

RescueStreamer® Technical Data Sheet

Overview

This document provides technical characteristics for RescueStreamer® products manufactured by Rescue Technologies Corporation, CAGE Code 1CFD4. Characteristics common to all products are listed first followed by characteristics specific to individual products.

RescueStreamer® Film

Film used for all RescueStreamer® products is

- High Density Polyethylene Extruded (HDPE)
 - Thickness .003 inches or 3 MILs
 - Color bright orange (NBS Special Pub 440, color 34)
 - Bright yellow available on special orders
 - Positively buoyant
 - Inert, non-hazardous
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Flotation Struts

Flotation struts used on RescueStreamer® products are hollow, air filled and sealed providing additional buoyancy and enhancing the overall flotation and stability of the deployed RescueStreamer®. Each RescueStreamer® product uses different diameter struts defined in the specific product sections below. Flotation struts are sonic welded to the film at optimal locations and perpendicular to the deployed length of the RescueStreamer®. This configuration prevents twisting of the film when deployed.

Attachment Bridles

Attachment bridles on SAR series products are manufactured using 80 pound test monofilament line, nylon swages and injection molded nylon shock cord clips.

Reflectivity

Passive light reflectors are SOLAS grade retro-reflective tapes installed at optimal locations on both side of the RescueStreamer® film. Retro-reflectors are standard on SAR 6/25 RR and can be installed on any RescueStreamer® product.

Legislative Compliance

All RescueStreamer® products are Berry and Kissell Amendment compliant.



SAR 6/25 MIL

Overview	SAR 6/25 MIL is the most compact RescueStreamer®. SAR 6/25 MIL provides passive day signaling capability on land, ice and at sea.
Applications	Typical uses include person mounted applications such as flight vests, PFD's and tactical load bearing equipment.
National Stock Number	4240 01 451 8752
Packaged Size	<ul style="list-style-type: none">• Diameter 5 1/8 inches• Length 6 inches
Deployed Size	<ul style="list-style-type: none">• Length 25 feet• Width 6 inches
Weight	<ul style="list-style-type: none">• 4.3 ounces
Flotation Struts	<ul style="list-style-type: none">• Quantity 9• Diameter 5/8 inches• Spacing on film every 37 inches
Performance Characteristics	<p>Visual acuity or detection range is 1.3 miles at 1500 feet altitude.</p> <p>Once deployed, SAR 6/25 MIL provides indefinite day signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away.</p> <p>SAR 6/25 MIL floats when stowed and deployed.</p>

SAR 6/25 RR

Overview	SAR 6/25 RR is identical in all respects to SAR 6/25 MIL with the one exception of installed retro-reflectors. SAR 6/25 RR provides passive day and night signaling capability on land, ice and at sea. Installed retro-reflectors reflect back aimed or ambient visible and infrared light sources.
Applications	Typical uses include person mounted applications such as flight vests, PFD's and tactical load bearing equipment.
National Stock Number	4240 01 451 8734
Packaged Size	<ul style="list-style-type: none"> • Diameter 5 1/8 inches • Length 6 inches
Deployed Size	<ul style="list-style-type: none"> • Length 25 feet • Width 6 inches
Weight	<ul style="list-style-type: none"> • 4.7 ounces
Flotation Struts	<ul style="list-style-type: none"> • Quantity 9 • Diameter 5/8 inches • Spacing on film every 37 inches
Retro-Reflectors	<ul style="list-style-type: none"> • Quantity 6 • Placement 3 each side of film • Spacing 76 1/2 inches
Performance Characteristics	<p>Visual acuity or detection range is 1.3 miles at 1500 feet altitude.</p> <p>Once deployed, SAR 6/25 RR provides indefinite day and night signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away.</p> <p>SAR 6/25 RR floats when stowed and deployed.</p>



SAR 6 MIL

Overview	SAR 6 MIL is a compact RescueStreamer®. SAR 6 MIL provides passive day signaling capability on land, ice and at sea.
Applications	Typical uses include one and two person life rafts or land based accessory survival kits installed in small aircraft or back country packs.
National Stock Number	4240 01 451 8756
Packaged Size	<ul style="list-style-type: none">• Diameter 6 1/8 inches• Length 6 inches
Deployed Size	<ul style="list-style-type: none">• Length 40 feet• Width 6 inches
Weight	<ul style="list-style-type: none">• 6.5 ounces
Flotation Struts	<ul style="list-style-type: none">• Quantity 14• Diameter 5/8 inches• Spacing on film every 37 inches
Performance Characteristics	<p>Visual acuity or detection range is 1.3 miles at 1500 feet altitude.</p> <p>Once deployed, SAR 6 MIL provides indefinite day signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away.</p> <p>SAR 6 MIL floats when stowed and deployed.</p>



SAR 11 MIL

Overview	SAR 11 MIL is the mid-sized RescueStreamer®. SAR 11 MIL provides passive day signaling capability on land, ice and at sea.
Applications	Typical uses include 7 through 16 person multi-place life rafts or accessory survival kits installed in small aircraft, helicopters and light armored vehicles.
National Stock Number	4240 01 451 8760
Packaged Size	<ul style="list-style-type: none">• Diameter 6 1/4 inches• Length 11 inches
Deployed Size	<ul style="list-style-type: none">• Length 40 feet• Width 11 inches
Weight	<ul style="list-style-type: none">• 11.5 ounces
Flotation Struts	<ul style="list-style-type: none">• Quantity 13• Diameter 5/8 inches• Spacing on film every 37 1/2 inches
Performance Characteristics	<p>Visual acuity or detection range is 1.5 miles at 1500 feet altitude.</p> <p>Once deployed, SAR 11 MIL provides indefinite day signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away.</p> <p>SAR 11 MIL floats when stowed and deployed.</p>



SAR 18 MIL

Overview	SAR 18 MIL is the largest RescueStreamer®. SAR 18 MIL provides passive day signaling capability on land, ice and at sea.
Applications	Typical uses include 20 through 50 person multi-place life rafts typically found aboard large ships.
National Stock Number	4240 01 451 8761
Packaged Size	<ul style="list-style-type: none">• Diameter 7 1/4 inches• Length 18 inches
Deployed Size	<ul style="list-style-type: none">• Length 40 feet• Width 18 inches
Weight	<ul style="list-style-type: none">• 20.4 ounces
Flotation Struts	<ul style="list-style-type: none">• Quantity 17• Diameter 3/4 inches• Spacing on film every 30 1/4 inches
Performance Characteristics	<p>Although not specifically tested, visual acuity or detection range exceeds 1.5 miles at 1500 feet altitude.</p> <p>Once deployed, SAR 18 MIL provides indefinite day signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away.</p> <p>SAR 18 MIL floats when stowed and deployed.</p>
International Distress Symbol	The black disk and square international distress signal installed on SAR 18 MIL has been certified by the U. S. Coast Guard as equivalent to Day Visual Distress Signals describe in 46 CFR 160.072.

Lighted RescueStreamer® Products

Overview

This section provides technical characteristics for lighted RescueStreamer® products. The Manual Deploy Lighted RescueStreamer® and the Self Deploying Infrared Streamer are discussed below. These two products, in addition to indefinite passive day signaling capability, provide active night signaling capability through the use of installed LiteTubes. Characteristics common to both products are listed first followed by specific characteristics in separate sections below.

Attachment Bridles

Attachment bridles used on lighted RescueStreamer® products are manufactured using Type 3 nylon cord and stainless steel dual ring swivels pull tested to 250 pounds.

LiteTube

LiteTubes installed on lighted RescueStreamer® products have the following characteristics

- Length 10 1/8 inches
 - Diameter 3 3/4 inches, 4 7/8 inches at the Reed switch
 - Weight 4.8 ounces
 - Light output High intensity red / orange light emitting diode array
 - Flashes S O S 60 times per minute
 - Alternating bright then dim display
 - Never fully extinguishes when actively flashing
 - Light signal duration Minimum of 3 night cycles
 - Automatic photo sensitivity illuminates at atmospheric dusk, extinguishes at atmospheric twilight
 - Batteries four CR 123 lithium cells
 - Battery life Four years from date of manufacture
 - Buoyancy Inherent positive buoyancy
 - Visual acuity or detection range Six miles at 3000 feet altitude
 - Reed switch activated during film extension
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Manual Deploy Lighted RescueStreamer®

Overview	Manual Deploy Lighted RescueStreamer® is the mid-sized RescueStreamer® designed specifically for integration in ejection seat survival kits where space limitations require small or compressible signaling configurations. The Manual Deploy Lighted RescueStreamer® is a capability consolidator due to the dual day and night signaling functionality. User organizations may remove dye markers, strobe lights, chemical light sticks and possibly pyrotechnics when the Manual Deploy Lighted RescueStreamer® is installed.
Applications	Designed for the Naval Aircrew Common Ejection Seat for installation in the life raft compartment. Typical uses include 7 through 16 person multi-place life rafts or accessory survival kits installed in small aircraft, helicopters and light armored vehicles.
Manufactures Part Number	NB-1140RR-1LT
National Stock Number	Not assigned
Packaged Size	<ul style="list-style-type: none"> • Diameter 10 3/8 inches • Length 11 inches
Deployed Size	<ul style="list-style-type: none"> • Length 40 feet • Width 11 inches
Installed Size	<ul style="list-style-type: none"> • Compressible Diameter 8 1/4 inches
Weight	<ul style="list-style-type: none"> • 18.8 ounces
Flotation Struts	<ul style="list-style-type: none"> • Quantity 13 • Diameter 5/8 inches • Spacing on film every 37 1/2 inches
LiteTubes	<ul style="list-style-type: none"> • Quantity 1
Performance Characteristics	<ul style="list-style-type: none"> • Visual acuity or detection range <ul style="list-style-type: none"> ➤ Day 1.5 miles at 1500 feet altitude ➤ Night 6 miles at 3000 feet altitude • Once deployed, NB-1140RR-1LT provides signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away. • NB-1140RR-1LT floats when stowed and deployed.



Self Deploying Infrared Streamer (SDIRS)

Overview	SDIRS is a mid-sized RescueStreamer® designed specifically for integration in the U. S. Air Force aircrew common ejection (ACES II) seat survival kit. This RescueStreamer® is a capability consolidator due to the dual day and night signaling functionality. User organizations may remove dye markers, strobe lights, chemical light sticks and possibly pyrotechnics when SDIRS is installed.
Applications	Typical uses include installation in tactical aircraft using the ACES II ejection seat. SDIRS is an ideal signaling solution for use in multi-place life raft assemblies.
Manufactures Part Number	SDIRS 11/40 MIL
National Stock Number	Not assigned
Packaged Size	<ul style="list-style-type: none">• Length 16 inches• Width: 11 1/2 inches• Height: 1 3/8 inches
Deployed Size	<ul style="list-style-type: none">• Length 40 feet• Width 11 inches
Installed Size Options	<ul style="list-style-type: none">• Flat install<ul style="list-style-type: none">➢ Length 16 inches➢ Width 11 1/2 inches➢ Height 1 3/8 inches• Bi-fold install<ul style="list-style-type: none">➢ Length 7 1/2 inches➢ Width 11 1/2 inches➢ Height 2 1/4 inches• Tri-fold install<ul style="list-style-type: none">➢ Length 5 1/2 inches➢ Width 11 1/2 inches➢ Height 3 inches
Weight	<ul style="list-style-type: none">• 31.2 ounces
Flotation Struts	<ul style="list-style-type: none">• Quantity 28• Diameter 7/8 inches

LiteTubes

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- Spacing on film every 17 inches
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- Quantity 2
 - Spacing on film 30 feet, first LiteTube installed 3 ½ feet from attachment bridle
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Self Deploying Infrared Streamer (SDIRS) continued

Valise System

SDIRS is packed in a black fabric valise that uses water soluble closure ties to secure the valise around the assembled RescueStreamer®. The water soluble ties are custom spun to close tolerance diameters designed provide a 13 minute time delay before deployment initiates. This 13 minute window allows the conscious pilot complete discretion to prevent deployment in the case where detection by enemy forces may occur. If the pilot is unconscious, incapacitated or otherwise unable to exercise deployment discretion, SDIRS will open and deploy automatically providing day and night signaling capability.

Performance Characteristics

- Visual acuity or detection range
 - Day 1.5 miles at 1500 feet altitude
 - Night 6 miles at 3000 feet altitude
 - Once deployed, SDIRS provides signaling capability until retrieved by the survivor. It will not dissipate, fade or drift away.
 - SDIRS floats when stowed and deployed.
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