Virtual Rear-crew Training System (VRTS)

USER REQUIREMENT DOCUMENT
V6.0

USER REQUIREMENTS DOCUMENT (URD)

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CONTENTS

PART 1

1 GENERAL DESCRIPTION

This document is the catalogue of User Requirements that describe the training and operational outcomes required to be delivered by the Virtual Rear-crew Training System (VRTS). These user requirements have been developed through a series of Joint Workshops with Air Mobility Force (AMF) HQ, XXIV Sqn, and the Technology Innovation Cell (TIC) and are endorsed by the DDH and Senior User. The requirements within this User Requirement Document (URD) focus on the current high-risk training objectives held within the Residual Training Gap Statement (RTGS) as well as the cost and resource savings which could be realised through the provision of this alternate method to live training.

1.1 SINGLE STATEMENT OF NEED

There is a requirement to provide a virtual training system for Atlas and C17 rear-crew[1] to address gaps within the RTGS and which cannot currently be delivered by existing live or synthetic means. The system should allow for Rear-crews to interact in a controlled, team training environment while offering increased realism and flexibility.

1.2 BACKGROUND

XXIV Sqn deliver training to all Atlas and C17 air and support crews. A lack of aircraft and resource[2] availability for FGen has highlighted the need to provide alternative methods of training. Additionally, there are core requirements which cannot be conducted 'live' due to their inherent risk. Although current synthetic methods[3] fulfil some key objectives, developments within this field offer the potential to reduce training gaps and risk, by providing the ability to conduct dynamic and high-risk events virtually.

While the requirement for a new training solution has been driven by the need to address specific training risks and shortfalls, equally important is its role in the development of next generation training for the AMF in line with direction set out in the Astra Training Vision.[4]

1.3 OPERATIONAL CONTEXT

With the need for AMF assets to remain operationally focused, a holistic solution is required to ensure that the training requirements are met for all user groups. Synthetic training in all skill sets forms an essential part of this approach, reducing the risk to life and ensuring that training to an As Low As Reasonably Practicable (ALARP) and tolerable level is achieved. Use of Synthetics is also integral to reducing costs and the non-operational draw on live assets.

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[1] The term rear-crew includes Loadmasters and mission specific specialists such as Air Movements, Aero-Medical, Air Despatch, and Parachutist Despatch personnel.
[2] Equipment such as Smoke Flame Floats (SFF) are limited to operational use only.
[3] Cargo Hold Trainer-Enhanced (CHT-E) for Atlas and Rear-crew Simulator for C17.
[4] Astra - Training (sharepoint.com)

Provision of a VRTS will enhance the existing training system through the following means:

Resource Saving. The use of this system will reduce the consumption of resources, such as live ac flying hours and aerial delivery consumables. It will also provide the opportunity for skills and procedures to be honed before the use of live load/aircraft/enablers, thus preserving resources for operational tasks.

Redundancy. The procurement of an additional and complimentary training aid will provide redundancy in the event of the loss of availability of one of the conventional synthetic devices. Use of synthetics enables the training provider to draw on the other resources available to ensure both ab-initio and qualified crews can continue to conduct mission specific training without it impacting timeframes or quality of training.

Risk Reduction. The ability to conduct high tempo, high risk and high stress scenarios and tasks within a realistic yet safe environment will help to provide confidence to both the front line and risk owners that crews are trained to the highest standards possible in line with agreed training outputs.

Flexibility. The VRTS should be quick and easy to set up and initialise by the instructor and, unlike current synthetic systems, would require no additional contractor support. The VRTS has the potential to support the front line for short notice tasking, and the ability to train personnel without impacting wider defence output.

Crew Qualification. VRTS is intended to support the option to maintain an increased number of crews qualified and current to conduct high-end, high risk taskings. 206 Sqn will form part of the acceptance team, conducting a RA2375 on the system to assess the potential Training Credits.

1.4 OPERATING ENVIRONMENT

A400M and C17 are global airlifters which are required to operate in non-benign environments and fulfilling a broad range of strategic and tactical roles. The VRTS solution should be able to replicate the cargo compartments of both aircraft across respective environmental and operational envelopes and for the freight models and training scenarios identified by the end user. The system should include the ability to add to the models and scenarios to meet the evolving capabilities of the supported aircraft types.

1.5 APPLICABLE ACQUISITION STRATEGY

To purchase a multi-platform Virtual Rear-crew Training System for Loadmasters and support crew. The equipment will be located at XXIV Sqn, RAF Brize Norton with a dedicated resource set to fully maximise the systems potential. Advice and direction in the suitable acquisition of a system will be provided by DE&S, XXIV Sqn end users and the TIC. Where the Contract allows, the TIC will integrate with the contactors to provide further models and support.

1.6 REQUIRED IOC AND FOC DATES

Many of the activities that will be trained using the VRTS are yet to be fully captured and are associated with capabilities that will be delivered between 2023-2026. Specifically, the future Training Scenarios[5] relating to air drop procedures which will be developed during flight trials. The list of the 6 IOC Training Scenarios for both C17 and A400M is at Annex A. An iterative approach has been taken due to the A400M and C17 still developing additional capabilities which will result in an extended period between IOC and FOC as new training scenarios are added. The capability development profile is as follows:

IOC	30 Sep 23	Delivery of Systems including 6 developed Training Scenarios, 3 specific to the Atlas and 3 for the C17.
FOC	31 Mar 26	Delivery of additional 2 Training Scenarios per platform in each of FY 23/24, 24/25 and 25/26.

[5] The term Training Scenario relates to a scripted training exercise, which details the Training Objectives to be achieved. This would include the definition of initial conditions, cargo loads, the required control panel hotspots, and any other interactive component.

Capability Milestone	Required Date	VRTS High Level DLOD Impact	
IOC **FOC**	15 Sep 23 15 Mar 26	Training	An Initial Train the Trainer package will be included during initial acceptance. However, due to the simplicity of operation, it is assumed that 24 Sqn would be self-sustaining in the work up of new operators. Any technical questions arising from use and onward development of the system would be covered by the support arrangement.
		Equipment	Two independent COTS based systems will be provided, each capable of providing VR training for at least 4 student participants. Each system supporting both Atlas and C17 Team Training.
		Personnel	During both initial and subsequent development phases, OC 24 Sqn will provide suitable Atlas and C17 Subject Matter Experts (SMEs) to complete the Training Design task including working with industry to develop the Training Scenarios. One instructor should be required to operate the VR System both in the set up and delivery of scenarios.
		Information	FsAST DT (SAC) will be responsible for the management of the system accreditation. The vendor will provide appropriate data as requested by SAC, with the system also adhering to the Secure by Design system (JSP 440 Part 2 V7.0) and NIST.
		Doctrine	DSAT – JSP 822 – Platform TNAs should be revisited to adjust Residual Training Gaps. Operational - The doctrine applying to live ac operations, will also be executed during the VR Training Scenarios.
		Organisational	Nil.
		Infrastructure	The equipment will be located and operated in the 24 Sqn HQ building, within a classroom currently used for C130J training (this will be vacated before delivery). Spare storage capacity can be provided for additional equipment.
		Logistics	There is the requirement for an in-service support element on this Project up to the 5 years (also with an option for additional 5 years of in-service support).

1.7 PLANNED OSD

The nominal VRTS OSD is 31 March 2033. However, given the rate of change of technical capability in this field, it is anticipated that the system requirement will be significantly expanded and possibly re-competed between yrs. 6 and 10.

1.8 DEPENDENCIES

To be managed by the Programme Delivery Team.

1.9 ASSUMPTIONS

To be managed by the Programme Delivery Team.

1.10 PROJECTED USAGE

Based on the steady state Atlas and C17 crew establishment, it has been determined that the maximum anticipated usage would be for 400 training sessions per year, with each session lasting 2 hrs, leading to a maximum system use of 800 hrs per year. Each 2 hr training session comprises:

30 min pre-brief and system initialization.

1 hr training

30 min debrief

PART 2

2 KEY USER REQUIREMENTS:

There are 7 KURs:

UR#	Requirement	Measure of Effectiveness		Validation	Remarks
		Threshold	Objective		
KUR01	The users[6] shall be provided with a VR based synthetic training aid.	The delivery and acceptance of a VR training systems.	N/A	Inspection: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
KUR02	The system shall enable cargo compartment Team Training for Atlas and C17 air and support crews.	The delivery and acceptance of a VR Team Training system.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	Digital data IP rights must be confirmed for both platforms.
KUR03	Two identical and independent sets of equipment are required.	The delivery and acceptance of 2 identical and independent VR training systems.	N/A	Inspection: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	The prime location will be 24 Sqn, RAF Brize Norton. However, it is possible that one set could be deployed in order to be closer to some users.
KUR04	Both sets of equipment shall be able to operate in either A400M or C17 mode.	The delivery and acceptance of 2 dual mode VR training systems.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	

[6] The primary target audience for VRTS are the Atlas and C17 Air Loadmasters and Support Crew, including Air Movements, Air Despatch, Parachuting Despatchers and Aero Med Staff.

KUR05	The system shall be capable of supporting a minimum of 4 student participants within the same VR training scenario	The delivery and acceptance of a VR system that supports Team Training by at least 4 student participants within the same scenario.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
KUR06	The user (instructor) shall be provided with an Instructor Operating Station (IOS), through which the conduct of the training session can be managed.	The delivery and acceptance of a system with an IOS through which the instructor can manage the conduct of the training session.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
KUR07	The user shall be provided with a system that complies with current MOD security policies and complies with NIST and JSP 440.	Successful completion of an independent security assessment of the system	N/A	Inspection: DES FsAST PT SAC	

PART 3

3. **USER REQUIREMENTS:**

There are 23 URs:

UR	Requirement	Measure of Effectiveness		Validation	Remark
		Threshold	Objective		
UR01	The user shall be provided with equipment that can complete all planned activity while maintaining high levels of availability.	The delivery and acceptance of a system capable of supporting the projected annual usage.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	Projected annual usage 800 per year.
UR02	The user (student) shall have the ability to train within a virtual Cargo Hold representative of an Atlas or C17.	The ability to complete training scenarios within virtual Atlas and C17 cargo holds.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	The level of interaction with control and indicators within the cargo holds, will depend on the training scenario.
UR03	The users (instructor) shall be able to select the Atlas or C17 mode during pre-session initialization as required for the scheduled training activity.	The platform mode (A400M or C17) should be selectable at the start of a training session.	N/A.	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR04	The user (student) shall be provided with a virtual training environment that is interactive allowing, interaction with aircraft controls and indicators when required during the conduct of a training scenario.	The ability for the student to interact with aircraft systems during training.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	Only those controls and indicators that are utilized during the specified Training Scenarios are required to be interactive.

UR05	The user (instructor) shall be provided with an IOS function to start/stop/restart the training scenarios as required.	The delivery and acceptance of a system with an IOS through which the instructor to control the start, stop and restart of a training session.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR06	The user (instructor) shall be provided with an IOS function to enable the observation of the student participants within the virtual environment during a training session.	The delivery and acceptance of a system with an IOS through which the instructor can observe the students actions within the virtual environment during a training session.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR07	The user (instructor) shall be provided with an IOS function to enable communication and interaction with the student participants within the virtual environment.	The delivery and acceptance of a system with an IOS through which the instructor can communicate with the student participants during a training session.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	

UR08	The user (instructor) shall be provided with a means of recording a training session, for playback during debrief.	The delivery and acceptance of a system with a debrief capability.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR09	The user (instructor) shall be provided with an IOS function to enable the activation or deactivation of equipment malfunctions, abnormal conditions or other events during the session as required by the training scenarios.	The delivery and acceptance of a system with an IOS through which the instructor can manage the input of events during the training session.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR10	The users shall be provided with a number of digital cargo load models each of which should be capable of use within both Atlas and C17 cargo compartment.	The cargo load models should be of a representative level of detail to support the interaction specified in the training scenarios.	N/A	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	The load models will include wheeled vehicles, palatized cargo and air drop loads. An indicative list of models to be delivered at IOC is at Annex A.
UR11	The user shall be provided with a system that can represent different environmental conditions, such as night/day or air/ground as selected by the instructor.	The ability to perform training scenarios in Atlas and C17 cargo holds under specified environmental conditions.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	

UR12	The users' (students) avatars shall be individually recognisable by role characteristics recognizable by other participants and the instructor within the virtual environment.	The participants should be able to be identified by role, but not by any personal image data	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR13	The users' (students) avatars shall be sufficiently detailed for all participants to be able to discern other team members' hand/arm signals.	The participants should be able to communicate by hand signals.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	Participant Avatar quality should reflect role characteristics and represent the whole body rather than just the head and hand wands. A key requirement is the ability to signal by hand movement to all other participants.
UR14	The user (instructor) shall be provided with the ability to initialize a training scenario in terms of aircraft type, cargo load, and abnormal or emergency events.	The system shall have an initialization function.	N/A	Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	The aim of the initialization function is to pre-plan as much as possible in order to minimize instructor workload once a training scenario is under way. However, there should always be the ability for the instructor to manually intervene during training.
UR15	The user (instructors) shall be provided with an initial Train the Trainer package.	Suitable familiarization package provided to an initial instructor cadre.	N/A	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	It is expected that following the initial train the trainer familiarization, 24 Sqn will be self-sustaining in terms of subsequent instructor training.
UR16	The users (instructors) shall be provided with documentation to enable them to operate the system.	The user shall be provided with a comprehensive Instructor Operating Manual (IOM).	N/A	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	

UR17	The VRTS shall be provided with through-life support.	The system shall be supported through life.	N/A	Inspection DES FsAST PT Contract.	The users shall be able to access technical queries/support during normal working hours within a reasonable timeframe.
UR18	The system shall be compliant with the UK Defence Modelling and Simulation Coherence (DMaSC) requirements, as prescribed in Pt2 of the 'Defence policy for modelling and simulation' (JSP 939).	The system shall be DMaSC compliant.	N/A	Inspection DES FsAST PT Contract.	
UR19	The users shall be provided with a system that will ensure only authorised users are provided with access.	User ID upon start-up and from standby mode in accordance with HMS IA Standard 7.	N/A	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR20	The user requires that the configuration of the %System% is accurately maintained throughout its operational life.	There is a up to date log of all changes and updates.	N/A	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR21	The user (C4I) shall be able to apply firmware/software patches on the System in accordance with MOD policies at level 2.	The System meets all military requirements and is regularly reviewed.	Security updates and patches are automatically installed without the need for user input.	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	Level 2 refers to maintenance by replacement, adjustment or minor repair including fault diagnosis and minor authorised modifications, within specified times, using generally provisioned resources. This includes equipment returned as faulty which is still under the manufactures warranty.

UR22	The user requires that the System is protected from unauthorised changes.	No changes are made without authorisation.	N/A	Inspection and Functional Test: Acceptance Team comprising 24 Sqn Atlas and C17 lead instructors, and DES.	
UR23	The users shall be able to maintain data storage in line with defence guidance.	The systems shall be accredited to UK MoD Official Sensitive.	N/A	Inspection DES FsAST PT Contract.	

CONTEXT DOCUMENTS

Referenced and associated documents:

- A400M and C17 scenarios see Annex A

Annex A

VTRS Training Scenarios – Indicative List of Required Freight Models Required for IOC

Modelled freight items should be capable of use within types of aircraft. Each item model may be used unlimited times within the same scenario. The IOC list will be added to incrementally as new capabilities are added up to FOC. An indicative list for this initial iteration is as follows:

Palletized Load A – 463L Pallet with netted loose freight - Jettison Capable.

Palletized Load B – 463L Pallet with netted stack of various Lacon boxes - Jettison Capable.

Palletized Load C – 463L Pallet with netted tri-wall boxes - Jettison Capable.

Palletized Load D – Linked double 463L Pallets with long/tall load 1 - non-Jettison Capable.

Palletized Load E – Linked double 463L Pallets with long/tall load 2 - Jettison Capable.

Mixed Loose Freight A – 3 Large Oxygen Cylinders.

Mixed Loose Freight B – Large Wooden Crate.

Mixed Loose Freight C – AMOS Oxygen Consol.

Wheeled Freight A - Small Vehicle.

Wheeled Freight B – Large Vehicle.

Wheeled Freight C – Cooling Trolley.

AD Load CDS (single container – can be multiple instances) – CDS Load can be loaded 24 at a time, 6 slight variations are required for the instructor to mix as required.

AD Load ASRA

Training Scenarios Required at IOC:

C17 Trg Scenario #1 - Conduct Smoke, Fire and Fumes Training

C17 Trg Scenario #2 - Conduct Emergency and Survival – Crash/Ditching Drills

C17 Trg Scenario #3 - Conduct Reverse taxi Operations

Atlas Trg Scenario #1 - Conduct Emergency and Survival – Crash/Ditching Drills

Atlas Trg Scenario #2 - Conduct ASRA Maritime Air Drop

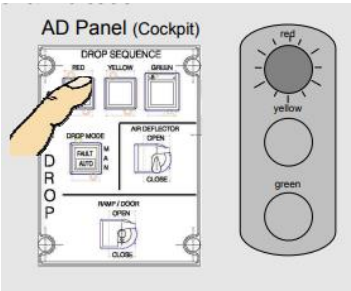
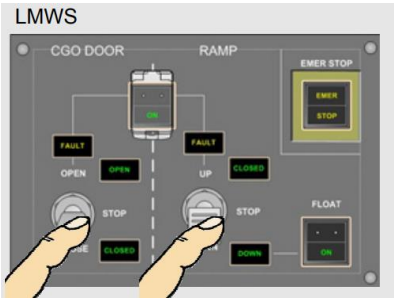
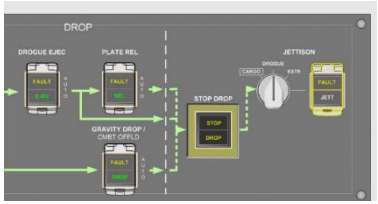
Atlas Trg Scenario #3 - Conduct CDS Air Drop (Gravity ERG)

An example of the Atlas Trg Scenario #3 (CDS Air Drop) is as follows:

Indicative Training Scenario Example – A400M CDS Air Drop

A400M Trg Scenario #3 - Conduct CDS Air Drop (Gravity ERG)			
Mission Phase	**Instructor Actions**	**Student Actions**	**Effect**
VRTS Initialization	Brief Exercise Select Training Scenario Select Cargo Config Select Planned Malfunctions: None Elec/ERG Failure Jammed Load Select Day/Night Set Ex Time Ref (inc Phr)	Brief Exercise Read Student Study Guide	VRTS Initialized by instructor whilst students plan exercise and read study guide.
Engine Start – 3 hrs	Config ac for loading	ALM – Pre-Load (LRH NOR-LOAD) AD – Pre-Load C/L	ALM and AD check the cargo hold preparation and role equipment fit before accepting load.

Loading	Jump to Loading Phase when ready	ALM – Loading LRH TCL-AD-PREPG) AD – Loading C/L	Atlas Loader transports CDS containers to the aircraft ramp sill. ALM and AD load containers and place them at the pre-planned positions ready for despatch.
Load Inspection	Apply Malfunctions if Required	ALM – Load Inspection (LRH TCL-AD-ALC) AD – Load Inspection C/L	ALM and AD conduct post load inspection.
Pre- Eng Start	Role Play 'Despatch Crew Brief'	ALM-AD Crew Brief C/L	ALM and AD, with instructor role playing the pilot, conduct a pre-flight Despatcher Brief.
Take-Off	Select Air Mode		
Drop – P-10 (Drop Preparation)	Role Play '10 Mins Prepare for Action'	ALM – Drop Preparation (LRH TCL-AD-GERG) AD – Drop Preparation C/L	Instructor role plays pilot Prepare for Action call and puts the Red Light On via the IOS. ALM and AD Prepare the Load for despatch, including removing any additional transit restraint if used.

	RED Light On 		
Drop P-4 (Pre-Drop)	Role Play 'Speed Below 200kts' 'Aircraft Depressurized' 'Auth Ramp/Door Open)'	ALM – Pre-Drop Checks (LRH TCL-AD-GERG) AD – Pre-Drop C/L  	Instructor role plays pilot Pre-Drop Checks, and authorizes the Ramp and Door opening. ALM opens the Ramp and Door from the LMWS and completes Pre-Drop Checks.

Drop P-30Sec	Role Play ’30 Seconds’	ALM – 30 Seconds Before Drop LRH TCL-AD-GERG AD – 30 Seconds Before Drop	Instructor role plays pilot 30 seconds call ALM and AD hand signals to crew members not on intercom ALM Arm ERGs and Check Status on LMWS
Drop P-15 Sec	Role Play ’15 Seconds’ ‘Action Stations’	ALM – 15 Seconds Before Drills (Hand Signals) AD – 15 Seconds Before Drills (Hand Signals)	Instructor role plays pilot ‘Action Stations’ call ALM and AD hand signals to crew members not on intercom
Drop P-5 Sec	Role Play ‘Yellow Light’ Yellow Light Activates	ALM – Yellow Light Drills (Hand Signals) AD – Yellow Light Drills (Hand Signals)	Instructor role plays pilot ‘Yellow Light’ call and puts the Yellow Light On via the IOS. ALM and AD hand signals to crew members not on intercom

Drop P-0 **Option 1:** **Normal Drop**	Role Play 'Green Light' Green Light Activates	ALM – Observe Drop Progress AD – Confirm Good Despatch C/L	Instructor role plays pilot 'Green Light' call and puts the Green Light On via the IOS. The IOS Green Light selection will initiated the automatic release. ALM and AD hand signals to crew members not on intercom
Drop P-0 **Option 2:** **Malfunction:** **Electrical Fault ERGs Fail to Operate**	Role Play 'Green Light' Green Light Activates Check Malfunction Active		Instructor role plays pilot 'Green Light' call and puts the Green Light On via the IOS, with ERG Malfunction programmed. ALM press Stop Drop button and Check Red Light On Stop Drop Button cycles drop lights to Red. ALM and AD carry out failure to drop actions.
Drop P-0 **Option 3:** **Malfunction: Jammed Load**	Role Play 'Green Light' Green Light Activates Check Malfunction Active	ALM – Load Emergency C/L LRH TABN-TABN-16 AD – Load Emergency C/L	Instructor role plays pilot 'Green Light' call and puts the Green Light On via the IOS, with Jammed Load Malfunction programmed. ALM press Stop Drop button and Check Red Light On Stop Drop Button cycles drop lights to Red. ALM and AD carry out Jammed Load actions.
After Drop	Role Play End of Drop	ALM – After Drop C/L LRH TCL-AD-GERG	Instructor role plays pilot 'Red Light' call and puts the Red Light On via the IOS.

	‘Red Light’ Red Light Activates	AD – After Drop C/L	ALM Closes the Ramp and Door and with AD complete the remainder of the After Drop Checks.
Egress	Role Play Red Light Off	ALM – Complete all Procedures AD – Complete all Procedures	Instructor role plays pilot ‘Red Light Off’ call and removes the Red Light On selection on the IOS. ALM Closes the Ramp and Door and with AD complete the remainder of the After Drop Checks.
De-Brief	Conduct Exercise De-Brief Replay Exercise Recording, using fast forward/reverse, or another method of navigating the timeline efficiently Archive the exercise recording if required.	Attend De-Brief	ALM and AD attend joint De-Brief with instructor.