Review

By Filipe Castro

L’épave de Port Berteau II
Éric Rieth, Catherine Carrière-Desbois, and Virginie Serna

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INA’s Richard Steffy describes this as one of the best recent monographs on ship construction, both because of the subject vessel and the comprehensive presentation. It describes an interesting boat excavated on the right bank of the Charente River in Northwest France. Aiming at the study of both the vessel and the environment in which it was conceived, built, and sailed, the authors present an immense amount of information in four pleasant chapters, written in an organized, clear, and easy style.

The Port Berteau II boat was a small trader built with timbers that were probably felled in the winter of 599–600 CE. Sometimes in the seventh century, the vessel was left on the riverbank with the keel up while undergoing repairs or just for winter storage. For some unknown reason, it slid into the river and sank. In time the upturned bottom broke away, and sediment covered the upper part of the hull. The boat’s remains were found in 1973, excavated between 1992 and 1997, and studied and reconstructed in 1998 and 1999. It is estimated to have been 14.29 m long and 4.8 m in beam, with a depth in hold of one meter. The shipwrights fastened the planks to the frames with treenails and to the posts with iron nails, at least in the upper works. Empty, with one ton of ballast, the boat displaced about 7.6 tons of fresh water. At full capacity, with the waterline 40 cm below the caprail amidships, it displaced 25.5 tons. The weight of the hull has been estimated at around 5.7 tons, and the total weight of the vessel empty, with rudder, masts, rigging, and anchors 7.6 tons.

The first chapter describes the larger study carried out by the French Centre National de la Recherche Scientifique (CNRS) in which the Port Berteau II vessel took part. Begun in 1971, the project includes a survey and inventory of all medieval sites of archaeological importance along the lower course of the Charente River. This tidal section of the Charente is strongly influenced by the maritime environment and was regularly penetrated by coastal craft. The second chapter studies the Port Berteau II archaeological site in relation to its fluvial environment, both from the physical and cultural viewpoints. The CNRS investigation sought to understand the landscape in which this vessel was built and sailed.

The third chapter is devoted to the shipwreck itself. A comprehensive description of the boat follows the presumed construction sequence, from the posts to the frames and planking, and then from the cross-beams to the decks and steering system. Particular attention is given to the fastening patterns and the runs of the hull strakes for their importance in the determination of the hull shape. A detailed analysis of the preparation of the timbers and the tool marks left by its carpenters completes the study. Vegetable fibers and an organic grease were used to caulk the planking seams, probably pressed into place from the outside.

Eric Rieth proposes a reconstruction of the vessel and analyzes its architectural characteristics in the fourth chapter. He sees these as functions of the many technical, economic, and cultural influences on the builders. A set of lines is proposed, together with a structural reconstruction. Evidence suggests that this vessel was built “frame-first” over a flat keel 10.3 m long. However, the structural importance of the planking, wales, and through-beams is not neglected. A strong case is made for the placement of two strakes over a small number of frames. Running around the turn of the bilge and at the level of the caprail amidships, these two natural runs defined the basic overall shape of the hull. Three appendices present studies on the nails, dendrochronology, and palinology. When I finished reading, I had to agree with Mr. Steffy’s enthusiastic assessment of L’épave de Port Berteau II.