

INTRODUCTION

United States Fleet Activities (FLEACT) Yokosuka is a forward-deployed naval base located just inside Tokyo Bay on the Pacific Ocean side of Honshu, one of the five major islands of Japan. The naval complex is approximately 43 miles south of Tokyo, and 18 miles south of Yokohama. The base's primary mission is to maintain and operate base facilities for the logistic, recreational, administrative support and service of the U.S. Naval Forces Japan, U.S. Seventh Fleet and other operating forces assigned within the Western Pacific. As the Navy's largest, most strategically important overseas installation, Fleet Activities Yokosuka hosts 83 Departments and tenants with a population of greater than 24,000 military and civilian personnel. FLEACT Yokosuka's Environmental Division's Cultural Resources Management (CRM) Program is arguably the largest amongst all Department of Defense (DoD) service components; comprised of some of its oldest, most diverse and most impressive assets. FLEACT Yokosuka manages over 1,700 acres of land, 1,500 buildings, and 8,200 feet of berth which includes 36 Kanagawa Prefecture registered archeological sites, 256 historical buildings/architectural structures, 22 monuments memorializing historical events/religions/people/animals, complex WWII tunnel networks used for air raid protection and ordnance storage, and historical dry docks made in the late 1800s of stone blocks with stepped sides. As such CRM management is critical to preservation of the installation's rich heritage while maintain Fleet operations.

Ms. Ryouko Araki, an Environmental Engineering Technician, is FLEACT Yokosuka, Public Works Department Environmental Division Cultural Resources Manager solely responsible for the entire FLEACT, Yokosuka area of responsibility (AOR). The AOR includes housing areas at Ikego and Negishi; fuel terminals at Hakozaki, and Tsurumi; an ordnance depot at Urago; and loading facilities at Yokohama North Dock and Nagai.

BACKGROUND

Ms. Araki's major responsibility is to administer the Integrated Cultural Resources Management Plan (ICRMP), which she originally developed and updated in December 2015. The 2015 ICRMP is under review and will be updated in 2019 to include new survey information with global position system (GPS) data, new 2018 Japan Environmental Governing Standards (JEGS) guidance, inclusion of Environmental Management System (EMS) and CRM metrics, and planned construction project information that may affect cultural resources. Ms. Araki's management of preservation of Japan's artifacts, buildings and structures has been fostered through a successful partnership and excellent working relationship with the municipal and Kanagawa Board of Education (BOE). The BOE serves a similar function as a State Historical Preservation Office in the U.S. Ms. Araki also serves as the backup program manager for the Natural Resources Program and Pesticide Management Program.

SUMMARY OF ACCOMPLISHMENTS

Overall Cultural Resources Management:

Ms. Araki enhanced the CRM program by extensive networking with local government, universities, and non-governmental organizations interested in the installation's cultural properties. Collaborators delivered a wealth of knowledge and volunteer labor/material support into the CRM program enabling FLEACT, Yokosuka to cost-effectively perform its mission under the watchful eye of a host nation eager to expand cultural awareness in the local community. Many of the cultural assets are preserved on site in a capacity that contributes to the day-to-day operations of the U.S. Navy. The ongoing cooperative efforts between FLEACT, Yokosuka and its host nation over the past two years have significantly increased cross-cultural communication and improved mutual understanding, respect and admiration among FLEACT, Yokosuka tenants and its host, especially as they work side-by-side to preserve these resources.

The ICRMP is a prime example of the aforementioned collaboration efforts. During the reporting period Ms. Araki executed two survey contracts in support of the ICRMP; Archaeological Inventory Survey and the Historic Tunnel Inventory Survey. Ms. Araki was the onsite project manager and coordinated with, Kanagawa BOE, Naval Facilities Engineering Command Far East Region, and contractors to complete the surveys. The collaboration served as an alternative staffing approach saving \$10K in costs to the government as BOE performed the field survey along with the contractors.

To improve program administration, historic asset reviews are integrated with the environmental planning process. Through structured project review procedures, the Environmental Division evaluates and provide comments for all major and minor constructions, work requests and excavation request. Ms. Araki participates in the project contract review process, including Area Development Plans (ADP) for each facility. The ADP is a future plan ranging between 5 to 25 years, and routinely monitors construction projects. She provides cultural resource guidance on excavation permit requests and conducts project site visits to determine if further management is required for cultural and historical resources. When needed, she coordinates with the BOE and/or other subject matter experts. Ms. Araki ensures artifact recovery only happens if they are inadvertently discovered during excavation in areas not previously known to contain archeological resources. With such proactive measures, Ms. Araki helps to avoid project delays.

Historic Buildings and Structures:

In April 2017, Ms. Araki supported an adaptive reuse project to sustain mission needs. In 1938 the IJN constructed one of the historical ammunition caves in Ikego which the Ship Repair Facility and Japan Regional Maintenance Center now uses as a warehouse for storing ship equipment. FLEACT Yokosuka rehabilitated the warehouse with new LED lighting and upgraded the facility to current safety standards instead of demolishing the deteriorated cave. Ms. Araki and Zushi City BOE successfully recorded the renovation. The creative makeover contributed towards historic facility preservation while providing logistic support and service to the U.S. Seventh Fleet.

During the reporting period, Ms. Araki documented and oversaw the demolition of four historical buildings based on the Standard Operating Procedures and preservation rating system in the ICRMP. A detailed survey included photography and corresponding sketches for building measurement. In some instances, architectural features were salvaged and provided to universities for study and preservation. Specifically, historical structural joints were collected for research related to earthquake tolerance.

Archaeological Resources:

To promote research initiatives with the Yokosuka BOE, the CRM program often uses alternative survey methods to recover historic data. After demolition of a new Child Development Center, contractors discovered the old 1920 shoreline during excavation. The U.S. Army Corps of Engineers Japan Engineer District immediately notified Ms. Araki through the well-established protocol instituted for the contract. The site served as an ideal location for research contributions with the Yokosuka BOE conducting a successful archeological recording following two days of monitoring and oversight. As a result of the early coordination by Ms. Araki, the survey and monitoring resulted in no impacts to project execution. In addition, the government saved \$2K for the recordation of the inadvertent discovery as the BOE conducted the survey at zero cost. At the same construction site near the old shoreline, the contractor found dozen dummy munition rounds and an anti-aircraft director. Since the site was a former IJN's Gunnery School, they were believed to be used for practice purposes. After the dummy rounds were confirmed as non-explosive, Ms. Araki coordinated with Yokosuka BOE to transfer the artifacts to BOE for their use. Ms. Araki also coordinated the transfer of the anti-aircraft director to the company which manufactured it in 1937, as requested by the company.

In October 2016 Ms. Araki attended a specialized workshop sponsored by the Yokosuka BOE to increase her knowledge of Japanese conservation management. During the workshop she learned that two coastal Battery Defense Sites in Yokosuka City were designated National Heritage Sites, which is equivalent to the U.S. National Register of Historic Places. The Meiji government (1868-1912) constructed a total of 20 western style coastal batteries for defense of the newly established capital city; Tokyo. In 2005 a joint modernization-related property survey with the Yokosuka BOE reported two gun batteries were remaining within FLEACT Yokosuka. However, no detailed survey had been done for confirmation. Ms. Araki noted the possible connection between the recently designated sites and immediately created a new project to verify and evaluate the Tokyo Bay Defense Fortress on FLEACT Yokosuka. The project, estimated for execution in FY21 is significant to ensure future site protection measures are established for a potential National Heritage Site.

FLEACT Yokosuka has a total of 101 identified archaeological sites. The sites include both buried cultural properties and tangible cultural properties. The latter includes the network of tunnels used for storage, air raid shelters, command posts, and caves in the AOR. In accordance with the JEGS, the CRM program must inventory all historic and cultural resources in areas under DoD control, including the tunnels. In 1993, a study identified the location of the tunnels; however there was no comprehensive documentation and understanding of the use of the tunnels and caves with respect to historic base activities. During the achievement period, Ms. Araki executed the aforementioned Archaeological Inventory Survey at Hakozaki Fuel Terminal, Urago Ammunition

Storage, and Ikego. She coordinated with the Yokosuka, Yokohma, Zushi and Kanagawa BOEs to complete the survey. The survey located and recorded the resources; mostly tombs from 7th century to 16th century, using GPS. Resource types and historical use was identified, and the survey provided a historic summary. Forty new sites were recorded, which were in addition to the 59 known sites that were also re-confirmed. Additionally, Ms. Araki was instrumental in executing the comprehensive historic inventory of 260 tunnels via a GPS, identifying historic usage and providing historic summary of the interrelationship with the tunnel activity and purpose to the historic base. She gathered literature for the project and coordinated with the Yokosuka BOE to complete the field survey. The survey results were successfully documented and will be incorporated into the ICRMP revision, making data available for real property inventory to enforce historic site protection.

Curation:

Ms. Araki continued to facilitate partnerships with local government officials, historical societies and academic institutions which enabled FLEACT, Yokosuka to add over 10 items to its current inventory of more than 25,000 artifacts at the History Resource Center. This facility is located in the midst of the Ikego Housing Complex and includes over 240 assets registered with the Kanagawa Prefecture. It is open to all DoD military and civilian personnel as well as local Japanese Nationals, and receives 20 tours annually. Students, private citizens and members of various cultural and historical societies are exposed to a range of artifacts from pottery to earthenware to fossils and stone models and even tombstones.

In addition to the installation support curation facility, Ms. Araki supports initiatives that make collection available to host nation research and public through two inadvertent discoveries. During a new car wash replacement project, contractors informed her that an unknown underground structure was found during excavation. Her site survey estimated that the fire resistant brick structure found at the work site could be a flue associated with an incinerator of the IJN. She initiated consultation with the Yokosuka BOE resulting in an archeological measurement survey using a laser rangefinder to document the historic resource's points. During replacement of electric power cables at historical building A47, the contractor found an unknown structure and immediately informed Ms. Araki. The brick structure discovered was determined to be an underground waste gas tunnel constructed by the IJN. Before demolishing the structure, Ms. Araki and the Yokosuka BOE properly documented its features. Over a three day period, the BOE's contractor recorded findings with a laser rangefinder. In both instances, Ms. Araki readily provided artifacts to Yokosuka BOE for curation and research.

Cultural Resources Awareness and Education (On and Off the Nominee Property):

The primary means of providing cultural resource awareness is through the annual Earth Day/Environmental Fair observance. In 2017 and 2018, Ms. Araki-san increased historic education through display of old base maps and historical artifacts. Ms. Araki expanded upon Japanese cultural resources awareness by inviting host nation companies and organizations to participate in the event. The Japan Geotechnical Society displayed information panels on the degradation of stone, and water leakage survey results for historical Dry Dock 1. The voluntary survey highlighted government cost savings and assured the 147 years old dock did not have major damage. The

Yokosuka City Museum provided natural/cultural resources, including Japanese kimono and traditional toys that children wore and played with for an interactive experience.

The Yokosuka Adopt-a-Monument program was created in 2009 to stimulate awareness and appreciation of Japanese culture and heritage. The program allows various tenant commands, schools, and base social organizations to maintain the 22 cultural and historical monuments within the Yokosuka Naval Complex throughout the year. Volunteers were recognized by the Installation Chief Staff Officer at the Earth Day/Environmental Fairs. Volunteers maintain the monuments quarterly for base beautification. Such volunteerism improved host nations relations and provided a sense of facilities pride and ownership.

The CRM program has become a considerable component of base public affairs tours. Ms. Araki gave a historical tour to the Facility Planners and Junior/Senior officers in Public Works Department underlining the importance of cultural asset reviews during project scoping. She led a tour of Yokosuka facilities and programs including the preservation of cultural resources at Dry Dock 1 and the historical buildings designated under the Government of Japan Cultural Affairs Japan Heritage listing. She also gave the same historical tour to American Embassy officials during the Emergency Management Conference.

Base personnel, schools and residents often contact Ms. Araki for history of their facilities and quarters. During the reporting period, she provided briefing sheets for the FLEACT Housing Office, Sullivans Elementary School, U.S. Navy Information Operations Command, and Commander Destroyer Squadron 15 as the Command Historian. Specifically, the Housing Office requested records regarding the history of the Senior Officers' Quarters and its District. The five Senior Officers' Quarters were built between the 1930s – 1940s, and were for IJN high ranking officers

In 2016 Ms. Araki took over responsibility as a member of the Yokosuka City Modern Historical Assets Promotion Group Committee and has been attending the quarterly meetings. The FLEACT Yokosuka Civil Affairs Officer previously held the position. The Committee meets to plan practical use of historical sites and support and improve the modern cultural assets promotion based on Japan Heritage designation. Yokosuka City requested one representative attend the monthly meeting as FLEACT Yokosuka is the most popular historical tours location. Meeting attendance resulted in gained preservation knowledge and also strengthens host nation relations. Since the designation, Ms. Araki met with the FLEACT Yokosuka Civil Affairs Office and Public Affair Office to disseminate information about the designation and plan for additional cultural awareness outreach. Ms. Araki was proactive with the Yokosuka BOE and GoJ Agency to discuss ICRMP preservation guidelines that align with the Japan Heritage recognition.

In October, 2016, Ms. Araki created an Environmental Gram announcing designation to all the environmental point of contacts. Ms. Araki is preparing to install historical signboards to commemorate the designation based on the education funding proposed for execution in 2019. The signboards will be installed at minimal cost to the government due to collaboration with Seabees.

Community Relations:

A notable partnership is the existing coordination between the Environmental Division and local university. The College of Industrial Technology, Nihon University, has been researching the architectural engineering in the Naval Station's Headquarters and other buildings constructed by the IJN designed by the flexible structure theory which was developed to response the Great Kanto Earthquake of 1923. Based on the university's request, Ms. Araki coordinated a vibration survey for the Commander, U.S. Naval Forces Japan building, to record low frequency vibration used to survey architectural design. The survey report will be a reference for maintenance of the historical building. Scientific research funding from the Japan Society for the Promotion Science was provided for the survey with no cost to the government.

Ms. Araki also coordinated the transfer of the construction material from the one of the historical warehouse constructed in 1935 using the flexible structure theory. Prior to demolition, Ms. Araki and the Yokosuka BOE coordinated with the university to conduct the historical record. Based on request from the university, FLEACT Yokosuka transferred some steel joints and portion of steel with the manufacture's roll mark, to the university. Further study will obtain technical data of steel composition and strength, providing knowledge regarding Japanese pre-WWII steel.

Another excellent partnership is the existing coordination between the Environmental Division and youth/student groups. Ms. Araki assisted a Yokosuka Girl Scout who created a historical monument map depicting base historical sites. She provided the base map and information of historical monuments. Ms. Araki participated in the Science, Technology, Engineering, and Math program at Kinnick High School, where students learn conservation efforts at the historical sites on Yokosuka Main Base.

In 2003 FLEACT Yokosuka funded the demolition of the oldest historic western-style house in eastern Japan. All of the original construction materials were transferred to the City of Yokosuka for future restoration at an off base location. In February 2018, the City proposed to reconstruct the house using original materials with today's techniques as a visitor's center anticipating assembly in 2020. Ms. Araki is working with the City on an English translation of the project emphasizing the FLEACT Yokosuka's preservation efforts. This creative mitigation will not only be a model for management of a historic resource, continuing to build up stronger relations between the U.S and Japan.

Mission Enhancement:

The DoD transferred forty hectares of land in the Ikego Housing Area to the City of Zushi. The area is jointly used by host nation citizens and military personnel under the control of Zushi and with FLEACT Yokosuka oversight. Ms. Araki played an invaluable role in maintain the memorandum of understanding between the two stakeholders as most of the Joint Use area serves as a recreation area to promote mission enhancement for military personnel. Prior to the transfer, FLEACT Yokosuka protected the 16th century ancient tombs in Ikego. FLEACT Yokosuka Environmental worked closely with the City of Zushi officials and Zushi BOE providing consultations to ensure minimal disturbance to current land use operations.

Cooperation between FLEACT Yokosuka leadership, Public Works Department Acquisition Branch, and the Environmental Division, resulted in building of strong relationships between the municipalities and local community. Dry Dock 6 is the largest berth in FLEACT Yokosuka and heavily used to repair U.S. Seventh Fleet ships. The dock was constructed in 1940 and associated equipment is close to the end of its service life. To mitigate mission impacts, in FY18 contractors conducted an engineering survey for load bearing capacity. The survey included boring cores sampling from the dock floor. Ms. Araki coordinated transfer of boring core samples to the National Defense Academy per a professor's request for further study. Engineering students will analyze the samples and share data to assist in future dock repairs.

Cultural Resources Compliance:

During FYs 17 and 18, Ms. Araki conducted an internal environmental audit with the purpose of verifying conformance with ISO 14001:2004 EMS standards, and evaluate compliance with the JEGS and applicable instructions. The Cultural Resource program did not receive any new significant or complex compliance deficiencies.

A notable achievement during the period is FLEACT Yokosuka receiving the 2018 Commander U.S. Forces Japan. Environmental Excellence Award for Natural and Cultural Resources Protection. Such an accomplishment is a testament to Ms. Araki's management expertise and close coordination with local government and non-governmental organizations. Ms. Araki continued to promulgate stakeholder interaction through the preservation for existing and undiscovered historical resources on FLEACT Yokosuka. Her active participation in community activities enhanced awareness of tangible cultural properties, both on the installation, and more importantly, with our host nation. She is very active in community cultural affairs and keeps abreast of cultural affair issues at GoJ's municipal and national levels.