

Safety Equipment Technical Services Pty Ltd ABN: 36 083 308 427

# MANUFACTURER INSTRUCTION & MAINTENANCE MANUAL (MIMM 200020)

# Dispatcher Restraint Strap [Capewell]



Issue 2

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## **GENERAL**

This MIMM replaces all previous SETS Dispatcher Restraint Strap (Capewell) Operating Instructions & Limitations and SETS Dispatcher Restraint Strap (Capewell) Installation Instructions and Limitations documents.

This manual is provided for use with the Dispatcher Restraint Strap (Capewell) (HW-DRS[C]) assembly and provides manufacturer and maintenance instructions to the user/operator when utilising and caring for this equipment.

The SETS Dispatcher Restraint Strap (Capewell) is approved to the Australian Technical Standard Order ATSO-C1001 which prescribe the minimum performance standards which must be met by this equipment. This equipment is utilised for aircraft internal cabin restraint. It is the responsibility of the user/operator to ensure that the installation of the SETS Dispatcher Restraint Strap (Capewell) on or within an aircraft to determine that the aircraft's installation conditions are within the approval requirements. The SETS Dispatcher Restraint Strap (Capewell) may only be installed if further evaluation, by the user/operator, substantiates an acceptable installation and is approved by the local Civil Aviation Safety Authority or other approved local representative

If the SETS Dispatcher Restraint Strap (Capewell) is used in conjunction with other non-SETS equipment, then it is the responsibility of the user/operator to ensure reference is made to the other manufacturer user/instructions. It should describe the equipment for information concerning technical data, instructions for use and operating limitations.

### APPLICABLE MODELS

All SETS HW-DRS [C]

Dispatcher Restraint Strap (Capewell) HW-DRS [C- - - ]

# **AMENDMENT RECORD**

- 1. All amendments to content are to be recorded below;
- 2. All new content inserted during an amendment will be shown with a vertical line in the margin indicating the extent of the amended portion.

Amendment		Summary	Incorporated	
No.	Date	Sections/Pages Affected	Date	Name
1	05-2023	Document Release	05-2023	J. Berman
2	01-2025	Document Rewrite and Release	01-2025	J. Berman
3				
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# 1. Limitations of Use

The SETS Dispatcher Restraint Strap (Capewell) assembly HW-DRS [C] is not designed for use on its own, it is designed for use in conjunction with a SETS Restraint/Rescue Harness assembly approved to ATSO-C1003, to enable the user to attach to the aircraft and allow movement within the cabin during flight.

SETS Restraint/Rescue Harness manual is separate to this manual

The SETS Dispatcher Restraint Strap (Capewell) should only be used by personnel who have been trained in the correct fitting, assembly, disassembly and emergency release of the associated restraint strap. The user/operator must be familiar with the equipment limitations and guidelines as set out in this manual and in any additional Approved Installation which the operator may gain.

#### CAUTION

The SETS Dispatcher Restraint Strap is not a 'seat belt'. It is provided for use to restrict the movement of the user inside the aircraft cabin when not in a seat and seat belt/harness.

The length of the Dispatcher Restraint Strap should be confirmed and if necessary, adjusted prior to each use to ensure that the user's body will not be outside the aircraft during 'doors open' or 'doors off' flight operations.

The Dispatcher Restraint Strap should be used in conjunction with an approved aircraft attachment point which has been established and approved as an appropriate connector to the aircraft.

The Safe Working Load of the SETS Dispatcher Restraint Strap is for use by one single human load with a total weight including equipment of 200kg/440lb

#### **NOTE**

SETS Dispatcher Restraint Strap requires additional approval prior to installation onto the aircraft. Refer to that approval for any additional requirements.

#### **CAUTION**

Any modifications, additions or alterations to any part of the SETS Dispatcher Restraint Strap assembly must be approved prior to use.

If any part of the webbing, hardware or stitching becomes exposed to corrosive or hazardous chemicals, the SETS Dispatcher Restraint Strap should be removed from service.

Any repairs must be completed & certified by SETS prior to placing the Dispatcher Restraint Strap back into service.

If any part of the assembly is worn or damaged, consult this manual or SETS directly to establish the serviceability of the assembly prior to next use.

# 2. Design & Construction

### 2.1 Restraint/ SETS Dispatcher Restraint Strap

# HW-DRS [C]

The SETS Dispatcher Restraint Strap [C] is designed to be attached to the SETS Restraint/Rescue Harness at the left or right hip block by the user and to an approved attachment point in the aircraft at the other end.

2.2 The SETS Dispatcher Restraint Strap [C] is a three-part assembly:

Part A: Harness attachment end with the 'male' part of the Capewell

emergency release assembly

Part B: Centre adjustable strap with the 'female' part of the Capewell

emergency release assembly

Part C: Aircraft attachment end with adjuster.

#### **NOTE**

These three sub-parts all have an ID Tag attached with matching serial numbers detailing the complete assembly.

### 2.2.1 Attachment Hardware Options

TABLE 1: HARDWARE						
PART NUMBER	DESCRIPTION	USABLE ON	DASH NO.			
1234-1	SNAP, STEEL, CAD PLATE, SELF-LOCKING	SUBPART A & C	SLS			
SH906	SNAP, ALLUMINIUM, DOUBLE ACTION	SUBPART A & C	SLSD			
SH907	SNAP, ALLUMINIUM, TRIPLE ACTION	SUBPART A & C	SLST			
C847CB	CARABINER , STEEL, TRIPLE ACTION	SUBPART A & C	K1			
A595TBBZO	CARABINER , STEEL, TRIPLE ACTION	SUBPART A & C	K2			
KL202SSP1	CARABINER , STEEL, TRIPLE ACTION	SUBPART A & C	K3			
VCT146500POASS	CARABINER, STAINLESS STEEL, TRIPLE ACTION	SUBPART A & C	KS			
MRNI10.0/VMRLOSS10	MAILLON, OVAL, STAINLESS STEEL, 10MM	SUBPART C	MR			
MRDI12.0/VMRDSS12	MAILLON, DELTA, STAINLESS STEEL, 12MM	SUBPART C	MD			

# Self-Locking Snap (Two Action & Triple Action):

- 1234, SH901, SH906 Two Action;
- SH903, SH907 Triple Action.

# Trip Lock Carabiner (triple action):

- A595;
- 146500PO ASS

### **Oval Link**

• 10mm Stainless Steel.

# Delta Ring

12mm Stainless Steel



Pic 1: Self-Locking Snaps





Pic 2: Carabiners





Photo 3: Maillon Rapide - Oval & Delta

# 2.4 Adjuster Hardware Options:

# Friction adjuster with or without spring



# 2.5 Emergency Release HW-DRS [C]:

Emergency Release Assembly consisting of a Capewell Release:

- Main lower body 'female' fitting
- Upper body 'male' fitting.



# 3. Use of Dispatcher Restraint Strap [C]

- 3.1 The user should first don the SETS Restraint/Rescue Harness assembly
- 3.2 Confirm the aircraft attachment end of the SETS Dispatcher Restraint Strap [C] is correctly fitted to an approved aircraft attachment point
- 3.3 Visually and physically confirm that the Capewell emergency release is correctly assembled. This does not require disassembly of the Capewell
- 3.4 The 'working end' of the SETS Dispatcher Restraint Strap [C] is then connected by the user at the left or right hip block D ring of the SETS Restraint/Rescue Harness
- 3.5 The length of the Dispatcher Restraint Strap [C] should then be adjusted prior to each use to ensure that the users' body will not be outside the aircraft during 'doors open' or 'doors off' flight operations. An elastic keeper is used to secure the loose end of the strap at the turn back.

#### **Operation of the Capewell Release Assembly**

### **Activation/Disassembly**

Pull back the top cover which exposes the wire release handle.
 Pictures 1 and 2



Picture 1



Picture 2

- Pull on the wire release handle Picture 3
- Capewell mechanism will separate Picture 4





Picture 3

Picture 4

# **Assembly**

- Lay the main body of the Capewell release on a flat surface and fold the latching mechanism back away from the main body - Picture 1
- Lay the rear bar of the triangular shaped piece into the slot at the front of the main body - Picture 2
- Push the triangular piece downward until flat Picture 3
- Push the latching mechanism downward into place Picture 4



Picture 1



Picture 2



Picture 3



Picture 4

- With the latching mechanism locked into place position the wire release handle under the cover lock groove at the rear of the main body - Picture 5
- Push the leading edge of the cover into the groove on the main body above the wire release handle - Picture 6





Picture 5 Picture 6

• Push the cover over the mechanism and snap into position to complete the assembly - Picture 7.



Picture 7

# 4. Storage

- 4.1 SETS equipment should be stored in a secure area. The storage area should be free of foreign matter, moisture, direct sunlight, extreme changes in temperature, high humidity and rodents.
- 4.2 SETS equipment should be stored away from other non-aircraft/industrial products.

#### **CAUTION**

Inappropriate storage of SETS Dispatcher Restraint Strap may lead to a deterioration of the strength of the webbing, stitching and hardware

# 5. Maintenance - General

- 5.1 The recommended maintenance schedules for the inspection of SETS equipment are as follows:
  - Before & After Use Check.
  - 12 monthly Inspection & Recertification by a CASA approved repairer/inspector.

#### NOTE

Any repairs of SETS Equipment is conducted 'on condition' due to damage or wear. This work may only be carried out by SETS.

Any repairs to SETS equipment will require a full inspection of the equipment prior to releasing.

# 6. Inspection

#### 6.1 Before & After Use Check

SETS equipment should be checked by the user/operator as follows:

- Check the webbing for any signs of major damage.
- Check the hardware for any signs of damage, ease of use and free of foreign matter.
- Check for any major corrosion on metal hardware, D rings and adjusters.
   If in doubt, contact SETS for advice.
- Check the stitching for any damaged or loose stitching or separating of webbing.
- Ensure the harness is identifiable by SETS ID tag/s or internal asset number.

#### NOTE

If the Dispatcher Restraint Strap has been exposed to a shock loading event it must be removed from service

### 6.2 12-Monthly Inspection & Recertification:

The yearly inspection & recertification is more detailed than the Before & After Use Check completed by the user/operator. It ensures the serviceability of all parts & components and is conducted by a suitably experienced & qualified inspector. This inspector should be authorised to issue CASA Approved Authorised Release Certificates (ARC).

SETS will issue an ARC on completion of any service/repair and/or annual inspection and recertification. The equipment will remain 'Approved' for use by SETS from the date on the ARC for a period of 12 months to the end of the month in which the ARC was issued.

SETS may in exceptional circumstances (as deemed by SETS) allow an additional +1 month tolerance to the yearly inspection and recertification if certain conditions are met. The user/operator should contact SETS for approval in relation to this request if it is required.

# 7. Service Life

- 7.1 SETS equipment has an identification label affixed to it. This label details:
  - Equipment description.
  - Model designation.
  - Date of manufacture.
  - Serial number.
  - Time expire date (TX Date).
  - Approvals applicable to the equipment.
- 7.2 ATSO Approved equipment has a life expectancy of 10 years from the date of manufacture regardless of any service, repairs or overhauls carried out on it during its in-service life.
- 7.3 SETS equipment should be withdrawn from service after the stated TX Date on the label. If there is no TX Date or this date is un-readable, then 10 years after the date of manufacture.
- 7.4 If the user/installer is unsure as to the TX Date of any of SETS equipment, they should contact SETS for confirmation and advice.

# 8. Cleaning

### 8.1 Post Saltwater Immersion/Exposure

To clean the Dispatcher Restraint Strap:

- Disassemble the Dispatcher Restraint Strap
- Thoroughly wash the assembly in clean fresh water.
- Thoroughly rinse the entire assembly in clean water, it is recommended a separate container/bucket is used – it may require several rinses.
- Air-dry the assembly naturally away from direct sunlight & away from any heating elements.
- Assemble the Dispatcher Restraint Strap
- When dry, lightly lubricate all hardware with LPS1/WD40 or similar anti corrosion lubricant. Spray the lubricant onto a rag & wipe over the hardware or carefully spray the hardware. Wipe or blow any excess off the assembly with an air compressor & complete the 'Before & After Use' Check.
- Ensure the entire assembly is dry prior to storage. If the webbing is stored
  wet, it may reduce the load capacity over time & it will wear the hardware
  plating prematurely around the hardware webbing bars & corrosion will
  occur.

#### 8.2 Fresh Water Immersion/Exposure

To clean the Dispatcher Restraint Strap:

- Disassemble the Dispatcher Restraint Strap
- Thoroughly rinse the entire assembly in clean water it may require several rinses.
- Air-dry the assembly naturally away from direct sunlight & away from any heating elements.
- Assemble the Dispatcher Restraint Strap
- When dry, lightly lubricate all hardware with LPS1/WD40 or similar anti corrosion lubricant. Spray the lubricant onto a rag & wipe over the hardware or carefully spray the hardware. Wipe or blow any excess off the assembly with an air compressor & complete the 'Before & After Use' Check.
- Ensure the entire assembly is dry prior to storage. If the webbing is stored
  wet, it may reduce the load capacity over time & it will wear the hardware
  plating prematurely around the hardware webbing bars & corrosion will
  occur.

#### **CAUTION**

If using soaps & detergents in the cleaning of SETS equipment, the product should be checked to ensure there would be no detrimental effect on the webbing, stitching & hardware. If in doubt, complete the washing in clean fresh water only

If using lubricants in the care of SETS equipment, the product should be checked to ensure there will be no detrimental effect on the webbing, stitching & hardware

# 9. Overhaul and Repair

9.1 Overhaul and Repair of the Dispatcher Restraint Strap may only be undertaken by SETS.