

#### NPA/24/21

Title of Proposal: Airborne Equipment

#### RA(s) or Manual Chapter(s): RA 1700, RA 1701, RA 1702, RA 1703, RA 1704

**Organizations and / or business sectors affected:** Operators involved with all types of Airborne Equipment

#### RFC Serial No: None

MAA Author

Post	Name	Rank	Signature
DSA-MAA-OpAssure-ASM	Redacted	Redacted	Redacted - Original Signed
MAA Supervisor			

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MAA LegAd (if required)			
Post	Name	Rank	Signature

N/A

N/A

#### Cross-references to Other Documents or Relevant Sources

Other MRP Amendments: Removal of RA 1150, RA 1345 and RA 2355

Service Inquiry Recommendations: WOTG SI Recs No 1.5.4.a and RA 1.5.8. a.

N/A

AAIB Recommendations: N/A

N/A

Other Investigation Recommendations: N/A

Any Other Document: N/A

#### Feedback Notes for the Regulated Community

The Regulated Community are invited to offer feedback about the proposed amendment in the following areas:

- Air or Flight Safety impact
- Operational impact
- Errors or omissions
- Timescale for implementation
- Cost of implementation
- Amendment to internal processes/orders



Annex A to NPA Form Revised – Aug 23

- Resourcing the outcome of change
- (Contract amendments because of the change)

The format for feedback is available within a single Excel Template file on both internal and external MAA websites; it is important to use this format to ensure that your responses are considered and answered correctly.

#### **Summary of Proposed Amendment**

**Objective:** To replace RA 1150, RA 1345 and RA 2355 with bespoke Regulations for MOD parachuting activities, including the recommendations from in the Weston-On-The-Green Service Inquiry.

**Changes made:** This new series of regulations provides direction and guidance for an expanded set of activities to provide clarity on the requirements dependent on the activity. This provides a an update to RA 1150 and in doing so introduces new regulations from the MRP that will now be applicable to parachuting activities. The community should be aware that the option of using civil equipment from Aircraft that are on the military Aircraft Register has been removed.

**Impact Assessment**: Some additional work by the taregeted community when first published to understand the changes and update any local procedures / documents. An associateat Regualtior Instruction will be issued with the regulations allowing all of the regulated community 6 months to comply wih these regulations.

#### Consultation Period Ends: 29 May 2024

The consultation period for this proposed amendment ends on the stated date. Please send your feedback, using the Response Form, via email to <u>DSA-MAA-MRPEnquiries@mod.gov.uk</u>

Post	Name	Rank	Signature
DSA-MAA-OpAssure- DepHd-TEST	Redacted	Redacted	Redacted - Original Signed

#### MAA Approval

# **RA 1150 - Airborne Equipment and Airborne Forces**

#### Rationale ► The regulatory requirements of this RA have been incorporated within the RA 1700 Series<sup>1</sup>, and thus this RA has been withdrawn. The RA 1700 Series identifies the different types of parachuting within Defence and includes the addition of Non-Combat parachuting activities, a recommendation placed on the MAA from the Weston On the Green Service Inquiry. Specifically, RA 1701<sup>2</sup> provides Regulation for MOD approved parachuting and expands on applicable MAA Regulatory Publications beyond those identified in RA 1150 Annex A. This reflects the maturity of the Safety Management by the Aviation Duty Holder chain with notable derogations in Recognition that parachutes are not Air Systems. ◄

#### Contents 1150(1): ► Withdrawn – Incorporated into the RA 1700 Series ◄

Regulation 1150(1)	Application of Regulations1150(1)► Withdrawn – Incorporated into the RA 1700 Series.
Acceptable Means of Compliance 1150(1)	<ul> <li>Application of Regulations</li> <li>1. ► Withdrawn – Incorporated into the RA 1700 Series. </li> </ul>
Guidance Material 1150(1)	<ul> <li>Application of Regulations</li> <li>2. ► Withdrawn – Incorporated into the RA 1700 Series. </li> </ul>

<sup>&</sup>lt;sup>1</sup> ► Refer to RA 1700 Series – Airborne Equipment.

<sup>&</sup>lt;sup>2</sup> RA 1701 – MOD-approved Airborne Forces Equipment.

#### Annex A

► This Annex has been withdrawn ◄

#### Annex B

► This Annex has been withdrawn ◄

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# RA 1345 - The Compendium of Airborne Equipment Release Certificates

Rationale	► The regulatory requirements of this RA have been incorporated within the RA 1700 Series <sup>1</sup> , and thus this RA has been withdrawn. The RA 1700 Series identifies the different types of parachuting within Defence and includes the addition of Non-Combat parachuting activities, a recommendation placed on the MAA from the Weston On the Green Service Inquiry. Specifically, RA 1701 <sup>2</sup> provides Regulation for MOD-approved parachuting and expands on applicable MAA Regulatory Publications beyond those identified in RA 1150 Annex A. This reflects the maturity of the Safety Management by the Aviation Duty-Holder chain with notable derogations in Recognition that parachutes are not Air Systems.
Contents	1345(1): ► Withdrawn – Incorporated into the RA 1700 Series ◄
Regulation 1345(1)	The Compendium of Airborne Equipment Release Certificates1345(1)► Withdrawn – Incorporated into the RA 1700 Series.
Acceptable Means of Compliance 1345(1)	<ul> <li>The Compendium of Airborne Equipment Release Certificates</li> <li>1. ▶ Withdrawn – Incorporated into the RA 1700 Series. ◄</li> </ul>
Guidance Material 1345(1)	<ul> <li>The Compendium of Airborne Equipment Release Certificates</li> <li>2. ▶ Withdrawn – Incorporated into the RA 1700 Series. ◄</li> </ul>

<sup>&</sup>lt;sup>1</sup> ► Refer to RA 1700 Series – Airborne Equipment.

<sup>&</sup>lt;sup>2</sup> RA 1701 – MOD-approved Airborne Forces Equipment. ◀

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# **RA 1700 - Airborne Equipment**

Rationale	The delivery of personnel or equipment from Aircraft using Airborne Equipment (AE) <sup>1</sup>
	appropriately could result in increased Risk to Life (RtL) to personnel and / or 3rd
	parties, damage to Aircraft and / or AE. In order to own and manage RtL, there needs
	to be in place a proportionate regulatory framework for all types of AE activity; this is
	based on the provenance of the AE and the operating intent. This Regulatory Article
	(RA) ensures organizations <sup>2</sup> understand their Responsibilities associated with their AE
	activity and to enable suitable regulatory frameworks to be applied. This will ensure
	that AE used is safe to operate and is being operated safely throughout its life.

#### Contents Definitions relevant to the RA 1700 Series 1700(1): Airborne Equipment Regulatory Requirements

Definitions	Definitions relevant to the RA 1700 Series
	1. <b>Parachuting Operating Duty Holder</b> . An accountable individual, who is a 2* Crown Servant, with formal delegated Responsibilities for actively managing Air Safety for parachuting via an effective Air Safety Management System <sup>3</sup> to ensure that associated RtL is As Low As Reasonably Practicable (ALARP) and Tolerable within their defined Areas of Responsibility.
	2. <b>Parachuting Commander</b> . A 2* who is in the direct Chain of Command of the unit participating in the activity. They own Duty of Care <sup>4</sup> for their troops throughout the activity. They will be either ADH / AM(MF)-Facing or Duty Holding <sup>5</sup> .
	3. <b>Airborne Equipment Safety Case (AESC)</b> . A structured argument, supported by a body of evidence, that provides a compelling, comprehensible and valid case that Airborne Equipment is safe for a given application in a given environment. It is through-life, pan-Defence Lines of Development and addresses a combination of the physical components, procedures and human resources organized to deliver the capability. AE is not an Air System and so use of the term Air System Safety Case (ASSC) is inappropriate. However, the principles of RA 1205 <sup>6</sup> can be applied to AESC as they are equally relevant.
Regulation	Airborne Equipment Regulatory Reguirements
1700(1)	1700(1) Parachuting activity within the Defence Aviation (DA) and the Defence Air Environment (DAE) <b>shall</b> be appropriately regulated.
Acceptable	Airborne Equipment Regulatory Reguirements
Means of Compliance	4. Organizations responsible for parachuting activity <b>should</b> ensure compliance with the regulatory requirements detailed as follows:
1700(1)	a. <b>MOD-approved Airborne Forces Equipment (AFE) – RA 1701</b> <sup>7</sup> . MOD- approved AFE are the parachutes and ancillary equipment that are included in the Compendium of Airborne Equipment Release Certificates (CAERC). It includes items listed as cleared for use as Operational Emergency Clearance (OEC) and Clearances with Limited Evidence (CLE).

<sup>&</sup>lt;sup>1</sup> Refer to MAA 02 – MAA Master Glossary. <sup>2</sup> This includes the Aviation Duty Holder (ADH), Accountable Manager (Military Flying) (AM(MF)), Continuing Airworthiness Management Organization, Delivery Team, Maintenance Approved Organization Scheme, Design Approved Organization Scheme and operators of AE authorized to conduct parachute descents for any given AE. <sup>3</sup> Refer to RA 1200 – Air Safety Management Systems.

<sup>&</sup>lt;sup>4</sup> Duty of Care is a legal responsibility that applies at every level to all Defence activities.

<sup>&</sup>lt;sup>5</sup> Refer to JSP 815 – Defence Safety Management System.

 <sup>&</sup>lt;sup>6</sup> Refer to RA 1205 – Air System Safety Cases.
 <sup>7</sup> Refer to RA 1701 – MOD-approved Airborne Forces Equipment.

Acceptable Means of Compliance 1700(1)	<ul> <li>b. MOD-approved Aerial Delivery Equipment (ADE) – RA 1702<sup>8</sup>. MOD-approved ADE are the parachutes and ancillary equipment that are included in the CAERC. It includes items listed as cleared for use as OEC and CLE.</li> <li>c. Use of foreign military AFE – RA 1703<sup>9</sup>. Foreign military AFE are parachutes (static line and freefall) and associated equipment normally utilized by any foreign military organization under their own orders and instructions.</li> </ul>
	d. Use of Non-Combat Parachutes and Ancillary Equipment for Military Outputs – RA 1704 <sup>10</sup> . Non-combat parachute equipment is equipment not listed in the CAERC and is either procured as Commercial-Off-The-Shelf (COTS) or hired for use in the activities defined in this RA. They comprise the parachute canopies, deployment devices, container, harness and requisite attachments. They do not include parachutes designed for the descent of persons from an Aircraft in an emergency.
Guidance Material 1700(1)	<ul> <li>Airborne Equipment Regulatory Requirements</li> <li>5. A summary of the AE activities, together with Aircraft registration criteria, assured against the respective Regulations of the 1700 Series is at Annex A.</li> <li>6. The RA 1700 Series applies to all parachuting activity within the DA and DAE, conducted from UK military-registered Aircraft, foreign military-registered Aircraft, or civil-registered Aircraft.</li> </ul>

<sup>&</sup>lt;sup>8</sup> Refer to RA 1702 – MOD-approved Aerial Delivery Equipment.

 <sup>&</sup>lt;sup>9</sup> Refer to RA 1703 – Use of Foreign Military Airborne Forces Equipment.
 <sup>10</sup> Refer to RA 1704 – Use of Non-Combat Parachutes and Ancillary Equipment for Military Outputs.

#### Annex A

# Figure 1 – Summary of AE Regulations (for illustrative purposes only – see RAs for definitive applicability)



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# **RA 1701 – MOD-approved Airborne Forces Equipment**

# **Rationale** The delivery of personnel from Aircraft using Airborne Forces Equipment (AFE)<sup>1</sup> is a key enabler of military capability. Failure to regulate AFE activity appropriately could result in increased Risk to Life (RtL) to personnel and / or 3rd parties. The Regulations applicable for AFE activity are based on the provenance of the AFE and the operating intent. This Regulatory Article (RA) identifies the Regulations for MOD-approved AFE to ensure that AFE used is safe to operate and is operated safely throughout its life.

Contents	Applicability
	Definitions Relevant to this RA
	1701(1): Governance Responsibilities
	1701(2): Regulatory Requirements
	1701(3): Approval for Static Line and Freefall Parachuting
	1701(4): Operating MOD-approved AFE
	1701(5): Parachutist and Parachute Jumping Instructor
	Requirements
	1701(6): Qualification, Approval and Use of Parachute Training Devices

#### Applicability Applicability

1. RA 1701 is applicable for the conduct of parachuting using MOD-approved AFE. This includes parachuting activities conducted by:

a. UK military Parachute Units (including attached foreign troops where applicable)<sup>2</sup> conducting parachuting from UK military-registered Aircraft, civil-registered Aircraft or foreign military-registered Aircraft.

- b. MOD-approved AFE trials activity.
- c. Military-Operated (In-Service) delivery.
- d. Civilian-Operated (In-Service) delivery.

Definitions	Definitions Relevant to this RA
	2. <b>Airborne Forces Equipment (AFE)</b> . This is the equipment and ancillary items that are used in the insertion of personnel into Drop Zones.
	3. <b>Parachute Training Device (PTD)</b> . Is categorized as a device which is an Advanced Parachute Training Device or Basic Ground Training Apparatus.
	4. <b>Advanced Parachute Training Device (APTD)</b> . Means a virtual reality trainer or vertical wind tunnel which provides realistic simulation of the activity.
	5. <b>Basic Ground Training Apparatus (BGTA)</b> . Means a training aid other than an APTD which facilitates training where a complete environmental simulation is not necessary.
	6. <b>Qualification Statement (QS)</b> . The documented output of successful completion of the qualification requirements identified in para 53c. This is developed, managed and owned by the Senior Responsible Owner (SRO) or Parachuting Operating Duty Holder (ODH).

<sup>&</sup>lt;sup>1</sup> Refer to MAA02 – MAA Master Glossary.

<sup>&</sup>lt;sup>2</sup> This includes the Royal Air Force Falcons Parachute Display Team.

Regulation 1701(1)	<ul> <li>Governance Responsibilities</li> <li>1701(1) MOD-approved AFE shall be operated under the authority of the Aviation Duty Holder (ADH) / Accountable Manager (Military Flying) (AM(MF)), the Parachuting ODH and / or the Parachuting Commander<sup>3</sup>.</li> </ul>
Acceptable Means of Compliance 1701(1)	Governance Responsibilities 7. The ADH / AM(MF) is legally accountable for ensuring that RtL associated with operating Aircraft under their Area of Responsibility (AoR) to deliver MOD-approved AFE is As Low As Reasonably Practicable (ALARP) and Tolerable. This <b>should</b> be achieved by: a. Ensuring that the RtL associated with the use of MOD-approved AFE is reflected in the claims made in the Air System Safety Case <sup>4</sup> for the Aircraft within their AcP
	b. Discharging RtL and Duty of Care (DofC) Responsibilities associated with MOD-approved AFE in accordance with (iaw) Annex A.
	8. Where MOD-approved AFE is used from foreign military-registered or civil- registered Aircraft, the Parachuting ODH and / or Parachuting Commander as the accountable individual(s) <b>should</b> ensure the activity is ALARP and Tolerable (Annex A refers).
	9. The Parachuting ODH <b>should</b> :
	a. Have their nomination endorsed by the Director Military Aviation Authority (D MAA) iaw MAA03 Annex G⁵. The Parachuting ODH and the ADH may be the same person.
	b. Ensure that the RtL is ALARP and Tolerable for personnel using MOD- approved AFE and to other 3 <sup>rd</sup> parties that might be affected after the AFE has left the Aircraft <sup>6</sup> .
	c. Be responsible and accountable for the safe operation of MOD-approved AFE within their AoR and only authorize MOD-approved AFE that has an Approval in the Compendium of Airborne Equipment Release Certificates (CAERC) provided by the Airborne Equipment (AE) <sup>1</sup> Type Airworthiness Authority (TAA).
	d. Define the Responsibility for RtL transfer, in consultation with the ADH / AM(MF), between flying activity and parachuting activity.
	e. Ensure that Parachute Jumping Instructors (PJI) and Drop Zone Safety Officers are Suitably Qualified and Experienced Persons (SQEP).
	10. The Headquarters 1 Gp Air Staff Orders (HQ 1 Gp ASOs) and Air Mobility Operations Manual Parts A and B <b>should</b> be used as the definitive documents for the use of all MOD-approved AFE.
	11. The Parachuting Commander <b>should</b> publish orders and instructions that detail how the Responsibilities at Annex A will be allocated.
	12. In order to ensure that Parachutists are appropriately Competent and current, Parachuting Commanders <b>should</b> publish orders specifying how this is monitored.
	13. All units conducting parachuting <b>should</b> ensure that the correct Notice to Aviation (NOTAM) action has been put in place for the duration of the activity.

 <sup>&</sup>lt;sup>3</sup> Refer to RA 1700 – Airborne Equipment, for definition of Parachuting ODH and Parachuting Commander.
 <sup>4</sup> Refer to RA 1205 – Air System Safety Cases.
 <sup>5</sup> Refer to MAA03: Military Aviation Authority Regulatory Processes.

<sup>&</sup>lt;sup>6</sup> Defined for static line parachuting as the point at which the parachute assembly is no longer attached to the Aircraft or, for freefall, when the parachutist clears the Aircraft and is free direct contact with it or any associated wake turbulence.

Guidance	Governance Responsibilities		
Material 1701(1)	14. It is essential that, throughout the flying and parachuting activity, the ADH / AM(MF), Parachuting ODH and Parachuting Commander understand their Responsibilities, communicate as required with each of the stakeholders involved and have robust orders and instructions. The table at Annex A identifies these Responsibilities throughout the activity.		
	15. Fundamental to effective governance and Risk Management is a clear understanding of when the Responsibility for the RtL and / or DofC associated with the parachuting activity is transferred between stakeholders.		
Regulation	Regulatory Requirements		
1701(2)	1701(2) The Regulations associated with MOD-approved AFE <b>shall</b> be adhered to by the ADH / AM(MF), the Parachuting ODH, the Parachuting Commanders and AE TAA responsible for their operation.		
Acceptable	Regulatory Reguirements		
Means of Compliance 1701(2)	16. ADH / AM(MF), the Parachuting ODH, Parachuting Commanders and organizations <sup>7</sup> responsible for MOD-approved AFE <b>should</b> comply with the RAs listed at Annex B with the specified derogations at para 25. Annex C lists RAs that are not applicable for MOD-Approved AFE.		
	17. AFE <b>should</b> be approved through the issuance of AE Release Certificates approved by the AE TAA and authorized in the CAERC by the Delegated Release To Service Authority (Royal Air Force (RAF) (DRTSA (RAF)).		
	18. The AE TAA <b>should</b> ensure that all AFE has a valid Certificate of Design <sup>8</sup> .		
	19. MOD-approved AFE <b>should</b> be included within the CAERC. It <b>should</b> be authorized for use on specific platforms through the relevant Release To Service (RTS) or Military Permit To Fly (MPTF) for operators of non-RTS platforms <sup>9, 10</sup> .		
	20. The CAERC <b>should</b> :		
	a. Be Certified by the AE TAA and / or authorized by the DRTSA (RAF).		
	b. Record all Operational Emergency Clearances (OEC) and Clearances with Limited Evidence (CLE), and be suitably marked.		
	c. Include an Audit trail of amendments <sup>11</sup> .		
	d. Follow the format shown in the CAERC template as detailed in the CAERC Instructions at Leaflet 1 <sup>12</sup> .		
	21. The master copy of the CAERC containing all original signatures is held by the DRTSA (RAF). All pages within the CAERC <b>should</b> show the issue status of the document and amendment status for the specific page.		
	22. Where the despatching Aircraft is not on the UK military Aircraft Register, a rigorous Safety Assessment (SA) <b>should</b> be made by the AE TAA of the Aircraft, its suitability, the interaction of the AE with the Aircraft and all special requirements, Modifications, and limitations (speed, height, flaps setting, etc). The CAERC lists the Aircraft that have been assessed as suitable by type or, if required, registration number.		
	23. <b>Maintenance Management</b> . AFE Maintenance <b>should</b> be conducted by a Military Maintenance Organization or an Approved Maintenance Organization holding		

<sup>&</sup>lt;sup>7</sup> This includes the ADH, Continuing Airworthiness Management Organizations (CAMO), Delivery Team, MAOS, Design Approved Organization Scheme and operators of AE authorized to conduct parachute descents for any given AE.

 <sup>&</sup>lt;sup>8</sup> Refer to RA 5103 – Certification of Design.
 <sup>9</sup> Refer to RA 1305 – Military Permit To Fly (In-Service), (Special Case Flying) and (Single Task).
 <sup>10</sup> Refer to RA 5880 – Military Permit To Fly (Development) (MRP Part 21 Subpart P).
 <sup>11</sup> Refer to RA 1225 – Air Safety Documentation Audit Trail.

<sup>&</sup>lt;sup>12</sup> Leaflet 1 to RA 1701 CAERC Contents.

Acceptable	Maintenance Approved Organization Scheme (MAOS) Approval <sup>13</sup> .		
Means of Compliance 1701(2)	24. The Chief Air Engineer (CAE), to the Parachuting ODH, <b>should</b> manage CAw by ensuring that MOD-approved AFE is maintained iaw RA 4800 to RA 4849: MRP Pt 145. To help ensure the Airworthiness of MOD-approved AFE, an approved Mil CAMO is required iaw RA 4947 <sup>14</sup> .		
	25. <b>Specified Derogations from the MRP</b> . The following MRP derogations <b>should</b> be applied:		
	a. <b>Continuing Airworthiness (CAw) Management</b> . The following specific requirements do not apply to AFE:		
	(1) <b>RA 1011<sup>15</sup></b> . Any requirements related to managing weight and balance, Mil ARs or CAA oversight.		
	(2) <b>RA 4947(1)e. Para 9</b> . Uncommanded Flying Control Movements, Control Restrictions or other abnormal flying characteristics.		
	(3) <b>RA 4947(1)h</b> . Weight and moment statements are not provided for AFE. However, effective weight control measures <b>should</b> be in place for the AFE to ensure the weight remains within limits.		
	(4) <b>RA 4964(1)</b> . Many Air System specific types of information listed at para 1 are not relevant to AFE. Appropriate equivalent or AFE specific information <b>should</b> be identified by the CAMO and listed in the Continuing Airworthiness Management Exposition (CAME).		
	b. <b>Type Airworthiness (TAw) Management</b> . The AE TAA <b>should</b> ensure that the Design and Modification of MOD-approved AFE is carried out iaw the RA 5000 Series unless identified as not applicable (see Annex B), with the following derogations:		
	(1) For MOD-approved AFE that are Commercial-Off-The-Shelf (COTS) purchases, any recognized Design Standards used during development <b>should</b> be recorded within the Type Airworthiness Safety Assessment (TASA) <sup>16</sup> .		
	(2) <b>Ageing AFE</b> . AFE has a finite Service Life based upon usage parameters and ageing Air System Protocols are not required.		
	26. Equipment Safety. The AE TAA should:		
	<ul> <li>Use a TASA to inform the Equipment Defence Line of Development (DLoD) input to the AESC<sup>17</sup>.</li> </ul>		
	<ul> <li>b. Provide Assurance of the Equipment DLoD of the RTSR iaw RA 1300(2)<sup>Error! Bookmark not defined.</sup></li> </ul>		
	c. Produce and maintain an appropriate Airborne Equipment Document Set for MOD-approved AFE, to include limits, procedures, and operating information for the users.		
	27. Any further Alternative Acceptable Means of Compliance (AAMC)s, Waivers or Exemptions from the RA 4000 Series <b>should</b> be applied for iaw MAA03 Annex B.		
	28. The Military Continuing Airworthiness Manager <b>should</b> propose deviations from the procedures detailed in the RA 4000 <sup>18</sup> series Regulation, outlining the basis for judgement, in the Engineering Orders referenced in the CAME or in the Maintenance Organization Exposition for a MAOS organization.		
	29. <b>Maintenance by non-engineering tradesperson</b> . There <b>should</b> be processes for use of non-specialist parachute packers or Contracted support to pack sports-type parachute systems in place.		
	30. Supervision of Parachuting. The Parachuting ODH should ensure an		

<sup>&</sup>lt;sup>13</sup> Refer to RA 4800 to RA 4849: MRP Pt 145.
<sup>14</sup> Refer to RA 4947 – Continuing Airworthiness Management – Part M Sub.
<sup>15</sup> Refer to RA 1011 – Military Continuing Airworthiness Manager Responsibilities.
<sup>16</sup> Refer to RA 5012 – Type Airworthiness Safety Assessment.
<sup>17</sup> Refer to definition in RA 1700 – Airborne Equipment.
<sup>18</sup> Refer to the RA 4000 Series: Continuing Airworthiness Engineering Regulations.

Acceptable Means of	appropriate management system is in place to ensure parachute operations are supervised by a SQEP.		
Compliance 1701(2)	31. <b>Authorization of Parachuting</b> . The Parachuting ODH <b>should</b> ensure an appropriate management system is in place to ensure parachute operations are authorized by a SQEP.		
Guidance	Regulatory Reguirements		
Material	32. <b>Supervision of Parachuting</b> . Some of the supervisory processes detailed in RA 2305 <sup>19</sup> may be considered suitable for the supervision of AFE activities.		
	33. <b>Authorization of Parachuting.</b> Some of the Authorization processes detailed in RA 2306 may be considered suitable for the Authorization of AFE activities <sup>20</sup> .		
	34. The MRP are specifically written with respect to Air Systems. Their application is equally suitable for aspects of AFE activities and to the Risk management framework <sup>21</sup> necessary to allow ADH / AM(MF), Parachuting ODH and other members of the Airborne Forces Community to ensure RtL is managed appropriately.		
	Endorsement / Approval of the CAERC.		
	35. The CAERC will be amended once all necessary evidence has been collated. Recommended amendments, with supporting evidence, will be presented to the AE TAA for endorsement. The AE TAA will provide a recommendation to the DRTSA.		
	36. The DRTSA approval process will take into consideration the Aircraft that the MOD-approved AFE is to be despatched from.		
	37. The CAERC determines that the equipment is safe to use, not that it is authorized to use from any specific Aircraft.		
	38. The CAERC, certified by the AE TAA and approved by the DRTSA (along with supporting evidence), will be passed to the TAAs <sup>22</sup> of the despatching Aircraft.		
	39. The TAA of the despatching Aircraft will:		
	a. Provide recommendation to the DRTSA / Operating Centre Director of the despatching Aircraft to authorize the use of the MOD-approved AFE within their Aircraft RTS / MPTF <sup>23</sup> .		
	b. Return the completed Acknowledgement Sheet to the AE TAA, detailing the acceptance of the MOD-approved AE for use on the Aircraft or stating the reason for non-acceptance.		
	40. A Matrix, which identifies the compatibility between Aircraft types and AE, controlled by the RTSA, will be maintained on the MOD Intranet alongside the CAERC.		
	41. It is possible that MOD-approved AFE will not be designed to any recognized Certification standards. This may be acceptable; however, it is the AE TAA's Responsibility to ensure that the MOD-approved AFE is still safe to operate within the limitations of the CAERC.		
	42. For the purposes of this RA, Risk management and ADH / AM(MF) Responsibilities of AFE undergoing Test and Evaluation trials is managed by the Air and Space Warfare Centre ADH chain. Trials activity using equipment that is not yet approved, or that is used on a civil or foreign military Aircraft undergoing development, requires Subject Matter Experts to define who is responsible for RtL to manage the additional Risks. These activities must comply with RA 2370 <sup>24</sup> .		

<sup>&</sup>lt;sup>19</sup> Refer to RA 2305 – Supervision of Flying.

<sup>22</sup> Where the Air System is not UK MOD-owned, TAw management regulatory responsibility by either the TAA or Type Airworthiness Manager (TAM) needs to be agreed within the Sponsor's approved model; refer to RA 1162 - Air Safety Governance Arrangements for Civilian Operated (Development) and (In-Service) Air Systems, or refer to RA 1163 - Air Safety Governance Arrangements for Special Case Flying Air Systems. Dependant on the agreed delegation of TAw responsibilities TAM may be read in place of TAA as

 <sup>&</sup>lt;sup>20</sup> Refer to RA 2306 – Authorization of Flights.
 <sup>21</sup> Refer to RA 1200 – Air Safety Management and RA 1210 – Ownership and Management of Operating Risk (Risk to Life).

appropriate throughout this RA. <sup>23</sup> Refer to RA 1305 – Military Permit to Fly (In-Service), (Special Case Flying) and (Single Task).

<sup>&</sup>lt;sup>24</sup> Refer to RA 2370 – Test and Evaluation.

Regulation 1701(3)	Approval for Static Line and Freefall Parachuting1701(3)ADH or AM(MF) shall approve all static line and freefall parachuting from UK military-registered Aircraft.		
Acceptable Means of Compliance 1701(3)	<ul> <li>Approval for Static Line and Freefall Parachuting</li> <li>43. ADH or AM(MF) should only approve static line and freefall parachuting on Aircraft that are specifically cleared for this role in the RTS or the MPTF.</li> <li>44. ADH or AM(MF) Orders should specify the requirements for static line and freefall parachuting from UK military-registered Aircraft taking account of the HQ 1 Gp ASOs and Air Mobility Operations Manual Parts A and B.</li> </ul>		
Guidance Material 1701(3)	Approval for Static Line and Freefall Parachuting 45. Nil.		
Regulation 1701(4)	<ul> <li>Operating MOD-approved AFE</li> <li>1701(4) The Para ODH shall ensure the RtL associated with operating MOD-approved AFE and ancillary equipment is managed within their AoR and that Safety responsibilities associated with the activity are properly defined.</li> </ul>		
Acceptable Means of Compliance 1701(4)	<ul> <li>Operating MOD-approved AFE</li> <li>The Para ODH should publish orders and instructions that includes the following detail, where relevant to the activity, as a minimum: <ul> <li>a. How and when Parachutists are fitted with location equipment dependent on the operating environment to locate Parachutists in the event of an Incident<sup>25</sup>.</li> <li>b. Direction that if at the planned deployment Height the skydiver is unsuccessful on their first attempt to deploy the main canopy, one further attempt (of no more than 2 seconds), irrespective of body attitude, should be made. If unsuccessful, emergency procedures should be conducted immediately.</li> <li>c. Minimum Heights<sup>26</sup> for main parachutes; in any eventuality these should be not lower than: <ul> <li>(1) Solo Parachutists - 2,500 ft.</li> <li>(2) Tandem Parachutists, when conducting low shows - 1,500 ft.</li> <li>d. Procedures for setting automatic activation devices regarding minimum Height settings accounting for uneven topography around the Drop Zone.</li> <li>e. Actions to be taken by a Parachutist that experiences a pilot chute hesitation.</li> </ul> </li> </ul></li></ul>		
	g. The periodicity of currency training for emergency procedures.		

 <sup>&</sup>lt;sup>25</sup> This equipment must be cleared in the CAERC.
 <sup>26</sup> The Height at which the parachute is to be fully inflated and be in a condition to be controlled by the user.

Guidance Material 1701(4)	Operating MOD-approved AFE 47. Nil.		
Regulation 1701(5)	<ul> <li>Parachutist and Parachute Jumping Instructor Requirements</li> <li>1701(5) Parachutists and Parachute Jumping Instructors (PJI) shall be qualified to operate AFE. PJIs shall be appropriately trained, qualified, experienced and assured to deliver instruction in their parachuting discipline.</li> </ul>		
Acceptable Means of Compliance 1701(5)	<ul> <li>Parachutist and Parachute Jumping Instructor Requirements</li> <li>48. The Parachuting ODH should define in orders the Parachutist and PJI qualifications and experience required for the safe conduct of parachuting utilizing MOD-approved AFE within their AoR.</li> <li>49. PJIs are required to possess skills that enable the effective transfer of knowledge to their trainees, and should be trained to achieve the following baseline Competences: <ul> <li>a. Plan, prepare and deliver appropriately structured theoretical and practical teaching events.</li> <li>b. Manage trainees and instructional resources.</li> <li>c. Deliver specialist instruction to incorporate a range of differing learning styles.</li> <li>d. Integrate Human Factors training into all serials<sup>27</sup>.</li> <li>e. Confirm / check learning has taken place, using appropriate practical techniques on the ground and in the air.</li> <li>f. Monitor and review trainee progress across the full range of training events.</li> </ul> </li> </ul>		
Guidance Material 1701(5)	<ul> <li>Parachutist and Parachute Jumping Instructor Requirements</li> <li>50. The British military parachute wings badge is awarded to Parachutists by the Approving Officer once the appropriate standard on an approved training course has been met.</li> <li>51. The PJI Qualification Badge is awarded to PJIs by the Approving Officer once the appropriate standard on an approved training course has been met.</li> </ul>		
Regulation 1701(6)	<ul> <li>Qualification, Approval and Use of Parachute Training Devices</li> <li>1701(6) The SRO, Parachuting ODH shall ensure that the Parachute Training Devices (PTD) within their AoR are Qualified, Approved and used as intended.</li> </ul>		
Acceptable Means of Compliance 1701(6)	<ul> <li>Qualification, Approval and Use of Parachute Training Devices</li> <li>52. PTD that misrepresent the real behaviour, performance or have significant material differences to the associated parachute system could jeopardize the safe operation of the live AFE. The SRO or Parachuting ODH should ensure that PTD within their AoR are appropriately qualified, fit for purpose for the approved use.</li> <li>53. The SRO should: <ul> <li>a. Define the intended use of the device, including any specific military or</li> </ul> </li> </ul>		

<sup>&</sup>lt;sup>27</sup> Refer to RA 1440 – Air Safety Training.

Acceptable	training tasks that may be performed.		
Means of Compliance	b. Define the desired training output and what level of fidelity is required for each training objective, including any environmental considerations.		
1701(6)	c. Produce a QS which <b>should</b> include as a minimum:		
	(1) The training objectives the PTD can and cannot support, including the currency limitations, qualifications, ratings and supervisory checks that may be carried out using the device.		
	(2) Detail the implications of any environmental misrepresentation and the environmental conditions in which the PTD may be used.		
	<ul> <li>(3) Detail any relevant material differences between the PTD and the 'as flown' parachute system. This may be referenced to an appropriate document that is available to trainees and training staff.</li> </ul>		
	(4) Detail any areas where there is a reasonable prospect of negat training occurring, specifying any associated limitations or exceptions where RtL may be increased in the live parachute system as a result.		
	d. Ensure qualification of the PTD is conducted by SQEP, as determined by the SRO <sup>28</sup> .		
	54. The Parachuting ODH <b>should</b> approve a PTD for use based on the QS specific to that device. PTD <b>should</b> be approved on initial entry into service and Approval <b>should</b> be renewed and recorded at least annually. This annual assessment <b>should</b> be conducted by SQEP identified at para 53d above. The PTD Approval <b>should</b> be renewed following any Modification to the QS and be subject to an assessment by SQEP.		
	55. The Parachuting ODH <b>should</b> assess the material differences between the PTD and the parachute phase it is designed to simulate (exit, flight or landing) as part of the AESC and ensure that any differences are published and reflected in the training documentation.		
	56. The Parachuting ODH <b>should</b> use the QS to determine the suitability of an PTD to conduct Qualifications, and type of training, including currency and Competency requirements.		
	57. The Parachuting ODH <b>should</b> specify in orders and instructions the amount of synthetic parachuting time / descents and the training objectives that <b>should</b> be conducted with a PTD, the periodicity that applies and how the training is to be recorded.		
	58. Currency on a PTD <b>should</b> be recorded in the relevant section of the PJI or Parachutist's logbook.		
	59. To ensure PJIs are trained and Competent to operate PTDs, the Parachuting ODH <b>should</b> stipulate in orders the training and currency requirements for PJIs.		
	60. The Parachuting ODH <b>should</b> define in orders, criteria and periodicity for PJI assessment for operating PTDs. This <b>should</b> include an element of independent assessment.		
	61. In addition to the assessment at para 60, the Parachuting ODH <b>should</b> stipula in orders the periodicity of independent PJI assessments of PTDs.		
Guidance	Qualification, Approval and Use of Parachute Training Devices		
Material	62. Assessment of PTD may include the following considerations:		
1701(6)	a. Handling characteristics for 'flight' phase trainers.		
	b. Mission realism, including specific military role tasks.		
	c. Accuracy of parachute harness and ancillary equipment layout.		
	d. Representative malfunctions where they are included in PTD training.		

<sup>&</sup>lt;sup>28</sup> This may include Test Parachutists or PJIs, as appropriate to the device and intended use.

Guidance Material 1701(6) e. Representative visual and motion cues.

f. Instructor Operating Station, operator and system interaction capabilities for APTDs.

63. It may not be appropriate to report all Incidents in the PTD as they would be when using the live parachute system. The stage of training or experience level is to be considered when deciding if reporting an Incident is appropriate<sup>29</sup>. Where PTD systems have been intentionally degraded for training to induce an emergency or the environmental conditions have been manipulated to create a scenario at the extremes, or even outside, of limits it may be anticipated that the likelihood of an Incident is increased, therefore reporting may not be appropriate. However, reporting is to be considered if an adverse outcome has resulted from incorrect procedures or poor handling. Equally, if there is value to other users from lessons identified, eg relevant material differences between the PTD and the live parachute system or incorrect procedures, reporting is to be considered.

<sup>&</sup>lt;sup>29</sup> In accordance with RA 1410 – Occurrence Reporting and Management.

#### Annex A

Parachutist	UK Personnel	UK Personnel	Foreign Armed Forces Personnel	Foreign Armed Forces Personnel
Parachute Equipment	MOD-approved Airborne Forces Equipment	MOD-approved Airborne Forces Equipment	MOD-approved Airborne Forces Equipment	MOD-approved Airborne Forces Equipment
Aircraft	UK military- registered	Non-UK*	UK military- registered	Non-UK*
Duty of Care Owner (DoC) <sup>30</sup> - on Aircraft / parachute descent	Parachuting Commander	Parachuting Commander	Foreign Troops Parachuting Commander	Foreign Troops Parachuting Commander
Duty Holder – On Aircraft	ADH / AM(MF) (RtL)	Para ODH (RtL)**	ADH / AM(MF) (RtL)	Para ODH (DoC only)
Duty Holder – Parachute descent	Para ODH (RtL)	Para ODH (RtL)	Para ODH (RtL)	Para ODH (RtL)

AFE Duty of Care and RTL Duty Holder Responsibilities

\* Non-UK includes foreign military Aircraft and civil Aircraft. If civil Aircraft is chartered for parachuting activities, then guidance in RA 1240 – Chartering of Civilian Air Systems for Military Purposes, **should** be followed.

\*\* In this instance the Parachuting ODH **should** ensure that the Aircraft is correctly configured for the parachuting activity and confirm that it is routinely used and authorized by the Aircraft's national or military aviation authority for such activity.

<sup>&</sup>lt;sup>30</sup> DoC as defined in JSP 815 Part 2. This includes the requirement to ensure the parachutists are trained and fit for the activity.

#### Annex B

<b>RA Series</b>	RA Number / Title
1000 Series	RA 1002 Airworthiness Competent Persons
	RA 1003 Delegation of Airworthiness Authority and Notification of Air Safety
	Responsibility
	RA 1005 Contracting with Competent Organizations
	RA 1006 Delegation of Engineering Authorizations
	RA 1010 Head of Establishment Aviation Responsibilities and Aviation Duty Holder
	/ Accountable Manager (Military Flying) Establishment Responsibilities
	RA 1011 Military Continuing Airworthiness Manager Responsibilities
	RA 1013 Air Systems Operating Centre Director – Provision of Airworthy and Safe
	RA 1014 Design Organizations and Coordinating Design Organizations –
	Airworthiness Responsibilities
	RA 1015 Type Airworthiness Management – Roles and Responsibilities
	RA 1016 Military Continuing Airworthiness Management
	RA 1020 Aviation Duty Holder - Roles and Responsibilities
	RA 1021 Release to Service Authorities - Roles and Responsibilities
	RA 1022 Senior Operator - Air Safety Responsibilities
	RA 1023 Chief Air Engineer – Air Safety Responsibilities
	RA 1028 Contractor Flying Approved Organization Scheme - Responsibilities
	RA 1030 Defence Aeronautical Information Management
	RA 1032 Aviation Duty Holder-Facing Organizations and Accountable Manager
	(Military Flying)-Facing Organizations - Roles and Responsibilities
	RA 1200 Air Safety Management
	RA 1202 Cyber Security for Airworthiness and Air Safety
	RA 1205 Air System Safety Cases
	RA 1207 Air Safety Data Management and Exploitation
	RA 1208 Flight Data Monitoring
	RA 1210 Ownership and Management of Operating Risk (Risk to Life)
	RA 1223 All worthiness information Management
	RA 1225 All Salety Documentation Audit ITali RA 1220 Decige Sefety Tergete
	RA 1230 Design Salety Talgets PA 1240 Chartering of Civilian Air Svetome for Military Purpose
	RA 1300 Release To Service
	RA 1305 Military Permit to Ely (In-Service) (Special Case Elying) and (Single Task)
	RA 1310 Air System Document Set
	RA 1380 Performance Based Navigation
	RA 1400 Flight Safety
	RA 1410 Occurrence Reporting and Management
	RA 1420 Service Inquiries and Non-Statutory Inquiries
	RA 1430 Aircraft Post Crash Management and Significant Occurrence
	Management
	RA 1440 Air Safety Training
1000 Sarias	PA 4000 Aviation Engineering Orders and Lass Pressdures
4000 Selles	TA 4009 Aviation Engineering Orders and Local Procedures

RA Series	RA Number / Title
	RA 4051 Airborne Checks
	RA 4103 Removal of Body Fluid Contamination from Aircraft
	RA 4213 Control of Air System Components used in Ground Test Facilities
	RA 4253 Loose Articles Recovery
	RA 4600 Aircraft Assisted Escape Systems – Safety and Maintenance
	RA 4800 General Requirements (MRP Part 145)
	RA 4801 Certifying Staff
	RA 4802 Scope of the MRP Part 145 (MRP 145.A.10) - Approved Maintenance
	Organizations only
	RA 4803 Method of Application for Approval (MRP 145.A.15) - Approved
	Maintenance Organizations only
	RA 4804 Terms of Approval (MRP 145.A.20) - Approved Maintenance
	Organizations only
	RA 4805 Facility Requirements (MRP 145.A.25)
	RA 4806 Personnel Requirements (MRP 145.A.30)
	RA 4807 Certifying Staff and Support Staff (MRP 145 A 35)
	RA 4808 Equipment Tools and Material (MRP 145 A 40)
	RA 4809 Acceptance of Components (MRP 145 A 42)
	RA 4810 Technical Information (MRP 145 A 45)
	RA 4811 Maintenance Planning (MRP 145 A 47)
	RA 4812 Certification of Air System Release and Component Release (MRP
	RA 4813 Maintenance Records (MRP 145 A 55)
	RA 4814 Occurrence Reporting (MRP 145 A 60)
	RA 4815 Maintenance Procedures and Safety and Quality Policy (MRP 145 A 65)
	RA 4816 Maintenance Organization Exposition (MRP 145 A 70) - Approved
	Maintenance Organizations only
	RA 4817 Privileges of the Organization (MRP 145 A 75)
	RA 4818 Limitations on the Organization (MRP 145 A 80) - Approved Maintenance
	Organizations (AMOs) only
	RA 4819 Changes to the Organization (MRP 145 A 85) - Approved Maintenance
	Organizations (AMOs) only
	RA 4820 Continued Validity of Approval (MRP 145 A 90) - Approved Maintenance
	Organizations only
	RA 4821 Findings (MRP 145 A 95) - Approved Maintenance Organizations only
	RA 4941 Application - MRP Part M Sub Part G
	RA 4943 Continuing Airworthiness Management Exposition - MRP Part M Sub Part
	G
	RA 4945 Personnel Requirements - MRP Part M Sub Part G
	RA 4947 Continuing Airworthiness Management - MRP Part M Sub Part G
	RA 4948 Documentation - MRP Part M Sub Part G
	RA 4951 Quality System - MRP Part M Sub Part G
	RA 4954 Continued Validity of Approval - MRP Part M Sub Part G
	RA 4955 Findings - MRP Part M Sub Part G
	RA 4956 Military Continuing Airworthiness Management Organization Tasks
	Performed by Other Organizations - MRP Part M Sub Part G
	RA 4961 Aircraft Maintenance Programme and Military Continuing Airworthiness
	Management Organization Responsibilities for Air System Release - MRP Part M
	Sub Part C
	RA 4962 Special Instructions (Technical) - MRP Part M Sub Part C
	RA 4963 Modifications and Repairs - MRP Part M Sub Part C
	RA 4964 Continuing Airworthiness Management Records - MRP Part M Sub Part C
	RA 4965 Local Manufacture Assurance – MRP Part M Sub Part C
	RA 4966 Military Continuing Airworthiness Management Organization Instructions –
	MRP Part M Sub Part C

<b>RA Series</b>	RA Number / Title
5000 Series	RA 5010 Type Airworthiness Strategy
	RA 5011 Type Airworthiness Safety Management System
	RA 5012 Type Airworthiness Safety Assessment
	RA 5013 Air Safety Management of Equipment and Commodity Items
	RA 5103 Certificate of Design
	RA 5212 Weight and Moment Determination
	RA 5301 Air System Configuration Management
	RA 5305 In-Service Design Changes
	RA 5320 Air System Maintenance Schedule – Design and Validation
	RA 5405 Special Instructions (Technical)
	RA 5406 Aircrew Publications
	RA 5407 Support Policy Statement
	RA 5724 Life Extension Programme
	RA 5725 Out of Service Date Extension Programme
	RA 5726 Integrity Management
	RA 5805 Airworthiness Directives and Service Bulletins (MRP Part 21 Subpart A)
	RA 5815 Instructions for Sustaining Type Airworthiness
	RA 5825 Fault Reporting and Investigation
	RA 5835 Production Organizations (MRP Part 21 Subpart G)
	RA 5850 Military Design Approved Organization (MRP Part 21 Subpart J)
	RA 5855 Parts and Appliances (MRP Part 21 Subpart K)
	RA 5865 Repairs (MRP Part 21 Subpart M)
	RA 5875 (European) Technical Standard Order (MRP Part 21 Subpart O)
	RA 5880 Military Permit to Fly (Development) (MRP Part 21 Subpart P)
	RA 5885 Identification of Products, Parts and Appliances (MRP 21 Subpart Q)

#### ANNEX C

#### LIST OF REGULATORY ARTICLES NOT APPLICABLE TO AFE

RA Series	RA Number / Title
1000 Series	RA 1012 Director General (Air) – Air Safety Responsibilities
	RA 1019 Sponsor of Military Registered Civilian-Owned and Civilian Operated Air
	Systems – Air Safety Responsibilities
	RA 1026 Aerodrome Operator and Aerodrome Supervisor (Recreational Flying)
	Roles and Responsibilities
	RA 1027 Air Traffic Management Equipment Organizations – Responsibilities of
	Contracted Organizations
	RA 1029 Ship-Air Release – Roles and Responsibilities
	RA 1031 Contractor Flying Approved Organization Scheme (Basic Remotely
	Piloted Air Systems)
	RA 1340 Equipment Not Basic to the Air System
	RA 1160 Series – The Defence Air Environment Operating Framework
	RA 1350 Air Launched Weapon Release
	RA 1390 Reduced Vertical Separation Minimum
	RA 1395 Authorization to Permit Embarked Aviation in His Majesty's / MOD Ships
	RA 1600 Series – Remotely Piloted Air Systems
	RA 1910 Quality Assurance of Aviation Fuel from non-UK MOD Sources
	RA 1920 Aviation Arrangements in His Majesty's / MOD Ships – Equipment
	Standards
2000 Series	All Flying RAs
3000 Series	All Air Traffic Management RAs
4000 Series	RA 4053 Royal Flights and Flights for Nominated Very Important Persons
	RA 4054 Ground Handling Operations
	RA 4061 Air Systems Displaying Abnormal Flying Characteristics
	RA 4510 Ground Running of Aero-Engines and Auxiliary Power Units
	RA 4657 Weapon Loading and Armed Aircraft Maintenance
	RA 4970 Baseline Military Airworthiness Review - MRP Part M Sub Part I
	RA 49/1 Military Airworthiness Review and Certification - MRP Part M Sub Part I
	RA 49/2 Military Airworthiness Review Surveyors – MRP Part M Sub Part I
	RA 49/3 Military Airworthiness Review Process – MRP Part M Sub Part I
	RA 49/4 Circumstances when Military Airworthiness Review Certificates Become
FOOD Carias	Invalid – MRP Part M Sub Part I
5000 Series	RA 5219 Instrumentation and Flight Data Recorder Requirements for Flight Trials of
	All Systems RA 5602 Dropulation Systems Port Lifting, Critical and Common Deal Ports
	RA 5602 Propulsion Systems Part Linng, Childai and Common Pool Parts
	RA 5725 Ageiling All System Audit
	RA 5010 Williary Type Certificate (WRP Part 21 Subpart D) RA 5812 Digital Models and Simulations Supporting Airworthingss Polated
	Decision-Making
	PA 5820 Changes in Type Design (MPP Part 21 Subpart D)
	RA 5800 Cyber Security for Airworthingss and Air Safaty Type Design and
	Changes / Repairs to Type Design
	Changes / Repails to Type Design

# **RA 1702 – MOD-approved Aerial Delivery Equipment**

**Rationale** The delivery of equipment from Aircraft using Aerial Delivery Equipment (ADE)<sup>1</sup> is a key enabler of military capabilities. Failure to manage ADE activity appropriately could result in increased Risk to Life (RtL) to personnel, 3rd parties or damage to Aircraft. This Regulatory Article (RA) provides Regulation to ensure organizations understand the Safety aspects of their ADE activity and to enable a suitable regulatory framework to be applied. This will ensure that ADE used is safe to operate and is being operated safely throughout its life.

# Contents Applicability 1702(1): Regulatory Requirements

#### Applicability Applicability

1. RA 1702 is applicable for the conduct of ADE activities. This includes parachuting activities conducted by:

- a. UK Military Air Despatch and Parachute Units.
- b. ADE trials activity for MOD-approved ADE.
- c. Civilian-Operated (in-Service) delivery.

Regulation 1702(1)	<ul> <li>Regulatory Requirements</li> <li>1702(1) The applicable Regulations for MOD-approved ADE shall be adhered to by the Aviation Duty Holder (ADH) / Accountable Manager (Military Flying) AM(MF), the Parachuting Operating Duty Holder (ODH), the Parachuting Commanders and the AE<sup>1</sup> Type Airworthiness Authority (TAA) responsible for their</li> </ul>
Acceptable Means of Compliance 1702(1)	<ul> <li>Regulatory Requirements</li> <li>2. The ADH / AM(MF) is legally accountable for ensuring that RtL associated with operating Aircraft within their Area of Responsibility (AoR) to deliver MOD-approved ADE is As Low As Reasonably Practicable (ALARP) and Tolerable. This should be achieved by: <ul> <li>a. Ensuring that the RtL associated with the use of MOD-approved ADE is reflected in the claims made in the Air System Safety Case<sup>2</sup> for the Aircraft under their AoR.</li> <li>b. Discharging RtL and Duty of Care (DofC) Responsibilities associated with MOD-approved ADE iaw Annex A.</li> </ul> </li> <li>3. The Parachuting ODH should ensure that the RtL associated with the operation and deployment of MOD-approved ADE is reflected in the claims made in the appropriate Airborne Equipment Safety Case (AESC)<sup>3</sup>.</li> <li>4. ADH / AM(MF), the Parachuting ODH, the Parachuting Commanders and organizations<sup>4</sup> responsible for MOD-approved ADE should comply with the RAs listed at Annex B with the specified derogations at para 10. Annex C lists RAs that are not applicable for MOD-approved ADE.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Refer to MAA02 – MAA Master Glossary.

<sup>&</sup>lt;sup>2</sup> Refer to RA 1205 – Air System Safety Cases.

<sup>&</sup>lt;sup>3</sup> Refer to RA 1700 - Airborne Equipment, for definition.

<sup>&</sup>lt;sup>4</sup> This includes the ADH, Continuing Airworthiness Management Organizations (CAMO), Delivery Team, Maintenance Approved Organization Scheme and operators of AE authorized to conduct parachute descents for any given AE.

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Acceptable	5. The AE TAA <b>should</b> ensure that all ADE has a valid Certificate of Design <sup>5</sup> .
Means of Compliance	6. MOD-approved ADE <b>should</b> be included within the Compendium of Airborne Equipment Release Certificates (CAERC) <sup>6</sup> and be approved for use within the Release To Service (RTS) or Military Permit to Fly (MPTF) <sup>7, 8</sup> , of the despatch Aircraft.
	7. The CAERC <b>should</b> :
	a. Be certified by the AE TAA and / or issued by the Delegated Release To Service Authority (DRTSA) (RAF).
	b. Record all Operational Emergency Clearances (OEC) and Clearances with Limited Evidence (CLE), and be suitably marked.
	c. Include an Audit trail of amendments <sup>9</sup> .
	d. Be subject to a 5 yearly review by the DRTSA.
	e. Follow the format shown in the CAERC template as detailed in the CAERC Instructions at Leaflet 1 <sup>10</sup> .
	8. The master copy of the CAERC contains all original signatures and is held by the RTS Authority (RTSA) (RAF). All pages within the CAERC <b>should</b> show the issue status of the document and amendment status for the specific page.
	9. The Chief Air Engineer (CAE), to the Parachuting ODH, <b>should</b> manage Continuing Airworthiness (CAw) by ensuring that MOD-approved ADE is maintained in accordance with (iaw) RA 4800 to RA 4849: MRP Pt 145. To help ensure the Airworthiness of MOD-approved ADE, an approved Mil CAMO is required iaw RA 4947 <sup>11</sup> .
	10. <b>Specified Derogations from the MRP</b> . The following MRP derogations <b>should</b> be applied:
	a. <b>CAw Management.</b> The following specific requirements do not apply to ADE:
	(1) <b>RA 1011<sup>12</sup>.</b> Any requirements related to managing weight and balance, Mil ARs or CAA oversight.
	(2) <b>RA 4947(1)e. Para 9.</b> Uncommanded Flying Control Movements, Control Restrictions or other abnormal flying characteristics.
	(3) RA 4947(1)h. Weight and moment statements are not provided for ADE. However, effective weight control measures should be in place for the parachute systems to ensure the weight remains within limits.
	(4) <b>RA 4964(1).</b> Many Air System specific types of information listed at para 1 are not relevant to ADE. Appropriate equivalent or ADE specific information <b>should</b> be identified by the CAMO and listed in the Continuing Airworthiness Management Exposition.
	b. <b>Type Airworthiness (TAw) Management</b> . The AE TAA <b>should</b> ensure that the Design and Modification of MOD-approved ADE is carried out iaw the RA 5000 Series unless identified as not applicable (see Annex B), with the following derogations:
	(1) For MOD-approved ADE that are Commercial-Off-The-Shelf (COTS), any recognized Design Standards used during development should be recorded within the Type Airworthiness Safety Assessment (TASA) <sup>13</sup> .

<sup>&</sup>lt;sup>5</sup> Refer to RA 5103 – Certification of Design.
<sup>6</sup> Refer to RA 1701 – MOD-approved Airborne Forces Equipment.
<sup>7</sup> Refer to RA 1305 – Military Permit To Fly (In-Service), (Special Case Flying) and (Single Task).
<sup>8</sup> Refer to RA 5880 – Military Permit To Fly (Development) (MRP Part 21 Subpart P).
<sup>9</sup> Refer to RA 1225 – Air Safety Documentation Audit Trail.
<sup>10</sup> Leaflet 1 to RA 1701 CAERC Contents.
<sup>11</sup> Refer to RA 4947 – Continuing Airworthiness Management - MRP Part M Sub Part G.
<sup>12</sup> Pefer to RA 1011 – Military Continuing Airworthiness Manager Responsibilities.

 <sup>&</sup>lt;sup>12</sup> Refer to RA 1011 – Military Continuing Airworthiness Manager Responsibilities.
 <sup>13</sup> Refer to RA 5012 – Type Airworthiness Safety Assessment.

Acceptable Means of	(2) Ageing ADE. ADE has a finite Service Life based upon usage parameters and ageing Air System Protocols are not required.
Compliance	c. Equipment Safety. The AE TAA should:
1702(1)	(1) Use a TASA to inform the Equipment Defence Line of Development (DLoD) input to the AESC <sup>14</sup> .
	(2) Provide Assurance of the Equipment DLoD of the RTS Recommendation iaw RA 1305 <sup>7</sup> .
	(3) Produce and maintain an appropriate Airborne Equipment Document Set for MOD-approved ADE to include limits, procedures, and operating information for the users.
Guidance	Regulatory Requirements
Material 1702(1)	11. For the purposes of this RA, Risk management and ADH / AM(MF) Responsibilities of ADE undergoing Test and Evaluation trials is managed by the Air and Space Warfare Centre ADH chain. Trials activity using equipment that is not yet approved, or that is used on a civilian or foreign military Aircraft undergoing development, requires Subject Matter Experts to define who is Responsible for RtL to manage the additional Risks. These activities must comply with RA 2370 <sup>15</sup> and advice will be sought from the ASWC.
	Endorsement / approval of the CAERC.
	12. The CAERC will be amended once all necessary evidence has been collated. Recommended amendments, with supporting evidence, will be presented to the AE TAA for endorsement. The AE TAA will provide a recommendation to the DRTSA.
	13. The DRTSA approval process will take into consideration the Aircraft that the AE is to be despatched from.
	14. The CAERC determines that the equipment is safe to use, not that it is authorized to use from any specific Aircraft.
	15. The CAERC, certified by the AE TAA and approved by the DRTSA (along with supporting evidence), will be passed to the TAAs <sup>16</sup> of the despatching Aircraft.
	16. The TAA of the despatching Aircraft will:
	a. Provide recommendation to the DRTSA of the despatching Aircraft to authorize the use of the AE within their Aircraft RTS.
	b. Return the completed Acknowledgement Sheet to the AE TAA, detailing the acceptance of the AE for use on the Aircraft or stating the reason for non-acceptance.
	17. A Matrix, which identifies the compatibility between Aircraft types and AE, controlled by the RTSA, will be maintained on the MOD Intranet alongside the CAERC.
	18. It is possible that MOD-approved ADE will not be designed to any recognized Certification standards. This may be acceptable; however, it is the AE TAA's Responsibility to ensure that the MOD-approved ADE is still safe to operate within the limitations of the CAERC.

<sup>&</sup>lt;sup>14</sup> Refer to RA 1205 – Air System Safety Cases.
<sup>15</sup> Refer to RA 2370 – Test and Evaluation.
<sup>16</sup> Where the Air System is not UK MOD-owned, TAw management regulatory responsibility by either the TAA or Type Airworthiness Manager (TAM) needs to be agreed within the Sponsor's approved model; refer to RA 1162, or refer to RA 1163. Dependant on the agreed delegation of TAw responsibilities TAM may be read in place of TAA as appropriate throughout this RA.

Parachute	MOD-approved Aerial Delivery	MOD-approved Aerial Delivery
Equipment	Equipment	Equipment
Aircraft	UK military-registered	Non-UK*
Duty of Care Owner <sup>17</sup> - on Aircraft / parachute descent	Parachuting Commander	Parachuting Commander
Duty Holder – On	ADH / AM(MF)	Parachuting ODH
Aircraft	(RtL)	(RtL)
Duty Holder –	Parachuting ODH	Parachuting ODH
Parachute descent	(RtL)	(RtL)

#### ADE Duty of Care and RTL Duty Holder Responsibilities

Annex A

\* Non-UK includes foreign military Aircraft and civil Aircraft. If civil Aircraft is chartered for ADE activities, then guidance in RA 1240 – Chartering of Civilian Air Systems for Military Purposes, **should** be followed.

<sup>&</sup>lt;sup>17</sup> DoC as defined in JSP 815 Part 2.

#### Annex B

#### List of Regulatory Articles Applicable to ADE

RA Series	RA Number / Title
1000 Series	RA 1002 Airworthiness Competent Persons
	RA 1003 Delegation of Airworthiness Authority and Notification of Air Safety
	Responsibility
	RA 1005 Contracting with Competent Organizations
	RA 1006 Delegation of Engineering Authorizations
	RA 1010 Head of Establishment Aviation Responsibilities and Aviation Duty Holder
	Accountable Manager (Military Flying) Establishment Responsibilities
	RA 1011 Milliary Continuing All worthiness Manager Responsibilities
	Systems
	RA 1014 Design Organizations and Coordinating Design Organizations –
	Airworthiness Responsibilities
	RA 1015 Type Airworthiness Management – Roles and Responsibilities
	RA 1016 Military Continuing Airworthiness Management
	RA 1020 Aviation Duty Holder - Roles and Responsibilities
	RA 1021 Release to Service Authorities - Roles and Responsibilities
	RA 1022 Senior Operator - Air Safety Responsibilities
	RA 1023 Chief Air Engineer – Air Safety Responsibilities
	DA 1020 Contractor Elving Approved Organization Scheme
	RA 1028 Contractor Flying Approved Organization Scheme
	RA 1030 Defence Aeronautical Information Management RA 1032 Aviation Duty Holder-Facing Organizations and Accountable Manager
	(Military Elving)-Facing Organizations - Roles and Responsibilities
	RA 1200 Air Safety Management
	RA 1202 Cyber Security for Airworthiness and Air Safety
	RA 1205 Air System Safety Cases
	RA 1207 Air Safety Data Management and Exploitation
	RA 1208 Flight Data Monitoring
	RA 1210 Ownership and Management of Operating Risk (Risk to Life)
	RA 1223 Airworthiness Information Management
	RA 1225 Air Safety Documentation Audit Trail
	RA 1230 Design Safety Targets
	RA 1240 Charlening of Civilian All Systems for Milliary Purpose RA 1300 Release To Service
	RA 1305 Military Permit to Fly (In-Service) (Special Case Flying) and (Single Task)
	RA 1310 Air System Document Set
	RA 1380 Performance Based Navigation
	RA 1400 Flight Safety
	RA 1410 Occurrence Reporting and Management
	RA 1420 Service Inquiries and Non-Statutory Inquiries
	RA 1430 Aircraft Post Crash Management and Significant Occurrence
	Management
	RA 1440 Air Safety Training

RA Series	RA Number / Title
4000 Series	RA 4009 Aviation Engineering Orders and Local Procedures
	RA 4051 Airborne Checks
	RA 4103 Removal of Body Fluid Contamination from Aircraft
	RA 4213 Control of Air System Components used in Ground Test Facilities
	RA 4253 Loose Articles Recovery
	RA 4600 Aircraft Assisted Escape Systems – Safety and Maintenance
	RA 4800 General Requirements (MRP Part 145)
	RA 4801 Certifying Staff
	RA 4802 Scope of the MRP Part 145 (MRP 145.A.10) - Approved Maintenance
	Diganizations only DA 4802 Method of Application for Approval (MDD 145 A 15) Approved
	Maintonance Organizations only
	RA $4804$ Terms of Approval (MRP 145 A 20) - Approved Maintenance
	Organizations only
	RA 4805 Facility Requirements (MRP 145 A 25)
	RA 4806 Personnel Requirements (MRP 145.A.30)
	RA 4807 Certifying Staff and Support Staff (MRP 145.A.35)
	RA 4808 Equipment Tools and Material (MRP 145.A.40)
	RA 4809 Acceptance of Components (MRP 145.A.42)
	RA 4810 Technical Information (MRP 145.A.45)
	RA 4811 Maintenance Planning (MRP 145.A.47)
	RA 4812 Certification of Air System Release and Component Release (MRP
	145.A.50)
	RA 4813 Maintenance Records (MRP 145.A.55)
	RA 4814 Occurrence Reporting (MRP 145.A.60)
	RA 4815 Maintenance Procedures and Safety and Quality Policy (MRP 145.A.65)
	RA 4816 Maintenance Organization Exposition (MRP 145.A.70) - Approved
	Maintenance Organizations only RA 4817 Privileges of the Organization (MPP 145 A 75)
	RA 4817 Finiteges of the Organization (MRF 145.A.75) RA 4818 Limitations on the Organization (MRP 145.A.80) - Approved Maintenance
	Organizations (AMOs) only
	RA 4819 Changes to the Organization (MRP 145 A 85) - Approved Maintenance
	Organizations (AMOs) only
	RA 4820 Continued Validity of Approval (MRP 145.A.90) - Approved Maintenance
	Organizations only
	RA 4821 Findings (MRP 145.A.95) - Approved Maintenance Organizations only
	RA 4941 Application - MRP Part M Sub Part G
	RA 4943 Continuing Airworthiness Management Exposition - MRP Part M Sub Part
	G
	RA 4945 Personnel Requirements - MRP Part M Sub Part G
	RA 4947 Continuing Airworthiness Management - MRP Part M Sub Part G
	RA 4940 Documentation - MRP Part M Sub Part G
	RA 4951 Quality System - MICF Fait M Sub Fait G
	RA 4955 Findings - MRP Part M Sub Part G
	RA 4956 Military Continuing Airworthiness Management Organization Tasks
	Performed by Other Organizations - MRP Part M Sub Part G
	RA 4961 Aircraft Maintenance Programme and Military Continuing Airworthiness
	Management Organization Responsibilities for Air System Release - MRP Part M
	Sub Part C
	RA 4962 Special Instructions (Technical) - MRP Part M Sub Part C
	RA 4963 Modifications and Repairs - MRP Part M Sub Part C
	RA 4964 Continuing Airworthiness Management Records - MRP Part M Sub Part C
	RA 4965 Local Manufacture Assurance – MRP Part M Sub Part C
	RA 4966 Military Continuing Airworthiness Management Organization Instructions –
	MRP Part M Sub Part C

RA Series	RA Number / Title
5000 Series	RA 5010 Type Airworthiness Strategy
	RA 5011 Type Airworthiness Safety Management System
	RA 5012 Type Airworthiness Safety Assessment
	RA 5013 Air Safety Management of Equipment and Commodity Items
	RA 5103 Certificate of Design
	RA 5212 Weight and Moment Determination
	RA 5301 Air System Configuration Management
	RA 5305 In-Service Design Changes
	RA 5320 Air System Maintenance Schedule – Design and Validation
	RA 5405 Special Instructions (Technical)
	RA 5406 Aircrew Publications
	RA 5407 Support Policy Statement
	RA 5724 Life Extension Programme
	RA 5725 Out of Service Date Extension Programme
	RA 5726 Integrity Management
	RA 5805 Airworthiness Directives and Service Bulletins (MRP Part 21 Subpart A)
	RA 5815 Instructions for Sustaining Type Airworthiness
	RA 5825 Fault Reporting and Investigation
	RA 5835 Production Organizations (MRP Part 21 Subpart G)
	RA 5850 Military Design Approved Organization (MRP Part 21 Subpart J)
	RA 5855 Parts and Appliances (MRP Part 21 Subpart K)
	RA 5865 Repairs (MRP Part 21 Subpart M)
	RA 5875 (European) Technical Standard Order (MRP Part 21 Subpart O)
	RA 5880 Military Permit to Fly (Development) (MRP Part 21 Subpart P)
	RA 5885 Identification of Products, Parts and Appliances (MRP 21 Subpart Q)

#### Annex C

#### **RA Series RA Number/Title** 1000 Series RA 1012 Director General (Air) – Air Safety Responsibilities RA 1019 Sponsor of Military Registered Civilian-Owned and Civilian Operated Air Systems – Air Safety Responsibilities RA 1026 Aerodrome Operator and Aerodrome Supervisor (Recreational Flying) Roles and Responsibilities RA 1027 Air Traffic Management Equipment Organizations – Responsibilities of Contracted Organizations RA 1029 Ship-Air Release – Roles and Responsibilities RA 1031 Contractor Flying Approved Organization Scheme (Basic Remotely Piloted Air Systems) RA 1340 Equipment Not Basic to the Air System RA 1160 Series – The Defence Air Environment Operating Framework RA 1350 Air Launched Weapon Release RA 1390 Reduced Vertical Separation Minimum RA 1395 Authorization to Permit Embarked Aviation in His Majesty's / MOD Ships RA 1600 Series – Remotely Piloted Air Systems RA 1910 Quality Assurance of Aviation Fuel from non-UK MOD Sources RA 1920 Aviation Arrangements in His Majesty's / MOD Ships - Equipment Standards All Flying RAs 2000 Series 3000 Series All Air Traffic Management RAs RA 4053 Royal Flights and Flights for Nominated Very Important Persons 4000 Series RA 4054 Ground Handling Operations RA 4061 Air Systems Displaying Abnormal Flying Characteristics RA 4510 Ground Running of Aero-Engines and Auxiliary Power Units RA 4657 Weapon Loading and Armed Aircraft Maintenance RA 4970 Baseline Military Airworthiness Review - MRP Part M Sub Part I RA 4971 Military Airworthiness Review and Certification - MRP Part M Sub Part I RA 4972 Military Airworthiness Review Surveyors - MRP Part M Sub Part I RA 4973 Military Airworthiness Review Process - MRP Part M Sub Part I RA 4974 Circumstances when Military Airworthiness Review Certificates Become Invalid – MRP Part M Sub Part I RA 5219 Instrumentation and Flight Data Recorder Requirements for Flight Trials of 5000 Series Air Systems RA 5602 Propulsion Systems Part Lifing, Critical and Common Pool Parts RA 5723 Ageing Air System Audit RA 5810 Military Type Certificate (MRP Part 21 Subpart B) RA 5812 Digital Models and Simulations Supporting Airworthiness-Related Decision-Making RA 5820 Changes in Type Design (MRP Part 21 Subpart D) RA 5890 Cyber Security for Airworthiness and Air Safety - Type Design and Changes / Repairs to Type Design

#### List of Regulatory Articles Not Applicable to ADE

# **RA 1703 – Use of Foreign Military Airborne Forces Equipment**

Rationale	The use of foreign military Airborne Forces Equipment (AFE) <sup>1</sup> is an enabler of military capability. Failure to manage use of the AFE appropriately could result in increased Risk to Life (RtL) to personnel and / or 3rd parties. This Regulatory Article (RA) provides Regulation to ensure organizations understand their Responsibilities associated with the use of foreign AFE to ensure it is safe to operate and operated safely.
Contents	Applicability Definitions Relevant to this RA RA 1703: Governance of Foreign Military Airborne Forces Equipment
Applicability	Applicability <ol> <li>RA 1703 is applicable for the conduct of parachute training and operations using foreign military AFE. These are parachuting activities conducted by UK military Parachute Units (including attached foreign troops where applicable).</li> </ol>
Definitions	Definitions Relevant to this RA
	2. For the purposes of this RA, the following definitions apply:
	a. <b>Parachuting Operating Duty Holder (ODH)</b> . An accountable individual, who is a 2* Crown Servant, with formal delegated responsibilities for actively managing Air Safety for MOD approved AFE via an effective Air Safety Management System <sup>2</sup> to ensure that associated RtL is As Low As Reasonably Practicable (ALARP) and Tolerable within their defined Areas of Responsibility (AoR).
	b. <b>Parachuting Commander</b> . A 2* Crown Servant who is in the direct Chain of Command of the unit participating in the activity, who has end to end oversight of the activity. They own Duty of Care (DofC) for their troops throughout the activity. They are Duty Holding <sup>3</sup> when using foreign AFE.
	c. <b>Foreign Military Airborne Forces Equipment</b> . Foreign Military AFE are parachutes (static line and freefall) and associated equipment normally utilized by any foreign military organization under their own orders and instructions.
Regulation	Governance of Foreign Military Airborne Forces Equipment
1703(1)	1703(1) Parachuting Commanders <b>shall</b> manage RtL associated with the use of foreign military AFE and the parachute delivery of troops within their respective AoRs.
Acceptable	Governance of Foreign Military Airborne Forces Equipment
Means of Compliance 1703(1)	3. Where UK Armed Forces personnel operate with foreign military AFE not included in the Compendium of Airborne Equipment Release Certificates (CAERC) <sup>4</sup> , the Parachuting Commander <b>should</b> manage RtL associated with parachuting with foreign military AFE to ALARP and Tolerable.
	4. The Parachuting Commander <b>should</b> publish orders and instructions that detail how their RtL and DofC responsibilities will be discharged. As a minimum these orders <b>should</b> detail:

 <sup>&</sup>lt;sup>1</sup> Refer to MAA02 – MAA Master Glossary.
 <sup>2</sup> Refer to RA 1200 – Air Safety Management.
 <sup>3</sup> Refer to JSP 815 – Defence Safety Management System.
 <sup>4</sup> Refer to RA 1701 – MOD-approved Airborne Forces Equipment.

Acceptable Means of	a. The parachuting training and Competence required to conduct parachuting activity using foreign military AFE.
Compliance 1703(1)	b. How the RtL associated with parachuting with foreign military AFE will be managed so that an assessment of the ALARP and Tolerable position can be made.
	5. When using foreign AFE from UK military-registered Aircraft, or civil Aircraft, the Aviation Duty Holder (ADH) or Accountable Manager (Military Flying) (AM(MF)) <b>should</b> engage with the Airborne Equipment (AE) Type Airworthiness Authority (TAA) to request an entry into the CAERC (Clearance with Limited Evidence (CLE) or Operational Emergency Clearance (OEC)) <sup>5</sup> or seek a clearance from the Aircraft TAA <sup>6</sup> for a clearance (CLE or OEC) in the Aircraft Release To Service (RTS) / Military Permit To Fly (MPTF). They <b>should</b> seek confirmation from the Commander of any foreign troops involved that they accept the associated RtL once despatched from the Aircraft.
	6. Where the operation of foreign military AFE is regulated by both the UK MAA and the foreign National Authority; the most restrictive Regulation <b>should</b> take primacy.
	7. When planning to use foreign AFE the Parachuting Commander <b>should</b> consult with:
	a. The AE TAA to request a RTS Recommendation / MPTF Recommendation for potential inclusion in the CAERC.
	b. The Parachuting ODH to seek direction and guidance for use of the AFE.
	8. When parachute activity is conducted using foreign military AFE, the Parachuting Commander <b>should</b> be appointed as Duty Holder (in accordance with JSP 815, Part 2).
Guidance	Governance of Foreign Military Airborne Forces Equipment
Material	9. Fundamental to effective governance and Risk Management is a clear
1703(1)	understanding of when the responsibility for the RtL and / or DofC associated with the parachuting activity is owned by a stakeholder eg Parachuting Commander, ADH or AM(MF) for the Aircraft.
	10. It is essential that, throughout the parachuting activity, the Parachuting Commander understands their responsibilities, communicates as required with each of the stakeholders involved and has robust orders and instructions relating to this activity.
	11. RA 1240 <sup>7</sup> must be complied with for parachuting activity conducted from chartered Aircraft.

 <sup>&</sup>lt;sup>5</sup> Refer to RA 1300 – Release to Service.
 <sup>6</sup> Where the Air System is not UK MOD-owned, TAw management regulatory responsibility by either the TAA or Type Airworthiness Manager (TAM) needs to be agreed within the Sponsor's approved model; refer to RA 1162<sup>6</sup>, or refer to RA 1163<sup>6</sup>. Dependant on the agreed delegation of TAw responsibilities TAM may be read in place of TAA as appropriate throughout this RA. <sup>6</sup> Refer to RA 1305 – Military Permit to Fly (In-Service), (Special Case Flying) and (Single Task).
 <sup>7</sup> Refer to RA 1240 – Chartering of Civilian Air Systems for Military Purposes.

# RA 1704 - Use of Non-Combat Parachutes and Ancillary Equipment for **Military Purposes**

Rationale	The MOD has a requirement to use non-combat parachutes and ancillary equipment for a variety of activities to deliver training and Defence activity. Failure to manage the activity appropriately could result in an increased Risk to Life (RtL) to 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> parties. In order to support operational capability and effectively manage RtL, Duty Holders <sup>1</sup> (DH) must act in line with the MOD's Duty of Care (DofC) obligations. Furthermore, to ensure RtL is As Low As Reasonably Practicable (ALARP) and Tolerable, DH must understand the Risk picture, be clear as to where division of Safety Responsibility lies and be able to effectively govern parachuting activities through robust orders and procedures.
	parties. In order to support operational capability and effectively manage RtL, Duty Holders <sup>1</sup> (DH) must act in line with the MOD's Duty of Care (DofC) obligations. Furthermore, to ensure RtL is As Low As Reasonably Practicable (ALARP) and Tolerable, DH must understand the Risk picture, be clear as to where division of Safety Responsibility lies and be able to effectively govern parachuting activities through robust orders and procedures.

Contents	Applicability
	1704(1): Governance of Non-Combat Parachuting for Military
	Purposes
	1704(2): Assurance of Non-Combat Parachutes and Ancillary Equipment for Military Purposes
	1704(3): Operating Non-Combat Parachutes and Ancillary Equipment for Military Purposes

#### **Applicability Applicability**

RA 1704 is applicable for the conduct of parachuting by MOD organizations 1. holding an affiliated Parachute Training Organization licence with the British Skydiving Association for activities conducted on-duty<sup>2</sup>. This is collectively known as non-combat parachuting.

Definitions	Definitions Relevant to this RA
Demitions	Definitions Relevant to this RA

2. Non-Combat Parachute Equipment. Non-combat parachute equipment is equipment not listed in the Compendium of Airborne Equipment Release Certificates (CAERC) and is either procured as Commercial-Off-The-Shelf (COTS) or hired for use in the activities defined in this Regulatory Article (RA). It comprises the parachute canopies, deployment devices, container, harness and requisite attachments.

Non-Combat Ancillary Equipment. Non-combat ancillary equipment is 3. equipment procured via COTS or hired for use in the activities defined in this RA. It comprises items such as altimeters, helmets, Parachutist clothing and mounted cameras.

Regulation	Governa	nce of Non-Combat Parachuting for Military Purposes
1704(1)	1704(1)	The DH <b>shall</b> ensure the RtL associated with non-combat parachutes and ancillary equipment is managed within their Area of Responsibility (AoR).

Acceptable	Governance of Non-Combat Parachuting for Military Purposes
Means of	4. For all on-duty non-combat parachute activities within the scope of this RA, the
Compliance	DH should ensure UK Civil Aviation Authority (CAA) and British Skydiving Association
1704(1)	Regulations are followed.

<sup>&</sup>lt;sup>1</sup> For non-combat parachuting activities it is acceptable to have a non-Aviation DH (minimum rank of OF5) in accordance with (iaw) the definition in JSP 815 – Defence Safety Management System. <sup>2</sup> As defined in respective single Service policies concerning duty status.

Acceptable Means of Compliance 1704(1)	5. The DH <b>should</b> issue orders and instructions which offer outcomes that are at least as safe as the outcomes which would be achieved through equivalent civil Regulation via the UK CAA and British Skydiving Operations Manual.
Guidance	Governance of Non-Combat Parachuting for Military Purposes
Material 1704(1)	6. Safety responsibilities for on-duty parachuting with non-combat parachutes and ancillary equipment can be divided between those relating to aviation aspects and those relating to the specific conduct of the activity. For example, it is routinely the Responsibility of the Aviation DH or Accountable Manager (Military Flying) for on-Aircraft Safety and the air-delivery of personnel to an area within safe navigation parameters. However, the Responsibility regarding personnel and equipment, such as fitness and training for example, would be that of the DH who holds DofC responsibility for the personnel undertaking the specific activity.
Regulation	Assurance of Non-Combat Parachutes and Ancillary Equipment for Military Purposes
	1704(2) The DH <b>shall</b> be responsible for Assurance that the RtL associated with non-combat parachutes and ancillary equipment within their AoR is ALARP and Tolerable.
Acceptable	Assurance of Non-Combat Parachutes and Ancillary Equipment for Military Purposes
Compliance	<ol> <li>The DH should establish and maintain a robust system for control of non- combat parachuting activities, this should include as a minimum:</li> </ol>
	a. Provision of Risk Assessments to identify and mitigate potential Hazards.
	b. Procedures for equipment inspections and Maintenance.
	c. Training and Certification aligned to civil standards.
	d. Detailing operating protocols.
	8. The DH <b>should</b> define in orders the criteria and periodicity for assessing the system for control of non-combat parachuting activities.
	9. In addition to the assessment at para 8, the DH <b>should</b> ensure that the system for control of non-combat parachuting activities is assessed by an independent expert body. The DH <b>should</b> stipulate in orders the periodicity of these independent assessments.
Guidance	Assurance of Non-Combat Parachutes and Ancillary Equipment
Material	for Military Purposes
1704(2)	10. The DH and personnel involved in non-combat parachuting activities will follow the Guidance in:
	a. UK CAA Civil Aviation Publication (CAP) 660 <sup>3</sup> .
	b. British Skydiving Association Operations Manual.
	<ul> <li>Unit parachuting operations manual that provides detailed guidance on Safety procedures, equipment standards and operating protocols specific to non-combat parachuting activities.</li> </ul>
	11. An independent expert body needs to be sufficiently independent such that it is not unduly influenced by commercial, operational, peer or rank / status pressures.

<sup>&</sup>lt;sup>3</sup> Refer to CAP 660: Parachuting.

Regulatory	Article	1704
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Regulation 1704(3)	Operating Non-Combat Parachutes and Ancillary Equipment for Military Purposes 1704(3) The DH shall ensure the RtL associated with operating non-	
	combat parachutes and ancillary equipment is managed within their AoR and that Safety responsibilities associated with the activity are properly defined.	
Acceptable Means of Compliance	Operating Non-Combat Parachutes and Ancillary Equipment for Military Purposes	
1704(3)	DH <b>should</b> publish orders and instructions that includes the following detail, where relevant to the activity, as a minimum:	
	a. How and when Parachutists are fitted with location equipment dependent on the operating environment to locate Parachutists in the event of an Incident.	
	b. Direction that if at the planned deployment height the skydiver is unsuccessful on their first attempt to deploy the main canopy, one further attempt of no more than 2 seconds, irrespective of body attitude, <b>should</b> be made. If unsuccessful, emergency procedures <b>should</b> be conducted immediately.	
	c. Minimum heights <sup>4</sup> for main parachutes; in any eventuality these <b>should</b> be not lower than:	
	(1) Solo Parachutists - 2,500 ft.	
	(2) Tandem Parachutists - 5,000 ft.	
	(3) Display Parachutists, when conducting low shows - 1,500 ft.	
	d. Procedures for setting automatic activation devices regarding minimum Height settings accounting for uneven topography around the Drop Zone.	
	e. Actions to be taken by a Parachutist that experiences a pilot chute hesitation.	
	f. Guidance on how camera jackets are attached to the parachute or Parachutist's clothing.	
	g. The periodicity of currency training for emergency procedures.	
	Non-Combat Parachuting Accident and Incident Reporting	
	13. All non-combat parachuting Occurrences <b>should</b> be reported iaw RA 1410 <sup>5</sup> . Consideration <b>should</b> also be given to reporting under the respective single-Service reporting mechanisms and the requirements of the civil governing body.	
Guidance Material 1704(3)	Operating Non-Combat Parachutes and Ancillary Equipment for Military Purposes 14. Nil.	

 $<sup>^4</sup>$  The height at which the parachute is to be fully inflated and be in a condition to be controlled by the user.  $^5$  Refer to RA 1410 – Occurrence Reporting and Management.

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#### Compendium of Airborne Equipment Release Certificates

#### Structure

#### Presentation of Compendium of Airborne Equipment Release Certificates (CAERC) Text

1. In the CAERC text the following conventions are used:

a. All normal text, including headings, will be used as shown.

b. Italic text presented within shaded boxes is not required in the CAERC; rather it provides guidance on the required CAERC text.

c. Normal text shown within non-shaded boxes is where mandatory content is defined, but the presentation is not specified.

#### Applicability of Sections

2. The Parts of the CAERC (A to G) are mandatory.

3. The Sections within each Part are also mandatory (see pages 8 to 14).

4. Some Sections will not be applicable to specific Airborne Forces Equipment (AFE) or Aerial Delivery Equipment (ADE); in such cases, the Section heading **should** be used with the text 'Not Applicable'.

5. Where there are no limitations that need to be expressed in the CAERC, the Section heading **should** be used with the text 'iaw {*Document Name*}.

#### Sub-Section Titles

6. The CAERC may be divided into further sub-sections at the discretion of the Release To Service Authority (RTSA). Part D of the CAERC is Ancillary Equipment specific; layout will be at the discretion of the RTSA.

#### Sub-Section Numbering

7. The numbering of sub-sections will follow the same format as that used in an Release To Service (RTS) (see RA 1300 - Release To Service). Therefore, in Section A of the CAERC, Level 1 is an 'A' followed by a single letter (eg A.n), Level 2 is 'A followed by 'n.n' (eg A.n.n).

#### Classification

8. The Classification of the CAERC will be OFFICIAL – SENSITIVE in line with the guidance provided within JSP 440 Part 4 Section 1. If information of a higher classification must be included in the CAERC, rather than another part of the Airborne Equipment Document Set (eg Tactics Manual), this will be presented as a separate 'Classified Supplement' to the CAERC. Any Classified Supplement' to the CAERC is to be managed in the same manner as that for a Classified Supplement to an RTS (see RA 1300).

#### **Configuration Control**

9. All pages in the CAERC (including the Preliminary Pages and any blank pages) **should** show their Issue and Amendment status.

#### **Electronic Formats**

10. The CAERC may be provided solely in electronic format.

#### **Content Appropriate to the CAERC**

11. The CAERC is the primary document of the AEDS and, where appropriate to provide supporting detail, it will contain cross references to other documents in the AEDS.

12. The limitations in the CAERC are the definitive limits for Airborne Equipment (AE) in-Service. Where any conflict arises between the CAERC and any other documents in the AEDS, the limitations in the CAERC are overriding.

13. In judging what content is appropriate to the CAERC, and how to handle Safety Information, authors need to consider 5 principles:

a. **Relevance**. Is the information relevant to the aim of the CAERC? Does it help define the Safety envelope of AE?

b. **Completeness**. If the information is relevant, it needs to be presented without omissions.

c. **Target Audience**. Is the information relevant to the target audience?

d. **Coherence**. The CAERC is to be coherent with the other documents in the AEDS. Early liaison with other AEDS authors is essential to ensure that the whole AEDS is a coherent and seamless source of Safety information.

e. **Responsibility**. The Author of the CAERC needs to be aware of their overarching responsibility for providing Safety information. Where an author decides not to include the information, they must take positive steps to provide an audit trail to show why the information has not been included and bring this to the attention of the AE Delivery Team (DT).

#### Procedures

14. Only those procedures that are directly essential to enable compliance with a limitation **should** be included. All other procedures **should** be placed in other parts of the AEDS (eg Standard Operating Procedures (SOPs) issued by Operating Duty Holders (ODHs), Force SOPs, Technical Publications).

#### Placing Information in Parts

15. The following **should** be used to determine where information is placed in the CAERC.

Question	Response	Action
1. Is the information supported by a fully substantiated Safety	Yes	Go to Q2
Assessment that has been accepted by the TAA and RTSA?	No	Cannot be included in the CAERC unless as a Special Clearance; Operational Emergency Clearance (OECs) and Clearance with Limited Evidence (CLEs) are placed in Parts B-D as appropriate: they must be recorded in Part F
2 le the information of a	Voc	Place in Part E
temporary nature?	165	
	No	Go to Q3
3. Is the topic engineering information?	Yes	Provide a reference from Part A7
	No	Go to Q4
4. Does the limitation relate to Airborne Forces Equipment?	Yes	Place in Part B
	No	Go to Q5
5. Does the limitation relate to Aerial Delivery Equipment?	Yes	Place in Part C
	No	Go to Q6
6. Does the limitation relate to Ancillary Equipment?	Yes	Place in Part D
	No	Place elsewhere in the AEDS

Table 1. Placing Information in Parts of the CAERC

#### **Recording of Modifications**

16. Where different limitations apply to different Modification states on an Air System or AE Equipment then split limitations must be stated. These will normally be of the form 'pre-mod nnn...; post-mod nnn...'. Any Air System Modification requiring split limitations **should** be placed the Air System's RTS in accordance with (iaw) RA 1300. Any Air System or AE Modification requiring split limitations will be detailed in the appropriate Section of Part B-E of the CAERC.

17. AE Modifications will be recorded by the AE TAA in the AEDS under their configuration control. The CAERC is not the repository of all Modifications embodied on AE, however some Modifications need to be identified to operators. An AE Modification affects the CAERC when it is necessary to identify different limitations for the pre-Modification and / or post-Modification conditions of the equipment. Once a Modification has been superseded (Fleet embodiment, subsequent Modification etc) reference to it **should** be removed from the CAERC.

#### **Contents of the CAERC**

**Preliminary Pages** 

Part A – Airworthiness and Document Management

Part B – Airborne Forces Equipment

Part C – Aerial Delivery Equipment

Part D - Ancillary Equipment

Part E – Temporary Information

Part F - Clearances With Limited Evidence / Operational Emergency Clearances

Part G – CAERC History

#### Preliminary pages

The preliminary pages of the CAERC must contain the following sections:

List of Contents List of Amendments List of Effective Pages List of Abbreviations Definition of Terms Distribution

Note: Conventionally each of the above elements of the Preliminary pages would start on a new page

#### List of Contents

A List of Contents will be provided, to a level of detail defined by the RTSA. The following represents the minimum list:

Preliminary Pages

Part A – Airworthiness and Document Management

Part B – Airborne Forces Equipment

Part C – Aerial Delivery Equipment

Part D – Ancillary Equipment

Part E – Temporary Information

Part F – Clearances with Limited Evidence / Operational Emergency Clearances

Part G – CAERC History

#### List of Amendments

An amendment list must be provided to record all amendments made to the CAERC, eg			
Amendment number Date Detail of Changes		Detail of Changes	

#### List of Effective Pages

An important element of document control is a correct and auditable amendment procedure. To achieve this the CAERC will have a 'List of Effective Pages' which will be updated by every amendment eg:

Page	Issue / Amendment	Page	Issue / Amendment

#### **List of Abbreviations**

The CAERC must provide a consolidated list of the abbreviations used throughout the document as an aid to the reader. No further expansion of abbreviations need be used throughout the document.

#### **Definition of Terms**

It is important to the use of the CAERC and the overall Airworthiness of the cleared AE systems that there is a clear and common understanding of the terms used within the CAERC. Therefore, the CAERC will have a section dealing with the definition of terms.

Term	Definition	
Aerial Delivery Equipment	Equipment and ancillary items, including an Airdrop Platform, where used, to deliver Cargo to Drop Zones.	
Airborne Equipment	Airborne Equipment is the generic term covering the wide variety of parachuting assemblies for personnel and equipment, airdrop platforms, supply dropping equipment and ancillary items that are used in the insertion of personnel and equipment onto pre-planned Drop Zones. This equipment can be split into two areas: Airborne Forces Equipment (AFE) and Aerial Delivery Equipment (ADE).	
Airborne Forces Equipment	Equipment and ancillary items used to insert personnel into Drop Zones.	
Air Cargo	Stores, equipment or vehicles, which do not form part of the Aircraft, and are either part or all of its payload.	
Airdrop Platform	A base on which vehicles, cargo or equipment are loaded for airdrop or low altitude extraction	
Airworthiness	The ability of an Air System or other airborne equipment or system to be operated in flight and on the ground without significant Hazard to Aircrew, ground crew, Passengers or to third parties; it is a technical attribute of materiel throughout its lifecvcle.	
Cargo	Commodities and supplies in transit	
CAUTION	A 'CAUTION' is inserted when the consequence of not respecting a limitation might be damage to the Air System or equipment.	
Clearance with Limited Evidence	A clearance within the CAERC for an Air System when a fully substantiated Type Airworthiness Safety Assessment is not available to support a full CAERC clearance but, on the balance of available evidence, the clearance is judged to remain within the required Air System Design Safety Target.	
Day /Night	Where day / night limitations are given, transition is based on Civil Twilight: Civil Twilight occurs when the sun's centre is 6° below the observer's visible horizon	
Drop Zone	Notified portion of airspace and associated area of ground within which AE drops are made.	
Following	Following parachutists are those that follow a dispatched load on the same	
Parachutists	pass	
g-limits	The max normal acceleration cleared. All g limit values in this document are positive unless otherwise stated.	
Installation only	'Installation only' means that the equipment may be fitted but must not be operated in flight. It must be isolated iaw with a defined scheme unless it has been shown that inadvertent operation represents an acceptable Hazard.	
LIMITATION	Values of parameters used to define the extent of an equipment's operating envelope (All airspeeds, mach numbers, altitudes, angle of attack and temperatures are indicated values unless otherwise stated).	
Note	A 'Note' is inserted to clarify the reason for a limitation.	
Operational Emergency Clearance	A clearance within the CAERC for an Air System that does not achieve the Air System Design Safety Target. This judgment may be substantiated by a Type Airworthiness Safety Assessment or on limited available evidence. An OEC will only be authorized by the RTSA once it is assured that any operating Risks have been communicated to, and accepted by, the appropriate Aviation Duty Holder. Note: OEC are indicated throughout the document by means of a striped line at the edge of the page adjacent to the relevant clearance.	

Term	Definition		
Parachute System	The parachute will deliver the parachutist from the air to the ground safely. It is considered safe for use if it meets the project safety target for the 'as designed system'. This includes the parachute system its subsystems:		
	Safety Critical Systems (SCS) and Safety Enabling Systems (SES) and a trained parachutist. This can be combined with Soldiering Mission Systems (SMS) to enhance military capability.		
Parachute System – Safety Critical Systems	A piece of equipment that influences the parachute Hazard Analysis to improve the Safety of the parachute system in the military.		
Parachute Safety Enabling Systems	A piece of equipment introduced to interact between the parachutist and the parachute system to enhance Safety.		
Prohibited	'Prohibited' means operation in the manner described or of the equipment specified (as appropriate) is prohibited because the associated Risk is unacceptable. The Risk may be judged unacceptable because it is either too high or because there is insufficient knowledge to determine the likelihood of encountering a severe Hazard.		
Soldiering Mission Systems – Parachuting Mission Systems	Equipment that is integrated to enable the parachute system to enable the completion of a parachuting task.		
Soldiering Mission Systems – Soldiering and Ancillary Systems	Equipment carried by the parachutist to enable the completion of a military (mission specific) task which is not always integrated to the parachuting activity and is not defined above.		
TAA approved Design Standard	The TAA approved Design Standard is the standard to which the CAERC applies. The TAA has the discretion to use a reference design standard which is other than the DO CSR. The TAA must be satisfied that there is a Safety Assessment for this reference design standard and that configuration control procedures are equivalent to those required for a CSR.		
Temporary Information	Temporary Information includes: Temporary Clearances, Temporary Restrictions, and Temporary Information Notices. The details of Temporary Information will be located in Part E of the RTS. Within Temporary Information, where a Temporary Clearance is used, it is to be of a genuinely transitory nature (eg the clearance of a Modification for a short duration trial after which it will be removed, test equipment for short term use only, etc). See RA 1300 for fuller details.		
WARNING	A 'WARNING' is inserted when the consequence of not respecting a limitation might be death and/or injury.		

### Distribution

Necessary to ensure amendments are promulgated to all document holders.

#### Action

Mandatory

RTSA	Master copy and to promulgate the CAERC
ODH	
TAA	
MAA	For independent assurance of new AE and Major Changes to existing AE
	only

#### Information

Mandatory

DT Safety Manager	
Delivery Duty Holder (DDH)	
Officer Commanding Defence	
Aircrew Publications Squadron	
(OC DAPS)	
Military Continuing Airworthiness	
Management Organization (Mil	
CAMO)	

#### Part A – Airworthiness and Documentation Management.

#### A 1 Release Statements

#### A 1.1 Certification of Safety and Airworthiness

- A 1.1.1 I certify that the Airborne Equipment, when operated iaw this CAERC at Issue *X* AL *Y*, including the CLEs listed in Part F, is airworthy and that the overall Risk is acceptable.
- A 1.1.2 Clearances which carry a higher level of Safety Risk are identified as OECs and their use, once authorized by the RTSA, requires specific approval by the relevant ODH iaw RA 1300.
- A 1.1.3 Clearances in Part E and F that are not supported by a fully substantiated Air System Safety Case (ASSC) or Type Airworthiness Safety Assessment (TASA) are authorized for inclusion in the CAERC by the RTSA.
- A 1.1.4 The authority for exposure to, and the ownership and management of, the residual Risk associated with the clearances in Part E and F lies with the Aviation Duty Holder (ADH) chain.
- A 1.1.5 CAERC clearances are only valid once the associated Aircraft TAA has accepted the CAERC for the specific Aircraft type. Operators are to confirm, through the Matrix on the RTSA website, that relevant sections have been accepted by the Aircraft TAA.

Signature Name Rank AE TAA

Dd Mmm Yy

#### A 1.2 Authorization

- A 1.2.1 As the Delegated Release to Service Authority (DRTSA), I authorize AL Y to Issue X of the CAERC.
- A 1.2.2 The limitations of this CAERC are the definitive limits for Airborne Equipment in Service. Where any conflict arises between this CAERC and any other Airborne Equipment documentation, the limitations in the CAERC are overriding.
- A 1.2.3 Authorized holders of the CAERC are to ensure that all CAERC documents that define current limitations are kept with this authority under one cover.

*Signature* Name Rank DRTSA (RAF)

Dd Mmm yy

#### A2 Introduction

- A2.1 **Purpose**. This CAERC is the statement on behalf of the C17CSAE TAA and the RTSA that acceptable TASAs have been prepared for AE systems.
- A2.2 Structure: This CAERC comprises Release statements and 7 supporting parts:

Part A covers the purpose and management of the CAERC and any other relevant information that does not appear as an AE or Air System limitation.

Part B includes all cleared personnel parachutes and reserve systems; Annexes provide specific clearances for cleared dispatch Aircraft.

Part C includes all cargo and platform systems cleared for use; Annexes provide specific clearances for cleared dispatch Aircraft.

Part D includes items that require regulatory consideration and support AFE and ADE system clearances and enhance mission success or improve Hazards identified within AE systems.

Part E details Temporary Clearances and the management of temporary information; it is subdivided as follows:

- E 1 Temporary Clearances.
- E 2 Temporary Restrictions.
- E 3 Temporary Information Notices.

Part F details Clearances with Limited Evidence and Operational Emergency Clearances; it is subdivided as follows:

- F 1 CLE. A record of the extant CLE and their management.
- F 2 OEC. A record of extant OEC and their management.

Part G enables the production, content and evolution of the CAERC to be audited; it is sub-divided as follows:

- G 1 Audit Trail. Reference to evidence used to compile the CAERC.
- G 2 Amendments. A list of all amendment elements.

The limitations in Parts B to E may be either: for normal use (ie in peace and war), or for operational emergency use only.

All permanent information that has been derived from the ASSC will be included within the main Parts B to D of the CAERC, with temporary information, also having been derived from the ASSC, being covered in Part E.

**A2.3 Amendment**: Amendments will be promulgated automatically to the agencies detailed within the distribution list. Suggestions for amendment are to be forwarded to:

{Contact details of the RTSA Desk Officer}

#### A3 Description

A description regarding the management of AE system clearances at the discretion of the AE TAA and DRTSA

#### A4 Airborne Equipment Life and Fatigue

A statement regarding the management of, and inclusion of references to, the lifing of AE equipment at the discretion of the AE TAA and DRTSA.

#### A5 Statement of Operating Intent and Usage

The use of AE has been reviewed by the Duty Holders and the TAA.

The SOIU for AE has been issued. Any perceived differences between the AE use described in the SOIU and the way in which AE is actually being operated are to be highlighted to DES C17CSAE DT – AE Engineering Authority.

#### A6 AE Configuration

A statement regarding the management of, and inclusion of reference to, Modifications affecting AE clearances at the discretion of the AE TAA and DRTSA.

#### A7 Related Documents

#### A7.1 Parachutist Documentation

The AFE cleared within this CAERC is airworthy when operated by qualified personnel within the limitations of this CAERC and iaw the information and provisions contained in the following related documents.

Document	Publishing Organization	Sponsor

#### A7.2 Aerial Delivery Documentation

The ADE cleared within this CAERC is airworthy when operated by qualified personnel within the limitations of this CAERC and iaw the information and provisions contained in documents referenced in Part C which are published by Joint Air Delivery Test and Evaluation Unit (JADTEU) and sponsored by HQ 1 Gp.

#### A7.3 Aircrew Documentation

The AE cleared within this CAERC is airworthy for dispatch from the air platforms specified in this CAERC when the air platforms are operated iaw their RTS.

#### A7.4 Maintenance Documentation

Reference is made to the associated Maintenance documentation from each Section within Parts B to D of this CAERC.

#### Part B - Airborne Forces Equipment.

This Part of the CAERC contains clearances and limitations for the in-service personnel parachutes and reserve systems authorized for use by the MOD. Information pertinent to the safe use of the equipment from specific Aircraft types is found in associated Annexes to the Section. Each section covers a specific parachute type, within which are Annexes covering specific clearances and limitations for the dispatch of the parachute from cleared dispatch Aircraft.

#### Part B Section Layout

Each Section is constructed as follows:

#### **Equipment Title**

#### 1. Release Statement

To specify that the equipment concerned is 'cleared for use' and to give the general criteria of the clearance. These criteria will include: users of the equipment; if it is for training and / or operations; if usage is in daylight only or day / night; if usage is onto land only or land / water; and if usage is across worldwide temperature conditions or if only within particular temperature ranges.

#### 2. Special Clearances

To identify what areas of the clearance are covered under OEC / CLE. OEC will be suitably annotated with hatched markings to the outer edge of the page. OEC and CLE content will be prefixed by OEC / CLE and Number in line with the lists in Part F.

#### 3. Brief Description

To provide a general description of the equipment in question and an indication of the role in which it is employed.

#### 4. System Design Organization

To specify the Design Organization(s) or, where appointed, the Co-ordinating Design Organization for the equipment in question.

#### 5. Build Standard

To specify the Configuration Status Record or other formally recognized descriptor for the build standard of the overall system and, where applicable, the individual primary components.

#### 6. System / Load Preparation

To specify the Technical Publication(s), or other recognized document(s), in which the parachute packing method or the load preparation is detailed.

#### 7. Maintenance

To specify the Technical Publication(s), or other recognized document(s), in which the equipment Maintenance criteria and procedures are detailed.

#### 8. Deployment

To specify how the parachute deployment is to be initiated.

#### 9. Dispatch Aircraft

To specify which military Aircraft platforms the equipment is cleared for dispatch from, noting where necessary the applicable Annex. Where the AE is to be deployed from civilian Aircraft, the type (including any modifications) or where required registration number are to be listed.

#### 10. Dispatch Conditions - System

To specify any generic dispatch Height data or to specify that the Height is Aircraft platform dependent and refer to the associated Annex.

To specify wind limitations applicable to descending the equipment onto land / into water.

To specify any sea state criteria that may limit the use of the equipment.

To specify any limitations that may apply in operating the equipment onto high altitude drop zones.

#### 11. All Up Mass and Stores Dimension

To specify the maximum / minimum mass limitations applicable to the use of the equipment.

To specify the maximum / minimum All-Up-Mass (AUM) of the individual parachutist / individual stores load.

To specify the maximum / minimum store dimension limitations applicable to the use of the equipment.

#### 12. Ancillary Equipment

To specify any Ancillary equipment cleared for use with the AE including any associated limitations, either directly or, through reference to Section D3 or another document within the AEDS.

#### 13. Standard Operating Procedures

To define any SOPs that have associated limitations or, to refer to ODH / Force SOPs including any associated comments pertinent to the clearance.

#### 14. Annexes

To list the associated Annexes for specific Aircraft types.

#### **Section Annex Layout**

Each Annex is constructed as follows:

#### Annex X - Dispatch of the [Equipment Type] from the [Aircraft Type]

#### 1. Release Statement.

To specify that the equipment is 'cleared for use from [Aircraft type]' and give any additional criteria specific to the clearance from that Aircraft type.

#### 2. Aircraft Preparation.

To specify how the Aircraft is to be prepared for the activity in question, covering any role equipment requirements and any pre-loading checks. Where this information is set out in another Air Publication / document, the relevant reference must be shown.

To specify the role fit required on the Aircraft to undertake the planned activity. Where this information is set out in another Air Publication / document, the relevant reference must be shown.

#### 3. Aircraft / Airdrop Conditions

To specify the Aircraft-specific criteria associated with the carriage / dispatch of the equipment / troops concerned.

To specify the minimum / maximum, and where appropriate, optimum speed of the Aircraft at the point of dispatch of equipment / troops.

To specify any variation in Aircraft speeds when the equipment is being used within an operational context or training role.

To specify the minimum / maximum Aircraft Height / altitude at the point of dispatch of equipment / troops when the equipment is being used within an operational context or training role.

To specify the heading, relative to wind, of the Aircraft at the point of dispatch of equipment / troops.

To specify the Aircraft attitude at the point of dispatch of equipment / troops.

To specify the Aircraft flap setting at the point of dispatch of equipment / troops.

To specify the position of deflector doors during the dispatch of equipment/troops.

To specify how the stores loads are to relate to the Aircraft's centre of gravity.

#### 4. Calculated Air Release Point

To specify how the point of release / dispatch is to be calculated. Where this is included in another Air Publication / document, the relevant reference must be shown.

#### 5. Dispatch Procedures

To specify the dispatch procedures to be adopted on the Aircraft type. Where this information is set out in another Technical Publication / document, the relevant reference must be shown.

To specify the maximum number of parachutists in a 'stick' when operating from the Aircraft ramp and / or the Aircraft's side doors.

#### 6. Emergency Procedures

To specify any emergency procedures that must be complied with on that particular Aircraft type (i.e. Hung-up Parachutist Release Assembly (HUPRA) for static line parachuting). Where this information is set out in another Technical Publication / document, the relevant reference must be shown.

#### Part C - Aerial Delivery Equipment

This part of the CAERC contains clearances and limitations for the in-service cargo and equipment dropping systems authorized for use by the MOD. Information pertinent to the safe use of the equipment from specific Aircraft types is found is associated Annexes to the Section. Each section covers a specific Delivery Equipment, within which are Annexes covering specific clearances and limitations for the dispatch of the equipment from cleared airborne platforms.

#### Part C Section / Annex Layout

Each Section / Annex is constructed as Part B.

#### Part D - Ancillary Equipment.

Within this Part of the CAERC are individual sections covering stand-alone in-service ancillary systems authorized for use with, or in support of, items in Parts B and / or C.

#### Part E - Temporary Information.

Part E is reserved for the 'Management of Temporary Information', Clearances included in this section are to be of a genuinely transitory nature (eg the clearance of a modification for a short duration trial after which it will be removed); or included within this part through operational necessity as a temporary amendment, pending its inclusion in the appropriate part at the next formal amendment of the CAERC. Each element of Part E will have been derived from a supplementary Safety Assessment and provide information (limitations) on one or more aspects. This Part may also be used to promulgate other urgent information to operators pending formal amendment of operator publications. This part may also be used for time-limited clearances (eg specific to an operation or exercise), and where it is expected that they will not form part of the CAERC in the longer term.

This Part is sub-divided as follows:

- E1 Temporary Clearances.
- E2 Temporary Restrictions.
- E3 Temporary Information Notices.

The format and content of Part E is as for an RTS (see RA 1300).

#### Part F – CLE / OEC

The purpose of Part F is to record where information has been included within the CAERC that has not been derived from a fully substantiated Safety Assessment; such clearances are termed 'Clearances with Limited Evidence: (CLE). Each CLE will be integrated into the appropriate part of the CAERC and identified as a CLE. Such clearances are subject to periodic review, frequent amendment and some may be applicable only to certain operating units or specific airborne platforms. Following a periodic review or change to such clearances, the applicability and validity of the CLE may change.

An OEC can be applied to a clearance residing in the main body of the CAERC. The OEC must include an indication of the reason for identifying it as a high Risk clearance. A full explanation of the Risks must be retained by the TAA in the Audit trail.

Part F is sub-divided as follows:

#### F1 Record of CLE.

#### F2 Record of OEC

The information in Section F 1 and F 2 must provide:

The title of the CLE / OEC

A Record of all current CLE / OEC

The review period of the CLE / OEC (iaw RA 1300)

The arrangements for withdrawal of each CLE / OEC.

The location within the CAERC of the details of each CLE / OEC

#### F 1 Record of Clearances with Limited Evidence

CLE No	Location of CLE	Title of CLE	Arrangements	Review Date
			for Withdrawal	

#### F 2 Record of Operational Emergency Clearances

			1	
OEC No	Location of	Title of OEC	Arrangements	Review Date
	OEC		for Withdrawal	

#### Part G - CAERC History

Part G provides a history of the CAERC and is sub-divided as follows:

**G1** Audit Trail. This includes reference to the Point of Contact within the AE DT for all evidence used in constructing the clearances.

**G2. Amendments**. This provides a list of areas affected by subsequent amendments to the CAERC.

# Parachute Training Device (PTD) Qualification Statement

PSTD Number:	Insert
Serial Number:	Insert
Parachute System Type(s):	Insert Parachute System Type(s)
Located at:	Insert PTD location address

#### **PTD Data Sheet**

A	Mark or Variant of Parachute System:	Insert Parachute System Mark / Variant
В	Visual System:	eg Head mounted display
С	Weather and Environmental:	eg Day or Night
D	Additional Capabilities:	eg with Equipment, O2 system
E	Restrictions or Limitations:	Insert any restrictions on qualifications and currency. Insert any training objectives that cannot be conducted in the PTD. Insert specific profiles that cannot be conducted in specific environmental conditions
F	Material Differences to Live Parachute System:	Insert any differences between the PTD and the Live Parachute System
G	Risk of Negative Training that may Increase Risk to Life (RtL) in Live Parachute System:	Insert any profiles that may induce negative training for the live Parachute System and increase RtL

Н

Guidance Information for Training, Testing and Checking Considerations

Currency	Yes / No If Yes, list currency training regimes that can be conducted
Competency	Yes / No If Yes, list all competency training regimes that can be conducted
Certificate of Qualification on Type	Yes / No If Yes, list any restrictions and limitations that should also be recorded at line L
Proficiency Checks	Yes / No If Yes, list all proficiency checks that can be conducted

Other

# **RA 2355 - Static Line and Freefall Parachuting**

Rationale	► Due to gaps in Regulatory requirements within this Regulatory Article (RA), a new series of RAs have been created to cover Parachuting activity. Therefore, the regulatory requirements of this RA have been incorporated into RA 1701 – MOD-approved Airborne Forces Equipment, RA 1702 – MOD-approved Aerial Delivery Equipment, RA 1703 – Use of Foreign Military Airborne Forces Equipment and RA 1704 – Use of Non-Combat Parachutes and Ancillary Equipment for Military Purposes
Contents	<ul> <li>2355(1): ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1703 </li> <li>2355(2): ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1704 </li> <li>2355(3): Withdrawn – Incorporated into RA 2357<sup>14</sup></li> </ul>
Regulation 2355(1)	Approval for Static Line and Freefall Parachuting 2355(1) ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1703. ◄
Acceptable Means of Compliance 2355(1)	<ul> <li>Approval for Static Line and Freefall Parachuting</li> <li>1. ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1703.</li> </ul>
Guidance Material 2355(1)	Approval for Static Line and Freefall Parachuting         2. ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1703.
Regulation 2355(2)	Procedures for Static Line and Freefall Parachuting 2355(2) ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1704. ◄
Acceptable Means of Compliance 2355(2)	<ul> <li>Procedures for Static Line and Freefall Parachuting</li> <li>3. ► Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1704.</li> </ul>
Guidance Material 2355(2)	<ul> <li>Procedures for Static Line and Freefall Parachuting</li> <li>4. ▶ Withdrawn – Incorporated into RA 1701, RA 1702 and RA 1704.</li> </ul>
Regulation 2355(3)	Procedures for Fast Roping and Abseiling 2355(3) Withdrawn – Incorporated into RA 2357.
Acceptable Means of Compliance 2355(3)	<ul> <li>Procedures for Fast Roping and Abseiling</li> <li>5. Withdrawn – Incorporated into RA 2357.</li> </ul>

<sup>&</sup>lt;sup>1</sup> ► Refer to RA 2357 – Troop Insertions and Extraction Systems. ◄

Guidance	Procedures for Fast Roping and Abseiling
Material	<ol><li>Withdrawn – Incorporated into RA 2357.</li></ol>
2355(3)	