

## MODEL NUMBERS

SAR-6H-TSD-MKII	Search And Rescue, 6 Person Capacity Life Raft, in Hard Fiberglass Container, with Toroidal Stability Device (TSD), and Standard Equipment.
SAR-6S-TSD-MKII	Search And Rescue, 6 Person Capacity Life Raft, in Soft Fabric Valise, with Toroidal Stability Device (TSD), and Standard Equipment.
SAR-6H-TSD-MKII-EXT	Search And Rescue, 6 Person Capacity Life Raft, in Hard Fiberglass Container, with Toroidal Stability Device (TSD), and Standard plus Extended Equipment.
SAR-6S-TSD-MKII-EXT	Search And Rescue, 6 Person Capacity Life Raft, in Soft Fabric Valise, with Toroidal Stability Device (TSD), and Standard plus Extended Equipment.

## SPECIFICATIONS

Rated Capacity	6 Person
Overload Capacity	9 Person
Buoyancy Tube Diameter	10.25 in.
Freeboard	20.50 in.
Raft Inflated Dimensions	99.00 in. L x 69.0 in. W x 48.5 in. H
Floor Area (total)	24.50 ft. <sup>2</sup>
Floor Area (per person)	4.00 ft. <sup>2</sup>
Buoyancy in Fresh Water	Total 1,500 lbs. Per Person 250 lbs.
Buoyancy in Salt Water	Total 1,540 lbs. Per Person 257 lbs.
Operating Pressure	2 p.s.i.
Operating Temperature Range	- 22°F to +150°F
Life Raft Hard Container Material	Hand-Laid Fiberglass
Life Raft Soft Valise Material	1,000 denier Cordura™
Aluminum Cradle Material	Anodized AL-6463-T55
Buoyancy Chamber Material	USCG Approved 16 oz./sq. yd. Urethane Coated Nylon Base Cloth (Exceeds MIL-C-17415-16AA)
Inflation System	Carbon Dioxide (CO <sub>2</sub> ) & Nitrogen (N <sub>2</sub> ) Gas Mixture
<b>SAR-6-TSD-MKII with Standard Equipment</b>	
Hard Container Dimensions *	36.5 in. L x 24.0 in. W x 13.5 in. H
Soft Valise Dimensions **	36.0 in. L x 24.0 in. W x 14.5 in. H
Weight in Hard Container ***	121 lbs.
Shipping Weight *§	145 lbs.
Weight in Soft Valise ***	102 lbs.
Shipping Weight *§§	124 lbs.
<b>SAR-6-TSD-MKII with Standard &amp; Extended Equipment</b>	
Hard Container Dimensions *	36.5 in. L x 24.0 in. W x 16.5 in. H
Soft Valise Dimensions **	36.0 in. L x 24.0 in. W x 16.5 in. H
Weight in Hard Container ***	135 lbs.
Shipping Weight *§	164 lbs.
Weight in Soft Valise ***	116 lbs.
Shipping Weight *§§	131 lbs.

### NOTE:

- \* Optional Cradle will extend the overall installed height and width dimensions of the Hard Container by approximately two inches.
- \*\* Soft Valise dimensions may vary from those indicated depending upon options.
- \*\*\* Weight may vary depending upon options.
- \*§ Weight includes Cradle, Hydrostatic Release, and "Drop Stitch" Inflatable Floor.
- \*§§ Weight includes "Drop Stitch" Inflatable Floor.
- Specifications are subject to change without notice.
- Patents Pending

**Manufactured with Pride in America**

By

**SWITLIK PARACHUTE COMPANY**  
 1325 East State Street Trenton, N.J. 08609  
 Phone: (609)-587-3300 Fax: (609)-586-6647  
 E-Mail: info@switlik.com Web Site: www.switlik.com

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PARACHUTE COMPANY

Established 1920

# SAR-6 MK-II

## LIFE RAFT

# The World's Best

## Blue Water-Offshore Life Raft ?

# ABSOLUTELY !!!

*The*  
**Search And Rescue Life Raft**

**Combining Quality, Value, & ...  
 A Name You Trust**

*The Search & Rescue MK-II, 6 Person Capacity Life Raft is based on our original Military Model LRU-20 Design, with an Advanced Canopy Configuration, Toroidal Stability Device (TSD), Rigid Boarding Step, and Extended Range Survival Kit.*

The introduction of the Mark-II version of our *Search And Rescue Life Raft* continues the *SWITLIK* tradition of providing the most advanced designs available anywhere to recreational yachtsmen. The *SAR-6-MKII* is the marine version of the air-droppable Life Raft (Model *LRU-20*) we designed for the United States Coast Guard's helicopters and fixed wing aircraft.

It combines three major features from our earlier designs:

- The convertible canopy of our Coastal-MKI Life Raft.
- The Toroidal Stability Device (TSD) of our original Search And Rescue-MKI Life Raft.
- The twin-tube boat-shaped hull of our USCG Approved SOLAS-6-MKI Life Raft.

..... into what is absolutely the World's Best Blue Water-Offshore Life Raft.

We build it using the toughest double-coated Urethane coated fabric and the best available components. Any survival or other Life Raft equipment that can be Coast Guard Approved, is. It is constructed with the same pride and to the same high quality control standards as all *SWITLIK PARACHUTE COMPANY* life-saving equipment.

### When designing a Life Raft,

decisions are made about the relative emphasis placed on each of the features that may affect occupant survivability. If that emphasis is misplaced, one raft's design may not be as "safe" as another. For example, a poorly designed canopy entrance may lessen survivability more than an enhanced stability system increases it.

The probability that a given feature will be utilized in a survival episode is also part of the designer's equation. The probability is near 100% that survivors will have to find a way into their raft, should they need it for whatever reason. Most reasonably prudent mariners, however, will do everything within their power to insure that they and their vessel will never be in "hurricane" conditions.

Cost is another compelling factor. We offer less expensive designs, but for the individual, who wants only the best, there is...

the *SAR-6-MKII*

### Canopy

Although necessary for protection from the elements, most life raft canopies create several problems. These include difficult entry into the raft, seasickness, restricted visibility, and dehydration. The *SAR-6-MKII* Life Raft helps solve these problems.

### BOARDING

One of the first problems you may encounter after inflation of your raft is simply getting into it. In rough sea conditions with the vessel rolling side to side and the raft bobbing up and down, the canopy entrance looks very small. Survivors are reluctant to jump onto the canopy or into the raft entrance for fear of tearing the canopy or injuring themselves. Climbing down into the raft from the side of your vessel may be impossible due to the violent motion. The only alternative: jump into the water first and then climb into the raft. This should be avoided because it greatly increases the risk of hypothermia once you're in the raft.

When the *SAR-6-MKII* Life Raft inflates, the canopy top is furled to one of the canopy support arch tubes leaving the entire center section of the raft completely open. This makes jumping or climbing into the raft from your vessel much easier. Once all survivors are safely aboard the raft, zipping up the two doors provides 360° protection from wind and wave action. If further protection is needed, the canopy top may be unfurled and quickly attached to the opposite arch tube with the two-inch wide Velcro® tapes. Further security is provided with a heavy-duty marine grade zipper.

### DEHYDRATION

Should you abandon your vessel in tropical areas, loss of body fluids through perspiration can quickly cause dehydration. Simply providing protection from the sun is not enough. If there are six raft occupants seated closely, fresh air is necessary to quickly remove body heat. This isn't possible in rafts having canopies with only one entrance.

### SEASICKNESS & LOOKING OUT

The claustrophobic canopy of most Life Raft designs often causes the survivors to become seasick within moments of boarding a raft due to loss of visual reference with the horizon. The configuration of the *SAR-6-MKII*'s canopy, with its two large door openings, allows all raft occupants to see the horizon from wherever they are seated. This feature also allows raft occupants to leave the canopy open, if conditions permit, to keep a continuous lookout in all directions for any rescue vessels or aircraft. In higher wind and sea conditions, the canopy doors may be raised to different levels while retaining wide lateral openings between them and the canopy top.

### HELICOPTER EXTRACTION

Lowering the raft doors and re-furling the top allows the occupants to be lifted directly from the raft into a rescue helicopter without first having to jump into the water.

### Toroidal Stability Device

The United States Coast Guard, after extensive comparative testing against Life Rafts stabilized with standard rectangular, Icelandic, or Hemispherical ballast systems, selected the *SWITLIK* Toroidal Stability Device (TSD) as the improved stability system for its air-droppable, 6-person capacity survival and rescue rafts.

The Royal Australian Air Force (RAAF), after similar testing, also selected the Toroidal Stability Device for its 6-person capacity air-droppable Life Rafts.

Both of these services tested Life Rafts equipped with TSD's in heavy weather conditions and tried, unsuccessfully, to capsize them with the down-wash from their helicopters.

### Boat Shaped Hull

Life Rafts are available in a variety of shapes – Round, Square, Rectangular, Hexagonal, Octagonal, and "Boat-Shaped" (Elongated Hexagonal or Octagonal). In a survival episode, there is a very good possibility that, through injury or exposure, one of the survivors may be in shock. One major advantage of a boat-shaped raft hull is that it offers a greater likelihood that an individual in shock may lie down with legs elevated. If no one is lying in the center of the raft, this configuration allows all occupants to fully extend their legs.

### Buoyancy and Floor Area

All Life Rafts are not created equal! Unless built to a regulated specification, raft manufacturers are free to apply whatever criteria they feel appropriate to the total Floor Area and Buoyancy of the raft in order to determine its capacity "Rating." This is why you'll see some advertising which states that the Life Raft is "*Name of Manufacturer-Approved.*"

The United States Coast Guard requires a minimum of 4 square feet of floor area and 212 pounds of buoyancy in fresh water per person to determine the capacity of a USCG Approved Life Raft. Rafts with floor area and buoyancy below these levels may be safe under most conditions. Just be aware that a raft with an 8-person capacity, rated at 3 square feet per person and 24 square feet of floor area is the same size as the *Switlik SAR-6-MKII* that offers 4 square feet and 250 pounds of buoyancy per person. Total floor area and buoyancy, however, become even more important considerations when the raft is filled to its "Over-Load" capacity. (Typically 50% above the rated capacity.)

These factors combined with the *SAR-6-MKII*'s large diameter buoyancy tubes and twin independent canopy arch-support tubes, provide full seated head and shoulder room for the all the rafts occupants. When comparing Life Rafts, be sure to look inside each of them and imagine what it would be like to be seated in it with five other people.

### Drop-Stitch Inflatable Floor

Shock is an important concern when people are forced to abandon ship. Even in temperate zones, raft occupants must do everything possible to insulate themselves from the cold water outside the Life Raft and separate themselves from any water that may be in the raft.

So-called "Double Floors" are merely a second layer of fabric attached to the bottom of the raft. When inflated, they do provide some insulation. Unfortunately, any water inside the raft remains on top of the floor and constantly comes into contact with the survivors. This greatly increases the rate at which their bodies lose heat and energy.

"Drop-stitch" material is two layers of fabric joined together with tens of thousands of equal length threads. When inflated in a Life Raft, it becomes a uniformly 3-inch-thick air mattress. The optional *Switlik* Drop-Stitch floor provides substantially better insulation than a double-floor.

Even better, it creates a bilge... People sit on top of the floor; water in the raft goes under it.

### Additional Features

Compare the features and equipment listed on the next page with those offered in any other Life Raft you're considering and,

**We're sure you'll agree that,  
The SAR-6-MKII is truly, ....  
The World's Best Life Raft.**

## FEATURES

### STANDARD FEATURES

- Toroidal Stability Device (TSD) Ballast System
- Twin Heavy Duty (840 denier) Nylon Buoyancy Tubes Coated on Both Sides with Abrasion Resistant Urethane
- Over-Lapped Seams Taped Inside and Out
- Raft Use Instructions Silk Screened on Buoyancy Tubes
- High Visibility Fluorescent Orange Canopy with Opaque Blue Inner Coating
- Two 4 feet Wide Canopy Doors and Convertible Canopy Top with Heavy Duty Marine Grade Zippers
- Storm Flaps with 2" wide Velcro® Closures over Canopy Zippers
- Twin Independent Canopy Support Arch Tubes
- 3 square feet of SOLAS Grade Retro-Reflective Tape on Canopy and Upper Buoyancy Tube
- 1.5 square feet of SOLAS Grade Retro-Reflective Tape on Life Raft Bottom
- Carbon Dioxide (CO<sub>2</sub>) / Nitrogen (N<sub>2</sub>) Inflation System (Operating Range of -22°F to +150°F)
- 30 feet of 2000 lb. Test Inflation / Mooring Lanyard
- USCG Approved Life Raft Interior Light with On/Off Switch
- USCG Approved Life Raft Exterior Locator Light with On/Off Switch
- Gel-Coated Hand-Laid Fiberglass Container or Abrasion Resistant Urethane Coated Cordura® Soft Valise
- Auto Deployed Military Specification Sea Anchor with 50 feet of 1,000 pound test Rode and Stainless Steel Swivel
- Heaving Ring and 100 feet of Floating Retrieval Line
- Life Raft Righting Strap
- High Proof-Test Attachment Points
- Rigid Boarding Step
- Boarding Ladder
- Boarding Hand-Holds
- 6 ea. Over-Pressure Relief Valves
- 4 ea. Manual Topping-Off Valves
- Rain Water Catcher
- Floating Life Raft Safety Knife
- Interior Grasp Lines
- Exterior Life Lines

### OPTIONAL FEATURES

- Marine Grade (6463-T55) Anodized Aluminum Deck Mounting Cradle for Hard Container
- USCG Approved Hydrostatic Release
- Independent "Drop-Stitch" Inflatable Floor
- Independent Heat Sealed Inflatable Floor
- *SWITLIK* Emergency Gear Bag
- ACR EPIRB
- *KATADYN® Survivor-06* Water Maker

## EQUIPMENT

### STANDARD EQUIPMENT

#### RAFT

- Raft Repair Clamp Kit (1 sm., 1 med., & 1 lg.)..... 1 ea.
- Hand Inflation Pump with 5" Extension ..... 1 ea.
- Pressure Relief Valve Plugs ..... 6 ea.
- Bailing Bucket ..... 1 ea.
- Sponges..... 2 ea.
- Paddles..... 2 ea.
- Equipment Bag (Large)..... 1 ea.
- Equipment Bag (Small)..... 1 ea.

#### SURVIVAL

- Survival Manual ..... 1 ea.
- Immediate Action Placard Hanging from Arch Tube... 1 ea.
- USCG Approved Folding Utility Knife ..... 1 ea.
- USCG Approved First Aid Kit..... 1 ea.
- USCG Approved Drinking Water ..... 33 oz.
- Water Bag..... 1 ea.
- Drinking Cup..... 1 ea.
- Sea Sickness Tablets ..... 36 ea.
- Can Opener..... 1 ea.

#### SIGNALING

- USCG Approved/SOLAS Parachute Flares..... 1 ea.
- USCG Approved/SOLAS Hand-Held Flares ..... 3 ea.
- USCG Approved Signal Mirror..... 1 ea.
- Water Proof Flashlight ..... 1 ea.
- Spare Batteries ..... 2 ea.
- Spare Bulb..... 1 ea.
- Whistle..... 1 ea.

### EXTENDED EQUIPMENT

**All Standard Raft, Survival, and Signaling Equipment, plus the following:**

- Spare Mil Spec Sea Anchor, Rode, and Swivel ..... 1 ea.
- USCG Approved Fishing Kit ..... 1 ea.
- USCG Approved Food Rations ..... 60,000 kJ.
- USCG Approved Drinking Water (Add'l) ..... 33 oz.
- Water Bag (Add'l)..... 2 ea.
- Compass (Lensatic, Liquid Filled - #468) ..... 1 ea.
- SPF 50 Waterproof Sun Screen ..... 4 oz.
- USCG Approved/SOLAS Parachute Flare (Add'l).... 1 ea.
- Dye Marker (Military Specification / Mil-S-17980) .... 1 ea.