

2 Flying Training School



Duty Holder Orders

Issue 2

Dated 1 Nov 20

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DHO NUMBER	DHO DESCRIPTION	SUB DHO	RA	GASO	DHO
		Contents			X
		Foreword			X
		Amendment Record			X
		Request for Change Form (RFC)			X
		Duty Holder Instructions (DHIs)			X
		Duty Holder Exemptions (DHEs)			X
GASO 1380	Performance Based Navigation	1380(1): Performance Based Navigation	X	X	
DHO 1410	Occurrence Reporting and Management	1410(1): Occurrence Reporting and Management	X	X	X
DHO 1430	Aircraft Post Crash Management and Significant Occurrence Management	1430(1): APCM and Significant Occurrence Management – ADHs and HoEs	X		X
		1430(2): Withdrawn – Content incorporated in DHO 1410(1)			
		1430(3): Withdrawn – Content incorporated in DHO 1430(1)			
		1430(4): APCM and Significant Occurrence Management – AM(MF)s	X		
DHO 1440	Air Safety Training	1440(1): Air Safety Training	X	X	X
		1440(2): Withdrawn – Content incorporated in DHO 1440(1)			
		1440(T1): Air Safety Awards		X	X
DHO 2101	Aircrew Qualifications	2101(1): Entitlement to Conduct Flying Duties	X	X	X
		2101(2): Certificate of Qualification on Type	X	X	X
		Annex A: Aircrew Training Standards			X
		Annex B: Minimum Training Requirements and Exemptions for Pilots with Previous Flying Experience			X
DHO 2102	Aircrew Competence in Role	2102(1): Certificate of Competence	X	X	X
		2102(2): Periodicity of Assessment of Competency	X	X	X
		2102(T1): Refresher Flying for Aircrew Under Training		X	X
		Annex A: Flying Ability Test			X
		Annex B: Periodic Continual Assessment of Graded Pilots			X
DHO 2103	Currency and Continuation Training	2103(1): Currency Requirements	X	X	X
		2103(2): Continuation Training	X	X	X
GASO 2115	Aircraft Commanders	2115(1): Responsibilities of an Aircraft Commander	X	X	
		2115(2): Authority of an Aircraft Commander	X	X	
GASO 2120	Pilots' Instrument Rating Scheme	2120(1): Instrument Rating Requirements	X	X	
		2120(2): The Instrument Rating Test (IRT)	X	X	
DHO 2125	Aircrew Instructor Training	2125(1): Aircrew Instructor Training	X	X	X
		2125(D1): Periodic Check Flights			X
		2125(D2): Extension, Testing and Withdrawal of QGI Categories			X
		2125(D3): Temporary Duty at Another Unit			X
		2125(D4): Relief Instructing Duties at CGS			X

DHO NUMBER	DHO DESCRIPTION	SUB DHO	RA	GASO	DHO
		Annex A: QGI Training Standards			X
		Annex B: VGS Suitably Qualified and Experienced Person (SQEP) Declaration			X
DHO 2130	Safety Equipment, Survival Drills and Training	2130(1): Survival and Survival Training and Currency	X	X	X
		2130(2): Withdrawn – Content incorporated in DHO 2130(1)			
		2130(3): Wearing and Carriage of Aircrew Equipment Assemblies and Safety Equipment	X	X	X
		2130(4): Safety Harnesses	X	X	X
		2130(5): Survival and Rescue Equipment	X	X	
		2130(6): Ejection Seat Anthropometrics	X	X	
		2130(T1): Ejection Seat – Safety Procedures		X	
		Annex A: Trainee Safety and Survival Training Certificate			X
DHO 2135	Aircrew Medical Requirements	2135(1): Aircrew Medical Employment Standard	X	X	X
		2135(2): Fitness-to-Fly	X	X	X
		2135(3): Pilot Operations – Upper age limit	X	X	X
		2135(4): Flying After an Accident or In-Flight Medical Incident	X	X	X
		2135(5): Aviation Medical Training	X	X	X
		2135(6): High G Training	X	X	
		2135(7): Temporary Medical Restrictions to Flying Duties	X	X	X
DHO 2201	Carriage of Maintenance Documents in UK Military Aircraft	2201(1): Documents to be Carried	X	X	X
GASO 2210	Flight Servicing and Continuous Charge Operations	2210(1): Preventive Maintenance Limitations	X	X	
		2210(2): Continuous Charge Operations	X	X	
DHO 2211	Authorization of Aircrew to Carry Out Maintenance Tasks	2211(1): Authorization of Aircrew to Carry Out Flight Servicing	X	X	X
		2211(2): Authorization of Aircrew to Carry Out Aircraft Maintenance Work	X	X	X
		2211(3): In-Flight Corrective Maintenance	X	X	
		2211(4): Training of Aircrew to Enter a Cockpit Containing Aircraft Assisted Escape Systems (AAES)	X	X	
DHO 2220	Maintenance Test Flights	2220(1): The Flight Test Schedule	X	X	X
		2220(2): Aircrew Competency and Authorization for Flight Tests	X	X	X
DHO 2301	Responsibility for an Aircraft	2301(1): Transfer of Custody of Aircraft	X	X	X
		2301(2): Flying Requirements Post Maintenance	X	X	X
		2301(3): Aircraft Acceptance Checks	X	X	
		2301(4): Exceeding Parameters and Hazardous Incidents	X	X	X

DHO NUMBER	DHO DESCRIPTION	SUB DHO	RA	GASO	DHO
DHO 2302	Responsibilities in the Air	2302(1): Responsibilities in the Air	X	X	X
DHO 2305	Supervision of Flying	2305(1): Supervision of Flying	X	X	X
		2305(2): Embarked Aviation Operations	X	X	
		2305(3): Aircraft Limitations	X	X	
		2305(4): Withdrawn – Covered by the Armed Forces Act			
		2305(5): Aircrew Briefing	X	X	X
		2305(6): Air Exercise Planning and Airspace Integration	X	X	
		2305(7): Taxiing of Aircraft	X	X	X
		2305(T1): Supervision of Cadets		X	
		2305(T2): Alcohol, Drugs and Flying – Guidance Only		X	
		Annex A: 2 FTS Weather Limitations – Quick Reference Guide			X
		Annex B: Meteorological and Operations Briefing			X
		Annex C: Out-Brief			X
		Annex D: Cross-Country/Transit Out-Brief			X
		Annex E: Glider Aircraft In-Brief			X
		Annex F: Aerotow Aircraft In-Brief			X
		Annex G: Procedure for Detailing 2 FTS Operations into the Centralised Aviation Data Service (CADS)			X
DHO 2306	Authorization of Flights	2306(1): Authorization of Flights	X	X	X
DHO 2307	Rules of the Air	2307(1): Rules of the Air	X	X	X
DHO 2309	Flight Procedures	2309(1): Landing away from Active Airfields	X	X	X
		2309(2): Fire Precautions and Smoking in Aircraft	X	X	X
		2309(3): Carriage of Loose Articles and Stores	X	X	X
		2309(4): Dropping or Jettisoning of Articles	X	X	X
		2309(5): Handing over Control in Aircraft with Dual Controls	X	X	X
		2309(6): Withdrawn – Content incorporated into GASO 2307			
		2309(7): Flying in the Company of Civil Aircraft	X	X	X
		2309(8): Withdrawn – Content incorporated into GASO 2307			
		2309(9): Aerobatics	X	X	X
		2309(10): Air-to-Air Refuelling	X		
		2309(11): Electromagnetic and Cosmic Radiation	X	X	X
		2309(12): Oxygen and Cabin Pressure	X	X	
		2309(13): Altitude Limitations	X	X	X
		2309(14): Simulated and Practice Emergencies	X	X	X
		2309(15): Refuelling Aircraft – Engines and/or Rotors Running	X	X	X
		2309(16): Night Vision Device Flying	X	X	

DHO NUMBER	DHO DESCRIPTION	SUB DHO	RA	GASO	DHO
		2309(T1): Military Use of Civil Airfields		X	X
		2309(T2): Security		X	X
		2309(T3): Night Flying		X	
		2309(T4): Glider and Tutor Flying Over Open Water		X	X
		2309(T5): Circuit Flying		X	X
		2309(T6): Volcanic Ash Cloud		X	X
		2309(T7): Flight Data Recorders		X	X
		2309(D1): Concurrent Airfield Operations			X
		2309(D2): Cold Weather Operations			X
		2309(D3): VGS Midweek Operations			X
DHO 2310	Role Specific Fixed Wing	2310(1): Supersonic Flight	X	X	
		2310(2): Withdrawn – Content incorporated into DHO 2309(9)			
		2310(3): Spinning and Stalling	X	X	X
		2310(4): Asymmetric Power	X	X	
		2310(5): Single-Engine Aircraft Engine Shutdowns	X	X	X
		2310(T1): Minimum Landing Distance		X	X
		2310(T2): Gliding Military Air Ground Communication Service (MAGCS)		X	X
		2310(D1): Airfield Operations			X
		2310(D2): Radio Procedures			X
		2310(D3): Role Specific Motor Glider Operations			X
		2310(D4): Role Specific Glider Operations			X
		2310(D5): Role Specific Aerotow Operations			X
		2310(D6): Cross-country			X
		2310(D7): Flying Competitions			X
		2310(D8): Ground Handling			X
		2310(D9): Parking of Aircraft			X
		2310(D10): First Response Vehicle (FRV)			X
		2310(D11): Operation of Non-2 FTS Aircraft at 2 FTS Sites			X
		2310(D12): Control of Ballast Weights			X
		2310(D13): First Aid Cover at VGS			X
		Annex A: Cable Drop Zone (CDZ) Dimensions			X
		Annex B: Winch Operator Training Standards			X
		Annex C: FRV Equipment			X
		Annex D: Ballast Weights Guide			X
GASO 2315	Role Specific Rotary Wing	2315(1): Withdrawn – Content incorporated into GASO 2309(15)			
		2315(2): Withdrawn – Content incorporated into GASO 2309(11)			
		2315(3): Withdrawn – Content incorporated into GASO 2130(5)			
		2315(4): Withdrawn – Content incorporated into GASO 2309(14)			
		2315(5): Withdrawn – Content incorporated into GASO 2309(11)			

DHO NUMBER	DHO DESCRIPTION	SUB DHO	RA	GASO	DHO
		2315(6): Rotary Wing Air System Ground Runs	X	X	
		2315(7): Withdrawn – Content incorporated into GASO 2309(12)			
		2315(T1): Training and Transit Flights Over Water		X	
		2315(T2): Landing on Roads		X	
		2315(T3): Search and Rescue		X	
		2315(T4): Flying Competitions		X	
GASO 2325	Air Weapons Carriage, Training and Demonstrations	2325(1): Carriage of Air Weapons	X	X	
		2325(2): Air Weapons Training and Demonstrations	X	X	
GASO 2327	Air Combat and Evasion Training	2327(1): Air Combat and Evasion Training	X	X	
		2327(T1): Target Aircraft Training		X	
DHO 2330	Low Flying	2330(1): Low Flying	X	X	X
		2335(1): Flying Display Organisation and Management	X	X	X
DHO 2335	Flying Displays and Flypasts	2335(2): Display Flying, Role Demonstrations and Flypasts (Mil)	X	X	
		2335(3): Separation Distances, Minima and Restrictions	X	X	
		2340(1): Supernumerary Crew	X	X	X
		2340(2): Passengers – General	X	X	X
		2340(3): Routine Air Transport Passengers	X	X	X
		2340(4): Tactical Passengers	X	X	X
DHO 2340	Supernumerary Crew and Passengers	2340(5): Familiarization Flight Passengers	X	X	X
		2340(6): Air Experience Flight Passengers	X	X	X
		2340(7): Carriage of VIP Passengers	X	X	X
		2340(8): Carriage of Cadets as Passengers	X	X	X
		2340(9): Carriage of Working Dogs	X	X	
DHO 2345	Aircrew Fatigue Management	2345(1): Management of Aircrew Fatigue	X	X	X
		2345(2): Use of Temazepam in the Management of Work and Rest in Aircrew	X	X	X
		2350(1): Aircraft Emergencies	X	X	X
		2350(T1): Minimum Fuel		X	
		2350(T2): Actual Forced Landing Off Base		X	X
DHO 2350	Aircraft Emergencies	2350(D1): Action to be Taken in the Event of a Diversion			X
		2350(D2): Overdue Aircraft			X
		2350(D3): Winch Launching Abnormalities			X
		2350(D4): Cable Release Failure			X
		2355(1): Approval for Static Line and Freefall Parachuting, Fast Roping and Abseiling	X	X	
GASO 2355	Static Line and Freefall Parachuting, Fast Roping and Abseiling	2355(2): Procedures for Static Line and Freefall Parachuting	X	X	
		2355(3): Procedures for Fast Roping and Abseiling	X	X	
DHO 2360	Portable Electronic Devices	2360(1): Portable Electronic Devices	X	X	X
DHO 2370	Test and	2370(1): Test and Evaluation Governance	X	X	X

DHO NUMBER	DHO DESCRIPTION	SUB DHO	RA	GASO	DHO
	Evaluation	2370(2): Test and Evaluation Personnel	X	X	X
		2370(3): Test and Evaluation Activity	X	X	X
DHO 2375	Approval and Use of Flight Simulator Training Devices	2375(1): Approval of Flight Simulator Training Devices	X	X	
		2375(2): Use of Flight Simulator Training Devices	X	X	
		2375(T1): Use of Part-Task Trainers (PTT)		X	X
DHO 2401	Documents and Records	2401(1): Air System Document Set	X	X	X
		2401(2): Use and Carriage of Documents in the Aircraft	X	X	X
		2401(3): Flying Logbooks and Recording of Flying Times	X	X	X
		2401(4): Aviation Delivery Duty Holder (ADDH) Orders	X	X	X
		2401(5): Authorization Record	X	X	X
		2401(6): Meteorological Records	X	X	X
		2401(7): Training Records	X	X	X
		2401(T1): Operations Record Book (F540)		X	X
		2401(T2): Statistical Returns		X	X
		2401(D1): Duty Supervisor's Watch Log			X
		Annex A: 2 FTS Flying Logbook Section 3 & 4 – Example Entries			X
		Annex B: 2 FTS Flying Logbook Section 5 – Quarterly Summary Example Entries for VGS			X
		Annex C: 2 FTS Flying Logbook Section 6 – Annual Summary Example Entries for VGS			X
GASO 2415	Civil Use of Government Aerodromes	2415(1): Civil Use of Government Aerodromes	X	X	
		2415(T1): Recreational Flying		X	
		2415(T2): Recreational Gliding		X	
		2415(T3): Glider Towing		X	
DHO 3237	Royal Low Level Corridors	3237(1): Royal Low Level Corridors	X		X

Foreword

1. **Military Aviation Authority (MAA).** The MAA is the single independent regulatory body for all Defence aviation activity. As the 'Regulator', Director MAA (D MAA) is accountable to the Secretary of State (SofS), through the Defence Safety Authority (DSA) for providing a regulatory framework, given effect by a certification, approvals and inspection process for the acquisition, operation and airworthiness of air systems within the Defence aviation environment. Through Director General (DG) DSA, D MAA is responsible for providing assurance to SofS that the appropriate standards of military Air Safety are maintained. DG DSA is the Convening Authority for Service Inquiries into aircraft occurrences.
2. **Regulatory Structure.** D MAA is the owner of the MAA Regulatory Publications (MRP) and has the authority to issue them on behalf of the SofS. There are 3 MRP documentation levels: Overarching Documents; Regulatory Articles (RA); and MAA Manuals.
3. **Applicability of RA FLY 2000 Series.** Unless specifically excluded, the FLY 2000 series of Regulatory Articles apply to flying operations by any personnel, be they civilian or military, operating or flying on a civil or military registered aircraft under MAA regulations. Where operations are taking part under a Military Flight Test Permit (MFTP) or Certificate of Usage (CofU), reference must also be made to the Manual of Flying Orders for Contractors.
4. **Operating Duty Holder (ODH) Orders.** AOC 22 Gp issues Group Air Staff Orders (GASOs) for all flying activity undertaken by 22 Gp units and platforms. GASOs are the subordinate documents to the MRP and provide additional Orders and guidance. The initial issue of GASOs represented a major structural change and re-write of the previous Training Group Orders (TGOs), with the devolution of some type-specific Orders to ADDHs.
5. **Aviation Delivery Duty Holder (ADDH) Orders.** Comdt 2 FTS (ADDH) has the responsibility to ensure that any risks to life (RtL) associated with any activity within 2 FTS are As Low As Reasonably Practicable (ALARP), and the residual risk is Tolerable; to that end, 2 FTS local Flying Orders are produced as 2 FTS Duty Holders Orders (DHOs). DHOs **should** never be less stringent than the Orders on which they are based, but ensure 'best practice' is achieved. DHOs are therefore issued by Comdt 2 FTS, to provide local Flying Orders for flying activity within 2 FTS. An auditable change process for DHOs will be administered by 2 FTS OC Ops Wg.
6. **Personal Responsibilities.** The Orders contained within DHOs do not absolve any person from using their best judgement to ensure the safety of aircraft and personnel. Where safety demands, the Orders may be deviated from provided that a convincing case can be offered in retrospect. Where authorized individuals issue their own amplifying orders or instructions, they must be based on the Regulations and they cannot be less restrictive.
7. **Equal Opportunities Statement.** This document is gender neutral. In MAA/RN/2020/10 any references to the masculine gender (he, him and his) and feminine gender (she, her and hers) have been removed.
8. **Military and Civil Registered Aircraft.** For the purposes of these Orders the terms Military Registered Civilian Owned Aircraft (MRCOA) and Contracted Owned Military Operated Aircraft (COMOA) are synonymous and, where mentioned, it **should** be assumed that aircrew are operating in accordance with RA 2101(1).
9. **Wording Conventions.** DHOs are aligned with the MAA RA and GASOs, and in that context the following applies:
 - a. **Orders.** The executive verb **shall** (highlighted in bold for visual impact) indicates a mandatory activity which must be followed without exception unless a dispensation/waiver to the order has been formally issued. Whenever possible, mandatory orders will be written in the positive sense. If this is not feasible, then where the provision states that an organization/individual '**shall not**' do something, they are prohibited from doing the specified act.
 - b. **Acceptable Means of Compliance (AMC).** AMC are strongly recommended practices but are written in the permissive sense to allow the Regulated Entity the opportunity to consider alternative approaches. As a consequence, the AMC contain the permissive verb **should** (highlighted in bold for visual impact): this is the only place where this particular permissive verb will be used. Any proposed Alternative AMC (AAMC) **shall** be submitted to ADFT and, if necessary, the MAA, for consideration prior to implementation. When an AAMC is proposed the burden of proof that the RA/GASO/DHO are being satisfied rests entirely with the Regulated Entity.

- c. **Multiple AMC.** In the event that multiple AMC are published for the same order and they are equally applicable, the Regulated Entity must agree with HQ 2 FTS (Comdt 2 FTS) which option is to be followed. A 'blend' of AMC methods is only permissible with Comdt 2 FTS approval.
- d. **Mandatory Orders.** Mandatory Orders may contain both Orders (**shall**) and AMC (**should**) and **should** be interpreted appropriately.
10. **Proposed Amendments to DHOs.** The following process is to be used:
- a. **Request for Change (RFC) Form.** Proposed amendments, regardless of their level of urgency, **shall** be requested using the RFC form provided at the front of this document. A request for change will not be processed unless a 'Request for Change Form' is submitted.
- b. **Wording of the Request.** The exact wording required for the proposed change **should** be stated in the 'Requested Amendment' box and the reasons for the request **should** be stated clearly and concisely in the 'Rationale for Amendment' box.
- c. **ADDH Senior Operator (SO) Comment.** On completion the RFC **should** be passed to 2 FTS Air Safety Manager (ASM) for comment and staffing for approval through the SO (OC Ops Wg), prior to progression to Comdt 2 FTS.
- d. **ADDH(s) Approval.** The SO will staff the RFC to Comdt 2 FTS for comment and/or approval. The outcome will be notified to the originating Unit and the change will be incorporated into the next amendment of DHOs.
11. **Request for HQ 2 FTS Approval and/or Dispensation.** Any request for approvals required by DHOs or dispensation from orders within DHOs **should** be submitted to the SO in a timely manner. It is important that supporting information is provided to amplify the request and allow for staff consideration and response. This **should** include the nature of the request; the background to the request (concise summary of the reason for the submission); assessment of any additional risk; assessment of benefit and an OCs approval/supporting statement. For dispensations, all means to comply with the order **should** have been pursued prior to request for dispensation; a clear statement of why compliance is not possible, and the benefit/impact **should** be made.
12. **DHO Master Document.** An electronic copy of these orders may be found at the 2 FTS SharePoint and BADER pages and **should** be considered as the Master Document. Units are responsible for issued or locally reproduced documents, which **should** be considered as uncontrolled copies when printed.

Released by

A P Hobson
Wg Cdr
OC Ops Wg/Snr Op 2 FTS

On behalf of

B E Dale
Gp Capt
Comdt 2 FTS

1 Nov 20

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2 FTS Duty Holders Orders Request for Change Form			
Originator's Contact Details	Name:		Rank:
	Telephone Number:		Date:
	Unit:		
DHO No and Title			
Section/Page/Paragraph			
Requested Amendment (Specific Wording):			
Rationale for Amendment:			
Air Safety Implications of Amendment:			
Air Safety Manager Comment	Comment:		
	Signature:		Name:
	Telephone Number:		Rank:
Senior Operator Comment	Comment:		
	Signature:		Name:
	Telephone Number:		Rank:
Other Affected ADDH Approval A/R	Comment:		
	Signature:		Name:
	Telephone Number:		Rank:
Comdt 2 FTS Approval	Comment:		
	Signature:		Name:
	Telephone Number:		Rank:
SO Amendment	Name:		RFC: Year / No: /

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DHIs – Duty Holder Instructions

1. The following DHIs have been issued between Issue 1 and Issue 2 of DHOs and their current status/validity can be seen below.

DHI	Issue Date	DHO Affected	Detail	Status
1/0/1	28 Feb 18	All	Introduction of DHIs and DHEs	Withdrawn – Incorporated into DHO 2401(4)
1/0/2	26 Mar 18	2305(1)	Amendments to the DE role	Withdrawn – Incorporated into DHO 2305(1)
1/0/3	2 Jul 18	2310(D4)	Obstructions during trainee first solos	Withdrawn – Incorporated into DHO 2310(D4)
1/0/4	5 Jul 18	2307(1)	Unserviceable E-Varios	Withdrawn – Superseded by DHI 1/0/7
1/0/5	11 Jun 19	N/A	Cable Release Checks prior to first launch each day	Withdrawn – Incorporated into AP101G-1001-5B1
1/0/6	5 Aug 19	2305(1)	Video recording of first solo flights and Air Safety/Emergency incidents	Withdrawn – Incorporated into DHO 2305(1)
1/0/7	7 Aug 19	2307(1)	Unserviceable E-Varios	Withdrawn – Incorporated into DHO 2307(1)
1/0/8	23 Sep 19	2102 Annex A	Retention of completed FAT forms	Withdrawn – Incorporated into DHO 2102 Annex A
1/0/9	31 Oct 19	2340(1)	Flying accompanying CFAV personnel	Withdrawn – Incorporated into DHO 2340(1)
1/0/10	15 Jan 20	2310(D4)	Minimum age for Winch Operator	Withdrawn – Incorporated into DHO 2310(D4)

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1. The following DHEs have been issued between Issue 1 and Issue 2 of DHOs and their current status/validity can be seen below.

DHEs (DHO Issue 2)

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DHO 1410 – Occurrence Reporting and Management

Rationale

Accurate and timely Occurrence reporting with effective investigation is fundamental to identifying Air Safety risks and delivering effective mitigation. Without a simple, robust reporting and management system, that includes investigation and feedback, these events will re-occur, leading to increased risk to personnel, equipment and the public. This RA requires the Regulated Community to report all Air Safety Occurrences, and take appropriate action, in order to reduce the overall number of events.

Contents

1410(1): Occurrence Reporting and Management

Duty Holder Order 1410(1)

Occurrence Reporting and Management

1410(1) Unit Cdrs **shall** ensure that all Air Safety reportable Occurrences are reported, managed and appropriate action taken.

Acceptable Means of Compliance 1410(1)

Occurrence Reporting and Management

1. Unit Cdrs **should** ensure that all Air Safety reportable occurrences are reported to 2 FTS HQ through the Air Safety Management Cell. Unit Flight Safety Officers **should** promote and encourage reporting of occurrences and ensure that all types of reporting forms are readily available and displayed.

Guidance Material 1410(1)

Occurrence Reporting and Management

2. **Reporting Types.** Occurrences may be reported using one of the following forms:
 - a. **Defence Air Safety Occurrence Report (DASOR).** The DASOR is the primary method for reporting all Air Safety occurrences.
 - b. **In-Form.** An alternative method for the initial reporting of hazards and observations. The In-Form may be used by all personnel for the initial reporting of any issue that they wish to bring to the attention of the organisation, such as:
 - (1) Any safety related issue, including those affecting Air Safety, Airworthiness or Health and Safety.
 - (2) Near misses of any type, whether Air or Functional Safety.
 - (3) Any quality concerns.
 - (4) Any Continuous Improvement ideas or suggestions.
 - (5) Any organisational failings.
 - (6) Any issues that make human error more likely.
 - c. **Defence Confidential Occurrence Report Scheme (DCORS).** The DCORS aims to encourage the reporting of such incidents directly to the appropriate Command Flight Safety Officer (CFSO). If desired, the author's anonymity is guaranteed, and names will only be released with appropriate consent. Reports submitted anonymously will still be staffed, but they are less likely to be concluded satisfactorily. Those reports that do include the author's details enable the recipient to seek further detail/clarification, if needed, and allow feedback.
3. **Investigations.** All Air Safety occurrences must be investigated. In addition to Service Inquiries (SI) and Occurrence Safety Investigations (OSI), Local Investigations (LI) may be completed by Units to suit the nature of the occurrence. LI can be completed using the RAF Form 6806 for the investigation report format, but investigation action will be initiated by the 2 FTS Air Safety Management Team (ASMT). Further guidance on the use and completion of the F6806 can be obtained from OC Ops Wg.

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DHO 1430 – Aircraft Post Crash Management and Significant Occurrence Management

Rationale

There is a requirement for Aviation Duty Holders (ADHs), Heads of Establishment (HoEs) and Accountable Managers (Military Flying) (AM(MF)s) to ensure that Aircraft¹ Post Crash Management (APCM) and Significant Occurrence Management is carried out following an accident or significant occurrence. The management measures and procedures that are required to be in place include correct reporting, preservation of evidence, Health and Safety precaution, appropriate corporate communications, and where required, activities to restore the accident site to a satisfactory condition. For the avoidance of doubt, APCM does not encompass activation of emergency services or accident investigation.

Contents

1430(1): APCM and Significant Occurrence Management – ADHs and HoEs

1430(2): Withdrawn – Content incorporated in DHO 1410(1)

1430(3): Withdrawn – Content incorporated in DHO 1430(1)

1430(4): APCM and Significant Occurrence Management – AM(MF)s

Duty Holder Order 1430(1)

APCM and Significant Occurrence Management – ADHs and HoEs

1430(1) Unit Cdrs **shall** ensure that there are appropriate APCM plans and capabilities in place in the event of an aircraft Accident or Significant Occurrence.

Acceptable Means of Compliance 1430(1)

APCM and Significant Occurrence Management – ADHs and HoEs

1. Unit Cdrs **should** ensure that APCM plans are in place and regularly tested.

Impounding of Documentation.

2. **Engineering Documentation.** Following an Air System accident, the following engineering documentation **should** be impounded pending investigation:

- a. The F700C and any associated documents (example F705, F724, F707 Series) awaiting return to GMS.
- b. Flight Servicing Competency Checks (FSCC) Register.
- c. Aircraft Servicing Standards Check (ASSC) Register.
- d. Maintenance Task Competency Checks (MTCC) Register.
- e. F4124 record of engineering authorizations for personnel involved with servicing the aircraft.
- f. F4820A reading of engineering orders.
- g. For powered aircraft – impound fuel bowser and F361D (this may require the grounding of all aircraft at the Unit involved).

3. The engineering documents **should** be double bagged in polythene bags, secured with tape and date stamped. The documents **should** be placed in a secure locked location.

4. Inform the GMS Duty Engineer who **should**:

- a. Impound all associated paperwork.
- b. All engineering paperwork associated with the affected aircraft **should** be placed in a secure locked location.

¹ The term 'Aircraft' within the context of the acronym 'APCM' also refers to an Air System.

5. **Operations Documentation.** Following an aircraft accident, the following operations documentation (if applicable) **should** be impounded pending investigation:

- a. Authorization and log sheets.
- b. Powers of Authorization matrix.
- c. Duty Supervisor Watch Log.
- d. MET documentation.
- e. Aircrew Red/Green signature system.
- f. Flying programme.
- g. Briefing documents and other Flight Information relevant to sortie.
- h. Airfield plates/diagrams.
- i. Navigation route map.
- j. Passenger approval forms.
- k. Trainee manifest.
- l. Staff and cadet attendance register.
- m. Aircrew Flying Logbooks.
- n. Staff training folders.
- o. Trainee folders.
- p. RAF Form 5200 folders.
- q. GASOs and DHOs.
- r. Flying Order Book.
- s. ATC orders (if applicable).
- t. Air Traffic voice recordings (if applicable).

**Guidance
Material
1430(1)**

APCM and Significant Occurrence Management – ADHs and HoEs

6. Guidance on APCM is detailed within the 22 Gp and 2 FTS Air Safety Management Plans (ASMP) and Air Safety Manuals (ASM); additional guidance can be obtained from 2 FTS Flt Cdr Ops.

**Duty Holder
Order
1430(2)**

Post Significant Occurrence Alerting and APCM Initiation

1430(2) Withdrawn – Content incorporated in DHO 1410(1).

**Acceptable
Means of
Compliance
1430(2)**

Post Significant Occurrence Alerting and APCM Initiation

7. Withdrawn – Content incorporated in DHO 1410(1).

**Guidance
Material
1430(2)**

Post Significant Occurrence Alerting and APCM Initiation

8. Withdrawn – Content incorporated in DHO 1410(1).

Duty Holder Order 1430(3)	Significant Occurrence/APCM Plans 1430(3) Withdrawn – Content incorporated in DHO 1430(1).
Acceptable Means of Compliance 1430(3)	Significant Occurrence/APCM Plans 9. Withdrawn – Content incorporated in DHO 1430(1).
Guidance Material 1430(3)	Significant Occurrence/APCM Plans 10. Withdrawn – Content incorporated in DHO 1430(1).
Duty Holder Order 1430(4)	APCM and Significant Occurrence Management – AM(MF)s 1430(1) AM(MF)s shall ensure that there are appropriate APCM plans and capabilities in place in the event of a UK Military Registered Air System Accident or Significant Occurrence
Acceptable Means of Compliance 1430(4)	APCM and Significant Occurrence Management – AM(MF)s 11. N/A to 2 FTS.
Guidance Material 1430(4)	APCM and Significant Occurrence Management – AM(MF)s 12. Nil.

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DHO 1440 – Air Safety Training

Rationale

Air Safety Training is a critical component in the mitigation of Risk to Life. It increases safety awareness and supports the establishment and Maintenance of an engaged Air Safety culture. Human Factors (HF) and our interaction with aviation systems remain the principal causal factors in aviation incidents and accidents. Therefore it is essential that all those involved in Defence Aviation are trained to the highest possible standard.

Contents

1440(1): Air Safety Training

1440(2): Withdrawn – Content incorporated in DHO 1440(1)

1440(T1): Air Safety Awards

Duty Holder Order

1440(1)

Air Safety Training

1440(1) All personnel undertaking Air Safety related assignments **shall** be competent, qualified and current in accordance with RA 1440, GASO 1440 and AP 8000 Leaflet 8114.

Acceptable Means of Compliance

1440(1)

Air Safety Training

1. **General.** Qualified is defined as having undertaken a recognised pan-Defence Aviation safety course(s) at either the MAA Centre of Air Safety Training (CoAST), or CGS (for those courses delivered by CGS under AAMC), appropriate to assignment held. Details of courses completed **should** be entered in Section 4 (Non-Flying Qualifications) of an individual's Flying Logbook.
2. **Unit Flight Safety Officers (UFSO) Course.** VGS UFSOs and deputies **should** attend the MAA Gliding Safety Officers' Course (GSOC). 2 FTS HQ and CGS UFSOs and deputies **should** attend the MAA Flight Safety Officers' Course (FSOC). Both courses **should** be completed every 5 years.
3. **Human Factors (HF).** All 2 FTS personnel **should** complete HF Module 1 (Foundation) and Module 2 (Error Management) in extant RAs and GASOs. HF Continuation Training (HFCT) **should** be completed every two years; however, completion of the VGS GLAC or FSC **should** also count as HFCT. Completion of Module 1 **should** be the minimum qualification to act as Aircraft Commander; however, VGS personnel new to the Unit **should** complete the HF Utlearn course as soon as practicable, whilst waiting for completion of Module 1. Module 2 **should** be completed within 3 months of Module 1.

Guidance Material

1440(1)

Air Safety Training

4. The FSOC is a higher-level course than the GSOC; however, it is completed during weekday periods. VGS UFSOs and deputies may therefore attend the FSOC instead of the GSOC.

Duty Holder Order

1440(2)

Human Factors Training

1440(2) Withdrawn – Content incorporated into DHO 1440(1)

Acceptable Means of Compliance

1440(1)

Human Factors Training

5. Withdrawn – Content incorporated in DHO 1440(1).

**Guidance
Material
1440(1)****Human Factors Training**

6. Withdrawn – Content incorporated in DHO 1440(1).

**Duty Holder
Order
1440(T1)****Air Safety Awards**

- 1440(T1) Flying supervisors **shall** ensure that outstanding performance is recognised by recommendation for a suitable award or endorsement.

**Acceptable
Means of
Compliance
1440(T1)****Air Safety Awards**

7. **General.** Air Safety awards are a means to reward individuals for conscientious observation and alerting of potential dangers and hazards, and to encourage aviation safety awareness and vigilance on the part of all personnel, both military and civilian, of all ranks.
8. **Recommendation for Award.** A recommendation for an Air Safety award **should** be compiled in accordance with AP8000 Leaflet 8011 and **should** be forwarded through the Unit OC to the 2 FTS Air Safety Manager for consideration. In the case of cadets other than FSCs, 2 FTS SO2 Business and Commercial **should** send a letter to the Squadron Commander authorizing an entry in the Record of Service Book.
9. **Green Endorsement.** Refer to GASO 1440(T1).

**Guidance
Material
1440(T1)****Air Safety Awards**

10. AP 8000 Leaflet 8011.

DHO 2101 – Aircrew Qualifications

Rationale

Aircrew require a baseline standard of ability and knowledge in order to fly or operate Air Systems governed by MAA Regulatory Publications (MRP). A failure to either achieve or maintain this standard may result in an increase in Risk to Life and therefore it is necessary to demonstrate the application of this ability and knowledge on the specific Air Systems that are flown or operated.

Contents

2101(1): Entitlement to Conduct Flying Duties

2101(2): Certificate of Qualification on Type

Duty Holder Order 2101(1)

Entitlement to Conduct Flying Duties

2101(1) To fly or operate Air Systems governed by Duty Holder Orders, Aircrew **shall** be qualified.

Acceptable Means of Compliance 2101(1)

Entitlement to Conduct Flying Duties

Flying Training Publications

1. AOC 22 Gp is the sponsor for all SFTs; syllabus development and control is delegated to Comdt CFS, Comdt 2 FTS and OC Ops Wg. Units **should**:
 - a. Forward suggested SFT amendments to OC Ops Wg.
 - b. Forward suggested FTP3225 amendments to OC CFS GE.
2. **New Documents and Publications.** The ground school department at CGS **should** normally produce new flying training publications. Once a new publication is complete it will be submitted to OC Ops Wg for approval. CGS **should** then prepare it for printing and distribution.

RAF Air Cadet Training

3. **Cadet Courses.** All RAF Air Cadet (RAFAC) Gliding Course **should** be delivered iaw the approved SFT.

Pilot Training

4. **Pilot Qualifications.** Personnel appointed to a Unit, including Flight Staff Cadets, **should** be known as U/T Pilots until the award of a Grade 1 or Qualified Gliding Instructor (QGI) Category. Personnel **should** be designated as:
 - a. **Ungraded Pilots:**
 - (1) **Gliding Scholarship (GS).** Pilots who have completed a GS course and flown a first solo.
 - (2) **Advanced Glider Training (AGT).** Pilots who have completed an AGT course.
 - b. **Graded Pilots:**
 - (1) **Grade Two (G2).** Pilots who have completed G2 training and passed a G2 test.
 - (2) **Grade One (G1).** Pilots who have completed G1 training and passed a G1 test. G1 **should** be the minimum qualification for the award of the Reserve Pilot (Gliding) Flying Badge.
5. **Validity.** Pilot qualifications **should** be valid from the date of the initial award, subject to an annual Certificate of Competence (CofC) and Flying Ability Test (FAT). If these requirements are not completed within this period the pilot **should not** fly as Aircraft Commander, until the CofC check and FAT is completed. The requirements for the initial award and CofC renewal of each qualification are stipulated at Annex A (refer to DHO

2102(1) for CoC requirements).

6. **Previous Flying Experience.** Ungraded personnel joining a VGS with previous flying experience may require less training to achieve gliding qualifications than those joining with no flying background. Their conversion syllabus may be adjusted to take account of their experience and currency. Notwithstanding this, all pilots **should** complete the stalling and launch failure exercises, before completing a solo flight. The minimum training requirements and exemptions for pilots with previous flying experience are detailed at Annex B.

Refresher and Additional Flying for Pilot Upgrades

7. **Graded and Ungraded Pilots.** Additional flying, above the SCT allocation, for pilots undergoing training to achieve higher standards (G2, G1 and pre-QGI course training) is permitted at VGS and is included in the annual task. Additionally, following protracted periods of absence a pilot may require extra flying to regain previous levels of proficiency and **should** fly with a Flying Supervisor to regain flying currency. If the pilot's absence has exceeded 6 months, then the Flying Supervisor **should** conduct a FAT as well as fulfilling the requirements mandated below; on successful completion, a new CofC and Certificate of Qualification on Type (CQT) **should** be awarded and recorded in the individuals Flying Logbook. Such extra flying **should** be approved by the Unit Cdr. If extra flying is required by a VGS, the VGS OC **should** seek an additional training task from OC Ops Wg. The following exercises **should** be covered as part of a refresher course:

- a. Stall recovery and prevention.
- b. Approach and landing.
- c. Balloon landing recovery
- d. Launch failures.

Additional Qualifications

8. **Conversion to New Glider Types.** Conversion to a new aircraft type up to G1 standard may be carried out at VGS.

9. **Soaring Qualifications.** There are three separate soaring disciplines: thermal, ridge and wave. Aircraft Commanders **should not** undertake planned soaring until they have successfully completed the appropriate training and had the appropriate competence entered into their Flying Logbook; refer to DHO 2307(1) for further details.

Award and Recording of Qualifications

10. On successful completion of any syllabus of training a record of the qualification achieved **should** be made in the individuals Record of Service Book (RAF F3822), for Cadets, or Flying Logbook for 2 FTS personnel.

11. **Ungraded Pilots.** Awards made **should** be notified in the Gliding Utilisation Return (GUR); GS/AGT badges and certificates **should** be issued by the Unit Cdr.

12. **Graded Pilots.** When personnel, including FSCs, are Graded, a MOD F5363G **should** be raised with the appropriate recommendation made and signed at Part 3 by the Unit Cdr. Flying and ground test results along with a recommendation **should** be recorded at Part 4 and signed by the instructor/supervisor conducting the test. The Unit Cdr, as the award authority, **should** complete Part 5. The pilot **should** be shown the completed F5363G, which they **should** sign at Part 6. A copy of the completed F5363G **should** be forwarded to CGS who **should** update records and produce and distribute copies as required. Graded Pilot qualifications are only valid for the Unit/Location of the award, and must be re-validated if the individual operates at a different location from that which it was awarded.

13. **Renewals.** Unit Cdrs **should** ensure that the minimum requirements for the renewal of an annual CofC are met before recommending the renewal. F5363Gs raised for the renewal of qualifications **should** be actioned at Part 5 by the Unit Cdr. A copy of the F5363G **should** also be sent to CGS.

Withdrawal of Grades

14. A Grade may be withdrawn on the authority of Comdt 2 FTS, Comdt CFS, OC Ops Wg, OC Standards, OC CGS, OC CFS GE or VGS OC if it is found that the holder is not performing their duties satisfactorily.
15. Temporary withdrawal of a grade **should** be notified in writing to OC Ops Wg and OC CGS.
16. In the event of a permanent withdrawal of a grade, the Unit Cdr **should** instigate termination procedures or transfer of the individual to a non-flying position.

Guidance Material 2101(1)

Entitlement to Conduct Flying Duties

17. The requirements for the award and renewal of each qualification are stipulated at Annex A. The minimum training requirements and exemptions for pilots with previous flying experience are detailed at Annex B.

Duty Holder Order 2101(2)

Certificate of Qualification on Type

- 2101(2) To fly or operate Air Systems governed by Duty Holder Orders, Aircrew **shall** be in possession of a valid Certificate of Qualification on Type (CQT) for that type.

Acceptable Means of Compliance 2101(2)

Certificate of Qualification on Type

18. **Certificate of Qualification on Type (CQT).** On award of a G1 a CQT **should** be awarded and entered into the individual's Flying Logbook. U/T pilots undergoing GS, AGT or Graded Pilot training **should not** be awarded a CQT and **should not** require a CQT to act as Aircraft Commander for syllabus solo sorties. A new CQT **should** be entered in the individual's Flying Logbook on the successful completion of any refresher flying post a break in flying of 6 months or more.
19. **Aerotow Aircraft Qualification.** All pilots **should** have completed the Aerotow conversion course with an Aerotow Aircrew Instructor (AI). Pilots that have not been awarded a UK Military Regular Flying Badge (Pilot) **should** demonstrate SQEP credentials through previous civil equivalence and experience of at least a type of PPL(A), NPPL(A), EASA LAPL(A) or higher, prior to completion of the aerotow conversion course. CQT for Aerotow Aircraft **should** be recorded in the individual's Flying Logbook as "Aircraft Commander – Left Seat", which indicates the individual is converted to type and authorized to aerotow.
20. **Aerotow Authorized Checking Officers (ACO).** A 2 FTS HQ, CGS or CFS aerotow qualified pilot holding a minimum of an A2 Category QGI may be approved by Comdt 2 FTS to act as an ACO, subject to either:
 - a. Having a minimum of 500 hrs experience as an aerotow pilot on a 2 FTS aerotow aircraft, or;
 - b. Holding an aerotow endorsement and either a FI or CRI endorsement on their PPL.
21. An ACO may be authorized to conduct FATs, SCT and Standardisation sorties on 2 FTS Aerotow Aircraft. CQT for ACOs **should** be entered into the individual's Flying Logbook as "Aircraft Commander – Either Seat".
22. **Aerotow Conversion-to-Type Training.** Aerotow conversion-to-type sorties **should** normally be flown with a Qualified AI holding a category on type.

**Guidance
Material
2101(2)**

Certificate of Qualification on Type

23. Nil.

ANNEX A

AIRCREW TRAINING STANDARDS

1. **Applicability.** Only flying carried out in 2 FTS aircraft may be counted towards a qualification unless using an exemption for pilots with previous experience as detailed at Annex B to DHO 2101(1).

2. **MOD F5363G Approval.** Part 5 of the F5363G for Graded Pilots **should** be completed by the Unit Cdr, OC Stds, OC Ops Wg or CFS Exam Wg.

3. **Ungraded Pilots:**

a. **GS:**

Gliding Scholarship	
Examining Authority	A Category QGI
Award Authority	Unit Cdr
Mandatory Requirements	(1) Minimum age 16yrs at the start of the course. (2) Satisfactory completion of the syllabus contained within FTP3225. (3) Training should be completed over a minimum of 2 days. (4) Completion of the GS Essential Knowledge Quiz, prior to award. (5) Satisfactory check flight (2 launches minimum). (6) One solo circuit to be flown immediately after the check flight.
May be Authorized to	Undertake solo circuit flights subject to pre-solo checks. Carry out pre-flight external checks and assist in ground handling supervision. Receive training in winch operating leading to the award of a Certificate of Competence, and when qualified, operate winches (min age 17). Obtain FMT 600 and, thereafter, receive clearance to retrieve gliders/cables.

b. **AGT:**

Advanced Glider Training	
Examining Authority	A or B1 Category QGI
Award Authority	Unit Cdr
Mandatory Requirements	(1) Satisfactory completion of the syllabus contained within FTP3225. (2) Completion of the AGT Essential Knowledge Quiz.
May be Authorized to	Undertake activities listed in Para a detailed above.

4. **Graded Pilots:**

a. **G2:**

G2 Pilots	
Examining Authority	Flying Supervisor
Award & Renewal Authority	Unit Cdr, OC Stds, OC Ops Wg or CFS Exam Wg
Mandatory Requirements	(1) If FSC, AGT qualified. (2) Satisfactory completion of the syllabus contained within FTP3225. (3) Pass the flying test as detailed within FTP3225. (4) A minimum of 70 launches including 20 solos post 1st solo on type. (5) Possess a Certificate of Competence for winch operating.
CofC Renewal requirements	Pass the flying test as detailed within FTP3225.
May be Authorized to	(1) Fly solo. (2) Act as Aircraft Commander during ground retrieves and tow-out.

b. **G1:**

G1 Pilots	
Examining Authority	Flying Supervisor
Award & Renewal Authority	Unit Cdr, OC Stds, OC Ops Wg or CFS Exam Wg
Mandatory Requirements (Unless Exempt Under DHO 2101(1))	(1) A current G2 Pilot and completion of the syllabus contained within FTP3225. (2) Fly the aircraft from either seat as Aircraft Commander. (3) Received training to conduct Glider Induction Flights and Ex 2 of the GS syllabus iaw FTP3225. (4) Pass the flying test as detailed within FTP3225. (5) A minimum of 80 launches including 20 solos post award of G2.
Minimum CofC Renewal Requirements	(1) A minimum of 50 launches flown in the 12 months since the Grade award or last renewal. (2) Pass the flying test as detailed within FTP3225.
May be Authorized to	(1) Fly as Aircraft Commander from either seat. (2) Fly Glider Induction Flights iaw FTP3225. (3) Deliver Ex 2 of the GS syllabus iaw FTP 3225. (4) Carry out flight servicing when in possession of F4124. (5) Give instruction to trainee cable handlers, signallers, flying log recorders and wingtip orderlies. (6) Undertake aircraft ground handling, the conduct of pre-flight & external checks and be responsible for visitor's airfield safety. (7) Undertake the duties of Launch Point Supervisor (LPS).

ANNEX B

MINIMUM TRAINING REQUIREMENTS AND EXEMPTIONS FOR PILOTS WITH PREVIOUS FLYING EXPERIENCE

1. **Applicability.** Ungraded personnel joining a Unit with previous flying experience may require less training to achieve gliding qualifications than those joining with no flying background. Their conversion syllabus may be adjusted to take account of their experience and currency.
2. **Definitions.** Qualified Fixed Wing Pilots (QFWP) are defined as one of the following (Flying Logbook evidence is required as proof of qualification and currency):
 - a. Holder of a UK Military Regular Flying Badge (Pilot) iaw Queens Regulations for the RAF (QR J727).
 - b. EFT Graduates.
 - c. PPL/LAPL/NPPL (SEP, SLMG, TMG) or higher.
 - d. RAF/RN/Army GSA and BGA pilots holding at least a FAI 'A' (Silver C equivalent) certificate, including PPL/LAPL Sailplane (Glider Operators Only).
3. **Minimum Requirements.** There are no minimum launches mandated before an experienced pilot, as defined in Para 2, can be sent solo; however, all pilots **should** complete the stalling and PLF exercises, as appropriate, beforehand. Checking instructors **should** ensure that the conversion training is complete with due consideration given to the type of aircraft on which the candidates previous experience has been gained.
4. Following aircraft conversion, a QFWP, **should** complete a period of consolidation flying before attending a CGS QGI course. This consolidation **should** be conducted by a minimum of a B1 Category QGI. The launches required by each pilot to reach the standard of a QGI will vary, and Unit Cdrs **should** recommend awards on demonstrated ability. The following are minimum requirements for all personnel:

QFWP Minimum Consolidation Requirements			
Pilot Qualification	UK Military Regular Flying Badge (Pilot)	EFT Graduate/ PPL	FAI A & BGA Silver C
Launches to G1 Award	10	50	10
Pre-QGI Course Launches as Aircraft Commander	30	100	20

Note: Service QFIs can be exempted from the above consolidation requirements before attending a CGS QGI course; individual requests **should** be approved by OC Ops Wg.

5. **QGI Course Nomination.** QFWP will normally complete a B2 Category QGI course, but Unit Cdrs may recommend pilots with previous instructional or extensive gliding experience for a higher QGI course. Progression to higher instructional categories will be as normal (DHO 2125 Annex A), except that the guidance on experience required for re-categorisation from B2 to B1 Category QGI is reduced to 100 launches (Glider), if the pilot is a current QFI or BGA Full Category instructor. On completion of a QGI course, Comdt 2 FTS may award a higher QGI Category (maximum of B1) than that for which the pilot was recommended.
6. Pilots who fast track within the exemption criteria **should** have been trained and qualified in all the ground skills appropriate to a G1 before attending a QGI course.

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DHO 2102 – Aircrew Competence in Role

Rationale

Aircrew skill can degrade over time, which may lead to an increase in Risk to Life. This regulation requires Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) to ensure that Aircrew who operate UK Military Air Systems demonstrate the required skill level, achieve specific competencies in their role and have their proficiency periodically checked to confirm that skill levels are being maintained.

Contents

2102(1): Certificate of Competence

2102(2): Periodicity of Assessment of Competence

2102(T1): Refresher Flying for Aircrew Under Training

Duty Holder Order 2102(1)

Certificate of Competence

2102(1) To fly, or operate, UK military Air Systems in role, Aircrew **shall** be in possession of an applicable Certificate of Competence.

Acceptable Means of Compliance 2102(1)

Certificate of Competence

1. **Certificate of Competence.** On the award of a G2 or G1, the qualification, known as a Certificate of Competence (CofC), **should** be entered into Section 4 of the individuals Flying Logbook and a MOD F5363G raised in the F5200 folder.
2. For the initial award of a G1 only, a Certificate of Qualification on Type (CQT) **should** also be entered into Section 3 of the individuals Flying Logbook. A CofC **should** be renewed annually, entered into Section 4 of the individuals Flying Logbook and a F5363G raised in the F5200 folder. For Aircrew Instructors, an Instructional Competence Check (ICC) **should** be conducted annually instead of a CofC.
3. CofC checks **should** only be conducted with a Flying Supervisor as Aircraft Commander. This may include periodic assessment, by an independent examining body, eg CFS.
4. **Minimum Qualifications to fly as Aircraft Commander.** Before being authorized as Aircraft Commander, pilots **should**:
 - a. Hold a valid Certificate of Qualification on type (CQT), except for syllabus solo flying prior to the award of a G1.
 - b. Hold a valid CofC in their Flying Logbook except for syllabus solo flying prior to the award of G2 status.
 - c. Have passed the appropriate Essential Knowledge Quiz (GS and AGT trainees only).
 - d. Have a current Flying Ability Test (FAT) (QGLs and Aerotow pilots); the elements of a platform FAT are detailed at Annex A. Graded pilots do not require a separate FAT as all elements are included in their CofC.
 - e. Be in current flying practice.
5. Additional requirements are:
 - a. In addition to meeting the boarding mass limits, any pilot who has not been formally anthropometrically measured **should** have a check carried out, and recorded in their F5200 folder, by aircrew qualified on type (min G1 for Glider Induction Flight sorties and B2 Category QGL for GS) prior to flight to ensure that:
 - (1) They do not impinge flying control movement or other aircraft system or structure while seated.
 - (2) They can abandon the aircraft in an emergency.
 - (3) They can move the controls to their full extent and reach all necessary

controls in the cockpit.

Recording of Competence

6. **Training Folders (TF).** A TF **should** be opened and maintained for all pilots and instructors post-completion of AGT.
7. **RAF F5200.** F5200 folders **should** be opened and maintained for all pilots and instructors post-completion of AGT, and **should** include a record of all F5000 series and FAT forms raised. All other training and supervisory checks **should** be included within the individual's TF iaw DHO 2401(7).
8. **Authorized Exercises.** Once trained and cleared for individual competencies, a record of the competency **should** be recorded in the individual's Training Folder. For G2 and above pilots, additional competencies **should** also be recorded in the individual's F5200 folder and Flying Logbook.

Temporary Grounding of Aircrew

9. All temporary grounding of aircrew **should** be notified to OC Ops Wg.

Guidance Material 2102(1)

Certificate of Competence

10. The elements of a platform FAT are detailed at Annex A.

Duty Holder Order 2102(2)

Periodicity of Assessment of Competence

- 2102(2) Aircrew competence **shall** be periodically, independently assessed.

Acceptable Means of Compliance 2102(2)

Periodicity of Assessment of Competence

11. Graded Pilots **should** be continuously assessed from the initial award iaw Annex B.
12. Aircrew Instructors are subject to the continuous assessment process as laid down in DHO 2125.

Guidance Material 2102(2)

Periodicity of Assessment of Competence

13. Periodic assessment of Graded Pilots is detailed at Annex B.

Duty Holder Order 2102(T1)

Refresher Flying for Aircrew Under Training

- 2102(T1) Refresher flying **shall** be conducted by aircrew under training when required.

Acceptable Means of Compliance 2102(T1)

Refresher Flying for Aircrew Under Training

14. Refresher flying for aircrew under training is detailed in DHO 2101(1).

**Guidance
Material
2102(T1)**

Refresher Flying for Aircrew Under Training

15. Nil.

ANNEX A

FLYING ABILITY TEST

1. A glider FAT **should** be completed over a minimum of 3 launches. The minimum specific handling components that **should** be tested and assessed as part of a FAT are detailed below:

Handling Component to be Tested and Assessed	Conventional Gliders	Aerotow Aircraft
Take-Off Checks and Launch (TOCL)	✓	
Start Up, Taxi, Take-off (SUTTO)		✓
Medium Turns	✓	✓
Advanced Turns	✓	✓
Stall recovery	✓	✓
Stall prevention	✓	✓
Practice Launch Failures (PLFs)	✓	
Practice Engine Failure After Take-Off (EFATO)		✓
Upper air emergencies		✓
Practice Forced Landings (PFLs)		✓
Airborne Checks	✓	✓
Circuits	✓	✓
Landings	✓	✓
Low Approach/Go-Around		✓
Balloon landing recovery	✓	
Aerobatics ¹	✓	
Aerotow		✓

2. **Documents and Records.** The Testing Officer **should** record the details and assessment of the FAT, on a 2 FTS FAT form applicable to the aircraft type (2FTS/FAT/G or 2 FTS/FAT/AT), which **should** be retained in the individual's F5200 folder. FATs that are successfully passed **should** be entered into the individual's Flying Logbook, within Section 4, under the Special Flying Qualifications and Renewals Section, as detailed in DHO 2401. Where a FAT is completed concurrently as part of another assessment/flying qualification (eg B2 Category QGI 90-day check, CFS Standardisation etc), that is recorded on an MOD F5363G, the FAT assessment and expiry date **should** be added into the F5363G narrative; in this case, a separate FAT form **should not** be required.
3. **Periodicity.** A FAT **should** be valid for 1 year, and pilots **should not** operate as Aircraft Commander if the periodicity has expired. The next renewal date entry in the individual's Flying Logbook **should** be recorded as 1 year, ie a FAT completed on 18 Jan 21 will expire at midnight on 18 Jan 22, ie between 18 and 19 Jan.

¹ If Qualified and Weather Conditions Permitting.

ANNEX B

PERIODIC CONTINUAL ASSESSMENT OF GRADED PILOTS

1. All Pilots **should** undergo periodic flying assessments.
2. **Ungraded Pilots.** Before an ungraded pilot is authorized to fly solo, they **should** be given a dual check by an A or B1 Category QGI. Thereafter, the ungraded pilot may fly solo for up to 5 launches. Before any further solo flying is authorized, they **should** be given a further dual check.
3. **G2 Pilots.** G2 pilots **should** undergo a dual check every 31 days, with a minimum of a B1 Category QGI, for their solo currency to remain valid. G2 pilots may subsequently fly solo on any runway unless prevented by local Flying Orders. Additionally, G2 Pilots **should** undergo an assessment check every 90 days by a minimum of an A2* Category QGI or B Category CAI. These checks may count towards SCT requirements; however, checks required to regain currency, ie outside of 31 day, may not count towards SCT minimum requirements.
 - a. A G2 31-day check **should** consist of a minimum of 2 launches including any type of PLF.
 - b. A G2 90-day check **should** consist of a minimum of 5 launches (or a total of 1 hour duration) including any type of PLF.
4. **G1 Pilots.** G1 pilots **should** undergo an assessment check every 90 days by a minimum of an A2* Category QGI or B1 Category CAI. This check may count towards minimum SCT requirements; however, **should** consist of a minimum of 5 launches (or a total of 1 hour duration) including, elements of exercises they are cleared to teach.
5. **Annual Requirements.** In addition to the individual requirements, all Graded Pilots **should** undergo an annual CofC flying test as detailed in FTP3225. Completion of an annual CofC **should** also count as SCT and 90-day check requirements.
6. **Recording.** All 90-day checks and CofC **should** be recorded utilising a MOD F5363G. The F5363G **should** be retained in the individuals F5200 folder.
7. **CFS Standardisations.** CFS Standardisations will be included as part of the periodic continual assessment of Pilots, as directed by CFS Exam Wg.

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DHO 2103 – Currency and Continuation Training

Rationale

A minimum level of flying currency and training activity is required in order to enable the continued maintenance of Aircrew competencies that have been achieved in a specific role. A failure to achieve this will result in a degradation of skill that may increase Risk to Life. This Regulation requires Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) to specify the minimum activity required to reduce this to a level that is As Low As Reasonably Practicable and Tolerable.

Contents

2103(1): Currency Requirements

2103(2): Continuation Training

Duty Holder Order

2103(1)

Currency Requirements

2103(1) Unit Cdrs **shall** promulgate and manage flying currency requirements, by type and role, for the safe operation of Air Systems by Aircrew in their AoR in accordance with RA 2103(1), GASO 2103(1) and DHO 2103(1). Aircrew **shall not** operate as Air System Commander unless they are in current flying practice, except when undertaking a check to regain currency.

Acceptable Means of Compliance

2103(1)

Currency Requirements

- Minimum annual flying requirements.** All Pilots and QGIs **should** complete a minimum number of launches (glider) or hours (aerotow aircraft) to retain competency. For Pilots and QGIs this is detailed in Annex A to DHO 2101 & DHO 2125 respectively.
- Currency Requirement.** Once qualified, VGS Graded Pilots and QGIs (non-CAIs) **should** maintain currency in each discipline as per the table below:

VGS and non-CAI Currency Requirements Table						
Discipline	Graded Pilots		QGIs			
	G2	G1	B2	B1	A2	A1
Flying Practice	31 days					
Glider Aerotow	30 days		90 days		180 days	
Aerobatics	-	-	-	90 days	180 days	
Launch Failure	90 days			180 days		
SCT (Note 1)	90 days			180 days		
FAT	Note 2		Annually (Note 3)			

Notes:

- See DHO 2103(2) for definition of Staff Continuation Training requirements.
- For Pilot qualifications, all elements of a FAT are included in the Graded Pilot test schedules within the FTP3225. The specific elements of a platform FAT are detailed at Annex A to DHO 2102(1).
- QGIs over the age of 65 **should** complete a FAT every 6 months.

Currency Lapses

- Less than 6 months.** Pilots and instructors who have flown within the last 6 months but are out of currency **should** fly with an A or B1 Category QGI who is qualified and current in the relevant discipline.
- As an absolute minimum, the following requirements **should** be used to regain flying practice; however, Unit Cdrs **should** be aware that a long-term lapse of flying practice will likely require more flying to regain an acceptable standard:

Regain Flying Practice Table		
Aircraft Type	General Handling	Emergencies
Glider	1 x Launch, Circuit & Landing	1 x Practice Launch Failure
Aerotow Aircraft	1 x Take-Off, Circuit & Landing	1 x Practice EFATO

5. **Unsatisfactory Performance.** Any unsatisfactory check flights **should** be repeated, until a satisfactory standard is achieved.
6. **Greater than 6 months.** Pilots and instructors who have not flown for 6 months or greater **should** undergo refresher flying, leading to the re-award of a Certificate of Qualification on Type (CQT). Refresher flying requirements are detailed within DHO 2101(1) for Graded Pilots and DHO 2125(1) for QGIs.

2 FTS HQ/CGS CAIs and CFS Examiners

7. **2 FTS HQ/CGS CAIs and CFS Examiners.** 2 FTS HQ/CGS CAIs and CFS Examiners remain in current flying practice providing they have flown in that particular aircraft type within the previous 31 days. Once qualified, 2 FTS HQ/CGS CAIs and CFS Examiners **should** maintain currency in each discipline as per the table below:

2 FTS HQ/CGS CAIs and CFS Examiners Currency Requirements Table	
Discipline	2 FTS HQ/CGS CAIs & CFS Examiners
Flying Practice	31 days
Aerotow (Gliders and Aerotow Aircraft)	180 days
Aerobatics (Gliders Only)	180 days
Spinning (Gliders Only)	180 days
Cross-Country (Aerotow Aircraft Only)	12 months
Glider SCT	As per VGS requirements
Aerotow Aircraft SCT	180 days
Practice Forced/Field Landing (Note)	12 months

Note: PFL training required for glider transits, but currency may also apply to 2 FTS HQ/CGS non-CAIs, ie RGC personnel, on approval from OC Ops Wg. PFL training may be completed through the use of a Motor Glider, or arrival at destination airfield.

8. 2 FTS HQ, CGS and CFS QGIs **should** check their currency matrix to ensure they are current in all relevant disciplines, before operating at or visiting alternative locations, eg CGS Standardisation, Assurance and Training (SAT) visits to VGS.

Guidance Material 2103(1)

Currency Requirements

9. Nil.

Duty Holder Order 2103(2)

Continuation Training

- 2103(2) Unit Cdrs **shall** manage Staff Continuation Training (SCT) and ensure that training events are appropriately recorded.

Acceptable Means of Compliance 2103(2)

Continuation Training

10. **Introduction.** The emphasis for SCT **should** be for a qualified pilot/instructor to practise flying or instructional techniques with an A or B1 Category QGI and, therefore, **should not** be flown concurrently with other tasks. Whilst solo SCT is useful to appreciate the subtle and minor handling characteristics of aircraft when flown solo, VGS solo SCT **should** be kept to a minimum, or completed in addition to any mandatory SCT. SCT solo flying **should not** be counted as instructional launches.

11. **SCT Allocation.** As a minimum, all Graded Pilots and B2 Category QGIs **should** fly 5 launches, including one PLF, every rolling 90 days. The number of glider launches may be reduced to a minimum of 2 launches, including a launch failure, if one hour of total flight time will be achieved. Launches that are flown in order to regain flying practice following a flying lapse in excess of 31 days **should not** accumulate towards the minimum SCT within a rolling period. B1 Category QGIs and above **should** meet the same flying/launch requirements as a B2 Category QGI, but this **should** be flown in each 180 day rolling period.
12. **Aerotow Aircraft SCT.** As a minimum, Aerotow pilots **should** complete a continuous one-hour SCT sortie every 180 days. The sortie content **should** follow a FAT type profile but may be flown solo.
13. **Prioritisation of SCT.** The SCT flying requirements detailed above are the absolute minimums. Flying Supervisors **should** ensure that, on a case-by-case basis, sufficient SCT is afforded to maintain pilot/instructor competency. Those pilots or QGIs whose assessments are 'below average' **should** be allocated extra SCT and, where practicable, this flying **should** be flown with a Flying Supervisor.
14. **Pilots in Permanent Flying Appointments.** 2 FTS HQ, CGS & CFS staff **should** fly SCT appropriate to their Pilot Grade or QGI Category and **should** maintain currency in all disciplines for which they hold a Certificate of Competence.
15. **Mandatory SCT Backlog.** Individuals that are otherwise current, but have outstanding SCT, **should** complete their SCT requirements with another qualified and current pilot before any other flying is undertaken.

**Guidance
Material
2103(2)**

Continuation Training

Claiming of Instructional Launches

16. SCT sorties can be claimed as instructional launches by both Aircrew if the P2 is delivering an exercise from FTP3225VIK, eg a 90-Day check where a B2 Category QGI is delivering a GS exercise, then instructional launches can be claimed by both the B2 and the Flying Supervisor. If the P2 is not delivering an exercise, only the P1 can claim instructional launches.
17. All exercises from the FTP3225VIK may be claimed as instructional launches by QGIs. Passenger flights, solo flights, Flight Tests or any claimed as "other" are non-instructional sorties. Flying for FAT purposes or practising of pure flying skills are also non-instructional launches for the P2.
18. Flights where Aircrew are being trained in a new captaincy skill, eg Flight Test Pilot training, may be counted as instructional by the P1.
19. As detailed in RA 2340(5), Familiarization Flights are designed to familiarize Aircrew, who do not hold a Certificate of Qualification on Type (CQT) for the Aircraft, with the characteristics of an aircraft or its systems. The Passenger is permitted to handle aircraft controls or operate systems and occupy a crew position that routinely requires a CQT, provided that the Passenger is qualified Aircrew. As such, this type of flight may be counted as instructional by the P1.

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DHO 2125 – Aircrew Instructor Training

Rationale

Aircrew Instructors (AI) provide a training, checking and standardisation function to Defence Aviation in order to facilitate the delivery of operationally qualified crews to the Front Line. Instructional ability can be built through both practical experience and training, and in the case of Defence Aviation the lead agency for such training is the Central Flying School (CFS).

Contents

2125(1): Aircrew Instructor Training

2125(D1): Periodic Check Flights

2125(D2): Extension, Testing and Withdrawal of QGI Categories

2125(D3): Temporary Duty at Another Unit

2125(D4): Relief Instructing Duties at CGS

Duty Holder Order

2125(1)

Aircrew Instructor Training

2125(1) Personnel selected for flying instructional duties **shall** receive appropriate training and attain the instructional standards required to facilitate the provision of high quality instruction for all aircrew disciplines.

Acceptable Means of Compliance

2125(1)

Aircrew Instructor Training

1. **Nomination.** VGS OCs may nominate appropriately qualified personnel, including FSCs, for a QGI course at CGS. Whenever possible, these nominations **should** be supported by a 2 FTS HQ, CGS or CFS assessment of the individual's ability to pass the proposed course. "A" Category QGI candidates **should** not attend without a positive recommendation from 2 FTS HQ, CGS or CFS. When appropriate the VGS OC **should**:
 - a. Raise a MOD F5363G.
 - b. Complete the recommendation at Part 3, which is to include a full supporting narrative signed by the Unit OC, and **should** be available at CGS two weeks before the commencement of the categorisation course. CGS **should** complete the F5363G and distribute copies as required.
 - c. This procedure also applies to consolidation courses, although the 2 FTS HQ, CGS/CFS assessment is not required.
2. **Competent to Instruct (C to I).** When an A Category QGI is converting to a new aircraft type or returning to instructional duties, they **should** complete the appropriate course with CGS.
 - a. The C to I award authority is CFS; as such, end of course Standardisations **should** be completed by a CFS Examiner or Agent. In their absence, the 2 FTS Standards Flight may complete the test; however, the MOD F5363G **should** be forwarded through OC CFS GE to OC CFS Exam Wg for Part 5 completion.
 - b. Exceptionally, if the individual achieves the standards of their previous QGI Category in all respects during their end of course assessment, they **should** be re-awarded their former QGI Category.
 - c. Where the individual does not fully meet the standards of their previous QGI Category during their end of course assessment, but does achieve B1 QGI standard in all respects, they **should** be categorised as C to I. The C to I award **should not** be regarded as a permanent category, but as a means to gain experience and as a supervisory marker. An instructor categorised as C to I **should** confirm their category within 36 months of the award. Where an instructor does not meet the standards of their previous category during the confirmation of Category check flight, they **should** either be awarded a QGI Category appropriate to their

performance, or have their Category withdrawn. Extensions to the C to I award **should not** be made. Recognising the nature of the command appointment, a VGS OC is permitted to maintain a C to I for the initial 4 years of their appointment.

d. If the individual fails to achieve B1 QGI standard during their end of course assessment but is delivering safe and effective instruction, they **should** be awarded a B2 Category QGI. If awarded a B2 Category QGI they may be recommended for upgrade to B1 at any time in the next 36 months and thereafter recommended for upgrade to their previous A Category. Exceptionally, based on documented performance and when specifically approved by OC CFS Exam Wing, the individual may confirm their former A Category QGI direct from B2 within the 36 month period.

3. **Gliding Authorizers and Flying Supervisors Qualifications.** Qualifications for Authorizers and Flying Supervisors are detailed within Annex A.

4. **Conversion to New Aircraft Types.** To obtain a QGI Category on a new aircraft type, the candidate **should** complete a QGI course at CGS, or undergo assessment by a CAI.

Aircrew Instructors Returning to Instructional Duties

5. **Refresher Training.** The amount of flying training and actual time required to regain instructional skills **should** be at the discretion of the CAI. Pilots returning to flying duties after a period of absence **should** first fly with a Flying Supervisor to regain flying currency. Flying Supervisors **should** ensure that the requirements contained within Para 14 (Maintenance of Instructor Categories) are extant. If the pilot's absence has exceeded 6 months, then the Flying Supervisor **should** conduct a FAT as well as fulfilling the requirements mandated below. If the pilot's absence has exceeded 12 months or if the requirements of Para 14 have lapsed, then the pilot **should** fly with a CAI for assessment. The following exercises **should** be covered as a minimum as part of a refresher course:

- a. Stall recovery and prevention.
- b. Approach and landing.
- c. Balloon landing recovery
- d. Launch failures.

6. **Initial Categorisation.** On successful completion of the refresher training an ICC **should** be recorded in the individual's Flying Logbook and F5363G raised.

7. If there is any doubt on the refresher flying required to return to instructional duties, 2 FTS OC Standards **should** be consulted.

Aerotow Aircrew Instructor

8. To be considered for the role as an Aerotow Aircrew Instructor (AI) an individual **should** meet the minimum criteria laid down for an Aerotow Authorised Checking Officer (ACO) detailed in DHO2101(2), or the individual **should** be a QFI. The Aerotow AI will be categorised as C to I which **should** be awarded by CFS Exam Wg.

9. Due to the specialist nature of the Aerotow role within 2 FTS, the C to I award **should** be an enduring qualification, as a nominated individual will not achieve sufficient instructional experience for confirmation of category. The award and renewal criteria **should** be as follows:

- a. The initial award of the C to I as an Aerotow AI **should** be for 18 months and **should** be completed by CFS Exam Wg.
- b. After the initial award, the renewal **should** be conducted on an annual basis iaw MMAI 2101(3) and MMAI 2102(1).
- c. The annual renewal **should** be completed by a CFS Exam Wing QFI.

10. Once awarded an Aerotow AI, the individual may be authorised to complete all aspects of aircraft type and role specific Aerotow conversion training.

**Guidance
Material
2125(1)**

Aircrew Instructor Training

11. **QGI Training Standards.** QGI training standards are detailed at Annex A.
12. **Definitions.** QGI categories and qualifications are defined within the CFS Manual of Military Aircrew Instruction (MMAI) as follows:
 - a. **B2 Category QGI.** A B2 Category QGI is able to deliver safe and effective instruction but requires a higher level of supervision and mentoring. The B2 Category QGI is valid for 36 months from date of initial award or renewal.
 - b. **B1 Category QGI.** The B1 Category QGI is the normal working standard for instructional competence.
 - c. **A2 Category QGI.** An above average pilot and instructor.
 - d. **A1 Category QGI.** An exceptional pilot and instructor.
 - e. **C to I.** An instructor who has previously been categorised to at least A2 Category standard and thereafter is assessed as C to I during a period gaining experience on return to instructing or on change of aircraft type. It is not to be amplified as A2 (C to I) etc.
 - f. **Star (*).** A QGI who has successfully completed the VGS Flying Supervisors Course (VGS FSC). There are two parts to this course that may be completed separately; Air Safety training and the flying elements. The Air Safety training **should** be completed first. The relevant entries for Section 4 of the individuals flying logbook (in both flying and non-flying sections) are detailed in DHO 2401.
 - g. **Flying Supervisor.** A Flying Supervisor is an A* category appointed as VGS OC, CFI or Deputy CFI.
 - h. **CFS Accredited Instructor (CAI).** A 2 FTS HQ or CGS QGI approved by Comdt CFS to deliver instruction to trainee and established QGIs. CAIs also have the privileges of a Flying Supervisor.
 - i. **2 FTS Standards Flight.** 2 FTS HQ CAI approved to conduct end of B Category QGI Course Standardisations and consists of OC Ops Wg, OC Stds, Dep Stds and any CFS Agents.
 - j. **CFS Agent.** A 2 FTS CAI appointed by Comdt CFS. The CFS Agents may conduct CFS Standardisations on VGS personnel.
 - k. **Examiner.** A CFS Exam Wing Qualified AI, appointed as an Examiner by Comdt CFS. Examiners also have the privileges of a 2 FTS CAI.

**Duty Holder
Order
2125(D1)**

Periodic Check Flights

2125(D1) Instructors **shall** undertake periodic check flights in order to maintain their category

**Acceptable
Means of
Compliance
2125(D1)**

Periodic Check Flights

13. **Documentation.** All periodic check flights **should** be recorded on a MOD F5363G and subsequently entered into the individuals F5200 series folder.
14. **B2 Category QGI Acceptance.** On completion of a B2 Category QGI course at CGS and before being allowed to instruct trainees, the new instructor **should** demonstrate, to a Flying Supervisor, their ability to teach the following at their VGS location:
 - a. Elements of the upper air instructional syllabus (this **should** be selected exercises to enable the Flying Supervisor to confirm the ability of the new instructor).
 - b. Winch launch, circuits and approach & landing.

c. Practice Launch Failures.

This site check **should** be completed as soon as possible following the instructor's course.

15. **B2 Category QGI 90-day Checks.** Each B2 QGI **should** be checked at least every 90 days by a VGS Flying Supervisor or A2 Category CAI, on an exercise selected from the instructional syllabus. Such check flights **should** include a simulated emergency. Following a successful ICC by a CAI, or Standardisation by CFS, the next 90-day check periodicity commences from that date. In exceptional circumstances, Unit Cdrs may request authority from CFS OC Exam Wg for B1 Category QGIs, who have completed a Flying Supervisors Course, to undertake B2 90-day checks.

16. **Unsatisfactory Check Flights.** If a check flight reveals an instructional or flying weakness, the instructor **should** be given remedial training as soon as possible. The instructor **should** be checked again by a Flying Supervisor. Such check flights **should** be recorded on a F5363G and copied to OC Ops Wg. Any instructional flying **should not** be undertaken until the successful completion of an instructional check flight or as directed by OC Ops Wg.

17. **Maintenance of Instructor Categories.** In order to exercise the privileges of their category, all QGIs **should**:

- a. Complete an ICC flight annually with an independent assessor, ie someone who is not directly attached to the sub-unit of the QGI being assessed. For VGS, this will be either by a 2 FTS HQ/CGS CAI or CFS Examiner; for CGS, this will be either 2 FTS HQ CAI or CFS Examiner; for 2 FTS HQ this will be a CFS Examiner.
- b. Fly a Standardisation flight with CFS every 3 years for VGS QGIs, or every 2 years for 2 FTS HQ/CGS QGIs. This will also fulfil the annual ICC requirement, provided the ICC launch requirements, detailed at Annex A, are met.
- c. VGS QGIs and non-CAIs at 2 FTS HQ/CGS **should** fly an annual Flying Ability Test (FAT) with a Flying Supervisor. 2 FTS HQ, CGS or CFS CAIs **should** complete their FAT with a member of the 2 FTS Standards Flight, CFS Agent or Examiner. This requirement can be combined with either a Standardisation or ICC as detailed in sub-paras a to b above. The specific standards and elements of a platform FAT are detailed in Annex A to DHO 2102. QGIs **should not** fly if they have not flown a FAT within the last 12 months.
- d. Prior to an ICC, achieve the minimum instructional launches (or pro-rata equivalent if the ICC is conducted at less than the 12-month point), detailed at Annex A. If a QGI has not achieved the minimum amount, additional instructional sorties **should** be completed with a minimum B1 Category QGI, until the individual has completed the minimum number required for ICC renewal.

18. **Annual ICC.** On successful completion of the annual ICC flight, an ICC entry **should** be recorded in the individual's Flying Logbook and details of the flight entered onto a F5363G. The ICC is valid for 12 months from the date of the flight. Instructors without a valid ICC **should not** conduct instructional duties. The report **should** summarise:

- a. The weather conditions.
- b. Sortie content.
- c. The extent to which the instructor measures up to their current category with due regard to:
 - (1) Flying and instructional ability.
 - (2) Judgement.
 - (3) Airmanship.
 - (4) Emergency handling.

19. **CFS Standardisation.** VGS QGIs **should** fly with CFS every 3 years. HQ 2 FTS, CGS and CFS QGIs **should** fly with CFS every 2 years. Any QGI who has not flown a CFS Standardisation sortie within these periods **should not** give instruction, fly with cadets or passengers, or conduct flying tests until a Standardisation flight has been

completed with a CFS Examiner.

Extensions

20. **B2 Category QGI Extension.** Where it is not possible for a B2 Category QGI to upgrade to B1 within 36 months of the initial award, the circumstances **should** be reviewed, and a report staffed through OC Ops Wg to Comdt 2 FTS for an extension request or withdrawal of B2 Category QGI. A B2 QGI whose Category is withdrawn may have the opportunity to revert to a Graded Pilot.

2 FTS HQ Aircrew

21. **2 FTS HQ and Ops Wg CAIs.** 2 FTS HQ and Ops Wg CAIs are empowered to undertake all CGS functions and activities, as the organisation HQ.

Guidance
Material
2125(D1)

Periodic Check Flights

22. Nil.

Duty Holder
Order
2125(D2)

Extension, Testing and Withdrawal of QGI Categories

2125(D2) Flying and ground training leading to a change, renewal or withdrawal of QGI Category **shall** be recorded on a MOD F5363G.

Acceptable
Means of
Compliance
2125(D2)

Extension, Testing and Withdrawal of QGI Categories

23. **Examination and Testing.** The form and content of flying tests and ground examinations up to and including B1 Category QGI, **should** be iaw MMAI advice and guidance. Comdt CFS has delegated the award authority for B Category QGIs to Comdt 2 FTS; however, the routine completion and signing of Part 5 of the MOD F5363G is delegated to OC Ops Wg.

24. Flying and ground testing for A Category QGI **should** be iaw MMAI advice and guidance, and instructions issued by Comdt CFS.

25. A F5363G **should** be raised for all awards, acceptance checks, check flights, renewals, extensions and reversions of QGI Categories.

26. Details of the sortie exercises completed, the candidate's performance, weakness and other relevant comments, such as weather, runway in use etc, **should** be made in Part 4 of F5363.

Withdrawal of QGI Categories

27. QGI Categories may be reduced or withdrawn by CFS as a result of routine re-categorisation or other tests by CFS Examiners or CFS Agents. Categories may also be withdrawn by CFS, as the result of a recommendation by the individual's Duty Holder chain.

28. B Category QGIs may be reduced or withdrawn by OC Ops Wg, following recommendation from a 2 FTS CAI.

29. In the event of a permanent withdrawal of a QGI Category, the Unit Cdr **should** instigate termination procedures or transfer of the individual to a non-flying position.

Guidance
Material
2125(D2)

Extension, Testing and Withdrawal of QGI Categories

30. Nil.

**Duty Holder
Order
2125(D3)**

Temporary Duty at Another VGS

2125(D3) Pilots **shall** normally undertake duty only at the VGS to which they are appointed, but may be authorized to attend for temporary duty at another VGS.

**Acceptable
Means of
Compliance
2125(D3)**

Temporary Duty at Another VGS

31. **Criteria.** Completion of temporary duty at another VGS **should** be subject to the following:

- a. An eligible instructor **should** apply to the OC of the VGS to which they wish to be temporarily attached. Where there is a need for their service, the receiving OC **should** consult with the applicant's OC and, if they agree, the receiving OC **should** make an application to OC Spt Wg for the temporary transfer. The applicant's OC **should** advise the receiving OC of any restrictions, which might limit the instructor's ability to operate from their temporary duty location. The receiving VGS OC **should** review the individuals F5200 folder before allowing them to operate on their unit. Applications **should** provide full details of the transfer with supporting reasons and be accompanied by a F2969 (Application to Claim Travelling Expenses) and be forwarded to the temporary duty VGS. The OC requiring temporary staff reinforcement **should** apply to OC Spt Wg recommending, if possible, the source of such assistance wherever informal agreement has been obtained.
- b. The instructor **should** normally hold an A or B1 Category QGI and be in current flying practice. Exceptionally, exemptions may be made for B2 Category QGIs, at the discretion of OC Ops Wg, but the additional supervisory penalty must be borne in mind before applications are considered.
- c. Visiting instructors **should** receive a site check prior to commencing instructional duties; however, this requirement may be waived if the individual has flown from the site within the past 31 days.

32. **Administration.** VGS pilots on temporary loan to another VGS **should** ensure that the VGS SQEP Declaration, at Annex B, is completed and signed by their Unit Cdr.

**Guidance
Material
2125(D3)**

Temporary Duty at Another VGS

33. Nil.

**Duty Holder
Order
2125(D4)**

Relief Instructing Duties at CGS

2125(D4) In order to give instructors experience in training methods and operating techniques, they **shall** be permitted to assist on courses at CGS, in the capacity as Relief Instructors.

**Acceptable
Means of
Compliance
2125(D4)**

Relief Instructing Duties at CGS

34. **Criteria.** Attendance of Relief Instructors at CGS **should** be subject to the following:

- a. The instructor **should** normally hold an A or B1 Category QGI and be in current flying practice. Exceptionally, the minimum criteria may be reduced at the discretion of OC Ops Wg.
- b. Visiting instructors **should** receive a site check prior to commencing instructional duties; however, this requirement may be waived if the individual has flown from the site within the past 31 days.
- c. A maximum of 4 QGIs **should** attend CGS at any one time; however, this may be increased by OC CGS if required.

d. Subject to the prior approval of OC CGS, A Category QGI Relief Instructors, who are current on type, may authorize trainee first solos.

e. Visiting instructors **should not** normally perform the role of Duty Supervisor (DS) at CGS; however, to assess their ability to undertake this role, they may undertake this duty under the close supervision of the CGS DS, with whom responsibility for operations **should** remain.

35. **Administration.** Applications **should** be forwarded to CGS on proforma CGS/CA1. Where applicable, instructors accepted for Relief Instructor duties are permitted to complete Accounts Form 80, (Claim for Pay) when they attend. OC CGS **should** be considered the instructor's OC for the purpose of signing Part 2.

Guidance
Material
2125(D4)

Relief Instructing Duties at CGS

36. Proforma CGS/CA1.

ANNEX A

QGI TRAINING STANDARDS

1. **Applicability.** Only flying carried out in 2 FTS aircraft may be counted towards a qualification unless using an exemption for pilots with previous experience as detailed at Annex B to DHO 2101(1).

2. **MOD F5363G Approval.** Part 5 of the F5363G **should** be completed by the following individuals:

MOD F5363G Part 5 Completion and Approval	
B Category QGIs	OC Ops Wg or CFS Exam Wg
A Category QGIs	CFS Exam Wg
VGS FSC (Star (*)) (Flying Elements)	OC CGS, OC Stds or OC Ops Wg

3. **QGI Category Requirements:**

a. **B2 Category QGI:**

B2 Category QGI	
Examining Authority	2 FTS CAI or CFS Examiner
Award and Renewal Authority	Comdt CFS delegated to Comdt 2 FTS
Mandatory Requirements	(1) A current G1 Pilot. (2) Successful completion of a B2 QGI course at CGS.
Guidance on Experience Required Prior to Attending B2 Category QGI Course	150 launches as a G1, of which 100 must have been flown in the 12 months preceding the course.
On Award of B2 Category QGI May be Authorized to	Deliver GIF courses and teach GS exercises, including the associated Ground Lessons.
Minimum Flying Requirements for ICC Renewal	A minimum of 100 instructional launches (or pro-rata equivalent if the ICC is conducted at less than the 12-month point) since the initial B2 Category QGI award, or last ICC renewal.

Note: VGS OCs who intend to submit candidates for courses with less than the guidance criteria are to ensure CGS are informed before the application is made, and that the candidate is capable and prepared for the course. Consideration must not only be given to the candidate's attendance record, flying ability, airmanship and instructional technique; but also to their maturity, trustworthiness, spare intellectual and airmanship capacity and their general aviation knowledge.

b. **B1 Category QGI:**

B1 Category QGI	
Examining Authority	2 FTS CAI or CFS Examiner
Award Authority	Comdt CFS delegated to Comdt 2 FTS
Mandatory Requirements	(1) 20 years of age and a current B2 category. (2) Successful completion of a B1 QGI course at CGS. (3) Minimum of 4 x 90-day check flights with an A2 Category Flying Supervisor or A2 Category CAI.
Guidance on Experience Required Prior to Attending B1 Category QGI Course	B2 Category QGIs typically require a minimum of 2 years-experience and 400 instructional launches a B2 Category QGI (including 100 in the 12 months preceding the course) before attempting a B1 course.
On Award of B1 Category QGI May be Authorized to	(1) Deliver GIF courses, and teach GS and AGT exercises, including the associated Ground Lessons. (2) Perform pre-solo check flights on AGT, Ungraded and G2 pilots, including first solo on type for Qualified Fixed Wing (Refer to Annex B to DHO 2101), but excluding GS solo qualifying flights. (3) Fly as Aircraft Commander with QGIs to complete SCT. (4) Carry out the training of Graded and Ungraded pilots, except GIF and GS Ex 2 training. (5) Report and investigate gliding occurrences as directed by 2 FTS ASMT. (6) After attending the GLAC, perform the duties of Duty Authorizer (DA) and Duty Supervisor (DS) (not whilst holding the rank of a FSC). (7) Act as Duty Executive (DE) (Commissioned Officers, NCOs/SNCO Aircrew and selected CGIs only). (8) Hold a VGS Executive post.
Minimum Flying Requirements for ICC Renewal	A minimum of 75 instructional launches (or pro-rata equivalent if the ICC is conducted at less than the 12-month point) since the initial B1 Category QGI award, or last ICC renewal.

Note: VGS OCs who intend to submit candidates for courses with less than the guidance criteria are to ensure CGS are informed before the application is made, and that the candidate is capable and prepared for the course. Consideration must not only be given to the candidate's attendance record, flying ability, airmanship and instructional technique; but also to their maturity, trustworthiness, spare intellectual and airmanship capacity and their general aviation knowledge.

c. **A2 Category QGI:**

A2 Category QGI	
Examining Authority	CFS Examiner
Award Authority	Comdt CFS
Mandatory Requirements	(1) Normally, 24 years of age and a current B1 Category QGI. (2) Positive recommendation by 2 FTS HQ, CGS or CFS. (3) Successful completion of an A2 Category QGI course at CGS, followed by a flying and ground examination by CFS.
Guidance on Experience Required Prior to Attending A2 Category QGI Course	B1 Category QGIs typically require a minimum of 2 years-experience and 600 instructional launches as a B1 Category QGI (including 100 in the 12 months preceding the course) before attempting an A2 course.
On Award of A2 Category QGI May be Authorized to	(1) Perform the duties of a B1 Category QGI. (2) Perform GS first solo check flights. (3) When trained, conduct Post Maintenance Flight Tests and subsequent documentation.
Minimum Flying Requirements for ICC Renewal	A minimum of 75 instructional launches (or pro-rata equivalent if the ICC is conducted at less than the 12-month point) since the initial A2 Category QGI award, or last ICC renewal.

Note: VGS OCs who intend to submit candidates for courses with less than the guidance criteria are to contact CFS before the application is made. Success on an A Category QGI course requires the highest standards of flying and instructional technique.

d. **A1 Category QGI:**

A1 Category QGI	
Examining Authority	CFS Examiner
Award Authority	Comdt CFS
Mandatory Requirements	(1) Current A2 instructor and assessed by HQ CFS as suitable for re-categorisation. (2) Successful completion of an A1 QGI course at CGS, followed by a flying and ground examination by CFS.
Guidance on Experience Required Prior to Attending A1 Category QGI Course	A2 Category QGIs typically require a minimum of 2 years-experience and 500 instructional launches as an A2 Category QGI (including 100 in the 12 months preceding the course) before attempting an A1 course.
On Award of A1 Category QGI May be Authorized to	Perform all the duties of an A2 Category QGI to an exceptional standard. There are no additional privileges, but the successful candidate will have the satisfaction of having achieved the highest possible recognition of their ability as an instructor.
Minimum Flying Requirements for ICC Renewal	A minimum of 75 instructional launches (or pro-rata equivalent if the ICC is conducted at less than the 12-month point) since the initial A1 Category QGI award, or last ICC renewal.

Note: It remains the responsibility of HQ CFS (through OC CFS GE) to recommend A2 Category QGI candidates for A1 courses at CGS. Unit Cdrs are to follow the procedures contained within FTP3225.

e. **Gliding Authorizer:**

Gliding Authorizer	
Training Delivery Authority	CGS
Award Authority	Comdt 2 FTS
Mandatory Requirements	(1) Minimum B1 Category QGI (not an FSC) with 6 months experience as a B1 Category QGI and assessed by Unit Cdr as suitable for the role of Duty Authorizer (DA) and Duty Supervisor (DS). (2) Successful completion of the Gliding Authorizers Course (GLAC).
On Successful Completion of GLAC May be Authorized to	(1) Undertake the role of DA and DS. (2) Authorize flights in 2 FTS aircraft iaw promulgated powers of authorization.
Renewal Requirements	The GLAC qualification must be renewed every 5 years.

Note: Candidates for the GLAC qualification may be accepted with less than the stated requirements, subject to a positive recommendation following a CGS/CFS Standardisation and written dispensation from OC Ops Wg.

f. **VGS Flying Supervisor (Star (*)):**

VGS Flying Supervisor (Star (*))	
Examining Authority	2 FTS CAI or CFS Examiner
Award Authority	Comdt 2 FTS
Mandatory Requirements	(1) Current A Category QGI. (2) VGS established RAFAC Officer or SNCO/CGI who has been recommended for a Commission. (3) Successful completion of the VGS Flying Supervisors Course (FSC) at CGS (both Air Safety training and flying elements).
If Not Appointed as OC, CFI or DCFI on Award of Flying Supervisor May be Authorized to	(1) Carry out the duties of QGI Category held. (2) Conduct 90-day checks on Graded Pilots.
If Appointed as OC, CFI or DCFI on Award of Flying Supervisor May be Authorized to	(1) Carry out the duties of QGI Category held. (2) Conduct tests for the award of Pilot Grades. (3) Conduct tests for the renewals of Certificate of Competencies. (4) Supervise B2 Category QGIs including the checking of competence to instruct on GS air exercises and ground lessons. (5) Check the findings of occurrence investigation reports as directed by 2 ASMT. (6) Conduct GIF courses and GS Ex 2 training with Graded Pilots.
Renewal Requirements	The VGS FSC qualification must be renewed every 5 years.

Note: Candidates for the VGS FSC qualification may be accepted with less than the stated requirements, subject to a positive recommendation following a CGS ICC or CFS Standardisation, and written dispensation from OC Ops Wg.

ANNEX B**VGS SUITABLY QUALIFIED AND EXPERIENCED PERSON (SQEP) DECLARATION**

1. This is to certify that I have agreed to detach to _____ VGS for the period from _____ to _____ inclusive for the purpose of flying with _____ VGS at _____.

2. My details are as follows:

Requirements	Details
Rank:	
Name:	
Service Number:	
Current Pilot Grade/QGI Category:	

3. I have completed the SQEP declaration as follows (Flying Logbook must be taken as evidence):

Requirements	Expiry Date
31 Day Currency:	
90/180-day SCT:	
Flying Ability Test:	
Certificate of Competence:	
Instructional Competence Check:	
CFS Standardisation:	
Annual Medical:	
ECG:	
DBS:	
Human Factors:	
Synthetic Parachute Training:	
Canopy and Abandonment Drills:	
AvMed Training:	
GLAC/VGS FSC:	
MAGCS Provision:	
MAGCS Standardisation:	

4. I have signed the SQEP declaration to confirm the details above are true and correct:

Requirements	Details
Signature:	
Date:	

DHO 2130 – Safety Equipment, Survival Drills and Training

Rationale

All personnel who fly or are flown in Air Systems are subject to a degree of risk. Without the correct safety equipment and survival training personnel will be exposed to increased Risk to Life (RtL). This RA requires Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) to detail in orders the safety equipment and survival training required for all personnel who fly, or are flown in, military registered Air Systems within their Areas of Responsibility (AoR).

Contents

2130(1): Safety and Survival Training and Currency

2130(2): Withdrawn – Content incorporated into DHO 2130(1)

2130(3): Wearing and Carriage of Aircrew Equipment Assemblies and Safety Equipment

2130(4): Safety Harnesses

2130(5): Survival and Rescue Equipment

2130(6): Ejection Seat Anthropometrics

2130(T1): Ejection Seat – Safety Procedures

Duty Holder Order 2130(1)

Safety and Survival Training and Currency

2130(1) On conversion to a new aircraft type all aircrew **shall** complete the appropriate safety and survival drill training as mandated by RA 2130, GASO 2130; and local Flying Orders.

Acceptable Means of Compliance 2130(1)

Safety and Survival Training and Currency

1. **Aircrew.** Aircrew **should** remain familiar with the abandonment drills as per the Flight Reference Cards (FRCs).
2. **Passengers and Trainees.** Training for passengers and trainees **should** be sufficient to ensure successful escape from an aircraft and **should** normally comprise viewing the aircraft Passenger Safety Brief and practical egress training. This training **should** be reinforced as part of the Aircraft Commander's pre-take-off brief. GIF course trainees **should** have their understanding of escape drills prior to launch. Successful completion of training **should** be recorded on the Trainee Safety and Survival Training Certificate at Annex A.
3. **Aircraft Abandonment Training.** Permanent Unit personnel and passengers with standing authority to fly **should** conduct abandonment drills prior to first flight and then every 6 months. Trainees **should** complete abandonment training prior to their first flight. Initial aircrew training **should** involve viewing the aircraft Passenger Safety Brief, followed by training in the egress trainer. Where an egress trainer is not available, the drills can be conducted in the aircraft. This training **should** be carried out wearing full flying equipment and parachutes. The drill **should** be initiated from the fully strapped in position with the canopy closed. Training **should** include physically locating the parachute D-ring and rehearsal of the correct method of pulling the ripcord. Training for ungraded staff **should** be conducted with a QGI. It is not necessary to view the DVD when conducting currency drills.
4. **Canopy Jettison Drill.** Canopy Jettison Drills **should** be completed every 6 months and as part of the Aircraft Abandonment Drill. Emphasis **should** be placed on the need to operate both the normal and emergency canopy release handles before the canopy can be jettisoned fully. Briefings for ungraded staff **should** be conducted with a QGI. It is not necessary to view the DVD when conducting currency drills.
5. **Parachute Pull Test.** Before carrying out gliding training, Cadets **should** be tested using the Parachute Ground Training Appliance (PGTA) to ensure they can pull an 11kg

force using a 2-handed pull. Testing is mandatory but is required on a once-only basis. There is no requirement for additional testing prior to any subsequent gliding.

6. **Equipment.** Where possible, egress trainers **should** be used to practise safety and survival drills.

7. **Trainees.** Safety and Survival training **should** be recorded on the Trainee Safety and Survival Training Certificate (Annex A).

8. **Synthetic Parachute Training (SPT):** SPT **should** be repeated every two years. Where facilities allow, all SPT **should** be supervised by a competent Parachute Training Instructor using appropriate training rigs.

a. **Qualified Aircrew.** **Should** be conducted as soon as possible after establishment onto the Unit, post the award of the AGT and then every 2 years. Where SPT is not available, aircrew **should** view the aircraft Passenger Safety Brief.

b. **Trainees.** Trainees are not required to undergo SPT.

9. **Liferaft/Preserver Drills, Swimming Competence and Lifesaving Training.** 2 FTS aircrew are exempt from conducting life preserver and liferaft drills as detailed at RA 2130.

10. **Personal Equipment Serviceability.** Flying Clothing is serviced on condition; all aircrew **should** therefore conduct routine checks on their own equipment, and report any suspected unserviceabilities to a Survival Equipment Specialist.

Guidance Material 2130(1)

Safety and Survival Training and Currency

11. **PGTA.** The PGTA comprises a wall mounted bracket, to which a spring balance fitted with a parachute D Ring, is attached.

12. **Equipment.** The PGTA equipment consists of:

- a. Wall mounted bracket x 1.
- b. Quick release pin x 1.
- c. Parachute rip cord handle x 1.
- d. Spring balance (0-20kg/0-44 lbs or similar) NSN 6670-99-4673773 (TMEC registered) x 1.
- e. Mounting screws/bolts x 4.

13. **Installation Instructions:**

- a. Mount the wall bracket vertically on a solid surface, with the top adjustment hole 163 cm from floor level using 4 screws/bolts.
- b. Attach the parachute rip-cord handle to the spring balance by placing it into the hook. Close the hook by squeezing it in a bench vice.
- c. Using the quick release pin, attach the spring balance loop, opposite end to the hook, to the top hole of the mounting bracket.
- d. Check security of mounting bracket by exerting a force of 16 kg (34.5 lb). Repeat along the length of the mounting bracket to ensure it is securely mounted.

14. **Instructions for Use:**

- a. Stand the trainee sideways in front of the bracket, with the left shoulder close to the vertical mounting surface and behind the mounting bracket, allowing the spring balance to lie across the chest.
- b. Position the spring balance so that the attachment loop is level with the trainee's shoulder and re-insert the quick release pin.
- c. With the trainee firmly holding the D handle, with both hands and in a downwards and away from the mounting bracket direction, ask the trainee to exert

at least 11 kg force in a safe manner.

d. Record the spring balance force (force to be 11 kg or more).

e. Trainees achieving the limits detailed above are permitted to fly wearing the BMk 72 parachute, providing they satisfy all other fitting criteria.

15. **Abandonment Drills.** Abandonment drills may be carried out using the synthetic egress trainers.

**Duty Holder
Order
2130(2)**

Safety and Survival Training Currency

2130(2) Withdrawn – Content incorporate into DHO 2130(1).

**Acceptable
Means of
Compliance
2130(2)**

Safety and Survival Training Currency

16. Withdrawn – Content incorporated into DHO 2130(1).

**Guidance
Material
2130(2)**

Safety and Survival Training Currency

17. Withdrawn – Content incorporated into DHO 2130(1).

**Duty Holder
Order
2130(3)**

Wearing and Carriage of Aircrew Equipment Assemblies and Safety Equipment

2130(3) Aircraft Commanders **shall** ensure that Aircrew, Supernumerary Crew and passengers wear and carry approved AEA and SE.

**Acceptable
Means of
Compliance
2130(3)**

Wearing and Carriage of Aircrew Equipment Assemblies and Safety Equipment

18. The Aircraft Commander **should** ensure that all aircrew, supernumerary crew and passengers wear AEA appropriate to the type of sortie, duration of sortie and environmental conditions. Additionally, the Aircraft Commander **should** ensure that all aircrew, supernumerary crew and passengers are trained in the use of and are equipped with the appropriate survival equipment.

AEA and SE.

19. **Foul Weather Jackets.** The Blue Geltex Foul Weather Jacket or other Nylon clothing **should not** be worn in the cockpit.

20. **Headgear.** Headsets with boom microphones **should** be worn by all Aerotow Aircraft crews. Protective helmets **should not** be worn in 2 FTS aircraft.

21. **Parachutes.** Parachutes **should** be worn by all occupants of Glider aircraft for all flying. Only the BMk 72 parachute is approved for use in these aircraft.

22. For large or small personnel, the following flight safety considerations **should** apply when parachutes are worn:

a. The wearer's head **should not** be in contact with the closed canopy nor close enough to strike it during ground roll on a rough surface.

b. There **should** be no interference between the seat harness release box and the control column at full deflection.

- c. The wearer **should** be able to reach all controls and switches.
 - d. The wearing of the parachute **should not** impede exit from the aircraft.
 - e. The boarding mass of the wearer without the parachute assembly **should not** be less than 35kg (77lb), due to the parachute suspended weight limits, or greater than 103kg (226.6lb), due to the Viking seat limit.
23. When fitting and using a parachute care **should** be taken with the following points:
- a. The 'D' ring **should** always be treated with respect. If the 'D' ring appears to have been un-stowed the parachute **should** be checked by qualified safety equipment personnel before use.
 - b. The harness **should** be adjusted so that the pack sits high on the wearer's back.
 - c. The cushion pads **should** be in place under the snap hooks and the crotch harness **should** be checked for twists.
 - d. The method of fastening the snap hooks **should** be demonstrated and these **should** be connected before the chest strap.
24. If the parachute is worn while exiting the aircraft on the ground, the pilot **should** avoid making contact with canopy or gel coated areas while unbuckling the harness.
25. Crews **should not** wear parachutes whilst manoeuvring aircraft. Additionally, care **should** be taken to keep metal parachute fittings clear of the gel coat on the wingtip.
26. The Flight Reference Cards contain the emergency drill for abandoning by parachute. Before flight, the Aircraft Commander **should** ensure that the other occupant is familiar with this drill, especially the method of jettisoning the canopy.
27. If time permits, the Aircraft Commander **should** issue the warning "**PREPARE TO ABANDON AIRCRAFT BY PARACHUTE**". The executive command to leave the aircraft is the words "**JUMP, JUMP**"; the canopy **should not** normally be jettisoned or seat harness undone until this command is given.
28. A pre-flight check of understanding of this drill, with the trainee or passenger pointing to the appropriate equipment, **should** be part of the pre-flight briefing.
29. The Aircraft Commander **should** ensure the serviceability of both their own parachute and that used by the trainee/passenger. The DS has overall responsibility for the care and handling of parachutes being used.
30. **Aircrew Emergency Cutter.** Aircrew **should** have an Aircrew Emergency Cutter attached to their flying clothing/AEA; if this is not possible, one **should** be stowed in a thigh or leg pocket.
31. **Mobile Phones.** Aircrew are encouraged to carry mobile phones, which **should** be switched off, or set to Flight Safe Mode, during flight, and stowed securely.

Guidance
Material
2130(3)

Wearing and Carriage of Aircrew Equipment Assemblies and Safety Equipment

32. Nil.

Duty Holder
Order
2130(4)

Safety Harnesses

- 2130(4) All occupants of 2 FTS Aircraft **shall** be suitably restrained in all phases of flight.

Acceptable Means of Compliance 2130(4)	Safety Harnesses 33. The safety harness should be worn at all times when flying in 2 FTS aircraft. Instructors should ensure that trainees are familiar with harness operation and that the harness is correctly fitted over the shoulder straps of the parachute.
Guidance Material 2130(4)	Safety Harnesses 34. Nil.
Duty Holder Order 2130(5)	Survival and Rescue Equipment 2130(5) Survival and rescue equipment of the appropriate type and scale shall be carried for all occupants of 2 FTS Aircraft.
Acceptable Means of Compliance 2130(5)	Survival and Rescue Equipment 35. Nil in addition to GASO 2130(5).
Guidance Material 2130(5)	Survival and Rescue Equipment 36. Nil.
Duty Holder Order 2130(6)	Ejection Seat Anthropometrics 2130(6) All personnel for whom ejection seats are provided shall be checked for size and weight to ensure that they fit within the seat design parameters. Aircrew shall ensure that they remain within the promulgated limits.
Acceptable Means of Compliance 2130(6)	Ejection Seat Anthropometrics 37. N/A in 2 FTS aircraft.
Guidance Material 2130(6)	Ejection Seat Anthropometrics 38. N/A.
Duty Holder Order 2130(T1)	Ejection Seat – Safety Procedures 2130(T1) All personnel using ejection seat-equipped aircraft shall ensure that appropriate safety precautions are observed.

**Acceptable
Means of
Compliance
2130(T1)**

Ejection Seat – Safety Procedures

39. N/A in 2 FTS aircraft.

**Guidance
Material
2130(T1)**

Ejection Seat – Safety Procedures

40. N/A.

ANNEX A

TRAINEE SAFETY AND SURVIVAL TRAINING CERTIFICATE

1. **Applicability.** Safety and Survival training **should** be completed before the commencement of any flying/gliding training:

Trainee Safety and Survival Training Certificate		
Rank/Name:		Unit:
This certificate details the Safety and Survival training that has been completed:		
Date	Activity	Signature

2. Typical (but not definitive) Safety and Survival training activities to be recorded are as follows:
- Health & Safety brief.
 - Aircraft type passenger brief.
 - Airfield Discipline.
 - Parachute D Ring Pull Test.
 - Abandonment Drills.

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DHO 2135 – Aircrew Medical Requirements

Rationale *Operating Air Systems is both physically and mentally demanding. Without the correct level of fitness and aviation medicine training Aircrew will place themselves, the Air System and the public at increased risk. This Regulatory Article (RA) directs Aircrew to maintain the required level of fitness-to-fly and attend appropriate aviation medicine training.*

Contents

- 2135(1): Aircrew Medical Employment Standard
- 2135(2): Fitness-to-Fly
- 2135(3): Pilot Operations – Upper Age Limit
- 2135(4): Flying After an Accident or In-Flight Medical Incident
- 2135(5): Aviation Medicine Training
- 2135(6): High G Training
- 2135(7): Temporary Medical Restrictions to Flying Duties

Duty Holder Order
2135(1)

Aircrew Medical Employment Standard

2135(1) All 2 FTS aircrew **shall** hold an appropriate and valid Joint Medical Employment Standard (JMES), or **shall** be assessed as Fit Gliding Instructor Duties.

Acceptable Means of Compliance
2135(1)

Aircrew Medical Employment Standard

1. **Policy.** Individual aircrew **should** be responsible for ensuring that their medical certificate remains valid. Aircrew **should not** fly as a member of the crew without a valid medical certificate. The certificate of medical fitness is valid until the last day of the month in which the next annual aircrew medical is due.
2. The details contained within DHO 2135 are added for guidance and personnel **should** note that formal policy will be derived from AP1269A and the Command Flight Medical Officer (CFMO).
3. **Before Appointment:**
 - a. An initial medical examination **should** be performed by a Military Aviation Medical Examiner (MAME) at the parent medical centre and recorded on F Med 144.
 - b. The F Med 144 **should** be sent to R&SDOM Medical Board for confirmation of fitness and, on its return, the outcome or Joint Medical Employment Standard (JMES) recorded in the logbook of the instructor.
 - c. Either a Joint Medical Employment Standard (JMES) iaw AP1269A, or medically assessed as “Fit Glider Instructor Duties” **should** be the minimum requirements for flying in 2 FTS aircraft. Colour Perception 4 (CP4) is acceptable, but these instructors **should** be excluded from carrying out any cross country duties. Notwithstanding this, 2 FTS CAI or CFS Examiners **should** have a minimum standard of CP3.
 - d. As a temporary measure, until an initial medical examination can be performed by a Military Aviation Medical Examiner (MAME), U/T instructors up to the award of Grade 1 may fly dual (ie with an instructor) or solo provided that they have either:
 - (1) A valid cadet medical F6424.
 - (2) Minimum UK NPPL or EASA LAPL medical certificate.
4. **Periodic Medical Examination (PME).** A PME **should** be performed by the parent

medical centre or other MAME. The findings **should** be recorded in the individuals flying logbook (RAF F6748 or RAF F414). In the event that the logbook cannot be signed by the MAME, due to outstanding results or checks, the individual **should** be issued with an F Med 566 to indicate the individual's fitness to continue flying or otherwise. If the instructor is not under full-time healthcare by Defence Primary Healthcare (DPHC) Services, a completed GP Aircrew Medical Attendant's Report (MAR) and Aircrew Statement of Health (SoH) **should** be provided by the individual to the medical centre or MAME performing the PME. Personnel whose clothed weight exceeds 103kgs **should not** be declared medically fit for flying duties. The Unit Cdr **should** ensure that the findings are recorded in the individuals flying logbook.

5. **Medical Waivers.** The regulations governing the issue of a medical waiver are:

a. The Initial Medical Board may be waived if:

- (1) The individual has been passed fit within the appropriate limitations of an Air Land Marine Environment (ALME) medical flying category by a medical board during the previous 12 months, or
- (2) The individual has a current ALME Service aircrew JMES (and has been cleared to fly solo), or
- (3) For VGS Pilots under 60 years of age, the Initial Medical Board may be waived if the individual has a certificate of medical fitness for an EASA Class 1 pilot's licence. In this case, a completed GP MAR, SoH, a copy of the medical certificate, a copy of any page of the licence stating any permanent medical limitation and a record of blood tests performed (if required) **should** be sent to R&SDOM Medical Boards. For aircrew aged 60 and over, additional screening tests may be required. For these individuals, the waiver is subject to President R&SDOM approval.

b. The PME may be waived by the CFMO if:

- (1) The individual has been passed fit within the appropriate limitations of an ALME medical flying category by a PME during the previous 12 months or
- (2) The individual has a current ALME Service aircrew JMES (and has been cleared to fly solo), or
- (3) The individual has a current certificate of medical fitness for an EASA Class 1 pilot's licence. If this waiver is required, and the individual is under 60 years of age, a completed GP MAR, SoH, a copy of the medical certificate, a copy of any page of the licence stating a permanent medical limitation and a record of blood tests performed (if required) **should** be presented to the individuals MAME who **should** sign the pilot's logbook. For individuals aged 60 or over, these records **should** be forwarded to CFMO. If satisfied that a waiver can be given, he **should** inform the unit executive accordingly.
- (4) Notwithstanding that an EASA medical may last for more than one year, every instructor **should** be required to undergo a medical examination annually

6. **Validity.** Waivers are valid for a period of one year even if the EASA medical certificate needs to be renewed every 6 months for the type of civilian flying being undertaken.

7. **Cadets on Course and Flight Staff Cadets.** Cadets on a training course and Flight Staff Cadets **should** utilise a F6424 (Air Cadet Medical Certificate of Fitness for Glider Pilot Training) for flying up to and including the award of G2 only. For any further flying, ie G1 and above the requirements of this order **should** be met in full.

8. **Anthropometric Limits.** There is no anthropometric data for 2 FTS aircraft. law AP1269A¹, aircrew, trainees and passengers that fly 2 FTS aircraft **should** be checked by a pilot qualified on type (minimum G1), and recorded in their SRF or training folder, to ensure that:

¹ Leaflet 4-05, Annex B: RAF Anthropometric Limits.

- a. They can abandon the aircraft in an emergency.
- b. They do not impinge flying control movement or other aircraft system or structure while seated.
- c. They can move the controls to their full extent and reach all necessary controls in the cockpit.

9. **Enhanced Cardiovascular Screening (ECG).** 2 FTS HQ, CGS and CFS Aircrew **should** consult AP1269A for ECG periodicity. VGS Aircrew are required to undergo ECG investigation as follows:

- a. On appointment.
- b. Aged 40-49 years – 2 yearly.
- c. Aged 50 years and over – annually.

10. **Ground Duties.** 2 FTS personnel that are unfit for flying duties, may be utilised in any ground duties, ie winch operator/MT driving duties etc; however, the individual **should** be in possession of a UK DVLA driving licence, and **should** declare themselves medically fit to undertake the duty. Additionally, personnel undertaking the role of Duty Supervisor, **should** undergo a competency check by a Flying Supervisor, every 6 months.

**Guidance
Material
2135(1)**

Aircrew Medical Employment Standard

- 11. **R&SDOM Medical Board.** R&SDOM Medical Board, Adastral Hall, PO Box 1000, RAF College Cranwell, Sleaford, Lincs, NG34 8GZ.
- 12. **Command Flight Medical Officer (CFMO).** RAF Centre of Aviation Medicine, RAF Henlow, Beds, SG16 6DN.
- 13. AP1269A – RAF Manual of Medical Fitness.

**Duty Holder
Order
2135(2)**

Fitness-to-Fly

2135(2) Aircrew and Supernumerary Crew uncertain of their fitness-to-fly **shall** report to a MAME or a Medical Practitioner before flying.

**Acceptable
Means of
Compliance
2135(2)**

Fitness-to-Fly

14. **Inspection of Record of Service Book/F3822/F6424.** The Flying Authorizer **should** ensure that, the Record of Service Book, F3822, CCF RAF Form 7537D, Av-Med forms or F6424 of all cadets reporting for pilot training are inspected for any restrictions that may have been imposed. If there are any adverse comments on the F6424 the matter **should** be referred to 2 FTS Bus & Cmrcl for resolution with the CFMO (RAF).

15. Disability:

- a. If, in the opinion of the Flying Authorizer, anyone, either as a trainee or passenger, has a condition or disability which could affect the handling of the controls or give rise to a flight safety hazard, they **should not** be permitted to fly unless a certificate of fitness has been authorized by a MAME.
- b. Certain conditions such as undue nervousness or an abnormal sensitivity to a feeling of reduced weight may become apparent only in the air. If such a condition persists with a trainee undergoing pilot training, their instructor **should** refer the matter to the Unit Cdr or CFI for a ruling as to whether or not training continues. If the problem appears to be of a permanent nature, the Unit Cdr or CFI **should** make an entry (Certificate of Fitness to Undergo Glider Pilot Training) in the Cadet's RAF Form 3822 or Record of Service Book "Not eligible to undergo pilot training unless authorized by 2 FTS HQ" with their signature and date.

16. **Nutrition and Sustenance.** Flying hungry or dehydrated could constitute a potential Air Safety risk; consequently, prior to any flying, cadets **should** follow normal dietary

habits and **should** commence a flight hydrated and with sufficient energy reserves to enjoy the experience. Cadets **should** have breakfast if they normally have it and **should** continue to eat and drink normally until approximately one hour before flight.

Pilots with a Restricted JMES or Medical Certificate

17. QGIs with a restricted JMES or Medical Certificate, where they must only fly with another qualified pilot on type, **should** only fly with a minimum of a G2 who does not have a restricted medial and is under the age of 65. The sortie content **should** be within the other pilot's limits and qualifications.

Guidance
Material
2135(2)

Fitness-to-Fly

18. A per DHO 2135(1) Guidance Material.

Duty Holder
Order
2135(3)

Pilot Operations – Upper Age Limit

2135(3) Pilots **shall not** operate an aircraft once they attain the age of 65 unless the aircraft is fitted with dual controls and is operated with a second pilot who has not yet attained the age of 65. Furthermore, the second pilot **shall** hold an appropriate qualification and JMES to act as pilot in command.

Acceptable
Means of
Compliance
2135(3)

Pilot Operations – Upper Age Limit

19. The second pilot **should** be a minimum of a G2. Additionally, the second pilot **should not** have any medical restrictions affecting their ability to fly solo and **should** be less than 65 years of age.

Guidance
Material
2135(3)

Pilot Operations – Upper Age Limit

20. Nil.

Duty Holder
Order
2135(4)

Flying After an Accident or In-Flight Medical Incident

2135(4) After being involved in a flying accident or an in-flight Medical incident, Aircrew and Supernumerary Crew **shall not** operate an aircraft without appropriate Medical approval.

Acceptable
Means of
Compliance
2135(4)

Flying After an Accident or In-Flight Medical Incident

21. The Unit Cdr **should** ensure that the requirements of RA 2135(5) are fulfilled.

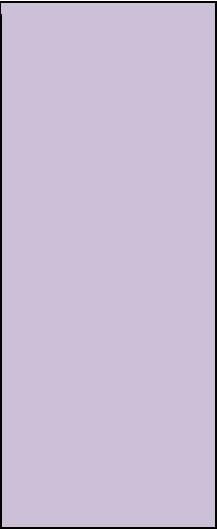
Guidance
Material
2135(4)

Flying After an Accident or In-Flight Medical Incident

22. AP 1269 Leaflet 12-06 lists in-flight Medical incidents and provides guidance.

23. AP 1269A Leaflet 4-02 Annex I – The Management of Aircrew and Others Following an Aircraft Accident or Incident.

Duty Holder Order 2135(5)	Aviation Medicine Training <p>2135(5) All Aircrew shall complete an initial course of aviation medicine training prior to the award of G2. All Aircrew engaged on flying duties shall receive appropriate refresher aviation medicine training.</p>
Acceptable Means of Compliance 2135(5)	Aviation Medicine Training <p>24. Initial Aviation Medicine (AvMed) Training. 2 FTS HQ, CGS and CFS aircrew should attend the Tutor/VGS AvMed Training Course at RAFCAM. VGS aircrew should complete the RAFCAM VGS distance learning AvMed Training prior to the award of G2.</p> <p>25. Refresher AvMed Training. All AvMed training should be refreshed no later than 5 yearly periods using the same criteria detailed within para 24.</p>
Guidance Material 2135(5)	Aviation Medicine Training <p>26. STANAG 3114.</p>
Duty Holder Order 2135(6)	High G Training <p>2135(6) All Aircrew whose employment exposes them to High G environments shall successfully complete High G training.</p>
Acceptable Means of Compliance 2135(6)	High G Training <p>27. N/A in 2 FTS aircraft due to the aircrafts authorized G limitations.</p>
Guidance Material 2135(6)	High G Training <p>28. Nil.</p>
Duty Holder Order 2135(7)	Temporary Medical Restrictions to Flying Duties <p>2135(7) Aircrew and Supernumerary Crew shall comply with any restrictions placed upon them following exposure to conditions affecting their fitness to fly.</p>
Acceptable Means of Compliance 2135(7)	Temporary Medical Restrictions to Flying Duties <p>29. Unit Cdrs should ensure that all aircrew and Supernumerary Crew within their AoR comply with the temporary medical restrictions that may be placed upon them by a MAME in accordance with the requirements of RA 2135(6).</p> <p>30. Temporary unfitness:</p> <p>a. A member of staff who suffers any illness or injury or requires any medical treatment from a doctor should report the fact to their Unit Cdr. The Cdr should withdraw permission for the person to undertake flying duties or any squadron duty that may be affected by the ailment, medical treatment or medication until they:</p>

- 
- (1) Provide, at their own expense, a report from their general practitioner certifying complete recovery, and fitness for resumption of those flying duties affected, or
 - (2) Have completed the course of medication, or
 - (3) Is passed fit for flying by a MAME.

b. Personnel **should not** fly within 48 hours of medical treatment unless cleared by a MAME.

c. **Resuming Flying.** Resumption of flying duties will depend upon the medical condition that initiated the restriction. For minor ailments where a course of drugs has been prescribed, flying **should** only be resumed after the course of drugs has been completed and the symptoms have ceased, or in consultation with and clearance by a MAME. Where significant travel would be involved, the MAME **should** first be contacted by telephone to ascertain whether attendance in person is necessary.

**Guidance
Material
2135(7)**

Temporary Medical Restrictions to Flying Duties

31. Nil.

DHO 2201 – Carriage of Maintenance Documents in UK Military Aircraft

Rationale

Maintenance documents provide an audit trail of maintenance activities that have been carried out on military registered Air Systems. Loss of the information contained in these documents could jeopardize the Continuing Airworthiness of an Air System and increase Risk to Life as a consequence. This Regulation details the processes that are to be applied to maintain the protection of these documents when an Air System is deployed away from its parent Station, Ship or Unit, and ensures that they are available for quality assurance, data exploitation and investigations.

Contents

2201(1): Documents to be Carried

Duty Holder Order 2201(1)

Documents to be Carried

2201(1) When an Aircraft is planned to land away from the parent Station/Unit, appropriate maintenance documents and publications **shall** be carried in the Aircraft.

Acceptable Means of Compliance 2201(1)

Documents to be Carried

1. For transit or delivery flights GMS and OC Eng Wg **should** be consulted on the appropriate documents to be carried. Documents with live or open signatures **should not** be carried.

Guidance Material 2201(1)

Documents to be Carried

2. The expression 'UK Military Aircraft' also refers to civil aircraft operated under military flying regulations.

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DHO 2211 – Authorization of Aircrew to Carry Out Maintenance Tasks

Rationale

Aircrew may be required to conduct flight servicing to improve flexibility of use of Air Systems. Airworthiness will be compromised if this activity is conducted by inappropriately authorized personnel, therefore Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) are to ensure that Aircrew are appropriately trained and assessed as competent in order to be authorized for such activities.

Contents

2211(1): Authorization of Aircrew to Carry Out Flight Servicing

2211(2): Authorization of Aircrew to Carry Out Aircraft Maintenance Work

2211(3): In-Flight Corrective Maintenance

2211(4): Training of Aircrew to Enter a Cockpit Containing Aircraft Assisted Escape Systems (AAES)

Duty Holder Order 2211(1)

Authorization of Aircrew to Carry Out Flight Servicing

2211(1) Aircrew required to carry out Flight Servicing **shall** be authorized and competent.

Acceptable Means of Compliance 2211(1)

Authorization of Aircrew to Carry Out Flight Servicing

1. OC Eng Wg **should** define through 2 FTS AESOs what flight servicing activities can be undertaken by aircrew.

Guidance Material 2211(1)

Authorization of Aircrew to Carry Out Flight Servicing

2. 2 FTS AESOs.

Duty Holder Order 2211(2)

Authorization of Aircrew to Carry Out Aircraft Maintenance Work

2211(2) Aircrew required to carry out a specific range of preventative and corrective maintenance activities pertinent to the type/mark of aircraft or aircraft equipment on which they are qualified to fly **shall** be authorized and competent.

Acceptable Means of Compliance 2211(2)

Authorization of Aircrew to Carry Out Aircraft Maintenance Work

3. OC Eng Wg **should** define through 2 FTS AESOs what maintenance activities can be undertaken by aircrew.

Guidance Material 2211(2)

Authorization of Aircrew to Carry Out Aircraft Maintenance Work

4. 2 FTS AESOs.

Duty Holder Order 2211(3)	In-Flight Corrective Maintenance 2211(3) In-Flight corrective maintenance shall only be carried out at the specific request of the Aircraft Commander and shall be limited in scope.
Acceptable Means of Compliance 2211(3)	In-Flight Corrective Maintenance 5. N/A in 2 FTS aircraft.
Guidance Material 2211(3)	In-Flight Corrective Maintenance 6. Nil.
Duty Holder Order 2211(4)	Training of Aircrew to Enter a Cockpit Containing Aircraft Assisted Escape Systems (AAES) 2211(4) Aircrew who require access to a cockpit containing AAES shall be appropriately trained.
Acceptable Means of Compliance 2211(4)	Training of Aircrew to Enter a Cockpit Containing Aircraft Assisted Escape Systems (AAES) 7. N/A in 2 FTS aircraft.
Guidance Material 2211(4)	Training of Aircrew to Enter a Cockpit Containing Aircraft Assisted Escape Systems (AAES) 8. Nil.

DHO 2220 – Maintenance Test Flights

Rationale

Flight Tests are conducted to confirm the performance, mission effectiveness or handling qualities and to perform diagnostic analysis of an Air System following maintenance. Before the Air System is confirmed as serviceable there is an increased Risk to Life and therefore the conduct of a Flight Test requires specific competency and authorization.

Contents

2220(1): The Flight Test Schedule

2220(2): Aircrew Competency and Authorization for Flight Tests

Duty Holder Order

2220(1)

The Flight Test Schedule

2220(1) Flight testing **shall** be carried out in accordance with the Flight Test Schedule (FTS).

Acceptable Means of Compliance

2220(1)

The Flight Test Schedule

1. Unit Cdrs **should** ensure that both Maintenance Test Flights (MTF) and Partial Test Flights (PTF) are conducted in accordance with the FTS and the requirements of RA 2220(1).

Guidance Material

2220(1)

The Flight Test Schedule

2. MAM-P – Manual of Airworthiness Maintenance – Processes – Chapter 3.1.

Duty Holder Order

2220(2)

Aircrew Competency and Authorization for Flight Tests

2220(2) Unit Cdrs **shall** nominate suitably qualified pilots, publish SQEP requirements and maintain a record of all SQEP pilots who are authorized to conduct MTF/PTF in accordance with the requirements of RA 2220(2).

Acceptable Means of Compliance

2220(2)

Aircrew Competency and Authorization for Flight Tests

Aircrew Authorization for MTF/PTF

3. **Nomination of SQEP Pilots for Flight Test Pilots (FTP) Duties.** Unit Cdrs **should** nominate suitably qualified pilots to undertake MTF/PTF. Only nominated UTP and Flight Test Pilots **should** fly MTF/PTF.

Training and Currency

4. **FTP Qualifications.** In order to qualify as a FTP, pilots **should** be a minimum of an A Category QGI on the aircraft type which requires the MTF/PTF, and complete the FTP course at CGS. This qualification is not subject to currency requirements.

5. **FTP Training.** Pilots **should** be trained and briefed on their duties before engaging in flight test duties. In addition, they **should** undertake at least one full test profile with a current and flight test qualified instructor before being authorized to undertake flight tests as Aircraft Commander. The Flight Test qualification **should** be recorded in sect 4 of the pilots Flying Logbook.

Supervision and Conduct of MTF/PTF

6. An aircraft **should** be flight tested whenever it is necessary to confirm that the in-

flight performance or handling of the aircraft and its systems meets normal operating requirements. Flight tests to the full flight test schedule **should** be undertaken in good daylight conditions and **should not** be combined with any other flying. Flight tests flown to selected parts of the flight test schedule may be combined with other flying at the discretion of the authorizing officer. The flight test report form **should** be completed during, or immediately after, the flight. The Aircraft Commander **should** inform engineering personnel of any unsatisfactory features or trends in performance or handling.

7. **Passengers.** Except for an appropriately trained engineer or permanent staff member acting as observer, passengers **should not** be permitted on flights when any element of MTF/PTF is being conducted.

**Guidance
Material
2220(2)**

Aircrew Competency and Authorization for Flight Tests

Definition of MTF/PTF

8. **MTF.** A MTF is conducted to confirm the performance and serviceability of an aircraft and will encompass the full FTS.

9. **PTF.** A PTF is conducted to confirm the performance and serviceability of an aircraft related to specific maintenance activity. The content of the PTF will involve selected elements of the FTS as required.

DHO 2301 – Responsibility for an Air System

Rationale

Responsibility for an Air System is transferred between the Continuing Airworthiness Management Organisation and the Aircrew when flying operations take place. A failure to correctly record this process could result in a breakdown in maintenance activity and increase Risk to Life. Therefore it is necessary to record the transfer of custody and responsibility of an Air System when it is released to and from flying operations, or has a flying requirement or taxi check raised post maintenance, to ensure that an auditable record exists.

Contents

2301(1): Transfer of Custody of Aircraft

2301(2): Flying Requirements Post Maintenance

2301(3): Aircraft Acceptance Checks

2301(4): Exceeding Parameters and Hazardous Incidents

Duty Holder Order

2301(1)

Transfer of Custody of Aircraft

- 2301(1) Custody of, and responsibility for, an aircraft **shall** transfer to the Aircraft Commander from the time the acceptance certificate is signed until the after-flight declaration is completed.

Acceptable Means of Compliance

2301(1)

Transfer of Custody of Aircraft

1. An Aircraft Commander **should** sign the acceptance certificate and accept responsibility for the Air System before taxi (in the case of powered aircraft) or tow out (in the case of gliders).

Guidance Material

2301(1)

Transfer of Custody of Aircraft

2. Nil.

Duty Holder Order

2301(2)

Flying Requirements Post Maintenance

- 2301(2) The Aircraft Commander **shall** familiarise themselves with any flying requirements or taxi checks raised as a result of maintenance conducted prior to flight.

Acceptable Means of Compliance

2301(2)

Flying Requirements Post Maintenance

3. **Airborne Check (AC).** Occasions will arise when a functional check of a system, sub-system or component is required that cannot be satisfactorily tested on the ground by engineering personnel or does not require a full Maintenance Test Flight (MTF) or Partial Test Flight (PTF). Any A or B1 Category QGI may conduct an AC, which must be properly recorded on the authorization sheet.
4. **Taxi Check (TC).** A TC is an engineering requirement not covered by the FTS. Any Aerotow Pilot, current on type, may be authorized to conduct a TC which must be properly recorded on the authorization sheet.
5. **Engine Ground Run (EGR).** EGRs must be conducted in accordance with the Defence Aerodrome Manual and 2 FTS AESOs.

**Guidance
Material
2301(2)****Flying Requirements Post Maintenance**

6. The term Airborne Check refers to any check other than a formal MTF or PTF.
7. RA 2220.

**Duty Holder
Order
2301(3)****Aircraft Acceptance Checks**

- 2301(3) The Aircraft Commander **shall** ensure that all necessary acceptance checks (walk-round) are carried out before flight.

**Acceptable
Means of
Compliance
2301(3)****Aircraft Acceptance Checks**

8. Nil in addition to GASO 2301(3).

**Guidance
Material
2301(3)****Aircraft Acceptance Checks**

9. Nil.

**Duty Holder
Order
2301(4)****Exceeding Parameters and Hazardous Incidents**

- 2301(4) The Aircraft Commander **shall** inform the responsible maintenance organisation when an aircraft in their custody has been exposed to an event that might adversely affect its serviceability.

**Acceptable
Means of
Compliance
2301(4)****Exceeding Parameters and Hazardous Incidents**

10. Nil in addition to GASO 2301(4).

**Guidance
Material
2301(4)****Exceeding Parameters and Hazardous Incidents**

11. RA 2301(4) GM provides examples of 'events' that might be considered as adversely affecting an aircraft's serviceability.

DHO 2302 – Responsibilities in the Air

Rationale

Flying operations are inherently hazardous and the associated Risk to Life must be reduced to a level that is deemed As Low As Reasonably Practicable and Tolerable. To achieve this Aircrew must be accountable when conducting flying operations and this Regulation prescribes the regulations, orders, instructions and law that are to be observed.

Contents

2302(1): Responsibilities in the Air

Duty Holder Order 2302(1)

Responsibilities in the Air

2302(1) All Aircrew **shall** ensure that the mission, sortie or task, for which they have been Authorized, is executed in a manner that minimizes the risk and hazards to the aircraft, its occupants, ground crew, other airspace users or general public over which such aircraft are flown.

Acceptable Means of Compliance 2302(1)

Responsibilities in the Air

1. **Aircraft Commander.** The Aircraft Commander is defined as the aircrew member authorized to be in overall charge of, and responsible for, a particular flight. The Aircraft Commander of a crew comprising more than one pilot **should** be responsible for the safety of the aircraft regardless of the experience of the other pilot. A QGI when carrying out instructional duties **should** be the Aircraft Commander. The Aircraft Commander **should** be responsible for initiating any handovers of control of the aircraft.
2. **Change of Aircraft Commander.** Changes to Aircraft Commander **should** be carried out on the ground and, except for an ab-initio trainee pilot's first solo on type, **should** be authorized in advance.
3. **Aircraft Handling below 500ft AGL.** Only Aircrew Instructors (AIs) or ACOs **should** allow passengers, trainees or second crew, to control the aircraft below 500ft AGL.
4. **Authorized Sortie Content.** Aircraft Commanders **should** only conduct those manoeuvres and procedures described in the authorization sheet duty column. Aircraft Commanders, including self-authorizing Aircraft Commanders, **should not** conduct manoeuvres or procedures not included in pre-flight authorization unless contact has been made with the Authorizing Officer and such additional manoeuvres and procedures have been added to the authorization sheets. If the Authorizing Officer has changed, a subsequent Authorizer cannot amend an existing entry. Self-authorizing Aircraft Commanders may alter the sortie content; however, the DS **should** be informed and the sortie alteration **should** be noted in the DSs Watch Log. The authorization sheet **should** be annotated accordingly post flight.
5. **Seating.** The primary seat is the left hand seat in the Robin or the front seat in the Viking.
6. **Non-handling Pilots.** Non-handling pilots are responsible for tasks as briefed by the Aircraft Commander. These may include:
 - a. Monitoring FRC checks and drills, initiating and executing such drills when required.
 - b. Operating and monitoring aircraft equipment and services in a safe and efficient manner.
7. **Safety.** Aircrew occupying a cockpit seat **should** contribute to the safety of the aircraft by maintaining a lookout and/or monitoring the instruments. If at any time a crewmember considers that the safety of the aircraft or any other aircraft is or is likely to be jeopardised, they **should** advise the Aircraft Commander accordingly and, if necessary, offer specific guidance to avoid the hazardous situation.
8. **General Responsibilities.** The Aircraft Commander **should** carry out the sortie as

briefed. In addition, the Aircraft Commander **should** ensure that:

- a. The flight can be safely undertaken, taking into account the latest information relating to the exercise to be flown, including weather reports, meteorological forecasts, airfield information and diversion options.
 - b. The sortie is executed in a manner that minimizes the hazards to the aircraft, its occupants and equipment.
 - c. All personnel are free of potential loose articles before entering the aircraft.
 - d. The communication and airfield facilities at the place of departure, at the proposed destination, diversions and enroute are adequate to complete the sortie as planned.
 - e. The aircraft has the appropriate equipment for the flight (or permission granted otherwise).
 - f. Sufficient flight planning has been carried out to execute the sortie safely.
 - g. The aircraft is fit for the flight.
 - h. The load of the aircraft is within weight limits, and that it is distributed and secured safely.
 - i. If applicable, sufficient fuel and oil are carried, with a suitable margin for contingencies.
 - j. With regard to the performance of the aircraft in the expected conditions, the aircraft can safely take-off and reach a safe height, taking into account any obstructions, and make a safe landing at the destination.
9. Pre-flight checks have been complied with. Where the aircraft is being flown dual, the Aircraft Commander may delegate part or all of the pre-flight external checks to a second pilot qualified on type; although ultimate responsibility remains with the Aircraft Commander at all times.

**Guidance
Material
2302(1)**

Responsibilities in the Air

10. Nil.

DHO 2305 – Supervision of Flying

Rationale

Across the Defence Air Environment, effective leadership is key to promulgating an active, effective Air Safety ethos. Without Commanders being personally accountable, Air Safety will be compromised. This Regulatory Article requires the Regulated Community to appoint named personnel to supervise flying operations, in order to provide the appropriate level of personal accountability.

Contents

- 2305(1): Supervision of Flying
- 2305(2): Embarked Aviation Operations
- 2305(3): Aircraft Limitations
- 2305(4): Withdrawn – Covered by the Armed Forces Act
- 2305(5): Aircrew Briefing
- 2305(6): Air Exercise Planning and Airspace Integration
- 2305(7): Taxiing of Aircraft
- 2305(T1): Supervision of Cadets
- 2305(T2): Alcohol, Drugs and Flying – Guidance Only

Duty Holder Order

2305(1)

Supervision of Flying

- 2305(1) Unit Cdrs **shall** appoint officers to supervise the flying operations for which they are responsible and promulgate appropriate orders detailing their duties.

Acceptable Means of Compliance

2305(1)

Supervision of Flying

1. **Local Flying Orders.** Where 2 FTS are HoE of a particular airfield, OC Ops Wg in the capacity as Aerodrome Operator, **should** issue Sections to the Flying Order Book (FOB) as appropriate. Where 2 FTS Units are lodger Units, they **should** comply with the FOB of the HoE in question. In this case, Unit Cdrs **should** issue local Flying Orders as Section D to the FOB; however, the Aerodrome Operator of that airfield **should** be consulted to ascertain the appropriate location for Unit Flying Orders. Additionally, local Section D Orders **should** be staffed through to the CGS Liaison Officer, to OC Ops Wg, for approval.
2. **Flying Priority.** At VGS, flying **should** be allocated in the following priority order:
 - a. Mandatory SCT in order for pilots to remain current, ie 31-day, 90-day checks etc.
 - b. GIF.
 - c. GS.
 - d. Any other SCT and flying, including AGT.
3. **Supervisory Roles and Responsibilities.** Personnel appointed to supervisory or executive posts **should** be suitably competent and qualified. Unit Cdrs **should** ensure that appropriate flying supervision is provided to cover flying training requirements. The following roles **should** be in place for 2 FTS operations:
 - a. **Unit Cdr.** The Unit Cdr is responsible to Comdt 2 FTS, for the delivery of the flying task and the day-to-day management and operation of the Unit. For VGS this **should** be through OC Spt Wg; for CGS this **should** be through OC Ops Wg. The Unit Cdr is the authority for the appointment and supervision of all personnel within their area of command. VGS Unit Cdrs **should** be Star (*) (VGS FSC) qualified within 6 months of taking post.

b. **VGS Chief Flying Instructor (CFI).** Within VGS, the CFI is responsible to the VGS OC for the maintenance of standards of instruction and flying ability on the Unit. In part, this **should** be achieved by 90-day checks of graded pilots and B2 Category QGIs, but Unit Cdrs and CFIs **should** endeavour to build up and maintain a personal knowledge of the flying and instructional ability of all pilots. The CFI **should** hold a Star (*) (VGS FSC) qualification.

c. **VGS Duty Executive (DE).** At VGS, the DE **should** be the OCs representative and provides overall oversight of the VGS and flying operation, whilst the VGS is active. When on duty the VGS OC **should** act as the DE. When the OC is not on duty, an established officer of the VGS staff **should** act as the DE. Where no established officer is available a part time or supernumerary officer may be nominated. Exceptionally and where no commissioned officer is available for this duty, the DE responsibilities may be undertaken by a SQEP SNCO (Aircrew) or CGI. The DE **should** be a minimum of a B1 Category QGI who has successfully completed the Gliding Authorizers Course (GLAC). The role of DE **should not** be undertaken concurrently with the role of Duty Supervisor (DS), and these roles **should** be two separate individuals. If the VGS OC undertakes the DS role, then the DE role **should** be passed to another SQEP individual. If the DE completes a flying task, the DS **should** undertake their Aircraft Post-Crash Management (APCM) responsibilities whilst they are flying; however, flying tasks **should** be kept to an absolute minimum, or full DE responsibilities passed to another SQEP individual. Unit APCM plans **should** detail site specific processes to be followed. Exceptionally, and under unique circumstances, a VGS DE may also concurrently act as the DS; however, this **should** only take place when specifically approved by OC Ops Wg, who **should** be consulted on the requirement.

d. **CGS Duty Executive (DE).** During CGS operations a DE **should** be appointed to act as RAF Syerston OC Flying. Approval and SQEP criteria to act as DE **should** be granted by OC Ops Wg. The role of DE **should not** be undertaken concurrently with the role of Duty Supervisor. The CGS DE **should not** fly whilst undertaking this role.

e. **VGS Duty Supervisor (DS).** The DE **should** appoint a DS to closely monitor, supervise and control all gliding operations; the DS **should** observe all launches, take-offs and landings. The DS **should not** normally fly while in control of flying. The DS **should** be a minimum of a B1 Category QGI, qualified on the type (but not an FSC), who have successfully completed the Gliding Authorizers Course (GLAC). Personnel who are undergoing CONVEX to a new aircraft type, may act as DS if they don't hold a B1 Category QGI on the new type; however, they **should** have been a minimum of B1 Category QGI on a former 2 FTS aircraft, and **should** be specifically trained/approved by CGS.

f. **Non-Flying DS.** VGS OCs may consider non-flying personnel for the role of DS providing:

- (1) They **should** have held a minimum of B1 Category QGI on the aircraft type and they are suitably experienced in the role of DS. They **should** have completed and be in date for the GLAC.
- (2) They **should** comply with the medical requirements and competency check, as detailed in DHO 2135 para 10.
- (3) They **should** have been authorized by OC Ops Wg and a copy of the permission is kept on file at the VGS.
- (4) They **should** undergo a competency check by a Flying Supervisor, every 6 months.

g. **CONVEX DS.** Previous DS that are converting to a new aircraft type may undertake the role of DS on the new aircraft type, whilst undergoing CONVEX training, providing:

- (1) The individual **should** have held a minimum B1 Category QGI on another 2 FTS aircraft type.
- (2) They **should** have completed a FAT and are undergoing CONVEX

training to B1 standard on the new aircraft type.

(3) They **should** have completed either the GLAC or VGS FSC.

(4) They **should** have been DS trained/supervised by CGS CAIs.

(5) They **should** have been specifically cleared by OC Ops Wg, to operate as DS.

h. **CGS DS.** During CGS operations a DS **should** be appointed as required. Approval and SQEP criteria to act as DS **should** be granted by OC Ops Wg.

i. **Duty Authorizer (DA).** A DA **should** be appointed to authorize flights for non-self-authorizing pilots. On occasion it may be advantageous to have a separate DA from DS; however, the two roles may be combined.

j. **Military Air Ground Radio Operator (MAGRO).** A MAGRO **should** be appointed to provide the Military Air Ground Communication Service (MAGCS).

k. **Launch Point Supervisor (LPS).** At a VGS, a LPS **should** be appointed to assist the DS in the supervision of the airfield, by supervising the immediate launch point. The LPS **should** also be utilised to undertake last look checks prior to the commencement of a launch. The LPS **should** be a minimum of a G1; however, Unit Cdrs may nominate suitable ground staff who are not a minimum of G1, but who they consider suitable for the role, eg a previous QGI who is over 65. Nominations for non-flying LPS, **should** be submitted to OC Ops Wg for approval. All LPS **should** undergo the 2 FTS LPS Practical Training Record and Check of Competence. The responsibilities of the LPS **should** be as follows:

- (1) Supervision of movement and positioning of aircraft.
- (2) Supervision of vehicle movements, including tasking of retrieve duties.
- (3) Supervision of cadets, staff and visitors around the launch point.
- (4) Supervision of cable handling and wingtip personnel and procedures, including detaching from cable retrieve vehicle.
- (5) Supervision of launching procedures and lookout.
- (6) Completion of last look checks prior to launch, to ensure:
 - (a) **Tail Dolly.** Tail dolly is removed.
 - (b) **Pitot Cover.** Pitot cover is removed.
 - (c) **Canopies.** Canopies are closed and canopy levers are fully forward.
 - (d) **Airspace.** Airspace above and behind is clear.

4. **Combined Duties.** The duties of DS, DA and MAGRO may be combined, if workload permits.

5. **Authorizations.** A list of personnel approved to act as DE, DS, along with a list of Aircraft Commander qualifications, competencies and the sortie profiles that they are qualified to undertake **should** be placed in the front of the DSs Watch Log. A list of personnel, approved by Comdt 2 FTS to act as DA, along with their powers of authorization, **should** be kept at all points where authorization can take place, and within the DSs Watch Log.

6. **Supervision of Flying Operations.** All 2 FTS operations **should** be closely monitored, supervised and controlled as follows:

a. **VGS.** Whenever gliding is in progress, the DS **should** be at the launch point. The DS may supervise the launching and recovery from inside or outside the Runway Caravan. When outside, the DS **should** stay well within audible range of a Flight Ops Assistant close to launch signalling equipment and **should** carry a portable Air to Ground radio set to the airfield frequency, and portable Station Management Radio Equipment (SMRE).

b. **CGS.** For CGS operations only, the DS **should** operate from either the Visual

Control Room (VCR) within Ops Wg HQ, or in the vicinity of the Runway Caravan, depending on the type of operation taking place. If a CGS trainee is flying solo, then the trainee's instructor **should** monitor the trainee from any vantage point that allows the operation to be observed including the take-off and landing area.

c. **SMRE Requirements.** All vehicles employed on airfield duties **should** possess a portable SMRE radio, so that the DS can effectively control vehicle movements.

7. **DSs Watch Log.** Whenever flying is taking place a diary of events **should** be maintained; the examples below are the typical events that **should** be recorded:

- a. The name and signature of the DS **should** be entered before flying commences.
- b. When the DS completes a Hand Over Watch (HOW), and hands over control of operations, they **should** brief their successor on all aspects of the current situation. They **should** then annotate the log with the name of the oncoming person and the time of transfer and **should** sign the log, this signature indicating that they have fully briefed their successor. The oncoming DS completing a Take Over Watch (TOW), **should** sign the log as having taken over.
- c. Royal Flight information and the origin from which the information was obtained.
- d. Runway in use and subsequent changes; include reasons.
- e. Other airfield activities affecting flying.
- f. Occurrences and action taken.
- g. Temporary stand-downs.
- h. Last landing time.
- i. The DE and any changes throughout the operating period.
- j. Additional items may be entered at the discretion of the DS, such as handover notes for the next day's shift, absentee information, etc.
- k. The MAGRO and any changes throughout the operating period.

8. **Terms of Reference (TOR).** Unit Cdrs **should** appoint staff to executive posts as directed by HQ 2 FTS. The appointment to the positions of CFI and DCFI (if required) **should** be approved by OC Spt Wg. Generic TORs for these posts **should** be issued by 2 FTS OC Standards.

Aerodrome Rescue and Firefighting (ARFF) Services.

9. Law DSA Defence Fire Safety Regulations (DFSR), the minimum Crash Category for Aerotow Aircraft is ICAO Special. There is no minimum Crash Category for Conventional Gliders, and therefore **should** be no requirement to maintain specific crash equipment, except for first aid kits.

Detachments and Landaways

10. All detachments **should** be supported by an Operations Order and approved by Comdt 2 FTS; transits by VGS personnel **should** be authorized by OC Ops Wg.

Trainee Solo Flying

11. **All Trainees – First Solo on Type:**

- a. Instructors **should** be responsible for ensuring that their trainees are familiar with cockpit and emergency drills.
- b. The final dual sortie before first solo by an ab-initio trainee **should** be flown with an A Category QGI. For current Qualified Fixed Wing Pilots this sortie may be conducted by a B1 Category QGI. The instructor sending the trainee solo **should** supervise that trainee from the Runway Caravan, or from alongside the DS.
- c. Where trainees are required to use the radio, the authorizing officer **should**

brief the trainee to add to the word "Student" to their callsign.

d. Except where Local Orders dictate otherwise, the DS **should** ensure that the circuit and landing area is sterilised for a first solo circuit.

12. **AGT Trainees:**

a. **Solo Flying.** The authorizing officer **should** inform the DS before AGT trainees fly solo sorties.

b. **Solo Circuit Consolidation.** Solo circuit consolidation **should** be supervised initially by the instructor who authorized the flight or carried out the preceding dual check. When the instructor considers that close supervision is unnecessary, the supervision may be delegated to the DS who **should** be informed when circuit consolidation is planned.

Recreational Flying

13. All 2 FTS pilots **should** be aware of the impact of recreational flying on fatigue and **should** declare any such flying as part of the authorization and Out-Brief, so that the DA is aware.

Supervisory Checks

14. **Supervisory Checks.** Details of supervisory checks are detailed within DHO 2101 for pilots and DHO 2125 for QGLs.

Recording First Solo Flights and Air Safety/Emergency Incidents

15. A video camera, following initial issue from 2 FTS, **should** be available for use at the Launch Point. The camera and accessories **should** be placed in the Runway Caravan prior to the start of flying. The video camera and associated accessories **should** be treated as V&A items; accordingly, at cease of flying, these items **should** be stored in a secure locker.

16. The DS **should** be responsible for ensuring the video camera is charged and ready for immediate use; any faults **should** be reported to the DE ASAP.

17. The camera **should** be used to record Student First Solos and Air Safety (AS) or emergency incidents. The recording may be of great value to a Service Inquiry (SI) or similar investigation. During a First Solo or AS emergency, the filming **should** be undertaken by a nominated individual from the launch point or another suitable vantage point. The video camera **should** be mounted on a tripod for stability.

18. The video camera **should** only be used for recording Student First Solos and AS or emergency incidents. The release of the recorded flight or emergency **should** be strictly controlled. The recording **should** be stored for a minimum of 30 days and **should** only be used for Debrief or Investigative purposes. Recorded flights **should not** be released to students or the general public including via Social Media platforms.

19. Units that have not received their initial issue of camera equipment **should not** be precluded from completing first solos when appropriate; additionally, where camera equipment becomes unserviceable, Units **should not** be precluded from completing first solos, whilst replacement equipment has been requested and awaiting delivery through HQ 2 FTS.

Control of Flying – Weather Minima and Limitations.

20. **Meteorological Forecast.** The DS **should** be responsible for obtaining the area forecast for the period during which flying is planned to take place. Dictated met forecasts **should** show the initials of the sender and be signed by the receiver. The minimum meteorological conditions acceptable are detailed within Annex A.

21. **Operating Hours.** Flying **should** only be carried out between sunrise and sunset, with the exception that the DS may permit QGLs to fly until 15 minutes after sunset provided that the ambient light is sufficient for safe operations, and they are authorized to do so.

22. **Minimum Cloud base.** Minimum cloud base for all flying (except for the higher figure required inside controlled airspace as detailed in Annex A) **should** be:

Minimum Cloud base Table		
Type of Aircraft	Solo Trainees and Ungraded Pilots	All Other Pilots
Gliders	1200ft AAL	900ft AAL (This may be reduced to 700ft AAL for A Category QGIs only)
Type of Aircraft	All Pilots	
Aerotow	900ft AAL	

23. **Rain.** Take-off in rain is prohibited. Water droplets on an aircraft's surfaces **should** be removed prior to take-off. If rain is encountered during flight the aircraft **should** be flown clear as soon as possible, as a noticeable deterioration in flight performance and damage to propellers will occur.

24. **Snow.** Pilots encountering falling snow whilst airborne **should** fly clear of the area to prevent accumulations developing on the aircraft wings; additionally, see DHO 2309(D2).

25. **Thunderstorm Risk (TR).** The term TR, is used by Meteorological (MET) Forecasters in relation to areas and remote sites. Notification of a TR is given in the form of an assessment, which is prefixed by the word 'Thunderstorm Risk', and defined by the following scale:

Thunderstorm Risk Category Table	
TR Category	Definition
High	A thunderstorm is occurring, or is expected to occur over the area in the near future (about 30 minutes).
Moderate	Thunderstorms are developing, or have been reported, within about 40 km of the area, but are not expected to affect the area in the immediate future.
Low	Thunderstorms are not occurring at the present or are not expected within about 40 km of the area.

Note: The area will be the airfield for which the warning is being issued.

26. Aircraft **should not** be flown within 5NM of thunderstorms and pilots **should** report any observed thunderstorm activity to the DS. MOMIDS **should** be used to view lighting strike data to aid the DS. Additional precautions in the event of specific warnings **should** be taken as follows:

a. **Thunderstorm Risk High:**

- (1) No refuelling of aircraft or MT vehicles **should** take place.
- (2) Winch launching **should** cease immediately, and all winch cables **should** be drawn back to the winch.
- (3) If possible, the DS **should** contact the MET Forecaster to obtain a detailed brief on local thunderstorm activity and an assessment of the specific risk to the airfield concerned.
- (4) Depending on the information obtained from the Met Forecaster, the DS has the authority to recommence winch launching and aircraft refuelling, provided that the following conditions can be achieved:
 - (a) The visibility and cloud base permit a clear view of the local Met conditions.
 - (b) There is no electrical thunderstorm activity visible from the airfield.

b. **Thunderstorm Risk Moderate and Low:** No specific actions are required when TR moderate or low are declared; however, irrespective of the issued TR, if Cb cloud is observed from the airfield, or if local Met conditions indicate that such conditions may prevail, the DS **should** implement TR High procedures immediately.

27. **Maximum Surface Wind Strength for Glider Operations:**

Maximum Surface Wind Strength – Gliders			
Aircraft Type	All Cadet Flying	Solo Trainees, Ungraded & G2 Pilots	G1 Pilots & QGIs
Glider	Mean 20kts Gust 25kts ¹	20kts	25 kts ²

Notes:

- Flight Staff Cadets (FSC) may fly in mean wind speeds up to 25kts providing they have received Synthetic Parachute Training (SPT).
- RAF Syerston (2 FTS HQ, CGS & CFS) permanent staff may be cleared to fly in up to a surface wind of 30kts, providing they have received SPT.
- Instructors attending courses at CGS or being presented for training or standardisation during routine CGS/CFS visits to their Unit, who have received SPT, may be given the option to operate in a surface wind of up to 30kts.

Crosswind Limitations:

Maximum Crosswind Strength		
Aircraft Type	Solo Trainees, Ungraded & G2 Pilots	G1 Pilots & QGIs
Glider	5kts	11kts

Note: Instructors **should** bear in mind the limited value of conducting circuit training in crosswinds that exceed the trainee's limits.

28. **Maximum Surface Wind Strength for Aerotow Operations:**

Maximum Surface Wind Strength – Aerotow		
Configuration	Max Headwind	Max Crosswind
Aerotow	Limits of Glider Aircraft on Tow	
Non-Aerotow	35kts	22kts

Note: Notwithstanding the maximum headwind limits when undertaking non-aerotow sorties, Authorizing Officers **should** consider the Pilots experience levels when authorizing sorties in strong winds. Additionally, non-aerotow sorties in excess of a surface wind of 30kts **should** be approved by 2 FTS OC Stds.

29. **Local Conditions.** The wind limits given above are maximum speeds, but local conditions may also need to be considered, (eg gusts, wind shear, turbulence from trees and hangars etc) and lower limits set if required.

30. **Aircraft Parking in Strong Wind Conditions.** Precautions to be observed when aircraft are parked or being manhandled in strong winds are detailed in DHO 2310(D8) and DHO 2310(D9).

Measurement of Wind Speed

31. **Approved Measurement of Wind Speed at VGS.** The official measurement of “meteorologically observed surface wind” is taken at a height of 10m above the surface, and any measurement of wind at ground level **should** be increased by a factor of 30%. It has been accepted by the ADDH that, at the majority of operating sites, the only measuring equipment available to VGS is the officially supplied hand-held MET Office anemometer. Any other devices, such as wind stations in Runway Caravans, **should** only be used as a management tool for trend analysis and DS **should** refer to the official MET Office calibrated device for official readings and **should** ensure flying operations remain within aircraft limits.

32. **VGS Operations.** The 25 knot surface windspeed limit detailed above is the VGS operating limit based on the handheld indications (plus/minus calibration chart variations). VGSs with access to formal MET data **should** still use the 25kt limit.

33. **CGS Operations.** At RAF Syerston, CGS operations up to 30kts are approved with windspeed measured through the MET Office digital system. At VGS locations, CGS

operations **should** use the handheld indications.

Curtailment of Flying in Adverse Weather Conditions

34. The DS **should** recall aircraft ahead of any adverse weather conditions; however, pilots airborne **should** report any approaching adverse weather to the DS.

Selection of Diversion Airfields.

35. For cross-country sorties, the Aircraft Commander **should** ensure that a diversion airfield is available in case of weather deterioration at the departure airfield or destination.

Fuel Planning

36. **Minimum Landing Fuel.** Refer to DHO 2310(D5) for Aerotow aircraft.

**Guidance
Material
2305(1)**

Supervision of Flying

37. Nil.

**Duty Holder
Order
2305(2)**

Embarked Aviation Operations

2305(2) 2 FTS aircrew **shall not** be required to undertake embarked operations.

**Acceptable
Means of
Compliance
2305(2)**

Embarked Aviation Operations

38. N/A to 2 FTS flying training.

**Guidance
Material
2305(2)**

Embarked Aviation Operations

39. Nil.

**Duty Holder
Order
2305(3)**

Aircraft Limitations

2305(3) Except in an emergency, the pilot of an aircraft **shall not** exceed the engine, airframe or handling limitations quoted in the Release to Service (RTS), or civilian equivalent, for the aircraft as reflected in the Aircraft Document Set (ADS) or civilian equivalent, or, for non-RTS flying operations, the Military Permit to Fly or Contractors Flight Limitations Document.

**Acceptable
Means of
Compliance
2305(3)**

Aircraft Limitations

40. Nil in addition to GASO 2305(3).

Guidance Material 2305(3)	Aircraft Limitations <p>41. Nil.</p>
Duty Holder Order 2305(4)	Alcohol and Flying <p>2305(4) Withdrawn – Covered in Armed Forces Act 2006 as amended by the Armed Forces Act 2011 effective 1 Nov 13. See Guidance Material at RA 2302(1)6 for applicability of Armed Forces Act. Refer to GASO 2305(T2) for further guidance.</p>
Acceptable Means of Compliance 2305(4)	Alcohol and Flying <p>42. Withdrawn – Covered by the Armed Forces Act.</p>
Guidance Material 2305(4)	Alcohol and Flying <p>43. Withdrawn – Covered by the Armed Forces Act.</p>
Duty Holder Order 2305(5)	Aircrew Briefing <p>2305(5) Unit Cdrs shall ensure that aircrew conduct appropriate flight planning and aircrew briefing prior to the conduct of flying training sorties.</p>
Acceptable Means of Compliance 2305(5)	Aircrew Briefing <p>44. Formal Brief. Where practicable, all aircrew programmed or expecting to fly, should attend a formal MET and Operations briefing. These briefings should normally be given by the DS or an instructor of B1 Category QGI or above. Junior instructors are encouraged to participate in the briefing process; however, they should be closely supervised by the DS or the QGI conducting the brief. Aircrew that are unable to attend the formal Operations brief should self-brief from the Ops briefing board and receive an update from the DA/DS during the Out-Brief process. A list of content which should be covered during the MET and Operations brief is detailed at Annex B.</p> <p>45. Notification of Information to Aircrew. Units should ensure that aircrew are briefed on information and changes that are relevant to flying operations. The following systems should be used:</p> <ol style="list-style-type: none"> Aircrew Red/Green. An Aircrew Red/Green (ARG) system should be used to alert Aircrew to any information that is a go/no go item and should be promulgated and acknowledged before their next flight takes place. Whilst not exhaustive, examples are changes to Regulation, Flying Orders, RTS etc. ARG items should be numbered to aid identification, ie item 3 in 2020 should be titled “ARG 3/20”. A Red/Green system should be used so that this type of information can be captured to ensure that aircrew are “Green” before their next flight; and should be available for viewing during the Operations brief. Aircrew Information. An Aircrew Information (AI) system should be used to promulgate any pertinent information that is relevant to aircrew, but is not necessarily a go/no go, Aircrew Red/Green, or items that should be acknowledged before next flight; for example, Unit Cdrs information, Senior Operator updates,

parachute serviceability updates etc. AI items **should** be numbered to aid identification, ie item 8 in 2021 **should** be titled “AI 8/21”. AI items **should** be available for viewing within the Operations room.

46. **Additional Briefs.** Unit Cdrs **should** ensure that all personnel undertaking flying training operations complete the following:

- a. **The ‘Out-Brief’.** An Out-Brief, such as the example at Annex C, **should** be completed for all sorties. In addition, the Out-Brief detailed at Annex D **should** be completed for all cross-country or transit sorties. The example Out-Briefs contain the minimum requirements that **should** be covered; however, Unit Cdrs may add to the list as required.
- b. **The ‘In-Brief’.** An In-Brief, such as the example at Annex E for Glider Aircraft, or Annex F for Aerotow Aircraft, **should** be completed for all sorties post flight. The example In-Briefs contain the minimum requirements that **should** be covered; however, Unit Cdrs may add to the list as required.

Flight Planning and Aircrew Briefing Facilities

47. **Operations Rooms.** Unit Cdrs **should** ensure that flight planning and aircrew briefing facilities are made available in accordance with the requirements of RA 2305(5). In particular, the following maps and charts **should** be available:

- a. **Map Displays of Local Area.** For the benefit of operational aircrew, Units **should** display a 1:50,000 chart overlaid with the areas and lower flight limits of any controlled airspace within the normal operating area.
- b. **Plan of the Airfield.** A plan of the airfield **should** be displayed showing the areas approved for flying operations, sterile areas and obstructions.
- c. **Charts.** All personnel **should** be conversant with the information displayed on the charts of the local area and the plan of the airfield. When authorizing a solo flight, the briefing is to include relevant information regarding controlled airspace, obstructions, sterile areas, etc.
- d. **Crash Maps.** Units **should** produce crash maps iaw RA 3261(2).

48. **Deconflictions and Centralised Aviation Data Service (CADS).** The DS **should** ensure that 2 FTS operations are recorded on CADS before any flying operations commence. A manoeuvre area upwind of the runway in use **should** be placed to cover the period of operation. The procedure for adding 2 FTS operations into CADS is detailed at Annex G.

Guidance Material 2305(5)

Aircrew Briefing

49. STANAG 3052 - Aeronautical Briefing Facilities.
50. CADS SOPs.

Duty Holder Order 2305(6)

Air Exercise Planning and Airspace Integration

- 2305(6) Units completing air exercise planning that is of a complex nature and/or has a high potential for interaction with other airspace users, **shall** obtain specialist airspace advice.

Acceptable Means of Compliance 2305(6)

Air Exercise Planning and Airspace Integration

51. N/A in 2 FTS aircraft.

Guidance Material 2305(6)	Air Exercise Planning and Airspace Integration 52. N/A in 2 FTS aircraft.
Duty Holder Order 2305(7)	Taxiing of Aircraft 2305(7) Unit Cdrs shall define the training, authorization and certification required by personnel who, by the nature of their duties, are required to taxi an aircraft.
Acceptable Means of Compliance 2305(7)	Taxiing of Aircraft 53. In accordance with RA 2305(7).
Guidance Material 2305(7)	Taxiing of Aircraft 54. Nil.
Duty Holder Order 2305(T1)	Supervision of Cadets 2305(T1) Unit Cdrs shall be responsible for the safety and supervision of cadets whilst they are on unit.
Acceptable Means of Compliance 2305(T1)	Supervision of Cadets 55. Nil in addition to GASO 2305(T1).
Guidance Material 2305(T1)	Supervision of Cadets 56. Nil.
Duty Holder Order 2305(T2)	Alcohol, Drugs and Flying – Guidance Only 2305(T2) All personnel shall be fit for duty at the commencement of their Crew Duty Period (CDP).
Acceptable Means of Compliance 2305(T2)	Alcohol, Drugs and Flying – Guidance Only 57. Nil in addition to GASO 2305(T2).

**Guidance
Material
2305(T2)**

Alcohol, Drugs and Flying – Guidance Only

58. Nil in addition to GASO 2305(T2).

ANNEX A

2 FTS WEATHER LIMITATIONS – QUICK REFERENCE GUIDE

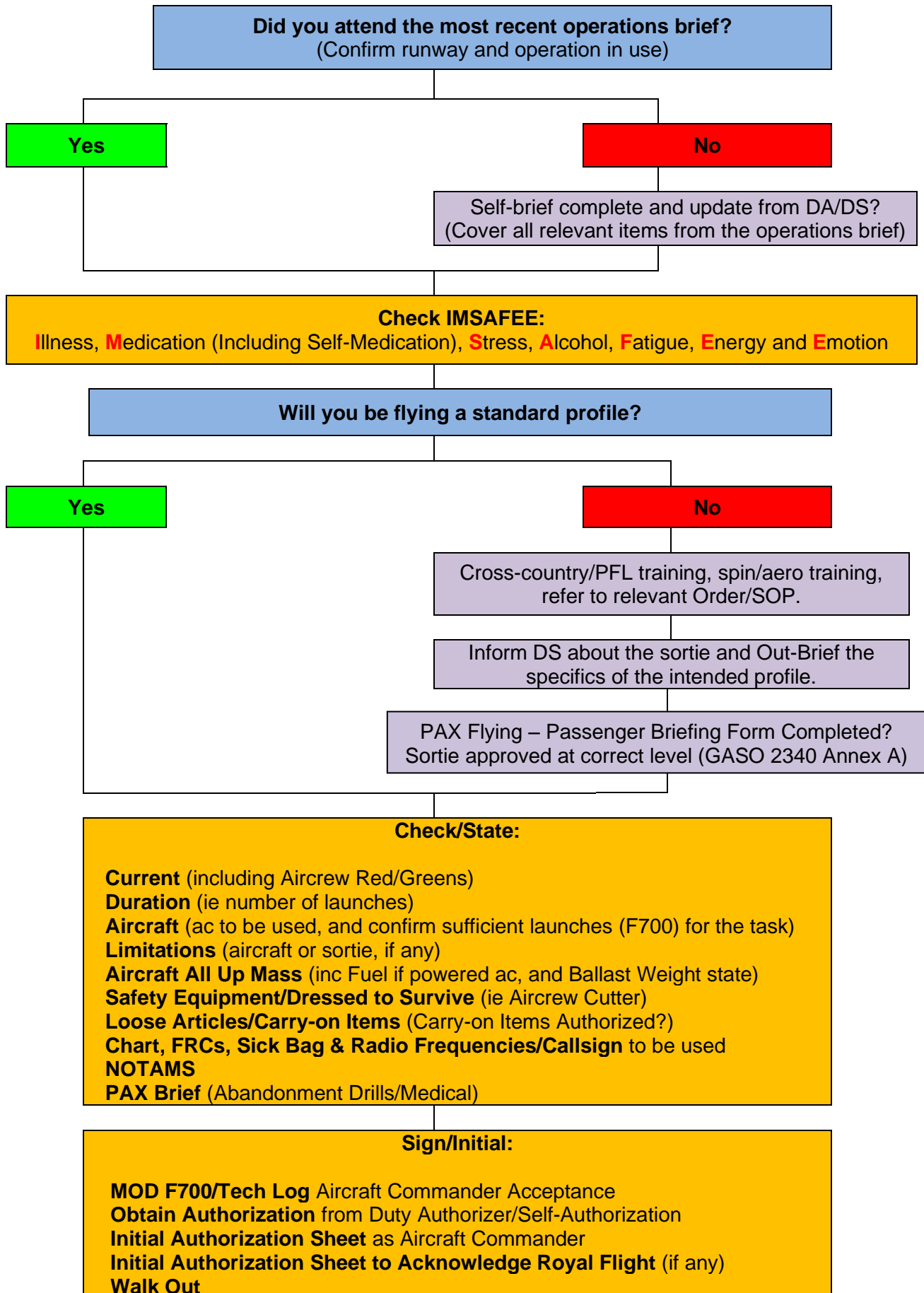
2 FTS Weather Limitations Table							
	Solo Cadets & Trainees	G2	G1	B2	B1	A	2 FTS HQ, CGS & CFS
Maximum Wind Speed	20kts		25kts				30kts
Maximum Crosswind	5kts		11kts				
Minimum Cloud Base Within Gliding Range	1200ft AGL	900ft AGL				700ft AGL for A Category QGI	
At or below 3000’ AMSL Airspace Class F or G	(1) In sight of base airfield. (2) Distance from cloud 1500m horizontally and 1000ft vertically, or clear of cloud and with the surface in sight. (2) Not above a local cloud layer of 4/8 or more. (3) Minimum in-flight visibility of 3km.						
At or below 3000’ AMSL Airspace Class A-E	(1) Distance from cloud 1500m horizontally and 1000ft vertically. (2) Not above a local cloud layer of 4/8 or more. (3) Minimum in-flight visibility of 5km.						
Above 3000’ AMSL (All Airspace Classes)	(1) Distance from cloud 1500m horizontally and 1000ft vertically. (2) Not above a local cloud layer of 4/8 or more. (3) Minimum in-flight visibility of 5km.						
Class D VFR Operations	Except when a special VFR clearance is obtained from an ATC unit, VFR flights should not take off or land at an Aerodrome within a control zone, or enter the Aerodrome Traffic Zone or Aerodrome Traffic circuit when the reported meteorological conditions at that Aerodrome are below the following minima: (1) The ceiling is less than 1500ft or (2) The ground visibility is less than 5 km. For fixed wing wishing to operate under VFR to or from an Aerodrome or enter the Aerodrome Traffic Zone or Aerodrome Traffic circuit in class D airspace, the ground visibility should be used.						
Special Visual Flight Rules (SVFR)	SVFR flights may be authorized to operate within a control zone, subject to ATC clearance. The Aircraft Commander should ensure that: (1) Flight is conducted clear of cloud and with the surface in sight and; (2) The flight visibility is not less than 1500m and; (3) Cloud ceiling is not less than 600ft AGL (Aerotow aircraft only – Glider aircraft should meet “Minimum Cloud Base Within Gliding Range”).						
Operating Outside Gliding Range, Cross-Country and PFL Training (Aerotow A/C Only)	1000ft cloud base & 5km visibility for 2 FTS CAI and CFS Examiners (Note – different authorization limits apply (NB 2000ft MSD) when aerotowing for transit purposes – Refer to DHO 2310(D6)						

ANNEX B**METEOROLOGICAL AND OPERATIONS BRIEFING**

1. **Meteorology:**
 - a. The synoptic situation for the area of operation.
 - b. The present visibility, temperature, wind and cloud structure up to FL100 and the expected changes during the flying period.
 - c. Information about thermal and wave activity expected during the flying period.
 - d. Airfield QFE.
2. **Programme:**
 - a. Normal training operations.
 - b. Airframe availability and allocation.
 - c. Maintenance Flight Tests.
 - d. Any special requirements.
3. **Airfield Layout Normal Operations:**
 - a. Runway in use.
 - b. Circuit details.
 - c. Launch failure/EFATO procedures.
 - d. Taxi, tow-out and retrieve routes.
 - e. Designated Landing Area(s).
 - f. Runway Caravan positions.
 - g. Aircraft parking areas or winch position (as appropriate).
 - h. State of the grass and/or runway surfaces, including the location of bad ground and any amendments to SOPs necessary to safely contend with the bad ground.
 - i. Non-Standard runs for crosswind training during AGT exercises, with particular emphasis on the earliest point for touchdown and avoidance of conflicts.
4. **Non-Standard Operations:**
 - a. Emphasise any Non-Standard procedure that will be used.
 - b. Other abnormal activities eg airfield sweeping, contractors, repairs etc.
5. **Airspace Restrictions:**
 - a. Royal Flights/Selected Helicopter Flights.
 - b. Relevant NOTAMS.
 - c. Warnings.
6. **General and Summary:**
 - a. Any unusual flying activity, eg visitors.
 - b. Sunset and last landing time.
 - c. Latest Aircrew Red/Green and Aircrew Info, and recent changes to orders.
 - d. Signatures for orders required from particular individuals.

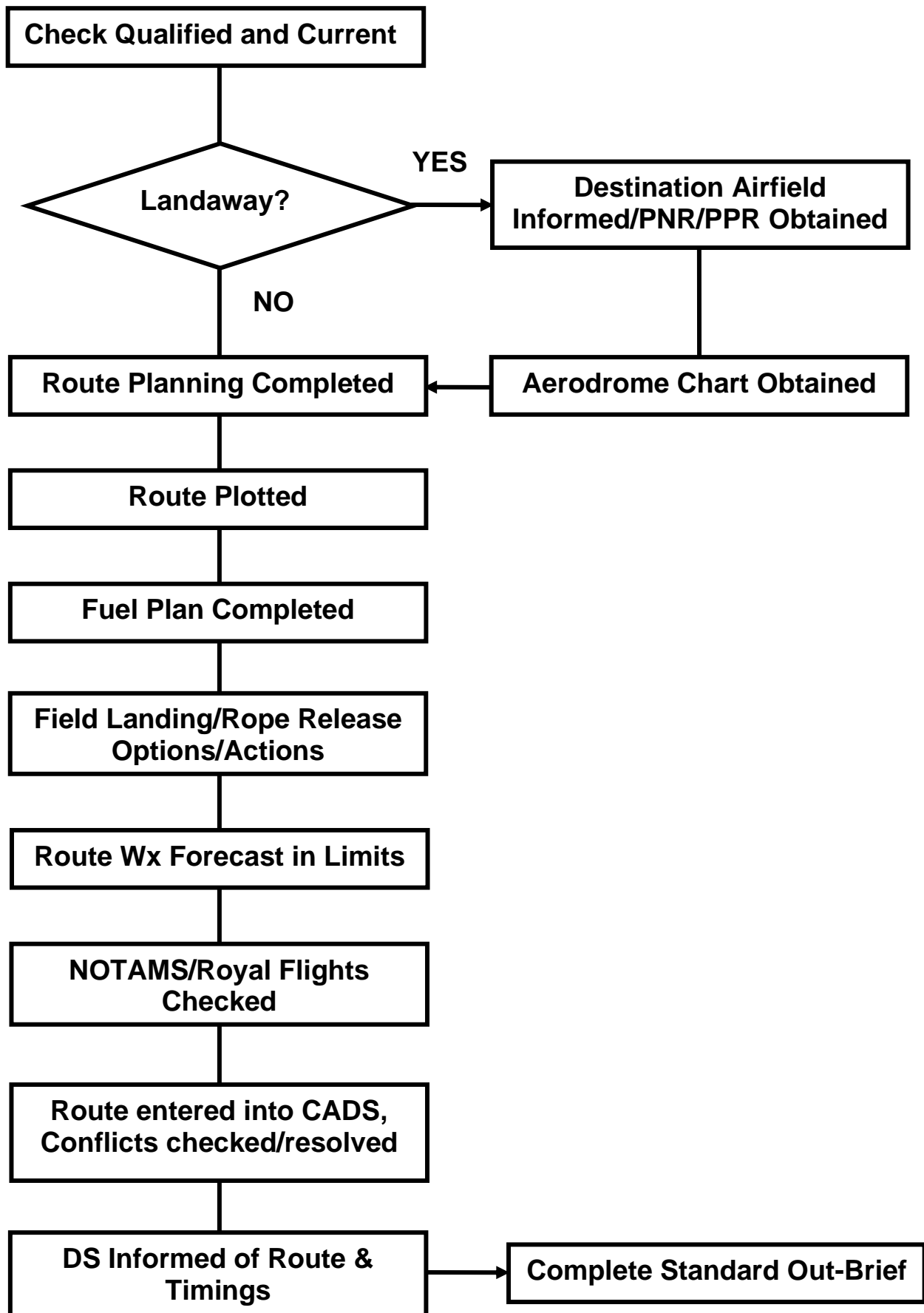
ANNEX C

OUT-BRIEF

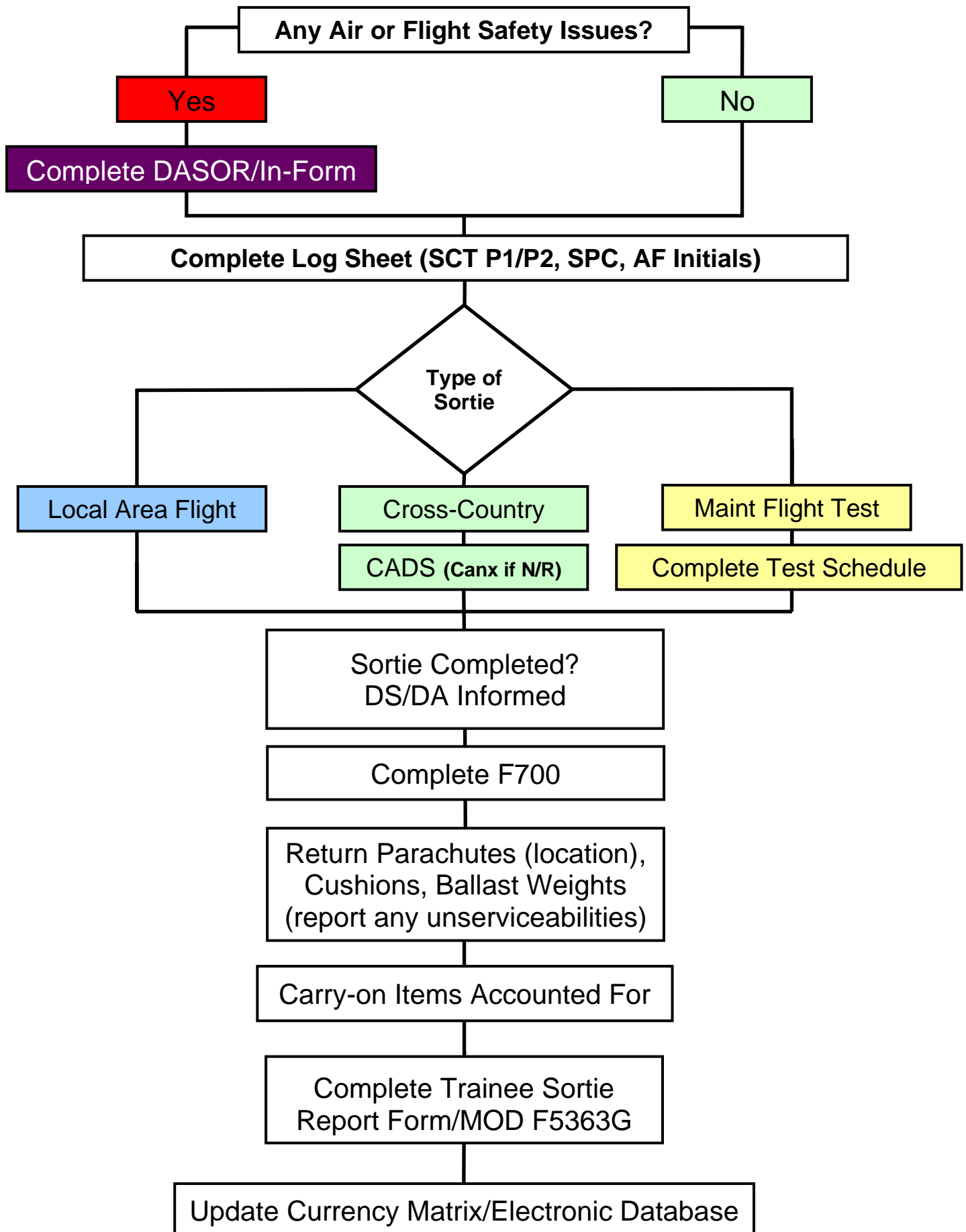


ANNEX D

CROSS-COUNTRY/TRANSIT OUT-BRIEF

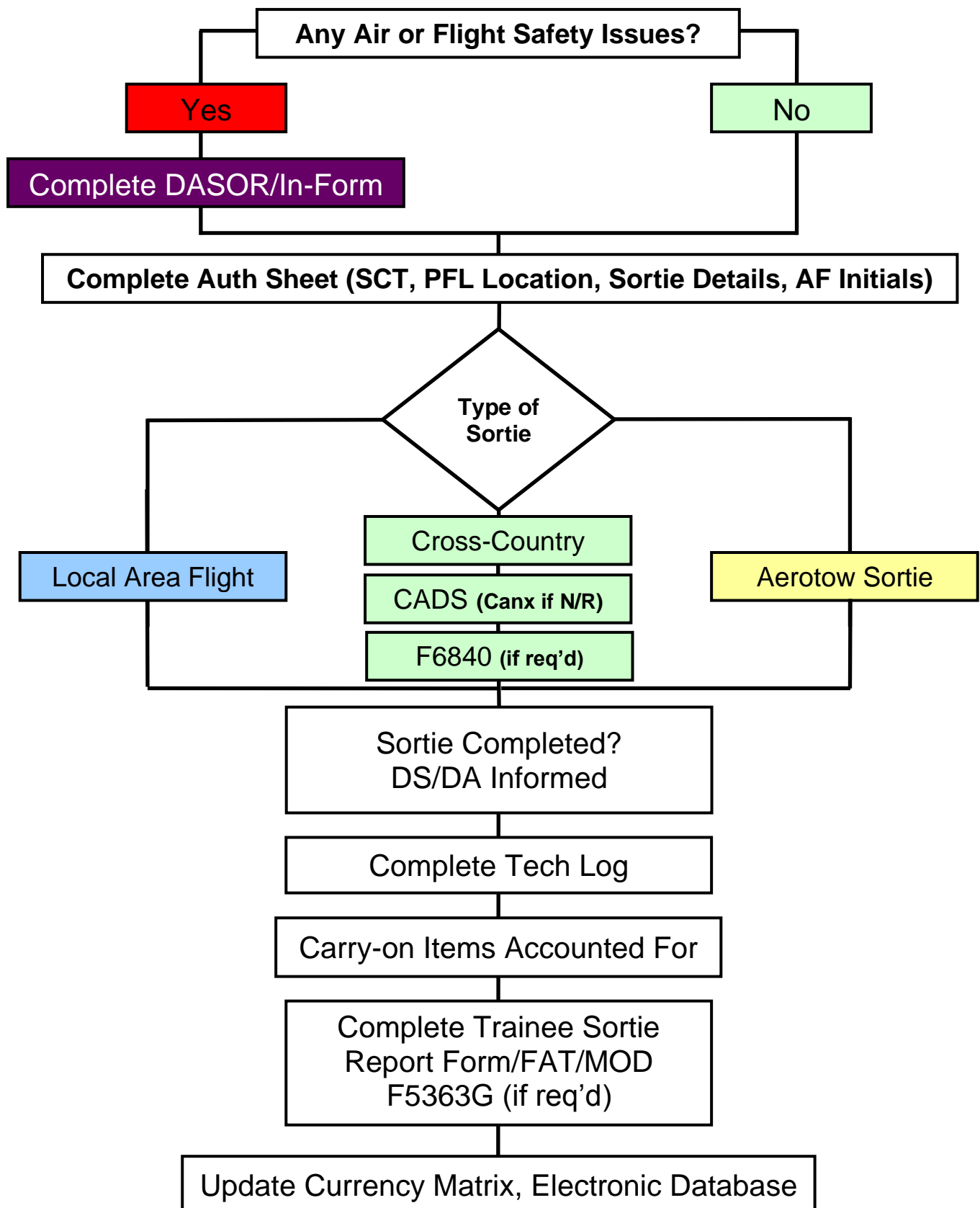


ANNEX E
GLIDER AIRCRAFT IN-BRIEF



ANNEX F

AEROTOW AIRCRAFT IN-BRIEF



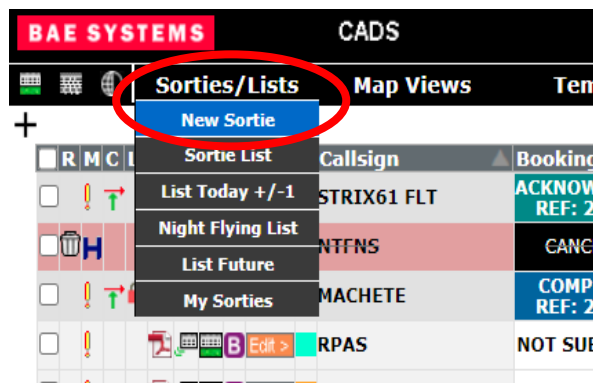
ANNEX G

PROCEDURE FOR DETAILING 2 FTS OPERATIONS INTO THE CENTRALISED AVIATION DATA SERVICE (CADS)

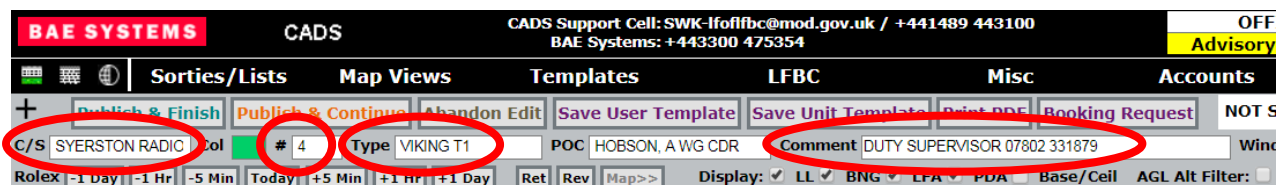
1. Log into CADS (works best in Google Chrome): <https://cads.aeroint.com>.



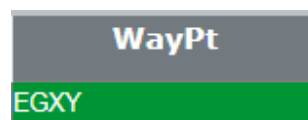
2. From the **Sorties/Lists** dropdown select **New Sortie**.



3. Add the following information:
 - a. **C/S**. The location and service, ie **SYERSTON RADIO**.
 - b. **#**. The number of aircraft on the flying programme.
 - c. **Type**. Select **VIKING T1**.
 - d. **Comment**. Add **DUTY SUPERVISOR** and the DSs mobile number.



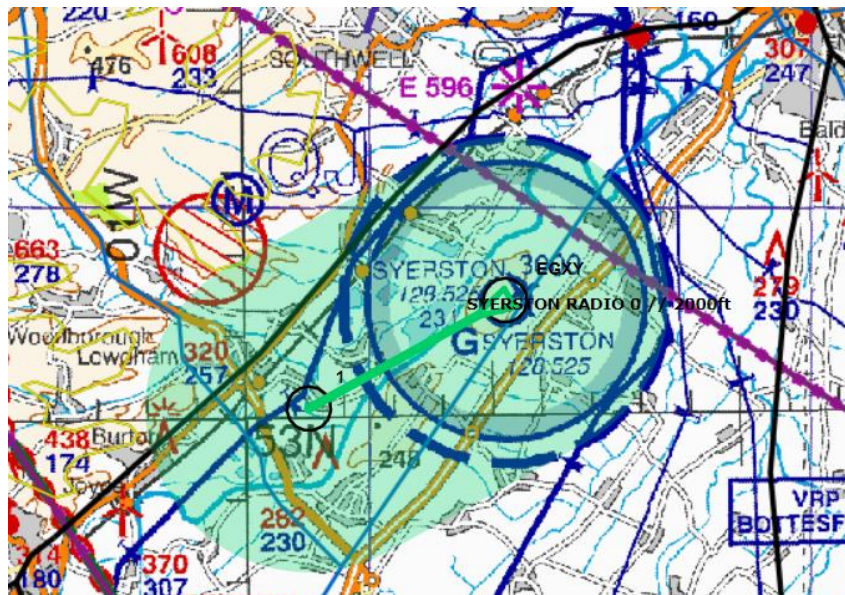
4. In the waypoint pane the airfield code or location **should** already be displayed as the start point.



5. Zoom into the map and draw a line upwind of the in-use runway into the likely operating area and add a waypoint (by left clicking on the mouse). Then press **Esc** to stop drawing any more points.



6. This will then place a waypoint as shown.



7. In the waypoint information bar at the top add the following information:
- AGL.** The possible winch launch height AGL.
 - TAS.** 50.
 - ETA.** Enter the planned start time for flying operations (in ZULU).
 - ETD.** Enter the planned finish time for flying operations (in ZULU).

WayPt				Lat (dd mm.mm)	Lon (ddd mm.mm)	BNG (s. e... n...)	Hdg (M)	Dist (nm)	AGL (ft)	AMSL (ft)	TAS (kts)	GS (kts)	Dur (hhmm:ss)	ETA (Z)	Delay (hhmm:ss)	ETD (Z)
EGXY				N53 01.40	W000 54.70	SK 7309 4789	---	---	0	217				0730:00Z		
1				N53 00.11	W000 58.71	SK 6865 4543	244	3	2000	2056	50	50	3:16	0730:00Z	0900:00	1630:00Z

8. Click on the "O" (circle icon) against waypoint 1.

WayPt			
EGXY			
1			

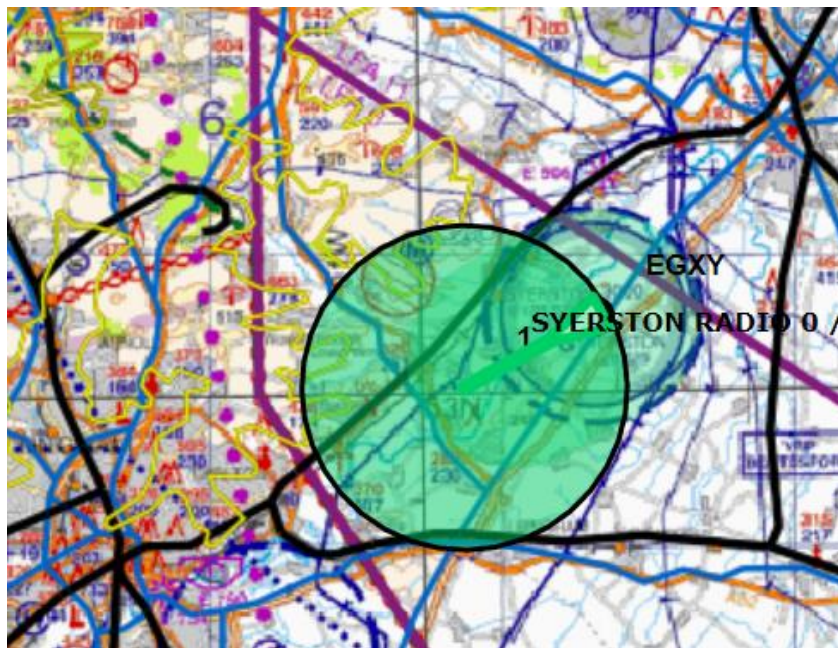
9. From the **Circles** tab select **3nm radius** and click **OK**.

Points	Squares	Circles	Rectangles	Pre Defined Areas
<input type="radio"/> 1km radius	<input type="radio"/> 1nm radius	<input type="radio"/> 12nm radius		
<input type="radio"/> 2km radius	<input type="radio"/> 2nm radius	<input type="radio"/> 15nm radius		
<input type="radio"/> 3km radius	<input checked="" type="radio"/> 3nm radius	<input type="radio"/> 20nm radius		
<input type="radio"/> 4km radius	<input type="radio"/> 4nm radius	<input type="radio"/> 25nm radius		
<input type="radio"/> 5km radius	<input type="radio"/> 5nm radius			
<input type="radio"/> 6km radius	<input type="radio"/> 6nm radius			
<input type="radio"/> 7km radius	<input type="radio"/> 7nm radius			
<input type="radio"/> 8km radius	<input type="radio"/> 8nm radius			
<input type="radio"/> 9km radius	<input type="radio"/> 9nm radius			
<input type="radio"/> 10km radius	<input type="radio"/> 10nm radius			

Base: 0 AGL 56 AMSL Ceiling: 2000 AGL 2056 AMSL

Cancel OK

10. Which will change the radius of your manoeuvre area.



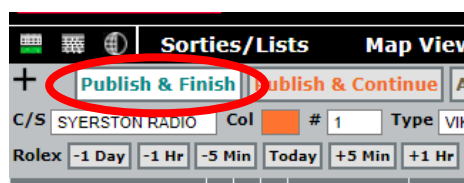
11. At the bottom click **Click to Assess Conflict**, which will give you details of any other planned activity, if any, in the area.



12. After the display of any warnings, you will receive a **Conflicts Synchronised** response.



13. Finally, select **Publish & Finish** at the top, which will publish and finalise the detail.



14. Click **OK** after the reply message and log off from CADs.

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DHO 2306 – Authorization of Flights

Rationale

Authorization is the authority given to an Aircraft Commander to fly a particular Air System on a specified mission or duty. In the course of normal operations a disregard for the direction that is implicit within Authorization may increase the Risk to Life to a level that is not As Low As Reasonably Practicable and Tolerable. This Regulation provides Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) with an immediate level of assurance and direction.

Contents

2306(1): Authorization of Flights

Duty Holder Order 2306(1)

Authorization of Flights

2306(1) All flights by UK Military aircraft **shall** be Authorized.

Acceptable Means of Compliance 2306(1)

Authorization of Flights

Powers of Authorization

1. **Comdt 2 FTS.** Subject to any limitations issued by higher authority, Comdt 2 FTS, as Aviation Delivery Duty Holder (ADDH) has full powers of authorization within 2 FTS.
2. **CFS (GE).** CFS (GE) Examiners may authorize their own flights within the terms of RAF GAI 2042, including SCT, providing they have read and signed GASOs, DHOs and the relevant Flying Order Book.
3. **2 FTS Delegated Powers of Authorization.** Comdt 2 FTS may delegate powers of authorization in accordance with this instruction as follows:
 - a. **Individuals who hold powers of Authorization.** Based on the requirements of Unit Cdrs, Comdt 2 FTS **should** authorize a list of those personnel who can act as an Authorizing Officer on that Unit, and any limitations that apply. This list **should** be displayed at any position where authorization takes place. All flights on a VGS **should** be authorized by the Authorizing Officer who will normally be the Duty Authorizer (DA) or Duty Supervisor (DS). Flights **should** only be authorized after the Aircraft Commander has 'Out-Briefed' the Authorizing Officer with details of the flight to be undertaken. Annexes C & D to DHO 2305 detail the minimum Out-Brief format. Amendments to Powers of Authorization **should** be staffed through OC Ops Wg.
 - b. **2 FTS Personnel.** The maximum powers of authorization are:
 - (1) All flights within the functional task.
 - (2) Role demonstrations/demonstration flights.
 - (3) Engine Ground Runs and Maintenance Flight Tests.
 - (4) Transit/Cross-Country flights.
 - (5) Passenger Flights (including VIP tasks).
4. **2 FTS CAIs and CFS Examiners Visits.** Due to the fact that VGS do not have access to CAI and Examiner records, 2 FTS CAI and CFS Examiners **should not** be authorized by VGS personnel when operating at a VGS
5. **2 FTS CAIs Authorization.** When operating at a VGS, 2 FTS CAIs **should** be authorized by another CAI or Examiner. If one is not present the CAI or Examiner **should** self-authorize.
6. **CFS.** A CFS Examiner holding a CQT on type **should** self-authorize sorties that are conducted as part of the CFS task. Where the Examiner does not hold a CQT on type, the sortie **should**, where possible, be authorized by another Examiner who holds the relevant CQT. 2 FTS CAIs detached to CFS (eg for a CFS visit to a VGS) **should** have their sorties

authorized by a CFS Examiner holding a CQT on type. In all cases CFS sorties **should** be out/in-briefed with the DA.

7. **Self-Authorization.** 2 FTS CAI and CFS Examiners **should** be permitted to self-authorize flights, as there are some tasks where it is not appropriate for the DA/DS to authorize, the DA/DS is not in the vicinity, or it is not within their PoA, ie ICC on VGS personnel, CFS Standardisation etc; however, if another CAI or Examiner is available, they **should** authorize the sortie.

8. **Unit Cdr Self-Authorization.** There may be occasions when it would be inappropriate for the DA or DS to authorize a sortie being undertaken by the Unit Cdr, eg for a specific task requested by Comdt 2 FTS, passenger flights with senior dignitaries etc. In this case the Unit Cdr may self-authorize, but they **should** ensure that the DS is Out-Briefed as part of the authorization process and that the nature of the sortie is detailed in the authorization sheet.

Methods of Authorization

9. **Written Authorization.** The content of all flights **should** be clearly defined as detailed in GASO 2306(1). Additions to authorizations on the Authorization Sheet, eg addition of aerobatics, if sufficient height is obtained, **should** be added into the existing authorization on request/approval, providing the same Authorizing Officer is making the amendment/addition. If the Authorizing Officer has changed, then a new entry into the Authorization Sheets **should** be made, with hard initials entered, and a new Out-Brief completed. The new entry process **should not** be completed whilst the airborne sortie is in progress.

10. **GIF Sorties.** When authorizing GIF sorties, Authorizing Officers **should** make reference to the 2 FTS Form 005 in the passenger column on the Authorization Sheets. A copy of the 2 FTS Form 005 **should** be retained with the Authorization Sheets.

11. **Block Authorizations.** Authorizers may issue block authorizations to cover a specific time period; however, they **should not** cross anticipated and significant periods, eg lunchtime standowns.

12. **Verbal Authorization.** A verbal authorization is permitted under the following circumstances:

a. **First Solo Flights.** For a first solo on type a verbal authorization **should** be given, by an instructor who is appropriately qualified in accordance with DHO 2125 Annex A. The authorizing instructor **should** make an entry on the Authorization Sheet detailing the solo sortie, eg "GS Ex 12 – Verbal Auth Given" but leaving the Aircraft Commander initial column blank. On completion of the solo, the trainee completes the entry by initialling the Aircraft Commander column.

b. **Diversion Recovery Flights.** Relevant details **should** be entered in the Authorization Sheets and initialled by the Aircraft Commander after landing. For the recovery flight from a diversion, verbal authorization may only be given by:

- (1) The Duty Supervisor.
- (2) Self-Authorizing 2 FTA CAI and CFS Examiners.

Guidance Material 2306(1)

Authorization of Flights

13. Rather than listing individual names in the passenger column in the Authorization sheets for GIF sorties, Authorizing Officers may refer to the 2 FTS Form 005 by detailing "As detailed on the 2 FTS Form 005".

DHO 2307 – Rules of the Air

Rationale

To ensure safe, efficient and expeditious air traffic all military participants in national sky must adhere to a common set of rules. The Standardized European Rules of the Air (SERA) govern air and related operations within the Community and have been adopted, with derogations, within the UK Air Navigation Order (ANO)¹; military actors are exempted from these regulations². Nevertheless, unnecessary deviation from SERA could increase Risk to Life for Military and Civilian parties and therefore this Regulation departs from SERA to the extent necessary to facilitate military aviation.

Contents

2307(1): Rules of the Air

Duty Holder Order 2307(1)

Rules of the Air

2307(1) The Aircraft Commander and/or Handling Pilot **shall** follow the Rules of the Air.

Acceptable Means of Compliance 2307(1)

Rules of the Air

1. Unit Cdrs **should** ensure that aircrew under their command operate in accordance with the Rules of the Air and the requirements of RA 2307(1). Weather limitations are detailed within DHO 2305.

Formation Flying

2. Formation flying **should not** be undertaken by VGS personnel. 2 FTS HQ, CGS and CFS personnel **should not** undertake formation flying without approval from Comdt 2 FTS.

Flying in Close Proximity to Other Aircraft

3. Pilots **should** only fly in close proximity to other aircraft when certified competent by their Flying Supervisor or when supervised by a certified pilot in the same aircraft. The Authorizing Officer **should** specifically brief pilots before flying any sortie that is likely to include close proximity flying.

4. **Minimum Aircraft Separation.** Aircraft separation **should not** be less than two wingspans or 100ft, whichever is the greater, except when undertaking Aerotow operations. During soaring, aircraft commanders **should** maintain a minimum of 100 ft separation from other aircraft in all directions. Infringements of this separation **should** be reported by DASOR. A solo pilot who has not completed AGT **should not** fly in close proximity to more than three other aircraft whilst completing any type of soaring.

Soaring Qualifications

5. There are three Soaring disciplines that are permitted within 2 FTS operations.

6. **Thermal Soaring.** Pilots **should** receive formal thermal soaring training and demonstrate the ability to join, share and leave a thermal safely with other gliders present. This essential training **should** be completed dual with a suitably qualified B1 Category QGI or above, before the thermal soaring qualification is awarded. If an individual has been trained in thermal soaring techniques but not demonstrated these skills with other aircraft present, the pilot may be authorized to soar in thermals but if joined by another aircraft, they **should** leave the thermal immediately. Thermal turns **should not** be made below 500ft AGL. Attempts at thermal soaring **should not** be carried out within the visual circuit (beyond the downwind call/upwind runway threshold point) unless at 900ft AGL or above; however, if there is no other circuit traffic present, thermal soaring may be completed within the visual circuit, but pilots **should** first obtain approval from the Duty Supervisor. All pilots qualified to thermal soar **should** receive the thermal soaring protocol brief on an annual basis. Pilots who are not in date for the brief **should not** thermal soar with other aircraft. Receipt of the thermal soaring brief **should** be recorded in the pilot's Flying Logbook.

7. **Thermal Soaring Authorization.** Thermal soaring when no other aircraft are present is considered part of the normal operation of a glider and, as such, no specific authorization **should** be required. Sharing a thermal with other aircraft is a specific skill that **should** be authorized as "Thermal Soaring", or by using a specific authorization code.
8. **Ridge or Wave Soaring.** Only pilots who are certified competent to soar in ridge or wave conditions **should** act as Aircraft Commander.
9. **Qualifications.** Soaring qualifications **should** be recorded in the individual's logbook iaw examples contained within DHO 2401 Annex A.
10. **Ridge of Wave Soaring Authorization.** Before a pilot is authorized to fly in ridge or wave conditions, they **should** have flown with their Unit Cdr, CFI or 2 FTS CAI/CFS Examiner and have been assessed as competent to fly in the strong winds and turbulence associated with ridge or wave conditions. The flight **should** be authorized as a "ridge or wave soaring" flight. The pilot **should** also have satisfied their Unit Cdr, CFI or CAI/Examiner that they have recently studied the relevant FTPs, and subject notes, and has revised the following:
- a. Estimating position by Dead Reckoning (DR).
 - b. Lost Procedure.
 - c. Field Landing Procedure.
11. **Limitations.** The weather forecast for the period of the flight **should** be within VMC limits. VGS wave flights **should** remain clear of controlled airspace (unless prior ATC clearance has been obtained). Except when authorized under 2 FTS HQ, CGS or CFS auspices, wave flights **should** remain within sight of, and within gliding range of, the base airfield at all times and **should not** exceed one-hours duration.
12. **Unserviceable E-Varios.** An aircraft with an unserviceable E-Vario may be used for thermal soaring. The Aircraft Commander **should** be thermal soaring qualified and in date for the thermal soaring protocol brief. If flown dual there **should** be no further restrictions; however, when flown solo the minimum Aircraft Commander qualification **should** be G2.
- Aircraft External Lighting includes Navigation, Landing/Taxi and High Intensity Strobe Lights (HISL)**
13. **Aircraft External Lights.** To inform personnel of the state of an aircraft and to enhance conspicuity during operation, the selection of Navigation, Landing/Taxy lights and HISLs during maintenance or flight operations **should** be detailed in the aircraft Flight Reference Cards.

Guidance
Material
2307(1)

Rules of the Air

14. DHO 2401 Annex A.

DHO 2309 – Flight Procedures

Rationale

Across Defence Aviation activities, planning any sortie carries a degree of complexity. Without a clear understanding of the risks and hazards involved, Aircrew will expose themselves, the Air System and the public at increased risk. This Regulatory Article requires all Aircrew to execute their mission in a safe and effective manner, in order to reduce these risks

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 2309(3): Carriage of Loose Articles and Stores
 2309(4): Dropping or Jettisoning of Articles
 2309(5): Handing Over Control in Aircraft with Dual Controls
 2309(6): Withdrawn – Content incorporated into GASO 2307
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Duty Holder Order 2309(1)

Landing Away from Active Airfields

2309(1) Landing away from active airfields **shall** be authorized and, where necessary, permission **shall** be gained.

Acceptable Means of Compliance 2309(1)	Landing Away from Active Airfields 1. Unit Cdrs should ensure that the requirements of RA 2309(1) are fulfilled. VGS detachments or landaways are subject to Comdt 2 FTS and OC Ops Wg approval respectively; as detailed in in DHO 2305(1).
Guidance Material 2309(1)	Landing Away from Active Airfields 2. DSA02 DFRS – Defence Aerodrome rescue & Fire Fighting (ARFF) Regulations.
Duty Holder Order 2309(2)	Fire Precautions and Smoking in Aircraft 2309(2) Smoking in aircraft shall be prohibited and, as a precaution against fire, smoking-related items shall not be carried by occupants of, or by personnel working on, UK Military Aircraft or civil aircraft used to deliver military flying training.
Acceptable Means of Compliance 2309(2)	Fire Precautions and Smoking in Aircraft 3. Nil in addition to GASO 2309(2).
Guidance Material 2309(2)	Fire Precautions and Smoking in Aircraft 4. Nil in addition to GASO 2309(2).
Duty Holder Order 2309(3)	Carriage of Loose Articles and Stores 2309(3) The Aircraft Commander shall be responsible for the custody and stowage of any loose articles and equipment.
Acceptable Means of Compliance 2309(3)	Carriage of Loose Articles and Stores 5. The Duty Supervisor should ensure that the requirements of RA 2309(3) are fulfilled. Examples of loose articles are mobile telephones, cameras, personal baggage, coins and keys etc. Cameras and Photographic Media 6. Carriage and Use of Cameras. Cameras may be carried and used in 2 FTS aircraft. The Aircraft Commander should ensure that: a. The camera can be safely stored and used in the cockpit, without interference or impingement of the aircrafts controls or systems. b. Procedures for the carriage and use of cameras should be included in the pre-flight brief. 7. Cameras of any sort should not be used by the handling pilot.

Guidance Material 2309(3)	Carriage of Loose Articles and Stores 8. Nil.
Duty Holder Order 2309(4)	Dropping or Jettisoning of Articles 2309(4) Unauthorized dropping of articles from aircraft shall be prohibited.
Acceptable Means of Compliance 2309(4)	Dropping or Jettisoning of Articles 9. Except for aerotow ropes or glider water ballast (if present depending on aircraft type), no other articles should be dropped from 2 FTS aircraft.
Guidance Material 2309(4)	Dropping or Jettisoning of Articles 10. Nil.
Duty Holder Order 2309(5)	Handing Over Control in Aircraft with Dual Controls 2309(5) Handing over or taking over control of an aircraft fitted with dual controls shall be conducted formally.
Acceptable Means of Compliance 2309(5)	Handing Over Control in Aircraft with Dual Controls 11. When it is necessary to hand over control of a 2 FTS aircraft, a formal instruction to take control and to accept control should be made. In some cases, (eg during instruction) it is necessary to take control in the first instance; this should also be formally declared and accepted. Formal statements of 'I have control' and 'You have control' should be made and acknowledged as appropriate. The Aircraft Commander should be responsible for initiating all control handovers.
Guidance Material 2309(5)	Handing Over Control in Aircraft with Dual Controls 12. QGIs may handover control to passengers iaw DHO 2302(1).
Duty Holder Order 2309(6)	Formation Flying 2309(6) Withdrawn – Content incorporated into GASO 2307.
Acceptable Means of Compliance 2309(6)	Formation Flying 13. Withdrawn – Content incorporated into GASO 2307.

Guidance Material 2309(6)	Formation Flying 14. Withdrawn – Content incorporated into GASO 2307.
Duty Holder Order 2309(7)	Flying in the Company of Civil Aircraft 2309(7) 2 FTS aircraft shall not be flown in the company of civil aircraft without specific approval from ADFT and appropriate authorization.
Acceptable Means of Compliance 2309(7)	Flying in the Company of Civil Aircraft 15. 2 FTS aircraft should not fly in the company of Civil operated aircraft without the approval ADFT.
Guidance Material 2309(7)	Flying in the Company of Civil Aircraft 16. Nil.
Duty Holder Order 2309(8)	Aircraft Marshalling Signals 2309(8) Withdrawn – Content incorporated into GASO 2307.
Acceptable Means of Compliance 2309(8)	Aircraft Marshalling Signals 17. Withdrawn – Content incorporated into GASO 2307.
Guidance Material 2309(8)	Aircraft Marshalling Signals 18. Withdrawn – Content incorporated into GASO 2307.
Duty Holder Order 2309(9)	Aerobatics 2309(9) Aircraft Commanders shall only undertake aerobatic manoeuvres permitted by the Aircraft Document Set (ADS).
Acceptable Means of Compliance 2309(9)	Aerobatics 19. Pilot Qualification. Aerobatics should only be flown by QGIs who have been specifically trained and cleared for aerobatics by a 2 FTS CAI or CFS Examiner. Aerobatics training should also include spin awareness training. Clearance for QGIs to fly aerobatics should be recorded in the individual's logbook by the checking instructor. The minimum qualification to undertake aerobatics should be B1 QGI. At present, due to the requirement for spinning currency, aerobatics should only be flown with a 2 FTS CAI or

CFS Examiner as Aircraft Commander.

20. **Aerobatic Currency.** Currency requirements are laid down in DHO 2103. To regain lapsed currency a pilot **should** undergo a dual check with an A Category QGI who is current in the relevant discipline. VGS instructors whose currency lapses for more than 12 months **should** re-qualify with a 2 FTS CAI or CFS Examiner.

21. **Limitations.** The following limitations apply to aerobatic flight:

- a. The minimum height **should** be 1200ft MSD during any part of the manoeuvre. Authorizing Officers may impose a higher minimum height.
- b. Aerobatics **should** only be flown in VMC with a clearly defined horizon, at and below manoeuvring heights.
- c. The pilot **should** avoid flying aerobatics in turbulent conditions.

22. **Permitted Manoeuvres.** Aerobatic manoeuvres **should** be limited to simple loops, chandelles and tight turns. The limits of 0g +3.5g **should not** be exceeded.

23. **Passenger Considerations.** Aircraft Commanders **should** ensure that passengers are not unnecessarily exposed to distress or alarm and **should** limit aerobatic sortie content accordingly; in particular, Aircraft Commanders are to guard against airsickness. It **should** be remembered that passenger flights are for the benefit of the passenger and not the pilot. Due consideration **should** therefore be given to passengers unaccustomed to aerobatics; however, aerobatics may be completed, provided that:

- a. It is not the passenger's first flight.
- b. The passenger has agreed to aerobatics.
- c. Unless the passenger is current or trainee aircrew, each aerobatic manoeuvre **should** be followed by a period of straight flight.
- d. The passenger is briefed on where to look out and the sensations likely to be experienced.

**Guidance
Material
2309(9)**

Aerobatics

24. FTP3225VIK.

**Duty Holder
Order
2309(10)**

Air to Air Refuelling

2309(10) 2 FTS aircraft **shall not** be required to refuel in the air.

**Acceptable
Means of
Compliance
2309(10)**

Air to Air Refuelling

25. N/A to 2 FTS aircraft.

**Guidance
Material
2309(10)**

Air to Air Refuelling

26. Nil.

Duty Holder Order 2309(11)	Electromagnetic and Cosmic Radiation <p>2309(11) Aircraft shall not be intentionally exposed to electromagnetic radiation outside the limits specified in the ADS or, for non-Release to Service (RTS) flying operations, the Military Flight Test Permit or Certificate of Usage.</p>
Acceptable Means of Compliance 2309(11)	Electromagnetic and Cosmic Radiation <p>27. Whilst it is unlikely that 2 FTS aircraft will be exposed to excess levels of electromagnetic and cosmic radiation, Unit Cdrs should ensure that 2 FTS aircraft avoid the HIRTA lateral and vertical limits detailed within the UK Civil AIP.</p>
Guidance Material 2309(11)	Electromagnetic and Cosmic Radiation <p>28. UK Military Low Flying Handbook (UKMLFHB). 29. UK Civil AIP ENR 5.3.</p>
Duty Holder Order 2309(12)	Oxygen and Cabin Pressure <p>2309(12) Aircraft shall not be flown above FL100 unless it is fitted with serviceable oxygen equipment for all of the crew.</p>
Acceptable Means of Compliance 2309(12)	Oxygen and Cabin Pressure <p>30. N/A to 2 FTS aircraft.</p>
Guidance Material 2309(12)	Oxygen and Cabin Pressure <p>31. Nil.</p>
Duty Holder Order 2309(13)	Altitude Limitations <p>2309(13) Flight at altitude shall be confined to safe limits.</p>
Acceptable Means of Compliance 2309(13)	Altitude Limitations <p>32. Maximum Height. 2 FTS Aircraft should not normally be flown above FL80 or 8000ft AGL; whichever is achieved first. 33. Altimeter Setting. Unless directed to operate on QFE by ATC or local Flying Orders, all routine training should be carried out with the altimeter set to zero at the take-off point. Differences between threshold elevation and the airfield QFE datum elevation should be considered when checking the accuracy of the altimeter. Soaring or cross-country flying may require more appropriate altimeter settings to be used. Aircraft should transit on the local Regional Pressure Setting, or the Standard Pressure Setting if flying</p>

above the Transition Altitude.

34. **Altimeter Calibration.** Altimeters used in 2 FTS aircraft **should** be accurate to +/- 2 hPa, of the airfield QFE¹. Dual altimeters in aircraft **should** be a maximum of 4 hPa difference each, but individually within +/- 2 hPa of the actual QFE. Any altimeters outside of this range **should** be placed unserviceable. Where dual altimeters are in place and only one altimeter is greater than 2 hPa difference from the QFE, the aircraft **should** still be flown, providing that altimeter can be set to zero for take-off on the ground and the Aircraft Commander can view the fully serviceable altimeter; however, the aircraft **should not** be used for any cross-country/transit sorties.

**Guidance
Material
2309(13)**

Altitude Limitations

35. Nil.

**Duty Holder
Order
2309(14)**

Simulated and Practice Emergencies

2309(14) Unit Cdrs **shall** specify in local Flying Orders the requirements for simulated and practice emergencies when conducted on an Aircraft within their AoR.

**Acceptable
Means of
Compliance
2309(14)**

Simulated and Practice Emergencies

36. Unit Cdrs **should** promulgate in local Flying Orders the conduct, authorization and crewing requirements for the conduct of simulated or practice emergencies for aircraft in their AoR, based on aircraft type.

37. **Engine Failure After Take-Off (EFATO).** EFATOs provide a means to train Pilots in the skill necessary to carry out a safe landing following an engine malfunction/loss of power after take-off. Practice EFATOs in Aerotow Aircraft **should** only be simulated by a pilot holding a CQT on type. This **should** be completed to a minimum consistent with the following requirements:

- a. To check competence in EFATO procedures of Pilots during periodic checks, tests or SCT.
- b. Simulated EFATOs and recoveries **should not** be planned to overfly habitation, persons or livestock below 500ft MSD.
- c. Landings **should** be made only when it is possible to land into wind in the normal airfield operating area. In all other cases overshoot/go-around action **should** be initiated as soon as the immediate actions are completed and approach to a field commenced, but in any event in time to avoid descending below a height of 100ft MSD above any obstacle affecting the approach or subsequent overshoot.
- d. Where FRCs call for the movement of a control (eg throttle, fuel-cock, magnetos etc) it **should not** be operated, but "touch" drills carried out and the action required by the FRCs described verbally. The engine **should not** be switched off.

38. **Practice Forced Landing (PFL).** PFLs provide a means to train Pilots in the skill necessary to carry out a safe off-airfield landing in the event of an airborne emergency. A PFL **should** only be simulated by a pilot holding a CQT on type. This **should** be completed to a minimum consistent with the following requirements:

- a. **Currency.** PFL currency **should** be maintained iaw DHO 2103(1).
- b. **Authorization.** PFL sorties **should** be authorized to a specific MSD, which **should not** be less than 100ft. Due to the increased risk associated with an engine malfunction below 500ft MSD, time spent below that height **should** be kept to a

¹ [ICAO Doc 8168 – Aircraft Operations](#); Page 251.

minimum. Once it has been assessed by the instructor/pilot that a landing in the selected field could be achieved, a go-around **should** be initiated.

c. **Weather Limitations.** Refer to DHO 2305(5).

d. **Radio Procedures.** The Aircraft Commander **should** advise the Duty Supervisor (DS) (or ATC if appropriate) by R/T that they are about to initiate PFL training, giving their approximate location. A further R/T call **should** be made to advise "Climbing Away" or "Ops Normal" within 15 minutes of initiating the exercise, or any previous "Ops Normal" call. The Aircraft Commander **should** ensure that these calls are acknowledged. The DS **should** record receipt of these calls and **should** initiate overdue action if the appropriate R/T call has not been received in the required timescale. Unit Cdrs **should** make local liaison with ATC to comply with these requirements, if appropriate.

e. **PFL Operating Restrictions.** During PFLs pilots **should not** descend below 100ft MSD and **should not** fly within 500ft of Persons, Vehicles, Vessels or Structures (PVVS). To avoid unnecessary disturbance to the public during the climb-out, the following **should** be considered:

- (1) Avoid over-flying livestock, particularly horses, agricultural activities or any location which might result in the generation of a noise complaint.
- (2) Control the engine and aircraft speed to avoid unnecessary noise generation.

f. Go-arounds from PFLs **should** be initiated in sufficient time that the climb-out path is not compromised by any obstructions such as trees or pylon lines.

g. Sound Air Safety or Airmanship decisions **should** override these constraints.

h. **Records.** Where PFL practice (away from an active airfield) is continued to less than 500ft MSD, Aircraft Commanders **should** record the LFA number and approximate area in the authorization sheets post flight. LFA details may be included within any authorization code lists.

39. **Practice Launch Failures (PLF).** A PLF **should** only be simulated for training purposes by QGIs. The guidance in FTP3225VIK and procedures in FRCs **should** be followed and practises **should** be kept to a minimum consistent with the following requirements:

- a. To check competence in PLF procedures of Pilots and QGIs during periodic checks or tests.
- b. To ensure trainees are competent in PLF procedures before being sent solo.
- c. The Aircraft Commanders of Staff Continuation Training sorties involving Simulated PLF procedures **should** be A or B1 Category QGIs only.
- d. PLF **should not** be initiated below 100ft for VGS QGIs, or 50kts for 2 FTS CAI or CFS Examiners. If Unit Cdrs specify a minimum height greater than 100ft, this requirement **should** be detailed in local Flying Orders.

40. **Low Level Launch Failure (LLLLF).** LLLF initiated below 100ft **should** only be conducted by appropriately trained 2 FTS CAI or CFS Examiners during CGS courses at RAF Syerston. LLLF **should** be accompanied by an appropriate ground briefing beforehand. Aircraft Commanders **should** communicate their intention to conduct LLLF with the Duty Supervisor, who **should** in turn communicate the intention to the winch operator. A response from the winch operator acknowledging the LLLF to the Duty Supervisor and subsequently Aircraft Commander, **should** be received before the LLLF is completed.

41. **Aerotow Launch Failure (ALF).** ALF **should** only be conducted where a landing on the Designated Landing Area (DLA) can be assured.

Guidance Material 2309(14)	Simulated and Practice Emergencies 42. Aircraft type specific FTP3225 and SOPs.
Duty Holder Order 2309(15)	Refuelling Aircraft – Engines and/or Rotors Running 2309(15) Unit Cdrs shall specify in local Flying Orders how and when the refuelling of aircraft with engines and/or rotors running is permitted.
Acceptable Means of Compliance 2309(15)	Refuelling Aircraft – Engines and/or Rotors Running 43. 2 FTS aircraft should not be refuelled whilst engines are running.
Guidance Material 2309(15)	Refuelling Aircraft – Engines and/or Rotors Running 44. Nil.
Duty Holder Order 2309(16)	Night Vision Device Flying 2309(16) The DDH shall specify local Flying Orders regarding the conduct of Night Vision Device (NVD) flying on Air Systems within their AoR.
Acceptable Means of Compliance 2309(16)	Night Vision Device Flying 45. N/A in 2 FTS aircraft.
Guidance Material 2309(16)	Night Vision Device Flying 46. N/A in 2 FTS aircraft.
Duty Holder Order 2309(T1)	Military Use of Civil Airfields 2309(T1) Aircraft Commanders shall submit an RAF F6840 after using civil airfield facilities.
Acceptable Means of Compliance 2309(T1)	Military Use of Civil Airfields 47. All 2 FTS aircraft are either Military Registered or Contractor Owned Military Operated. Therefore GASO 2309(T1) should apply to all 2 FTS aircraft and a RAF F6840 should be used if any charges are incurred.

**Guidance
Material
2309(T1)**

Military Use of Civil Airfields

48. Nil.

**Duty Holder
Order
2309(T2)**

Security

2309(T2) The Aircraft Commander **shall** be responsible for the security of their aircraft. The risk to the aircraft **shall** be minimised in accordance with AP 1990 and the aircraft protected appropriately.

**Acceptable
Means of
Compliance
2309(T2)**

Security

Minimum Aircraft Physical Security Requirements

49. **MOD and Civilian Airfields in the UK.** Whenever possible, aircraft **should** be kept in a secure hangar. If a secure hangar is not available, the Aircraft Commander **should** ensure that the aircraft is securely picketed and checked regularly by Unit personnel or de-rigged, trailered and securely parked.

50. **Security at Home Base.** Unit Cdrs are responsible for ensuring that aircraft are afforded the physical protection outlined above.

51. **Parked Aircraft Away from Military Airfields.** Whenever possible, aircraft **should** be kept in a secure hangar. If a secure hangar is not available, the Aircraft Commander **should**:

- a. When the aircraft is parked in the open, ensure a recognised guard force checks it hourly or keeps it under continuous visual or electronic surveillance.
- b. Where there is doubt as to the effectiveness of local security arrangements, nominate a crewmember to guard the aircraft until appropriate security protection is available.
- c. For short term parking (<4hrs), nominate a crewmember to guard the aircraft.
- d. Secure and lock (if possible) the aircraft if it is being left unattended.
- e. Complete a security inspection of the aircraft before flight.

Diversions and Forced Landing

52. **Responsibilities of the Aircraft Commander.** The Aircraft Commander **should** report to Air Traffic Control giving flight details and the nature of the unserviceability and ensure that these details are relayed to the home base.

53. **Responsibilities of the Unit Cdr.** Having been advised that an aircraft has encountered difficulties away from its parent base, the Unit Cdr, or representative, **should** ensure that all reasonable measures are being taken to protect the aircraft until the aircraft has been recovered, and **should** also notify OC Ops Wg.

Protection of Aircraft on Public Display at Open Days and Air Shows

54. **Public Events.** Where the display is being held at a military airfield, it is the responsibility of the display airfield to ensure adequate security; however, where the display is being staged at a civilian venue, the Unit Cdr **should** ensure adequate security.

55. **Preparatory Measures.** During preparatory stages of any air show, and particularly those staged by civilian organisations, participating Units **should** confirm that the organisers are aware of the minimum standards of security required.

Guidance Material 2309(T2)	Security <p>56. AP 1990 Manual of Protective Security for Aircraft Systems & Air Transportation Security.</p> <p>57. JSP 440 Defence Manual of Security.</p>
Duty Holder Order 2309(T3)	Night Flying <p>2309(T3) Unit Cdrs with responsibility for flying training at night shall specify in local Flying Orders the night flying procedures appropriate to the aircraft types and aircrew capabilities within their AoR.</p>
Acceptable Means of Compliance 2309(T3)	Night Flying <p>58. N/A to 2 FTS aircraft.</p>
Guidance Material 2309(T3)	Night Flying <p>59. N/A to 2 FTS aircraft.</p>
Duty Holder Order 2309(T4)	Glider and Tutor Flying Over Open Water <p>2309(T4) No aircraft shall be flown over open water except for the minimum period required to comply with local area Arrival, Departure and Deconfliction procedures, or where the ADDH has granted specific authority to do so.</p>
Acceptable Means of Compliance 2309(T4)	Glider and Tutor Flying Over Open Water <p>60. Where arrival, departure or operating procedures apply over open water, Unit Cdrs should ensure that appropriate Air Safety mitigation measures are detailed within local Flying Orders and applied.</p>
Guidance Material 2309(T4)	Glider and Tutor Flying Over Open Water <p>61. Nil.</p>
Duty Holder Order 2309(T5)	Circuit Flying <p>2309(T5) Unit Cdrs shall promulgate in local Flying Orders the maximum number of aircraft permitted in the visual circuit simultaneously with regard to type and mix of aircraft.</p>

Acceptable Means of Compliance 2309(T5)	Circuit Flying <p>62. Repetitive Trainee Circuits. Post AGT, but pre-Grade 1, pilots should be authorized to fly a maximum of up to 5 solo circuits, before a further dual check/authorization is required.</p> <p>63. Circuit Congestion. Unit Cdrs should specify the maximum number of aircraft permitted in the visual circuit if more restrictive than this order. No more than 4 aircraft should be in the circuit although a fifth aircraft may be leaving or joining.</p> <p>64. Runway Spacing. An aircraft should only land directly behind another landing or rolling aircraft provided that the pilot maintains spacing on the runway of not less than 500m at touchdown. The minimum lateral distance between two Glider aircraft, or any obstructions should not be less than half a wingspan from the wingtip. In the case of the Viking T Mk 1, this should be 8.75m. However, for pre-G2 pilots, this distance should be increased to two wingspans; in the case of the Viking T Mk 1, this should be 35m.</p>
Guidance Material 2309(T5)	Circuit Flying <p>65. Nil.</p>
Duty Holder Order 2309(T6)	Volcanic Ash Cloud <p>2309(T6) 2 FTS Units shall adhere to HQ Air Command directives and the ADDH shall promulgate specific guidance for the operation of aircraft within their AoR in the event of a Volcanic event.</p>
Acceptable Means of Compliance 2309(T6)	Volcanic Ash Cloud <p>66. OC Ops Wg should publish specific instructions in the event of a Volcanic event.</p>
Guidance Material 2309(T6)	Volcanic Ash Cloud <p>67. Nil in addition to GASO 2309(T6).</p>
Duty Holder Order 2309(T7)	Flight Data Recorders <p>2309(T7) Where fitted, a Flight Data Recorder shall be operated in accordance with the RTS and local Flying Orders.</p>
Acceptable Means of Compliance 2309(T7)	Flight Data Recorders <p>68. 2 FTS does not use Flight Data Recorders; however, use of the FR300 Personal Flight Recorder and Logbook is being investigated. OC Ops Wg should publish specific instructions for carriage and usage</p>

**Guidance
Material
2309(T7)**

Flight Data Recorders

69. Nil.

**Duty Holder
Order
2309(D1)**

Concurrent Airfield Operations

2309(D1) Unit Cdrs **shall** promulgate in local Flying Orders the specific operating procedures when concurrent airfield operations take place.

**Acceptable
Means of
Compliance
2309(D1)**

Concurrent Airfield Operations

70. Unit Cdrs **should** issue supplementary Section D Flying Orders as necessary to specify particular operating procedures.

71. The DS **should** liaise with the other operators to ensure that the agreed procedures are followed. Any difficulties in the implementation of Orders affecting concurrent operations, which cannot be resolved immediately, **should** be reported to the airfield operating authority. Where safety of operations cannot be assured, the DS **should** order the cessation of 2 FTS operations until the matter has been satisfactorily resolved.

72. Notwithstanding the existence of procedures for the safe operation of aircraft, personnel **should** understand that regulations do not by themselves guarantee safety margins. Personnel **should** therefore be alert to the consequences of possible infringements and **should** conduct operations on the basis of judgement and continuous awareness of activity in adjoining areas.

73. The launch or take-off point **should** be sited relative to the other operations in such a way that:

- a. Supervisors and pilots **should** have a clear view of both operations.
- b. Co-ordination of launches/take-offs from both points **should** be facilitated when required.

74. Launch cables, take-off and landing paths **should** be laid in parallel. All personnel **should** be especially alert to the effects of crosswind, which may tend to drift aircraft during and after launch/take-off into the adjacent operator's area. In such circumstances, lateral separation **should** be increased to the maximum consistent with the operating area and if necessary, launches and take-offs **should** be staggered in time. All pilots **should** be briefed on the effect of crosswind on circuit flying.

Parallel Runway Operations – Separated

75. Separated operations may be run independently; however, the minimum lateral separation between the two operations **should** be at least as described in the following table.

Minimum Separation Distance Required Between Launch Cable Runs/Runways		
Aerodrome Code Number	Runway Length	Separation Distance
1	Less than 800m	120m
2	800m up to, but not including, 1200m	150m
3	1200m and greater	210m

76. The separation distance required **should** be for the whole of the length of the respective take-off or landing area including launch cable runs. The separation area **should** be classed as a sterile area and **should** be kept free of all air and ground movements.

77. Each operation **should** fly opposite mirror visual circuits. The sterile area of separation **should** extend to both the lateral and vertical limits of at least both visual

circuits, but with a “glass” wall, the limits of which **should** be detailed in the FOB.

Parallel Runway Operations – Conjoint

78. Where the lateral separation distances detailed above cannot be achieved, operations **should** be considered Conjoint. In this situation, launches/take-offs **should** be staggered so that a launch or take-off **should not** be commenced until the glider launching cable from a previous launch has been seen to fall to the ground in a safe area or the powered aircraft departing has passed beyond the lateral axis of the winch.

79. Both operations **should** fly the same visual circuit.

80. **Aerotowing.** The aerotow pilot **should** be responsible for maintaining a safe separation between aircraft and the aerotow combination during all phases of flight; however, aerotow take-offs and landings **should** be staggered with either a winch launch or powered aircraft take-off.

Guidance Material 2309(D1)

Concurrent Airfield Operations

81. Operations are classed as Concurrent Airfield Operations when 2 FTS operations take place with other airfield users within the aircraft movement area boundary, be it either ground or air based.

82. Where the minimum lateral separation between the two operations is equal to or greater than 150m, the operations are classed as Separated Operations. When less than 150m, the operations are classed as Conjoint Operations.

Duty Holder Order 2309(D2)

Cold Weather Operations

2309(D2) Unit Cdrs **shall** ensure that cold weather operations take place in accordance with this Order.

Acceptable Means of Compliance 2309(D2)

Cold Weather Operations

83. Aircraft **should not** launch or take-off when snow is falling. Wing and tail surfaces **should** be dry and free of rime ice or hoar frost. Flying operations **should** cease if canopy icing or persistent canopy misting is experienced.

84. **Gliders.** Gliders **should not** be launched from wet snow, slush or from frozen rutted surfaces. Gliders may be operated from dry crystalline snow provided that:

- a. The snow is no more than 5cm deep.
- b. There are no drifts or snow banks near the take-off and landing areas, including emergency landing areas.

85. **Aerotow Aircraft.** Aerotow Aircraft **should not** be operated from snow or slush covered surfaces.

Guidance Material 2309(D2)

Cold Weather Operations

86. Nil.

Duty Holder Order 2309(D3)

VGS Midweek Operations

2309(D3) Midweek operations at VGS locations **shall** only take place with authority from OC Ops Wg.

**Acceptable
Means of
Compliance
2309(D3)****VGS Midweek Operations**

87. The term midweek operations covers flying carried out on days of the week other than Saturdays, Sundays, Public Holidays and those authorized for continuous courses.

88. Midweek operations **should not** be undertaken without specific authority. If a requirement for midweek flying exists, authority **should** be sought from OC Ops Wg; however, before seeking authority, the Unit Cdr **should** obtain agreement from the parent station or the airfield operating authority that it will be acceptable to carry out midweek operations. Notwithstanding 2 FTS authority, midweek operations **should not** take place if there is a likelihood of routine weekend training being jeopardised, eg inability of the GMS to complete maintenance activities to aircraft in preparation for weekend operations etc. At sites where activity is only promulgated in the UK AIP at weekends and Public Holidays, a NOTAM detailing the activity **should** be raised by Ops Wg through CAA Airspace Regulation Ops or AIS Supervisor as appropriate.

**Guidance
Material
2309(D3)****VGS Midweek Operations**

89. Guidance on AIP documentation and NOTAM submission can be obtained through OC Ops Wg.

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DHO 2310 – Role Specific Fixed Wing

Rationale *UK Military fixed wing aviation presents unique challenges that must be identified and regulated. This Regulation provides discrete and specific assurance to Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) to enable them to maintain Risk to Life within boundaries that are As Low As Reasonably Practicable and Tolerable.*

Contents	<p>2310(1): Supersonic Flight</p> <p>2310(2): Withdrawn – Content Incorporated into DHO 2309(9)</p> <p>2310(3): Spinning and Stalling</p> <p>2310(4): Asymmetric Power</p> <p>2310(5): Single-Engine Aircraft Engine Shutdowns</p> <p>2310(T1): Minimum Landing Distance</p> <p>2310(T2): Gliding Military Air Ground Communication Service (MAGCS)</p> <p>2310(D1): Airfield Operations</p> <p>2310(D2): Radio Procedures</p> <p>2310(D3): Role Specific Motor Glider Operations</p> <p>2310(D4): Role Specific Glider Operations</p> <p>2310(D5): Role Specific Aerotow Operations</p> <p>2310(D6): Cross-country</p> <p>2310(D7): Flying Competitions</p> <p>2310(D8): Ground Handling</p> <p>2310(D9): Parking of Aircraft</p> <p>2310(D10): First Response Vehicle (FRV)</p> <p>2310(D11): Operation of Non-2 FTS Aircraft at 2 FTS Sites</p> <p>2310(D12): Control of Ballast Weights</p> <p>2310(D13): First Aid Cover at VGS</p>
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Duty Holder Order 2310(1)

Supersonic Flight

2310(1) Supersonic flight **shall** be specifically approved when not for operations, training tests and trials.

Acceptable Means of Compliance 2310(1)

Supersonic Flight

1. N/A to 2 FTS aircraft.

**Guidance
Material
2310(1)**

Supersonic Flight

2. N/A to 2 FTS aircraft.

**Duty Holder
Order
2310(2)**

Aerobatics

- 2310(2) Withdrawn – Content Incorporated into DHO 2309(9).

**Acceptable
Means of
Compliance
2310(2)**

Aerobatics

3. Withdrawn – Content incorporated into DHO 2309(9).

**Guidance
Material
2310(2)**

Aerobatics

4. Withdrawn – Content incorporated into DHO 2309(9).

**Duty Holder
Order
2310(3)**

Spinning and Stalling

- 2310(3) Spinning and Stalling manoeuvres **shall** be conducted with sufficient height to permit the safe recovery of the aircraft from the intended manoeuvre or in the event of unintended loss of control. Intentional spinning **shall** be prohibited in all aircraft unless specifically Authorized.

**Acceptable
Means of
Compliance
2310(3)**

Spinning and Stalling

Spinning

5. **Aerotow Aircraft.** 2 FTS Aerotow aircraft **should not** undertake any spinning manoeuvres.
6. **Gliders.** Authorization for spinning **should** be in accordance with DHO 2306. Intentional spinning is only permitted with a 2 FTS HQ CAI or CFS Examiner acting as the Aircraft Commander. Pilots **should not** carry out any form of spinning when there is a poor horizon or when visibility is impaired by ice or condensation on the canopy. Spins **should not** be entered below 3000ft MSD. Deliberate mishandling of the controls during spins **should** be prohibited. Pilots **should** keep the ailerons as close to central as possible. A prominent ground or cloud feature **should** be available for orientation and to assist in counting the number of turns. The maximum number of rotations during the spin **should** be 4. The limits of 0g to +3.5g **should not** be exceeded. For the purposes of MOD F700 SPC completion, a spin of up to four rotations **should** count as 1 spin.
7. Pilots **should** initiate recovery by 2500ft MSD. After initiating full recovery action, and if the aircraft is still spinning at 2000ft MSD, the crew **should** abandon the aircraft.

Stalling

8. Authorization for stalling **should** be in accordance with DHO 2306. The minimum height for recovery from intentional stalling **should** be:
 - a. **Gliders.** 500ft MSD.
 - b. **Aerotow Aircraft.** 3000ft MSD.

Guidance Material 2310(3)	Spinning and Stalling 9. FTP3225 and type specific SOPs.
Duty Holder Order 2310(4)	Asymmetric Power 2310(4) Airborne practice and simulated asymmetric flying shall be specifically approved and Authorized.
Acceptable Means of Compliance 2310(4)	Asymmetric Power 10. N/A in 2 FTS aircraft.
Guidance Material 2310(4)	Asymmetric Power 11. N/A in 2 FTS aircraft.
Duty Holder Order 2310(5)	Single Engine Aircraft Engine Shutdowns 2310(5) Engine shutdowns and re-lights in single-engine aircraft shall not be carried out in the air (does not apply to self-launching Motor Gliders), except where Authorized for flight tests and trials.
Acceptable Means of Compliance 2310(5)	Single Engine Aircraft Engine Shutdowns 12. Engine shutdowns in 2 FTS Aerotow Aircraft should not be permitted.
Guidance Material 2310(5)	Single Engine Aircraft Engine Shutdowns 13. RA 2310(5) states that the Regulation does not apply to Motor Gliders. Whilst Motor Gliders are not routinely used by 2 FTS, they may be used on specific occasion; refer to DHO 2310(D3).
Duty Holder Order 2310(T1)	Minimum Landing Distance 2310(T1) Pilots shall ensure that they adhere to the Minimum LDA appropriate to the prevailing conditions of operation.
Acceptable Means of Compliance 2310(T1)	Minimum Landing Distance 14. Minimum Landing Distance Available (LDA). The following minimum LDA should be available in nil wind conditions, although the LDA may be reduced by 10% when the headwind component exceeds 10kts: <ol style="list-style-type: none"> Glider. 200m. Aerotow Aircraft:

- (1) **Paved surfaces with moderate breaking.** 175m.
- (2) **Grassed surfaces with no breaking.** 265m.

**Guidance
Material
2310(T1)**

Minimum Landing Distance

- 15. ADS and Civil Pilots/Flight Manuals.

**Duty Holder
Order
2310(T2)**

Gliding Military Air Ground Communication Service (MAGCS)

- 2310(T2) Only A and B1 Category QGIs **shall** be approved by 2 FTS HQ and CGS to provide a Military Air Ground Communication service.

**Acceptable
Means of
Compliance
2310(T2)**

Gliding Military Air Ground Communication Service (MAGCS)

- 16. 2 FTS CAI and CFS Examiners approved to undertake MAGROCC examinations, **should** provide a MAGCS or undertake MAGROCC currency and standardisation checks at any 2 FTS site, without the need for specific authority from the OC of the Unit, providing they are in date for their own currency and standardisation at RAF Syerston.
- 17. Units **should** provide a MAGCS during the notified hours of watch, even if not actually flying/operating.

**Guidance
Material
2310(T2)**

Gliding Military Air Ground Communication Service (MAGCS)

- 18. The majority of Orders covering a MAGCS and the Military Radio Operators Certificate of Competence (MAGROCC), provided at 2 FTS sites, are contained within GASO 2310(T2).
- 19. Further Advice and guidance can be obtained from the 2 FTS MAGCS sponsor, OC Ops Wg.
- 20. CAP 413 & 452.

**Duty Holder
Order
2310(D1)**

Airfield Operations

- 2310(D1) The Duty Supervisor **shall** closely monitor and supervise flying operations to ensure that aircraft can operate safely and that personnel comply with all relevant orders and instructions.

**Acceptable
Means of
Compliance
2310(D1)**

Airfield Operations

- 21. **Allocation of Duties.** The Duty Supervisor (DS) **should** be responsible for allocating duties to individuals who are SQEP to perform the task.
- 22. **Designated Landing Area (DLA).** The DLA **should** be the normal landing area for all 2 FTS flying operations. The DLA **should** be defined in the Flying Order Book (but **should not** contradict existing orders for the host airfield) and **should** be indicated by ground markers or physical features whenever flying is in progress. The DLA **should** begin a minimum of 100 metres into the landable area, but this distance may be increased to provide greater clearance for any obstructions on the approach path. It **should** be aligned to minimise the possibility of an occurrence if an aircraft overruns the far end of the DLA. When the take-off strip to be used is not the same as the landing strip, this **should** also be made clear in the FOB. Obstructions and bad ground within the DLA **should** be clearly marked. Markers **should not** constitute a hazard to aircraft. The Runway Caravan **should** be sited so that the Duty Supervisor (DS) has, as far as possible, an unobstructed view of the whole take-off, approach and landing run. At CGS, and only when the area is

suitable, the DLA **should** begin a minimum of 50m into the landable area and **should** be marked as such. In all circumstances, pilots of G2 and above **should not** land within half a wingspan of any obstruction, including the Runway Caravan. This distance **should** be increased to two wingspans for pre-G2 pilots. During crosswinds or at the discretion of the DS, this distance **should** be increased to allow for potential weathercock effects towards objects or pilot inexperience.

23. **Inspection of the Operating Area.** Before the MET and Operations Brief, the DS **should** inspect the operating area and note any obstructions, boggy or bad ground; this responsibility **should not** be delegated to any other personnel. If any of these features impinge on the operating area, they are to be clearly marked and briefed to all aircrew so that planned operations can take place safely. Any markers placed on the airfield are to be appropriate for airfield use.

24. **Grass Length.** During the inspection of the operating area, the DS **should** check that the grass length is short enough to allow safe operations, and that newly mown surfaces or cuttings are not liable to cause problems such as clogged wheel fairings or winch pulleys. Grass length is to be a maximum of 100mm in the operating area. If this is not the case, flying operations **should not** be commenced.

25. **Circuit Patterns.** The DS **should** specify the circuit patterns to be used. Where possible, flying over domestic and technical sites **should** be minimised.

26. **Control of MT.** The DS **should** control the movement and operation of MT vehicles on the aircraft manoeuvring areas. All vehicles employed on airfield duties **should** possess a portable SMRE radio, so that the DS can effectively control vehicle movements; all other vehicles **should** be escorted.

27. **Fitness and Fatigue.** The DS **should** ensure that all personnel are fit for flying duties.

28. **Parking of Aircraft.** The DS **should** ensure that during breaks in flying, aircraft are parked in a safe position or returned to the hangar. Aircraft **should not** be left unattended where there is a risk of interference by unauthorized persons.

Guidance Material 2310(D1)

Airfield Operations

Manufacture and Use of Airfield Markers

29. **Introduction.** Aerodrome and runway markers are required to identify the Designated Landing Area (DLA) and other areas of unserviceability or bad ground. There are two types of marker that may be used for this purpose.

30. **Manufacture.** Units are to request manufacture of these markers from their parent station stating MADS and this order as authority for production. Sufficient numbers are to be ordered to meet the necessary output at each location.

31. **General principles.** Any aerodrome markers are to be made from materials that are:

- a. Easily transportable.
- b. Frangible, ie breakable or capable of being broken. This means that they **should** be sturdy enough to withstand transport around the airfield, but will collapse and break if hit by an aircraft.
- c. Easily identifiable to aircraft in the circuit and manoeuvring area.
- d. Capable of withstanding movement by strong winds.
- e. Any markers **should** project at least 0.45m above ground level, but provide sufficient clearance between any aircraft propellers or wings.
- f. The colour of markers **should** contrast with the surrounding terrain.

32. **Materials.** The following principles **should** be applied to the materials of any aerodrome markers:

- a. **Basic material.** Aerodrome markers **should** be made from either wood or

thin plastic, ie formalux, that will be frangible. Metal **should not** be used, as this type of material has the potential to be less frangible than wooden or thin plastic materials.

b. **Base.** Any markers **should** be hollow so that the marker can collapse in on itself during a collision. The base frame needs to be sufficiently heavy so that the marker cannot be moved by strong winds.

c. **Frame.** Any side frame **should** be sturdy enough to hold the shape of the marker and possess the ability to withstand stresses during transport around the aerodrome.

d. **Side walls.** The sides of any markers **should** be made from a light wood or thin plastic that would be frangible, such as thin plywood. The frame and walls **should** be able to withstand natural weathering.

33. **DLA markers.** Where permanent aerodrome markings exist, ie threshold markings, aiming point or touch down markers, runway numbers etc, these may be used to denote the start of the DLA, providing they satisfy the minimum 100m inset from the start of the available landing area. If units wish to incorporate painted marks on runway surfaces to denote the start of the DLA, these marks are to be white.

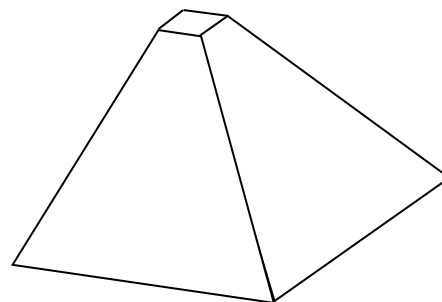
34. **Service supplied markers.** White DLA markers/cones supplied through Service supply routes are available by demanding against NSN 9905-99-6663947.



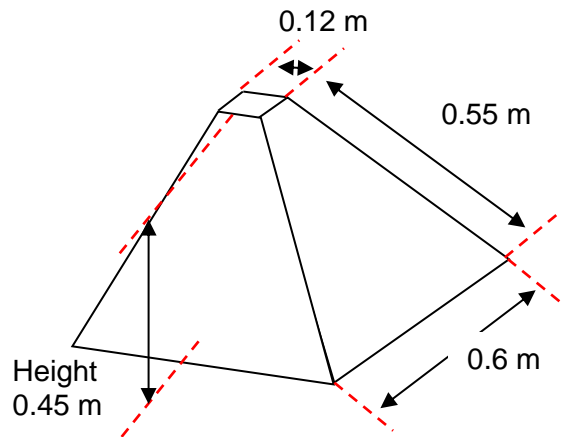
35. **Manufactured Markers.** Manufactured DLA markers **should** be made from the following design:

a. **Colour.** DLA markers are to be a bright white colour, whether used on tarmac/concrete or grass surfaces.

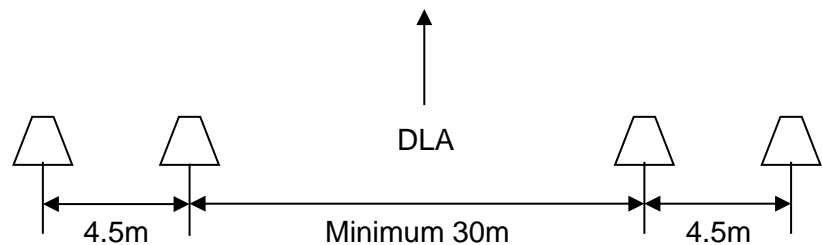
b. **Shape.** A four equal sided sloped "Isosceles Trapezoid" **should** be used. This is a four-sided pyramid with the top cut off (not to scale):



- c. **Dimensions.** Each side **should** be equal and the approximate dimensions are as follows:

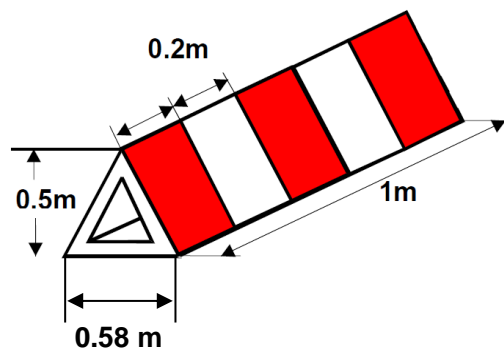


- d. **Layout.** DLA inner markers **should** be placed opposite each other at least 30m apart and at right angles to the DLA. Outer markers, if used, **should** be placed no more than 4.5m laterally from the inner markers:



36. **Unserviceability marker.** Unserviceability markers **should** be displayed wherever any portion of a taxiway, apron or dispersal is unfit for the movement of aircraft but it is still possible for an aircraft to bypass the area safely.

- Colour.** Unserviceability markers **should** consist of a marker board with alternate red and white vertical stripes.
- Shape.** A triangle shape **should** be used.
- Dimensions.** The dimensions to be used **should** be as follows:



- Layout.** Unserviceability markers **should** be placed at intervals sufficiently close so as to delineate the unserviceable area.

37. **Aircraft Manoeuvring and Non-Manoeuvring Markers.** Markers may be used to separate aircraft manoeuvring and non-manoeuvring areas and are available via Service supply routes. Red and white Tribox Plus markers are available, and measure 1350mm (W) x 500mm (H) x 570mm (D). They interlock and can be filled with water for greater stability. They are available in red: NSN 9905-99-3598985 and white: NSN 9905-99-8432058.



38. Further advice on markers is detailed in RA 3517 – Permanent Fixed Wing Aerodrome: Markers, and RA 3519 – Permanent Fixed Wing Aerodrome: Visual Aids for Denoting Restricted Use Areas.

**Duty Holder
Order
2310(D2)**

Radio Procedures

2310(D2) Radio procedures **shall** be set and followed according to local Flying Orders.

**Acceptable
Means of
Compliance
2310(D2)**

Radio Procedures

39. Unit Cdrs **should** publish radio pre-set channel allocations and any special procedures or R/T calls required to meet local requirements in local Flying Orders. An aircraft cockpit placard **should** be placed to indicate the pre-set channel allocations.

40. The DS **should** satisfy themselves with the condition and operation of the Air/Ground radio equipment in use.

41. Before flight, pilots **should** confirm that two-way communication is possible with the DS or airfield-controlling authority on the appropriate frequency.

42. **Student Prefix to Callsigns for Student Solo Flights.** The “Student” prefix **should** be compulsory for all 2 FTS ab-initio solo sorties and is subject to the following:

- a. If the sortie is conducted entirely at the home location, provided that the local ATSU are made aware of the solo flight, the use of the prefix may be dispensed with.
- b. Where the sortie results in contact with another ATSU, the prefix **should** be used on the initial call and, once acknowledged by the ATSU, it **should not** normally be necessary to use the prefix on subsequent transmissions.
- c. The use of the prefix **should** be included in all pre-flight solo briefs.
- d. Local Flying Orders **should** detail the precise procedures for use of the “Student” prefix and specifically, when it is to be used.

43. All students **should** be made aware that during solo sorties, they can choose to use the prefix at any time if they consider it necessary.

44. **Callsigns.** Military callsigns are constructed from a letter Tri-Graph or Telephony Alternative prefix. The prefix **should** be followed by a personal number allocated by Unit Cdrs to personnel from the following block allocations (approved by ICAO and contained within JSP 506 and Flight Information Handbook):

Callsign Allocation Table			
Unit	Callsign Trigraph	Telephony Alternative	Block Allocation
2 FTS HQ, CGS and CFS	SYO	SYERSTON	01-99
614 VGS	SMX	SWANTON	101-199
615 VGS	KNY	KENLEY	101-199
621 VGS	RIN	RISSINGTON	201-299
622 VGS	UPV	UPAVON	101-199
626 VGS	PDK	PREDANNACK	101-199
632 VGS	THL	TERN HILL	101-199
637 VGS	RIN	RISSINGTON	101-199
644 VGS	SYO	SYERSTON	101-199
645 VGS	TOP	TOPCLIFFE	101-199
661 VGS	KRT	KIRKNEWTON	101-199
RESERVE	GLS	SEDBURGH	A/R
RESERVE	VGL	PREFECT	A/R

45. "GLS" and "VGL" **should** be issued by OC Ops Wg as required.
46. Callsigns ending "00" **should not** be used to avoid confusion with Flight Levels and are therefore not available for use in the allocation table above.
47. 2 FTS HQ, CGS and CFS personnel **should** use their own callsign when flying as Aircraft Commander during visits to VGSs. Personnel attending a CGS course **should** use their own callsign, if one has been allocated, when flying as Aircraft Commander. A trainee carrying out a solo flight, when required to use the radio, **should** use the callsign of the instructor authorizing the solo. CGS course trainees who have not been allocated a personal callsign may be temporarily allocated one of the spare CGS callsigns.
48. The callsign for the Unit **should** be "(location) Radio". At VGS locations where this callsign is already allocated or where an ATC service is normally provided, the VGS callsign **should** be "Victor Ops" or other designated callsign as allocated by the airfield controlling authority. The callsign may be abbreviated to just the location once two-way communication has been established with an aircraft, provided that the possibility of confusion does not exist; however, at airfields where air traffic control is exercised the full base callsign **should** be used, even when air traffic is closed.

**Guidance
Material
2310(D2)**

Radio Procedures

49. CAP 413 & JSP 506.

**Duty Holder
Order
2310(D3)**

Role Specific Motor Glider Operations

- 2310(D3) Certain limitations to operations are necessary to ensure safe usage of Motor Glider aircraft by 2 FTS and **shall** be followed iaw this order.

**Acceptable
Means of
Compliance
2310(D3)**

Role Specific Motor Glider Operations

50. **Usage.** Whilst 2 FTS doesn't routinely operate Motor Gliders as a DDH Air System, 2 FTS occasionally operates Motor Gliders for other purposes, such as Practice Field Landing (PFL) training, iot remain current for Glider delivery and transit flights. The Orders contained within this DHO **should** therefore be considered to cover these eventualities.
51. **Engines.** Engine starting **should** be done, under supervision, at a safe distance from the hangar. If, when taxiing, there is any doubt about the space ahead, the engine **should** be shut down and the parking brakes applied until assistance is available to manhandle the aircraft.
52. **FOD.** When it is necessary to taxi over areas of loose stones (eg transitions

between paved and grassed areas), it is essential that engine power is kept to a minimum at the point of the transition.

53. **Propellers.** At no time **should** any person (other than those qualified for engineering or flight servicing purposes) or object be within the propeller arc. Motor Gliders **should not** be manhandled when the propeller is turning, except that the extreme wingtip(s) may be held to assist manoeuvring the aircraft on the airfield, when necessary. This **should** be done only as a special measure, under the supervision of the DS.

54. **Engine Running Changes.** Engine running crew changes **should not** be permitted.

55. **Aircraft Acceptance.** The Aircraft Commander taking over the aircraft **should** ensure that they have sufficient fuel for the planned sortie and that the sortie is completed within any Flight Servicing periods of validity.

56. **Gliding Range.** Except when completing PFL training, Motor Gliders **should** be operated such that both a safe glide circuit and landing can be achieved at the operating airfield in the event of a complete or partial engine failure. Additionally, the Motor Glider **should** be positioned such that it remains between the airfield and any approaching deteriorating weather.

57. **Noise Abatement.** The noise of the Motor Glider engine can be intrusive, particularly when engine speed is high. Pilots **should** use appropriate engine handling, speed and attitude control techniques when recovering from PFLs. To further reduce the impact of noise, the following procedures **should** be adopted subject to any over-riding flight safety considerations:

- a. After take-off, an appropriate reduction in power **should** be considered, once above 500ft MSD, when departing the circuit.
- b. All pilots **should** avoid known noise sensitive areas unless Flight Safety dictates otherwise.
- c. Avoid conducting upper air exercises in the same area, whenever possible.

58. **Minimum Take-off Fuel.** As per aircraft Pilot Operating Handbook (POH) of Flight Manuals (FM)

59. **Minimum Landing Fuel.** As per aircraft POH or FM.

60. **Re-joins.** Procedures for re-joining the circuit **should** be set out by Units Cdrs in local Flying Orders, giving due consideration to local avoids or noise sensitive areas and regulated airspace. Any amendments to procedures **should** be formulated in consultation with the CGS Liaison Officer. Standard re-join procedures are documented in AP 3456. When Motor Gliders are operating from a CAA licensed airfield or other Military airfield, re-join procedures **should** be in accordance with those laid down by the airfield operating authority or as directed by Air Traffic Control. Pilots **should** be aware of the other types of Rejoins for occasions when they might visit other airfields.

61. **Concurrent Airfield Operations.** At locations where other users are operating and flying opposite direction circuits to 2 FTS Unit, Deadside Re-joins **should not** be used. In this instance, re-joins **should** be limited to Downwind and live side Engine Stop re-joins only.

62. **Engine Stopped Flying.** Engine stopped flying may be conducted by Motor Glider pilots iaw the POH or FM. The Authorizing Officer **should** specifically brief and authorize pilots for engine stopped flying.

**Guidance
Material
2310(D3)**

Role Specific Motor Glider Operations

63. Type specific PoH and FM.
64. FRCs.
65. AP3456.

**Duty Holder
Order
2310(D4)**

Role Specific Glider Operations

2310(D4) Certain limitations to operations are necessary to ensure safe usage of 2 FTS Glider aircraft and **shall** be followed iaw this order.

**Acceptable
Means of
Compliance
2310(D4)**

Role Specific Glider Operations

Cable Layout Procedures

66. **Positioning the Winch and Launch Point Vehicles.** When considering the positioning of the winch and Runway Caravan, and in supervising the initial laying out of the cables, the DS **should** consider:

- a. The experience of the winch operator.
- b. The type of flying to be undertaken.
- c. The condition of the ground at, and between, the winch and the launch point.
- d. The surface and upper air wind strength, its direction, and the effect that any drift may have on falling cables.
- e. The need to ensure that falling cables will not at any time fall outside the airfield boundary or cause injury to personnel or damage to property.
- f. The availability of suitable landing areas for launch failure procedures.
- g. That there is a safe clearance between cables, obstructions or bad ground.

Cable Retrieving

67. **Control.** The driver of the cable retrieve vehicle **should** be under the control of the DS. The DS **should** delegate local control to the winch operator when the vehicle is at the winch end. If the retrieve driver is in any doubt as to how to proceed, they **should** seek guidance from the DS or winch operator as appropriate to their current location.

68. **Procedure at the Winch.** In order to prepare cables for the retrieve, the cable retrieve driver **should**:

- a. Park alongside the winch with the front of the vehicle behind the winch cab.
- b. Obtain approval from the winch operator prior to positioning the vehicle in front of the winch.
- c. Attach cables to the retrieve trailer arms or vehicle hooks as appropriate using nylon cord tow links. Under no circumstances **should** personnel attempt to attach a cable to a moving vehicle.
- d. Obtain approval from the winch operator prior to moving slowly forward to tension all cables.
- e. Confirm visually that cables are not crossed.
- f. Once the winch operator signals that the cables are under tension, smoothly accelerate to towing speed.

69. **Procedure During the Retrieve.** When towing, the cable retrieve driver **should**:

- a. Proceed in a straight line to a clear space at the launch point as briefed by the DS.
- b. Stop if a landing aircraft or other obstruction is encountered. Following any stop, obtain authority from the winch operator to recommence the retrieve.
- c. Comply with any signal directed at their vehicle.
- d. Continue with remaining cable(s) if any cable(s) detach during tow-out. Any cable detachments **should** be reported to the DS.

70. **Procedure at the Launch Point.** When approaching the launch point the cable

retrieve driver **should**:

- a. Smoothly slow to a stop at the point briefed by the DS.
- b. Reverse to remove tension from all the cable.
- c. Ensure that no person handles any cables until the vehicle is at rest.
- d. Physically check that all cables are detached, with trailer arms folded and secured with pins and safety clips prior to moving off from the launch point.

71. **Premature Stop in the Vicinity of the Launch Point.** If the cable retrieve driver has to stop at the launch point vicinity prior to reaching the final briefed position, they **should**:

- a. Make no attempt to restart the retrieve, until confirmation from the winch operator that it is safe to do so.
- b. Smoothly continue with the tow-out, following a take up slack signal from the winch operator.
- c. If the tow has been abandoned, reverse vehicle to remove tension from all the cables.
- d. Ensure that all cables are detached, with trailer arms folded and secured with pins and safety clips prior to moving off from the launch point vicinity.

72. Any cable that is dropped before reaching the launch point is to be wound-in before any of the remaining cables are attached for launching. All cable recoveries to the winch **should** be initiated by the DS under launch signal.

Launch Preparation

73. During an aerotow launch it is acceptable for launch preparation to be carried out utilising just one orderly; however, the cable **should** be attached prior to the wings being made level.

74. **Aircraft Positioning.** All aircraft preparing to launch **should** be positioned with their wings ahead of a lateral line emanating from the front of the Runway Caravan.

75. **Cable Handling.** Cadets undergoing gliding training may carry out cable attaching duties, but they **should** be closely supervised, even after training. The DS **should** ensure that no cable handling takes place when the winch beacon is flashing, unless the in-use cable can be seen to be wholly in the air. The cable orderly **should** be responsible for:

- a. Ensuring that when moving any cables into position, they **should** always be held with a loop in the cable, in case of inadvertent application of power from the winch.
- b. Inspecting the drogue parachute for serviceability and correct orientation, checking the weak link and shock absorber rope for integrity, and all karabiners and shackles for security. This check may be completed with all cables once they have been detached from the cable retrieve vehicle.
- c. Laying out the cable in preparation for launch in front of the aircraft and straightening out the parachute and strop assembly.
- d. Attaching the cable to the aircraft when instructed to do so by the handling pilot.

76. **Cable Sequence.** The DS and winch operator **should** ensure that before a launch is initiated, the in-use cable has not been compromised by another cable falling across it or interfering with it in any way.

77. **Cable Drop Zone (CDZ).** The CDZ is an area which a launch cable could drop into following release from the aircraft, or cable break, and therefore **should** remain sterile during launching or take-offs. The CDZ **should** be the length of the cable run between launch point and winch, a minimum lateral width of 100m either side of the cable run and extend vertically to the height of the winch launch; however, the width may start to reduce in the last 1/4 of the length, closest to the Runway Caravan. The height of the launch will vary due to the conditions on the day; however, the width **should** be increased as required by the DS, when conditions dictate, eg crosswind. The CDZ **should** be clear of all

obstructions, including aircraft, vehicles and personnel, whilst launching is in progress. A guide to the dimensions of the CDZ is detailed at Annex A, and both Aircraft Commanders and the DS **should** make a dynamic assessment to apply these dimensions to any obstacles in the operating area, before deciding if it is safe to launch.

78. **Clearance to Launch.** The DS **should** ensure the safety of personnel and equipment on and in the vicinity of the operating area; therefore, they **should** ensure that an aircraft is not launched if any of the following conditions exist:

- a. If there is any doubt as to the serviceability of the winch.
- b. If the signals from the launch point are not clear to the winch operator.
- c. If there are personnel, vehicles or airfield equipment in the vicinity of a launching glider or the launching cable, which would create a potential hazard to that aircraft or the obstruction, in the course of a normal launch or subsequent emergency situation.
- d. The CDZ is not clear.
- e. If there is a possibility that a cable might pose a hazard, after normal release or cable break, to personnel, aircraft, vehicles, airfield equipment, or where it might fall outside the airfield boundary.

79. **Between Launch Maintenance.** The DS **should** ensure that the cable end assembly is inspected prior to every launch; if doubt exists as to its serviceability, the appropriate repairs **should** be carried out before the cable is next used.

80. **Change of Wind Direction.** A change of wind direction may erode the margin between falling cables and obstructions. The DS **should** monitor the effect of changing conditions on the CDZ. If any doubt about safety margins between cables and obstructions exists, the DS **should** suspend launching. The DS **should** take appropriate action, eg reposition the winch or operation, after which the DS may recommence operations.

81. **Safety of Personnel.** Once the launching cable has been attached to the aircraft, it **should not** be handled again until after release by the pilot.

82. If any person is seen to be approaching a moving launch cable, the DS **should** ensure that action is taken to stop the cable movement as soon as possible.

83. Personnel in close vicinity to the winch **should** remain inside a vehicle whilst a launch is in progress.

Launching Orders

84. **Cable Orderly.** The following process **should** be followed to attach the launch cable to the aircraft:

Cable Attaching Process		
Serial	Handling Pilot Actions	Cable Orderly Actions
1	Call for "Cable On"	Prepare to attach cable and call "Open"
2	Open the cable release mechanism and reply "Open"	Insert cable and call "Close"
3	Close the cable release mechanism and reply "Closed"	Check that the cable is secure and the attachment rings are not jammed. Call "Cable On and Secure", and then immediately walk clear of the glider

85. The back-release mechanism **should not** be used for the purpose of attaching the cable.

86. At any one time, only one aircraft **should** have a launch cable attached. If there is a possibility of the aircraft passing close to any other cables, the cables **should** be pulled well clear before the in-use launch cable is attached.

87. **Obstructions.** Before giving any orders to commence the launch, the handling pilot **should** ensure that the launching area is clear of all obstacles.

88. **Wingtip Orderly.** Cadets undergoing gliding training may carry out wingtip orderly

duties, but they **should** be closely supervised until they can carry out their duties satisfactorily and without assistance. The wingtip orderly is responsible for raising or lowering the wing of the aircraft to the level position.

Wingtip Process		
Serial	Handling Pilot Actions	Wingtip Orderly Actions
1	Call for "Wings Level"	Check both wingtips are free of obstructions and raise or lower the wing to the level position
2	Ask "All Clear Above and Behind"	Check the area and airspace above and behind the aircraft, eg the final approach, is clear
3		If the area is not clear the wing top orderly should call "NO" . Competent orderlies may expand on this with additional information, eg "Aircraft on Final"
4		If the area is clear, respond with "All Clear Above and Behind"
5	Continue with normal launch orders	Continue with normal launch orders

89. As the aircraft moves forward on the take-off run the wingtip orderly **should** move with it, holding the wings level with only the hand nearest the aircraft holding the wingtip, until the aircraft accelerates out of their hand. The wing **should not** be pushed or pulled during the initial part of the run.

90. If the handling pilot decides not to proceed with the launch, the wingtip orderly, when instructed to do so, **should** lower the wing of the aircraft to the ground.

Launch Signals and Orders

91. Gliding operations **should** be controlled by standard signalling procedures using a signalling lamp, signalling bats or an appropriate electronic relay system which **should** be approved by OC Ops Wg. Launch Orders **should not** be relayed by radio as there is no failsafe if a radio failure occurs. In the event of signalling lamp failure in the Runway Caravan, DS, in consultation with the Duty Executive (DE), may elect to use a suitable vehicle, ie Ranger or Tractor as a substitute, providing the light signals can be clearly seen, and all personnel **should** be briefed on the usage. The vehicle operator **should** remain within audible range of the DS. Signalling devices **should** also have an audible warning to signal a launch is in progress; however, if the audible device is unserviceable, or other methods are used for launching, all those involved in the relay of launch orders, ie wingtip orderly and signaller **should** emphasise their verbal orders and responses. The DS **should** ensure that only the signalling procedures described in this order are used.

92. **Launch Signaller.** All signals originating from the launch point **should** be transmitted by a current or U/T operator. All operators **should** be under the supervision and control of the DS until deemed competent by the DS. The signaller **should** verbally acknowledge all signal orders directed at them by repeating the signal in a voice sufficiently loud and clear to be heard by the originator. Signals from the winch **should** be controlled by the winch operator.

93. **Signals.** All launch signals **should** be initiated by the handling pilot of the aircraft; however, any person who sees a situation of danger or Risk to Life developing during a launch **should** shout **"STOP, STOP, STOP"** at the signaller.

94. **Hand Signals from the Handling Pilot.** The pilot's verbal launch orders **should** be supplemented by hand signals as follows:

- a. **Take Up Slack.** The left hand **should** be raised, with one finger extended and both held motionless, whilst giving the verbal order "Take Up Slack". After the order has been given, the wingtip handler **should** verbally respond with the full order whilst relaying the order to the signaller, after which the pilot **should** lower their left hand so that it rests close to or on the cable release, so that the launch can be terminated if required. The wingtip handler **should not** abbreviate the Order, eg "Up Slack" or other examples **should not** be used.

b. **All Out.** The left hand **should** be raised, with two fingers extended and both held motionless, whilst giving the verbal order "All Out". After the order has been given, the wingtip handler **should** verbally respond with the full order whilst relaying the order to the signaller, after which the pilot **should** lower their left hand so that it rests close to or on the cable release, so that the launch can be terminated if required. The wingtip handler **should not** abbreviate the Order, eg "Out" or other examples **should not** be used.

c. **Stop.** There is no hand signal to indicate the command to "Stop". To stop a launch, the handling pilot **should** shout "STOP, STOP, STOP" and release the launching cable immediately.

95. **Winch Launch Signaller:**

a. **Take Up Slack.** The Take Up Slack signal **should** be a series of white dashes with a signal lamp pointed at the winch vehicle, or using one signalling bat held at arm's length and moved from side to side below the waistline of the signaller while facing the winch. This signal instructs the winch operator to engage the winch for the launch and to take up the slack on the cable.

b. **All Out.** The All Out signal **should** be a series of white dots with a signal lamp pointed at the winch vehicle, or using a signalling bat held at arm's length and moved from side to side, above the waistline of the signaller while facing the winch. This signal instructs the winch operator to proceed with the launch. The signal **should** be continued until the glider has reached at least 100ft MSD, unless a "STOP" signal is ordered.

c. **STOP.** The STOP signal **should** be a steady white light with a signal lamp pointed at the winch vehicle, or using the signal bat held vertically at arm's length above the signaller's head while facing the winch. This signal instructs the winch operator to stop the launch immediately. The signal **should** continue until the launch is stopped or until the DS orders the signal to be discontinued.

96. **Aerotow Signaller.** The Aerotow Signaller **should** employ the same set of signals as the winch launch, but using their arm/hand rather than a signalling bat, and the signals **should** be directed to the Aerotow Aircraft pilot.

a. **Take Up Slack.** The Aerotow Signaller **should** move their extended arm from side to side, in a 180-degree arc in line with and below their waist.

b. **All Out.** The Aerotow Signaller **should** move their extended arm from side to side, in a 180-degree arc in line with their shoulder and clearly above their head.

c. **STOP.** A STOP signal **should** be relayed by the Aerotow Signaller by raising their hand vertically up, holding their hand above their head whilst facing the Aerotow Aircraft, and **should** also verbally shout "**STOP STOP STOP**". Due to the potential difficulty of the Aerotow Aircraft pilot distinguishing between an All Out and STOP signal, the STOP instruction **should** also be relayed by radio from either the handling pilot or DS.

97. **Other Ground to Ground Signals.** When it is necessary to stop other activity taking place on the airfield, eg the movement of an airfield vehicle or aircraft, and communication by radio or SMRE is not possible, the "STOP" signal **should** be given with a signal lamp pointed at the activity concerned. A signal to resume the activity **should** be given by transmitting the "Take Up Slack" signal.

98. **Signalling Devices.** Signalling lamp devices **should not** be locally manufactured without approval from OC Ops Wg. Signalling bats may be locally manufactured but **should** be in the shape of a disc 18" in diameter, coloured Day-Glo orange, with a handle attached.

99. **Entry into Cloud.** If the cloud base is approached during a winch launch the pilot **should** terminate the launch before entering cloud. If cloud is inadvertently entered the winch operator **should** maintain winch power until the glider has released. The pilot **should** release the cable immediately on entering cloud, then lower the nose to descend clear.

100. **Hangar Landings.** Hangar landings may occasionally be used to return aircraft to

the hangar at the end of flying operations, in order to achieve a more expeditious recovery; however, there are several supervisory factors that **should** be considered by the DS:

- a. **Landing Area.** Hangar landings normally utilise parts of the airfield not routinely used in the day's operation. The DS **should** therefore inspect the area to ensure it is serviceable.
- b. **Crew Competence.** The DS **should** ensure that the Aircraft Commander is competent for the task.
- c. **Approach Path.** The DS **should** ensure there are no obstacles in the new approach path.
- d. **Undershoot/Overshoot options.** The DS **should** consider and brief both undershoot and overshoot options.
- e. **Braking.** The DS **should** consider the effect of aircraft brake failure and ensure there are no obstacles in a prolonged landing run. Aircraft Commanders **should** ensure they are not pointing directly at any obstructions, ie the hangar itself, without sufficient landing space for the aircraft to come to a stop under its own momentum
- f. **After Landing.** The DS **should** ensure that the new landing area will not infringe any CDZs.
- g. **Vehicle Movements and Other Airfield Users.** The DS **should** brief all other airfield users.

Centre-Line Operations

101. A centre-line operation allows aircraft to take-off and land on either side of a centre-line axis drawn through the Runway Caravan and the winch. It **should** only be employed if the following additional safety precautions are followed:

- a. The Runway Caravan and winch **should** be positioned so that DS can ensure that the space either side of the caravan provides sufficient width for landing and take-off, bearing in mind the number of aircraft to be operated, the experience of the Aircraft Commander and any crosswind. Aircraft may land either side of the caravan.
- b. Circuits **should** be in one direction only. The cables **should** be drawn out along the centre-line. Only one aircraft on the launch lines may have its wings level or its cable attached at any one time. Only the next available outside cable (on either side) **should** be used for launching. On seeing the take up slack signal, the winch operator **should** determine, which outside cable is required by observing the launch point for aircraft with wings level. Any ambiguity **should** be resolved using the radio, or binoculars, before the winch drum is engaged.
- c. The DS **should** be meticulous in enforcing launch point discipline. In particular, the wingtips of launching aircraft **should** be ahead of the caravan to enable pilots to see aircraft at the head of the opposite launch line. All personnel **should** remain well clear of all cables during a launch procedure.
- d. Drivers of vehicles in line with the Runway Caravan **should** ensure that both take-off and approach lanes are clear before proceeding into any manoeuvring areas.
- e. Where centre-line operations are used concurrently with other airfield users, the same restrictions in DH 2309(D1) **should** apply. ie the separation distance between take-off/landing areas **should** be a minimum of 150m distance from the operations of other airfield users, in order to utilise mirror circuits.

Trainee Solo Flying

102. **First Solo.** An A Category QGI, or B1 Category QGI if the trainee is a current Qualified Fixed Wing Pilot, **should** fly the pre-solo check and **should** brief the trainee for their first solo flight. The flight **should** consist of one take-off, circuit and landing. In addition to the normal pre-flight brief, the instructor **should** ensure that:

- a. The trainee has carried out all the dual exercises and ground lessons detailed in FTP3225VIK. The trainee **should** have carried out at least 2 simulated PLFs, one

landing ahead on the remaining airfield and one requiring a mini circuit. The instructor **should** also brief the trainee on PLF procedures below 100ft MSD.

- b. The trainee **should** have completed a minimum of 25 dual launches flying training.
- c. The trainee **should** have received training over at least 2 separate days.
- d. The instructor **should** ensure that the trainee is not fatigued.
- e. For any trainee who requires spectacles for flying, the instructor **should** inspect them for fit and security. The trainee **should** carry a spare pair of prescription spectacles, if available.
- f. The instructor **should** brief the trainee on the potential for different characteristics involving elevator and trim sensitivity. It is desirable for the total weight of the pilot, parachute and ballast weight to exceed the placard minimum cockpit weight by more than 15kg, to compensate for the fact the aircraft is flown solo. Accordingly, authorizing officers **should** ensure that for the first solo and all AGT sorties, ballast weights are fitted to the aircraft, to achieve as close as possible the desired minimum weight.
- g. The instructor **should** advise the DS of the intended first solo. The DS **should** stop all other launches, have the shock absorber rope, weak link and drogue chute assembly inspected for wear, and have them renewed if serviceability is suspect. The DS **should** inform the winch operator and other airfield users before the first solo take-off.
- h. During any trainee first solos, there **should** be no obstructions laterally within 37.5m (as a guide – 2.5 Viking wingspans) of what is considered as the in-use runway edge or operating surface. This includes, vehicles, personnel or other parked aircraft. There will be occasions when this may not be possible, and in this instance, landings **should** be planned further into the runway or operating surface, so that lateral separation can be assured, or obstructions removed.
- i. Current Qualified Fixed Wing Pilots **should** have completed the minimum requirements laid down in Annex B to DHO 2101.

Winch Training and Authorization

103. Winch Operator training standards are detailed at Annex B. Winch Operators and Instructors **should** be trained iaw the Skylaunch Winch Operators Practical Training Syllabus.

104. The minimum age of a Winch Operator **should** not be less than 17 years of age. Prior Winch Operator competencies gained on the Mk2 Glider Winch **should** be counted towards the training requirements on the Skylaunch winch system.

105. **Duration of Training.** The duration of training will vary and **should** continue until the trainee has successfully reached the required standard, including the completion of the following requirements:

- a. **Operators.** The total number of launches performed will differ from person to person but **should not** normally be less than 20. The trainee **should** demonstrate competence in a wide range of conditions from near calm wind up to the aircraft maximum wind speed of 25 Kt. Additionally, competence in all of the associated engineering tasks **should** be essential.
- b. **Instructors.** Selected personnel who are qualified and experienced operators, and have completed 200 launches on a Mk2 or Skylaunch Glider Winch.
- c. **Examiners.** Selected personnel who are qualified and experienced Winch Instructors, and have completed 500 launches on a Mk2 or Skylaunch Glider Winch.

106. **Authorization.** The Skylaunch Operator, Instructor or Examiner qualification **should** be entered into Section 4 of the individuals Flying Logbook. A Certificate of Competence (RAF Form 7538) **should** be held in the individuals Training Folder and **should not** be entered into the individual's F5200 folder. Non-Pilot Winch Operators **should** have the qualification recorded on the individual's FMT 600.

CAA Winch Launch Permission

107. Due to the fact that 2 FTS operate military registered aircraft, 2 FTS is exempt from the majority of the Air Navigation Order, which includes the requirement to possess CAA permission to winch launch. 2 FTS locations therefore do not need to be in possession of a CAA Winch Launch Permission, but Units **should not** launch to a height above that specified within the UK AIP ENR 5.5. Civil Gliding organisations that winch launch from 2 FTS sites **should** be in possession of a CAA Winch Launch Permission, which they **should** present to the Aerodrome Operator for formal approval.

Guidance Material 2310(D4)

Role Specific Glider Operations

108. FTP3225VIK and type specific SOPs.
109. FRCs.

Duty Holder Order 2310(D5)

Role Specific Aerotow Operations

2310(D5) Certain limitations to operations are necessary to ensure safe usage of 2 FTS Aerotow aircraft and **shall** be followed iaw this order.

Acceptable Means of Compliance 2310(D5)

Role Specific Aerotow Operations

110. **Aerotow Aircraft.** 2 FTS Aerotow Aircraft are UK-Civil Registered aircraft utilised by the MOD iaw RA 1166, and therefore, when operated by 2 FTS, **should** be operated as a Military Aircraft iaw the RA 2000 series, GASOs, DHOs, the approved Flight Manual and the appropriate Flight Reference Cards.

111. **Aerotow Activity.** 2 FTS **should** undertake aerotowing activity in connection with QGI, Cadet, aerotow pilot training and cross-country flights as required in support of the 2 FTS task. Any other aerotowing activities **should** be approved by Comdt 2 FTS.

112. **Provision of Aerotow Aircraft.** Aerotow aircraft **should** be provided through commercial lease by an appropriate contractor organisation.

113. **Aerotow Combination.** The Aerotow pilot **should** be the Aircraft Commander of the Aerotow aircraft and Glider combination, and responsible for all airmanship aspects, ie sortie management. The sum of the experience of both Aerotow and Glider Aircraft Commanders **should** be at least 10 aerotows.

114. **Aircraft Commander.** The Aircraft Commander **should** hold a Certificate of Qualification on Type (CQT) iaw with DHO 2101(2), and unless giving dual instruction or completing a check flight, the Aircraft Commander **should** occupy the left front seat.

115. **Safety Equipment.** Aerotow aircraft are equipped with appropriate headsets; no attempt **should** be made to wear a parachute or a flying helmet. Crewmembers **should** wear appropriate flying clothing and footwear. Passengers **should** wear flying suits and all crew **should** be subject to the standard loose articles check.

116. **Aerotow Rope.** The DS **should** inspect the Aerotow Rope for serviceability, before the first use of the day.

117. **Persons on Board for Aerotow Operations.** Normal aerotow operations **should** only be flown with the Aerotow Aircraft Commander on board. One additional person, who **should not** be a Cadet, may be carried on aerotows, as follows:

- a. A second pilot receiving aerotow dual instruction.
- b. A 2 FTS HQ, CGS or CFS instructor observing the Aerotow aircraft end of the combination.
- c. Aerotow transit flights, where a second crew is required due to workload.

118. **Persons on Board for non-Aerotow Operations.** During cross-country or air

experience sorties, and when not completing aerotow operations, personnel may be carried as passengers, within the AUM and C of G limits detailed within the Flight Manual. Passengers **should** be carried on these flights iaw RA 2340, GASO 2340, DHO 2340 and the passenger approval processes.

119. **Flight Servicing.** Aerotow aircraft Flight Servicing and Replenishments **should** be conducted in accordance with the schedules provided by the leasing contractor. Aircrew **should** obtain Servicing Certificates before carrying out and signing for these servicings. All other servicing **should** be carried out by the contractor under the terms of the support contract.

120. **Minimum Take-Off Fuel.** Minimum fuel for take-off **should** be 35 litres.

121. **Minimum Landing Fuel.** Aircraft Commanders **should** plan land with a minimum of 25 litres of fuel (of which 10 litres may be unusable).

**Guidance
Material
2310(D5)**

Role Specific Aerotow Operations

122. Type specific SOPs and Flight Manual.

123. FRCs.

**Duty Holder
Order
2310(D6)**

Cross-country Flying

2310(D6) Aerotow aircraft may be flown cross-country in support of the 2 FTS task. Gliders may be aero-towed cross-country to reposition them. Gliders may fly cross-country under specific tasking from Comdt 2 FTS. All cross-country and transit flights **shall** be undertaken iaw this Order.

**Acceptable
Means of
Compliance
2310(D6)**

Cross-country Flying

Cross-country

124. **Definition.** A Cross-country Flight is a flight that is planned to involve navigation along a specific planned route or a transit flight that will involve landing at an airfield other than the departure airfield.

125. **Authorization.** Cross-country flights **should** be authorized in accordance with DHO 2306.

126. **Currency.** Currency requirements are laid down in DHO 2103.

127. **Weather Limitations.** See DHO 2305.

128. **Minimum Heights.** Cross-country flights **should not** be flown below 500ft MSD. Notwithstanding these limits, aircraft **should** remain clear of cloud and in sight of the surface, in accordance with VFR criteria. The cross-country height restrictions for pilots **should not** take precedence over specific ATC procedures where they differ, eg use of Low-Level Corridors through controlled airspace.

129. **Centralised Aviation Data Service (CADS).** All cross-country sorties **should** be entered into CADS.

130. **Equipment.** Aircraft used for cross-country flights **should** have a serviceable compass and valid deviation card. The radio and transponder **should** be checked as serviceable prior to any departure.

131. **Lower Airspace Radar Service (LARS).** Whenever practicable, pilots on cross-country flights **should** consider utilising LARS to supplement lookout and situational awareness.

132. **Charts.** Pilots **should** carry either a 1:250,000 or 1:500,000 chart of an area at least 20nm around their intended route. The charts **should** be annotated with the following

information:

- a. The intended track with headings, timings, planned altitudes or flight levels, pre-planned fixes and the forecast wind velocities.
- b. The lateral dimensions and vertical extent of any controlled airspace, danger areas, prohibited or restricted areas, with a base altitude below FL100, within 20nm of the intended route.

133. The contact frequencies of any ATC units that are planned to be contacted and any suitable diversion airfields within 20nm of the intended route.

134. **Out-Brief.** Out-Briefs **should** be available which include the extra items relevant to cross-country sorties.

Aircraft Transit Flights

135. **Routes.** Aircraft transit flight routes **should** be planned to be as direct as possible; however, consideration **should** be given to terrain, controlled airspace and built-up areas when planning transit routes so that a landing area is always available in the event of an engine malfunction. Routes and planning **should** include and be close to appropriate diversion airfields. Consideration **should** also be given to aircraft radio capabilities during the planning phase to ensure compatibility with LARS providers or diversion airfields, eg 25kHz versus 8.33kHz capabilities.

136. **Safety Precautions.** A minimum of Crash Category ICAO Special **should** be maintained at the departure airfield until it is clear that the aircraft will not return and at the destination airfield during the landing phase of the flight. Telephone contact **should** be established between departure and destination airfields and confirmation of aircraft departure and ETA **should** be passed to the destination airfield and the latter **should** confirm aircraft arrival to the dispatching unit.

Glider Aircraft Cross-country Flights

137. Cross-country flights in Gliders (except aerotow transit flights) **should** be approved by OC Ops Wg. 2 FTS aircraft used in competitions **should** be operated iaw DHO 2310(D7). Aerotow transit flights for gliders **should** be authorized by OC Ops Wg, OC Standards or OC CGS, and comply with the following:

- a. **Qualification.** The Aircraft Commander **should** be a minimum of an A2 Category QGI; exceptionally, B1 Category QGIs may be authorized by OC Ops Wg, based on previous or external (BGA) experience.
- b. **Field Landings.** The Aircraft Commander **should** have undergone Practice Field Landing (PFL) training and, to demonstrate civil equivalence or better, retain a 12-month currency. This training and currency may be completed using a Motor Glider.
- c. **Rope Break.** During any failure of the aerotow rope and subsequent field landing, the Aircraft Commander **should** ensure that any remains of the rope, that are attached to the glider, are released before landing to ensure it doesn't foul on any obstructions within the approach lane or boundary of any field or aerodrome. There is a risk that the rope, when released, could impact on third party buildings or persons during release; therefore, the Aircraft Commander **should** ensure that the rope is released over an area that is clear of Persons, Vehicles, Vessels and Structures (PVVS).

Aerotow Aircraft Cross-country Flights

138. **Qualification.** Pilots **should** be in possession of a Transit Qualification (TQ) iaw the syllabus detailed in FTP117. The TQ **should** be awarded as one of the following:

- a. **TQ – Non-Aerotow Only.** This qualification **should** permit pilots to conduct cross-country and transit flights, but non-Aerotow only.
- b. **TQ – Aerotow Transit.** This qualification **should** permit pilots to conduct cross-country and transit flights in both the Aerotow and Non-Aerotow roles.

139. **Authorization.** Aerotow transits **should** be planned and authorized Not Below

2000ft MSD. Any part of the transit that is less than this authorized height (except where departing or arriving at the destination airfield), **should** be highlighted to the Authorizing Officer post-flight and an appropriate entry detailed on the Authorization Sheets annotating the reason, eg unexpected low cloud base during a part of the sortie, or lower height flown to remain VMC.

**Guidance
Material
2310(D6)**

Cross-country Flying

- 140. FTP117 – Robin DR400 Conversion Guide.
- 141. CADS SOPs.

**Duty Holder
Order
2310(D7)**

Flying Competitions

- 2310(D7) 2 FTS participation in competitions **shall** be approved by Comdt 2 FTS.

**Acceptable
Means of
Compliance
2310(D7)**

Flying Competitions

- 142. **Competition Participation.** 2 FTS personnel occasionally participate in National, Regional and Inter-Services gliding competitions to represent 2 FTS and 22 Gp/RAF Gliding activity. Any competitions outside of routine 2 FTS operations **should** be supported by an Op Order and **should** be approved by Comdt 2 FTS.
- 143. **Aircraft Commander Qualifications.** OC Ops Wg **should** approve nominated Aircraft Commanders, based on qualifications and experience, and the requirement to minimise disruption to other training tasks.
- 144. **Detachment Commander.** OC Ops Wg **should** appoint a Detachment Commander for each competition.
- 145. **Duty Status.** Pilots and crew members **should** be considered as “on duty” during the duration of the competition, including any pre/post competition activities.

Conduct of Flying

- 146. Competition flying **should** be conducted in accordance with the rules of the competition and with the sense of responsibility appropriate to an individual representing 2 FTS and the RAF.
- 147. Enthusiasm to succeed in competition **should not** outweigh good airmanship, common sense and overall Air Safety considerations. Any crewmember may fly as a passenger in two-seater aircraft, subject to the limitations of GASO 2340 and DHO 2340.

**Guidance
Material
2310(D7)**

Flying Competitions

- 148. Nil.

**Duty Holder
Order
2310(D8)**

Ground Handling Procedures

- 2310(D8) Supervisors **shall** ensure all aircraft are handled iaw the Aircraft Document Set (ADS) and extant procedures.

**Acceptable
Means of
Compliance**

Ground Handling Procedures

- 149. **Supervision.** Aircraft ground handling **should** be supervised by qualified and competent personnel. This is defined as either Glider Maintenance Section personnel or QGLs. A Graded Pilot may supervise, but is to be specifically detailed and briefed by a Unit

2310(D8)

supervisor for the task.

150. Incorrect or careless handling can easily damage aircraft. They **should** only be manoeuvred by pulling or pushing on known strong parts of the airframe. On no account are trailing edges, control surfaces, tailplanes or canopies to be used as handholds. GRP surfaces can be dented by poor handling, or by objects dropping on to them. Supervisors **should** ensure any visiting personnel are briefed accordingly.

151. Gliders **should not** be manoeuvred on grassed surfaces by exerting force on wingtips.

152. Gliders may be manoeuvred with or without a tail dolly fitted; however, aircraft manoeuvring without a tail dolly fitted **should** only be completed over short distances and relatively straight lines, or when no tail dollies are available.

153. **Tail Dollies.** Particular care **should** be taken when fitting the tail dolly on to a glider to avoid damage to the total energy probe, pitot/static probes and the fuselage gelcoat forward of the fin.

154. **Wingtip Handlers.** When a glider is being manoeuvred on the ground, the wing **should** be held at waist level by a handler. If it becomes necessary to change wings the following drill **should** be used:

- a. Supervisor calls "Change Wings".
- b. The handler levels the wings.
- c. The receiving handler takes hold of the unmanned wingtip and calls "My Wing".
- d. The first handler visually checks that the receiving handler has taken over and replies "Your Wing", then releases the wing.
- e. Receiving handler lowers wing to waist level.

155. **Retrieval.** Glider retrieval **should** be completed either by hand or through the use of a towing vehicle. Unit Cdrs **should** ensure that aircraft towing vehicle drivers are appropriately trained and cleared for towing duties, with the training recorded in the individuals MT records.

156. **Occupants.** Normally, the aircraft **should** be free of occupants when undergoing retrieval, except for very short distances and in straight lines only, eg an aircraft has just landed and has to come to a stop shorter than intended, and a 2m distance and movement forward is required to ensure the aircraft wings are ahead of the Runway Caravan. In this case DS **should** ensure that sufficient personnel are utilised to meet Health and Safety manual handling guidelines.

157. **Retrieval by Hand.** Gliders may be moved by hand with or without a tail dolly fitted, and either forwards or backwards. To minimise the risk of damage to the canopy, the glider **should** be pushed backwards whenever possible, with the canopy locked. On concrete or tarmac surfaces only, gliders may be moved by pushing or pulling from the wingtips. Steering from the wingtip **should not** be done unless a tail dolly is fitted or the tailwheel is raised clear of the ground by pressing down on the nose. A glider **should not** be moved by pushing or pulling on any of the control surfaces.

158. When manoeuvring on grass or uneven surfaces, the procedures detailed below **should** be followed:

- a. **Forwards.** Gliders may be moved forwards by hand and may be pulled or pushed. Pushing **should** be on the rear fuselage above the wing roots. The glider may be pulled either by the front seat back support member or from the area between the fuselage sidewall and the instrument panel. When the canopy is opened to pull forwards, it **should** be supported. A wingtip handler **should** hold the wingtip at waist level.
- b. **Rearwards.** Handlers **should** push back on the nose section or the leading edge of the wings at the wing roots. A wingtip handler **should** hold the wingtip at waist level. Steering from the wingtip **should not** be done unless a tail dolly is fitted, or the tailwheel is raised clear of the ground by pressing down on the nose.

c. **Rotating.** Without a tail dolly, a glider **should** only be rotated while balanced on the mainwheel with the nosewheel and tailwheel clear of the ground. When rotating a glider near an obstacle the wingtip passing the obstacle **should** be supervised. If the canopy is open to facilitate pulling forward, the canopy **should** be supported by hand during rotation.

159. **Retrieval by Vehicle.** When retrieving by vehicle, the following procedures **should** be followed:

- a. A glider **should** only be towed nose first using a rope.
- b. A vehicle **should not** tow more than one glider at a time.
- c. The towrope **should** be between 10 to 12 metres long and **should** incorporate a weak link assembly, which **should** be at the glider end of the towrope but positioned such that it **should not** come into contact with the fuselage during the towing operation. The towrope **should** only be attached to the nose hook of the glider.
- d. The wing **should** be held at waist height.
- e. Wingtip handler changes **should** only be made as detailed in the "Wingtip Handlers" section above.
- f. A handler, normally the Aircraft Commander, **should** be positioned by the left side of the nose within easy reach of the front canopy so that, if necessary, they can open it quickly and release the towrope; the DV panel in the front canopy of the glider **should** be left open. The Aircraft Commander may delegate this responsibility to their second crew or pilot as part of their training, but the handler **should** be a minimum of a G2.
- g. The release **should not** be operated by reaching through the DV panel.
- h. Canopies **should** be closed and locked.

160. **Maximum Towing Speed.** The towing vehicle **should not** exceed walking speed when towing an aircraft. The handler walking by the nose **should** retard the glider, when necessary, to prevent it overrunning when the vehicle slows, or the combination is moving down a slope.

161. **Turning.** The side loads that result from turning with more than one aircraft wheel on the ground at a time can cause damage. When towing without a dolly a glider **should** only be moved in a straight line; however, small changes of direction may be made by pressing down on the nose to raise the tailwheel clear of the ground. Bad ground areas or places that might result in 3-wheel contact **should** be avoided.

162. **Completion of retrieval.** The towrope **should not** be released while the vehicle/aircraft combination is in motion unless in an emergency. The vehicle **should** stop to allow the glider canopy to be opened and the towrope released. The vehicle driver **should** visually check that the rope has been released from the glider before moving away.

163. **Canopies.** Canopies and their supporting structure can be easily damaged, and they **should** always be operated with care:

- a. To open the canopy, the DV panel **should** be used for access to the canopy lock and the canopy **should** be opened by holding the frame of the canopy in the fingers. No pressure **should** be applied to the edge of the DV panel in any direction. Open canopies **should not** be left unattended. When closing a canopy, it **should** be supported and not allowed to slam shut.
- b. The restraining cords/clips of the glider canopy are designed to fail and release the canopy if it is jettisoned in flight. Care therefore **should** be taken not to overload the mechanism by allowing it to reach full travel suddenly, or by pressing down on an open glider canopy. An unlocked canopy can blow open and cause damage in this way, therefore canopies **should** be kept locked except when:
 - (1) Aircraft occupants are getting in or out.
 - (2) The canopy is open to facilitate pulling the aircraft forwards, in which

case it **should** still be supported.

164. **Handling in Confined Spaces.** When manoeuvring any aircraft in a congested hangar or in close proximity to other aircraft or equipment, the supervisor **should** operate from a central position near the nose of the aircraft. Further assistants **should** be placed at each wingtip and one at the tail. Where small clearances cannot be avoided, the supervisor **should** stop the aircraft movement and personally check there is enough room before continuing the movement. Assistants **should** be briefed to show the size of a clearance by use of the hands, and **should** shout: "**STOP, STOP, STOP**", if there is any risk to the aircraft.

165. **Precautions in Rain or Strong Wind Conditions.** The following precautions **should** be taken:

- a. When precipitation is likely to affect an aircraft parked on the ground, the pressure head **should** be made weatherproof using the covers or tape as required. When the aircraft is being prepared for take-off, a thorough check **should** be made by the Aircraft Commander during the external checks, that the pitot cover is removed, and all the pressure sources are clear.
- b. When the surface wind is steady or gusting above 20kts, additional helpers **should** be detailed for handling or towing.
- c. If it is likely that the wind will exceed flying limits for a considerable period (eg the passage of an active front), the DS **should** have all aircraft returned to the hangar. Flying operations **should not** recommence until the wind is within flying limits.
- d. Canopy assistants **should** be provided for crewing in and out of the aircraft in windy conditions.

**Guidance
Material
2310(D8)**

Ground Handling Procedures

166. Aircrew Manual.

**Duty Holder
Order
2310(D9)**

Parking of Aircraft

2310(D9) Supervisors **shall** ensure that when it is necessary to park 2 FTS aircraft in an external environment, the procedures contained within the Aircraft Document Set are strictly followed.

**Acceptable
Means of
Compliance
2310(D9)**

Parking of Aircraft

Glider Parking at the Launch Point – In Use

167. Gliders parked at the launch point that are for imminent or immediate launch are classed as "in use" and **should** face the launch direction. If the wind is above 15kts at least one person **should** be located at the nose or seated in the front cockpit.

168. Gliders may be parked temporarily by positioning them crosswind, with the downwind wingtip on the ground, the canopy hinge side into wind, and may be left unmanned provided that, the tail dolly is removed, there are no obstructions under the aircraft, the wind is less than 15kts and ground handling personnel are in the immediate vicinity.

Glider Parking at the Launch Point – Parked

169. Gliders parked at the launch point that are not intended for imminent use **should** be considered as "parked" and positioned crosswind with the downwind wingtip on the ground, with the canopy hinge side into wind and either manned or picketed. Gliders may be left in the open unattended for short periods, such as shutdown periods for lunch etc, provided that they are secured by straps and pickets in such a way that they cannot be

lifted or swung round by a wind change. Picketing spikes and hammers **should not** be passed over the aircraft.

External Glider Parking Outside of Normal Operating Periods

170. Routinely, Gliders are stored in hangars or trailers; however, during detachments they may be left outside of normal operating hours in an external environment and fully rigged for flight, provided that the forecast maximum wind speed is no more than 35kts and no precipitation expected. Gliders **should** be correctly and firmly picketed using extra lashing materials, water barrels and wing stands as required. Provided the covers for the wings and tailplane are also fitted, the restriction regarding forecast precipitation **should not** apply.

Guidance Material 2310(D9)

Parking of Aircraft

171. Aircrew Manual.

Duty Holder Order 2310(D10)

First Response Vehicle (FRV)

2310(D10) First Response Vehicles and Equipment **shall** be used in order to provide an Aerodrome Rescue and Firefighting (ARFF) Category to at least a minimum of ICAO Special.

Acceptable Means of Compliance 2310(D10)

First Response Vehicle (FRV)

172. **Introduction.** An FRV **should** be available for immediate use whenever Motor Glider or Aerotow Aircraft operations are in progress. An FRV **should not** be required when the Airfield Operating Authority provides appropriate cover of ICAO Special or above.

173. **Equipment.** FRVs **should** be equipped in accordance with Annex C.

174. **Training.** The FRV crew **should** hold current Certificates of Training, which **should** be issued on the basis of the syllabus produced by DFR.

FRV Control and Crew Complement.

175. **Control.** The FRV **should** be under the control of the DS, or the airfield controlling authority (in this case the DS **should** have a direct line of communication to the controlling authority). Normally the DS **should not** act as an FRV Crew Leader. If the Unit Aircraft Post Crash Management Plan (APCMP) is dependent on the DS to act as the Incident Commander or Incident Response Officer; the DS **should not** form part of any of the FRV Crew.

176. **Crew Complement.** The FRV **should** be manned by a minimum crew of 2, aged 18 or over, who are current personnel on the Unit and have been appropriately trained for the role. The No 2 **should** possess an FMT600 authorizing them to drive Landrover/Ranger type vehicles on public roads. The Crew Leader **should** occupy the passenger seat. Unit Cdrs **should** ensure that FRV crewmembers who are not current Pilots or QGIs, are familiar and competent with the operation of aircraft cockpit controls for the fuel cock, fuel pump, ignition and electrical main switch. All FRV crewmembers **should** be familiar with the methods of normal egress from a 2 FTS aircraft cockpit.

177. **FRV Operation.** The FRV **should** be operated in accordance with the following:

- a. The FRV and its equipment **should** be inspected before flying operations commence, in conjunction with the vehicle daily inspection schedule.
- b. During flying operations, the vehicle **should** be positioned adjacent to the Runway Caravan, immediately accessible to the DS, but with due regard to the safety of aircraft taxiing, taking off and landing.

- c. The crew **should** be in the FRV, or in its immediate vicinity, and **should** have the best possible view of the operating area.
- d. When the ambient air temperature is at or below 0°C, the engine of the FRV **should** be run for 5 minutes at intervals not exceeding 1½ hours.
- e. Powered flying **should** cease if, for any reason, the FRV equipment or crew ceases to be immediately available.

178. **Established ARFF Service.** When an established ARFF service is available, the requirement for 2 FTS Units to provide its own FRV cover may be dispensed with, provided that the controlling authority for the vehicle and its crew has agreed the commitment.

**Guidance
Material
2310(D10)**

First Response Vehicle (FRV)

179. It **should** be noted that the FRV crew and personnel are not fully trained Fire and Rescue personnel, but are Initial Emergency Responders (IER), provided to undertake defensive actions sufficient to protect life or prevent injury from fire. Although ICAO Special is defined as an ARFF Category, it is not to be considered in the same context. The training provided by DFR is intended to enable personnel to be able to dynamically risk assess an emergency situation, operate the provided firefighting equipment and if appropriate affect a rescue, or assist self-rescue. The primary duty is to provide an effective response facility to an aircraft incident, pending the arrival of external emergency services. As such, FRV crews **should not** attempt to fight fires or perform rescue attempts which will place personnel in dangerous positions and where risk of injury or risk to life could be possible. Each incident will be different, but in the event of an incident, the FRV crew **should** complete their own "Dynamic Risk Assessment" at the time of the event, to ensure they are not placing themselves in unnecessary danger, whilst considering the needs of the aircraft occupants. Personnel **should not** enter a hazardous area if they consider it unsafe to do so.

180. The FRV is designed for attending aircraft incidents within the airfield boundary and for Stn or camp use only. However, there will be occasions, such as Engine Failure After Take-Off (EFATO), where an aircraft may land in an area close to, but outside of the airfield boundary. Due to the differences in operating sites and topography, there is no definitive guide as to where the FRV can be deployed, therefore the DS **should** make a dynamic assessment of whether to deploy the FRV to an "off-site" location or not. In the event of an emergency where initial life saving activities need to take place, and the aircraft can be seen, the FRV may be dispatched to an off-site location providing it is safe to do so, is easily accessible, and there are no risks to either the FRV crew or third parties. FRV personnel **should** be reminded that they are not "blue light" trained and are still required to obey the rules of the road and the Highway Code. If any uncertainty of the location exists, the FRV **should** be held, but the DS **should** make use of any other resource, ie aircraft already airborne, to assist in identification of any possible incident sites, whilst waiting for professional emergency services to arrive.

181. Any Personal Protective Equipment (PPE), designed to protect against minor injuries from a Functional Safety perspective, **should** be limited to that detailed in Annex A, which has been approved by DFR. To provide any additional specialist equipment may give personnel a false sense of security leading them to take risks for which they are unprepared. Further guidance can be obtained from DFR through OC Ops Wg.

182. DSA02 DFSR.

**Duty Holder
Order
2310(D11)**

Operation of Non-2 FTS Aircraft at 2 FTS Sites

2310(D11) Unit Cdrs **shall** ensure that dual operations, where Comdt 2 FTS is the HoE, **shall not** take place.

**Acceptable
Means of
Compliance
2310(D11)**

Operation of Non-2 FTS Aircraft at 2 FTS Sites

183. Non-2 FTS aircraft are subject to encroachment regulations iaw DIO procedures. Unit Cdrs **should** ensure that:

- a. There are no dual operations, ie 2 FTS and non-2 FTS, unless approved as part of a Civil or Strn/Unit Flying Club.
- b. There is no use of any public assets or funds, ie vehicles, winches, radios etc (although separate arrangements exist for RAF sponsored clubs, eg RAFGSA).
- c. 2 FTS personnel are off-duty when undertaking non-VGS operations. If combining duty with non-duty, there **should** be a clear system that enables personnel to be able to sign on/off duty for this purpose.
- d. VGS personnel in receipt of pay or travel and subsistence **should** have completed a minimum of 8 hrs duty before commencing non-VGS flying operations.

**Guidance
Material
2310(D11)**

Operation of Non-2 FTS Aircraft at 2 FTS Sites

184. N/A to 2 FTS aircraft.

**Duty Holder
Order
2310(D12)**

Control of Ballast Weights

2310(D12) Unit Cdrs **shall** ensure that the use of aircraft ballast weights is strictly controlled.

**Acceptable
Means of
Compliance
2310(D12)**

Control of Ballast Weights

185. Glider aircraft ballast weights **should** be used when the mass of a solo pilot mass (including parachute) is less than 70kg (154 lb), in order to maintain the aircraft CofG within limits. Four sets of aircraft ballast weights **should** be held within the Runway Caravan. When ballast weights are required, they **should** be issued by the DS to the Aircraft Commander and recorded as directed by the MOD F700. Upon completion of the ballast weight requirement the weights **should** be returned to the Runway Caravan and their removal recorded as directed by the MOD F700. The Aircraft Commander **should** be responsible for fitting and removal of the ballast weights. Authorizing officers **should** ensure that for first solo and all AGT sorties, ballast weights to achieve the minimum weight are fitted to the aircraft; however, noting it is desirable for the total pilot, parachute and ballast weight to exceed the placard minimum cockpit weight by more than 15 kg to compensate for the fact that the aircraft is flown solo. Aircraft placards and FRCs **should** be referred to in order to ensure the correct aircraft all up mass is achieved.

186. Up to two ballast weights, each weighing 5.6 kg (12.2 lbs) can be fitted on 2 threaded bars in the front left cockpit footwell. Care **should** be taken when fitting or removing ballast weights as there is a potential loose article from the 2 wing nuts and locking pins.

**Guidance
Material
2310(D12)**

Control of Ballast Weights

187. **Fitting.** Fitting of ballast weights is achieved by:

- a. Remove and store both locking pins.
- b. Remove and store both wing nuts.
- c. Add required ballast weights.
- d. Refit both wing nuts and ensure they are sufficiently tight to secure the ballast weights.

- e. Refit both locking pins.
- f. Confirm all loose items removed have been made secure.

188. **Removal.** Removal of ballast weights is achieved by a reversal of the fitting procedure, confirming at the end that all loose items removed have been made secure, and ballast weights are returned to the Runway Caravan.

189. A ballast weight guide is detailed at Annex D.

**Duty Holder
Order
2310(D13)**

First Aid Cover at VGS

2310(D12) Unit Cdrs **shall** ensure that First Aid Cover at VGS is available during 2 FTS flying operations.

**Acceptable
Means of
Compliance
2310(13)**

First Aid Cover at VGS

190. Unit Cdrs **should** ensure that at least one Activity First Aid or First Aid at Work qualified person is available, and on the ground, whilst flying operations are taking place.

**Guidance
Material
2310(13)**

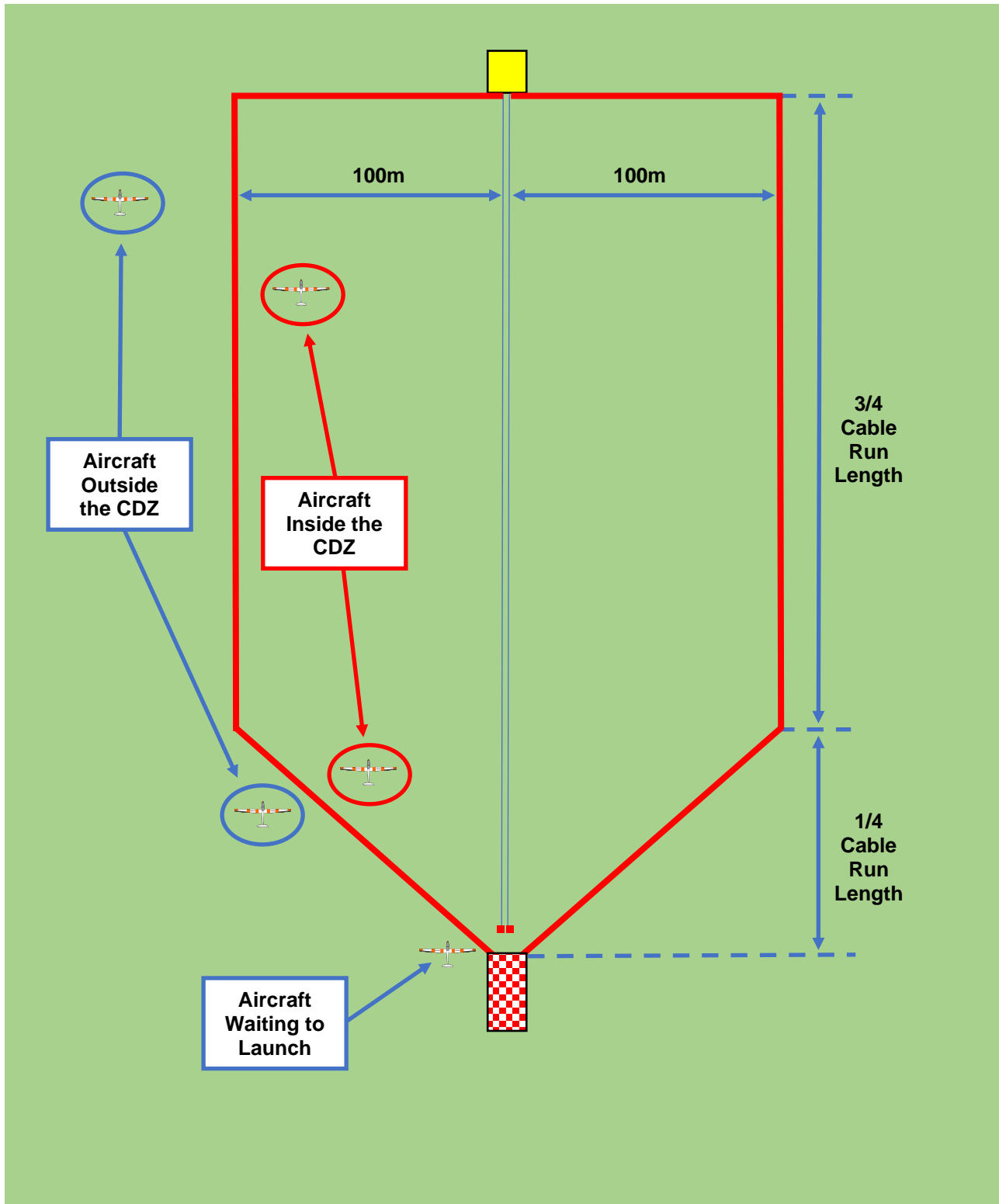
First Aid Cover at VGS

191. Guidance on First Aid may be obtained from OC Spt Wg.

ANNEX A

CABLE DROP ZONE (CDZ) DIMENSIONS

1. This Annex is intended to be used as a guide to aid Aircraft Commanders and Duty Supervisors to dynamically assess if it is safe to launch. It **should not** be taken literally, and the width and dimensions **should** be increased as required to consider other factors, eg crosswind.



ANNEX B

WINCH OPERATOR TRAINING STANDARDS

1. **Applicability.** Only training carried out in the Mk2 Glider Winch may be counted towards a qualification on the Skylaunch winch system.
2. The following competencies apply to the Skylaunch winch system:
 - a. **Winch Operator:**

Winch Operator	
Examining Authority	Winch Examiner
Award Authority	Unit Cdr
Mandatory Requirements	(1) Minimum 17 years of age. (2) Completed first solo on Glider or non-Pilot Winch Operator nominated by Unit Cdr.
Guidance on Experience Required Prior to Training	None required.
Following the Award of a Skylaunch Certificate of Competence, may be Authorized to	(1) Use Skylaunch winch documentation. (2) Conduct a Daily Inspection. (3) Prepare the winch for towing. (4) Site the winch (subject to FMT 600). (5) Launch Gliders. (6) Handle launch failures. (7) Handle launch emergencies. (8) Complete cable repairs. (9) Manufacture cable stops.
Minimum Currency Requirements	(1) Complete a minimum of 10 Glider launches in the previous rolling 6 months. (2) Pass an annual Competence Check.

- b. **Winch Instructor:**

Winch Instructor	
Examining Authority	Winch Examiner
Award Authority	Unit Cdr
Mandatory Requirements	(1) Nominated by Unit Cdr. (2) Skylaunch winch Certificate of Competence.
Guidance on Experience Required Prior to Training	(1) Current Winch Operator. (2) 200 Glider launches on either the Mk2 Glider or Skylaunch winch.
Following the Award of a Skylaunch Certificate of Competence, may be Authorized to	(1) Teach how to use Skylaunch winch documentation. (2) Teach how to conduct a Daily Inspection. (3) Teach how to prepare the winch for towing. (4) Teach how to site the winch and prepare for launching. (5) Teach all aspects of launching Gliders on the Skylaunch winch. (6) Teach how to handle launch failures. (7) Teach how to handle launch emergencies. (8) Teach how to complete cable repairs. (9) Teach how to repair/manufacture cable stops. (10) Conduct annual Competence Checks on Winch Operators only.
Minimum Currency Requirements	Complete a minimum of 10 instructional launches in the previous rolling 6 months.

c. **Winch Examiner:**

Winch Examiner	
Examining Authority	2 FTS HQ, CGS or CFS Winch Examiner
Award Authority	OC CGS
Mandatory Requirements	(1) Nominated by Unit Cdr. (2) Mk2 Glider or Skylaunch winch Certificate of Competence.
Guidance on Experience Required Prior to Training	(1) Current Winch Instructor. (2) 500 Glider launches on either the Mk2 Glider or Skylaunch winch.
Following the Award of a Skylaunch Certificate of Competence, may be Authorized to	(1) Teach/examine how to use Skylaunch winch documentation. (2) Teach/examine how to conduct a Daily Inspection. (3) Teach/examine how to prepare the winch for towing. (4) Teach/examine how to site the winch and prepare for launching. (5) Teach/examine all aspects of launching Gliders on the Skylaunch winch. (6) Teach/examine how to handle launch failures. (7) Teach/examine how to handle launch emergencies. (8) Teach/examine how to complete cable repairs. (9) Teach/examine how to repair/manufacture cable strops. (10) Conduct annual Competence Checks on Winch Operators, Instructors, or other Examiners.
Minimum Currency Requirements	(1) VGS Winch Examiners – Complete a minimum of 10 instructional launches in the previous rolling 6 months. (2) 2 FTS HQ, CGS and CFS Winch Examiners – Complete a minimum of 10 instructional launches in the previous rolling 12 months.

ANNEX C
FRV EQUIPMENT

1. The FRV **should** be equipped with the following items, all of which **should** be checked as serviceable during the vehicle Daily Inspection:

Item	National Codification Bureau Description	Qty	NATO Stock Number (NSN)
Fire Extinguishers			
9 Kg Dry Powder Fire Ext	Extinguisher, Fire	2	4210-99-6953001
90 Litre Foam Trolley Fire Ext	Fire Ext, Transportable	1	4210-99-7019379
Toolkit			
Bolt Croppers	Cutter, Bolt	1	5110-99-5000348
Container for FRV Kit	Container, Aircraft Spares	1	8115-99-7326034
Crowbar	Bar, Wrecking	1	5120-99-4562115
Emergency Release Knife	Knife, Emergency Release	1	4240-99-7013017
Flashlight	Flashlight	2	6230-99-2262084
Fire Resistant Blanket	Blanket, Fire	1	4210-99-2257200
Pliers	Pliers	1	5120-14-4586720
Rescue Axe	Axe, Fire	1	1680-99-4670513
Screwdriver – Flat Tip 6.5mm	Screwdriver, Flat Tip	1	5120-99-1386556
Screwdriver – Flat Tip 13 mm	Screwdriver, Flat Tip	1	5120-99-8075959
Screwdriver – Philips PH 2	Screwdriver, Cross Tip	1	5120-99-9105865
Screwdriver – Philips PH 4	Screwdriver, Cross Tip	1	5120-99-9105867
Tin Snips	Snips, Metal Cutting, Hand	1	5110-99-1207288
Functional Safety Personal Protective Equipment			
Disposable Face Mask	Mask, Air Filtering	10	4240-99-1563608
Fire & Heat Resistant Gloves	Gloves, Heavy Handling	2 PR	8415-99-4772231-5 (S – XXL)
Safety Helmet (Red)	Helmet, Safety, Red	2	8415-99-9200977
Safety Helmet Chinstrap	Chinstrap, Elasticated	2	8415-99-9788958
Visor Carrier for Helmet	Carrier, Visor	2	4240-99-6628437
Visor for Helmet	Visor	2	4240-99-9788781
Sweatband for Helmet	Replacement Sweatband	A/R	8405-99-1318413
Disposable Gloves	Gloves, Disposable	Box	8415-99-7896048 (L)

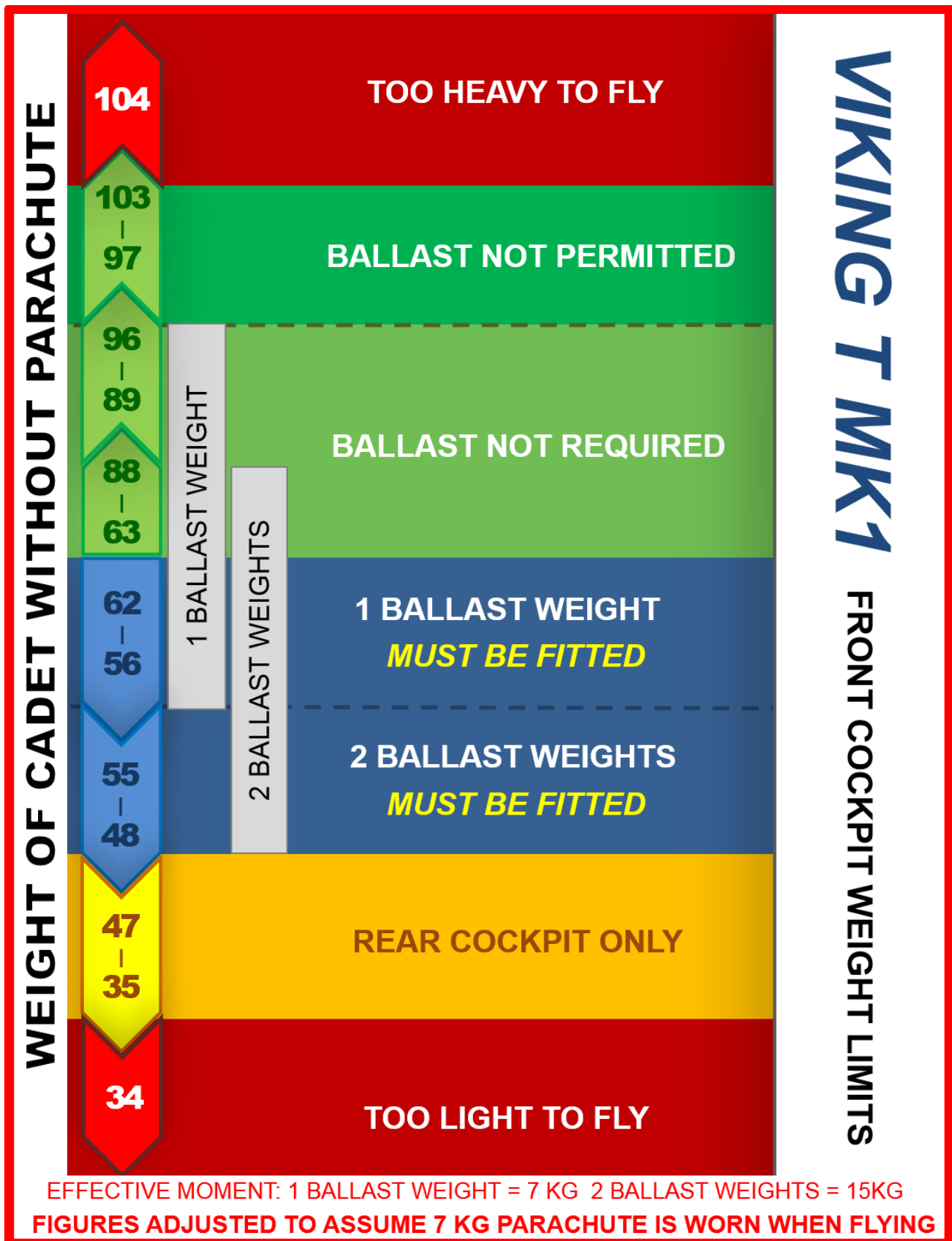
2. The following equipment **should not** be mandated and is not part of the FRV equipment but may be used at aircraft dispersals or parking areas for initial engine start-ups.

Item	National Codification Bureau Description	Qty	NATO Stock Number (NSN)
Fire Extinguisher			
10 kg CO2 Trolley Fire Ext	Applicator, Telescopic	1	4210-99-7398610
10 kg CO2 Trolley Fire Ext	Ext Fire CO2 Mk 2 Wheeled Without Applicator	1	4210-99-1395542

3. Items **should** be demanded from the parent RAF unit; any piece of equipment that is not deemed as a consumable (C Class) **should** be held on the Unit Articles in Use (AinU) supply inventory. NSNs have been provided as a guide, but are subject to change as more appropriate items are sourced. Any discrepancies or amendments identified **should** be forwarded to OC Ops Wg.

ANNEX D

BALLAST WEIGHTS GUIDE



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DHO 2330 – Low Flying

Rationale

Flight at low level has historically been a factor in 46% of fatal accidents and 83% of mid-air collisions¹. It reduces the margin for error in aircraft operations and can cause unnecessary annoyance to the public. It is therefore essential that those engaged in the conduct and supervision of low flying ensure the highest standards of flying discipline, pre-flight preparation and briefing are maintained

Contents

2330(1): Low Flying

Duty Holder Order 2330(1)

Low Flying

2330(1) Low-flying **shall** be specifically Authorized and conducted in accordance with the procedures contained in the UK Military Low Flying Handbook (UKLFHB).

Acceptable Means of Compliance 2330(1)

Low Flying

1. **Authorization.** 2 FTS aircraft are considered to be low flying when operating at less than 500ft MSD. Flights below 500ft MSD **should** be specifically authorized by OC Ops Wg. This limitation **should not** apply to aircraft taking off, landing or conducting simulated EFATOs or PFLs.
2. **Supervision.** Any conduct and limitations of low flying activity **should** be detailed by OC Ops Wg.
3. **Avoidance.** All low flying and avoidance criteria **should** be subject to an appropriate "Op Order", specifically authorized by Comdt 2 FTS.
4. **Minimum Separation Distance (MSD).** MSD for all 2 FTS aircraft **should** be 100ft.
5. **Local Bird Hazards.** Unit Cdrs **should** utilise the Bird Hazard Avoidance Model (BHAM) from the UKLFHB to highlight unusual bird activity.
6. **Safety Altitude (SALT).** N/A to 2 FTS aircraft.

Guidance Material 2330(1)

Low Flying

7. UKLFHB.
8. CAP 393 - Air Navigation: The Order and the Regulations.
9. SERA 3105 - Minimum Heights; SERA 5005(f) - Visual Flight Rules; and SERA 5015(b) – Instrument Flight Rules.

¹ MAA analysis of UK Military fatal accident data from 1985 to 2012.

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DHO 2335 – Flying Displays and Special Events

Rationale

Military involvement in Flying Displays, Display Flying, Role Demonstrations and Flypasts play an important role in Defence engagement in the UK and abroad. These events also allow Heads of Establishment (HoE) to engage with the families and friends of serving military personnel, and Commanders to engage with their local communities.

Flying Displays, Display Flying, Role Demonstrations and Flypasts can involve Air Systems operating in close proximity to gatherings of people; this activity involves an increase in Risk to Life (RtL) over normal operating and if not managed effectively this risk could become intolerable.

This Regulatory Article (RA) regulates all UK military registered Air Systems (when conducting Display Flying, Role Demonstrations and Flypasts (Mil) worldwide) and foreign military registered Air Systems (when conducting Display Flying, Role Demonstrations and Flypasts (Mil) in the UK); additionally, it regulates all Flying Displays conducted at, or over MOD-Occupied Property. It ensures that appropriate individuals are made responsible for all facets of planning, preparing, managing and conducting Flying Displays, Display Flying, Role Demonstrations and Flypasts to ensure RtL remains As Low As Reasonably Practicable (ALARP) and Tolerable.

Contents

2335(1): Flying Display Organisation and Management

2335(2): Display Flying, Role Demonstrations and Flypasts (Mil)

2335(3): Separation Distances, Minima and Restrictions

Duty Holder Order 2335(1)

Flying Display Organisation and Management

2335(1) All Flying Displays **shall** be managed, organized and delivered in order to reduce the RtL to at least ALARP and Tolerable.

Acceptable Means of Compliance 2335(1)

Flying Display Organisation and Management

1. **Role Demonstrations and Flypasts.** 2 FTS aircraft Role Demonstrations and Flypasts are infrequent and therefore **should** be subject to specific “Op Orders” approved by Comdt 2 FTS and AOC 22 Gp.

Guidance Material 2335(1)

Flying Display Organisation and Management

2. GASO 2335.

Duty Holder Order 2335(2)

Display Flying, Role Demonstrations and Flypasts (Mil)

2335(2) AOC 22 Gp and Comdt 2 FTS **shall** ensure that personnel involved in conducting Display Flying, Role Demonstrations and Flypasts (Mil) are competent and appropriately trained, approved, Authorized and supervised.

Acceptable Means of Compliance 2335(2)

Display Flying, Role Demonstrations and Flypasts (Mil)

3. Nil in addition to GASO 2335(2).

**Guidance
Material
2335(2)****Display Flying, Role Demonstrations and Flypasts (Mil)**

4. Nil in addition to GASO 2335(2).

**Duty Holder
Order
2335(3)****Separation Distances, Minima and Restrictions**

- 2335(3) Authorized minimum vertical and lateral separation distances, and other applicable minima and restrictions **shall** be complied with at all times during Display Flying, Role Demonstrations and Flypasts.

**Acceptable
Means of
Compliance
2335(3)****Separation Distances, Minima and Restrictions**

5. Nil in addition to GASO 2335(3).

**Guidance
Material
2335(3)****Separation Distances, Minima and Restrictions**

6. Nil.

DHO 2340 – Supernumerary Crew and Passengers

Rationale

On occasion Supernumerary Crew and Passengers are required to be employed or carried on military registered Air Systems where there is a justifiable and valid Service or Defence Contractor Flying Organization (DCFO) requirement; the scope of activity varies greatly dependent on the Air System type and the task that is being conducted. Such personnel are not necessarily trained to the same level as Aircrew, nor do they undergo the same medical screening and as such there may be additional Risk to Life (RtL) associated with the activity. To enable RtL to be managed to As Low As Reasonably Practicable (ALARP) and Tolerable, this Regulatory Article (RA) provides the definitions of Aircrew, Supernumerary Crew and Passengers to be used during the flight authorization process and details the regulatory framework to be applied when Supernumerary Crew and Passengers are employed or carried on military registered Air Systems. However, due to the broad nature of the type of employment of Supernumerary Crew and carriage of Passengers across the Regulated Community, this RA requires Aviation Duty Holders (ADH) and Accountable Managers (Military Flying) (AM(MF)) to provide further detail within their orders and instructions regarding the conduct of this activity in their Areas of Responsibility (AoR)

Contents

- 2340(1): Supernumerary Crew**
- 2340(2): Passengers – General**
- 2340(3): Routine Air Transport Passengers**
- 2340(4): Tactical Passengers**
- 2340(5): Familiarization Flight Passengers**
- 2340(6): Air Experience Flight Passengers**
- 2340(7): Carriage of VIP Passengers**
- 2340(8): Carriage of Cadets as Passengers**
- 2340(9): Carriage of Working Dogs**

Duty Holder Order 2340(1)

Supernumerary Crew

- 2340(1) Unit Cdrs **shall** follow the orders that detail the requirements regarding the employment of Supernumerary Crew on aircraft within their AoR iaw RA 2340(1) and GASO 2340(1).

Acceptable Means of Compliance 2340(1)

Supernumerary Crew

1. Since the majority of second crew will either be passengers, trainees or Aircrew, Supernumerary Crew **should not** be required within 2 FTS.

Guidance Material 2340(1)

Supernumerary Crew

2. A Supernumerary Crewmember is an individual, military or civilian, who is employed on an Air System and authorized to carry out a specific duty (that does not require an Aircrew qualification) while in flight or ground taxiing.

**Duty Holder
Order
2340(2)**

Passengers – General

- 2340(2) Unit Cdrs **shall** be responsible for the safety of passengers flying in 2 FTS aircraft within their AoR. Before approving a passenger flight, Approving officers **shall** consider the rationale for the requested flight, the type of passenger, and the reputational risk to the Service in the event of an accident.

**Acceptable
Means of
Compliance
2340(2)**

Passengers – General

3. The minimum qualification to undertake Passenger Flights **should** be G1. Aircrew Instructors or ACOs may allow Passengers to control the aircraft below 500ft AAL; however, due to the fact that Passengers do not undergo the same medical and selection process as ab-initio trainees, Authorizing officers and Aircraft Commanders **should** consider the age, maturity, and anthropometric dimensions of a Passenger before allowing them to control the aircraft below 500ft.

4. Appointed RAFAC Cadet Force Adult Volunteers (CFAV) escorting/accompanying cadets at 2 FTS Units may be offered a Passenger Flight in 2 FTS Gliders providing there is spare capacity to do so, and that the flight is not to the detriment of any cadet flying. CFAV **should not** undergo formal GIF sorties, but **should** be treated as passengers flying iaw RA 2340. They **should** undergo the same ground briefings and training as cadets but the medical and emergency drills self-certification **should** be recorded on an MAA Passenger Briefing Form (PBF)¹ to ensure they are both medically fit for the flight, and understand the emergency procedures. The Approving officer **should** provide the Approval and the Authorizing officer **should** provide the Authorization for the flight on the PBF and the Authorization sheet. Approving Officer in this context **should** be as per the level defined in Annex A to GASO 2340. The Authorizing officer **should** be the Duty Authorizer/Duty Supervisor. The PBF **should** be retained with the Authorization sheets.

Prohibited manoeuvres

5. **Prohibited and Restricted Manoeuvres.** Certain manoeuvres **should** be prohibited or restricted during Passenger Flights. The following table details those manoeuvres that are prohibited within 2 FTS aircraft:

Prohibited and Restricted Manoeuvres Table		
Manoeuvre	Limitation	Approval Authority
Spinning	PROHIBITED	N/A
Incipient Spinning	PROHIBITED	N/A
Stalling in the Turn	PROHIBITED	N/A
PLFs/Practice EFATOs	PROHIBITED	N/A
PFLs Away from an Active Airfield	PROHIBITED	N/A
Practice Airborne Emergencies	PROHIBITED	N/A

**Guidance
Material
2340(2)**

Passengers – General

6. All personnel, military or civilian, who are not authorized as the aircraft's Aircrew or as Supernumerary Crew for a flight are deemed to be Passengers. Due to the broad nature of the method in which Passengers are carried, the following sub-divisions are to be used:

- a. **Routine Air Transport Passengers.** As defined in RA 2340.
- b. **Tactical Passengers.** As defined in RA 2340.
- c. **Familiarization Flight Passengers.** As defined in RA 2340.
- d. **Air Experience Flight Passengers.** As defined in RA 2340.

¹ This can be found on the MAA internet (external) within (under RA 2340):

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835177/RA2340_Passenger_Briefing_Form.docx

Duty Holder Order 2340(3)	Routine Air Transport Passengers 2340(3) Air Transport Passengers shall not be carried in 2 FTS aircraft without approval of Comdt 2 FTS.
Acceptable Means of Compliance 2340(3)	Routine Air Transport Passengers 7. All requests should be staffed through OC Ops Wg.
Guidance Material 2340(3)	Routine Air Transport Passengers 8. Routine Air Transport Passengers are those Passenger Flights governed by JSP800 Defence Movement and Transport Regulations.
Duty Holder Order 2340(4)	Tactical Passengers 2340(4) Tactical Passengers shall not be carried in 2 FTS aircraft without approval of Comdt 2 FTS.
Acceptable Means of Compliance 2340(4)	Tactical Passengers 9. All requests should be staffed through OC Ops Wg.
Guidance Material 2340(4)	Tactical Passengers 10. Tactical Passenger Flights, not governed by JSP800, are where Passengers are required to fly on or in support of operations or exercises, to meet essential tasking or as essential elements of training.
Duty Holder Order 2340(5)	Familiarization Flight Passengers 2340(5) Familiarization Flights shall be carried out iaw RA 2340(5) and GASO 2340(5).
Acceptable Means of Compliance 2340(5)	Familiarization Flight Passengers 11. The minimum qualification to undertake Familiarization Flights should be B1 Category Aircrew Instructor or ACO.
Guidance Material 2340(5)	Familiarization Flight Passengers 12. A flight designed to familiarize Aircrew, who do not hold a Certificate of Qualification on Type (CQT) for the Aircraft, with the characteristics of an aircraft or its systems. The Passenger is permitted to handle aircraft controls or operate systems and occupy a crew position that routinely requires a CQT, provided that the Passenger is qualified Aircrew.

Duty Holder Order 2340(6)	Air Experience Flight Passengers 2340(6) Air Experience Flight Passengers shall only be carried in 2 FTS aircraft iaw the requirements stipulated in RA 2340(6) and GASO 2340(6).
Acceptable Means of Compliance 2340(6)	Air Experience Flight Passengers 13. The minimum qualification to undertake Air Experience Flights should be G1. Aircrew Instructors or ACOs may allow Passengers to control the aircraft below 500ft AAL; however, due to the fact that Passengers do not undergo the same medical and selection process as ab-initio trainees, Authorizing officers and Aircraft Commanders should consider the age, maturity, and anthropometric dimensions of a Passenger before allowing them to control the aircraft below 500ft.
Guidance Material 2340(6)	Air Experience Flight Passengers 14. An Air Experience Flight is designed to give the recipient airborne experience where the Passenger occupies a seat that does not demand an Aircrew occupant. Such flights can include the handling of Air System flying controls by the Passenger but are subject to greater restrictions than Familiarization Flights.
Duty Holder Order 2340(7)	Carriage of VIP Passengers 2340(7) VIPs shall only fly as passengers in 2 FTS aircraft iaw the requirements stipulated in RA 2340(7) and GASO 2340(7).
Acceptable Means of Compliance 2340(7)	Carriage of VIP Passengers 15. Carriage of VIP Passengers should be Approved by AOC 22 Gp.
Guidance Material 2340(7)	Carriage of VIP Passengers 16. VIP status is defined in Appendix 44 to QR J741.
Duty Holder Order 2340(8)	Carriage of Cadets as Passengers 2340(8) Cadets shall only fly as passengers in 2 FTS aircraft iaw the requirements stipulated in RA 2340(8) and GASO 2340(8).
Acceptable Means of Compliance 2340(8)	Carriage of Cadets as Passengers 17. 2 FTS flying is an established task and has standing approval by AOC 22 Gp; therefore, Cadets should not be considered as Passengers when attending 2 FTS locations to undertake exercises contained within FTP3225VIK. Cadets on individual/formal visits, and not participating in formal 2 FTS visits, are not covered by this standing approval and should be Approved by Comdt 2 FTS.

**Guidance
Material
2340(8)**

Carriage of Cadets as Passengers

18. Nil.

**Duty Holder
Order
2340(9)**

Carriage of Working Dogs

2340(9) Working dogs **shall not** be carried in 2 FTS aircraft.

**Acceptable
Means of
Compliance
2340(9)**

Carriage of Working Dogs

19. N/A to 2 FTS.

**Guidance
Material
2340(9)**

Carriage of Working Dogs

20. Nil.

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DHO 2345 – Aircrew Fatigue Management

Rationale

Fatigue poses a well-documented risk to aviation and can significantly reduce Aircrew performance. This Regulation places limits on Aircrew maximum flying times, cockpit alert time and compulsory rest periods in order to reduce this risk to a level that is As Low As Reasonably Practicable and Tolerable.

Contents

2345(1): Management of Aircrew Fatigue

2345(2): Use of Temazepam in the Management of Aircrew Work and Rest in Aircrew

Duty Holder Order 2345(1)

Management of Aircrew Fatigue

2345(1) Flying Supervisors **shall** be responsible for the management of Aircrew Fatigue. Individual Aircrew **shall** adhere to the Maximum Flying Rates, Crew Duty Time and Crew Rest Period requirements.

Acceptable Means of Compliance 2345(1)

Management of Aircrew Fatigue

1. **Supervisory Responsibility.** Flying supervisors **should** consider the following factors affecting aircrew fitness and fatigue when planning and conducting flying programmes. Supervisors **should** be particularly aware during periods of continuous and intensive flying.
 - a. The standard of overnight accommodation used during the previous rest period and the travelling time to the place of duty.
 - b. The quality of the rest taken during the previous stand-down period and any disturbances.
 - c. How long the individual has been awake and how long the individual will have been awake by the end of the proposed task.
 - d. Flying related ground activities (Duty Supervisor, winch driving, aircraft engineering tasks, driving tasks, ground instruction, Part Task Trainer instruction etc).
 - e. Number of days since the individual has had a day off work or duty.
 - f. Extremes of temperature in the cockpit and during ground duties and any dehydration issues.
 - g. The time taken to complete the task, delays incurred and expected (latest) landing time.
 - h. Recent non-2 FTS flying activities, in particular any transmeridian flight by individuals whether acting as crew or passengers.
 - i. Personal and social situation of the individual aircrew.
2. **Fasting.** Aircrew fasting in accordance with religious beliefs **should** land before 1200hrs local.
3. **Flying Programmes.** Flying programmes **should** allow individuals to have a one-hour meal break during the working day and snacks and drinks to be consumed as required between sorties or series of launches.
4. **Personal Responsibility.** Before their next duty period, individuals **should** make full use of the opportunities for rest and conduct off-duty activities accordingly. Aircrew who consider themselves too fatigued for flying duties **should not** carry out any flying related tasks (Duty Supervisor, winch driving, driving duties, MAGRO etc).
5. **Endurance Flying.** Before authorizing an endurance flight, such as a BGA Silver C 5-hour attempt, Flying Supervisors **should** carefully consider all factors that may have an

impact on the safe conduct of that flight. Assessment of fatigue is subjective; therefore, pilots **should** accept their share of responsibility in assessing personal fitness to undertake the sortie. Authorizers **should** objectively assess the individual and not rely on the individuals perceived levels of fatigue. Pilots **should** carefully monitor their fitness throughout the flight and terminate it when in doubt.

6. **Maximum Aerotow Aircraft Flying Rates.** The table below details the maximum Service flying rates and number of instructional sorties for aircrew in Aerotow aircraft:

Aircrew Category	Each Year (hrs)	Every 30 Days (hrs)	In a Duty Period (hrs)
Als, ACOs and Aerotow Pilots	500	60	6

7. **Maximum Glider Flying Rates.** No pilot **should** exceed 30 launches in any one day. Cadets and other personnel attending for gliding familiarisation and training are subject to the following limitations:

a. The normal maximum number of dual and solo flights, which a GS and AGT trainee may undertake in one day, **should** be 15. Exceptionally this limit may be increased to 18, including the solo flight subject to the following:

- (1) The decision **should** be made by an A Category QGI who has flown with the trainee for at least the 6 previous flights immediately before the solo.
- (2) The QGI **should** satisfy themselves that the trainee is in a condition to undertake the additional flights.

b. The maximum number of launches that a cadet may undertake in one hour **should** be 10.

8. **Crew Duty Time (CDT).** The overriding requirement before undertaking any period of duty involving the operation of aircraft, or the supervision of such operations, is that the individual **should** be fit and sufficiently rested for such duties.

9. For the purposes of fatigue management of personnel involved in flying duties, it is necessary to consider any activity prior to a duty period at a VGS or CGS. Such activity **should** include the individuals' working occupation, commute or education.

10. **Crew Rest Periods (CRP).** In addition to GASO 2345(1), personnel who have completed a 2 hour or longer period of continuous duty as Winch Operator or Retrieve Vehicle Driver **should** have a minimum of a 30 min break before any subsequent flying related activity.

Guidance Material 2345(1)

Management of Aircrew Fatigue

11. **CDT.** An individual's CDT is defined as a continuous period of duty, that includes flying, and begins and ends when leaving or arriving at their residence or overnight accommodation respectively.

Duty Holder Order 2345(2)

Use of Temazepam in the Management of Aircrew Work and Rest in Aircrew

2345(1) 2 FTS aircrew **shall not** use Temazepam in the management of work and rest schedules

Acceptable Means of Compliance 2345(2)

Use of Temazepam in the Management of Aircrew Work and Rest in Aircrew

12. Nil.

**Guidance
Material
2345(2)**

**Use of Temazepam in the Management of Aircrew Work and Rest in
Aircrew**

13. Nil.

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DHO 2350 – Aircraft Emergencies

Rationale

Air System emergencies pose a significant Risk to Life and must be managed in a manner that reduces this risk to a level that is As Low As Reasonably Practicable and Tolerable. In order to achieve this Aircrew must use a standard set of immediate actions during an emergency situation and support these with common verbal or visual instructions.

Contents

2350(1): Aircraft Emergencies

2350(T1): Minimum Fuel

2350(T2): Actual Forced Landing Off Base

2350(D1): Action to be Taken in the Event of a Diversion

2350(D2): Overdue Aircraft

2350(D3): Winch Launching Abnormalities

2350(D4): Cable Release Failure

Duty Holder Order 2350(1)

Aircraft Emergencies

2350(1) Aircrew operating UK Military Aircraft **shall** have a thorough knowledge, appropriate to their Aircrew specialization, of the emergency procedures and drills specific to the aircraft they are operating.

Acceptable Means of Compliance 2350(1)

Aircraft Emergencies

1. Unit Cdrs **should** ensure that emergency procedures are briefed at appropriate intervals to ensure that handling pilots are aware of the immediate and subsequent actions to be taken.
2. **Aircraft Commander's (Emergency) Pre-Take-Off Brief.** The Aircraft Commander **should** monitor the brief and expand upon it if required. Solo ab-initio trainees **should** rehearse their actions with the authorizing officer and self-brief prior to take-off. Consideration **should** be given to runway length, overshoot terrain, local Engine Failure After Take-Off (EFATO)/Launch Failure (LF) hazards and surface wind. As a minimum, the pre-take-off Brief **should** include:
 - a. The identity of who the Aircraft Commander and who the Handling Pilot is.
 - b. **Motor Glider aircraft:**
 - (1) Actions following failure on the runway.
 - (2) Actions following EFATO up to 300ft AAL.
 - (3) Actions following EFATO 300-500ft AAL.
 - (4) Actions following EFATO above 500ft AAL.
 - (5) Actions following a Partial Power Loss.
 - c. **Glider aircraft:**
 - (1) Actions following a LF at a low height.
 - (2) Actions following a LF at a medium height.
 - d. **Aerotow aircraft (when aerotowing):**
 - (1) Actions following failure on the runway.
 - (2) Actions following EFATO at key heights and positions.
 - e. **Aerotow aircraft (when not aerotowing):**

- (1) Actions following failure on the runway.
 - (2) Actions following EFATO up to 600ft AAL.
 - (3) Actions following EFATO above 600ft AAL.
- f. **All aircraft.** Subsequent actions to be completed after landing.

Aircraft Strikes

3. Aircraft subject to strikes in the air, eg drone strike, bird strike, **should** undergo handling checks, including slow speed handling checks, so that the Aircraft Commander can assess the serviceability and general handling of the aircraft. Consideration **should** be given to aircraft abandonment, **should** circumstances dictate, ie current height, parachutes available etc.

Fumes and Smoke in the Cockpit

4. In the event of fumes or smoke entering the cockpit, the following immediate actions **should** be taken:

- a. Immediately shut off any cabin heater and close any other openings that might convey the engine compartment air into the cockpit.
- b. Open a fresh air source immediately.
- c. Land at the first opportunity and ask Maintenance personnel to determine whether CO is being allowed to enter the cabin (eg a defective exhaust, unsealed opening between engine compartment & cabin).
- d. Avoid smoking.

5. The following **should** also be considered:

- a. **Severe or Persistent Symptoms.** Aircrew suffering severe or persistent symptoms **should** report to an on-site MAME as soon as possible or, where the MAME is not on-site, attend the nearest A&E department. Where A&E attendance has been required, the CFMO **should** be immediately informed.
- b. **Mild Symptoms or Asymptomatic.** Aircrew who are asymptomatic or suffering only mild symptoms **should** contact the MAME as soon as possible. Where the MAME is not on-site, this can be done by phone.

6. Following exposure, aircrew **should not** fly without medical clearance from a MAME.

Smell of Fuel in the Cockpit

7. Smell of fuel in the cockpit is not classed as fumes and if this is encountered a medical appointment **should not** be required.

Guidance Material 2350(1)

Aircraft Emergencies

8. Type-specific SOPs.

Fumes and Smoke in the Cockpit

9. Whilst fumes or smoke in the cockpit **should** be reported via DASOR, a smell of AVGAS is not classed as fumes in the cockpit. Something that turns the CO detector a different colour fits more into this category, but it **should** be a judgement call by the Aircraft Commander.

10. The worst-case scenario in the short-term is Carbon Monoxide (CO); as this competitively binds to haemoglobin in the blood, reducing the oxygen carrying capacity. This is synergistic with the effects of altitude: the hypoxic hypoxia of altitude plus the anaemic hypoxia of CO poisoning. This is why many light aircraft now have CO detectors. Symptoms of CO inhalation are, unfortunately, very vague. Early symptoms of poisoning include feelings of sluggishness, being too warm, and tightness across the forehead. These may be followed by more intense feelings such as headache, throbbing or pressure in the temples, and ringing in the ears. These in turn may be followed by severe

headache, general weakness, dizziness, and gradual dimming of vision. Large accumulations of CO in the body result in loss of muscular power, vomiting, convulsions, and coma. Low exposure over extended periods is just as bad as a one-off high exposure, as the half-life of CO in the body in room air is 3-4 hours.

**Duty Holder
Order
2350(T1)**

Minimum Fuel

2350(T1) The Aircraft Commander **shall** declare 'Minimum Fuel' as soon as it is apparent that their aircraft will land with the promulgated minimum fuel.

**Acceptable
Means of
Compliance
2350(T1)**

Minimum Fuel

11. Nil in addition to GASO 2350(T1).

**Guidance
Material
2350(T1)**

Minimum Fuel

12. Nil in addition to GASO 2350(T1).

**Duty Holder
Order
2350(T2)**

Actual Forced Landing Off Base

2350(T2) Unit Cdrs **shall** ensure that the requirements of RA 1410, RA 1430 and the MAA Manual of Post-Crash Management are fulfilled.

**Acceptable
Means of
Compliance
2350(T2)**

Actual Forced Landing Off Base

13. **Crew Action.** Where possible, the Aircraft Commander **should** inform the DS by radio that they are preparing to land outside the airfield and **should** give, if known, the details of their position relative to the base airfield and where they intend to land. After landing the Aircraft Commander or, if the Aircraft Commander is incapacitated the second crew member **should**:

a. **Assistance.** Seek medical assistance for any injuries, calling for an ambulance, if necessary, by the quickest means. Inform the local police and seek assistance, if necessary.

b. **Safety.** Safeguard the aircraft as far as possible from wind, animals and members of the public. If 2 persons were on board, and neither is injured, one **should** stay with the aircraft.

c. **Landowner.** Inform the landowner, whenever possible. Make no admission of liability for any damage. Minimise damage to crops and property. Ensure that all gates are left as found.

d. **Contact Base Unit.** Contact the DS giving the exact location of the aircraft and advice on how best to reach it. Give details of injuries and of damage to the aircraft and property. If the landing was due to a technical fault this **should** be clearly explained.

e. **Security.** Return to the aircraft and remain with it until relieved. The aircraft **should not** be moved or tampered with.

14. **DS Action.** The DS **should** alert the DE and Unit Cdr of the situation and **should**:

a. Initiate the Aircraft Land Out Plan (ALOP) if a safe landing has been achieved, or the Aircraft Post Crash Management Plan (APCMP) if a crash has

occurred.

b. Report the occurrence to OC Ops Wg as soon as practicable.

15. Place all available staff on standby to assist in guarding/retrieval as decided by OC Ops Wg, or parent station holding post-crash management responsibilities.

**Guidance
Material
2350(T2)**

Actual Forced Landing Off Base

16. Gliders landing out in fields is a regular occurrence in the Civil world, especially during cross-country sorties and tasks; however, within 2 FTS operations Aircraft Commanders always plan to remain within gliding range of the airfield. If during an occasion where a 2 FTS aircraft lands out, but completes a successful landing where no damage to the aircraft or injury to personnel occurs, then this event is not designated as a crash, and the normal post-crash management actions are not required. Further guidance can be obtained from OC Ops Wg as part of the reporting procedure.

17. RA 1410 – Occurrence Reporting.

18. RA 1430 – Aircraft Post-Crash Management and Significant Occurrence Management.

19. MAA Manual of Post-Crash Management.

**Duty Holder
Order
2350(D1)**

Action to be Taken in the Event of a Diversion

2350(D1) The term Diversion **shall** be used when an aircraft is forced to land at another airfield due to weather constraints whilst flying an authorized cross-country flight or routine authorized operations outside of engine-stopped gliding range of the base airfield.

**Acceptable
Means of
Compliance
2350(D1)**

Action to be Taken in the Event of a Diversion

20. **Crew Action.** The Aircraft Commander **should** inform the relevant Air Traffic agency, if being used, of their plan to divert due to weather. The Aircraft Commander **should** inform the DS of the diversion as soon as possible after landing.

21. **DS Action.** The DS **should** inform OC Ops Wg and provide the diversion details. If nothing other than a normal landing took place, the aircraft is otherwise serviceable and the diversion airfield is suitable for aircraft operations, OC Ops Wg may approve the subsequent aircraft recovery.

22. **Aircraft Recovery.** Once verbally authorized by the DS, pilots of powered aircraft are permitted to take-off and continue the sortie, or return to their home location, after satisfying themselves that the aircraft is fully serviceable. After return to base the diversion landing details **should** be reported in full to the DS and recorded in the authorization sheets.

**Guidance
Material
2350(D1)**

Action to be Taken in the Event of a Diversion

23. Nil.

**Duty Holder
Order
2350(D2)**

Overdue Aircraft

2350(D2) Aircraft that are not known to have landed safely after a prescribed time **shall** be considered as overdue. Aircraft commanders **shall** keep the DS aware of changes of ETA and transmit Ops Normal calls as appropriate.

**Acceptable
Means of
Compliance
2350(D2)**

Overdue Aircraft

24. **Local Sorties.** Aircraft Commanders **should** give an "Operations Normal" (Ops Normal) call after one hour airborne. This **should not** be required if completing circuit sorties within the visual circuit.

25. **Cross-country Flights.** Prior to departure, the Aircraft Commander **should** advise the DS of the duration of the flight and the ETA at the destination airfield. The Aircraft Commander **should** also inform the DS of their arrival at the destination airfield and prior to their departure for the return flight. The DS **should** record sortie details in the DSs Watch Log.

26. An aircraft **should** be considered overdue and action taken, iaw the Guidance Material listed below, if:

- a. The aircraft fails to arrive at, or has no radio communication with the destination airfield by the time of the last ETA, or an ETA based on the actual time of departure (ATD).
- b. The aircraft has exceeded one hour airborne on a local sortie without giving a revised ETA or an "Ops Normal" call.

**Guidance
Material
2350(D2)**

Overdue Aircraft

27. If an inbound aircraft is overdue, the DS will:

- a. Request a revised ETA or "Ops Normal" R/T call on the frequency in use, or if un-answered, on any alternative frequency.
- b. If the R/T calls are un-answered, task any airborne aircraft to request a revised ETA from the overdue aircraft.
- c. Inform the DE that an aircraft is overdue.
- d. Detail a responsible person to contact the aircraft's departure airfield to confirm its ATD, ETE and any revised ETA. If the aircraft is still overdue, inform the departure airfield that overdue action is being initiated.

28. After consultation with the DE delegate a responsible person to contact RAFU Swanwick D&D cell GPTN 95586 Ext 2406 or Civ 01489 612406 and inform them that the aircraft is overdue and give the following information:

- a. The full aircraft callsign.
- b. Type.
- c. The number of POB.
- d. Departure Airfield.
- e. Estimated Time En-Route.
- f. Approximate Endurance to Fuel Tank Dry.
- g. Route of Flight.

29. The DS will ensure that a responsible person remains by a telephone until the aircraft recovers or a landing site is established.

30. If the aircraft is known to be in contact with another ATC unit, then the DS must be informed.

31. If the aircraft recovers to the airfield or destination, then D&D must be informed by telephone.
32. The DS will initiate reporting action and maintain a diary of events.
33. If an outbound aircraft is overdue, the DS must contact the destination airfield to obtain an update. If there has been no updated ETA and the aircraft cannot be contacted, overdue action must be initiated by either the destination airfield or by the DS.

**Duty Holder
Order
2350(D3)**

Winch Launching Abnormalities

2350(D3) Aircraft Commanders **shall** be aware of the actions to be taken during abnormal circumstances.

**Acceptable
Means of
Compliance
2350(D3)**

Winch Launching Abnormalities

34. **Cable Over-Run.** If an aircraft over-runs the launch cable during the early stages of a launch, there is a danger of the cable end assembly or the cable itself being caught on some part of the aircraft. If an Aircraft Commander experiences or suspects a cable over-run, they **should**:
- Release the cable and shout "**STOP, STOP, STOP**".
 - Ensure the aircraft is held at wings level and the crew remains strapped in until all the cable is pulled forward of the aircraft.
 - Once the cable is clear of the aircraft, ensure that one wing of the aircraft is lowered to the ground. Ensure that the wings are not returned to level until ready to re-start a launch.
35. Any individual at the launch point who observes a cable over-run **should** stop the launch. The Launch Point Supervisor **should** ensure that the aircraft is moved forward, if necessary, before another attempt to launch on the same cable is made. The Duty Supervisor may elect to instruct the winch operator to recover the cable.
36. **Wing Drop on Take-Off.** If during a launch the aircraft wingtip contacts the ground, the pilot **should** immediately release the cable.
37. **Fast Launch Procedure.** If the launch speed seems likely to exceed the maximum permitted (65kts), the pilot **should** ensure that the aircraft is positively and smoothly yawed both left and right to signal to the winch operator, that the launch is too fast. The pilot **should** repeat the signal as required; however, if the speed reaches the maximum permitted, the pilot **should** ensure the launch is abandoned at a safe height by releasing the cable.
38. **Slow Launch Procedure.** If the aircraft fails to achieve the minimum launch speed (50kts), or slows below this speed, the pilot **should** lower the aircraft nose to select an appropriate accelerative attitude and to signal to the winch operator that the launch is too slow. If airspeed increase immediately the launch **should** be continued. If not, the pilot **should** abandon the launch by releasing the cable.

Winch Operator Actions in the Event of an Emergency

39. **Winch Emergency.** Winch Operators encountering a winch emergency or abnormality during a launch **should** continue to apply power, if it is safe to do so, until the aircraft can be seen to be at a safe height for release.
40. **Aircraft Emergency.** Winch Operators who suspect an aircraft emergency **should** continue to apply power, except if:
- There is a risk of Mid-Air Collision if the launch continues.
 - There is visual evidence that a launch failure has occurred.
 - A "**STOP**" signal is received from the launch point.

**Guidance
Material
2350(D3)**

Winch Launching Abnormalities

41. FTP3225VIK.
42. Skylaunch Operators Manual – AESP 1720-G-106-201.

**Duty Holder
Order
2350(D4)**

Cable Release Failure

2350(D4) A Cable Release Failure (also known as a Cable Hang-up) is an extremely rare occurrence resulting from the simultaneous failure of both the normal release and back release mechanisms of the Centre of Gravity release unit; however, Aircraft Commanders **shall** be aware of the subsequent recovery procedure, designed to ensure the safety of both aircraft occupants and individuals on the ground.

**Acceptable
Means of
Compliance
2350(D4)**

Cable Release Failure

43. **Symptoms.** The following symptoms are normally present during a Cable Release Failure:
 - a. The cable fails to release when the release toggle is pulled.
 - b. The cable fails to release when second crew member pulls their release toggle.
 - c. The cable fails to back release.
 - d. The aircraft nose pitches down and speed increases.
 - e. An un-commanded nose pitch-up is evident once the cable has been guillotined from the winch end.
44. **Recovery.** The Aircraft Commander **should** ensure the following recovery actions are completed:
 - a. Fly at 60kts.
 - b. If the cable has not been guillotined fly orbits around the winch until it has.
 - c. Instruct second crew member (if present) to hold release toggle open.
 - d. Fly a modified circuit avoiding over-flight of people and livestock if practicable.
 - e. Use airbrakes as required to minimise airborne time.
 - f. Select normal approach speed +10kts for the approach.
 - g. Commence final turn inside the airfield boundary if sufficient landing area is available, otherwise overfly the boundary at a safe height.
 - h. Aim to land deep into the DLA.
 - i. A lower nose attitude may be required to maintain the required speeds as the aircraft descends.
45. **Radio.** The Aircraft Commander **should** inform the Duty Supervisor of the emergency and intentions at any point when time permits.
46. **Winch Operator Actions.** The Winch Operator **should** be informed of the failure to release by the DS. If no message is received from the DS, and the cable fails to release from the glider after the Winch Operator reduces power at the top of the launch, the Winch Operator **should** complete the following actions:
 - a. Close the throttle.
 - b. Apply the brake.
 - c. If the cable does not separate from the glider, and the glider passes overhead



the winch, the Winch Operator **should**:

- (1) Operate the guillotine.
- (2) Set the transmission select lever to the neutral position.
- (3) Move the drum selector to neutral.
- (4) Report the incident by radio to the DS.
- (5) Stay inside the winch cab until confirmation is received that the emergency is over.

**Guidance
Material
2350(D4)**

Cable Release Failure

47. FTP3225VIK.
48. Skylaunch Operators Manual – AESP 1720-G-106-201.

DHO 2360 – Portable Electronic Devices

Rationale

Portable electronic devices (PED) are portable information systems or devices with or without the capability of wireless local area network (WLAN) or wireless personal area network (WPAN) connectivity. These include, but are not limited to, mobile telephones, pagers, personal digital assistants, laptops, memory sticks, thumb drives, and two-way radios. PED may interfere with Air Systems by means of electro-magnetic interference or battery pack fire. Consequently carriage and operation of PED within UK military Air Systems needs to be controlled.

Contents

2360(1): Portable Electronic Devices

Duty Holder Order 2360(1)

Portable Electronic Devices

2360(1) Unit Cdrs **shall** specify in local Flying Orders the requirements for the operation of PED in or near aircraft within their AoR in accordance with RA 2360(1), GASO 2360(1) and DHO 2360(1).

Acceptable Means of Compliance 2360(1)

Portable Electronic Devices

1. PED authorized for use on 2 FTS aircraft, and the limitations on their use, are detailed in the aircraft Release to Service (RTS).

Carriage of Portable Electronic Devices

2. The Aircraft Commander **should** ensure that any passengers are checked for the carriage of PED, and that passengers are made aware of the requirement to stow PED safely during flight.

3. Ancillary equipment such as lenses, memory cards, batteries and flash units **should not** be changed in flight. Where used, cases, bags, straps and pouches **should** remain securely attached to the associated PED (or securely stowed) with no possibility of fouling the flying controls or other aircraft equipment.

Navigational Aids

4. Navigational aids such as GPS may be used during cross-country and transit flights; however, standard pilot navigation techniques **should** be the main source of navigation. When a GPS is carried, the GPS and power source, such as external battery, **should** be secured to the aircraft or pilot and **should** not constitute a loose article or hazard.

Guidance Material 2360(1)

Portable Electronic Devices

5. Nil in addition to GASO 2360(1).

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DHO 2370 – Test and Evaluation

Rationale

Test and Evaluation (T&E) activity provides evidence that is used to support the Air System Safety Case (ASSC). The Risks to Life (RtL) associated with this activity are two-fold: firstly the process of evidence gathering has the potential to present a greater RtL than that associated with the routine operating environment, and secondly the generation of flawed evidence may negatively impact on the subsequent ASSC. Therefore T&E activity, and the associated evidence-generation, needs to be conducted and supervised by approved organizations and Suitably Qualified and Experienced Person (SQEP).

Contents

2370(1): Test and Evaluation Governance

2370(2): Test and Evaluation Personnel

2370(3): Test and Evaluation Activity

Duty Holder Order 2370(1)

Test and Evaluation Governance

2370(1) T&E activity **shall** be subject to governance by SQEP.

Acceptable Means of Compliance 2370(1)

Test and Evaluation Governance

1. 2 FTS **should not** be categorized as a competent T&E organization; however, Comdt 2 FTS as the DDH **should** nominate appropriate individuals to conduct airborne assessments when required to assist in RtL decisions.

Guidance Material 2370(1)

Test and Evaluation Governance

2. Nil.

Duty Holder Order 2370(2)

Test and Evaluation Personnel

2370(2) T&E activity **shall** only be designed, planned, supervised and conducted by SQEP.

Acceptable Means of Compliance 2370(2)

Test and Evaluation Personnel

3. 2 FTS does not possess any personnel that are deemed T&E competent; however, Comdt 2 FTS as the DDH **should** nominate appropriate individuals to conduct airborne assessments when required to assist in RtL decisions.

Guidance Material 2370(2)

Test and Evaluation Personnel

4. Nil.

Duty Holder Order 2370(3)

Test and Evaluation Activity

2370(3) Unit Cdrs **shall** ensure that Orders to support T&E activity are followed.

**Acceptable
Means of
Compliance
2370(3)****Test and Evaluation Activity**

5. All T&E activity or airborne assessment required for RtL decisions **should** be conducted under the authority of Comdt 2 FTS. An evaluation report **should** be completed for each series of assessment sorties. Where practicable, assessments **should** be conducted iaw the Air & Space Warfare Centre (ASWC) Trial Guide. When an assessment is designated as a minor task, Comdt 2 FTS may direct that the evaluation be carried out in the most appropriate and expeditious manner taking due regard of the Safety Case.
6. Assessment sorties **should** be authorized iaw normal authorization procedures.

**Guidance
Material
2370(3)****Test and Evaluation Activity**

7. Nil.

DHO 2375 – Approval and Use of Flight Simulator Training Devices

Rationale

Flight Simulator Training Devices (FSTD) may be used as either preparation or substitution for live sorties in United Kingdom (UK) military Air Systems. However, FSTD vary considerably in fidelity and because of this their use must not prejudice the safe operation of that Air System. Careful consideration is therefore required to ensure the FSTD is fit for purpose.

Contents

2375(1): Approval of Flight Simulator Training Devices

2375(2): Use of Flight Simulator Training Devices

2375(T1): Use of Part Task Trainers (PTT)

Duty Holder Order 2375(1)

Approval of Flight Simulator Training Devices

2375(1) Flight Simulators **shall** be used in support of Flying Training.

Acceptable Means of Compliance 2375(1)

Approval of Flight Simulator Training Devices

1. Nil in addition to GASO 2375(1).

Guidance Material 2375(1)

Approval of Flight Simulator Training Devices

2. Nil.

Duty Holder Order 2375(2)

Use of Flight Simulator Training Devices

2375(2) Comdt 2 FTS **shall** determine the extent that Flight Simulation can be used as a substitute for live flying based on the fidelity of the FSTD being used.

Acceptable Means of Compliance 2375(2)

Use of Flight Simulator Training Devices

3. N/A to 2 FTS.

Guidance Material 2375(2)

Use of Flight Simulator Training Devices

4. N/A to 2 FTS.

Duty Holder Order 2375(T1)

Use of Part Task Trainers (PTT)

2375(T1) 2 FTS Units **shall** use Part Task Trainers (PTT), where they are available, to increase the effectiveness of training delivery.

**Acceptable
Means of
Compliance
2375(T1)****Use of Part Task Trainers (PTT)**

5. Use of PTT **should** be iaw the 2 FTS PTT syllabus.
6. PTT modifications **should** be coordinated by OC Aerospace Wing.
7. PTT instructors **should** be approved and standardised by CGS.
8. Any synthetic trainer that emulates 2 FTS platforms **should** have oversight and approval of their use conducted by CGS.

**Guidance
Material
2375(T1)****Use of Part Task Trainers (PTT)**

9. FTP120.
10. Aviation accident investigations have suggested a potential for Aircrew to incorrectly make “live” inputs to emergency systems during the conduct of simulated or practice emergency handling on the aircraft in flight immediately after conducting the same exercise “live” in a Synthetic Training Device. This cognitive phenomenon might be mitigated by appropriate authorization, pre-flight briefing, crew composition and other supervisory factors and must be considered during the authorization process.

DHO 2401 – Documents and Records

Rationale

Documents pertaining to the operation of Air Systems and associated systems form a fundamental part of the Air System Safety Case. They provide essential knowledge to personnel who operate and supervise military flying. Accurate records are required for the management of personnel and equipment, and allow analysis and exploitation of occurrence data to improve Air Safety.

Contents

2401(1): Air System Document Set
2401(2): Use and Carriage of Documents in Aircraft
2401(3): Flying Logbooks and Recording of Flying Times
2401(4): Aviation Delivery Duty Holder Orders
2401(5): Authorization Records
2401(6): Meteorological Records
2401(7): Training Records
2401(T1): Operations Record Book (F540)
2401(T2): Statistical Returns

Duty Holder Order 2401(1)

Air System Document Set

2401(1) All aircrew **shall** be familiar with the elements of the Aircraft Document Set (ADS) relevant to operation of the aircraft.

Acceptable Means of Compliance 2401(1)

Air System Document Set

1. 2 FTS OC Standards **should** be nominated as the User Authenticator (UA) and **should** be consulted on all ADS matters.

Guidance Material 2401(1)

Air System Document Set

2. Nil.

Duty Holder Order 2401(2)

Use and Carriage of Documents in Aircraft

2401(2) All aircraft checks **shall** be completed in accordance with the relevant Aircrew Manual/Pilot's Notes and associated Flight Reference Cards. Unit Cdrs **shall** ensure that the appropriate Flight Reference documentation is carried in aircraft within their AoR.

Acceptable Means of Compliance 2401(2)

Use and Carriage of Documents in Aircraft

3. Unit Cdrs **should** ensure that the following Flight Reference documentation is carried in the aircraft within their AoR.

4. **FRCs and Check Lists:**

a. **Normal Drills.** Normal Drills **should** be completed with reference to FRCs.

Checks that are completed whilst aircraft are in motion may be completed from memory.

b. **Emergency Drills:**

- (1) Immediate Actions **should** be completed from memory.
- (2) Any Subsequent Actions (SAs) may be completed from memory or with reference to the FRCs as required.

5. **Local Area Charts.** A local area chart (1:250 000 M-5219 (Air) series), clearly marked with all controlled, restricted and prohibited airspace within a 25 NM radius of the base airfield, **should** be available for Aircraft Commanders. These Charts depict all aeronautical information up to and including FL100. The charts **should** be in date and have the expiry date clearly marked on the chart. The charts **should** also be amended in line with notifications issued as part of the Chart Amendment Low Flying (CALF) series.

**Guidance
Material
2401(2)**

Use and Carriage of Documents in Aircraft

6. Nil.

**Duty Holder
Order
2401(3)**

Flying Logbooks and Recording of Flying Times

2401(3) Accurate and detailed records of flying times **shall** be maintained by personnel who are required to fly regularly in the course of their duties. Unit Cdrs **shall** ensure that the requirements for the recording of flying times and checking of logbooks are followed by aircrew within their AoR.

**Acceptable
Means of
Compliance
2401(3)**

Flying Logbooks and Recording of Flying Times

7. **Flying Logbooks.** Flying Logbooks **should** be maintained to show an accurate record of a pilot's flying qualifications and experience. Regular Service Aircrew **should** continue to use their Pilots Flying Logbook (RAF F414) or Aircrew Flying Logbook (RAF F1748), all other 2 FTS Aircrew **should** use the 2 FTS Pilots Flying/Gliding Logbook (RAF F6748). Flying Logbooks **should** normally be issued to U/T pilots following successful completion of the AGT course. Unit Cdrs **should** ensure that personnel maintain Flying Logbooks in accordance with these Orders and in conjunction with those inside the front cover of the Flying Logbook. Entries and summaries **should** be prepared in accordance with the examples illustrated at Annexes A, B and C.

8. Flying Logbooks **should** be made available for inspections as required by 2 FTS HQ, CGS, CFS and personnel appointed to investigate occurrences.

9. **Recording of Flying Times.** Flight entries will be made as follows:

a. **Section 1 – Previous Experience.** On commencing a new Flying Logbook all previous flying experience **should** be included on this page and certified correct by the Unit Cdr. Entries **should** be in **BLUE** or **BLACK** ink. The “others” column may be used for all non-Service flying including BGA or Service GSA flying but the entry **should** be made in **GREEN** ink.

b. **Section 2 – Record of Aviation Medical Training, Tests and Examinations.** The Flying Logbook **should** be taken to the annual Periodic Medical Examination (PME) and signed by the Military Aviation Medical Examiner (MAME). An RAF FMed 566 will only be issued if the medical has limitations or is incomplete, ie waiting for test results. In exceptional circumstances Unit Cdrs **should** sign this entry if an FMed 566 has been issued and the MAME has not signed Section 2, or if notification of medical status is sent by other means, eg written approval from the CFMO. Completion of any Aviation Medical (AvMed) Training **should** also be recorded in this section.

c. **Section 3 – Certificates of Qualification as Pilot.** This section lists the Certificate of Qualification on Type (CQT) for each aircraft that individuals are cleared to fly. It **should not** be a record of flying grade or category. Initial qualification as “CQT – Aircraft Commander Either Seat”, **should** be annotated following the award of a G1. Following a lapse in flying of a period of more than 6 months, a CQT **should** be re-awarded and the same entry entered into Section 3. For Aerotow aircraft the entry **should** be “CQT – Aircraft Commander Left Seat Only” for Aerotow pilots, and “CQT – Aircraft Commander Either Seat” for Authorized Checking Officers and Aircrew Instructors.

d. **Section 4 – Special Flying Qualifications and Renewals.** This section is used to record the award and renewal of flying qualifications and **should** detail the pilot's current Grade or QGI Category. Following re-grading, re-categorisation or Standardisation an entry **should** be made by the CAI or Examiner (CFS make their Standardisation entries in **RED** ink, all other entries **should** be in **BLACK** or **BLUE** ink). In the Qualification column CFS **should** enter “CFS Standardisation”, along with an expiry date. The reference column will refer to the checking instructors report on the MOD F5363G. Example entries are detailed at Annex A.

e. **Section 4 – Non Flying Qualifications and Renewal.** This section is used to record any non-flying qualifications or training, such as Human Factors, Winch Operator, MAGROCC, Synthetic Parachute Training etc. Example entries are detailed at Annex A.

f. **Section 5 – Record of Flying Completed.** Entries **should** be in **BLUE**, **BLACK** or **GREEN** ink, as appropriate. SCT times and launches/landings **should** be completed in **RED** ink. The term “Self” **should** be used to indicate the individual's role (either as Aircraft Commander or 2nd Pilot/Trainee/Passenger). All check flights, including 31-day currency checks, **should** be underlined in **RED**. The duty column **should** contain the following information:

- (1) Type of training as appropriate, along with exercise number or flight details.
- (2) SCT whether P1 or P2, with exercise numbers or sortie details.
- (3) Cross-country or transit sorties, with route details.
- (4) G2, G1 or B2 QGI 90-day checks, with exercise numbers or sortie details.
- (5) All PLF, EFATO and PFL, ie “3 x PLFs”, even if not claimed as SCT. Practice emergencies claimed as SCT **should** be detailed using **RED** ink.

g. **Section 5 – Summaries.** VGS Summaries **should** be produced on 31 Mar, 30 Jun, 30 Sep and 31 Dec and **should** be completed using **RED** ink; except the Pilots signature which **should** be completed using **BLACK** ink. The summary **should** be signed by the Unit Cdr or CFI. Annual summaries **should not** be included in this section, but **should** be completed in Section 6 as detailed below. 2 FTS HQ, CGS and CFS pilots **should** produce monthly summaries. OC Ops Wg and OC Stds **should** sign each other's monthly summaries, except for the months of June and Dec which **should** be signed by Comdt 2 FTS. Instructors **should** keep a running total of instructional flying since first award of QGI Category. Guidance on which sorties count as instructional launches is contained within DHO 2103(2). Example entries are detailed at Annex B.

h. **Section 6 – Periodic Summaries.** Entries in this section **should** be limited to annual summaries, except that when personnel change Units, a summary of their year to date flying within that Unit **should** be completed. Entries **should** be signed by the Unit Cdr or CFI, except for those of OC Ops Wg and OC Stds, which **should** be signed by Comdt 2 FTS. Example entries are detailed at Annex C.

i. **Section 7 – Record of Service.** This section **should** be used as a record of service to detail length of service within 2 FTS Units.

10. **MOD F5363G.** On receipt of any completed MOD F5363G report, Unit Cdrs **should** check that the Flying Logbook entry is correct. They **should** then allow the pilot concerned to read the complete report and have them sign the F5363G as having done so. The

report **should** then be filed in the pilot's F5200 folder. VGS OCs **should** return signed F5363G to OC CGS for inclusion in their F5200 folder.

**Guidance
Material
2401(3)**

Flying Logbooks and Recording of Flying Times

11. OC Ops Wg holds an MAA AAMC to RA 2401 (MAA_AWE_2019_017 dated 24 Apr 19) so that VGS pilots may complete Quarterly logbook summary completion and inspection, as opposed to monthly.

**Duty Holder
Order
2401(4)**

Aviation Delivery Duty Holder Orders

2401(4) OC Ops Wg in the capacity as the Senior Operator **shall** issue Orders approved by Comdt 2 FTS.

**Acceptable
Means of
Compliance
2401(4)**

Aviation Delivery Duty Holder Orders

12. Unit Cdrs **should** ensure that personnel within their AoR are aware of all Orders that relate to 2 FTS operations.

13. **2 FTS Orders.** 2 FTS Orders are split between two Order sets; the 2 FTS Orders and the Stn Flying Order Book (FOB):

a. **2 FTS Orders.** In addition to MRPs, 2 FTS operations **should** be governed by the following documents:

(1) **22 Group Air Staff Orders (GASOs).** These are 2* Orders and regulations set by the Directorate of Flying Training (DFT) on behalf of the AOC.

(2) **2 FTS Duty Holder Orders (DHOs) (this document).** These are the Orders set by Comdt 2 FTS as the ADDH. They are subordinate to GASOs, but detail the ADDHs regulation where required. The MAA use a Regulatory Instruction (RI) process with respect to the RAs. 2 FTS has instigated a similar process for DHOs, adapted to meet the requirements of 2 FTS:

(a) **Duty Holder Instructions (DHIs).** A safety critical regulatory change or notice **should** be passed to the 2 FTS community immediately in the form of a DHI. The full staffing process **should** be applied to the DHI before uplifting to DHOs. DHIs **should** be short in nature, easy to read and unambiguous. They may not refer to any particular Order as the full staffing process may be required to fully understand the impact and some existing Orders may need to be restructured as a result. DHIs will take primacy over any contradiction in current DHOs, and could easily be removed through the same notification process, if required, allowing temporary short term measures without a DHO change. Caution **should** be taken to ensure only critical updates are issued to avoid diluting its relevance. DHIs **should** usually be uplifted into DHOs at the next change opportunity.

(b) **Duty Holder Exemptions (DHEs).** Occasionally, there will be a requirement to issue exemptions to DHOs that may be extant only for a short period or exceptional circumstance (ie not steady state) and will not be implemented into a formal DHO change. These changes or notices will be issued in the form of a Duty Holder Exemption (DHE), but will have a formal expiry date.

(c) Changes to DHOs and issue of both DHIs and DHEs **should** be actioned within the Aircrew Red/Green system.

(3) **2 FTS Aviation Engineering Standing Orders (AESOs).** These detail the policies for engineering and maintenance procedures within 2 FTS.

b. **Flying Order Book (FOB).** Each flying Unit **should** maintain a FOB, which

should contain all the local Flying Orders relevant to that Stn. The FOB **should** be constructed as follows:

- (1) **Section A.** New Orders (Part 1) and Special Flying Instructions (SFI) (Part 2). New Orders will be retained in Section A for a period of 3 months.
- (2) **Section B.** General Flying Orders (GFO) relating to aircraft type (if reqd).
- (3) **Section C.** Flying Orders issued by the airfield operating authority and relate to all users.
- (4) **Section D.** Flying Orders issued by the airfield operating authority and local Unit Orders, that relate to individual Units.

14. **Aircrew Red/Green System.** Amendments to any of the above documents **should** be managed and recorded through the Aircrew Red/Green System for all aircrew and operations support personnel.

15. **Management of Orders.** Amendments to Orders will be notified as follows:

- a. **MAA Regulatory Publications.** OC Ops Wg **should** notify all Unit Cdrs of any relevant changes to MAA Regulatory Publications which affect 2 FTS operations. This may be done through DHOs, or in the interim, a DHI.
- b. **GASOs and DHOs.** OC Ops Wg **should** notify all Unit Cdrs of all changes to GASOs and DHOs.
- c. **AESOs.** OC Eng Wg **should** notify all Unit Cdrs of all changes to AESOs.

16. **Station/Unit Flying Order Book.** Sponsors of Stn/Unit orders **should** notify all affected personnel of all changes to Stn/Unit Flying Orders.

**Guidance
Material
2401(4)**

Aviation Delivery Duty Holder Orders

17. Nil.

**Duty Holder
Order
2401(5)**

Authorization Record

2401(5) Unit Cdrs **shall** ensure that accurate and detailed records of flight authorizations are maintained.

**Acceptable
Means of
Compliance
2401(5)**

Authorization Record

18. **Retention for Audit.** Unit Cdrs **should** ensure that authorization and log sheets are retained for audit for at least 2 years. After this period they **should** be destroyed.

19. **Authorization Sheets.** Flying **should** be recorded in the authorization sheets as follows:

- a. **Course Flying.** Dual and solo syllabus sorties **should** be recorded as course flying, as appropriate.
- b. **SCT.** Sorties for flying or instructional practice (mutual or solo) or for testing QGIs or Graded Pilots **should** be recorded as SCT. Sorties for flying or instructional training, including all VGS instructor training at CGS, **should** be recorded as SCT U/T.
- c. **Other Flying.** Sorties which are neither instructional nor SCT (even if a trainee is carried) **should** be recorded as Other. Examples include dedicated weather checks, Maintenance Flight Tests, media flights and transits including aircraft delivery and staff 'reward' flights ie a G1 flying a junior staff member, but with no training involved.

Guidance Material 2401(5)	Authorization Record <p>20. JSP 441 – Defence Records Management Policy and Procedures.</p>
Duty Holder Order 2401(6)	Meteorological Records <p>2401(6) All relevant meteorological data shall be archived to assist in post-incident investigation.</p>
Acceptable Means of Compliance 2401(6)	Meteorological Records <p>21. Nil in addition to GASO 2401(6).</p>
Guidance Material 2401(6)	Meteorological Records <p>22. Nil.</p>
Duty Holder Order 2401(7)	Training Records <p>2401(7) Unit Cdrs shall maintain training records for all Aircrew.</p>
Acceptable Means of Compliance 2401(7)	Training Records Data Protection Act <p>23. Unit Cdrs should ensure that all personal records (manual or electronic) should be succinct, factual and properly protected. Authors of personal records or reports should be prepared to justify any comments. Private records should not be compiled.</p> Student Training Records <p>24. Sortie Report Folders/Forms (SRF) should be completed for all GS, AGT and U/T instructor training.</p> <p>25. Reports on Progress. Unit Cdrs should interview each U/T instructor (post AGT) every 6 months, to discuss progress until they reach a G1 standard. The content of the interview should be recorded and inserted into the individuals Training Folder.</p> Pilot and Instructor Training Records <p>26. Unit Cdrs should maintain the following records for Unit personnel:</p> <p>a. RAF Form 5200. An individual RAF F5200 folder should be raised and maintained for all permanent members of staff, including FSCs. F5200 folders for VGS OCs should be held at CGS, however, VGS OCs should ensure they send any documentation that needs to be inserted into their F5200, ie FAT forms, MOD F5363G etc to OC CGS once they have signed to certify they have seen the report. The folders should be used as covers for:</p> <p>(1) RAF Form 5200A inserted as enclosure 1, when a F5200 folder is raised.</p> <p>(2) Copies of all F5363G, raised in accordance with these DHOs.</p>

- (3) Any other F5200 series form.
- (4) Flying Ability Test (FAT) forms.
- (5) Any report or letter on a pilot raised or received by the Unit Cdr in connection with training or occurrences if directed by Comdt 2 FTS or OC Ops Wg.
- (6) Any Air or Flight Safety Award.

b. In accordance with the instructions for use, all RAF F5200 folder insertions **should** be indexed on page 2 of the folder or, if necessary, on a continuation sheet. F5200 folders **should not** be used as a general personnel admin file.

c. When the temporary or permanent transfer of a pilot to another unit has been authorized, the individuals RAF F5200 folder with enclosures **should** be forwarded to the receiving unit, together with any other pertinent personal documents.

d. **Training Folder.** A training folder **should** be raised for all Pilots and QGIs post-completion of AGT. This folder **should** contain all training records and documents that are not contained within the individuals F5200 folder.

e. **Personnel Folder.** A personnel folder **should** be raised by HQ 2 FTS Admin upon appointment to contain all personnel information, eg appointment and extension of service paperwork, medial information etc. Unit Cdrs **should** forward on documentation to be included in the personnel folder as required.

27. **MOD F5363G – Standardisation/Categorisation and Test Report (Glider).** A MOD F5363G **should** be raised whenever a Pilot flies with their Unit Cdr, CFI/DCFI, 2 FTS CAI or CFS Examiner for the purpose of Standardisations, tests, B2 Category QGI acceptance checks, award of qualifications and acceptance checks on transfer (temporary or permanent). A F5363G **should** also be raised for B2 Category QGI extension requests, upon completion of conversion to a new aircraft type and for all courses at CGS. The individual **should** complete parts 1 and 2 of the form and the Unit Cdr or Flying Supervisor **should** complete the recommendation at part 3. Following Standardisation or test, the Examiner, CAI or Flying Supervisor **should** complete part 4. Part 5 **should** be completed by the Unit Cdr, OC Ops Wg or CFS as appropriate. The candidate **should** then complete and sign part 6 as certification that they have seen the report. Once completed, Units **should** ensure the F5363G is enclosed within the pilot's F5200 folder. The following detail **should** also be included:

- a. The surname of the trainee or individual being reported on **should** be completed in block capitals throughout the entire form.
- b. For routine QGI, Graded pilot and U/T pilot standardisations the Part 3 recommendation may be left blank. If a FAT or Graded pilot 90-day check is required, then a one-line entry to this effect **should** be made. The signature box at the bottom of the first page **should** be completed in all cases.
- c. For all initial awards and re-categorisations, a full Part 3 recommendation **should** be completed.
- d. For QGI CFS Standardisation sorties the Part 4 drop down boxes for Flying Ability, Instructional Ability, Knowledge of Sequence and Knowledge of Allied Subjects **should** normally read "Not Required"; strengths and weaknesses **should** be highlighted in the Part 4 remarks section. The same will apply when VGS supervisors conduct 90-day checks with a B2 QGI. For re-categorisations the drop-down boxes **should** continue to be used, ie for an A2 award all 4 boxes will read "Above Average".
- e. For Graded pilot Standardisations, Graded pilot 90-day checks, Graded pilot awards and U/T pilot standardisations, the only Part 4 drop-down box that **should** be used is the Flying Ability box, the other 3 dropdowns **should** read "Not Required".

Staff Aircrew Training Records

28. Unit Cdrs **should** ensure that staff aircrew Qualifications (DHO 2101), Competencies (DHO 2102), SCT (DHO 2103) and Aircrew Instructor Training (DHO 2125)

records are maintained in accordance with the requirements of RA 2410(7).

Inspection of Personal Records

29. Unit Cdrs **should** ensure that personal records are available for inspection by the subject in an auditable manner.

Guidance Material 2401(7)

Training Records

30. Flying Training Records and Course Reports include:

- a. F5200 (Individual Record of Service – Flying Personnel – Transit Folder)
- b. F5200A (Aircrew Flying Accident/Incident Record).
- c. FTPs (Flying Training Publications).
- d. MOD F5363G (Standardisation/Categorisation and Test Report (Glider)).
- e. Training Folder (Contains items that are not inserted into F5200 folders, such as SRFs).

Current FT Forms

31. Current FT Forms are available on either MODNET or BADER sites.

Duty Holder Order 2401(T1)

Operations Record Book (F540)

2401(T1) Unit Cdrs **shall** ensure that a squadron Operations Record Book (F540) is compiled and managed for all flying units within their AoR in accordance with AP3040.

Acceptable Means of Compliance 2401(T1)

Operations Record Book (F540)

32. Whilst 2 FTS HQ **should** complete a monthly F540 return, CGS and VGS Units are exempt from this requirement.

Guidance Material 2401(T1)

Operations Record Book (F540)

33. AP3040, QR2137 and QR2138.

Duty Holder Order 2401(T2)

Statistical Returns

2401(T2) Unit Cdrs **shall** ensure that statistical returns are compiled as required by 2 FTS HQ.

Acceptable Means of Compliance 2401(T2)

Statistical Returns

34. Unit Cdrs **should** ensure the statistical returns are compiled as required by 2 FTS HQ. 2 FTS Business & Commercial **should** maintain a historical record of 2 FTS flying activity using information provided from 2 FTS flying units.

**Guidance
Material
2401(T2)**

Statistical Returns

35. Nil.

**Duty Holder
Order
2401(D1)**

Duty Supervisor's Watch Log

2401(D1) Unit Cdrs **shall** ensure that Duty Supervisor's Watch Logs are completed and retained as required by 2 FTS HQ.

**Acceptable
Means of
Compliance
2401(D1)**

Duty Supervisor's Watch Log

36. Unit Cdrs **should** ensure that the Duty Supervisors Watch Log is retained for audit for two years.

**Guidance
Material
2401(D1)**

Duty Supervisor's Watch Log

37. Nil.

ANNEX A

2 FTS FLYING LOGBOOK SECTION 3 & 4 – EXAMPLE ENTRIES

Section 3 – Certificates of Qualification as Pilot

Type	Date	Unit	Qualification	Signature and Rank
Initial Award of G1 (CQT)				
Viking T1	1 Nov 20	614 VGS	Aircraft Commander Either Seat	<i>Unit Cdr or Checking Inst Signature</i>
CQT should be renewed if there is a break in flying of more than 6 months for any Grade or Category				
Viking T1	1 Jun 21	615 VGS	Aircraft Commander Either Seat	<i>Unit Cdr or Checking Inst Signature</i>
Initial Award of Aerotow Pilot (CQT)				
Robin DR400	1 Nov 20	CGS	Aircraft Commander Left Seat Only	<i>Unit Cdr or Checking Inst Signature</i>
Initial Award of Aerotow Aircrew Instructor or ACO				
Robin DR400	1 Nov 20	CGS	Aircraft Commander Either Seat Only	<i>Unit Cdr or Checking Inst Signature</i>

Section 4 – Special Flying Qualifications and Renewals

Date	Aircraft Type	Qualification	Next Renewal Date	Signature	Unit	Reference
Initial Award of Graded Pilot (CofC)						
1 Nov 20	Viking T1	G2 or G1	N/A	<i>Unit Cdr or Check Inst Signature</i>	621 VGS	F5363G
1 Nov 20	Viking T1	G2 or G1 CofC	1 Nov 21 (Note 1)	<i>Unit Cdr or Check Inst Signature</i>	621 VGS	F5363G

Note 1: All renewal dates are now based on exact calendar year, rather than minus 1 day.

Annual Certificate of Competence (Graded Pilots Only)						
2 Nov 21	Viking T1	G2 or G1 CofC	2 Nov 22	<i>Unit Cdr or Check Inst Signature</i>	622 VGS	F5363G
Initial Award of QGI Category						
1 Nov 20	Viking T1	B2, B1, A2 or A1 Category QGI	(Note 2)	<i>Unit Cdr or Check Inst Signature</i>	(Note 3)	F5363G

Note 2: Renewal date only required for B2 Category QGIs or C to I (3 years); for all other QGIs entry N/A.

Note 3: 2 FTS HQ, CGS or CFS for B Category QGIs. CFS only for C to I, or A Category QGIs; however, 2 FTS Standards Flight may complete this entry for C to I awards in the absence of CFS.

Award of Viking C to I						
1 Nov 20	Viking T1	C to I	1 Nov 23	<i>Unit Cdr or Check Inst Signature</i>	(Note 3)	F5363G
CFS Standardisation						
10 Nov 20	Viking T1	CFS Standardisation	10 Nov 23 (Note 4)	<i>Checking Inst Signature</i>	CFS	F5363G

Note 4: 3 years for VGS personnel, 2 years for 2 FTS HQ, CGS or CFS personnel.

Soaring Qualification						
1 Nov 20	Viking T1	Thermal Soaring	N/A	<i>Checking Inst Signature</i>	626 VGS	DHO 2307(1)
Soaring Protocol Brief						
1 Nov 20	Viking T1	Thermal Soaring Protocol Brief	1 Nov 21	<i>Briefing Inst Signature</i>	632 VGS	DHO 2307(1)
Flying Ability Test (QGIs only – The FAT profile is included in Graded Pilots CofC)						
1 Nov 20	Viking T1	FAT	1 Nov 21	<i>Checking Inst Signature</i>	637 VGS	2FTS/FAT/G
Annual Instructional Competence Check (QGIs Only)						
1 Nov 20	Viking T1	ICC – B1 (Note 5)	1 Nov 21	<i>Checking Inst Signature</i>	CGS	F5363G

Note 5: Enter the QGI Category.

VGS Flying Supervisors Course Flying Elements						
1 Nov 20	Viking T1	Star (*)	(Note 6)	<i>Checking Inst Signature</i>	CGS	F5363G

Note 6: The expiry date **should** be the same as the Air Safety training expiry date, detailed under Non-Flying Qualifications & Renewals.

Initial Award of Aerotow Authorised Checking Officer						
1 Nov 20	Robin DR400	ACO	N/A	Checking Inst Signature	(Note 7)	F5363G

Note 7: 2 FTS HQ, CGS or CFS as required.

Initial Award of Aerotow Aircrew Instructor						
1 Nov 20	Robin DR400	C to I	1 May 22 (Note 8)	Checking Inst Signature	CFS	F5363G

Note 8: Initial Award of Aerotow Aircrew Instructor C to I is valid for 18 months, subsequent renewals will be completed on an annual basis and will be valid for 12 months only.

Initial Award of Aerotow Transit Qualification in the Non-Aerotow Role						
1 Nov 20	Robin DR400	TQ – Non Aerotow Only	N/A	Checking Inst Signature	(Note 7)	F5363G
Initial Award of Aerotow Transit Qualification in the Non-Aerotow Role						
1 Nov 20	Robin DR400	TQ – Aerotow Transit	N/A	Checking Inst Signature	(Note 7)	F5363G

Section 4 – Non-Flying Qualifications & Renewals

Date	Qualification	Next Renewal Date	Signature	Unit	Reference
Military Air Ground Radio Operator Certificate of Competence					
1 Nov 20	MAGROCC	N/A	Checking Inst Signature	CGS	GASO 2310(1)
Synthetic Parachute Training					
1 Nov 20	Synthetic Parachute Training	1 Nov 22	Checking Inst Signature	RAFC Cranwell	RA 2130(3)
Winch Qualifications					
1 Nov 20	Skylaunch Operator	N/A	Examiners Signature	644 VGS	DHO 2310(D4)
1 Nov 20	Skylaunch Instructor	N/A	Examiners Signature	645 VGS	RAF F7538
1 Nov 20	Skylaunch Examiner	N/A	Examiners Signature	CGS	RAF F7538
Human Factors					
1 Nov 20	Human Factors Foundation Training	N/A	Instructors Signature	CGS	RA 1440(1)
1 Nov 20	Human Factors Error Management	N/A	Instructors Signature	CGS	RA 1440(1)
1 Nov 20	Human Factors Continuation Training	1 Nov 22	Instructors Signature	661 VGS	RA 1440(1)
Gliding Authorizers Course					
1 Nov 20	GLAC	1 Nov 25	Instructors Signature	CGS	DHO 2125(1)
VGS Flying Supervisors Course Air Safety Training					
1 Nov 20	VGS FSC	1 Nov 25	Instructors Signature	CGS	DHO 2125(1)

ANNEX B

2 FTS FLYING LOGBOOK SECTION 5 – QUARTERLY SUMMARY EXAMPLE ENTRIES FOR VGS

1. 2 FTS HQ, CGS and CFS Pilots will complete monthly summaries as detailed by OC Standards.
2. VGS Pilots will use the template below.

Year <input type="text"/>		Aircraft		Crew		Duty	SLG		Conventional		Others		SCT		Instructional	
Month	Day	Type & Mark	Number	Aircraft Commander	Trainee, 2nd pilot or passenger		LDG	Hrs	LCHs	Hrs	LCHs LDGs	Hrs	LCH/LDG	Hrs	LCHs	Hrs
				Summary for Qtr Ending 31 Dec 20		Viking			52	4:05			5	0:35	50	3:58
				Date: 31 Dec 20		Last PLF	3 Nov 20*									
Unit Cdr or CFI Signature				Unit: 661 VGS												
				Pilots Signature		Totals	Nil	Nil	52	4:05	Nil	Nil	5	0:35	50	3:58

* If more than one PLF or Aerobatics sortie is flown within the quarter, only the date of the latest one **should** be recorded here. The date for the last PLF and Aeros sortie **should** be annotated, even if it occurred during a previous quarter. The details **should** only be recorded for pilots who are qualified in these disciplines.

ANNEX C

2 FTS FLYING LOGBOOK SECTION 6 – ANNUAL SUMMARY EXAMPLE ENTRIES FOR VGS

1. 2 FTS HQ, CGS and CFS Pilots will complete annual summaries as detailed by OC Standards.
2. VGS Pilots will use the template below.

Periodic Summary			SLG		Conventional		Others		Instructional LCHs/Hrs in Current Category	
			LDGs	Hrs	LCHs	Hrs	LCHs LDGs	Hrs	LCHs LDGs	Hrs
Date	Occasion	Type								
31 Dec 16	Annual	Viking			240	65:05			201	63:00
Signed	Unit Cdrs Signature									

DHO 3237 – Royal Low Level Corridors (RLLC)

Rationale

Members of The Royal Family afforded such status by the Director of Royal Travel, The Royal Household¹ are routinely flown in the UK by Royal Helicopter². The dynamic nature of military low flying may constitute a hazard to the safe conduct of Royal Helicopter flights; therefore, Royal Helicopter flights are conducted within the confines of a Royal Low Level Corridor (RLLC)³ which are subject to specific conditions to ensure that adequate separation is achieved between military Air Systems (AS) and the Royal Helicopter.

Contents

3237(1): Royal Low Level Corridors

Duty Holder Order 3237(1)

Royal Low Level Corridors

3237(1) Unit Cdrs **shall** ensure that 2 FTS aircraft maintain adequate separation from Royal Helicopter flights.

Acceptable Means of Compliance 3237(1)

Royal Low Level Corridors

1. All aircrew **should** be familiar with the regulations governing Royal Flights details in the MAA Manual of Military Air Traffic Management (MMATM).
2. Unit Cdrs **should** ensure that Royal Flight details are disseminated to aircrew, who **should** sign to acknowledge the Royal Flight(s) in the authorization sheets.
3. Unit Cdrs **should** ensure that:
 - a. Supervisory staff are conversant with the action necessary on receipt of a Royal Flight Notification.
 - b. A plot and copy of the Royal Flight is displayed in the Unit HQ.
 - c. Visiting Aircraft Commanders are aware of a Royal Flight.
 - d. Full details of the Royal Flight are publicised at the last flying briefing before the ETD of the Royal Flight.
4. **NOTAMs.** Royal Flight NOTAMs **should** be promulgated via the NATS Military Aviation Planning Portal: <https://login-mileams.natsmos.aero/>. Units that do not have access to this system **should** contact the relevant Royal Flight Safeguard Unit detailed at Para 8.
5. When a Royal Flight NOTAM or amendment is received, the DS **should** ensure that personnel are informed of the details. A proforma or copy of the NOTAM **should** be displayed and briefed to those concerned and **should** include:
 - a. Aircraft type and callsign.
 - b. ETD and place of departure.
 - c. Route and reporting points, with times and Flight Levels.
 - d. ETA and destination.
6. **Briefings.** The DS **should** contact the appropriate Safeguard Unit, detailed in the Guidance Material, to obtain all relevant information on any Royal Flight or Special Helicopter Flight that may affect flying operations. Before flying operations commence all relevant Royal Flight information **should** be briefed and all necessary detail **should** be displayed on a map. Inspection of this map **should** be included in the pre-flight brief. If it is

¹ When so directed by the Civil Aviation Authority (CAA) Head of Airspace, Aerodromes and Air Traffic Management (Hd AAA) certain flights within UK airspace by Sovereigns and Heads of State of foreign countries and, where appropriate, Prime Ministers of Commonwealth countries may also be afforded Royal Flight status.

² Helicopters from The Queen's Helicopter Flight (TQHF), 32 (The Royal) Squadron and civilian chartered helicopters.

³ A RLLC is a series of check points and/or turning points promulgated by Notification Message and/or Notice to Airmen (NOTAM). The CAA Airspace Regulation (Utilisation) is responsible for the coordination and notification of RLLC for Royal Helicopter flights.

suspected that a pilot has not been informed of a conflicting Royal Flight, the DS **should** provide this information before the pilot flies.

7. **Authorization.** On the day that a Royal Flight takes place, Aircraft Commanders **should** initial the authorization sheets, signifying their awareness of the following:

- a. The route and timing of the Royal Flight.
- b. The imposition of any local restrictions and the effect on their sortie.
- c. Implications for landaway and transit flights.

**Guidance
Material
3237(1)**

Royal Low Level Corridors

8. **Safeguard Units.** The following table details the allocation of Safeguard Units to 2 FTS Unit:

Safeguard Unit Table			
2 FTS Unit	Safeguard Unit	Contact Details	Comments
CGS	RAFC Cranwell	95751 7377 or 01400 267377	
614 VGS	RAF Northolt	95233 8915 or 02088 338915	
615 VGS	RAF Northolt	95233 8915 or 02088 338915	
621 VGS	RAF Brize Norton	01993 896142	
622 VGS	RAF Brize Norton	01993 896142	
626 VGS	RNAS Culdrose	93781 2417 or 01326 574121 Ext 2417	
632 VGS	RAF Shawbury	95531 7227 or 01939 250351 Ext 7227	
637 VGS	RAF Brize Norton	01993 896142	
644 VGS	RAF Waddington	95771 7451 or 01522 720271 Ext 7451	
645 VGS	RAF Leeming	01677 423041 Ext 7210/3041	Teeside if Leeming is closed: 01325 331020
661 VGS	RAF Lossiemouth	95161 7542 or 01343 817542	

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