

# NRP Sagres

*By Jorge Reis*

*Pictures by Jorge Reis*



In this article we will visit the training ship NRP Sagres, built by Jorge Reis from Portugal. We met Jorge Reis at an event in Paredes de Coura, where he kindly showed us all the details of this MOC and explained its history. We then asked him to contribute the following article so we could share this great model with our readers.

## **NRP Sagres**

The NRP Sagres is a three-masted barque built in 1937 at the Blohm & Voss shipyard in Hamburg and was originally named 'Albert Leo Schlageter'. It was the third in a series of four similar ships built for the German Navy. After World War 2 it was sold by the US to Brazil, before being purchased by the Portuguese Navy in 1961. Since 1962 it has been employed as a training ship under the new name 'Sagres'. In addition to its mission with the students at the Portuguese Naval School, it is also regularly used as a travelling embassy for Portugal.

## **Its Symbols**

The Cross of Christ shown on the sails is one of the symbols of the ship. When the ship is moored, the sails are normally doused except for one that is always up, allowing for its identification. The figurehead of the ship represents Prince Henry the Navigator (b.1394), the third surviving son of King John I and a great initiator of the Age of Discoveries.

## NRP Sagres in LEGO®

I finished this model in September 2014 for an exhibition of the Portuguese LEGO® Users Group – PLUG (Associação Portuguesa de Utilizadores de LEGO®). The first presentation of the NRP Sagres in LEGO® was made by Commander António Manuel Gonçalves of the Portuguese Navy.

The model is built exclusively with LEGO® pieces, though slightly starched pure linen was used to represent the sixteen sails – an important component of this majestic ship. The dimensions of the ship in LEGO® are 1.4m in length, 1m in height, and 0.2m in width (dimensions in studs: 176x128x22). The model contains more than 20,000 pieces in 12 different colours. The main colours used are white and black for the hull, tan for the deck, and reddish brown for the masts and the booms.

The three ship wheels are a characteristic feature for operating the real ship. The rudder is manual and there are two command posts: the reverse or emergency wheel, which is connected directly to the mechanism, and the two normal wheels. All wheels are connected to the rudder by means of crown gears, just like on the real ship where it normally takes two men to operate a wheel.

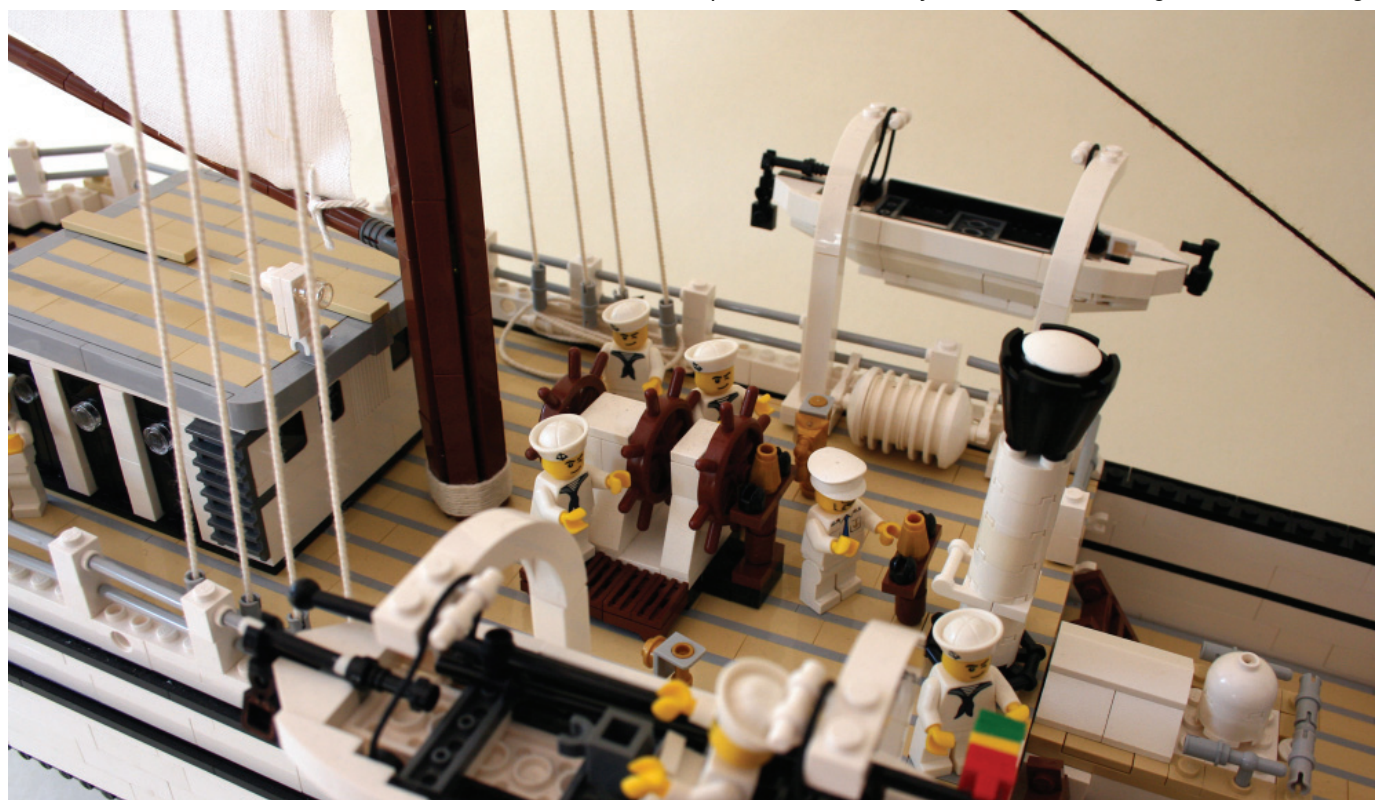
As for construction time, it took two years due to the high number of pieces and the different building and rebuilding stages of the hull, deck, masts and sails. In addition to the high level of difficulty, the construction time was also affected by cost (€3,000). The pieces were acquired through the LUGBULK program and from Portuguese BrickLink shops.

I built the replica using SNOT techniques, with Tan bricks and Light Bluish Grey plates. In addition, the ship is built symmetrically so that the studs always face outwards. In this way, the deck is connected from below. Some hidden plates and bricks connect the sections, achieving a strong solidity and finish similar to that of the real ship. I have also included specific City pieces for purposes very different from their normal usage. Some of these are car parts: Wheel 30.4x14



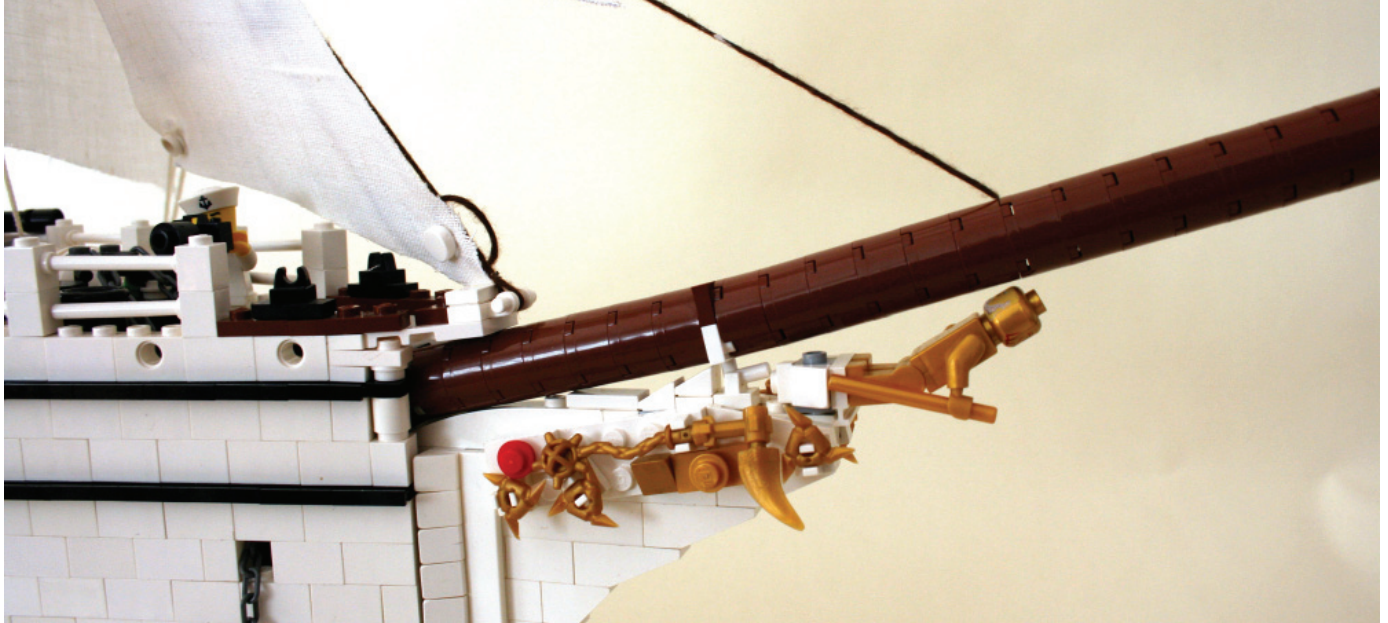
VR (Ref. 2994) which I used for inflatable rafts, and Brick Arch 1x6x3 1/3 curved (Ref. 6060) used for the life raft davits. Some other interesting parts I have used are decorative elements from Friends sets, which you can see on the controls and the wheel.

Nearly all the parts I have used are common bricks, slopes and plates found in many LEGO® sets, although the hardest thing



was to get them in sufficient quantities. In addition to the common parts that you can see, I have also used several Technic bricks in the hull to give it stability and the get the curved effect. This is where most of the parts were used and it was the hardest part to build – and the part I liked best! The top part of the curve of the hull, in white, was very hard to achieve. But the hardest part was closing the deck and placing the masts. Cables and backstays were used to secure the masts, using the same techniques used in the construction of a sailboat.

One of my favourite details in the build is the bell of the ship which was built with these elements: a pearl gold Cone 1x1, a small black Lever (Ref. 4593), and a black Technic hub / handle 1x1 (Ref. 424). The way the parts are connected means the clapper can move inside the bell. I discovered this construction by accident, as I had never seen it used before. And more importantly, it's at the same scale as the ship!



It is important to mention that the original model of the NRP Sagres in LEGO® has already undergone a few changes. You could even say that it is currently in version 1.2. Will there be any more changes? Yes, because I will continue to improve the construction as new elements come out and as new building techniques are shared by others.

The model can be presented individually or in a specific LEGO®-built structure. A new project for the NRP Sagres in LEGO® is currently being developed – it will soon appear in a new building and will be completely integrated, ready to tell a whole new story.

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