

# Maritime Survivor Locating Devices



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## Red Sea – Egypt – LOST DIVER LOCATING - Sea Trial

Sea Marshall® Lost Diver Locating Systems – Test Report

Date of trial – Sunday 14<sup>th</sup> Feb 2010-02-19

Location – 5 miles North of Sharks Bay – Sharm, Egypt

Time – Mid morning to mid afternoon

Sea State – Calm, moderate

Visibility – Excellent

Wind – 2 to 3 knots

Dive Boat used:



## Equipment On Test

1. Sea Marshall® SARfinder® bridge mount locator unit



2. 1 of Sea Marshall® AU9 '500mW' personal locator beacon



3. 1 of Sea Marshall® AU9 '500mW' personal locator beacon fitted to SMB



(photo for representation only)

## Test Format

A 4m RIB was deployed due South in a straight line from Anchor point to GPS points at 1km intervals. At each point the RIB stopped and activated the PLBs, 2 AU9 '500mW' PLBs. On the main boat the SARfinder unit was set to TONE detect. The SARfinder antenna was held upright to a height of 1.5m above the metal framework on the top of the boat (4 times the height of the antenna). For the purpose of the test the SARfinder was run from a 12V lithium battery. The SARfinder was mounted on the bridge of the ship next to the wheel.

**NOTE** – During the test a person snorkelling from a dive boat positioned approx 250m NNE of the test boats anchor point drifted and became lost from his boat, he was forced to come aboard the test boat until his vessel could be contacted to come and recover him. The current prevented him from being able to swim back to his boat. If we hadn't been anchored in that position he would have drifted further out to sea and become lost.

# 1<sup>st</sup> Test– Outbound, moving away from dive boat

Rib with crew carrying 2 AU9 500mW units despatched due South from anchor point with instruction to stop at 1km intervals from boat and activate PLB, radio contact/cell phone was maintained between the boats to monitor progress.

<b>Distance</b>	<b>AU9 units tested</b>	<b>Alarm Activate</b>	<b>Accurate Tracking</b>	<b>Signal Strength</b>
1km	Both	Yes	Yes	High
2km	Both	Yes	Yes	High
3km	1	Yes	Yes	High
4km	1	Yes	Yes	Medium
5km	1	Yes	Yes	Medium
6km	1	Yes	Yes	Medium
7km	1	Yes	Yes	Medium
8km	1	Yes	Yes	Medium
9km	Both	Yes	Yes	Medium
10km	1	Yes	Yes	Low
11km	1	Yes	Yes	Low
12km	1	Yes	Yes	Low
13km	1	No	Yes – opened the channel to track	Very low, bearing LED and intermittent signal strength LED
14km	1	No	Yes – opened the channel to track	Very low, bearing LED with intermittent signal strength LED. (Further range could be introduced by increasing height of SARfinder antenna on dive boat)

## 2<sup>nd</sup> Test – Inbound, side to side tracking

Rib with crew carrying 2 AU9 500mW units despatched due South from anchor point with instruction to stop at 1km intervals from boat and activate PLB, radio contact/cell phone was maintained between the boats to monitor progress.

Distance	AU9 unts tested	Alarm Activate	Accurate Tracking	Signal Strength
10km	1	Yes	YES - Rib moved West to East, accurate tracking of PLB target was maintained	Low
8km	1	Yes	YES - Rib moved 3km East, accurate tracking of PLB target was maintained	Medium
4km	1	Yes	YES - Rib moved to position due East approx km from dive boat, accurate tracking maintained	Medium
4km tracking straight back to target	1	Yes	YES - Rib moved NNE from dive boat anchor point to a position next to an island behind another boat, approx 5km from dive boat. Dive boat used SARfinder display to track to target	Medium to high
2km tracking back to target	1	SARfinder still tracking on open channel	YES - Rib moved from position NNE behind another boat in a line West along the edge of the island approx. 1.5km. SARfinder accurately tracked moving target and took dive boat straight to target	High