

# Beyond the Shallows: Shipwreck Discoveries from the 2005 Bozburun Peninsula Survey, Turkey

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In 2004, INA President Donny Hamilton approached INA Director George Robb and myself about conducting a survey off the southeastern coast of the Bozburun peninsula (Fig. 1). The project, during July of 2005, was a cooperative effort with the Turkish Ministry of Tourism and Culture represented by Commissioner Gulnaz Savran. I was particularly excited by investigating this area as I participated in the Bozburun shipwreck excavation directed by Fred Hocker from 1995-1998 and knew the ancient settlements of Physkos, Lorima, and Tios were in this area. Over the centuries, this segment of coast was part of an active trade route between these ancient cities as well as Rhodes, Ephesus, and Knidos.

During the summers of 1965, 1967 and 1968, Dr. George Bass led survey expeditions along sections of this shoreline and located a scattered, unidentified wreck in at 100 m of water (Bass, 1976: 29-30). Dr. Bass led subsequent surveys along the southwestern Turkish coast in 1973, 1974, and 1980, where he documented a looted wrecksite near Marmaris and several near-shore dump sites (Bass 1982: 45-7; Rosloff, 1981: 277-81). Also located here is the bay of Serçe Liman where Drs. Bass and van Doorninck, Jr. excavated the 11th-century Byzantine glass wreck from 1977-79, and Cemal Pulak excavated the Hellenistic wreck from 1978-80 (Bass and van Doorninck, 2004; Pulak and Townsend, 1987). More recently in 2004, Jeremy Green and Dr. Faith Hentschel of INA returned to the purported area where a bronze statue was pulled from the sea in 1953 (Green, 2005).

Our expedition objectives were to conduct a systematic multibeam survey of the southeastern coast out to a depth of 100 m; and subsequently locate and document any cultural deposit. The survey area extended approximately 37 km from Kadirga Burun at the northeast extreme, just outside Marmaris, to Bozuk Bükü at the peninsula's southwestern end (Fig. 1). By the end of the season, over 120 km<sup>2</sup> were surveyed that included the majority of the shoreline out to the 80-m contour.

Multibeam survey was conducted by RPM Nautical Foundation's research vessels the R/V Hercules and R/V Juno that are equipped with remote sensing, verification, and analysis equipment (Fig. 2). A dual-head system for depths up to 100 m is affixed to the R/V Hercules and a single-head system for depths up to 45 m on the R/V Juno. Accordingly, the R/V Juno surveyed from near shore to the 45-meter contour, while the R/V Hercules surveyed between the 40- and 100-meter contours. Based on field experience and the nature of seafloor, the multibeam systems were deemed best for locating cultural resources. Multibeam survey provides highly-detailed three-dimensional data of the seafloor. Hence, positioning information is more precise and it is possible to detect small mounds often missed, as well as exclude many geologic anomalies that

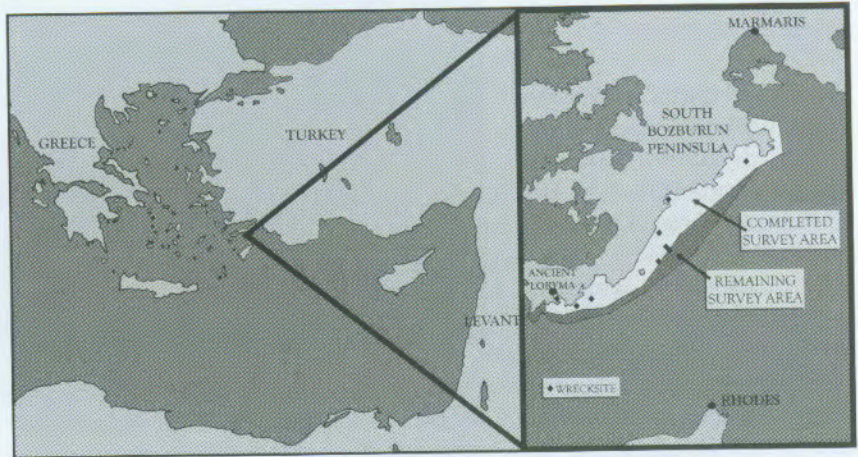


Fig. 1. Map of survey area with general locations of wrecksites. Map: J. Royal



Fig. 2. R/V Hercules and Juno surveying off the Turkish coast. Photos: RPM Nautical Foundation

often plague other systems.

Multibeam data was processed onboard the R/V Hercules and reviewed for potential shipwreck sites, which were then investigated with the remote operated vehicle (ROV). Outfitted with still and video cameras, lights, and sonar, the ROV provided complete image documentation on wrecksites. A laser attached to the ROV provided a photographic scale that assisted in individual object identification and the construction of preliminary site plans.

### Overall Results and Specific Shipwreck Sites

To date, 77 anomalies were identified in the multibeam data. Of the 75 anomalies beyond diver depth, 29 (39%) were investigated by ROV deployment, and 7 of these 29 (24%) were shipwreck sites. The remaining two anomalies were located by the R/V Juno, sites TK05-AA and TK05-AG, and were clearly discernable as shipwrecks in the multibeam imagery. As these vessels appeared modern, intact, and had little signs of burial, they were designated for diver verification at a later time. Site TK05-AA lies at a depth of 24 m near Kumlu Burun, a narrow passage near the rocks and is probably a sailboat or one of the tourist gulets that operate out of nearby Marmaris. Site TK05-AG also appears to be a modern vessel of around 22 m in length that lies within Bozuk Bükü harbor at a depth of 39 m.

#### Sites TK05-A east and TK05-AF

Site TK05-Aeast is a small, wooden vessel located at a depth of 72 m. Its articulated timbers appeared in good condition, nail heads were still visible, and the metal sheathing along its hull curled downwards like a peeled banana (Fig. 3). It is likely of a modern date. Site TK05-AF was certainly a modern vessel resting in 87 m of water,

which was likely a small sailboat. There is little degradation to its timbers, and loose debris that surrounds the hull includes a boom and a corroded battery.

#### Site TK05-AB: Galley A Wreck

July 11, the first day the ROV was made ready to deploy on a target. This anomaly lay about 2 km offshore and appeared in the multibeam image as a small, elongated mound on a flat plain. After the ROV reached the bottom at 75 m, we drove to the target with all eyes glued to video screens on Hercules. A bump in the distance grew and our screens were filled with the image of large anchors.

As we explored the area, we found a relatively undisturbed wrecksite comprised of anchors, armament, and a ballast pile aligned east-west (Figs. 4 and 5). This roughly 16 x 2.5-meter site reaches 1 m high where a gun sits atop the ballast pile that marks the center of the site; four large anchors sit to its east and several pieces of armament to its west. All four anchors are the same type and have the same dimensions, with two-meter long rectangular shafts (Fig. 6). The anchors' arms are a 0.5 m in length that end with triangular flukes, and join the shafts at a slightly curved angle. One anchor has its large ring protruding

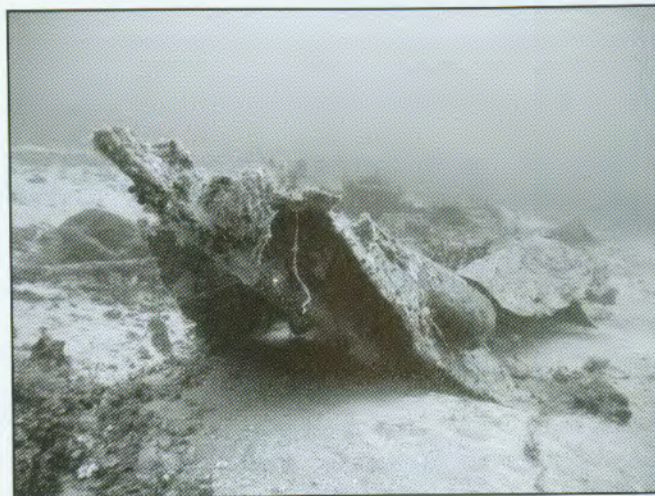


Fig. 3. Site TK05-AE: note the curled metal sheathing, and the two dots of the laser on the keel. (Photo: RPM Nautical Foundation)

Fig. 4. Site TK05-AB: anchors in foreground, large cannon atop ballast in upper right. (Photo: RPM Nautical Foundation)



from the sand, and two anchors have chain comprised of large, rounded links visibly wrapped around them. The four anchors are lying in pairs, aligned end to end, with the axis of each pair converging on the site's center line, which suggests the shape of a vessel's extremity. Anchors were traditionally stowed at the bow of vessels. The anchors' positions indicate the vessel likely sank with them in their stowed positions.

The half-meter high ballast pile has clearly defined edges that extend about 9 x 2.5 m. Smooth,

light-colored stones on its surface range from pebble to fist-sized. The pile tapers at its western end, which mimics the interior shape of a ship's lower hull. A close examination of images revealed no cultural material within the ballast.

The remains of at least three guns are present, all of wrought-iron construction with reinforcement bands along their length. One nearly intact gun is centered atop the eastern end of the ballast pile, and has the largest diameter of the three. Adjacent to one end of the gun sits an apparent breechblock. At least two smaller guns are located approximately 5 m west of the ballast pile that are undoubtedly swivel guns (Fig. 7). These guns have a small, consistent diameter relative to their circa two-meter length and a large reinforcement band at the muzzle. Located nearby are two small cylindrical objects, one of which has a shape consistent with a swivel gun's breechblock. Also, present is a concreted bar and loop on one swivel gun that is probably the stand on which it was originally mounted on the vessel. A long pole-shaped object between the ballast pile and anchors is about 1.5 m in length, and possesses 8-10 loops running along its length on opposing sides (Fig. 4). With a far smaller diameter than any of the guns and no reinforcement bands, it is unlikely armament, rather perhaps part of the vessel's rigging or a battering ram.

This site's dimensions indicate a small, narrow vessel such as a galley. Based on the single cannon at the

bow and two swivel guns further aft, this was probably a small rowed war galley such as an Italian fustas or galliot, or a Turkish firkate or kalite. Both the fustas and firkate had a single large center-line cannon, several swivel guns, and probably carried a single lateen rig (Gardner 1995: 142-62; Konstam 2002: 21-3; Alertz 1995: 142-62; Güleriyüz 2004: 29, Fig. III-C; Pulak, 2005).

Although it is unclear if there are other confirmed archaeological examples of these galleys, historical data indicates they were circa 20-28 x 2.5-3.5 m in size, undecked, and had 10-17 banks of oars per side with two men operating each oar (Konstam 2002: 21-3; Güleriyüz 2004: 29; Pulak, 2005). The galliot was outfitted, rigged, and operated similar to the fustas, but was somewhat larger at around 27-28 x 3-3.5 m and 18 oars per side rowed by two men (Konstam 2002: 21-3). A Turkish kalite was analogous to a galliot with 19-24 banks of oars (Güleriyüz 2004: 29; Pulak, 2005).

These galley types were designed for speed and maneuverability as their greatest tactical advantages. The large center gun was their primary armament, while swivel guns were placed at the bow or along the central gangway to provide supporting fire. Hence, the position of the swivel guns on this site probably mark an area forward of the stern, and suggests that this vessel was at least 16 m in length. The lengths of a galliot and kalite are probably greater than this site's dimensions would initially indicate, therefore, the more likely identification for

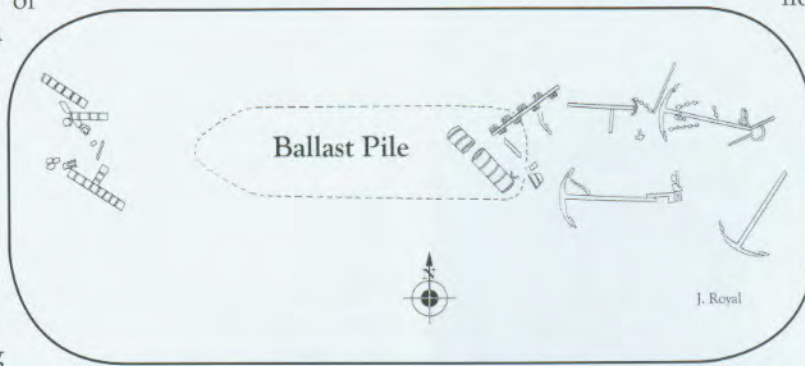


Fig. 5. (above). Site TK05-AB: preliminary site plan; not to scale. Map: J. Royal

Fig. 6. (lower left). Site TK05-AB: one of the anchors with its chain. Photo: RPM Nautical Foundation

Fig. 7. (lower right). Site TK05-AB: southernmost gun at the western portion of site, note the bore of the swivel gun. Photo: RPM Nautical Foundation



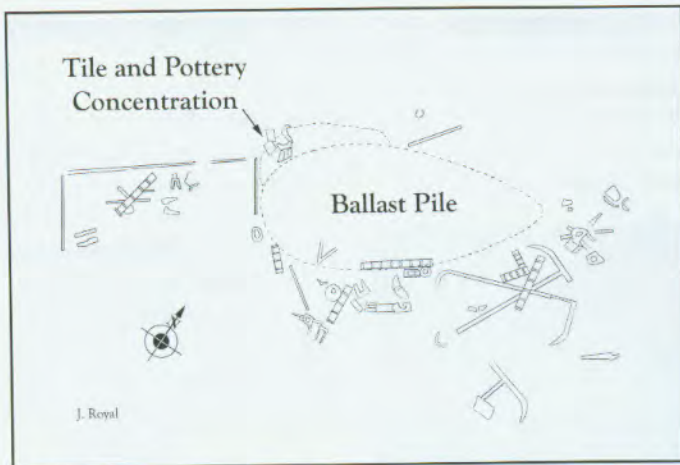


Fig 8. Site TK05-AH: preliminary site plan; not to scale. Map: J. Royal

this site is that of a fustas or firkate.

Given that wrought-iron guns were used on ships from the mid 15th - 16th century AD, and that larger galleys were outfitted before smaller ones, the earliest date for the Galley A wrecksite is likely the last quarter of the 15th century. Although wrought-iron guns continued in use on vessels through the 16th century, and later to a lesser extent, bronze guns replaced them at a rapid rate during the early 16th century. As it was increasingly rare to find wrought-iron guns after circa 1530 on galleys in the Mediterranean, the latest operational date for the Galley A wrecksite is approximately the second quarter of the 16th century. Furthermore, the anchors' shapes match as those from other 16th-century wrecks and is also noted in pictorial evidence dating to the late 15th century, where they are stowed at the bow.

The Galley A wreck was probably a fustas or firkate that operated around AD 1475-1550. Small galleys such as these were commonly used in the eastern Mediterranean throughout this period for raiding, patrols, and quick troop delivery and were not typically used in fleet engagements. Although it is not possible at this stage to assign a particular cultural identity to this galley the light armament on the galley suggests one associated with either the Italian city-states, Ottomans, or Knights of St. John who operated out of nearby Rhodes and for awhile in Bodrum.

#### Site TK05-AH: Armed Nave Wreck

An anomaly about 2 km offshore yielded a very interesting wrecksite in 81 m of water. The site covers an area approximately 10 x 4 m and is dominated by a central ballast pile that measures about 6 x 2.5 m (Fig. 8). Notable artifacts on this site were wrought-iron guns and anchors, as well as pottery, large tiles, groups of iron concretions, and remains of the ship's hull.

Three anchors and two rings protruding from the sand are located at the east end of the site, the pre-

sumed bow. Two of the anchors lie crossed one over the other (Fig. 9), with the third nearby. A ring on one of the anchors is identical to the two rings protruding from the sand, which indicates there are other anchors buried nearby. The two nearly complete anchors are around 2 m in length. At least two anchor types are present, the rounded 'lunette' shape and a cruciform example that is similar to those on the Galley A site. It appears the anchors were either on deck or stowed on the vessel's bow quarter when it sank.

The half-meter high ovoid ballast pile narrows at both ends and forms a shape reminiscent of the vessel's lower hold. Stones on its surface are smooth and range from fist to cobble size with gravel mixed among them. The ballast pile is littered with ceramic sherds and concretions with a concentration located in the southwestern sector. This concentration of large tile fragments, a concretion that may be the oven, and portions of flat-bottom ceramics (the presumed port-aft section) may indicate the ship's galley. The majority of ceramic sherds on and outside the ballast pile are body sherds of containers with flat-bottoms with small, or no, handles.

There are indications of at least four wrought-iron swivel guns of similar dimensions located around the site. Sections of one gun are lying atop and beside the crossed anchors and together are 1 - 1.5 m in length and have a relatively small diameter (Fig. 10). Additionally, fragments of apparent breechblocks and mounting assemblies were located nearby. A particularly well-preserved section of a gun is lying at the western end of the site, presumably the stern (Fig. 10). This one-meter long piece has a flared end and is clearly analogous to the swivel guns found on the Galley A wrecksite.

Fig. 9. Site TK05-AH: crossed anchors with gun sections lying atop them. Photo: RPM Nautical Foundation



Also at the western end of the site are hull timbers protruding from the sand and numerous scattered wood fragments (Fig. 10). The top of a strake is visible running northwest of the gun, and extends at least 3 m to the northern edge of the ballast pile. Two other exposed timbers lie perpendicular to this strake run; one marking the west end of the ballast pile and another marking the west end of the site.

Based on the armament, guns, and ceramics, it is clear the vessel is of a similar date to the Galley A wreck; however, this site's rounded shape indicates a merchant vessel. Historical records indicate that the length-to-beam coefficients of merchant ships were typically about 3:1 for Venetian merchantmen (or 'nave') of the mid 16th century, as well as Spanish merchantmen of the later 16th century. This ratio fits well with the Armed Nave wrecksite. The high presence of ceramic fragments and possible galley remains are also consistent with the remains of a merchantman. Based on the ballast pile, timber remains, and artifact distributions, the size of the vessel is estimated to have been 13-16 x 4-5 m; again consistent with a Renaissance merchantman.

As discussed with the Galley A wrecksite, wrought-iron guns were used in the mid 15th – 16th century AD. Armament on sailed merchantmen was necessary during the Renaissance due to conflicts between the various Italian states, Turks, and Barbary pirates. Furthermore, developments in rigging and naval armament by the mid-15th century made the smaller sailed merchantmen more cost effective to operate than larger merchant galleys that required vast crews. Armed merchantmen appear to have become common with the Venetians, Genoese, and Ottomans by around 1500 AD, typically by mounting small arms such as swivel guns. The wrought-iron armament, along with the anchor types indicate a date for the Armed Nave wreck between the late 15th to the late 16th century AD (AD 1475-1575).

#### Discussion of the Galley A and Armed Nave Wrecks

Given that two of the five pre-modern wrecks were from the Renaissance era, some comments about their historical context are warranted. With the conquest of western Anatolia during the later 14th century, Turkish forces gained coastal Aegean bases for launching seaborne attacks against the Italian city states, as well as raiding shore installations. The fall of Constantinople to the Ottomans in 1453 further strengthened Turkish maritime capabilities, and was perceived as serious by the West. Consequently, the Knights Hospitallers (Knights of St. John) moved their base to Rhodes in order to better check the Turks. Combined with forays by Barbary pirates, as well as the naval threat of the Mamluk dynasty in Egypt, the waters around the Bozburun peninsula were particularly perilous for maritime ventures. Moreover, overseas trade ventures were as vulnerable to attacks from one another as they were to Barbary pirates. As a result, the Venetians were among the first to arm their merchantmen with swivel guns to offset the threats. In addition to the threats of piracy, raids, and rival encounters at sea, there were three major naval operations during this period. Each operation targeted Rhodes to dislodge the Knights Hospitaller. The first two assaults, in 1444 by Mamluk forces and in 1480 by Ottoman forces, were repulsed by the resilient Hospitallers. However, the third attempt in 1523 by an overwhelming Ottoman force wrenched the city from the Knight's control and sent them in search of a new base of operations.

Considering the hostilities around the Bozburun peninsula area in this area, it is not surprising that two vessels from this period were discovered. The Galley A and Armed Nave wrecks are situated between the former Ottoman emirate of Menteshe and the Hospitaller fortress city of Rhodes. This stretch of water also lies along the maritime pilgrim path to the Levant and trade routes used by the Genoese, Venetians, and Ottomans. Smaller galleys, such as the fustas or firkate, were used to escort merchantmen (some armed) through dangerous waters, delivered Ottoman forces during the siege of Rhodes, and served as part of Hospitallar squadrons patrolling for pirate or raiding activity. Although an association with a specific cultural group or historical event cannot be made now, when placed within the historical context of the area, these two wrecksites provide tantalizing prospects for the examination of events known primarily from written sources.



Fig. 10. Site TK05-AH: gun at presumed aft portion of site, note strake remains at top of photo. Photo: RPM Nautical Foundation

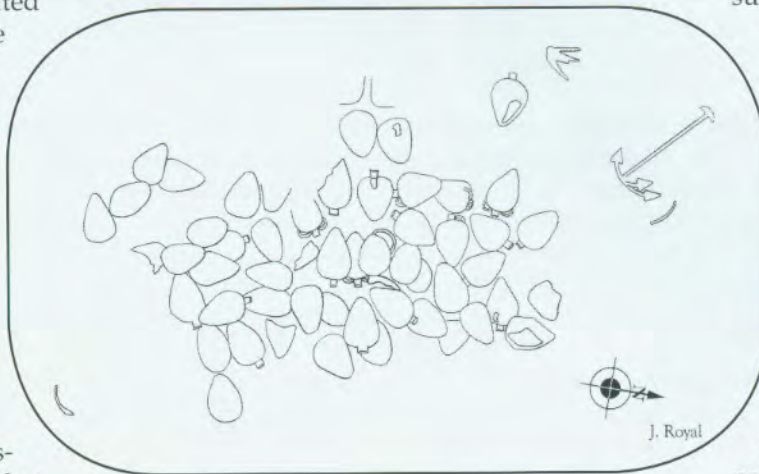
Site TK05-AC: Çomlek Burun Wreck

Site TK05-AC was close to shore, some 150 m from the cliff face near the promontory of Çomlek Burun. The wreck, a mound of roughly 60 amphoras with an anchor at one end, lies on a sandy bottom at 65 m of depth (Fig. 11). Considering there are numerous amphoras visibly buried in the sand, there are at least three layers of amphoras that cover an area approximately 10 x 3 m. Proximity to the shoreline protected this wrecksite from dragnets and kept amphoras mostly intact (Fig. 12). There is evidence of two forms of a single type; both forms have generally small, rounded bodies that taper towards their bases. However, one form has a shorter neck and a slightly more rounded body (Fig. 13). The closest parallel for these amphoras are the small pyriform amphoras found on the 11th-century Serçe Li-



Fig. 11. Site TK05-AC: layers of amphoras in an oblong mound. Photo: RPM Nautical Foundation

Fig. 12. (Center) Site TK05-AC: preliminary site plan; not to scale. Map: J. Royal

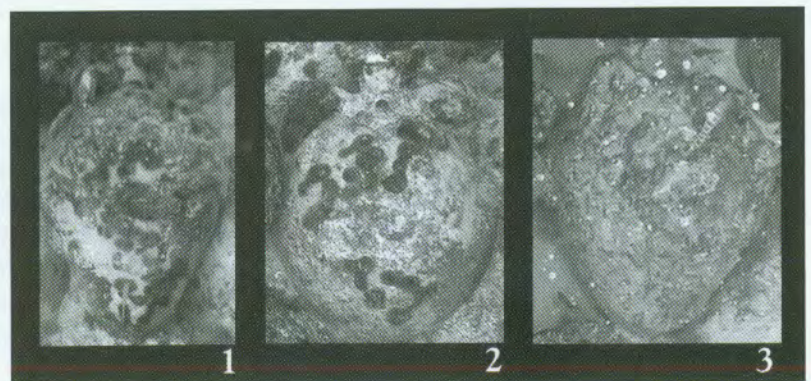


run wrecksite located around 15 km to the southwest and excavated by Drs. Bass and van Doorninck, Jr. in the 1970's.

A grapnel anchor situated at the northern end of the site is approximately 1.5 m in length, with large triangular flukes and a crescent-shaped crown that curves downward towards its arms (cover photo of this Quarterly). The grapnel anchor provides some general dating parameters for the site as these large-fluked types became common in the 12th century AD and are featured in depictions through the 15th century AD. Considering both the amphora and anchor evidence, the provisional operational date for the small merchant vessel is the late 11th – 12th century AD.

This provisional operational period for the Çomlek Burun wreck encompasses the first three crusades (AD 1095-1192) and the steady rise in Christian pilgrimage traffic from the west to the Levant. Increased travel, combined with the general growth in the demand for imported goods, spurred overseas trade and military ventures in the eastern Mediterranean during this period. The discovery of the Çomlek Bu-

Fig. 13. Site TK05-AC: amphora examples. Photo: RPM Nautical Foundation



run wreck, in relation to the Serçe Limani wreck, helps to substantiate the importance of the trade route along the southern Bozburun peninsula during this historically significant period.

Site TK05-AD: Late-Antiquity Anchor Wreck

Investigation of a small anomaly 2 km off shore yielded an amphora deposit with a collection of anchors at 85 m of depth (Fig. 14). The amphora deposit forms an approximately 9 x 3-meter oval that narrows at both ends and suggests the shape of a merchantman's hold. Apparently, the site has been dragged as it has very little relief off the seafloor. Two deposits of anchors are located approximately 4 m to the west and northwest of the amphora deposit (Fig. 16).

Initial study of the amphoras indicates a minimum of three types. One large type (Type I) is around 50 cm in length, and has a rather bulbous body, thick handles,

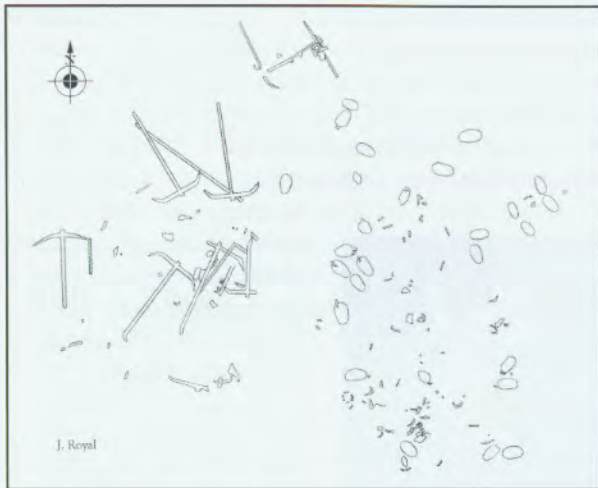


Fig. 14. Site TK05-AD: preliminary site plan; not to scale. Map: J. Royal

them (Fig. 16). The numerous concentrated anchors suggest they were in their stowed positions when the vessel sank. Seven anchors have clearly discernible arms, six of which are of a cruciform shape that upturn at their ends. A single anchor has lunette-shaped arms that curves gently from the shaft joint. Anchor stocks were not observed on most of the anchors; however, one example has a two-meter stock and ring attached to the top of its shaft.

Although cruciform anchor styles were used in the Mediterranean from the 4th – 10th centuries AD, the lunette-shaped anchor was utilized primarily during the early Roman Imperial period. Thus, the presence of both types suggests a date between the 4th and 7th century AD. Similar cruciform anchors were found on the Dramont F wreck from France dated to ca AD 400, and on the 7th-century AD Yassiada

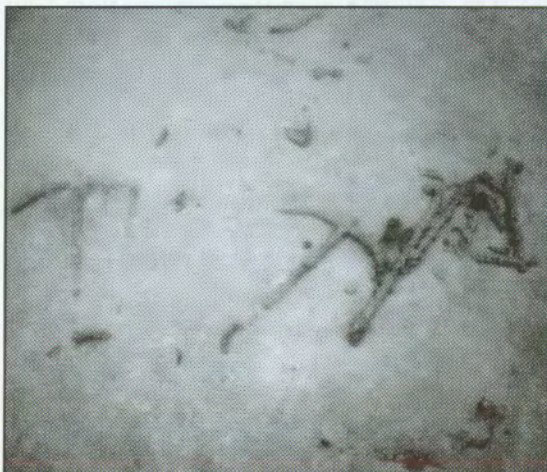
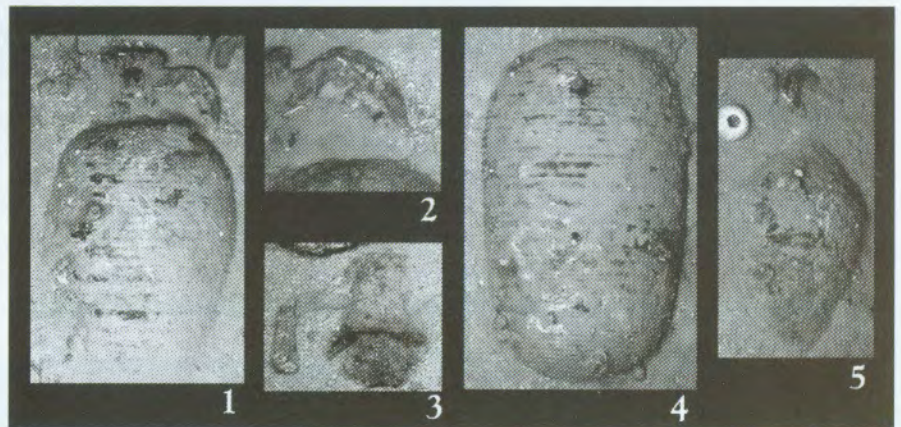


Fig. 15. Site TK05-AD: amphora examples. Photo: RPM Nautical Foundation



shipwreck from Turkey. Despite this similarity in arm shape, the anchors from the Dramont F and Yassiada wrecks differ in their relationship of shaft to arm lengths. Anchors from the Dramont F wreck have relatively short arms relative to their total length, while the anchors from the Yassiada vessel have relatively longer arms. The anchors from the Late-Antiquity Anchor wreck have an average shaft-to-arm coefficient value almost identical to those from the Yassiada vessel. Hence, the date suggested by the anchors is a closer to the 7th century AD. Together, the amphora and anchor evidence suggest an operational date for this wrecksite in the 6th century AD (AD 500 – 600). An estimate of vessel size may be deduced from the number of anchors present. Only four anchors, all smaller than those

Fig. 16. Site TK05-AD: group of anchors near amphora deposit, note the lunette-shaped anchor to left; second group beginning at top of photo. Photo: RPM Nautical Foundation

and ridges along the body (Type I; Figs. 15-1, 2). Another large type (Type II) is around 10 cm longer and more bulbous so that it has a 'beehive' shape; it also has ridges along the body (Type II; Fig. 15-3, 4). A smaller variety (Type III) is only about 40 cm long has short strap handles and has a pyriform body that tapers to a foot at its base (Type III; Fig. 15-5). Type 1 amphoras from the wreck are a well-known type of Late Roman amphora used to ship both olive oil and wine that date to the late 6th – beginning of 7th century AD (AD 575 – 625). Notably, they are similar to the Type IV amphoras found on the Yassiada wreck dated to the early 7th century AD. Precise archaeological equivalents for Type 2 amphoras have proved elusive. The best comparison is an amphora on the Great Palace mosaic from Istanbul dated to the 6th century AD. The single example of the Type 3 amphora matches a type of Late Roman amphora at the end of its development during the 6th century AD. Taken as a whole, the amphoras suggest a date in the 6th century AD.

There are at least 9, and possibly 11, anchors located in the two deposits with amphora fragments scattered among

on TK05-AD, were located on the Dramont F wrecksite; a small cargo carrier of about 10-12 m in length. The 9 – 11 anchors found on the Late-Antiquity Anchor wreck corresponds with the 11 anchors found on the 7th-century AD Yassiada wreck that is estimated to have been 21.5 x 5.5 m.

Type I amphoras were produced in the eastern Mediterranean, namely in Syria, Cyprus, Rhodes, along the southwestern Anatolian coast, as well as areas of the west Black Sea. Possible origins for the small Type III amphoras include those of Type I as well as the Aegean. Emperor Justinian's reconquest campaigns dominated the 6th-century Mediterranean world in that they restructured trade patterns, altered the political landscape, and produced large building campaigns. The conquest of Carthage by Justinian's forces in AD 533 and campaigns in the western Mediterranean resulted in a general movement of goods from east to west. With at least three types of eastern Late Roman amphoras comprising the cargo of the Late-Antiquity Amphora wreck, this site provides an excellent prospect for the study of this poorly understood era.

*Site TK05-AI: Julio-Claudian 1 Wreck*

Near the Armed Nave wrecksite was an anomaly at 83 m of depth. As the ROV approached this anomaly, we were initially disheartened to see a rock outcrop with a single stray amphora lying atop it. As the image grew larger one, then another, amphora came into view; suddenly a chorus of "they are all amphoras". The large amphora mound appeared to be relatively undisturbed and formed a nearly perfect oval of approximately 15 x 5 m (Fig. 17).

The tremendous amount of marine growth made the production of a site plan from photography unworkable; however, there are at least three types of Rhodian amphoras evident (Fig. 18). These are the large and small elongated body types (Types I and II; Figs. 19-1 and 2), as well as the more bulbous body variety (Type III; Figs. 19-3).

Each type has the characteristic curved handles with a sharp peak at their apex, long necks, rounded rims, and a long foot at their base (Fig. 19). Such amphoras typically carried wine, but also were used for shipping fruits. The two elongated types are analogous to many examples of Rhodian amphoras found throughout the Mediterranean and dated to the 1st century BC – early 2nd century AD, while the bulbous Type III is typically dated to the late 1st century BC. Based on the presence of the three amphora types, the operational date for this vessel is 50 BC – AD 50.

The cargo suggests that this merchantman originated in Rhodes, about 20 km south-southeast of the wrecksite (Fig. 1). Ancient Rhodes made great strides on the political and commercial landscapes when it sided with Rome during the First Mithridatic War in the early 1st century BC. Shortly thereafter Pompey the Great spared Rhodes from the revocation of tribute immunities. Despite the temporary rise in piracy at the fall of the Republic, the stability during the Ju-

lio-Claudian era nurtured growth in Mediterranean trade. Demand for goods in Rome itself was substantial; an estimated 150-300,000 tons of grain and equivalent amounts of wine and oil were imported each year. This heavy demand led to over-laden ships taking to sea, and one ap-



Fig. 17. Site TK05-AI: site photo showing oval shape. Photo: RPM Nautical Foundation

Fig. 18. Site TK05-AI: close-up of deposit, note the heavy growth on most of the amphoras that served as homes for many eels. Photo: RPM Nautical Foundation





proaching the Turkish coast met an untimely end. Further study of this wrecksite can shed new light on this complex and vibrant period of Roman economic history.

#### Further Study: The 2006 Expedition

During the 2006 season, the remaining anomalies along the Bozburun peninsula will be investigated along with any newly discovered anomalies in the data. Subsequent to the completion of the southeastern Bozburun target verification, a multi-beam survey of the Bodrum approaches will commence. Indications are that equally as exciting finds will be made.

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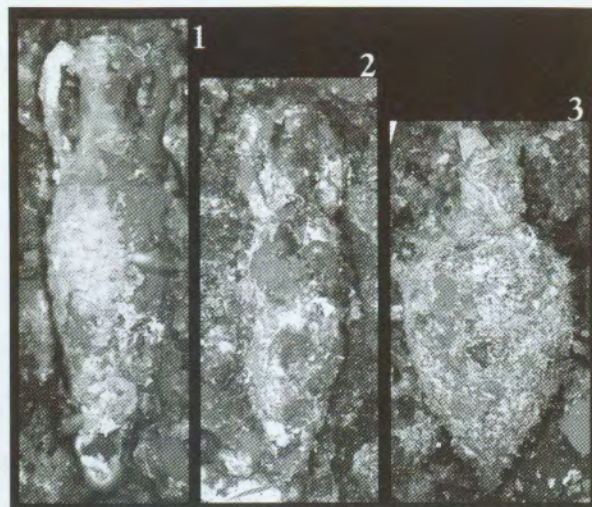


Fig. 19. Site TK05-A1: amphora examples. Photo: RPM Nautical Foundation

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