The voyage of the San Carlos, overlaid on an 1802 Spanish map. The following maps, based on Pilot Vicente Vila’s diary, are the first ever to accurately reveal his torturous voyage to San Diego. Though Vila’s noon observations of latitude were accurate, his estimates of longitude were as much as thirty miles off—still more so when he attempted to reconcile them with the inaccurate ones made by earlier explorers. Without chronometers—recently invented in England but not yet available—mariners like Vila estimated their longitude by measuring the distance traveled in a given time, using instruments such as the towing log and pair of half-minute hourglasses recorded in the San Carlos’s 1777 inventory. Vila measured his position from “the meridian passing through Guanachico on the Island of Tenerife” in the Canary Islands, for his contemporaries—partly as a matter of national pride—chose to use any of a variety of different meridians as 0°, Greenwich not yet being the universally accepted prime meridian. These maps convert his estimates to the Greenwich meridian, and make corrections when possible by adjusting his position relative to the actual locations of landmarks he observed, from which he estimated his distance.
The Spanish colonization of California in 1769, so secure a fact in the history books, was actually a gamble which was very nearly lost. Of the ninety soldiers and sailors who came by sea to secure Spain’s claim to California, well over a third lay buried beside San Diego Bay by the year’s end. Their story has been told before, but it bears retelling, for in their extraordinary struggle against winds, currents, and geographical misinformation, the voyage highlights the ordinary difficulties all Spanish mariners faced in sailing north off Baja California’s coast. Thanks to the surviving diary kept by the captain of the San Carlos—one of two ships which carried the first settlers north to Alta California—sufficient information exists to permit maps to be made of the journey, enabling us to visualize it as never before.

The 1769 expedition epitomizes Spain’s late-eighteenth-century attempt to accomplish ambitious ends with the meager resources available on the frontier. Mexico, known as New Spain since 1521, was no longer new, and the energetic expansion which had characterized Spain in the Americas had largely drained away with the crown’s ebbing fortunes. The one exception was Mexico’s northwestern frontier, where the old dynamism was rekindled in 1767.

There, not far from the present-day resort of Puerta Vallarta, among the mangroves in a mosquito-ridden inlet whose sweltering, unhealthy climate one of its commanders called “the terror of humanity,” a busy naval base linked New Spain with San Diego and the northwest coast for thirty-five years. The Naval Department of San Blas was the brainchild of a single powerful individual, José de Gálvez, who founded it in 1767 as the base from which to stage the military pacification of Sonora, and from which to launch his plan to colonize Alta California.

The phenomenally ambitious Gálvez had risen from impoverished Andalucian nobility—he had for a time been a shepherd—to become Visitador General, the king’s special representative in charge of reforming New Spain’s policies. One aspect of his mission was improving frontier defenses, and Gálvez decided to proactively seize Alta California for Spain, based on longstanding fears that a foreign foothold there could cut the Manila galleon trade and provide a base from which to attack the Mexican interior. What finally spurred Spain to act on fears which had been expressed for over a century was a combination of Gálvez’s zeal and reports in the 1760s from Spanish diplomats in St. Petersburg that Russia was making probes eastward.

His expedition to seize California’s ports of Monterey and San Diego—San Francisco still being unknown to Europeans—was hurriedly planned and executed with minimal resources; less than three hundred men could be spared. “A maritime expedition was resolved upon,” recorded an officer present with Gálvez at a May, 1768 council in San Blas, “and the ships in which it was to be undertaken were assigned, choosing for this purpose the San Carlos and the San Antonio as vessels of greater size and strength” than the few other tiny craft available. Just four months after this decision, the San Carlos was underway from San Blas to fulfill her mission.

The vessel aboard which so many hopes were riding, also known as the Toison de Oro, was sixty-four feet long in the keel with a twenty-three foot beam. She was one of a pair of paguebotes, packets

José de Gálvez. Shepherd, seminarian, struggling lawyer and powerful royal administrator, he was the force behind the Spanish occupation of Alta California.

Mark Allen became editor last year after receiving his Master’s degree in History from the University of Colorado. Interested readers may wish to visit the Serra Museum in San Diego’s Presidio Park, where a mural, designed while he was curator of exhibits there, depicts the routes of the land and sea expeditions of 1769.
constructed of the region’s fine timber in the new shipyard upriver from San Blas and launched in 1767. A shipwright sent from Veracruz built her and her sister ship *San Antonio* as troop carriers, intended to aid military movements in the protracted Indian war in Sonora.

The plan which Gálvez ultimately settled upon for the expedition called for two groups to travel overland to San Diego through Baja California, while the *San Carlos*, after calling in La Paz, would rendezvous with her sister ship at Bahia San Bernabé, near Cabo San Lucas. After arriving together in San Diego, they were to sail on to Monterey to establish a stronghold, while the smaller *San José* would ferry supplies to the beachheads to ensure the expedition’s survival.

Gálvez’s plans began unraveling almost immediately. He had not reckoned on the winter weather which bedeviled the *San Carlos* and her captain, Vicente Vila, an Andalucian pilot with a decade’s experience on capital ships in Spain. After disappearing for three months in a voyage which normally lasted fifteen to twenty days, the *San Carlos* reappeared on Christmas Day, 1768. Gálvez’s secretary reported that “We first witnessed the entrance of the *San Carlos* into the port of La Paz on the twenty-fifth of December, taking aboard more than six inches of water per hour, short of crew, her tackle and rigging in shreds, with two broken anchors; the cargo was damaged except for some barrels of flour and she was without any fresh provisions whatsoever.”

The military engineer Miguel Costansó, waiting in La Paz to board her for the long journey north, must have been particularly dismayed: the ship had clearly “labored much on the sea, straining with the winds, which had loosened the seams, which spat out oakum, taking in water.”

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This is perhaps the only sketch made of the *San Carlos* while she existed. Mislabeled *La Goleta Sonora*—a far smaller vessel—it appears on the edge of a 1775 map of the San Francisco Bay region drawn by Father Pedro Font.
The reconstructions of the San Carlos accompanying this article have never been published. There are several small differences between these drawings by Raymond Aker and our cover, which he painted circa 1975. The most noteworthy revisions are gangways, topped by iron stanchions with rope netting between, which link the quarterdeck and foc’sl, allowing sailors to pass above the crowded gun deck. Mr. Aker based his work primarily upon inventories of the ship and plans of small Spanish naval vessels of the period.

Courtesy Raymond Aker.
**Soldiers and sailors endured seemingly endless trips for water in a launch like this.** This conjectural reconstruction of a twenty-one foot craft is based on inventories of the San Carlos. The davit in her stern carried a kedge anchor, which helped save the ship from grounding.

*Courtesy Raymond Aker.*

Concepción, the crew put on a sailing demonstration for his benefit. The strain was beginning to tell on Gálvez, however, who was en route to the Bay of San Bernabé to attempt, unsuccessfully, to repair the San Antonio in time to sail north with the San Carlos as planned. Soon, Gálvez was insisting that he had seen Russians in Baja California with his own eyes; unhinged perhaps by the stress of the still-uncertain outcome of his Alta California gamble and by the war in Sonora, within the year he was claiming to receive messages from Saint Francis, and believed himself to be by turns the kings of Prussia and Sweden, and God Himself. Astonishingly, he would recover and rise to still more exalted heights in the King’s service.¹³

A anchoring in the bay of San Bernabé on January 14, Vila paid Gálvez a last call aboard Concepción. After spending a day topping off his water casks—crucial for a voyage along a desert coast—he put to sea again. On January 22, he heard news “which caused me some anxiety” from the ship’s caulker, who reported three and one-half inches of water in the pump.¹⁴ Before dawn the next day, the seas had grown so rough that the barely-controllable tiller broke his helmsman’s leg; hours later, in conditions “which tormented us greatly with the strong pitching that it caused the paguebot,” Vila learned that the water was coming from damaged casks. Though he insisted that the 150 casks had been properly stowed, during the next week of huge waves—one of which snapped the tiller at its socket—his log records the dwindling water supply.¹⁵

On February 1, the seas lessened, and San Carlos altered course to the north after sailing almost due west as ordered.¹⁶ After passing waterless Guadalupe Island two weeks later, the crew sighted mainland Baja California on February 18. As they neared it the following day, in fog and extreme cold, Vila saw his first kelp, “a kind of leek or sea onion of considerable size, with stems two fathoms long.” That day, San Carlos reached a position a mere 125 miles south of San Diego. The water situation, however, was critical; in every four casks, they later reported, not enough remained to fill one. Vila turned south, hoping to replenish at one of the few watering places reported by previous explorers.¹⁷

On March 4, they anchored near shore, where they saw several Indians, the first fellow humans they had encountered for over a month. In a sudden gust of wind, however, the anchors dragged, forcing Vila to cut one and continue south.¹⁸ Five days later at Cedros Island, where he knew that Sebastian Vizcaíno, the last Spanish visitor, had found water 167 years before, Vila lowered the launch and sent Lieutenant Pedro Fages and several armed soldiers ashore. Finding only a trickle of water about half a mile inland, they dammed it and returned to the ship, and in the afternoon, Fages brought the other officers and surgeon Pedro Prat to the site; all decided that the brackish water was drinkable. Their ship, however, was in peril of running aground. As the San Carlos dragged her anchor on the sandy bottom and edged toward shore, Vila was forced to kedge—a laborious maneuver in which the launch hauled one of the ship’s anchors a distance to seaward, while sailors on the ship heaved around the capstan to pull her clear of danger. The shallow nine-foot draft, which probably impeded her sailing qualities, no doubt helped save her. While Fages and his soldiers slept on the island, presumably grateful to be ashore, Vila confessed to having “passed an
anxious enough and care-filled night, until daybreak." 20

Over the next several days, Fages earned his men’s admiration by helping manhandle the casks uphill to the watering place and back. While Miguel Costansó found a better watering place within a few days—greeted by three cheers from the San Carlos’s deck when he returned triumphantly—the task of watering required a week, during which the launch made an exhausting fifteen round trips to shore and back.

For the sake of the men in the launch, Vila spent the week struggling to maintain a position within about a mile of the watering sites, as Costansó reported, “with great difficulty and labor, the ship remaining under sail, tacking between the land and the island, without shelter nor an anchorage where they could anchor without risking its loss because of the bad quality of the bottom.” 20

The worst was still to come, for as they left Cedros behind and sailed west against contrary winds and currents, captain and crew alike began to acutely feel the effects of scurvy—and to sicken further from the bad water they had so laboriously collected. On April 19, Fernando Alvarez, the coxswain of the launch, died, as did Pilot Manuel Reyes the following Sunday evening. On April 24, however, an island appeared, and at dawn the next day Vila found himself between four islands and the mainland, whose distant snowcapped heights reminded him of mountains near...
Granada which he had seen from the Mediterranean. If his heart sank, however, on recognizing the Channel Islands from earlier explorers' descriptions of them, he did not confess it in his diary; they signified that he had missed San Diego entirely. His orders, based on inaccurate accounts which placed San Diego's latitude between 33° and 34° north, had sent him hundreds of miles astray.21

Buffeted by very rough seas, the ship anchored in San Pedro Bay, but the anchor dragged. Instead, Vila wrote, “I made sail to look for the port of San Diego, where we confidently expected to find the relief that we needed—especially the sick—as our water supply was already running short.”22

At nine on the morning of April 29, in now-smooth seas, the Coronado Islands appeared, “the best and surest marks for making the port of San Diego.”23 Eight hours later, the San Carlos doubled Point Loma, with a sailor in the bow calling out the depths on the leadline, and broke out her colors to hail the San Antonio, riding at anchor inside Ballast Point. Vila’s sailors, only two of whom remained healthy after their 110-day voyage, were “unable to let down the launch to obtain water or to do any other work;” half the soldiers were prostrate with scurvy as well.24 With little wind and the tide against her, she anchored outside the bay, but after dark the San Antonio’s launch pulled alongside carrying her second-in-command, Pilot Miguel de Pino. Though the San Antonio had sailed a month later than the San Carlos, Pino reported, and despite having become disoriented among the Channel Islands, she had been waiting in San Diego for eighteen days. Their own situation was desperate: his captain, Juan Pérez, and half the crew were down with scurvy, with only the seven men in the launch fit for work.

At midnight the wind improved, and before dawn on Sunday, May 1, the San Carlos anchored inside the bay at last. After Mass and the firing of cannons on both ships, the San Antonio’s boat brought Captain Pérez and departed again with a shore party to seek a watering place. From higher ground, Kumeyaay Indian men warily observed the twenty-one stumbling, sickly strangers. One of Fages’s soldiers was sent ahead to them alone, laying his weapons on the ground and making gestures they hoped would communicate peaceful intentions. The Kumeyaay let him approach, and after accepting his gifts, directed the party by signs toward water amid the welcoming willows and cottonwoods by the San Diego River. For months,
Alta California’s desperately ill occupying force would continue to depend for their survival on the Kumeyaay, accepting whatever fish and game they could obtain in trade.

Aboard San Carlos, Pérez told his superior, Vila, just how near the expedition had already come to failure: the San Carlos had appeared on the very day Pérez had chosen to abandon the port for Monterey, in the belief that Vila’s ship had long since come and gone. In order to set up a tent hospital onshore, under sails brought from his ship, Vila ordered any such voyage temporarily postponed, hoping that the land expedition or the supply ship San José would arrive quickly. Failing that, the Andalucian captain contemplated a suicidal mission: “as a last resort I hoped to send off one of the two paquebotes with four or six men (though it seemed foolhardy to think of) to San Blas...to inform them of our sad condition and to beg these authorities to send us the necessary supplies without sparing time.”25 The eagerly awaited San José, however, would never come. After being delayed by her own water difficulties, she was lost with all hands somewhere off the Baja California coast.

Two weeks after San Carlos anchored in San Diego Bay, the first of the two desert-weary parties sent overland by Gálvez hove into view:

From a little height on this plain...we caught sight of the ships’ mainmasts, scarcely visible because of our distance from them. I do not know how to tell the happiness and joy we all felt at seeing the hour arrive of our reaching the wished-for harbor of San Diego, or at seeing in it His Majesty’s packetboats the San Carlos and the San Antonio.26

Though the elated writer, Father Juan Crespi, joyously scrawled SAN DIEGO in giant letters in his diary, he was sobered by the scene he encountered, writing one month later that “few of them can keep on their feet. Only by a miracle will most of them be able to escape with their lives.”27 Vila’s diary records the accelerating deaths of his men—first one Filipino sailor, then his cabin boy, then another Filipino. “Every day, two or three of them died,” wrote Costansó. When Father Serra arrived by land in June, he was shocked at the condition of the men he had blessed in January: “the San Carlos is without sailors, for all have died of scurvy, save one and a cook.”28 By the expedition’s end, death would claim fifty-one of the sea party.

Though for a year they all feared that the abandonment of San Diego was likely, the survivors held on and recovered. In July, Vila ordered the San Antonio south to San Blas with a skeleton crew to bring help; postponing her mission to Monterey until their survival was secure. The dearth of sailors trapped Vila and the San Carlos in San Diego Bay for one and a half years before he could sail her back to San Blas; days after his arrival there, he too was dead. The San Carlos herself would return to California—though never again under such grueling circumstances—and in 1775 became the first ship to enter San Francisco Bay. The legacy which the San Carlos left behind in Southern California, however, was equally significant. On the day in 1769 when the Kumeyaay watched Vila’s men construct their makeshift hospital to shelter men of European, Mexican, African and Filipino descent, San Diego was born as a multi-ethnic community.
NOTES

1 Francisco Bodega y Quadra, Journal, 1792, MS HM141, Huntington Library, San Marino.
4 Miguel Costansó, Diario Histórico De Los Viages De Mar, Y Tierra Hechos Al Norte De La California De Orden Del Excelentíssimo Señor Marques De Croix, Virrey, Gobernador, Y Capitan General De La Nueva España: Y Por Direccion Del Illustriissimo Señor D. Joseph De Gálvez, Del Consejo, y Camara de S.M. en el Supremo de Indias, Intendente de Exercito, Visitador General de este Reyno. (Mexico City: Imprenta del Superior Gobierno, 1770). This and all other quotations from Costansó are author’s translations.
5 Toison de Oro refers to the Order of the Golden Fleece, Spain’s highest award for military merit, created after the 1571 Battle of Lepanto. Dimensions were calculated by Raymond Aker based on information contained in inventories of the ship, made in 1769, 1777, and 1778. These and other research enabled Mr. Aker to create the reconstructions of San Carlos which accompany this article. From inventories we learn such trivia as that her binnacle lamps were silver, and her cabin held a pair of commodes. The only detail which betrays her Mexican origin is a cable woven of agave fiber. See also Anonymous, “Maritime Detective Work: How San Carlos was Given Form and Substance After 200 Years,” Sea Letter (Summer 1975): n.p.
6 The area was rich in timber, prompting even visitors from Spain otherwise unimpressed by frontier conditions to extol “the excellence of San Blas timber for marine construction.” Antonio de Pineda, an officer on Malaspina’s Expedition, in Michael E. Thurman, The Naval Department of San Blas (Glendale: Arthur H. Clark, 1967), 39.
7 Ibid., 69.
8 Juan Manuel de Viniegra, in Ibid., 69.
9 Costansó, 14-15.
10 Viniegra, in Thurman, 70.
11 The composition of her 1769 crew is suggested by her 1778 complement of 30: a captain, mate, chaplain, second surgeon, bosun, bosun’s mate, “practical” pilot, carpenter, caulker, coxswain, bloodletter, steward, cook, seven gunners, eight sailors, a grommet and a page. “Inventario del Paquebot...San Carlos,” March 1778, Californias, vol. 8, Archivo General de la Nación (hereafter cited as AGN), Mexico City.

A late-eighteenth-century Spanish drawing of a “pacabote” of eighteen guns. Though much larger than the San Carlos, she shows what a Spanish packet was like. Courtesy Museo Naval, Madrid.
According to her manifest, the San Carlos was also laden with 3,800 gallons of water, 4,676 lbs. of dried beef, 1,783 lbs. of dried fish, 6,678 lbs. of hardtack, 690 lbs. of white bread, 450 lbs. of cheese, 300 lbs. of chili pepper, 125 lbs. of garlic, 17 bushels of salt, 5 jars of brandy and 6 of Baja California wine, sugar, flour, lard, corn, rice, garbanzos, beans, bran, lentils, vinegar, figs, raisins, dates, chocolate, hams, smoked beef tongues, oil and spices. Room had to also be found for agricultural implements, 5 tons of wood, 16 sacks of coal, and 112 pounds of candles. Owen Coy, "The San Carlos, Mayflower of the West," California Historian 22 no. 1 (1975): 6. Her 1769 complement is numbered in “Inventario del Paquebot...San Carlos,” February 1769(?), Provincias Internas, AGN.


Ibid., 14. The injured seaman was Agustín Medina. The number of casks is in “Inventario del Paquebot...San Carlos,” February 1769 (?), Provincias Internas, AGN.

“Gálvez had given strict orders to Captain Vila as also to the other captain to sail out into the ocean and proceed as far as latitude thirty-four degrees and then to cruise in search of said port...” Fr. Junípero Serra to Fr. Francisco Palóu, 3 July 1769, in Fr. Zephyrin Englehardt, San Diego Mission (San Francisco: James H. Barry Company, 1920), 18. See also Costansó, 17.

Serra to Palóu, 18.

Near Punta San Antonio.

Vila, 45.

Costansó, 17-18.

Serra to Palóu, 18. San Diego’s actual latitude is 32° 42’ north.

Vila, 87.

Ibid., 89.

Serra to Palóu, 19.

Vila, 95.


Fr. Juan Crespi to the Fr. Guardian of the Colegio de San Fernando, 22 June 1769, in Englehardt, 15.

Serra to Palóu: 18. Vila records that the dead Filipino sailors were Agustín Fernandez de Medina and Matteo Francisco, and the cabin boy was Manuel Sanchez.

Courtesy Raymond Aker.