

JUNK *FREE CHINA*
Bethel Island
Contra Costa County
California

HAER CA-2268
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

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JUNK FREE CHINA

HAER No. CA-2268

Location: Bethel Island, Contra Costa County, California

Rig/Type of Craft: Junk

Trade: Unknown

Propulsion: Sail; Volvo diesel engine added later

Date of Construction: Unknown, although physical evidence suggests late nineteenth to early twentieth centuries

Disposition: Returned to Taiwan in May 2012

Significance: *Junk Free China* is likely the oldest Chinese-built sailing junk still in seaworthy condition.

Description: The vessel is a smaller version of the Fujian-style coastal merchant, the pole-junk. The distinctive features of junks from that region include a high oval stern and long sheer lines with prominent wales. When the junk first arrived in California, it was close to original condition, aside from the addition of a 5-hp winch to help the small crew better handle the heavy sails since they were sailing with only one-third the typical size crew. A curved steel tube gallows frame, manufactured in Japan, was also added for the heavy mainsail for the same reasons.

The 80' wood vessel featured ten interior watertight bulkheads and ten interior watertight compartments. The forward compartment, with two holes drilled through the submerged hull planks, served as the free flooding anti-pitching compartment common to Fujian junk types. The turret-built hull design is typical of Chinese ship construction. For many junk designs, access to the watertight holds exists only through relatively narrow hatches in the center of the deck. The hull strakes literally curve over the gunwale or tops of the holds, the upper strakes then readily shedding any water which might break over the decks. Often an additional level platform which serves as the 'false' deck is built above the topside hull strakes. The original rudder was, of course, the typical Chinese deep oceangoing rudder, suspended by a windlass high on the oval stern and held in place by cables running underwater to another winder on the bow. Though the tillers which attached to the rudder post were broken when the crew failed to reduce sail in strong weather, *Free China*'s rudder itself suffered no mishaps.

Though *Free China* was initially representative of Chinese working vessels, there have been drastic alterations to almost every aspect of the vessel. The interior bulkheads have been

removed or compromised; the high oval stern has been chopped off, foremast cut down, rigging added to the mainmast, a diesel engine and fuel tanks installed, and a Western-style steel rudder attached. Only the distinctive bow and overall lines of the remaining portion of the hull are left, as are specific construction features where the bulkheads meet the inner hull (*gua ju* nails) and the complex construction of the foremast 'step' (lodges between partners against forward raked bulkhead but not touching the keel). Also, some of the broad timbers used in the lower portions of the transverse bulkheads are carved from massive sections of timber, asymmetric and original.

The unfortunate destruction of the *Free China*'s Fujian stern in 1989 does give a clear picture of the hull profile, including the individual planks and wales and turret build of the original junk. The false deck and turret construction of the vessel is also apparent in the cut-through deck scuttle on the starboard side amidships. The strong longitudinal deck members above and the relatively thin hull planks at the bottom give an accurate illustration of the way the junk structure is hung downwards from its deck rather than built up from the keel. The remains of the cut-down vertical pillars indicate the position of the original rudder slot. A frameset appears on the aft side of the transom/bulkhead. The hull is carvel built with rounded wales, featuring many L-shaped *gua ju* brackets interior between bulkhead and hull.

History: The history of Junk *Free China* prior to its 1955 purchase by Paul Chow has not been documented, but physical evidence suggests it was built around the turn of the twentieth century. The junk, at the time known as *Sheng Xiao Li*, was used for shipping loads of salted ribbon fish between Matsu Island and Taiwan, and also, allegedly, smuggling contraband. On February 17, 1955, Paul Chuan-Chun Chow and his partner, Loo-Chi Hu, purchased the vessel from Lian Yi-Kwai for about \$1,500 using funds provided by Taiwanese officials with the intent of sailing it in a New York Yacht Club-sponsored transatlantic race between New York and Sweden. The story of the race and the project of launching a sailing junk on a worldwide tour became a well-known cause for an island nation in the throes of an all-out struggle against the Communist mainland.

Once Chow and Hu had purchased the junk, a number of repairs had to be made. With the assistance of Calvin Mehlert, American vice-counsel, the appropriate visas were obtained for the ship's crew, which was comprised of Chow and Hu, plus Reno Chia-Lin Chen, Benny Chia-Cheng Hsu, and Marco Yu-Lin Chung. Mehlert was evidently so intrigued by their expedition that he also joined the crew and filmed their voyage.

Free China was launched on March 8, 1955, from Taiwan. After a number of false starts and necessary repairs stemming from the crew's lack of sailing experience and bad weather, the ship finally set sail from Yokohama, Japan, where it had been undergoing repairs, on June 17, 1955. *Free China* reached San Francisco Bay on August 8, 1955, after a fifty-five-day journey. Chow and his crew were not able to participate in the transatlantic race, however, because they lacked funds. Chow transferred the title of the vessel to the Chinese Consolidated Benevolent Association, the Six Companies, in November 1955, and it was left at China Camp in Marin County, California. The National Maritime Museum in San Francisco tentatively agreed to take the vessel and preserve it, but in the end decided to transfer the junk to a small group of volunteers. The junk was then towed to the Alameda Shipyard, where it remained for four years

and underwent repairs. Additional work was then performed on the vessel at the Oakland Dock and Warehouse Company for another three years. The keel was deepened, a modern steel rudder replaced the larger wooden Chinese version, and bulkheads were removed so that a Volvo diesel engine could be fitted into the hull. Govinda Dalton purchased the vessel in 1989 and made one of the most significant changes when he had the decorated high oval stern cut away.

Free China remained on blocks at the Bethel Island Boatyard near Sacramento, California, until May 2012, when it was shipped back to Keelung, Taiwan, in the hold of a transport ship. The preservation of the vessel was due in part to the efforts of Dione Chen, daughter of crew member Reno Chen, and John Muir of the San Francisco National Maritime Historical Park.

Historian: Adapted with permission from Hans Van Tilburg, whose research on *Free China* has been published as *Chinese Junks on the Pacific: Views from a Different Deck* (Gainesville: University Press of Florida, 2007).

Project Information: Documentation of the Junk *Free China* was undertaken as part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The Heritage Documentation Programs of the National Park Service, U.S. Department of the Interior, administers the HAER Program. Todd Croteau, HAER Maritime Program Coordinator, directed the project and produced the large-format photographs.