spillage.** In the event of a fuel spillage, action is to be taken iaw Ref E.

**Guidance
Material
2-1-7-6**

References:

- A. AESP 2330-G-200-601
- B. JSP 317 Part 2 Volume 3, ►Chapter 1◄
- C. RA 4055(1) and RA 4055(2) Supported by MAM-P Chapter 3.4.1
- D. JSP 515 HSIS Safety Data Sheet Avgas 100LL
- E. Local Fuel Spillage Plan

2 FTS AESO 2-1-7-7 - DAILY AND WEEKLY REFUEL PROCEDURES OF THE DIESEL 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL) AND TROLLEY FUEL REPLENISHMENT MK4.

Rationale *To ensure that contamination free fuel is delivered in a safe manner and that associated risks to the environment are minimised.*

Contents

DAILY AND WEEKLY REFUEL PROCEDURES OF THE DIESEL 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL) AND TROLLEY FUEL REPLENISHMENT MK4.

2 FTS AESO 2-1-7-7

DAILY AND WEEKLY REFUEL PROCEDURES OF THE DIESEL 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL) AND TROLLEY FUEL REPLENISHMENT MK4.

1. This order is applicable to all Volunteer Gliding Squadron personnel using the 975 litre Trailer Tanker Refuelling (TTR) and/or Trolley Fuel Replenishment Mk4.

Note: It is recognised that due to the varying physical make up of each unit it may not always be possible to strictly adhere to this order, however, the spirit of the order is to be complied with and any doubt as to the permitted procedures is to be brought to the attention of the sponsor.

Acceptable Means of Compliance 2-1-7-7

DAILY AND WEEKLY REFUEL PROCEDURES OF THE DIESEL 975 LITRE TRAILER TANKER REFUELLING (THOMPSON CARMICHAEL) AND TROLLEY FUEL REPLENISHMENT MK4.

CAUTION

If it is suspected that diesel fuel systems have been contaminated, the individual i/c refuelling is to ensure all affected vehicles are placed unserviceable and HQ 2FTS Ground Equipment Support informed.

Health and Safety at Work

2. **Diesel.** Ingestion of diesel can cause intestinal upsets and may lead to vomiting. Inhalation of diesel vapour can result in chemical pneumonitis, which can be fatal. Prolonged and repeated skin contact can lead to defatting of the skin, drying, cracking, dermatitis, and erythema of the skin. Warty growths may occur which can become cancerous. Personnel engaged in refuelling duties are to minimise contact with diesel iaw Reference A.

975 TTR (THOMPSON CARMICHAEL)

3. **Prohibitions, Hazards and Warnings.** The person in charge of the refuelling party is to ensure that:

- a. The refuelling team consists of a minimum of 2 qualified personnel.
- b. A daily/weekly check of the TTR, detailed at Reference B has been carried out.
- c. A visual check for fuel contamination has been carried out.
- d. Refuelling does not take place when thunderstorm activity is close to the refuelling point.
- e. Refuelling does not take place in rain unless precautions are taken to prevent the ingress of water into the fuel tank.
- f. Refuelling is only carried out in a designated area. A designated area is a hard standing where fuel spills are fully intercepted by the airfield drainage system or the use of a spill kit. Refuelling should never take place on a grassed area.
- g. A 90-litre foam fire extinguisher is immediately available and is upwind of the TTR.
- h. The prime mover is diesel powered.

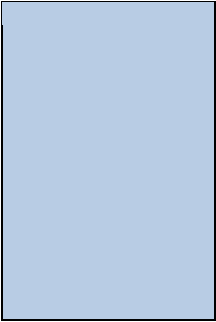
4. **Fuelling Hazard Zone.** The fuelling hazard zone during refuelling extends to a lateral radius of 10m around the fuelling aperture and to a height of 3m within the zone. The fuelling zone ceases to exist one minute after fuel transfer has ceased unless there has been a spillage. Within the zone:

- a. The use of management radios, mobile telephones or personal electronic devices (PEDs) are prohibited.
- b. Smoking ►/vaping ◀ is forbidden.
- c. Personnel are not to carry matches or cigarette lighters ►or any other sources of ignition◀ on their person.
- d. Personnel are not to wear metal-tipped footwear.
- e. Only qualified personnel directly involved in the refuelling operation are to be present.

5. **Pre-Refuelling Checks.** Prior to the fuel checks being carried out the person I/C refuelling party is to ensure the following:

- a. Position the TTR on level ground.
 - b. Apply the handbrake of the TTR and, using the jockey wheel handle, raise the front of the trailer to give a slight slope to the rear.
 - c. If the TTR has been moved, allow at least 10 minutes settling time to elapse before carrying out refuelling operations.
6. If any contamination of the fuel is observed or suspected during refuelling the advice of your parent unit Supply Sqn is to be sought.
7. The person IC the refuelling party is to ensure that all fuel issues and receipts are properly recorded in the relevant documentation as provided by parent unit.
8. **Fuel Contamination Checks.** Drain at least 1 litre of fuel from the drain point into a clean, clear glass container (e.g., NSN 6630-99-2241105) and carry out a single contamination check iaw Reference C weekly.
9. **Procedures for Refuelling the TTR.** The TTR is not to be refuelled if thunderstorm activity is close to the airfield iaw Reference D or if there is a risk of water ingress. The following procedure is to be adhered to:
- a. The TTR is to be on level ground with the handbrake firmly on.
 - b. Ensure the TTR earth strap is touching the ground over a minimum length of 3 inches (8 cm).
 - c. Bond the TTR to the bulk supply using either the TTR bonding lead or that of the bulk supply. Ensure that the point of contact is metallic and unpainted.
 - d. Remove the dust cover from the TTR lid and insert the refuelling hose.
 - e. Refuel ensuring that the TTR is not overfilled (approx 3% of total capacity should be allowed for expansion due to changes in temperature).
 - f. Replace the dust cover and disconnect the bonding lead.
 - g. Record the details of the refuel received in the relevant documentation as provided by parent unit.
10. **Fuel Spillage.** In the event of a fuel spillage, action is to be taken in accordance with Reference C & D.

TROLLEY FUEL REPLENISHMENT MK4



11. For the Trolley Fuel Replenishment Mk4 follow the procedures above where applicable. In addition, the following is also to be carried out:

- a. Check all pipework and components for leaks before use.
- b. Fuel is to be recirculated ► iaw reference C ◀.

**Guidance
Material
2-1-7-7**

References:

- A. JSP515 HSIS Safety Data Sheet Dieso MT
- B. AESP 2330/G-200-601
- C. JSP 317 Part 2 Volume 3, ► Chapter 1 ◀
- D. Local Fuel Spillage Plan

► 2 FTS AESO 2-1-7-8 - PRE-USE CHECKS AND USE OF GLIDER GROUND HANDLING TOW OUT KIT

Rationale *To The aim of this order is to provide guidance on the use and checks required to utilise the Glider Ground Handling Tow Out Kit (GGHTOK) at designated 2 FTS VGSs.*

Contents ANNEX A

PRE-USE CHECKS AND USE OF GLIDER GROUND HANDLING TOW OUT KIT

2FTS AESO 2-1-7-8

PRE-USE CHECKS AND USE OF GLIDER GROUND HANDLING TOW OUT KIT

1. This Order is applicable to all 2FTS personnel conducting operations at 611 VGS, RAF Honington and 626 VGS, Predannack Airfield.

Acceptable Means of Compliance 2-1-7-8

PRE-USE CHECKS AND USE OF GLIDER GROUND HANDLING TOW OUT KIT

Pre-Use Checks

2. **The tow out kit.** All elements of the tow out kit are to be inspected for wear or damage. Check that the tyres are inflated, and all fasteners are intact and functioning correctly and all nuts are secure. Check that the wing dolly wheel locks and unlocks and the tow arm extends and retracts correctly and is not excessively stiff.

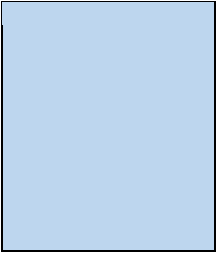
3. **Additional foam tube.** The foam tube is to be returned to a cylindrical shape and inspected for damage or cuts.

Fitment and use.

4. The minimum qualification for using this equipment is Grade 1.

5. A minimum of 2 people, including the Grade 1 must fit the Equipment. When fitting the wing dolly, one person should support the wing while the other positions and correctly secures it. The wing dolly is to be fitted to the wing that will be predominantly on the downwind side during the tow. The tow bar and tail dolly are to be utilised iaw Annex A, ensuring attention is paid to the locking of the towing arm. The yellow foam is to be pushed up to the suitable point to ensure it covers the towing arm in the area that may affect and prevent potential damage to the rudder, as illustrated in Annex A Para 6. Manufacturer information can be found at Ref A if required.

6. When towing, the speed is to be kept to a walking pace with a minimum of two personnel in the vehicle, 1 Driver and 1 Safety Observer. Each must monitor the wing tip on their side of the vehicle. When towing the vehicle must be positioned so the that wheel of the wing dolly remains on the paved surfaces.



7. Do not make sharp turns with the towing vehicle as there is a potential risk of the aircraft tailplane striking the vehicle. When manoeuvring in confined areas, unless clearance can be observed and guaranteed, disconnect the aircraft for manually manoeuvring.

8. The tow out kit must not be used on grass surfaces.

**Guidance
Material**
2-1-7-8

References:

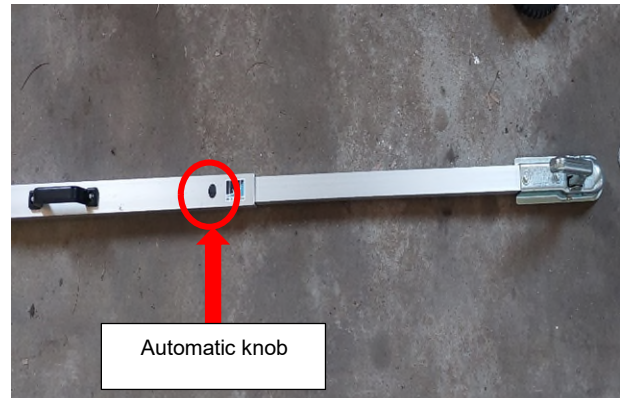
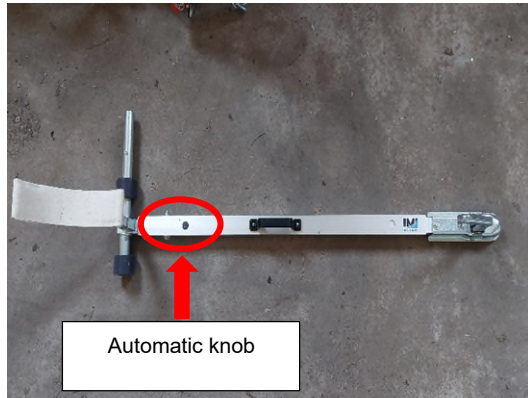
- A. [Manufacturers Description of GGHTOK.](#)

Annexes:

- C. Guidance for use of Glider Ground Handling Tow Out Kit.

Guidance for use of Glider Ground Handling Tow Out Kit

1. Ensure automatic knob is locked out when securing the tow bar in extended/folded position. Depress to unlock.



2. Raise tail of aircraft with tow bar and fit tail dolly as shown below, the tow arm must be in the fully retracted position.



3. Fit wing wheel in position as shown below.



Ensure red locking knob is in position to allow wheel to castor before towing

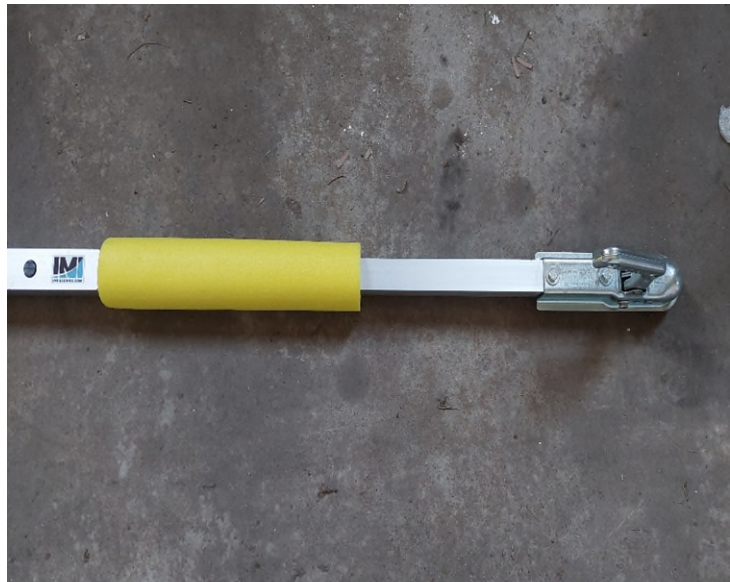
4. Insert towing bar into the tail dolly with angle 45° up. Lower and extend attached tow bar.



5. Attach extended towing bar to vehicle.



6. Fit yellow foam tube in position on the tow bar to protect rudder from damage.



2FTS AVIATION ENGINEERING STANDING ORDERS

6th Edition



Book 2 Part 2

SPECIFIC ORDERS

Contents

Order	Title	Sponsor
1	Squadron Aviation Engineering Standing Orders	2FTS OC Eng Wg

2 FTS AESO 2-2-1-1 - SQUADRON AVIATION ENGINEERING STANDING ORDERS

Rationale *The aim of this order is to detail the procedure for the issue, upkeep and withdrawal of any Squadron AESOs iaw Reference A.*

Contents

SQUADRON AVIATION ENGINEERING STANDING ORDERS

AESO 2-2-1-1

SQUADRON AVIATION ENGINEERING STANDING ORDERS

1. This order is applicable to No 2 Flying Training School Flying Squadrons (CGS and all VGSs).

Acceptable Means of Compliance 2-2-1-1

SQUADRON AVIATION ENGINEERING STANDING ORDERS

2. A Squadron may have its own local engineering instructions in order to account for local environment/conditions. These can be promulgated as Squadron AESOs held in a discrete book and/or local procedures. These orders facilitate the expansion of and compliance with regulations or higher-level instructions.

Note:

3. The primary purpose of local orders and procedures will be to take account of the local conditions and/or to achieve a more efficient task scheduling. They may refer to the Air System/Equipment Document Set (ADS/EDS) but are not to duplicate or be used to replace any Technical Information (TI) within the ADS/EDS. Where local orders and procedures refer to the ADS/EDS, this should be included in the list of Reference Publications, including its latest amendment state. Subsequent local orders and procedures may refer to specific procedures within the ADS/EDS, without the need to refer to the ADS/EDS amendment state.

4. Local orders and procedures are not to be used to correct errors or omissions in the ADS/EDS; the appropriate method for correcting the ADS/EDS is detailed at RA 4810 and MAM-P Chapter 10.1 – Management and Amendment of Technical Information.

5. The Squadron OC is responsible for the upkeep of any Squadron AESOs but the authority for any orders is OC Eng Wg **ONLY**. Any new or obsolete orders the VGS is to consult 2FTS OC Engineering Wing before creating/withdrawing any orders.

6. All squadron AESOs/local procedures must be reviewed annually by the squadron, and a record of the review maintained.

**Guidance
Material
2-2-1-1**

References:

A. MAM-P Chapter 1.1

Regulatory Governance:

A. RA4810