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A VIEW OF CELI'S JOURNAL OF SURVEYS AND CHART OF 1757

by JOHN D. WARE

THE *San Francisco de Asis* was a xebec, one of a class of relatively small three-masted sailing vessels used around the Spanish and Portuguese coasts. Her fore and mizzenmasts were lateen rigged, and her mainmast was square rigged, having three sails - main, lower main, and upper mainsails. This type was frequently outfitted with oars for use in calm water, but there is no indication that this vessel was so equipped.¹

This xebec under command of naval Lieutenant Don Jose Jimenez set sail from the "Port of Havana, which is at 23° 10' of North Latitude and Longitude 291° 10', for the *Bay of Tampa*, which is in 27° 40' and 290° Longitude, based on the meridian of Tenerife. . . ." ² The coordinates of latitude of both places are very nearly correct. Application of the sun's declination, either north or south, at meridian passage would give the latitude. Such latitude was limited in accuracy perhaps only by the skill of the observer and the refinement of the observing instrument itself. ³ Don Francisco Maria Celi, commander of this Florida surveying expedition, refers to "latitude by observation" and so records it in several places on his log sheets. It is probable that he measured the sun's angular distance with a backstaff, or sea quadrant, or perhaps with some early variation of the sextant, which was invented more than two centuries ago. ⁴ The determination of longitude at sea, however, was quite another matter and is a comparatively modern development. It was not until the

1. Henry B. Culver and Gordon Grant, *The Book of Old Ships* (Garden City, 1935), 213.
2. Francisco Maria Celi, "De la Havana al Puerto de Tampa, Ano de 1757, Diario de Reconocimientos, Oceano Atlantico Septentrional," trans. by John D. Ware as "From Havana to the Port of Tampa, Year of 1757, A Journal of Surveys, Atlantic Ocean, Northern Part," 1. Hereafter cited as Celi Journal. Ware's translation of Journal in Florida Historical Society Library, University of South Florida, Tampa, and the P. K. Yonge Library of Florida History, University of Florida, Gainesville.
3. The writer is speaking from personal experience.
4. Nathaniel Bowditch, *American Practical Navigator* (Washington, 1962), 42.

nineteenth century that the average navigator was able to determine his longitude with accuracy. In light of all this, it is almost certain that Celi was unable to determine his longitude by observation. In fact, he virtually admits this in his Journal when he referred to a position in the vicinity of Marquesa [*sic*] Key as being ". . . according to the information on the chart."⁵ There is no record in his work that he determined his longitude by observation, but rather is presumed to have derived it from some known, though perhaps erroneous, position on the chart.

By 1757, Spain's influence and power in Florida was diminishing year by year by reason of the burgeoning English colonies to the north and her own short-sighted policy of prohibiting the immigration of foreigners. In fact, the migration of her own non-Catholic citizens was likewise restricted.⁶ Despite this, Spanish interest in the Tampa Bay area impelled Don Lorenzo Montalbo, assistant quartermaster of the Royal Navy and its principal minister in Cuba, to request the survey. Accordingly, the order was given by Don Blas of Barreda, rear admiral of the Royal Fleet and ranking naval officer of Havana, to start the survey.

There is no indication from the Journal that Easter Sunday, April 10, 1757, was chosen as a particularly propitious day to begin their voyage. Yet this might well have been the case, as the Spaniards were a very religious people. Indeed, a member of the clergy, Don Augustin Fogasa, accompanied them on the voyage to minister to their spiritual needs.

After releasing the towing vessel⁷ which assisted them out of the harbor and through the narrows between Morro Castle and the Point,⁸ the weather soon worsened. The xebec was therefore compelled to heave-to for some six hours to await a more favorable wind before attempting the passage across the Straits of Florida.⁹ It is passing strange that the narrow, very shoal channel between Boca Grande Key and the Marquesas group would be their channel of choice to pass through the Florida Keys when the center of the ten-mile wide, deep-water fairway between Rebecca Shoal and

5. Celi Journal, 3.

6. Rembert W. Patrick, *Florida Under Five Flags* (Gainesville, 1945), 23.

7. This was probably a longboat with men at the oars.

8. United States Hydrographic Office, *Chart 307, Havana Harbor* (Washington, 1956).

9. Celi Journal, 1-2.

Dry Tortugas lay just thirty-five miles to the westward.¹⁰ The additional distance might well have been the determining factor. Be that as it may, the account records that Captain Jimenez and Pilot Celi exercised prudent seamanship in executing this successful shoal-water crossing.

Little is known of the actual dimensions of the *San Francisco de Asis*, but the vessel passed over bottom at a depth of two and one-half fathoms on this particular crossing and over a two-fathom bar upon entering Tampa Bay.¹¹ The Spanish fathom was 65.84 inches; therefore, from the foregoing, we must assume that the vessel had a draft of somewhat less than twice this figure. Based on the above, a draft of eight to nine feet would be a fair assumption.

Speculation and a fair measure of reasonable deduction must also be employed in arriving at the number of men aboard the xebec on this voyage, as well as the position, or station aboard ship of at least two of the officers. In all, six of the latter, including the chaplain and the accountant, were referred to at various times. The party who surveyed the Hillsborough River consisted of Captain Jimenez; Pilot Celi; Franco the draftsman; two petty officers, Francisco Diaz the carpenter, and the caulker who was unidentified by name; and fifteen seamen.¹² This totals twenty-five men, leaving four officers and a skeleton crew of seamen-perhaps not less than ten - while the xebec remained at anchor off Gadsden Point awaiting the return of the survey party. Thus the vessel's complement of officers, petty officers, craftsmen, and seamen was probably on the order of thirty-four in number. In addition to the officers identified, Don Fogasa and Don Rafael Jimenez were at various times referred to as the ship's chaplain and the accountant, respectively. This leaves in doubt the identity of only Don Lino Morillo and Jose Gonzalez.

The Journal discloses that at no time was the xebec left unattended without Captain Jimenez or Don Lino Morillo aboard ship. This fact, together with the frequency with which Morillo's name was mentioned, suggests that he was second-in-command or chief mate. This theory is further enhanced by his refusal to

10. United States Coast and Geodetic Survey, *Chart 1113, Havana to Tampa Bay-1964*. (They utilized this passage on their return, Celi Journal, 58-60.)

11. Celi Journal, 4, 7.

12. *Ibid.*, 29.

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give the Indians rum during Captain Jimenez' absence, although the captain himself did not hesitate to offer rum to the natives.¹³ Jose Gonzalez, whose name was mentioned only once, was probably Celi's assistant or junior pilot.¹⁴

Most seafarers would probably agree that the most dangerous phase of navigation occurs when a vessel is "on soundings." From the days of the earliest navigator, the possibility of grounding his vessel has been a major concern, and frequent soundings have been the most highly valued safeguard against this experience. The lead line is perhaps the oldest instrument of navigation.¹⁵ The hand lead, consisting of a lead weight attached to a line usually marked in fathoms, has been known since antiquity, and with the exception of the markings, is probably the same today as it was 2,000 years ago. The deep sea lead, a heavier weight with a longer line, was a natural outgrowth of the hand lead and was designed for use in deeper water.¹⁶

The lead is usually cylindrical in shape or roughly so, having a hole for attachment of the line to the top and a recess in its bottom. The latter is packed with tallow, wax, soap, or any other sticky substance not immediately water-soluble. Upon reaching the bottom, small particles will adhere to this substance and can thus be brought to the surface for examination and comparison. Thus it was that Celi obtained his soundings which were of immediate importance to the safe navigation of his vessel. The long-range significance of those depths taken in the Tampa Bay area, however, was infinitely greater - they would become a vital part of Celi's Journal of Surveys and its accompanying chart. They helped fulfill an important part of the mission by contributing to a useful and reasonably accurate chart,

The Journal is filled with references to the wind and weather. This is not strange when one considers that the wind can be almost at once both friend and foe. This was particularly true in the days of sail, and the shores of Florida are strewn with the remains of men and ships, who either ignored the signs of approaching storms or who were unable to flee.¹⁷ Of necessity,

13. *Ibid.*, 28, 43.

14. *Ibid.*, 54.

15. Bowditch, *American Practical Navigator*, 27.

16. *Ibid.*

17. Gonzalo Solis de Meras, *Pedro Menendez de Aviles, Adelantado, Governor, and Captain-General of Florida*, trans. by Jeannette Thurber Connor (DeLand, 1923) 109. See also facsimile edition with introduction by Lyle N. McAlister (Gainesville, 1964).

therefore, the early explorers to the New World developed an uncanny ability for judging the weather and acting accordingly. That some were willing to stake their professional reputation and their very lives on this ability has been chronicled often in written accounts of those early explorers.

There is no suggestion from Celi's Journal that any such momentous decisions involving the weather ever confronted him or his captain. Their voyage was in April and May - some two months before the usual hurricane season - so they were spared this worry. Land and sea breezes, both prevalent along the Florida west coast, and caused by alternate heating and cooling of the land mass adjacent to the water,¹⁸ were frequently referred to by Celi. The handling of the vessel in anticipation of these winds indicated a practical knowledge of their effect, if not the theory of their cause.¹⁹ In general, the navigation of the vessel could be characterized as both prudent and conservative. Soundings were taken at frequent intervals, and on several occasions the longboat was dispatched to sound ahead of the xebec and give an appropriate signal upon encountering dangerous shoal water.²⁰ Moreover, Celi did not hesitate to improve the position of the vessel because of inclement weather.²¹ Proof of the skill and vigilance of the officers and crew in this respect is the fact that there is no record in the Journal that the xebec touched bottom at any time, much less grounded.

While Celi's expedition was concerned chiefly with the survey of Tampa Bay, he also described many aspects of the Florida west coast on his three-day outbound voyage from Havana. There were certain inaccuracies of direction and distance of the coast line, to be sure, but in general his descriptions would have been useful to the navigator of that era. For example, he lists the depths of certain passes and bays enroute, although the Journal does not indicate that he actually stopped to sound these areas.²² The time element involved suggests that he did not penetrate any of these passes and bays. He must have been navigating from a chart developed by an earlier navigator, perhaps even himself, as he states near the end of his commentary that, "I have made

18. Bowditch, *American Practical Navigator*, 806.

19. Celi Journal, 6.

20. *Ibid.*, 26-28, 48-49.

21. *Ibid.*, 15-16.

22. *Ibid.*, 3-7.

many trips on this passage. . . .”²³ Thus, he may well have been speaking from his own former experiences or merely giving descriptions as he interpreted them from the chart.

Upon the approach to Tampa Bay, Celi's prudent judgment and perhaps former experiences were once again demonstrated when he advised anchoring at 2 a.m., “lest we go beyond the mouth of Tampa Bay.”²⁴ From his description and the subsequent time element involved, it is probable that the vessel anchored about four miles West South West of Longboat Pass.

Entry of the *San Francisco de Asis* into Tampa Bay by way of the present southwest channel at 8:30 a.m., Wednesday, April 13, 1757, and her anchoring a half hour later inside Egmont Key was attended by no particular fanfare. Some definite and accurately measured area of reference had to be decided upon as a starting point for the survey. “The island of the middle,” which Celi named San Blas and Barreda and which is presently called Egmont Key, was chosen.²⁵ The south point of the island was selected as a starting point, and it was subsequently marked by a cross on their outbound passage. It is indicated on the 1757 chart as Point of the Cross.

Celi's method of measuring and establishing the size and shape of this island is worthy of note. Starting at the south end of Egmont Key, he and his assistants sighted down the shore line, noting the compass bearing and distance in Castillian yards of thirty-three inches, until the beach began to curve. He proceeded to this point and repeated the operation, noting the bearing and distance as before. This operation was similarly repeated twenty times until, by this series of straight-line measurements, he returned to the point of origin.²⁶

One interesting sidelight becomes apparent upon reading the Journal and studying Celi's chart. The daily navigational log

23. *Ibid.*, 60.

24. *Ibid.*, 6.

25. *Ibid.*, 8-9.

26. The author has plotted these coordinates as recorded by Celi, using an assumed scale. The resulting outline bears an amazing resemblance to the Egmont Key of today both in size and shape. A comparison of Celi's Isle of San Blas and Barreda with the present Egmont Key may be noted on a modern navigational chart (United States Coast and Geodetic Survey *Chart 1257, Tampa Bay and St. Joseph Sound-1967*). The ravages of wind and sea in the intervening two centuries and more may account for certain minor discrepancies of size and shape.

sheets upon which the hourly data was recorded while the vessel was under way provide a column for magnetic variation, and lists therein different values for the areas navigated.²⁷ Yet there is no indication from a study of the text and chart that such variation for the Tampa Bay area in 1757 was considered in any of the surveys. There are two available charts of Tampa Bay²⁸ which provide a means of arriving at an approximation of the value of this 1757 phenomenon. One drawn in 1966 shows a magnetic variation of 1° 15' East, while an 1879 version shows that in 1885 this value was 3° 25' East. Inasmuch as the annual rate of change has not been uniform over the years, we derive an average annual rate of decrease of 1.6' (minutes of arc) for the eighty-one year interval. Applying this same rate to the 1885 magnetic variation, one arrives by extrapolation at a figure of 6° 50' East in 1757 - the date of Celi's survey. This approximation is strengthened considerably by another early chart, Bernard Romans' Map of Florida of 1774, which indicates a magnetic variation of 5° 47' East. Applying an average annual rate of decrease for the intervening seventeen years, again by extrapolation, to Romans' figure, the figure of 6° 14' East for 1757 is secured. The approximations of the magnetic variation, one based on unquestioned sources and the other on Romans' value, are within a little more than one half of a degree of arc-an insignificant difference.

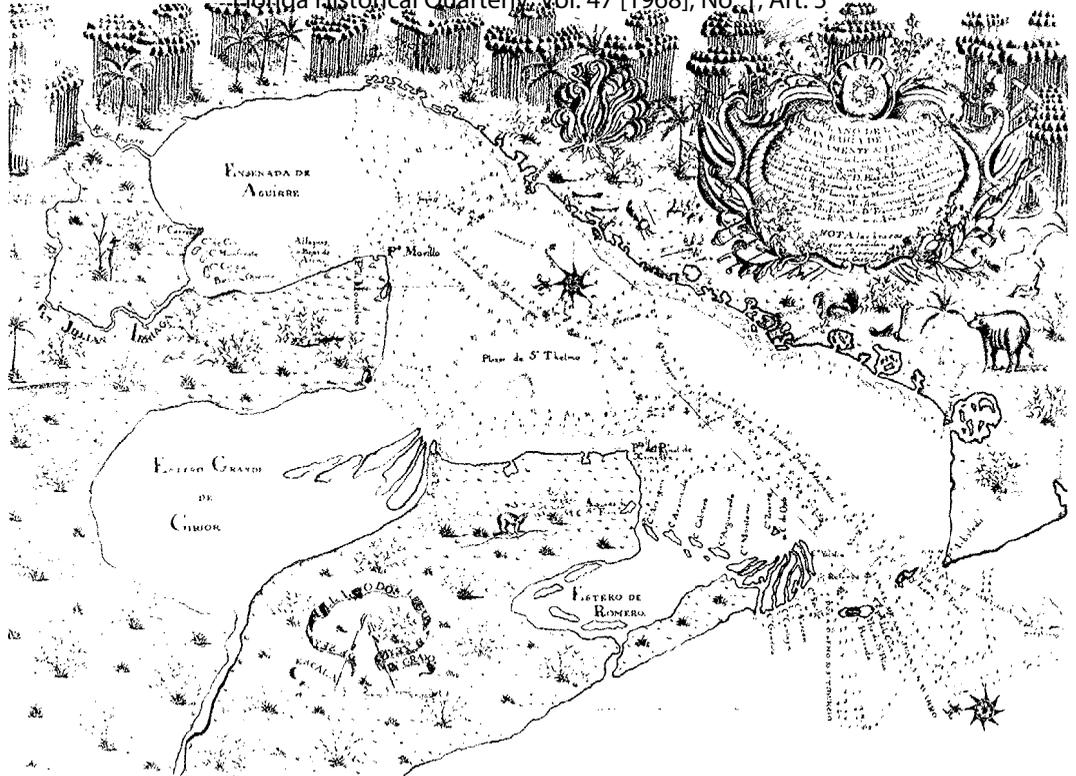
The xebec remained in her initial anchorage for some five days before shifting to a more protected position in the lee of Mullet Key Shoal. The Journal indicates that a strong northeaster had begun. It not only caused life aboard the small sailing vessel to become uncomfortable, but it threatened the safety of the vessel, and Ceil sought a more sheltered anchorage.²⁹

During these five days, Celi and his party pursued their surveying activities with the same diligence used in measuring Egmont Key. Relying in large measure on this now well established landmark as a reference, he outlined the shape of the shore line and shoals and recorded the depths of the latter, both inshore and offshore from the keys of the entrances to Tampa Bay. While

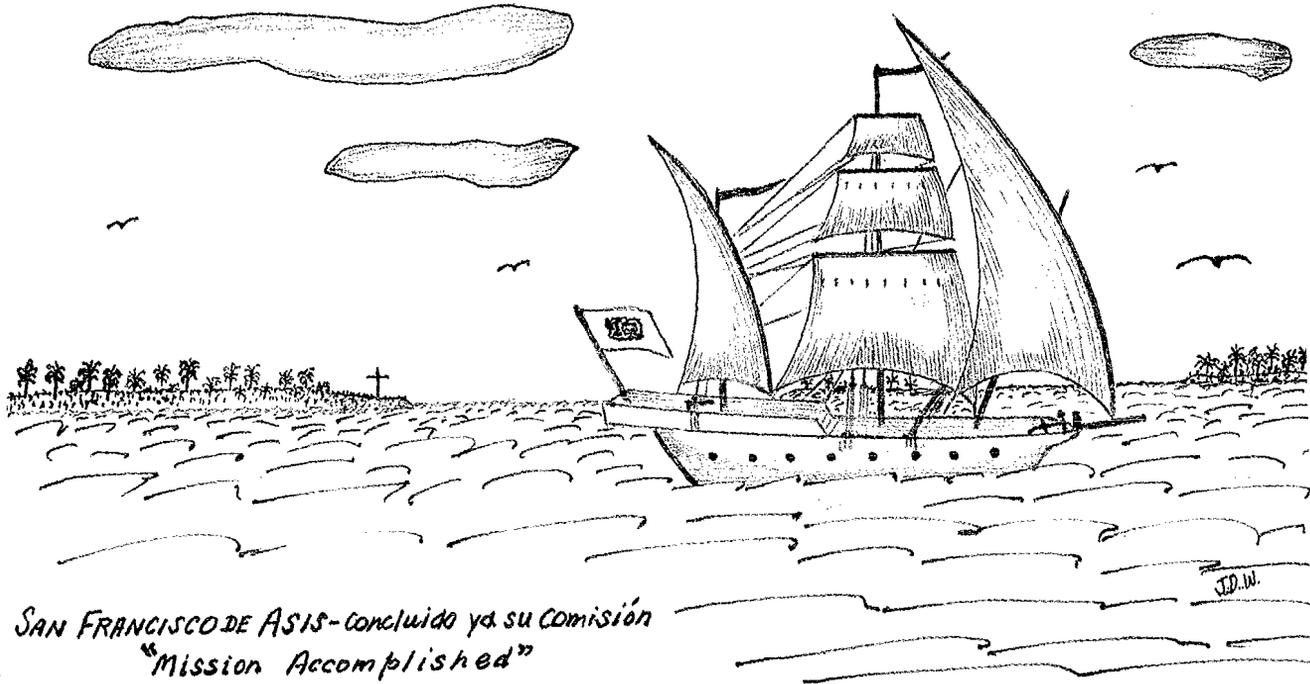
27. Celi Journal, appendix, i-v.

28. United States Coast and Geodetic Survey *Chart 1257, Tampa Bay and St. Joseph Sound-1966*, and *Chart 177, Tampa Bay-1879*. Hereafter cited as *Chart 1257* and *Chart 177*.

29. Celi Journal, 14-16.



Celi's chart as drawn in 1757



SAN FRANCISCO DE ASIS-concluido ya su comision
"Mission Accomplished"

A stylized version of the SAN FRANCISCO DE ASIS drawn by John Ware. He enlarged the sketch of the ship which appears in the lower right-hand corner of Celi's chart. The sketch shows the cross on the Isle of San Blas and Barreda (Egmont Key) which Celi erected. The trees seen under the sails were on what was then a good-sized island and is now a mere sand spit—Passage Key. The land to the right of the bow is Anna Maria Key.

Egmont Key was the starting point for the survey, as work progressed, other points of reference assumed equal importance. In general, all of the work reflected the same conscientious attention to detail, marred perhaps by only one significant error of judgment. It resulted in a decision involving the usefulness of the present Egmont Channel, a decision agreed to by the qualified officers of the *San Francisco de Asis* on the final day of the survey,

After delineating the shape of the shore line and shoals disclosed by his work "in the field," Celi moved on to the general area south and east of Boca Ciega Bay and Pinellas Peninsula, sounding and sketching as he went along. This two-day excursion took him as far north and as close as "half the range of a pistol shot" to a point which he called "Santa Cruz" (probably present Paps Point).³⁰ The xebec had meanwhile kept apace by proceeding further into Tampa Bay.

Two conclusions were reached by the party as a result of the examination of this area.³¹ First, Celi's chart does not show any soundings of Boca Ciega Bay - called by him Estero de Romero - nor would the time element indicated in his Journal have permitted more than a casual glance into this inlet. Yet he drew a fairly accurate likeness of this bay on his chart, concluding that, "I have tried to examine and survey it as being suitable only for fishing boats."³² Secondly, a likely source of fresh water was discovered by the carpenter and two seamen who had been sent ashore to "bleed some pines." A rather confusing description of the south shore of Pinellas Peninsula was reported to Captain Jimenez by these unlettered crew members, but their advice as to the suitability of fresh water for shipboard use was later followed on the outbound passage. Their report also suggested that the fresh water outlet came from some unknown source. This was perhaps a second outlet non-existent today, from the present Lake Maggiore.

Having completed this phase of his survey, Celi and his crew rejoined the xebec, which then made her way by various tacks into the mouth of the Ensenada de Aguirre or Hillsborough Bay and anchored some two miles to the eastward of what is now Gadsden Point. This passage was interrupted by intermediate

30. *Ibid.*, 24.

31. *Ibid.*, 23-26.

32. *Ibid.*, 24.

stops occasioned by shoal water and encounters with the Indians,³³ the first of several encounters - all friendly and peaceful - save the angry outburst of one petulant brave upon being refused rum.³⁴

Without touching on the historical significance of the several reports of the Indians in the Journal, certain inferences, however, do stand out. First of all, the vessel was proceeding inward, heading in a northerly direction, when a canoe carrying four Indians was first sighted astern.³⁵ From the relative position of the xebec at the time, it would appear that the craft was coming from a position on the southeast shore of Tampa Bay. From this observation and the fact that an Indian village is depicted on Celi's chart, it may be inferred that a village did indeed exist at or near the present Big Cockroach Bay and Mound. A hint of the living conditions of these Indians is contained in a later statement in the Journal.³⁶

Celi noted that in every instance the Indians came to the vessel of their own accord and that they had no fear of the white intruders. Whether the natives recognized the xebec as Spanish is debatable, even though the vessel flew her national banner, if not on the day of their initial meeting, at least on a later date.³⁷ With all this display of fearlessness and apparent trust by the Indians, there may yet have been a shred of doubt. The cacique, or chief, remained ashore on this first visit, and there is no record that he ever met with the white men although this possibility cannot be ruled out.³⁸

This lingering element of suspicion, if any, was probably not entirely one-sided. Celi later came upon a hunting party - eight men and two boys - in his search for some fire wood cut previously by his crew. Of this encounter, he wrote: "The fleet, as usual, was off to the W S W." The "fleet" or armada, as he characterized it, was the other two canoes with the rest of his party. Perhaps Celi had some doubts about this chance encounter; in any case, because of the admitted language problem and perhaps be-

33. *Ibid.*, 27-28.

34. *Ibid.*, 38.

35. *Ibid.*, 27; see also Celi's Chart of 1757, appendix ix.

36. *Ibid.*, 43.

37. *Ibid.*, 54.

38. *Ibid.*, 27-28.

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cause of prudence, he did not tarry long to ask about the fire-wood.³⁹

Much of this is speculation taken out of historical context. The Indian encounters referred to by Celi, when considered along with the other assembled knowledge, may well enrich the entire picture. All speculation aside, the record in the Journal suggests that the relationship between the Spanish survey crew and the Tampa Bay Indians was one of mutual respect and guarded friendship, if not of complete understanding. The Indians were well received and regaled with gifts.⁴⁰ They in turn volunteered some knowledge of their hunting skills, which apparently was about all they had to offer.⁴¹

The survey of the River of Saint Julian and Arriaga took some three days in time and considerable effort in pushing, pulling, and hauling the longboat over and past some of the shoals below and in the vicinity of what is now the Hillsborough River State Park. Their forward progress was finally halted completely by the outcropping of rocks which Celi called "El Salto" - the waterfall.⁴² The courses of the various reaches of the river - some fifty in number - together with their depths and widths are carefully noted, along with descriptions of the shoals and bars enroute.⁴³ In addition to charting this meandering stream, Celi and Captain Jimenez were also looking for trees suitable for masts, booms, and yards. Such timber was found in abundance on their walking survey of the river bottom, and they cut a specimen to take back to Cuba.⁴⁴ Whether Don Juan Franco, the draftsman from the navy yard, accompanied them on the river survey in connection with the search for timber is not clear.⁴⁵

39. *Ibid.*, 41-42.

40. *Ibid.*, 27-28, 39, 43.

41. *Ibid.*, 43. A description of a minor variation in deer hunting used by the Choctaw Indians is described in Bernard Romans, *A Concise Natural History of East and West Florida* (New York, 1775), 66. See also facsimile edition with introduction by Rembert W. Patrick (Gainesville, 1962). This description by Romans was recorded some thirteen or fourteen years after Celi's survey.

42. Celi Journal, 36.

43. *Ibid.*, 30-35. This river has undergone certain changes of configuration and depth of its upper part since the building of the present-day dam.

44. *Ibid.*, 36-38.

45. The author is of the opinion that Don Juan Franco may have done the art work on the chart after Celi drew in the shore lines.

Upon completion of the survey of the Hillsborough River, Celi resumed his work at Papy's Point or Point of the Cross, as he called it, surveying and sounding across the mouth of what is now Old Tampa Bay. This great body of water received about the same degree of attention as did Boca Ciega Bay - a few bearings of keys in its mouth, no soundings, and a guess-work outline.⁴⁶ The shoals and bars south of Tampa's Interbay Peninsula and on both sides of the entrance to Hillsborough Bay were sounded and recorded in the Journal and noted on the chart with great care and detail. According to the text and the chart the east side of this bay northward from its entrance, however, received no attention. Failure to recognize and chart the Alafia River is therefore not surprising, since this shore line was not traversed. Yet unaccountably, Celi drew the River of Franco, though rather inaccurately.⁴⁷ This is now known variously as Six-Mile Creek or Palm River.

The remainder of the shore line of the southeast side of Tampa Bay was examined by Celi and his crew by skirting the shoals and beaches close-aboard with the longboat, taking bearings and sounding intermittently. In view of this, his failure to document and sketch the Little Manatee River, Terra Ceia Bay, the Manatee River, and Sarasota Pass as little more than unrecognizable indentations on his chart is rather puzzling.⁴⁸ It was as if

46. Almost this same outline was to be drawn into an English chart twelve years later with the inscription, "Tampa Bay According to the Spaniards." See William Stork, *A Description of East Florida* (London, 1769), opposite page 35. Hereafter referred to as the Map of Bay of Espiritu Santo of 1769. This chart is also documented in Woodbury Lowery, *A Descriptive List of the Maps of the Spanish Possessions within the Present United States, 1502-1820*, ed. by Philip Lee Phillips (Washington, 1912), 385. It must be assumed that the English knew of the Celi Chart; they may even have had a copy and a translation of his journal from which the chart was developed. The English version shows a few soundings, suggesting that they at least went into Old Tampa Bay. Celi's free-hand rendition of this arm of the bay is fairly close to its actual shape and size.

47. Compare Celi's Chart of 1757 with Chart 1257.

48. Celi's Chart of 1757. Romans refers to a river emptying into Tampa Bay which he called the Manatee. In describing it he says "that in the river Manatee is a considerable fall of rocks fourteen miles from its mouth; - that above these falls the banks are very steep. . . ." Romans, *Natural History of Florida*, 287. This description is more or less consistent with Celi's account in his Journal and our present knowledge of the Hillsborough River. Examination of the Tampa Bay section of Romans, Map of Florida, 1774, tends to confuse the issue, but would apparently rule out the present Manatee and Little

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he considered that the survey was almost complete as far as he was concerned, and that his only interest was in completing the shore line of Tampa Bay.

Actually, for all practical purposes, both were probably true. The deep-water contours of the bay by now had been rather well established. The shoals on the west side and the great middle-ground, which he called the Shoal of Saint Thelmo, had been sounded and charted. Moreover, the surveying and charting of the southeast side of the bay was progressing apace. Certain tidal and current data had been gathered, and adequate fresh water and suitable timber had been found in abundance on the survey of one large river.⁴⁹ Of what consequence then were a few more inlets, tributaries, or rivers? In Celi's mind there probably remained only one other survey item of any importance - a conclusive sounding of the channel between San Blas and Belasco now known as Egmont Channel. This had been halted by adverse winds and currents on the first attempt.

Of the two chores not directly related to the survey, one had been accomplished - fresh water had been taken aboard at the Watering Place of San Francisco on lower Pinellas Peninsula. The other matter - erecting a cross on the south end of Egmont Key - would be attended to on the outbound passage. Small wonder then that the officers and crew were anxious to complete their mission and return to Havana. As if reading Celi's mind or possibly by prearrangement, Captain Jimenez had heaved anchor and proceeded to a position to the eastward of the north end of Egmont Key to await the pilot and his party. At the first sign of dawn, Friday, May 6, 1757, Celi and other principal officers went ashore and erected a cross on the south point of Egmont Key as the guns from the xebec echoed across the waters.⁵⁰

Celi's second attempt, immediately following the ceremony of the cross, to examine, sound, survey, and therefore to be able to draw an accurate and documented sketch of Egmont Channel was again turned back by adverse wind and the current. Captain

Manatee rivers, leaving only the Alafia and Hillsborough for consideration as Romans' "Manatee River." The P. K. Yonge Library of Florida History and the Tampa Public Library have the twelve sections of Roman's map.

49. Celi Journal, 12, 26, 38, 51.

50. *Ibid.*, 55.

Jimenez therefore called certain of his officers together, and they jointly agreed on a "matter of consequence" involving two decisions, both based on Celi's unsuccessful attempts to sound this channel completely and thoroughly. The first decision was of immediate concern, and, in light of the circumstances, it appeared to be wise and prudent. Since there remained an element of uncertainty about Egmont Channel, they would leave the Bay of San Fernando by way of the channel through which they entered.⁵¹ This latter channel, along with its bordering shoals, had been carefully sounded and charted and was known to be safe. Their second decision, according to Celi, was "to consider the channel between San Blas and Key Belasco as not useful because of the aforesaid obstacles."⁵² It might well have had far-reaching consequences for those future navigators and pilots to Tampa Bay who had relied on his chart.

After Celi's first examination of this channel on Wednesday, April 20, he noted in the Journal, "we proceeded to the westward until San Blas was lost from view to me."⁵³ Turning back because of an increase in the wind and current, he failed to complete the soundings. His second attempt on Friday, May 6, was likewise unsuccessful because, "the contrary winds and opposing currents would not allow me to proceed." Yet, at the time of their unanimous agreement, he states, "So therefore we hold ourselves responsible that I and Don Lino Morillo went outside with the longboat until almost out of sight of San Blas, and on this day found a scant 2 fathoms. I thus discovered further offshore that the channel continued its shoaling appearance."⁵⁴ These two statements by Celi at different times and about the same occurrence are at variance with one another, and they indicate that the two-fold "matter of consequence" was decided on the basis of an earlier and incomplete examination. It is possible that one more attempt under more favorable weather conditions would have led Celi to a far different conclusion.

The English chart published twelve years after the Celi expedition,⁵⁵ indicates that Egmont Channel was open to the westward to the deep water of the Gulf of Mexico, and that it had a

51. *Ibid.*, 55-56.

52. *Ibid.*, 56.

53. *Ibid.*, 20.

54. *Ibid.*, 55-56.

55. Map of Espiritu Santo of 1769.

depth of at least some three and one half fathoms or twenty-one feet. Subsequent charts, including the Romans' Map of Florida, 1774, tell substantially the same story. It is therefore extremely unlikely that this channel was closed to the open sea as indicated on Celi's chart.⁵⁶

It must be noted to Celi's credit, however, that he did not show any soundings on the large shoal with which he enclosed the westward extremity of Egmont Channel.⁵⁷ This fact alone is testimony to Celi's honesty in the matter. The inference is clear - the shoal is shown as unsounded and therefore suspect, and his error was one of judgment and omission, rather than one of commission. This attitude was characteristic of all of Celi's work in connection with this survey.

The Journal records that their return passage was rather uneventful and was marked by the same careful and prudent navigation as their outward passage. They set sail at 5 a.m., Saturday, May 7, and arrived at Havana at 5:30 p.m., Tuesday, May 10. They had been away just one month to the day.

A casual examination of Celi's chart might well lead one to believe that cartography was more of an art than a science, and in many earlier examples this undoubtedly was true. Celi's Chart of 1757, however, appears to embody a great deal of both. The areas of Tampa Bay which were carefully sounded and measured compare favorably with subsequent charts, even to those of the relatively modern era. The discrepancies between the Spanish chart under discussion and those of unquestioned accuracy of our present day may be attributed to at least three things - Celi's relatively crude surveying methods, the changes in the area itself wrought by time and the elements, and various man-made alterations. Despite certain shortcomings, it is obvious that this chart served a useful purpose as an aid to the safe navigation of Tampa Bay.

Celi gave names to a great many of the keys, points, inlets, and other creations of nature which he considered important. The following list is an attempt to relate his places and names to their modern counterpart by comparison with a present-day

56. Romans, *Natural History of Florida*, appendix, LXXVIII, LXXXI; Spirito Santo and Tampe Bay [*sic*] section of Romans, Map of Florida, 1774; and *Chart 177*.

57. Celi's Chart of 1757.

chart ⁵⁸ (none of Celi's names remains today with the possible exception of Point Pinellas - from the Piney Point of Jimenez): Bahía de San Fernando, Tampa Bay; Estero de Romero, Boca Ciega Bay; Estero Grande de Girior, Old Tampa Bay; Ensenada de Aguirre, Hillsborough Bay; Isla de San Blas y Barrada, Egmont Key; Isla de San Francisco y Leon, Passage Key; Cayo San Luis y Belasco, Mullet Key; ⁵⁹ Canal de Santilla, Passage Key Inlet; Canal de San Juan y Navarro, Southwest Channel; Pozo o Seno de San Tiburcio, Egmont Channel; Punta Arboleda, Bean Point (north end of Anna Maria Key); Punta del Quemado, probably Terra Ceia or Snead Point; Punta de la Cruz (1) south point of Egmont Key (2) probably Papys Point; Punta del Pinal de Jimenez, Pinellas Point; Punta Morillo, Gadsden Point; Punta de Montalbo, Catfish Point; Punta Carrascon, Hookers Point; Rio de San Julian y Arriaga, Hillsborough River; Pinal de la Cruz de Santa Teresa, an area to the north and east of Temple Terrace; El Salto, the "waterfall" at Hillsborough River State Park; Rio de Franco, Six-Mile Creek; Palm River; Punta Gonzalez, probably Mangrove Point; Punta Gago, probably an unnamed key just north of Camp Key; Punta Trabajo, probably Mariposa Key; Noche Triste, probably an area inside of Two Brothers and Joe islands; Aguada de San Francisco, probably an outlet from the south side of Lake Maggiore, now non-existent; and Placer de San Thelmo, the unnamed middle-ground of Tampa Bay in the general area southwest of Tampa's Interbay and east of Pinellas peninsulas.

The imaginative art-work of Celi's chart demonstrates a desire to impart certain other information in addition to the navigational data. It is logical to assume, for example, the flora and fauna shown thereon were indigenous to the area. A close examination will disclose a snake, alligators, wildcat, deer, and turkeys - all easily recognizable. Three other species are uncertain in their identification. Two small animals on the Tampa Interbay Peninsula might be rabbits or foxes; another animal standing on

58. *Chart of 1257.*

59. The differences between the other keys in the general area of Mullet Key and Boca Ciega Bay as shown on the two charts in question make it difficult, if not impossible, to make any meaningful identifications. Comparison with United States Coast and Geodetic Survey *Chart 177* (Tampa Bay) of 1879, also indicates a similar situation at the mouth of the Hillsborough River.

its hind feet in what is now Tampa Heights area, might well be a bear eating berries. The last and perhaps the most baffling of all is the bovine-type animal in the area of what is now Bradenton. If indeed it is bovine, the chronology of cattle in the Tampa Bay area, and thus its authenticity, will be a matter for historians to decide.

The Indian village with its natives, canoes, campfires, fire-arms, and other unidentifiable objects in the area of what is now known as Cockroach Bay and Mound, formerly known as Indian Hill, is consistent with the record of Celi's Journal, other documentation, and certain archeological findings.⁶⁰ Pine trees in more or less symmetrical profusion and a few palm trees are shown on the chart on the east side of Tampa and Hillsborough bays. Yet strangely, none are shown on the Wooded Point or the Piney Point of Jimenez, both names synonymous with forested areas. Perhaps consideration for the appearance of the chart won out over the logic involved. In general, the remaining vegetation is of a nondescript type and provides little or no information of a specific nature.

The legend and its surrounding art-work, the scale of leagues and miles, and the sketch of the vessel demonstrate a skill usually attributed to an artist or a talented draftsman. As suggested earlier, perhaps Don Juan Franco embellished the chart after Celi provided the completed sketch of the bay. The drawing of the vessel is a more or less faithful reproduction of a xebec as verified from another source.⁶¹ The zigzag lines are the various courses and distances navigated by the vessel as she made her way into and out of Tampa Bay. Their apparent haphazard pattern is accounted for by the fact that the wind was not always favorable, and diverse tacks were often employed to make good a scant distance to the windward.

Of the three islands guarding the entrances to Tampa Bay prominently mentioned in Celi's Journal, one of them - Passage Key - is now little more than a sand spit, barely awash at high tide.⁶² Why it alone of these three islands has succumbed to the ravages of time and the elements will probably remain a mystery.

60. Celi Journal, 71, footnote 63; Gordon R. Willey, *Archeology of the Florida Gulf Coast* (Washington, 1949), 158-72.

61. Celi Journal, 64, footnote 13.

62. *Chart 1257*.

The other two - Egmont and Mullet Keys - were later to assume an important role in the historical background of the area; providing, among other things, sites for the third Fort Dade⁶³ and Fort DeSoto. Although their "guns never fired a shot in military defense or offense of this key entrance to Tampa Bay," they nevertheless stood prepared for many years.⁶⁴ The south and east sides of the two great peninsulas - Pinellas and Tampa's Interbay - along with the Hillsborough River area received by far the greatest attention of the mainland survey by Celi and his party. It is perhaps only coincidental but a fact, none the less, that these areas are today the great population, economic, educational, and cultural centers of the entire Florida west coast.

Don Francisco Maria Celi did not create any literary masterpiece in his Journal, nor is it likely that he intended to do so, as it is just what its name implies. Moreover, it contains certain errors of grammar and of a technical nature not usually associated with a man of letters. Nevertheless, for a technical work it is rich in other information. For example, Celi's several references to the Indians will no doubt contribute to the over-all knowledge of the natives living along Tampa Bay in the year 1757. His chart and the text also provide further confirmation of the flora and fauna for this period as well. Most of all, it allows the reader to view the day-by-day activities of a group of men who made a contribution, however modest, to the history, tradition, and development of the Tampa Bay area.

63. Frank Laumer, "This Was Fort Dade," *Florida Historical Quarterly*, XLV (July 1966), 11.

64. This quote taken from the brief historical outline posted at Fort DeSoto on Mullet Key.