### **Ocean Revival project:**

The Ocean Revival Algarve is situated off the coastal town of Portimao in southern Portugal. More precisely along the east side of the artificial reefs of Alvor, the bathymetric of 26 to 32 meters, with a minimum clearance of 15 meters. The reef will be one mile from the anchorage of Portimão, 3.3 miles from the port and 2 miles from the coast opposite to Prainha. A carefully selected location for the following reasons:

- Very good diving conditions
- Good sea condition over 300 days a year;
- Still waters, safe for diving;
- Water temperature between 14 ° and 22 ° C.



### Oliveira e Carmo



The "Corvette Ex-NRP Oliveira e Carmo" with NATO designation F489 was constructed between 1972-1975 in the Empresa Nacional Bazan shipyards in Cartagena, having the effective entry date to the Portuguese Armed Forces on October 1975. The Oliveira e Carmo Corvette had 107 crewmembers.

Equipped for anti-submarine combat and having radars and torpedoes available to them, are more than simple corvettes, they are light frigates. Designed for their presence in the Portuguese Colonial War, the resolution of those conflicts left these ships without a purpose, they were then put to use as oceanic escort ships under the scope of NATO, and later on, they were disarmed with a reduced level of weaponry, as patrol ships in the exclusive Portuguese economic zone. After 24 years of service, the Corvette retired in 1999.

Some overseas ports visited: Port Said; Aden; Colombo; Singapore; Darwin; Manila; Hong-Kong; Macau; Suez Canal; Dublin; Glasgow; El Ferrol; Kiel; La Coruña; Amsterdam and Oslo.

Oliveira e Carmo Type: Corvette Weight: 1.430 tons Length: 85 meters Beam: 12 meters Maximum Depth: 33m

Date sunk: 30.10.2012

### Zambeze



The 'Ocean Patrol EX-NRP Zambeze' with NATO designation P1147 was built for coastal and river patrol operations in Africa. All the ships of this class were named after African and Indian rivers from former Portuguese colonies. The ships were the next technological step up from LFGs - Large Inspection Ships of the

'Argos' class, built between 1964 and 1965. The Ocean Patrol was taken into active Armed Forces service in July 1972 with 33 crewmembers.

The following duties were frequently given to the patrol ship 'Zambeze': customs and fishing inspections in the North Zone; public service, mainly in Madeira; participation in exercises; Search & Rescue missions; transportation and evacuation of ill and injured people. After 31 years of service, the Ocean Patrol retired in September 2003.

Some overseas ports visited: Tenerife, Cape Verde, Guinea, Bissau, Caio and Las Palmas.

#### Zambeze

Type: Patrol Ship Weight: 292 tons Length: 44 meters Beam: 8 meters

Maximum Depth: 30m Difficulty: Advanced Date sunk: 30.10.2012

### Hermenegildo Capelo



The "Frigate Ex-NRP Hermenegildo Capelo" with NATO designation F481 started construction in 1966 at the Compagnie des Ateliers et Forges de la Loire shipyard in Nantes, the ship has seven levels and more than 300 compartments, having the effective entry date to the Portuguese Armed Forces on April 1968. The Hermenegildo Capelo Frigate had 164 crewmembers.

Electronic combat equipment: Air Warning Radar; Surface Radar; Shot Direction Radar; Navigation Radar and Sonar. Armaments/Equipment: 2x 100mm units; 2x 40mm units; 6 torpedo launchers and 2x chaff launchers. In the 1980s the Frigate was modernised in various ways, in particular the installation of ASW (Anti-Submarine Warfare) equipment and infrastructure that would allow for female sailors on board. The "Hermenegildo Capelo" was the first Portuguese Navy ship to take on female sailors - 15 Servicewomen.

Over the course of almost 30 years, the ship sailed for approximately 40,000 hours, the equivalent to four and a half years at sea and among all missions, the "Hermenegildo Capelo" crossed the Equator almost 60 times. After 37 years of service the Frigate retired in 2004.

Hermenegildo Capelo

Type: Frigate

Weight: 2.700 tons Length: 102 meters Beam: 12 meters Maximum Depth: 35m

Date sunk: 15.06.2013

### Almeida Carvalho



The "Hydrographical ship Ex-NRP Almeida de Carvalho" with NATO designation A527 started construction in 1961 in California, in the summer of 1965 the ship was struck by a merchant navy vessel, sinking in the shipyard. With salvage operations the ship was afloat again; however, the recovery work on the ship was carried out by another shipyard in

New Orleans. In January 1969 the "Kellar" was put into service for the US Navy and later acquired by Portugal and incorporated into the fleet of the Armed Forces on January 1972 with 47 crewmembers.

The Hydrographical ship has an area of 148m2 split between design rooms, dry and wet laboratory and 60m2 of locker space. For sounding in shallow waters it had one 8m boat. For precision positioning work, the ship could be operated at distance, rudder and engine. It has air conditioning system for any type of climate with reinforced hull for navigation in icy seas. After 34 years of service the Hydrographical ship retired in 2002.

The Almeida Carvalho sailed for more than 41,000 hours of and travelled over more than 244,000 miles over the 30 years it was at the disposal of the Hydrographical Institute.

Main foreign ports visited: San Francisco; Balboa; Panama Canal; Las Palmas; Cidade da Praia; Dakar; Bissau; Saint Nazaire; Casablanca; La Coruña; Cadiz and Jorf Lasfar.

Almeida Carvalho

Type: Hydrographical ship

Weight: 1.320 tons Length: 64 meters Beam: 12 meters Maximum Depth: 35m Date sunk: 21.09.2013