

Sea Voyage: The Evolving Maritime Cultural Landscape of American Samoa

Hans K. Van Tilburg, PhD (Maritime Heritage Coordinator, NOAA Office of National Marine Sanctuaries)

ABSTRACT

American Samoa is an unincorporated territory of the United States with a long and continuous history of ocean connection and maritime activities, from the initial voyaging discovery some 3,000 years ago to modern cruise ships and fishing fleets. Understanding this history as it is reflected in the maritime landscape helps us appreciate not only how the maritime past has evolved, but how the cultural and ecosystem benefits related to the ocean persist and remain important today. NOAA's Office of National Marine Sanctuaries recently completed a descriptive ArcGIS StoryMap of American Samoa, drawing from tangible and intangible cultural resources inventories and data compiled by NOAA's sanctuary staff, archival information, archaeological surveys, and site cultural information from participant workshops. The territory's story is presented as something of a maritime voyage through time, touching upon elements of the original Pacific voyaging and discovery of the islands, Samoan settlement culture and watercraft, western discovery and mapping, *fautasi* longboat heritage and copra plantations, activities during the naval period and WWII, and contemporary maritime spaces (commercial shipping and fishing). This StoryMap presents our human ties to the ocean, and the maritime cultural landscape of American Samoa, placing an importance on ocean locations, activities and events that have shaped the Samoan Islands and continue to define who we are today. Hopefully, a more comprehensive understanding of the cultural significance of our ocean spaces can contribute to better conservation and management of marine resources.

Keywords: American Samoa, cultural landscape, marine environment

List of Figures and Tables

Figure 1 *Foaga* or grinding holes/bait cups carved into the reef at Fagatele Bay, American Samoa.

Figure 2 Modern *fautasi* racing in Pago Pago Harbor.

Figure 3 Types and quantities of excess ordnance to be jettisoned at sea, Naval Station Tutuila,

Figure 4 The industrial landscape of Pago Harbor today. American Samoa Government Port Administration.

INTRODUCTION

The underwater cultural heritage (UCH) consists of properties and locations associated with the narrative of past events or human story. And whether that story is reflected in oral, written and/or archaeological and cultural resources, the broader context of our relationship to the environment is critical to the assessment of UCH. In other words, the ocean possesses a legacy of submerged properties that have cultural value, as well as implications for the health of the ecosystem. Maritime cultural landscapes are places where the interactions of culture and nature have resulted in identifiable cultural and ecological imprints. Every maritime cultural landscape captures a unique combination of nature and culture that is expressed in the condition of the marine environment, in both material and intangible cultural heritage, and in the meaning attached to that location by different stakeholder groups (Barr 2014). Understanding the ocean and shoreline as a cultural landscape helps us appreciate the full significance of UCH sites that would otherwise exist as isolated properties without context and connection.

American Samoa, an unincorporated island territory of the United States consisting of the eastern part of the Samoan archipelago, consists of five inhabited volcanic islands with rugged peaks and limited coastal plains, plus two coral atolls. The territory has a long and continuous history of ocean connection and activities, from the initial voyaging discovery thousands of years ago to the modern cruise ships and fishing fleets of today. The maritime cultural landscape of American Samoa captures elements of this long history in terms of locations, cultural activities and UCH resources, within the

broader maritime narrative of where we are from and who we are today. Importantly, the landscape approach supports a broader definition of UCH elements and inclusion of their influence upon the health of our marine ecosystems.

LEGACY OF VOYAGING

The sea is a highway. The first discoverers came by sea in what is considered one of the boldest maritime migrations in human history. The Samoan Islands were originally discovered and settled more than 3,000 years ago as part of the Austronesian expansion eastward into the Pacific. Over hundreds of years, double-hull voyaging canoes, guided by specialists trained in non-instrument navigation, moved throughout the western Pacific, bearing men and women, and all necessary supplies to support permanent remote settlement. Migration theory is based on dating the traces of ancient Lapita pottery, along with subsequent obsidian and basalt stone tool production, associated with this expansion and settlement. In 1973, dredge spoils from Mulifanua Harbor on Upolu Island (Western Samoa) revealed thousands of pottery sherds dated to 3000 BP, and coastal terrestrial Lapita remains have been excavated from Ofu Island in American Samoa (Kirch and Hunt 1993). Coastal village ruins, reef petroglyphs, submerged whetstones, and remnants of *foaga* or reef grinding holes/bait cups (Figure 1) add to the UCH archaeological footprint (Clark 1980, 24).



Figure 1 *Foaga* or grinding holes/bait cups carved into the reef at Fagatele Bay, American Samoa. Photograph by Hans Van Tilburg/NOAA.

The legacy of traditional navigation extends beyond archaeology. There are a great number of legends and stories represented by geo-cultural features or locations within the marine environment. These culturally significant places range from stacked rock formations (*tupua*) to coves, cliffs, and even submerged freshwater springs or passages in the reef, associated with famous chiefs, voyages, or mythic events in folklore. All are potential “traditional cultural properties” associated with cultural practices or beliefs of a living community that: (1) are rooted in that community's history, and (2) are important in maintaining and continuing the cultural identity of the community (Parker and King 1992). Chants are still performed at Turtle and Shark Cove, a place commemorating the death of an old woman and young girl, and the cove is protected by nomination to the U.S. National Register of Historic Places. Records at the Feleti Barstow Library document at least 20 geo-cultural locations in American Samoa's coastal and marine environment (Van Tilburg 2007, 29).

Near the village of Fagasa on Tutuila, the semi-submerged formation known as Sina's Rock recalls the time when Chief Li'ava'a's crew, departing the island, mistakenly abandoned his daughter, her grief and tears being the origin of the local spring (Kikuchi 1963, 84). This legend accounts for the dolphins that visit Fagasa today. Such sites "are of extraordinary significance to Samoan culture. Compared to all of the archaeological and historic sites that the HPO tries to protect, these sites are seen as the most significant to local residents" (Volk et al 1992, 32). Local and Indigenous perspectives that highly value the cultural significance of "natural" resources, and the importance of traditional practices and places to the maintenance of cultural identities, challenges us to examine the definition of UCH as "all traces of human existence of a cultural, historical or archaeological nature..." For purposes of heritage preservation and protecting marine resources, Sina's Rock should be considered UCH.

WESTERN ARRIVALS

Over time, 18th and 19th century Spanish, Dutch, French, British and American explorers shaped their own routes to the islands of Samoa, opening the seaway for whalers, merchants, and missionaries in pursuit of oil, copra and converts. The intentional adoption of new tools and nautical technology would shape the Samoan cultural landscape in new ways. The story of the Samoan longboat or *fautasi* provides an example of this evolution. The origin of *fautasi* dates back to the 1840s and observation of the effectiveness of British naval longboats, leading to innovations in boat building. Samoan carpenters began to construct an outrigger-less craft known as *taumualua*. Given the importance of watercraft in the archipelago and the competitiveness of human nature, these soon advanced in length from 50 feet to 60 feet and onwards. Aided by the skills of the castaway whaler and shipwright Eli Jennings, who came ashore in 1847, these hybrid craft took on the lightweight shiplap designs of whaleboats. By the last decade of the 19th century, *fautasi* (and the smaller version known as *tulula*) were capable and useful watercraft that served multiple roles: warfare, cargo transportation, passenger service, racing vessels, and more (Van Tilburg et al 2018, 124).

With the regulation of interisland travel imposed in 1903 by the U.S. Naval Administration, and the increasing use of motorized craft, the role of *fautasi* was slowly reduced to racing, which later remained as their sole function. Today, on Flag Day in American Samoa (17 April), 10 to 15 village *fautasi* longboats manned with 45 village members line up outside of the deep-water harbor port of Pago Pago for their fiercest competition of the year, acknowledged by some as the largest cultural event in the territory. These computer-designed modern material watercraft cost tens of thousands of dollars to purchase and maintain, and the race outcomes are intricately tied to financial benefits, village pride, community identity and a deep historical tradition of seafaring (Herdrich et al 2020, 46). The maritime cultural landscape of *fautasi* today encompasses the village boathouses, launching and training areas for the race (crews train for months in advance), and the race course itself from Taema Bank of Tutuila's south shore into the inner harbor of Pago Pago.



Figure 2 Modern *fa'atasi* racing in Pago Pago Harbor. Photograph by David Herdrich.

The extraction of resources and increasing trans-Pacific commerce would also change the landscape and UCH resources. Throughout the South Pacific, the coconut palm (*Cocos nucifera*) has been known as the “Tree of Life” due to the incredible value and usefulness of every part of the tree for food, medicine, shelter, and transportation. The commercial products derived from dried white coconut meat or copra, including oil for soaps and cosmetics and copra “cake” or meal for animal feed, would play a major role in the economic development of the Samoan Islands. Therefore, the collection of copra from the islands of American Samoa for shipment and sale abroad was critical. The copra export business in the territory was centralized around the U.S. Naval Station. Villages without copra sheds or wharves were responsible for transporting copra to the Naval Station (or to Leone in the Western District) by their own boat, bus, vehicle, or on their shoulders. Villages with copra sheds and wharves transported copra to the Naval Station or Leone by regular service public customs boats or public works trucks (NARA RG284). Thus, the cultural landscape components of wharves, landings, channels, and buoys came under the early management of the Public Works Department and the U.S. Navy. Additionally, the inventory of vessel losses, some 40 scattered around the islands between 1828-1993, including whalers, steamers, schooners, brigs, and fishing vessels, are landscape elements (Van Tilburg 2007, 8).

ON THE EDGE OF BATTLE

In 1899 Germany, England, and the United States signed a tripartite agreement (effective 16 February 1900), that granted control of the Samoan Islands of Upolu and Savai'i to Germany and control of Tutuila, Aunu'u, and Manu'a to the United States. Subsequently, The *Ali'i* (chiefs) of Tutuila and Aunu'u ceded their islands to the U.S. on 17 April 1900. The king and matai of the Manu'a Islands signed a deed of cession to the U.S. in 1904. Thus, a series of naval commanders served as military governors of American Samoa for the territory's first 50 years.

Although largely insulated from World War I, during World War II the American Samoa Defense Group (headquartered at Naval Station Tutuila) was, geographically, the largest command area in the South Pacific. Pago Pago Harbor on Tutuila served as a staging area for the preparation of amphibious forces engaged in South Pacific operations. The territory was home to thousands of Navy and Marine service men and women, including Samoan recruits in the *Fita-Fita* guard and the Samoan Marine Brigade known as *Maligi Samoa* or Samoan Marines (Hudson 1994, 25). Tutuila possessed the largest

jungle training center in the South Pacific. American Samoa, on the edge of the Pacific combat theater, was also an important link in maintaining communication between the United States, Australia, and New Zealand.

The scale and intensity of activities during the war years, even for peripheral American Samoa, made significant changes to the maritime cultural landscape and UCH inventory of the islands. During World War II, Tutuila supported a naval air station, maintaining up to 60 fighter aircraft and 12 long-range bombers at any one time. Moorings for seaplanes were located in the shallow lagoon near the landing strip. As a consequence of intensive wartime training and patrols, 43 naval aircraft ditched or crashed into local waters between 1942 and 1944, many in the vicinity of Tutuila (Van Tilburg 2007, 12). The naval airfield, constructed in 1942, is today the location of Pago Pago International Airport.

The remnants of numerous concrete pillboxes along the shoreline, as well as gun emplacements, bunkers, naval buildings, foundations, etc. are the more visible reminders of the war. A National Register of Historic Places multiple property nomination for many of these World War II sites was prepared in 2005 listing at least 79 coastal pillboxes (Kennedy 2005). Erosion and subsidence have placed some of these pillboxes into the ocean. The fortifications built at the entrance to Pago Pago harbor include gun emplacements at Blunts Point and Breakers Point. Both gun emplacements are listed on the National Register of Historic Places. National Archive records also locate minefields protecting the entrance to the deep-water harbor. The Naval Station significantly enlarged the harbor's infrastructure with the fuel dock, LST landing areas, wharves and moorings, and the ship repair facility across the bay (now a tuna cannery).

DANGEROUS LEGACY

Many of these sites can pose potential threats to the marine environment. Following the war, on 7 October 1949, the naval gasoline tanker USS *Chehalis* burned, exploded and sank in Pago Pago Harbor, with the loss of six crewmen. In 2007 the American Samoa Environmental Protection Agency completed a site investigation, confirming the aviation gasoline cargo, as well as the possibility of unexploded ordnance. In April 2009, the U.S. Navy conducted a preliminary survey, and fuel removal actions (60,000 gallons) were completed in April 2010 (Goldstein 2013). Further archival research in 2022 revealed extensive documentation of disposed ordnance and military materials by Naval Station Tutuila. Deteriorated, unused and obsolete ordnance and supplies, stockpiled throughout the wide Samoan Defense Area, were sent to area headquarters (Tutuila) to be disposed. Disposal meant dealing with the hazardous material in one of several ways: excess ordnance could be salvaged, forwarded to the West Coast, kept for peacetime storage, or jettisoned at sea. Ultimately, hundreds of tons of deteriorated or obsolete ammunition and materials were jettisoned somewhere in the nearby ocean. Specific locations were unspecified, but initial orders often carried instructions stating "sink in not less than 50 fathoms of water," changed at a later date to "dump in not less than 150 fathoms of water and not less than 10 miles from the nearest land" (NARA RG313). The extensive lists of jettisoned materials included: 500 and 1,000 lb bombs, demolition blocks, hand grenades, depth charges, mortars, howitzers, anti-aircraft ammunition, small arms ammunition, anti-tank mines, fuses, bomb tail vanes, fragmentation bombs, parachute flares, and more. An explosives dumping area of roughly 70 square miles was indicated some 15 miles southeast of Pago Pago. Disposed ammunition has been reported on Taema Bank, at the entrance to Pago Pago Harbor, and a dangerous wreck "loaded with explosives," was reported near Anunu Island in 1971 (Hudson 1994, 87).

ITEM No.	STANDARD STOCK CATALOGUE No. OR CLASS No.	DESCRIPTION OF ARTICLE	QUANTITY DELIVERED	UNIT OF QUANTITY	ITEM No.	STANDARD STOCK CATALOGUE No. OR CLASS No.	DESCRIPTION OF ARTICLE	QUANTITY DELIVERED	UNIT OF QUANTITY
1.		5 th /51 Charges 3050FS	3500		44.		5 th /51 High Capacity Mk 39.1	100	
2.		5 th /51 Charges 2300FS	104		45.		6 th /50 Common Mk 20-2	1740	
3.		100 # Inc Cluster AM-M54	50		46.		50 Cal AP lot UT (Grade 3)	414 Boxes	
4.		100 # Inc Cluster AM-M69	306		47.		Boosters Aux Bomb Mk 14	575	
5.		30 # Frag. Bomb M5 10 Gun NF	1857		48.		3 rd /50 Common for Mk 10 Gun NF	1483	
6.		50 Cal. Inc Grade # 3	992600		49.		3 rd /50 Illum	60	
7.		50 Cal. Belted Grade # 3	56000		50.		6 th /50 Common	904	
8.		50 Cal. A.P. Grade # 3	890000		51.		500# GP Bomb Mk 9 Mk 12	313	
9.		40 MM HE M 10 Tracer	1904		52.		1,000 # GP Bomb Mk 9 Mk 13	61	
10.		Cluster Green Star Mk.20	750		53.		325 # DB Bomb AN Mk 17-2	140	
11.		Cluster Red Star Mk.8	60		54.		325 # DB Bomb AN Mk 41	10	
12.		Cluster White Star Mk. 18	600		55.		650 # DB Bomb Mk 37	474	
13.		Amber Star Cluster Mk.22	680		56.		125 # Frag. Cluster AN M 1-A 1	588	
14.		Green Star Parachute M.19	700		57.		100 # Tail Vanes GP Mk 4	144	
15.		Amber Star Parachute Mk.21	550		58.		500 # Tail Vanes GP Mk 9-12	306	
16.		Amber Star Parachute Mk.22	100		59.		325 # Tail Vanes DB AN Mk 17-2	192	
17.		White Star Parachute Mk.5-A	690		60.		Boosters for Mk 224 Fuses	40	
18.		White Star Parachute Mk.17	700		61.		Booster Adapters M 102	140	
19.		White Star Cluster Mk.18	150		62.		Arming Wires assorted	1100	
20.		Red Chain Parachute Mk.7	360		63.		Arming Wires long	690	
21.		Amber Star Ground Mk.22	100		64.		Arming Wires short	20	
22.		Primers Mk. 11-41 21 Grain	300		65.		EC Markers Day Mk 1-1	450	
23.		300 # Depth Charges Mk. 3	13		66.		Fuses Hydrostatic AN M 224-1	228	
24.		300 # Depth Charges Mk. 6	15		67.		Fuses Bomb Tail AN M 228	108	
25.		3 rd /23 H.C. (Field)	1050		68.		AC Parachute Flare M 5-3 HOP Baldwin lot (34-80)	30	
26.		3 rd /23 A.A. Shrapnell	360		69.		AC Parachute Flare Mk 5-3 HOP Baldwin lot (290-405)	60	
27.		3 rd /50 A.A. HE M 42	1684		70.		AC Parachute Flare Mk 6-1 HOP Baldwin lot (30-80)	44	
28.		3 rd /50 A.A. M 42 - M 1918	2484		71.		Drift Signals Mk 4 all lots Mfg Prior to June 1940	1000	
29.		75 MM Pack Howitzer	2916		72.		Signal Cartridges Mk 4 Red-Red Star	2000	
30.		81 MM M 1 and M 1 A 2-HE M 43	11600		73.		30 Cal Belt Links Zinc Coated	698732	
31.		90 MM M 71	1276		74.		50 Cal belt links	9000	
32.		Demolition Blocks 55 #	2800		75.		3 pounder Comm-STD-2446	3200	
33.		Hand Grenades Frag M 2 Red-Red Star	1900		76.		Fuses Mk. 131-Mod.3	133	
34.		Anti tank Mines and Fuses Mk 1	1475		77.		2,25 Motors Mk.3	125	
35.		100 # GP Bomb Mk 4	1165		78.		2,7 AS Bobs Mk.4	125	
36.		500 # Inc Cluster Mk. AM-M 69	143		79.		AC Float Lights Mk.4	1975	
37.		Fuses Mk 221 and 223 All Mods	750						
38.		30 Cal Belted (Grade 3)	85500						
39.		All Detachments Dynamite	375 Cases						
40.		Fuses AN M 103	1000						
41.		Fuses AN M 219 Md 2	5000						
42.		All Damaged tail Vanes	883						
43.		5 th /51 Common Mk 15	3400						

Figure 3 Types and quantities of excess ordnance to be jettisoned at sea, Naval Station Tutuila, 13 October 1945.
Source: National Archives and Records Administration RG313.

AMERICAN SAMOA'S MARITIME LANDSCAPE TODAY

Today there are some 56,000 people living in American Samoa, with about 98% of those residents located on Tutuila Island. The territory is integrated into a modern global maritime world as an exporter of marine resources, communications hub, and recreational destination. The shipping and transportation landscape in American Samoa has evolved since the early 1900s when *fautasi* longboats were used to transport imported supplies from large ships, and as transportation to coastal villages and neighboring islands. Today, large container ships arrive weekly with supplies that the majority of the islands' residents rely on for food and livelihoods. Ferry services are available on a weekly basis for the domestic market between Tutuila and the Manu'a islands, and via the Samoa Shipping Corporation LTD., internationally between Tutuila and Apia. Fishing has likewise advanced. Canneries first began operating in American Samoa in 1954. Today, tuna processing and the territorial government are the largest employers and the mainstay of American Samoa's economy. International fishing fleets supply catches to the canneries for export, while small-scale artisanal fisheries supply the local market for fish (Levine and Allen 2009, 21). The footprint of UCH resources and the maritime cultural landscape has evolved, reflecting now disposed and wrecked long liners, cruise ship moorings and cannery infrastructure, modern navigational infrastructure, shoreline armoring for protection against erosion and climate change impacts, and more.

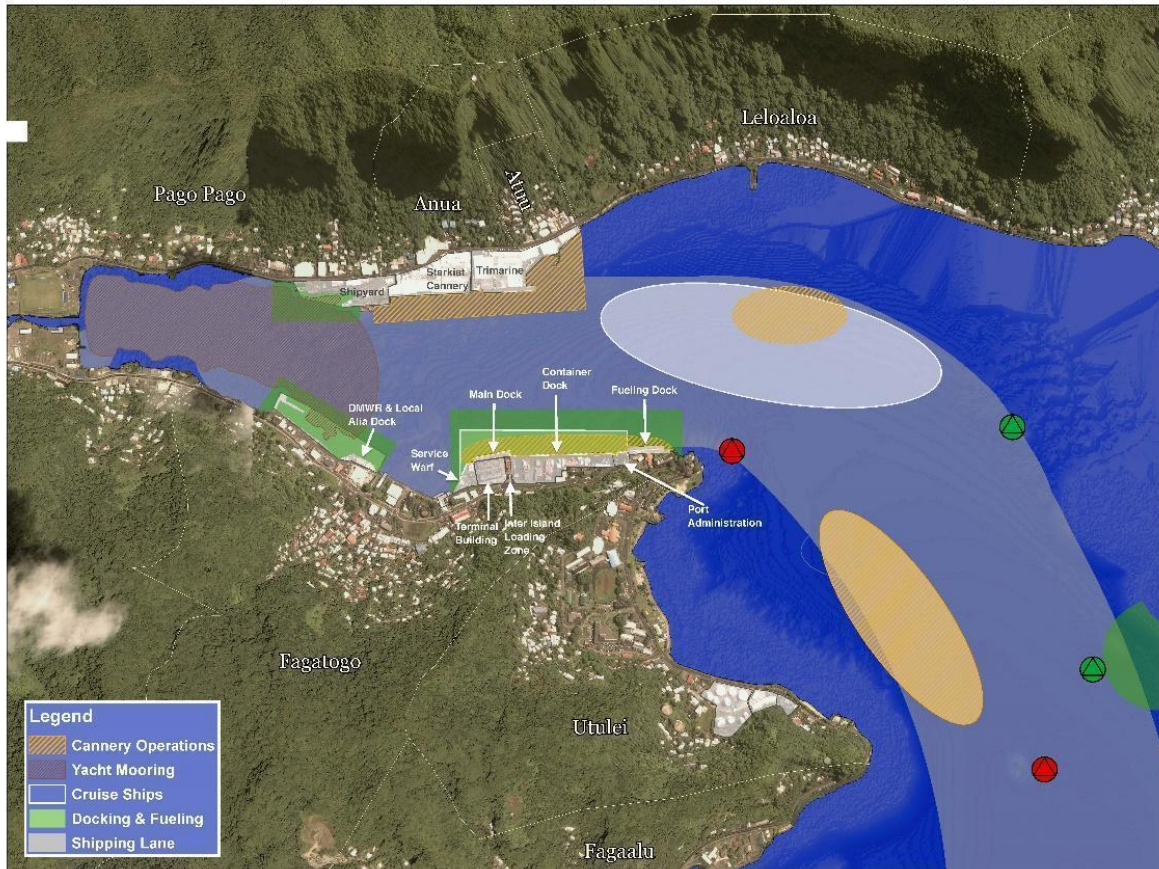


Figure 4 The industrial landscape of Pago Harbor today. Source: American Samoa Government PortAdministration.

Today there is an increasing desire and urgent need to achieve sustainable commercial and recreational practices in order to address the damage of pollution and climate change impacts. Our ocean environments are increasingly understood as places of critical marine research in this context. Maritime cultural landscapes have a role to play in this research. That role includes a broader definition of UCH and understanding the interactions *between* UCH sites and the marine environment, *for better or worse* (sites as potential habitat and cultural value, sites as potential environmental threat). Shipwrecks have been, and always will be, a unique subset of UCH resources both rich in historical and archaeological value, and exciting to the general public. However, becoming better stewards of our oceans implies reexamining our UCH from a broader perspective, one inherently supported by the maritime cultural landscape approach.

BIBLIOGRAPHY

Barr, Brad. "Observations on developing a maritime cultural landscape approach to managing US National Marine Sanctuaries." In *Proceedings of the 2nd Asia Pacific Underwater Cultural Heritage Conference*, 51-60, edited by Hans Van Tilburg, Veronica Walker Vadillo, Jun Kimura, Brian Fahy, Sila Tripati. Honolulu: Electric Pencil, 2014.

Clark, Jeffrey T. *Historic Preservation in American Samoa: Program Evaluation and Archaeological Site Inventory*. Honolulu: Bernice P. Bishop Museum, 1980.

Goldstein, Carl. Success story—USS *Chehalis*: Investigation and fuel offload operation. (Pacific Islands Office presentation-Pacific Environmental Success Stories) Guam: June 28, 2013.
https://issuu.com/guamepa/docs/goldstein_uss_chehalis_investigatio accessed 4/28/2023.

Herdrich, David, Hans K. Van Tilburg, and Atuatasi Lelei Peau. *Fautasi Heritage of American Samoa: Fa'Agā I Le Tai: O Ala O Le Vavau A Samoa*. Silver Spring: U.S. Department of Commerce NOAA, 2020.

Hudson, Jack C. and Kay G. *American Samoa in World War II*. Cultural Resources Services Inc. 1994.

Kennedy, Joseph. *Results of an Archaeological Survey and Archival Research of WWII Coastal Defenses on Tutuila Island, American Samoa*. Haleiwa, Hawai'i: Archaeological Consultants of the Pacific, 2005.

Kikuchi, William K. *Archaeological Surface Ruins in American Samoa*. Honolulu: University of Hawai'i (MA Thesis), 1963.

Kirch, P.V. and T.L. Hunt. *The To'aga Site: Three Millennia of Polynesian Occupation in the Manu'a Islands, American Samoa (Contributions to the University of California Archaeological Research Facility No. 51)*. Berkeley: University of California Press, 1993.

Levine, Arielle and Stewart Allen. *American Samoa as a Fishing Community*. Silver Spring: U.S. Department of Commerce NOAA, 2009.

National Archives and Records Administration (NARA) RG284. Records of the Government of American Samoa, Office of the Attorney General, Island Government files, 1931-1964, box 461. Correspondence from Secretary of Native Affairs to Governor 22 July 1947.

National Archives and Records Administration (NARA) RG313. Records of Naval Operating Forces, U.S. Naval Government Unit Tutuila, American Samoa, General Correspondence 1945-1951, box 10. Survey Request, Report and Expenditure, 13 October 1945.

Parker, Patricia L. and Thomas F. King. *Guidelines for Evaluating and Documenting Traditional Cultural Properties* (NPS Register Bulletin 38). Washington D.D.: U.S. Department of Interior National Park Service, 1992.

Van Tilburg, Hans. *American Samoa Maritime Heritage Inventory*. Silver Spring: U.S. Department of Commerce NOAA, 2007.

Van Tilburg, Hans K., David J. Herdrich, Michaela E. Howells, Va'Amua Henry Sesepasara, Telei'Ai Christian Ausage and Michael D. Coszalter. "Row as One! A History of the Development and Use of the Sāmoan Fautasi." In *Journal of the Polynesian Society* 127 no.1 (2018): 111-136.

Volk, Richard D., Pamela A. Knudsen, Karla D. Kluge, and David J. Herdrich. *Towards a Territorial Conservation Strategy and the Establishment of a Conservation Area System for American Samoa*. Pago Pago: Le Vaumatua Inc., 1992.