#### 22 Gp Air Staff Instruction 151

## to 22 Gp Air Staff Orders Edition 1 AL 13



Directorate of Flying Training No 22 Group Mailbox #7001 MoD Abbeywood BRISTOL BS34 8JH Sqn Ldr B Ervine 22 Gp ASAR SO2 Regulation Tel: 0300 1564601 barry.ervine447@mod.gov.uk

22 Gp Organisations	All
Affected	

Order 213	22 Gp RFC Serial No.	N/A	Issue Date	19 Oct 22
Title	MAA NAA Serial No.	22/06	Effective Date	19 Oct 22
Survival Equipment, Drills and Training.	MAA RI Serial No.	N/A	Expiry Date	N/A

#### **FEEDBACK**

This GASI is effective immediately, however the 22 Gp Regulated Community are invited to offer feedback where applicable on the impact of this Instruction and any comments for consideration before uplift into GASOs at the next issue. Feedback should be directed through the individual named above.

#### **SUMMARY**

Engagement with the RTSA has highlighted that t-shirts are not listed as approved undergarments in the Aircraft Document Set (ADS)¹ for 22 Gp platforms. 22 Gp GASOs previously offered latitude to DDHs to employ them in hot weather, making the orders non-regulatory compliant by being less restrictive than the superior orders. High-priority work is now ongoing to have a 100% cotton t-shirt cleared for use in warmer weather, for those platform crews with an evidenced need to wear them. Until that time, the only undergarments to be worn with flying clothing are those items of AEA listed in the ADS.

MAA NAA/22/06 introduced a new regulation detailing fire, smoke and fumes training requirements.

"Safety harnesses" are now known as "Restraint systems".

The link at para 25 to the Army Operational Shooting Policy is removed.

Please note that the paragraphs have also been renumbered.

#### INSTRUCTION

GASO 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

<sup>&</sup>lt;sup>1</sup> DAP 108B-001-1 Aircrew Equipment Assemblies

exposed to increased Risk to Life (RtL); therefore personnel operating in UK Military Aircraft or civil aircraft used to deliver military flying training need to have a thorough working knowledge of all safety equipment and survival drills appropriate to their aircraft type and role.

#### **Contents**

2130(1): Safety and Survival Training and Currency

2130(2): Withdrawn - Incorporated in GASO2130(1)

2130(2): Wearing and Carriage of Aircrew Equipment Assemblies (AEA) and

Safety Equipment (SE)

2130(3): Safety Harnesses Restraint Systems

2130(4): Aircraft Survival and Rescue Equipment

2130(5): Ejection Seat Anthropometrics

2130(6): Fire, Smoke and Fumes Training

2130(T1): Ejection Seat – Safety Procedures

## Group Air Staff Order

#### Safety and Survival Training

2130(1)

Aircrew, supernumerary crew and passengers flying in 22Gp air systems **shall** complete, and be current for, the appropriate safety and survival drill training as mandated by RA2130; GASO2130 and as stipulated by the DDH in Local Flying Orders.

#### Acceptable Means of Compliance

2130(1)

#### Safety and survival training

- 1. **Safety and emergency drill training.** Initial safety and survival training drills detailed in RA 2130(1) (including the Defence SERE Training Organisation Permissive Land Survival (PLS) course for ab initio students) **should** be completed as early as practicable in flying training and on conversion to type as detailed in DDH local Flying Orders. Currency **should** then be maintained iaw RA2130 Annex A and this GASO. There is no currency requirement for PLS after initial training has been completed.
- 2. **Survival, Evasion, Resistance and Extraction (SERE) Officer.** Where appropriate, the DDH **should** appoint a suitably qualified station SERE Officer responsible for carrying out SERE training in accordance with JSP 911 Pt 2.
- 3. **SERE instructors**. Individuals delivering SERE training **should** be suitably qualified and maintain a record of training delivered.

#### Safety and survival training currency

4. **Periodicity of safety and survival drills.** The DDH **should** ensure that aircrew within their AoR comply with the currency requirements for safety and survival drills at Annex A to RA 2130.

- 5. Aircrew Equipment Assemblies (AEA) and Safety Equipment (SE). The DDH should specify in local orders the AEA and SE to be worn during safety and survival training.
- 6. **Aircrew not required to fly over water.** Those 22 Gp aircrew and trainees not required to conduct over-water operations and training sorties are exempt from life raft/life preserver and wet winching drills. Exempt aircrew **should not** be permitted to conduct sorties that include, or may include, over-water operation unless they complete the drills detailed in Annex A to RA 2130(2).
- 7. **Practical emergency ground egress drills.** For staff and trainees flying Texan T Mk 1, and Hawk T Mk 2, practical Emergency Ground Egress Drills **should** be conducted in the simulator, cockpit procedures trainer or ejection seat trainer. For Prefect (EFT) and Hawk T Mk 2 (AFT and TW phases) this training is valid for the duration of the course and any subsequent return to flying package, but not exceeding one year.
- 8. **Aircraft abandonment / ejection drill.** The DDH **should** specify in local Flying Orders the requirements for Aircraft Abandonment/Ejection Drills for the aircraft and aircrew within their AoR iaw RA2130(1) Para 4.
- 9. **Canopy jettison drill.** The DDH **should** specify in local Flying Orders the requirements for Canopy Jettison Drills for the aircraft and aircrew within their AoR.
- 10. **6-Monthly check of student strapping-in competency.** All ab-initio Hawk T Mk 2 and Texan T Mk1 student aircrew **should** demonstrate their ability to fully strap in correctly under one-to-one supervision of a QFI (any category) every 6 months. This strap-in check **should** be done in full AEA (including helmet) and **should** be conducted in the aircraft immediately prior to flight. Successful completion of the check should be recorded on Flight Log, Flight Pro or TMIS.
- 11. **Synthetic Parachute Training (SPT).** The DDH **should** specify in local Flying Orders the requirements for SPT for aircrew within their AoR in accordance with the requirements of RA 2130(1). Training **should** be supervised by a Synthetic Parachute Instructor (SPI) and conducted using training rigs whenever possible. Normally SPT is to be conducted wearing full AEA and SE appropriate to the aircraft type. The DDH may detail alternate AEA and SE where they assess the wearing of full AEA and SE to be inappropriate.
- 12. **Dry Life Saving Jackets (LSJ) / Life Preserver (LP) / Load Carrying Jerkin (LCJ) Training.** The DDH **should** specify in local Flying Orders the requirements for Dry LSJ / LP / LCJ Training for aircraft and aircrew within their AoR.
- 13. **Life raft drills, swimming competence and lifesaving training.** The DDH **should** ensure that the requirements for life raft drill and lifesaving training are fulfilled for the aircraft and aircrew within their AoR. Having successfully completed a Role-Related Swimming Test during Phase 1 Training, there is no requirement to maintain this currency. Pool training may be conducted at sea.
- 14. **Parachute dragging training.** The DDH **should** specify in local Flying Orders the requirements for parachute dragging training for aircraft and aircrew within their AoR.
- 15. **Personal equipment serviceability.** All aircrew **should** ensure that their personal flying clothing and equipment is serviced regularly.
- 16. **Passenger flights.** All passengers should be briefed on safety and survival drills iaw GASO 2340.

- 17. **STASS drills.** For platforms where STASS is cleared for use the DDH should specify in local orders the requirements for training. All personnel required to undertake wet STASS training **should** be medically screened prior to the training, using the medical screening questionnaire.
- 18. **Miniflare WHT**. The DDH **should** ensure aircrew in their AOR carrying 16mm miniflares in AEA / SE hold a current 16mm Miniflare WHT, and **should** detail associated training requirements in local flying orders.

#### **Exemptions, dispensations and currency extensions**

19. The DDH **should** only grant an exemption, dispensation or survival training currency extension for operational or exceptional circumstances. Sqn Cdrs **should** apply in writing to the DDH explaining the reasons for the request and only then after exploring all options (including the use of other base facilities) to maintain the periodicity of training as detailed at Annex A to RA 2130(2). Any such exemption, dispensation or currency extension granted by the DDH **should** be forwarded by the unit to the appropriate type-specific Desk Officer at HQ DFT.

#### Guidance Material

#### 2130(1)

#### Safety and survival training

- 20. JSP 911 Pt 1 and Pt 2.
- 21. DDH Local Flying Orders.
- 22. Annex A of RA 2130 details the periodicity of safety and survival drills.
- 23. STASS wet training Medical Screening Questionnaire.
- 24. Where miniflares are carried within AEA or SE but aircrew are not planning to fire except in emergency, ODH dispensation is granted to reduce the WHT requirement for aircrew to an annual demonstration and verbal brief delivered prior to commencement of flying duties.
- 25. <u>Army Publication AC 71850: Operational Shooting Policy Vol. 2</u> <u>Operational Shooting Policy Vol. 2</u>.

## Group Air Staff Order

#### Safety and survival training currency

2130(2) 2130(2) Withdrawn - Incorporated into RA 2130(1).

Acceptable
Means of
Compliance

<del>2130(2)</del>

25. Withdrawn - Incorporated into GASO 2130(1).

#### Guidance Material

#### <del>2130(2)</del>

#### Safety and survival training currency

26. Withdrawn - Incorporated into GASO 2130(1).

Group Air Staff Order Wearing and Carriage of Aircrew Equipment Assemblies (AEA) and Safety Equipment (SE)

2130(2)

2130(2) The DDH **shall** ensure that aircrew, supernumerary crew and passengers wear and carry approved AEA and SE.

Acceptable Means of Compliance

2130(<mark>2</mark>)

## Wearing and carriage of Aircrew Equipment Assemblies (AEA) and Safety Equipment (SE)

26. The DDH **should** ensure that all aircrew, supernumerary crew and passengers wear, and are trained or briefed in the use of AEA appropriate to: the aircraft type, type of sortie, duration of sortie and environmental conditions. Where an air system has a Release to Service, only AEA and SE approved in the Air System Document Set **should** be worn. For air systems without a Release to Service the DDH should list approved AEA and SE to be worn.

#### **AEA and SE**

- 27. **Powered aircraft.** Personnel **should** wear approved flying clothing as provided on the scales of entitlement. Cadets **should** wear a flying coverall where possible, or a buttonless type of coverall, and **should** wear aircrew flying gloves. Footwear **should** be sensible and **should not** have metal studs or deep tread soles.
- 28. **Gliders.** There is no mandatory requirement for personnel to wear specific items of flying clothing when operating on the airfield, but flying suits **should** be worn at all times by aircraft commanders when flying. Trainees **should**, where possible, wear a flying or buttonless coverall when flying. Footwear **should** be sensible and **should not** have metal studs or deep tread soles.
- 29. **Underclothing.** All non-Viking aircrew **should** wear, as a minimum, a FACS FR Vest / FR Undershirt with Long Johns or a Service-issue long-sleeve roll-neck with Long Johns (legacy flying clothing), under the minimum prescribed clothing detailed above. When unit commanders consider the risk of heat exhaustion is greater than the risk of injury from burns, they **should** present a risk comparison to the DDH who is authorized to issue an exemption or temporary deviation from this Order, which **should** be copied to the appropriate Desk Officer at HQ DFT.
- 30. **Headgear and hearing protection.** Protective flying helmets or appropriate headsets **should** be worn by all 22 Gp aircrew (not applicable to Viking). Instructors **should** ensure that trainees are familiar with the use of headgear and that sufficient headroom exists from the canopy. Hearing protection, where scaled, **should** be used in accordance with type-specific AEA and SE publications.
- 31. **Immersion coveralls.** Immersion coveralls offer protection against cold shock and hypothermia. The DDH **should** consider the use of immersion suits at sea temperatures of 15°C and below. The use of immersion coveralls **should** comply with the following:
  - a. Aircrew and passengers of single-engine aircraft, who are not scaled for immersion coveralls **should** operate within gliding range of land when the sea temperature is 10°C and below except when carrying out a published airfield approach procedure.
  - b. When the sea temperature is 10°C and below, aircrew and passengers, who are scaled for immersion coveralls **should** wear them for all flights over the sea or when there is the possibility of a diversion that would involve a sea track; however; the DDH may waive this rule for specific

day sorties after due consideration of the sortie content, environmental conditions and availability of SAR assets. For example, flights in which the only over-sea portion is wholly within the local instrument departure or recovery pattern are not considered to be 'flights over the sea' and may be subject to a waiver from the requirement to wear immersion coveralls at the discretion of the DDH.

- c. Solo display pilots **should** be granted a waiver from this rule for displays or display rehearsals at the display venue and for transit flights to the display venue where it is not possible to change before the display, provided the over-sea track is relatively short, the flight is within SAR cover and the estimated survival time exceeds the expected rescue time.
- 32. **LSJ / LP / LCJ.** LSJ /LP / LCJ **should** be worn where scaled and appropriate.
- 33. **Parachutes.** Parachutes **should** be worn by all occupants of 22 Gp aircraft except where they are not scaled for type-specific use. DDHs **should** specify in local Orders the operating requirements and limitations for each aircraft type in their AoR.
- 34. **Aircrew emergency cutter.** Aircrew **should** have an Aircrew Emergency Cutter attached to their flying clothing/AEA.

#### Guidance Material

# Wearing and Carriage of Aircrew Equipment Assemblies (AEA) and Safety Equipment (SE)

2130(**2**)

- 35. <u>JSP 911</u>- Survival, Evasion, Resistance and Extraction Part 2 Volume 1 Chapter 3.
- 36. DDH Local Flying Orders.

#### Group Air Staff Order

2130(<mark>3</mark>)

2130(3) All occupants of 22 Gp aircraft **shall** be suitably restrained in all phases of flight.

# Acceptable Means of Compliance

#### **Safety harnesses** Restraint systems

Safety Harnesses Restraint Systems

2130(3)

37. Safety / dispatcher harnesses **should** be worn at all times in 22 Gp aircraft. Instructors **should** ensure that passengers and cadets are familiar with harness operation and that the harness is correctly fitted over the shoulder straps of the parachute if worn. See also RA 2130(3).

#### Guidance Material

2130(**3**)

#### Safety harnesses Restraint systems

38. Specific guidance for use of the dispatcher harness can be found in RA 2130(3) GM.

Group Air Staff Order

2130(**4**)

#### **Aircraft Survival and Rescue Equipment**

2130(4)

Survival and rescue equipment of the appropriate type and scale **shall** be carried for all occupants of 22 Gp Aircraft.

#### Acceptable Means of Compliance

#### Aircraft survival and rescue equipment

2130(<mark>4</mark>)

- 39. **General.** The DDH **should** ensure that the requirements of RA 2130(4) are fulfilled for the aircraft types within their AoR. Particular consideration **should** be given to the number of life rafts, medical supplies and survival packs commensurate to the number of personnel carried and the operating environment.
- 40. **Use of SE for instructional purposes.** Items of SE used for flight **should not** be used for instructional purposes except in exceptional circumstances, when SE personnel **should** confirm its serviceability before it is next used for flight.

#### Flight over open water.

41. Unless properly authorized for flight over water and equipped with appropriate survival and rescue equipment, 22 Gp aircraft **should** remain within gliding range of land. Exceptionally, where Tutor aircraft are authorized for sea crossings outside gliding range of land, single seat life rafts (easily accessible in flight) **should** be carried for each occupant and, where the sea temperature is below 10°C, aircrew, passengers and cadets **should** wear immersion coveralls.

#### Guidance Material

#### Survival and rescue equipment

2130(4)

42. DDH local Flying Orders.

#### Group Air Staff Order

#### **Ejection Seat Anthropometrics**

2130(5)

2130(5)

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

**Ejection seat anthropometrics** 

2130(5)

43. The DDH **should** ensure that the requirements for ejection seat anthropometrics as specified in RA 2130(5) are complied with for aircraft and aircrew within their AoR.

#### Guidance Material

### **Ejection seat anthropometrics**

2130(<del>5</del>)

44. DDH Local Orders.

Group Air Staff Order 2130(6)

#### Fire, Smoke and Fumes Training

2130(6)

All 22 Gp aircrew who operate aircraft with fire fighting and / or smoke and fumes equipment **shall** be appropriately trained and competent in the use of that equipment.

Acceptable Means of Compliance 2130(6)

#### Fire, smoke and fumes training

- 45. DDH orders **should** stipulate the training requirement for fire, smoke and fumes equipment. This training may be practical, or classroom based. The orders should detail as a minimum:
  - a. The periodicity and content of the fire, smoke and fumes training.
  - b. Any requirement for use of representative live firefighting equipment.

Guidance Material

2130(6)

Fire, smoke and fumes training

46. DDH Local Orders.

Group Air Staff 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**

47. The DDH **should** ensure that Aircrew Manual (ACM)/Aircrew Flying Manual (AFM) procedures for strapping into ejection-seat-equipped aircraft are followed. This **should** include measures for the avoidance of inadvertent ejection seat damage such as fouling by strap buckle, the headbox and the back pad.

#### Command ejection system

48. The DDH **should** specify in local Flying Orders the procedures for use of the Command Ejection System which **should** include the setting and use of the Command Ejection Lever both on the ground and in the air.

Guidance Material

2130(T1)

#### **Ejection seat**

49. DDH Local Orders.

APPROVAL	Post	SO(ODH) (FOR AOC)	
	Name	M Jordan	

#### UNCONTROLLED COPY WHEN PRINTED

	GASI Form revised Sep 20	
Rank	Gp Capt	