

# HELICOPTER RESCUE EQUIPMENT

Military, Coastguard and Civilian Search and Rescue (SAR) helicopters are tasked with the recovery of survivors and casualties from the sea and other difficult or inaccessible locations. To support this requirement Airborne Systems supply a range of helicopter rescue harnesses to lower the SAR crewman to the survivors and helicopter rescue strops to hoist the SAR crewman and survivor up to the helicopter.



## Helicopter Rescue Harness Mk 4

The helicopter rescue harness Mk 4 is fitted to the crewman and connected to the helicopter winch cable hook. It can be supplied in configurations to suit specific helicopter types and operating procedures. It consists of four main components:

- The harness assembly - A canvas bucket seat fitted with integral, adjustable body and leg straps.
- The suspension strop - A short strap to attach the harness to the helicopter winch cable hook.
- A quick release fitting - It connects the suspension strop to the harness.
- An extension strop - A strap of 1.8 m (72 in) in length to use as an additional connecting line between the harness and the helicopter winch cable hook.

The helicopter rescue harness Mk 4 is normally used in conjunction with the Helicopter Rescue Strop (See overleaf).



## The Hi-Line Transfer Assembly

During rescue operations at sea, there is danger of the SAR crewman being struck by the ship's masts or rigging. The Hi-Line Transfer Assembly enables the helicopter to be positioned to one side of a ship during rescue operations. Prior to lowering, the Hi-Line is positioned on the vessel's deck, then the helicopter moves clear of the vessel. The SAR crewman is lowered whilst the vessel's crew pull on the Hi-Line to guide the SAR crewman. The assembly consists of:

- A length of 7800 N (1750 lbs) braided rope.
- A line stowage container of rigid or fabric construction.
- A lowering weight.

### TECHNICAL DATA

Assembly		Part No.	NATO Stock Number
Helicopter rescue harness Mk 4		MRIGQ486	1670-99-105-7316
Hi-Line transfer assembly 46m (150 ft)	Fabric stowage container	MRIGQ1139	1680-99-750-2705
Hi-Line transfer assembly - 28 m (90 ft)	Rigid stowage container	MRIGQ1705/A	1680-99-573-6687
Hi-Line transfer assembly - 46 m (150 ft)	Rigid stowage container	MRIGQ1705/B	1680-99-573-6688
Hi-Line transfer assembly - 61 m (200 ft)	Rigid stowage container	MRIGQ1705/C	1680-99-573-6689
Hi-Line transfer assembly - 76 m (250 ft)	Rigid stowage container	MRIGQ1705/D	1680-99-573-6690

#### Airborne Systems North America

5800 Magnolia Avenue • Pennsauken, NJ 08109-1399, USA  
 Tel: 856 663 1275 • Fax: 856 663 3028

#### Airborne Systems Canada Ltd.

35 Wilson Ave. • Belleville, Ontario • Canada, K8P 1R7  
 Tel: 613 967 8069 • Fax: 613 967 0469

#### Airborne Systems Europe

Llangeinor • Bridgend CF32 8PL • United Kingdom  
 Tel: +44(0) 1656 72 7000 • Fax: +44(0) 1656 72 1100

# HELICOPTER RESCUE EQUIPMENT

## Helicopter Rescue Strop



The helicopter rescue strop is a nylon webbing strap fitted with D-rings at each end to attach the strop to the helicopter winch cable hook. A slider enables the strop to be drawn close to the body of the survivor. A webbing handle on the outside of the strop enables the SAR crewman to control and restrain the survivor.

The SAR crewman can easily fit the strop to injured and uninjured survivors. If required, the uninjured survivors can easily fit the strop without assistance. No special equipment or clothing is required.

Strops are available in various lengths over the D-rings. (see table below).

## Hypothermic Lift Strop



The hypothermic lift strop when used in conjunction with a standard rescue strop, allows survivors suffering from hypothermia to be lifted horizontally into the aircraft thus minimising the risk of a post-rescue loss of blood pressure.

The strop is a nylon webbing strap of 2.13m (84in) in length. Both strops are placed over the survivor's head and then the hypothermic strop is moved down to the lower legs of the survivor's body to put the survivor in a semi-recumbent position.

The illustration shows both lift strops; the hypothermic lift strop is blue, the helicopter rescue strop is yellow.

### TECHNICAL DATA

Assembly	Part No.	NATO Stock Number
Helicopter Rescue Strop—1.982 (6ft 6in)	GQD31299/1	1670-99-8510417
Helicopter Rescue Strop— 2.134 (7ft)	GQD31299/2	1670-99-5006332
Helicopter Rescue Strop—2.438 (8ft)	GQD31299/3	1670-99-7230495
Hypothermic Lift Strop	GQD40021	1670-99-5913623