Surface Rescue Swimmer School

Survivor Marker/Locator Devices

LT 4.6
INTRODUCTION

During this unit of instruction the rescue swimmer will learn about Survivor Marker/Locator Devices. This will help the rescue swimmer in identifying survivors and distinguish between the different types of markers being used. The rescue swimmer must understand that some of these devices can be hazardous to the swimmer and survivor.
Enabling Objectives

- Explain the purpose and hazards of the following Survivor Marker/Locator Devices per NTTP 3-50.1:
  - MK-25 Marine Location Marker
  - MK-58 Marine Location Marker
  - Electric Marine Marker Light
  - MK-124 MOD 0 Day/Night Distress Flare
  - MK-79 Pencil Flare
  - Signal Mirror
  - Sea Dye Marker
Survivor Markers

- Survivor markers are devices launched by aircraft/ships to provide day or night reference points to the position of survivors.
- Procedures for deploying pyrotechnic devices are contained in the NAVAIR 11-15-07.
Survivor Markers

WARNING

Should fuel be observed or suspected to be present in the water, pyrotechnic devices **SHALL NOT BE USED** due to ignition hazards.

WARNING

All flares burn "**white hot**" and can cause serious burns if allowed to come into contact with skin.
Survivor Markers

WARNING
Avoid breathing potentially hazardous pyrotechnic fumes.
Survivor Markers

- MK-25 Marine Location Marker
  - Produces smoke and light; burn time 10-20 minutes.
Survivor Markers

Remove Protective Cap
(Rotate Counter Clockwise)

Depress Arming Cap
(0.3 Inches, Using 18 Pounds Force)

Allow the Arming Cap/
Sealing Cap to Separate
(Spring Loaded)
Survivor Markers

- MK-58 Marine Location Marker
  - Produces a yellow flame and white smoke; burn time 45 minutes.
Survivor Markers

- Adhesive Foil Disks
- Pull Ring
- Electric Squib
- Chimney Caps
- Starter Composition
- Starter Pellet
- Pyrotechnic Candles
- Protective Cover
- Water-Activated Battery
- Polyurethane Foam
- Transfer Fuse
- Phosphorus Warning Label
- Battery

2005
Survivor Markers

- Electric Marine Marking Lights
  - Battery powered, an alternative to pyrotechnic devices when flammables are present or suspected.
Survivor Signaling Devices

- **MK-124 MOD 0 Flares**
  - This signal is used for day or night distress signaling as appropriate by personnel on land or at sea.
  - Emits **orange** smoke for day use and **red** flames for night use.
  - Burn time for each is approximately **20** seconds.
  - MK-124 is the replacement for the MK-13 and it’s intended use is the same as MK-13, but is designed for single hand operation.
Survivors Signaling Devices

- MK-79 Signal Kit Personal Distress (Pencil Flare)
  - Intended to be used by downed aircrew members or personnel in life rafts as a distress signaling device.
  - Produces a single red star display at a minimum altitude of 250 feet.
  - Burns for a minimum of 4.5 seconds.
Survivor Signaling Devices

- Non-pyrotechnic Visual Signaling Devices
  - Includes lights, strobes, and mirrors.
  - Pose no hazard to swimmers.

- Sea Dye Markers
  - A dye packet dissolves in sea water. Dye packets create a large, highly visible fluorescent signal. Standard Navy issue is a bright green color; other colors may be used.
  - The dissolved dye poses no hazard to swimmers.
Review

- Mk-25’s burn time is? 
  **10-20 minutes**

- Mk-58’s burn time is? 
  **45 minutes**