

An early pharaonic harbour on the Red Sea coast

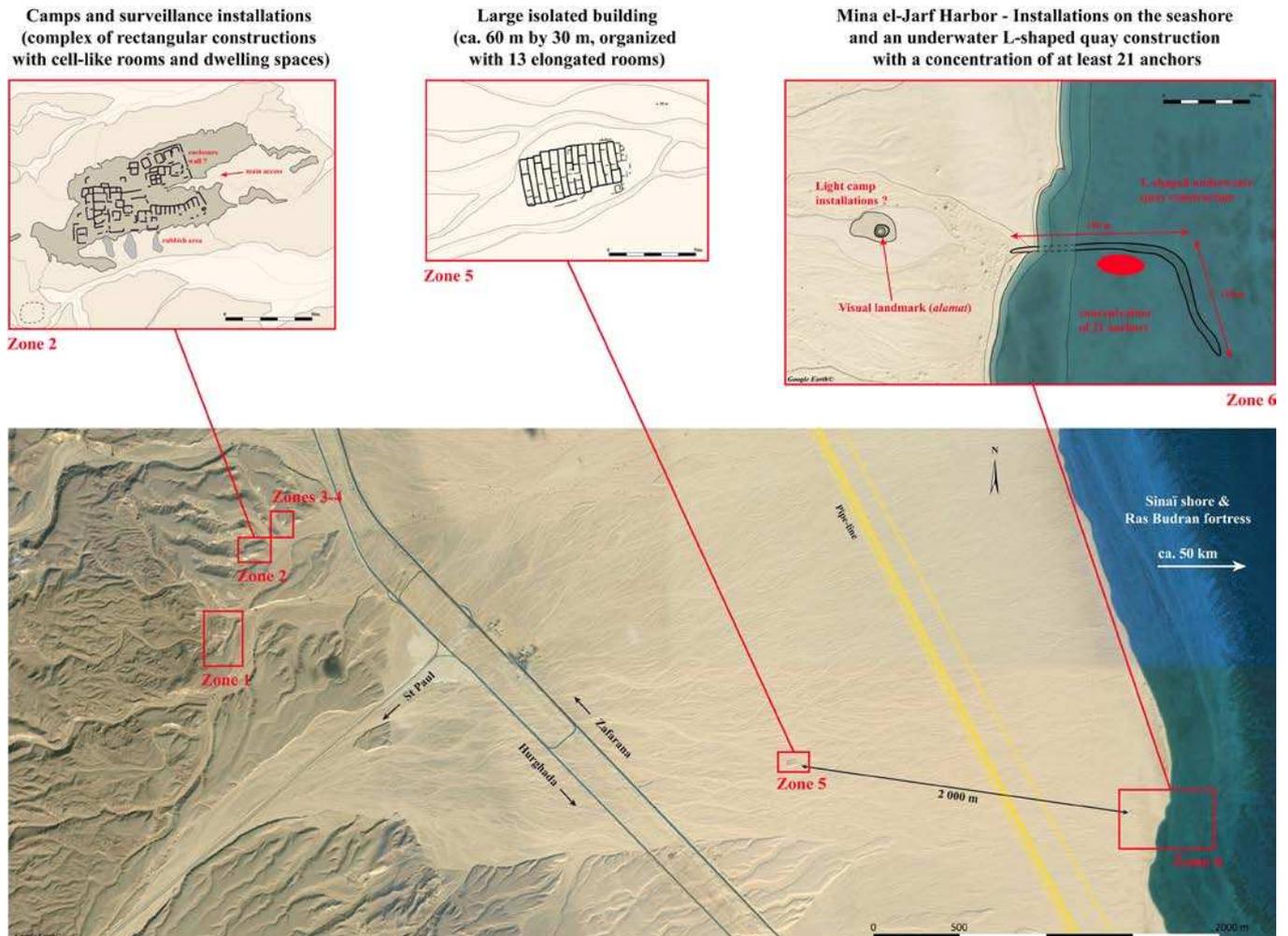
The first season of fieldwork conducted in June 2011 at Wadi al-Jarf has focused on the exploration of a new large-scale installation on the Red Sea coast dating back to the Fourth Dynasty. **Pierre Tallet** and **Gregory Marouard** report on the discovery of the oldest harbour remains found in Egypt.

During the past ten years, our knowledge of seafaring expeditions through the Red Sea towards the Sinai or the distant land of Punt has been considerably increased because of fieldwork conducted at port sites such as Mersa Gawasis.

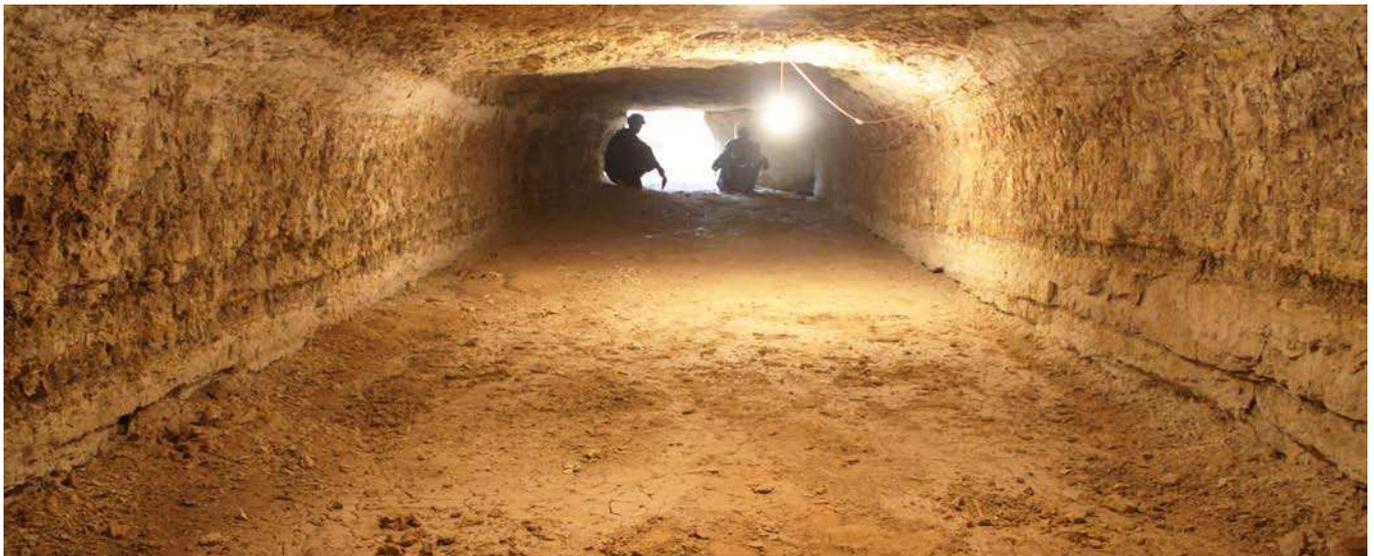
Along the Gulf of Suez, excavations by the French Institute (IFAO) have provided evidence of another important harbour complex at Ayn Sukhna (60km south of the town of Suez) which was used during the Old and Middle Kingdoms to reach the mining zones of copper and turquoise exploitation in south Sinai. Ayn Sukhna saw a peak of activity during the Fifth and the Twelfth Dynasties, as confirmed by several inscriptions left by pharaonic expeditions, and as a

point of departure from the Egyptian coast it was certainly linked to the small fortress at Tell Ras Budran on the west coast of the Sinai, south of Abu Zenima. Mainly occupied during the Old Kingdom and on a smaller scale during the Middle Kingdom, this latter site was used as a landing point on the Sinai coast on the way to the regions of Serabit el-Khadim and Wadi Maghara, emphasising its logistical role for expeditions. It may also have had a strategic function in view of its defensive architecture.

The discovery of the harbour of Wadi al-Jarf complements this general scheme. The site is situated on the Egyptian coast, 90km south of Ayn Sukhna and 25km south of Zafarana. It is located at the mouth of the Wadi Araba, a



The location on the Red Sea coast of Wadi el-Jarf, showing its main installations



Zone 1. Gallery G4 before excavation

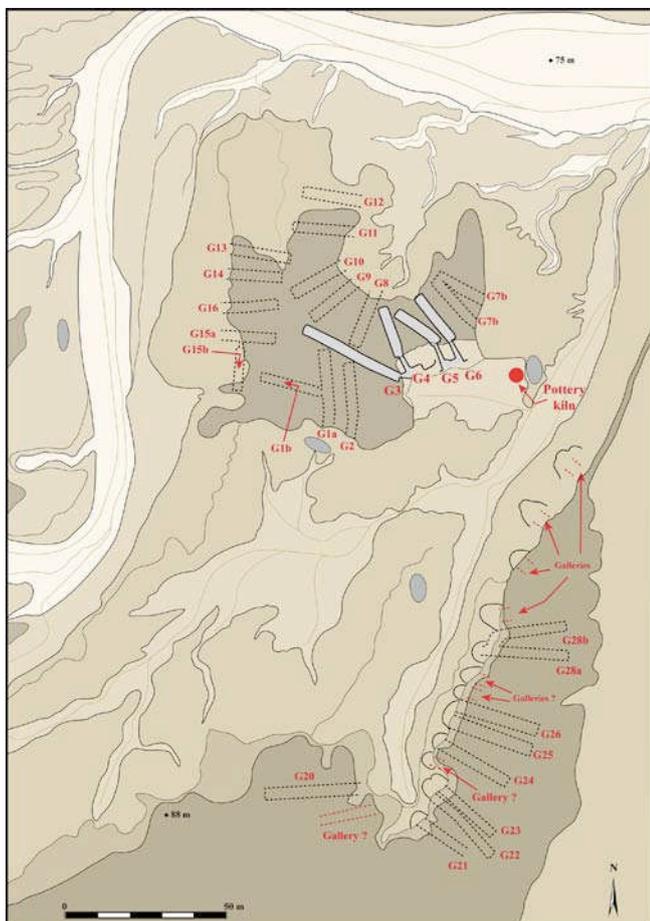
major corridor of communication between the Nile Valley and the Red Sea, through which the expeditions passed. In this region the narrowness of the Red Sea means that the western coast of the Sinai Peninsula lies only 50km from Wadi el-Jarf, which is exactly opposite the small Sinai fortress of Tell Ras Budran (excavated by Gregory Mumford for the University of Alabama) and the connection between these two is now beyond doubt.

John Gardner Wilkinson and James Burton first reported the existence of the site in 1823 and it was rediscovered in

1954 by French scholars, François Bissey and René Chabot-Morisseau, who carried out initial investigations that were prematurely stopped due to the Suez crisis. In 2008, the notes left by Bissey and Chabot-Morisseau (Ginette Lacaze and Luc Camino, *Mémoires de Suez*, 2008) and remote sensing work conducted on the Zafarana area with GoogleEarth satellite images helped to re-identify the site's location.

Wadi el-Jarf consists of four groups of installations that are situated along the coast and at the foot of the mountains near the spring of St Paul's monastery. Ceramic evidence shows that all these installations date back to the Fourth Dynasty and probably to the early part or the first half of it, with traces of occupation extending into the beginning of the Fifth Dynasty.

Five kilometres from the seashore lies a sizeable complex of 25 to 30 galleries (Zone 1). The excavations conducted at four galleries confirmed their use as storage facilities, as at Ayn Sukhna and Mersa Gawasis. They vary in length from 16m to 34m with an average width of 3m and a height of 2.5m. All of them were carefully cut into the limestone bedrock following a pre-planned layout, which is reflected by their



The galleries in Zone 1



Zone 1. Gallery 3 during excavation



Zone 1. The entrances to galleries 5 and 6 with the causeway of monumental stone blocks

relative uniformity and synchrony. Long ‘causeways’ made of stone blocks of monumental size, each measuring more than 2m–3m protected their access, and the entrances were closed by a system of ‘portcullises’ similar to those known from royal funerary installations of this time. At the entrance to the largest gallery remains of an inscription have been found showing an official named as ‘*The Scribe of the Fayum, Idu*’, holding a staff.

The use of the galleries as storage facilities is underlined by the discovery of fragments of ropes, textiles, pieces of wooden boxes and hundreds of fragments of worked wood. Among the latter were several tenons of acacia and large pieces of wood, including the end of an oar, several fragments of Lebanese cedar beams, and a complete piece of boat timber, 2.70m wide. These finds clearly indicate the presence of boat elements on the site, probably stored as dismantled pieces in the galleries.

Thousands of fragments of large globular storage jars have also been discovered *in situ* in several galleries. These jars were used for water and food storage and their surfaces are frequently marked by large-scale hieroglyphic inscriptions



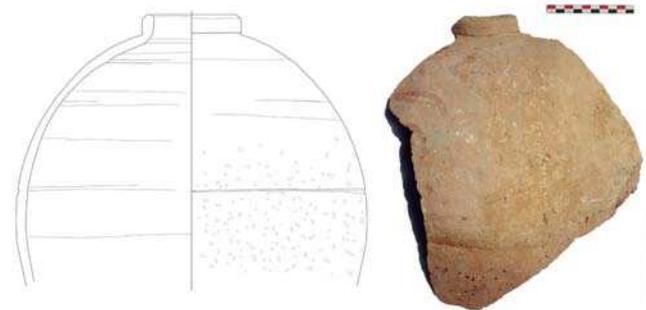
Zone 1. The portcullis block at the entrance to gallery 6



Zone 1. The end of an oar discovered in gallery G3



Zone 1. Parts of boats in the filling of the entrance to gallery G5



Zone 1. Part of a typical local jar (marl fabric with brown angular inclusions) with a red ink inscription, from gallery G23



Zone 1. Crushed locally-made jars in gallery G15b



Zone 1. A pottery kiln during excavation



Zone 6. Complete view of the mole at low tide

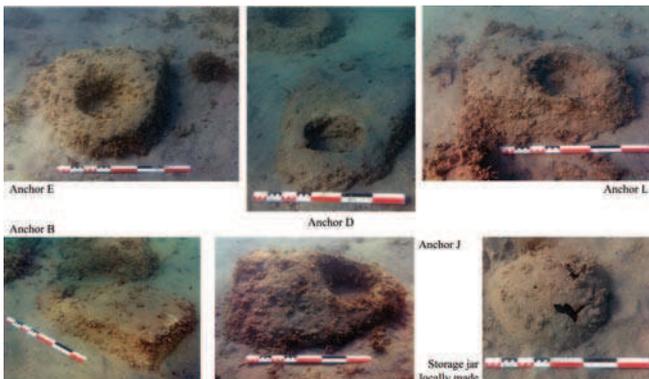
in red ink, giving the names of teams of workmen, crews or even of the boats themselves. These jars were produced locally in very large quantities, as can be seen from the excavation of the first large pottery kiln at the site. Characterised by a very particular marl fabric, this local production has been found at all the various installations at Wadi al-Jarf. These jars have also been identified in small numbers in Fourth Dynasty contexts at Ayn Sukhna and in large quantities at the fortress of Tell Ras Budran, where they have been mislabeled as ‘Sinaitic Ware’. The presence of this specific production on both sides of the Gulf of Suez confirms the close association of Tell Ras Budran with the Wadi al-Jarf installations.

Three groups of camps and surveillance installations were noted (Zones 2 –4) 500m north of the galleries area. Situated on top of a long promontory, the most important has a complex of rectangular constructions organised into cell-like rooms which served as dwelling places.

Another isolated construction (Zone 5) – the largest pharaonic building discovered to date along the Red Sea coast – has been identified on the coastal plain between the galleries and the seashore facilities. It consists of a rectangular building 60m long and 30m wide, divided into 13 elongated rooms, whose precise function is not known yet.

The last component of the site is situated directly on the coast. At 200 m from the shore, an artificially created mound made of limestone blocks forms a reference point, a sort of visual landmark (*alamat*) measuring 10m in diameter and 6m in height, surrounded by light camp installations.

The main element of the coastal site is a long L-shaped



Zone 6. A selection of anchors, and a storage jar, shown in situ

mole starting from the beach and extending under water in an easterly direction for over 160m. It then runs in a more irregular way towards the southeast for another 120m. The constant winds and the force of the coastal north-south currents emphasise its role as a breakwater structure built to protect an anchorage zone covering more than 3ha.

The use of the site as a harbour has been confirmed by the discovery of at least 21 limestone anchors, and some complete storage jars of local production. The anchors, often found in pairs, measure 60cm to 80cm in height and 48cm to 62cm in width. They appear in triangular, rectangular and cylindrical shapes; all of them have a rounded top and a simple hole in the upper part without any vertical groove. It is possible that these anchors were placed permanently in the water for mooring boats in transit.

This is the first discovery of pharaonic anchors in their original context of use in Egypt and it constitutes the oldest and largest concentration of this type for the early Bronze Age. The group adds considerably to the number of ancient Egyptian anchors previously known (c.35 examples, mainly discovered in Mersa Gawasis exclusively in contexts of secondary use and dating to the Middle Kingdom).

The recent discoveries at Wadi el-Jarf demonstrate once again the complex and extensive logistical organization of seafaring expeditions during the Old Kingdom. They emphasise the determination of the Egyptians, from the early Fourth Dynasty, to control the Red Sea coast and access to the resources of the Sinai by constructing a network of strategic installations on both sides of the Gulf of Suez. One can only wonder whether a port constructed on such a large scale was used only for crossing the sea to the Sinai or whether it would also have been used by expeditions travelling to the southern part of the Red Sea and the distant land of Punt

□ Pierre Tallet (University of Paris IV La Sorbonne) is co-Director of the Wadi el-Jarf excavations with El-Sayed Mahfouz (University of Assiut). Gregory Marouard (Oriental Institute, University of Chicago) is Senior Archaeologist at the excavations at Wadi al-Jarf. The French Foreign Office, the CNRS, the IFAO and the generosity of the Aall Foundation support this work. Damien Laisney (Maison de l’Orient et de la Méditerranée) carried out the topographic recording of the site. The illustrations and photographs are by the authors.