

= San Esteban (1554 shipwreck) =

San Esteban was a Spanish cargo ship that was wrecked in a storm in the Gulf of Mexico on what is now the Padre Island National Seashore in southern Texas on 29 April 1554 .

San Esteban was one of a flotilla of four ships carrying treasure from New Spain (Mexico) to Cuba . Three were wrecked in the storm , including San Esteban . Many of the three hundred sailors and passengers drowned while trying to reach shore . About thirty took a boat to seek help . Almost all the others died of thirst or starvation , or were killed by hostile local Karankawa Indians during their attempt to walk back to safety . The Spanish sent a salvage expedition , but recovered less than half of the cargo and treasure .

One of the wrecks was rediscovered in 1964 . A private company , Platoro , Ltd . , began to excavate the Espíritu Santo wreck in late 1967 , which caused public outrage and the passage of new laws to protect wrecks on the Texan coast . The remains of San Esteban were found in 1970 and excavated in 1972 @-@ 73 . Many artifacts have been recovered and are held in the Corpus Christi Museum of Science and History . They include the world 's oldest mariner 's astrolabe with a confirmed date .

= = 16th century = =

= = = Outbound journey = = =

San Esteban left Sanlúcar de Barrameda , Spain , on 4 November 1552 . It was part of a fleet of 54 ships under the command of Captain @-@ General Bartolomé Carreño that included an escort of six well @-@ armed ships with 360 soldiers . The escorting ships and 18 vessels were destined for the mainland of South America . Ten ships were heading to Santo Domingo and four to other parts of the West Indies . Sixteen were bound for San Juan de Ulúa (Veracruz) in New Spain (Mexico) .

The fleet had a difficult outbound voyage , suffering from bad weather , accidents and skirmishes with pirates . Eight vessels were lost and the rest scattered . All the New Spain flotilla arrived safely at Vera Cruz during February and March 1553 . The plan was to scrap eleven of the vessels and keep only five to make the return journey . This was typical . Ships from the Americas to Spain carried a much smaller volume of cargo than ships traveling in the other direction , although the shipments to Spain included valuable gold and silver .

In September 1552 Vera Cruz had been battered by a hurricane . The harbor facilities had not yet been repaired . The ships were unloaded and refitted slowly , and only one was prepared to sail for Havana to join the fleet for the return journey to Spain that year . The other four waited for over a year at Vera Cruz for the next fleet . These were the San Esteban , with Francisco del Huerto as master , Espíritu Santo , Santa María de Yciar and San Andrés with Antonio Corzo as master . Eventually the four decided not to wait longer and sailed for Havana without an escort . Antonio Corzo was named captain @-@ general of the flotilla .

= = = Shipwreck = = =

Oral tradition holds that a priest in Mexico predicted that there would be a disaster before the ships set sail , but that his warning was ignored . The four ships left Vera Cruz on 9 April 1554 , carrying over 400 people and valuable treasure and cargo . The passengers included wealthy citizens , merchants and former soldiers , but there were also a few prisoners and five Dominican missionaries who had decided to return to Spain . The ships carried barrels holding over 85 @,@ 000 pounds (39 @,@ 000 kg) of silver coins and disks that had been minted in Mexico City . The total cargo was worth more than two million pesos , the equivalent of almost US \$ 10 million in 1975 .

Due to prevailing winds and currents , the best route from Veracruz to Havana ran along the shore

of what became Texas and Louisiana . The four vessels took this route . On 29 April 1554 the ships were nearing Havana when they ran into a severe storm . Three of the ships were blown back to the west and wrecked on the Padre Island sandbars . Only San Andrés escaped . Santa Maria de Yciar sank about 42 miles (68 km) north of the Rio Grande 's mouth , where the Mansfield Channel is today . Espiritu Santo sank about 3 miles (4 @. @ 8 km) to the north of this point and San Esteban was wrecked 2 @. @ 5 miles (4 @. @ 0 km) further north again .

= = = Survivors = = =

There were about three hundred people on the wrecked vessels , of whom perhaps 100 @-@ 150 escaped drowning . Many women and children were among those who reached shore . Francisco del Huerto , the master of San Esteban , was able to salvage a boat . He made his way back to Vera Cruz with 30 men to get help . The other survivors tried to walk south along the shore , not realizing that the nearest Spanish outpost was Tampico , 300 miles (480 km) away . They met local people who seemed friendly and offered food , but later a fight broke out . The Spanish escaped but the Karankawa Indians followed them , picking off stragglers with arrows . The Spanish made driftwood rafts to cross the Rio Grande . They lost their crossbows when the unstable rafts tipped .

The Indians seized two men , took their clothes and then released them . The other Spaniards thought that perhaps the Indians only wanted their clothes , and stripped naked before going on . The women and children walked ahead to protect their modesty , and were ambushed and killed . Almost all of the men died of thirst or starvation , or were killed . There are records of only two who reached safety . One , Brother Marcos de Mena , was left for dead after receiving multiple arrow wounds . He recovered and managed to reach Pánuco with the aid of friendly Indians . The other , Francisco Vazquez , left the group early on and went back to the dunes facing the wrecks . He hid there until help arrived . The event came to be called the " Wreck of the Three Hundred " .

= = = Salvage = = =

Francisco del Huerto managed to reach Vera Cruz and tell of the tragic event . A rescue mission was dispatched by sea under Ángel de Villafañe . His small body of troops arrived in June . He guarded the site against looters from the Spanish settlements of Tampico and Pánuco until the salvage expedition arrived , and remained during the salvage operation from 23 July to 12 September .

The main salvage crew dispatched from Vera Cruz to try to recover the treasure was under García de Escalante Alvarado (a nephew of Pedro de Alvarado) . Alvarado bought six vessels to recover the Emperor Charles V 's coin and bullion , and the other cargo . There were 102 sailors , including eleven Spanish divers . The masts of San Esteban could still be seen . Salvage of San Esteban began at once . She had sunk in just 12 to 18 feet (3 @. @ 7 to 5 @. @ 5 m) of water , so could be thoroughly explored . The salvage team dragged a chain along the bottom to find the two other ships . Santa Maria de Yciar was located on 20 August . Her hull had split and the cargo was scattered around the wreck .

Alvarado recovered over 29 @, @ 000 pounds (13 @, @ 000 kg) of silver as well as 22 @, @ 000 pesos . The salvage crew also recovered personal items and cargo . This included resin , cochineal , sugar , wood and hides . The salvage crew found about 41 % of the total value of the cargo . 51 @, @ 600 pounds (23 @, @ 400 kg) of precious metals , coins , jewelry and religious artifacts were lost . After that the island was rarely visited by Europeans for the next 200 years .

= = 20th century = =

= = = Rediscovery and Espiritu Santo excavations = = =

The 1554 wrecks were well documented and were shown on maps from 1646 . Treasure hunters

who knew of them and beachcombers searching at random found traces of Spanish coins and fragments of ships on the Padre Island beaches throughout the 20th century . The search intensified after dredgers accidentally destroyed Santa Maria de Yciar late in the 1950s . In the summer of 1964 Vida Lee Connor found Espíritu Santo while scuba diving . She spent two years exploring her discovery before marking it with buoys and announcing the find . When she went back to the site later she found a private diving party taking items from the wreck . This was the start of a major debate about antiquities found in Texas .

Platoro , Ltd . , a private company , began to excavate Espíritu Santo wreck in late 1967 . They found about 500 objects , including a gold bar , jewelry , and equipment used for navigation . Platoro 's exploration and retrieval of objects from the site started a long @-@ running argument with the state of Texas about ownership of the artifacts . It also triggered the Texas legislature to pass the Antiquities Code in 1969 to prevent unauthorized excavation of future finds .

In 1960 the U.S. Supreme Court had ruled that all territory up to 10 @.@ 35 miles (16 @.@ 66 km) from the Texas coastline was the property of the state of Texas . On this basis , due to a concern that the excavation should be conducted using scientific archaeological methods , and since this was the oldest shipwreck site to be examined in the Western Hemisphere , the state launched a suit against Platoro . The Texas Archaeological Research Laboratory (TARL) at the University of Texas at Austin received the objects for study in the interim . There was a lengthy argument in the courts over state versus federal jurisdiction and compensation to Platoro . The outcome was that Platoro was offered a cash settlement of \$ 313 @,@ 000 . The state of Texas was acknowledged to be the custodian of the artifacts that had been recovered .

The Antiquities Conservation Facility (ACF) was set up at TARL to study the material found by Platoro . The ACF extended principles and approaches developed by TARL to cover shipwreck conservation and analysis . This created the basis for future marine archaeology in Texas . After the ACF was closed these principles were carried forward in the Conservation Research Laboratory at Texas A & M University .

= = = San Esteban excavation = = =

In 1970 the Texas Antiquities Committee commissioned the Institute of Underwater Research to survey about 20 miles (32 km) of the coast over a one @-@ month period . The institute found San Esteban during the survey . Where the magnetometer indicated that iron was present , they used a " blower " to make a vertical jet of water that blew a 5 feet (1 @.@ 5 m) layer of sand and shell away from the Pleistocene clay bottom and exposed the artifacts of the wreck . The Antiquities Committee arranged for the site of the San Esteban to be excavated in the summer of 1972 , with follow @-@ up work in the summers of 1973 and 1975 . They focused on this wreck , since it had not been disturbed .

Most of the ship 's wooden hull was lost , but the layout of the ship could be seen from the placement of the anchors , guns and fasteners . Corrosion and chemical interactions had melded many of the metal artifacts into conglomerates . One of these weighed more than two tons and was more than 4 metres (13 ft) in length . It held two anchors , a hooped barrel gun of wrought @-@ iron , and various other objects . The divers made careful maps of the material they recovered , but had no way of determining on the spot what was inside the metal conglomerates encrusted by marine growth . The divers recovered some of the conglomerates and some individual artifacts in 1972 . The next year they recovered the rest of the large conglomerates , many smaller conglomerates and individual artifacts . In all they brought up 12 @,@ 000 kilograms (26 @,@ 000 lb) of artifacts in 1972 @-@ 73 . The Texas Archaeological Research Laboratory received all the artifacts for analysis .

Each encrusted conglomerate of concreted material was carefully documented with photographs , radiographs where practical , and detailed conservation records . The researchers used hammers , chisels and small pneumatic chisels to break open the conglomerates . They then subjected the metal and wood objects to complex and time @-@ consuming processes to remove the products of corrosion and preserve them from future degradation . There had been a suspicion that Platoro had

excavated from the San Esteban as well as the Espíritu Santo , but the analysis of the San Esteban artifacts made it clear that the Platoro collection all came from Espíritu Santo .

The San Esteban findings included three broken anchors and a wrought iron swivel gun that was also broken and unusable . The broken objects may have been kept so they could later be repaired , or may have just been used for ballast . There were four anchors in working condition . The anchors were made of wrought iron . Other finds included ship 's fittings , tools and a cannon made by welding together iron bars . This gun and the wrought iron guns were by now obsolete in Europe , but presumably considered sufficient for the New World . The divers recovered the stern end of the keel and a portion of the sternpost . The stern / keel section of the San Esteban is similar to other wrecks of the period , and contributes to a view of ship construction at the time . Experts have estimated that the ship was 21 to 30 metres (69 to 98 ft) long and displaced 164 to 286 long tons (167 to 291 t) . The planks were 10 centimetres (3 @. @ 9 in) thick .

Miscellaneous finds included a brass buckle , shards of glass and olive pits . Several conglomerates held the exoskeletons of cockroaches , providing the first evidence of shipment of these insects between Europe and the Americas . Personal possessions included a gold crucifix , pins , silver thimbles and silver reale coins . The salvage team also found silver and gold bullion . Some locally @-@ made items included prismatic obsidian blades and a polished nodule of iron pyrite for use as a mirror . Other items included weapons and instruments for navigation . A mariner 's astrolabe is the oldest such instrument with a confirmed date . Pewter objects from England were found and stoneware from Cologne , Germany . In the end about 1 @, @ 500 artifacts were retrieved from the San Esteban , 85 % of them from the conglomerates .

= = = Preservation and display = = =

On 21 January 1974 the National Park Service listed the three wrecks as the " Mansfield Cut Underwater Archeological District " in the National Register of Historic Places . The Texas Antiquities Committee of the State of Texas owns the San Esteban wreck . It is managed by the National Park Service . The National Register lists the site as part of an archaeological district of national significance .

The Texas Antiquities Committee sponsored a travelling exhibition of the finds from the 1554 wreck from 1977 to 1981 , which visited 20 museums across Texas . The exhibition showed an anchor , cannons and the remaining parts of the keel and stern post . Display cases held explanatory text , illustrations and artifacts . The recovered objects found a permanent home at the Corpus Christi Museum of Science and History . An extension to the museum opened in May 1990 to house the Shipwreck ! exhibition .