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**CENTER FOR EGYPTOLOGICAL STUDIES**  
**OF THE RUSSIAN ACADEMY OF SCIENCES**

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**RUSSIAN UNDERWATER ARCHAEOLOGICAL MISSION TO ALEXANDRIA**

**Final report on the sixth season**  
**(May 04 – 19, 2015)**



**CAIRO**  
**2015**

The sixth season of the Russian Underwater Archaeological Mission to Alexandria has been carried out by the Center for Egyptological Studies of the Russian Academy of Sciences from 04 to 19 May, 2015.<sup>1</sup>

The main goals of this season included localisation of the shipwreck of French transport vessel 'Le Patriote' (1798) shipwrecked at the entrance to the West port of Alexandria and continuation of the reconnaissance of the second line of the submerged reefs situated at a distance of 1 kilometer from the shoreline looking for potential vestiges of ancient navigation.

1. Reconnaissance of the shoals at the entry to the modern West Port of Alexandria (ancient port of Eunostos).

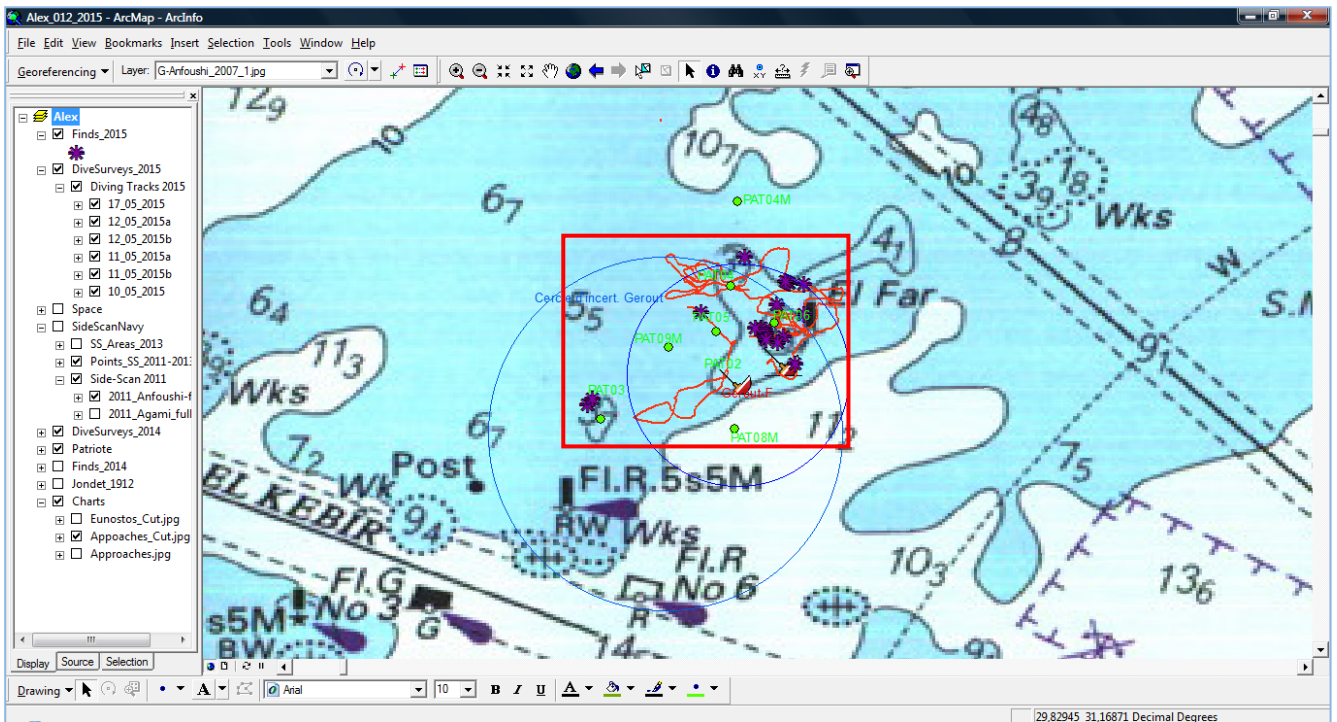
It is in this region that the absolute majority of reconnaissance dives were made during this season. Two major objectives were soon identified: the ancient shipwreck on the reef about 250 m to the north from the modern navigation sign delimiting *El Bughaz el Kebir* passage and the shipwreck of French transport vessel 'Le Patriote' (1798) (Figure 1).

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<sup>1</sup> Team members: Dr. Galina A. Belova — Director of the Mission; Mr. Atef Ibrahim Aly and Mr. Mohamed Elsayed Elsaid Sultan — Inspectors of the MSA; Mr. Bernard Boismoreau — Chief Navigator; Dr. Sergey V. Ivanov — Egyptologist, Photographer; Dr. Sabine Laemmel — Pottery specialist; Dr. Natalia Kharlamova — Archaeologist; Dr. Alexander A. Belov — Archaeologist; Mr. Alexander Berezin - Archaeologist; Mr. Alexander Adrianov - Head of Diving Works; Mr. Andrey Markelov — Archaeological Diver; Mr. Andrey A. Prosvirin — Technical diver, geologist; Representative Officers of the Egyptian Navy.

The expedition has been based on board of the MS 'Meto-5' while MS 'Jaguar-1' has been used as an auxiliary boat.

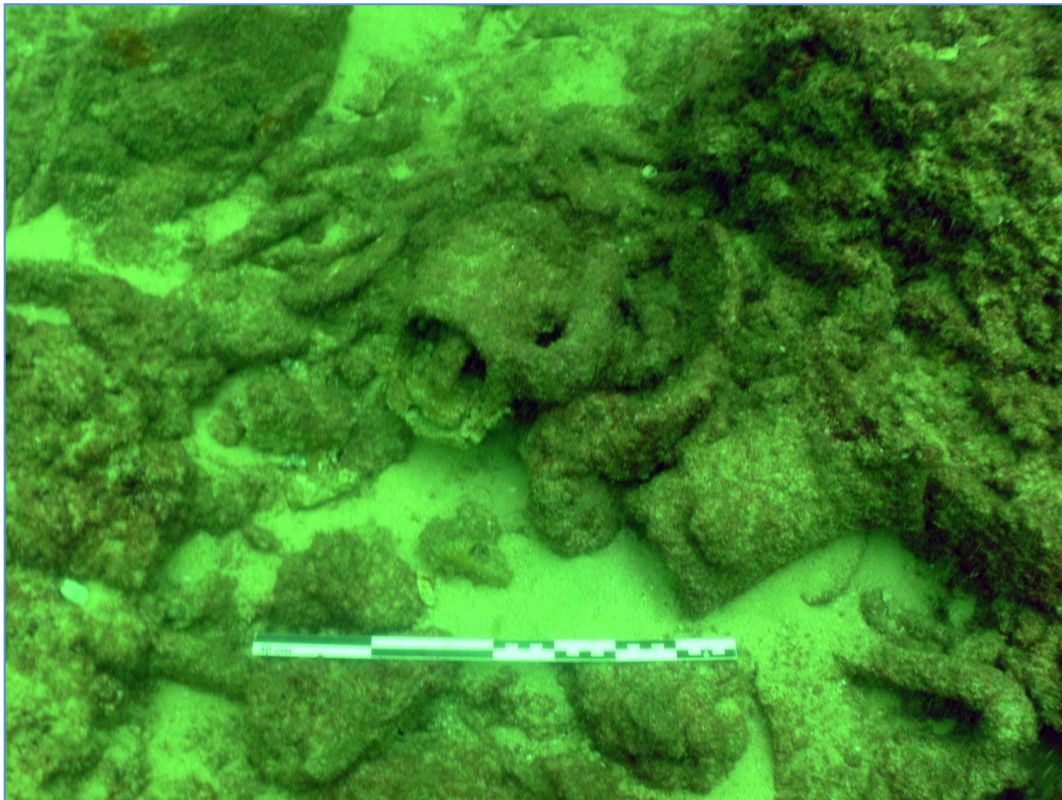


**Figure 1. Region of main diving operations of CES RAS at the entrance to the modern West Port of Alexandria (red rectangle).**

a. Ancient shipwreck *El Fara*.

Numerous traces of ancient shipwreck were discovered on the north-western side of the reef at the depth of 8-10 meters at point PAT03 (see Figure 1, bottom left corner of red rectangle).<sup>2</sup> Numerous fragments of amphoras and other vessels cover the seaward side of the reef and are also found between the crevices of its surface (Figure 2). All vessels studied so far are incomplete and heavily covered with concretions.

<sup>2</sup> Presence of ancient ceramics in this area has been previously reported by Max Guérout (Guérout, 2002: 64).



**Figure 2. Ceramics on the NW slope of the reef at point PAT03.**

The wreck site is scattered with numerous pottery fragments, but so far, no complete profile was recognised. All of the fragments that were apparent on the reefs' surface and on the sand are from imported East Greek amphorae exclusively and these must have constituted the bulk of the ship's cargo. So far, only four representative fragments were brought back to the surface for study. The assemblage fits a date between the mid 4th and the 2nd century BC, i.e. in the first part of the Ptolemaic period.

The first four fragments in the catalogue below come from the site of the ancient wreck and the fifth vessel is a stray find.<sup>3</sup>

From a cursory survey of the wreck, nearly all of the amphorae seem to relate to the broad type represented by AP15\_001 and AP15\_002 (Figure 3 and Figure 4). The neck is of medium length, slightly bulging and the rim is rounded and thickened. The large handles are oval in section and rise only slightly above the point of their attachment to the upper part of the neck in a soft arched curve. The fabrics of these two amphorae are very similar to one another, and, although

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<sup>3</sup> A four-handled jar or a cooking pot AP15\_005 found at point PAT04 (31,17098N; 29,82298E).

the shapes present minor variations, we may safely assume that they originated from the same production centre. So far, only one other amphora type, illustrated by AP15\_003 (Figure 5), was recorded. It has a similarly long, but straighter neck and a long, folded rim. The handles are large, oval in section and reach down from nearly a third of the way down the neck. Amphora bases appeared to have been less frequent than rim fragments throughout the wreck site, and only one single type was identified so far (Figure 6). It consists in a bulbous toe with a shallow depression under the base. Its fabric is identical to that of AP15\_001 and can thus be linked to this rim type. Most likely, all these fragments belong to a Rhodian production.

After the first half of the 3rd century BC, typical Rhodian amphorae are characterised by a long neck with thickened rim and angular handles rising high above their upper attachment to the neck, and bending at a sharp angle (e.g. Monachov 2005:78, fig. 4.2; Berlin 1997:46, 47, Dor6.45.1). Earlier 3rd century BC examples, however, have shorter necks and typically bent handles, very similar to those of the examples discussed here (Grace 1986).

The base AP15\_0004 (Figure 6) is made of the same, or of a closely related, fabric to that of the fragments with rounded rim (Figure 3 and Figure 4). The shape is also known from Rhodian amphorae, notably in association with folded rims, similar to that of AP15\_003 (Figure 5). This latter type is well dated to the end of the first quarter of the 3rd century BC by to examples with stamped handles (Monachov 2005:86, fig. 9.1-9.2).

Besides their occurrence on Rhodian types, folded rims, such as that of AP15\_003, are also evidenced on other southeast Aegean imports, such as Knidian and other contemporary south Aegean productions (Lawall 2010:383, pl. 295:124-125). However, the fact that the fabric of this sherd differs only slightly from that of the other fragments discussed here does not justify ascribing a totally different provenance for it.

While the morphology of all of our amphorae are suited to a Rhodian origin, their fabrics are not obviously Rhodian, except for their hardness, fineness and lack of mica (Whitbread 1995:59-67). Mica is indeed rarely attested in Rhodian

clays, but limestone, which could not be identified here, is commonly reported on products from the island.

The four-handled jar made of Nile silt fabric is certainly much later and date from the Late Roman/Byzantine period to the Ummeyyad and Abassid periods. Its fabric is very similar to that of Roman and Late Roman Nile silt cooking wares and the profile of its rim compares well with a two-handled cooking pot fragment from Tell el-Fadda in North Sinai (Vogt 1997:11, fig. 4(8), with further references).

Catalogue:

AP15\_001: Amphora thickened round rim.

Preservation: rim (100%), neck and handles.

Dimensions: d. top of rim 10.6 cm.

Fabric: hard and dense homogeneous beige-red imported fabric, no core, fine sand, very fine limestone, air holes are few and very small, buff-brown surface, uncoated.

Surface treatment: uncoated.

AP15\_002: Amphora thickened round rim.

Preservation: rim (100%), neck and handles.

Dimensions: d. top of rim 10.0 cm.

Fabric: hard, dense homogeneous brown-beige imported fabric, black core in places, fine sand, very few and small air holes, brown surface.

Surface treatment: uncoated.

AP15\_003: Amphora folded rim.

Preservation: rim (100%), neck and handles.

Dimensions: d. top of rim 10.3 cm.

Fabric: hard, dense homogeneous red-brown imported fabric, no core, silt-size sand, very small air holes, beige-buff surface.

Surface treatment: uncoated.

AP15\_004: Amphora bulbous toe.

Preservation: base (100%).

Dimensions: d. max. toe 5.5 cm.

Fabric: like AP15\_001.

Surface: uncoated.

AP15\_005: Four-handled jar/cooking pot.

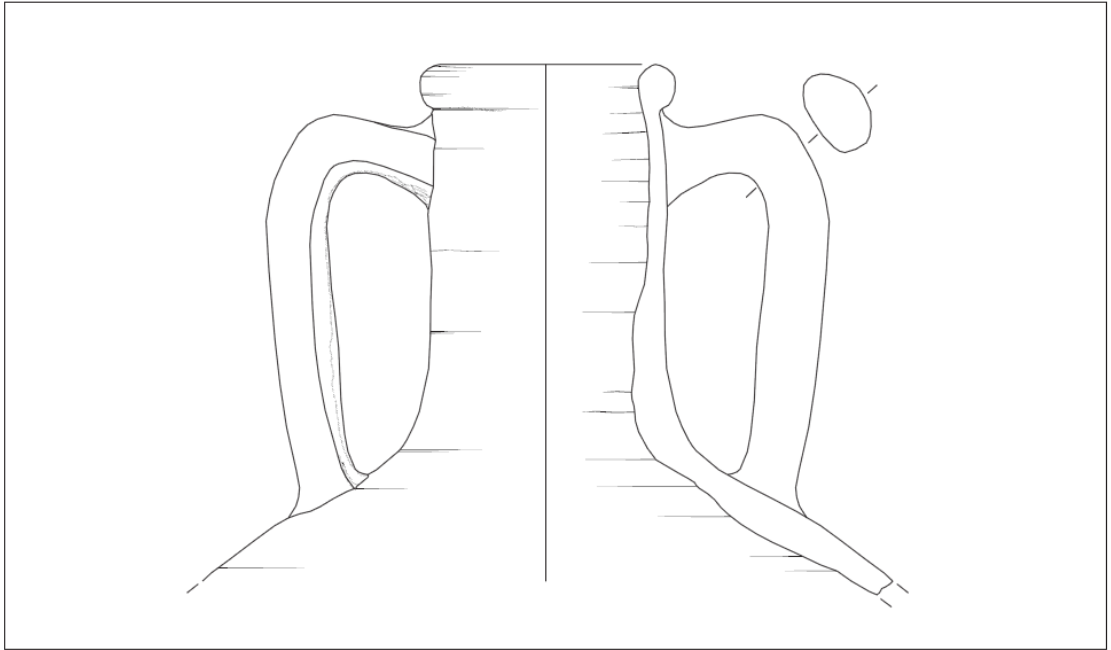
Preservation: rim (100%), neck and handles.

Dimensions: d. top of rim 12.5 cm.

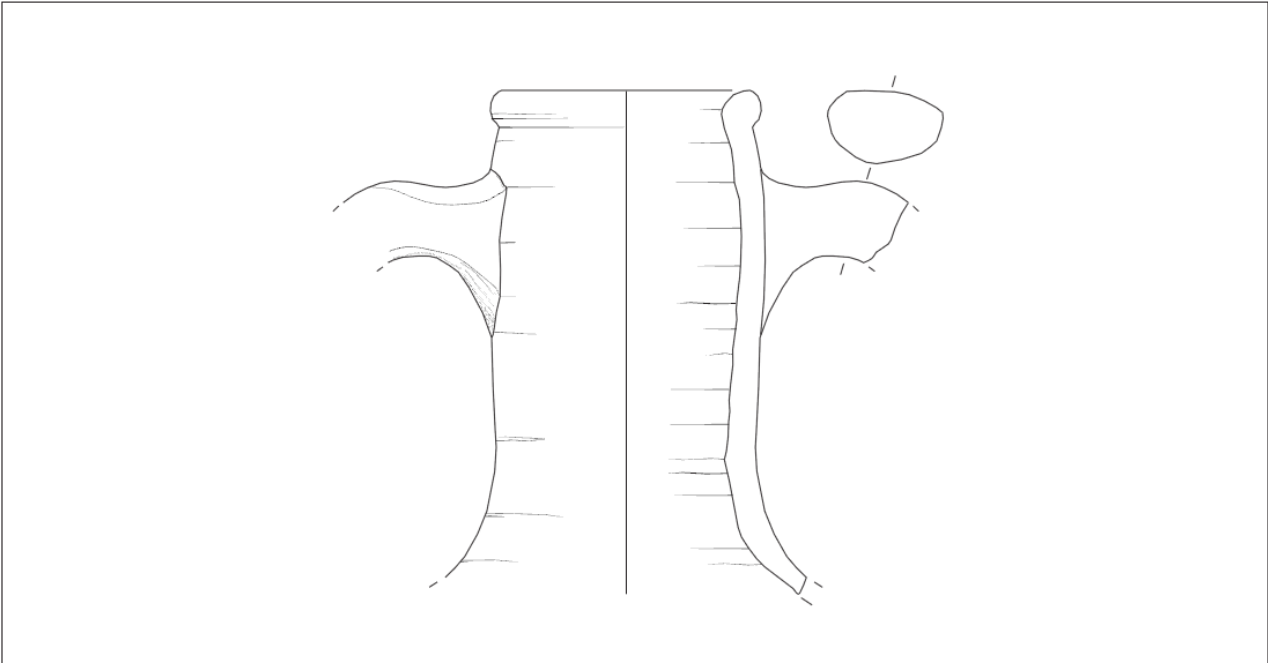
Fabric: hard, dense Nile silt fabric, fine sand, mica, no or very few vegetal tempering, dark grey to black core, brown surface.

Surface: uncoated.

Deposits: Probable soot traces on rim.

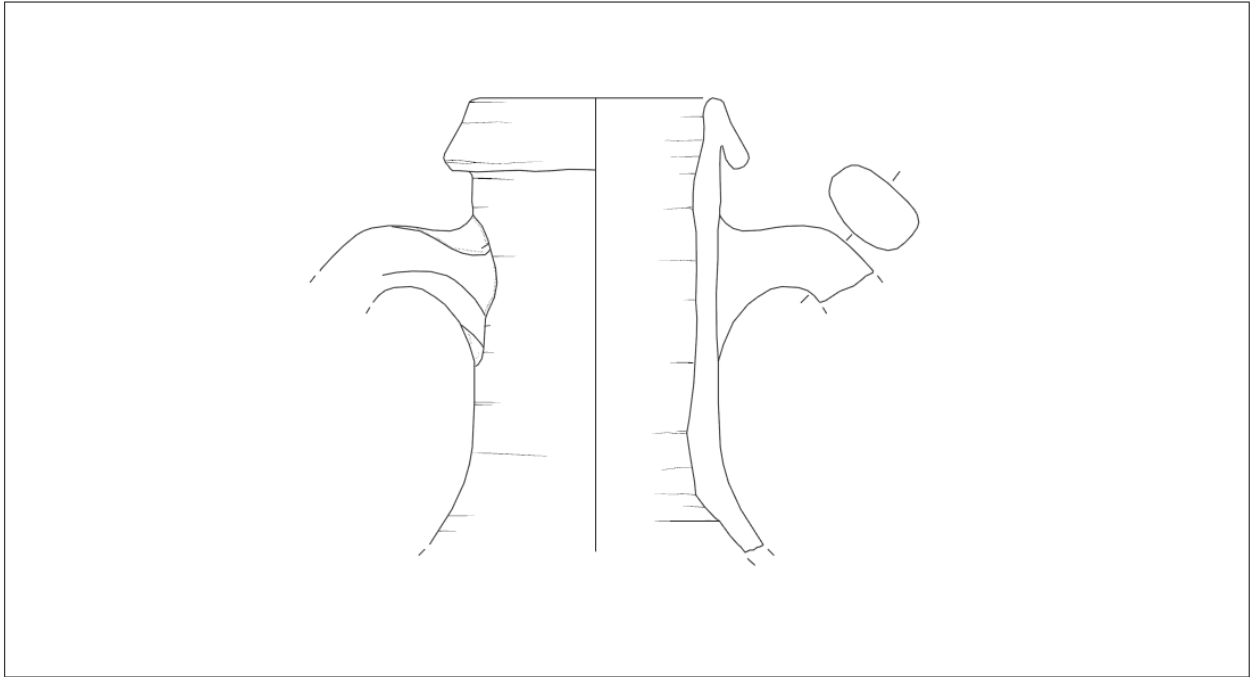


**Figure 3. Fragment of the East Greek amphora AP15\_001. (Drawing: S.Laemmel).**

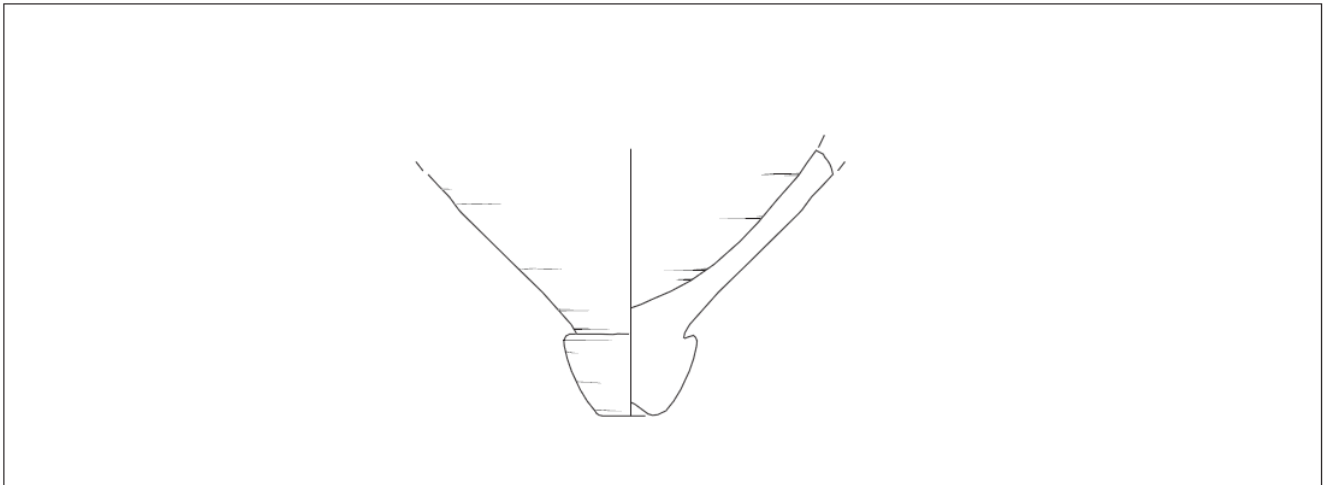


**Figure 4. Fragment of the East Greek amphora AP15\_002. (Drawing: S.Laemmel).**

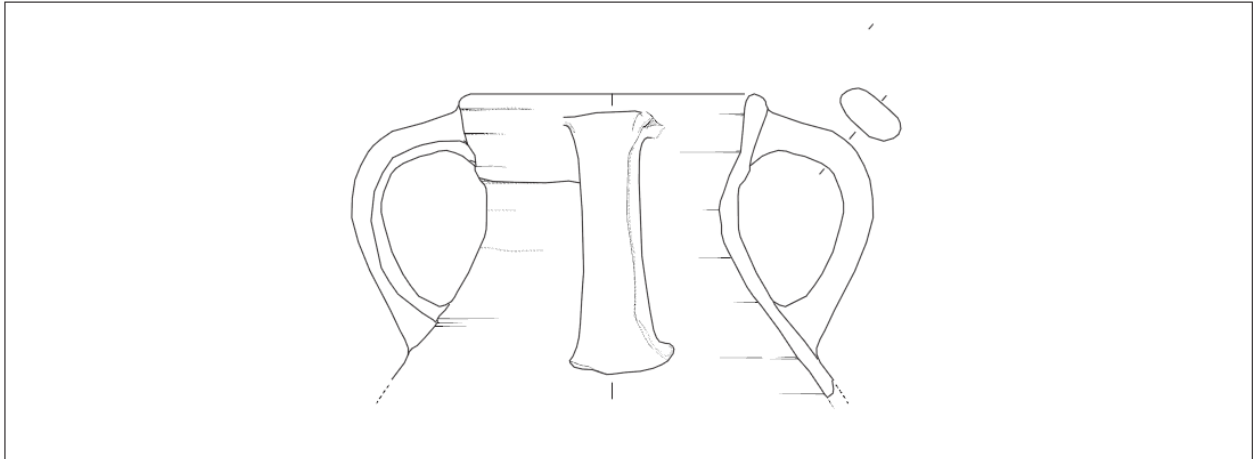




**Figure 5. Fragment of the East Greek amphora AP15\_003. (Drawing: S.Laemmel).**



**Figure 6. Fragment of the East Greek amphora AP15\_004. (Drawing: S.Laemmel).**

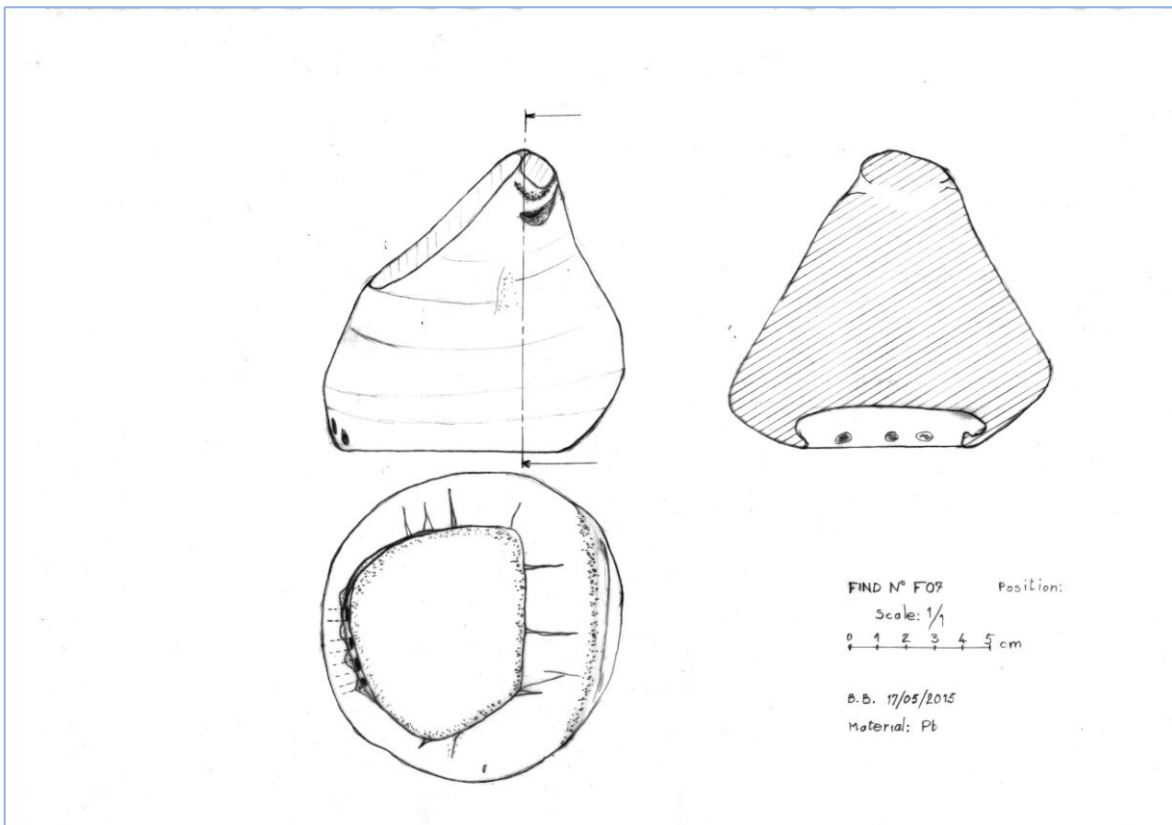


**Figure 7. Fragment of a four-handled jar or cooking pot AP15\_005. Drawing of S.Laemmel.**

At the bottom of the reef to the north two large conglomerates of ceramics were discovered ( ). Just 2 meters from them an ancient sounding lead was found (Figure 8). It has 117 mm in diameter, 104 mm in height and weights 5.05 kg. After the artefact was measured and photographed it has been returned on the spot of its discovery.



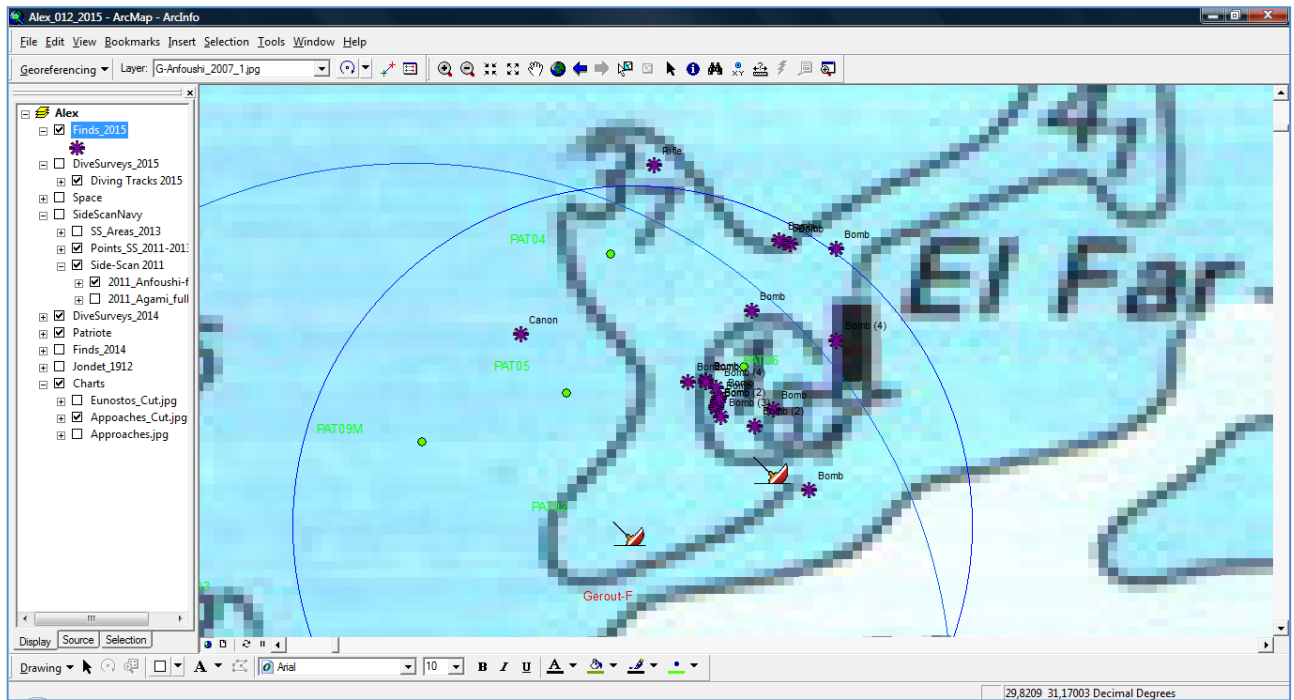
**Figure 8. Ancient sounding lead.**



**Figure 9. Drawing of the ancient sounding lead F07. Drawing of B.Boismoreau.**

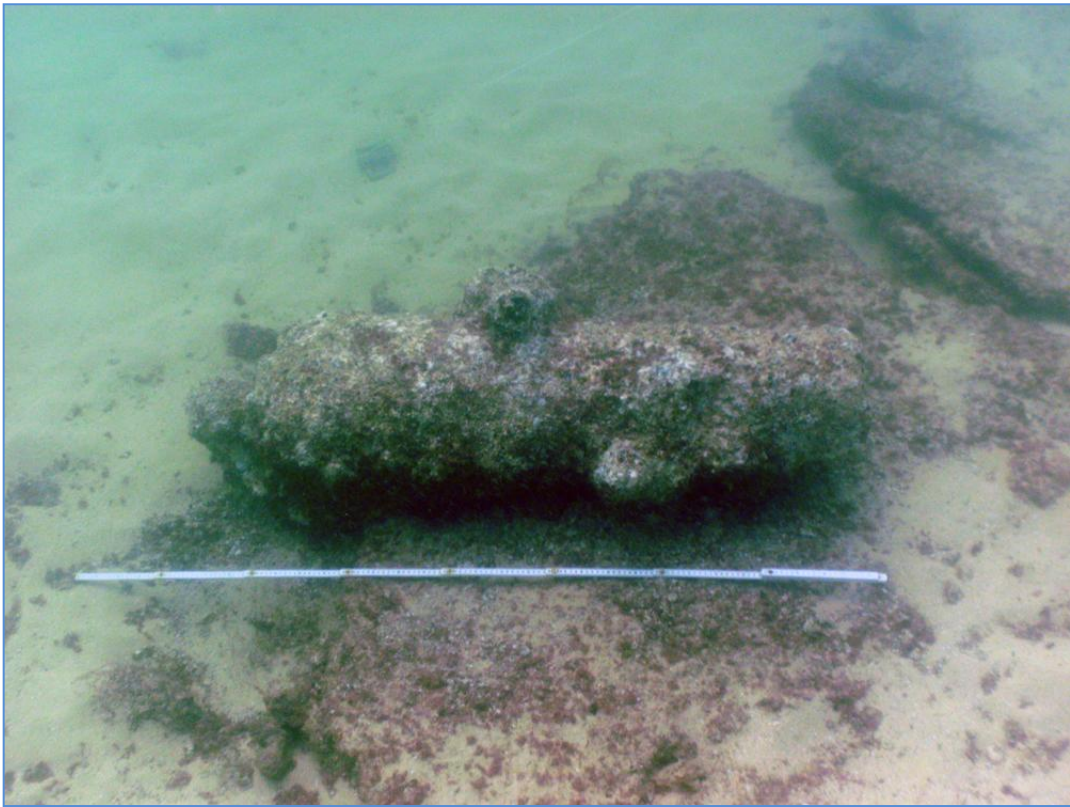
b. Shipwreck of French transport vessel 'Le Patriote' (1798).

French explorer Max Guérout discovered the remains of 'Le Patriote' in the region of the El Far shoal in 1986. This zone has been thoroughly examined during our mission. We found numerous artefacts probably from the cargo and armament of this ship (Figure 10).



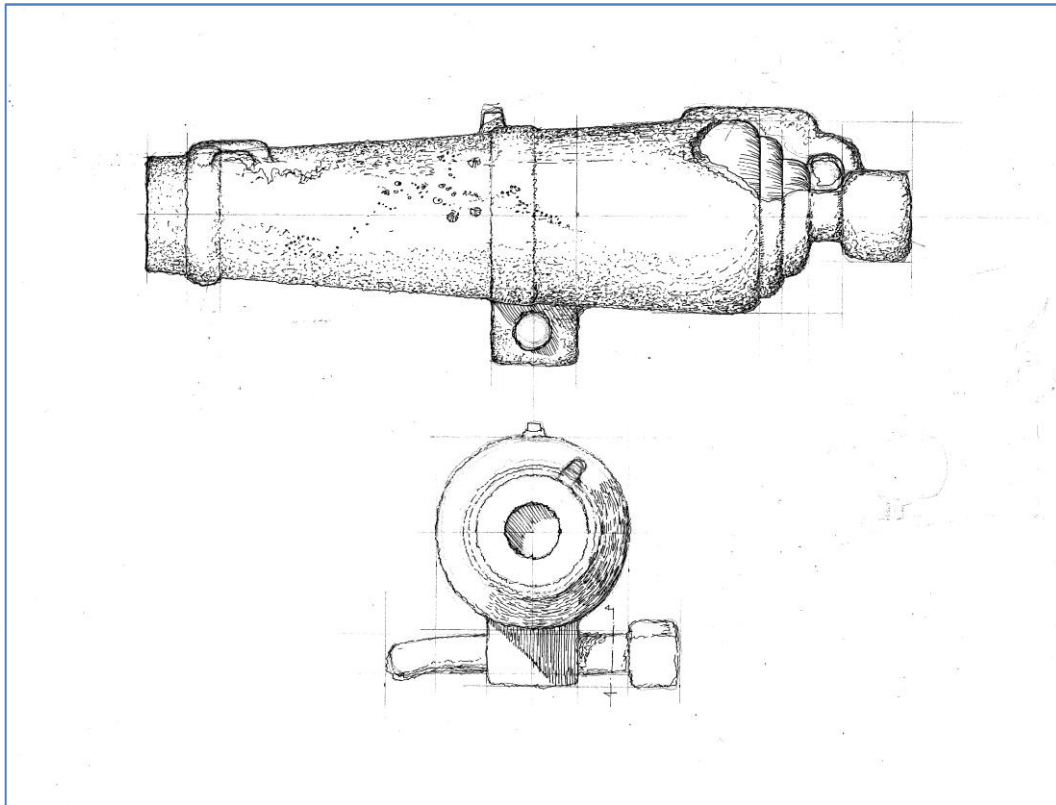
**Figure 10. Distribution of the artefacts probably from the cargo and armament of 'Le Patriote' discovered on the El Far shoal.**

A carronade was discovered at the western side of the reef on the sandy bottom at the depth of 9.5 m in point F08 ( ). (Figure 11). The piece is made of cast iron and measures 140 cm in length; inner diameter of the barrel is approximately 10-11 cm. The gun was covered with a thick layer of concretions and marine vegetation.



**Figure 11. Sea carronade discovered at the western side of the reef on the sandy bottom at the depth of 9.5 m.**

It seems quite probable that the gun belongs to the cargo of 'Le Patriote'. The ship was initially armed with two guns and they were found by the team of M.Guérout. They also found and lifted a carronade that seem to correspond by its dimensions to the gun we found this season (Figure 12). Lifting of the gun from the sea may be included in our mission's plan for the next season.



**Figure 12. Carronade found and lifted by the team of M.Guérout. Drawing of J.-M.Gassend, courtesy M.Guérout.**

Numerous bombs of Napoleonic time (more than two dozens) are dispersed on the reef and seem to belong to the cargo of the ship.<sup>4</sup> Their diameter is around 25 cm and most probably they were destined for mortars of Napoleon's land corps.

Small fragments of copper sheathing of the hull, probably this of 'Le Patriote', were found on the nearby reef (see section 1a above) (Figure 13).

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<sup>4</sup> The bombs are eaten by marine corrosion and do not represent any danger.



**Figure 13. Piece of copper sheathing of a hull.**

On the northern side of the reef (point ) a buttstock of a flint rifle, probably of a short carbine of marine type, was found (Figure 14).



**Figure 14. Buttstock of a flint rifle F22.**

However, the expedition did not find any vestiges of the hull of 'Le Patriote' itself, although all potential regions of its location were well explored. We have recently established contacts with French archaeologist M.Guérout is eager to help with the positioning of this ship's remains. We are planning to continue our research next year.

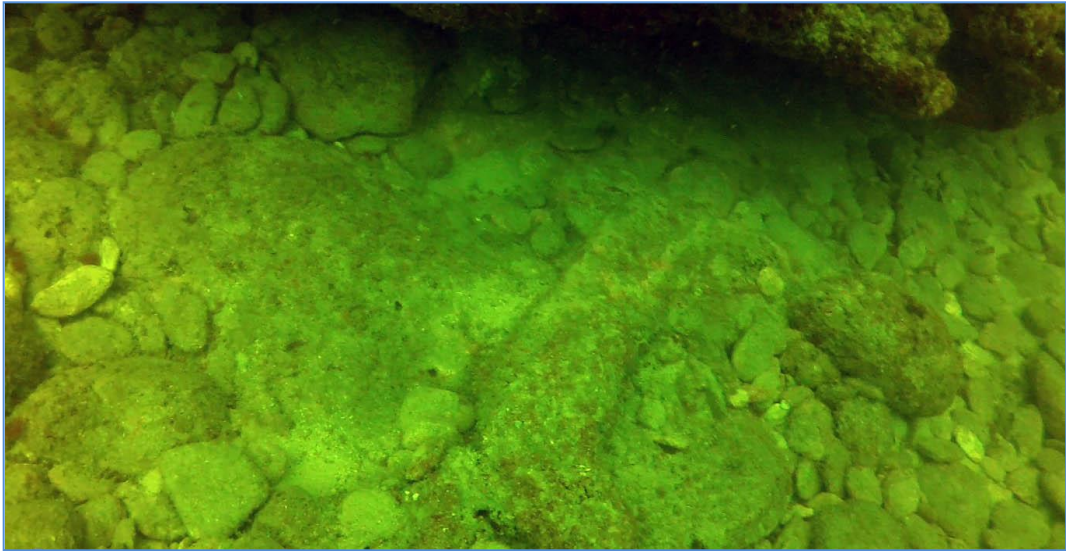
## 2. Reconnaissance of the second line of the submerged reefs in Anfushi region.

A second line of the submerged reefs in Anfushi region is situated at a distance of about 1 kilometer from the shoreline and is parallel to it. The depth over the reef makes about 9-12 meters while its foot is found at 18.5-19 meter depth. Several dives were aimed at the reconnaissance of the deeper region at the seaward side of the reef extending till the isobaths of about 20 meters.

Around point R12 ( ) we found three ancient anchors. Anchor stock F23 (estimated length - 148 cm, width - 42 cm, thickness



- 7 cm), is most probably from a Roman wooden anchor (Figure 15). It has been discovered at the depth of 17.7 m in the crevices of the reef, partially submerged in the sediment.



**Figure 15. Lead core of a Roman anchor, find F23.**

Nearby a Byzantine iron anchor measuring 226+ x 132 x 12-15 cm was discovered (Figure 16).



**Figure 16. Byzantine iron anchor, F24.**

Another anchor found at point ( ) belongs to a type in common use on medieval galleys (4-fluked grapnel).

In addition to the previous season many more flint rifles dating to the first half of 19<sup>th</sup> century, most of them two-barrel fowling pieces, were discovered in the region of the reef at point .

The reconnaissance of the regions to the seaward from the reef will be continued during the next season.

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