

The Cultural Property of Military Forts on the Sea or *Kai-hou* in Tokyo Bay: From the viewpoint of underwater cultural heritage

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Abstract

At the end of the 19th century the Japanese government built several military forts on the sea or artificial islands inside Tokyo bay in order to defend its capital from foreign sea powers. Three outer forts or Kai-hou, which were between the cape of Kannon, the cape of Huttsu, and Saruis land, formed the first naval defensive line. The first fort started to be constructed in 1881, and then finished in 1890. The second was built between 1889 and 1914, and the third between 1892 and 1921. Among three, only the third one does not exist anymore. In 2000 the governmental demolition project of the third fort began mainly because of the congested seaborne traffic, and was completed in 2007. During the work, some of its building materials were salvaged, which have been exhibited in a city park since 2006; they are now Yokosuka-City-Designated Important Cultural Properties. The underwater structures of the fort were also removed and reconstructed in a council owned ground; in 2013 they were also registered as the above-mentioned cultural properties. On the other hand, the first fort is now owned and charged by the ministry of finance and the second by the ministry of land, infrastructure, transport and tourism. Although both have already been registered as Sites Which Contain Buried Cultural Properties by the local educational committee, the governmental restoration work of the second fort is under way without any legal procedures in conformity with the Japanese domestic law of Act on Protection of Cultural Properties.

Key words: Kai-hou, Tokyo Bay, Taisho Period, Protection of Cultural Properties, Archaeological Heritage Site

Introduction

Kai-hou means fort on the sea. On the same ground that in the last period of Edo gun batteries on the sea called *O-daiba* (o is an honorific title which is added before noun for shogunate or its related organizations or facilities) was constructed to defend the capital, Meiji Government constructed three *Kaihous* on the sea located in the middle of Tokyo Bay. They could be regarded as Underwater Cultural Heritage. As two *kaihous* of three are designated as archaeological Heritage Sites in accordance with *Act on Protection of*

Cultural Properties, the treatment of them shall be abided by the Act.

***Kai-hous* in Tokyo bay (Military Forts on the Sea or *Kai-hous*)**

They are artificial islands on the sea with defensive facilities including gun batteries constructed to defend Tokyo from Meiji to Taisho period (the late 19th century to the early 20th century). After three forts on the sea were built, the army had resided there. The cannons were never fired in the actual war. After the Great Kanto earthquake of 1923, the alteration of national defensive policy made *Kai-hous* unnecessary. They have been left alone for a long time.

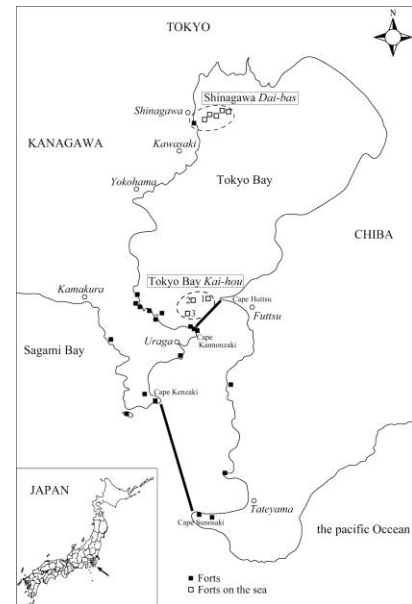


Fig. 1 A Bird's Eye View of Tokyo Bay. (T. Hayashibara)

The Construction Technology of *Kai-hou* in Tokyo Bay

Perceived foreign vessels had come to frequently appear offshore Japan at the end of Edo period; the necessity of coastal defense was urged. Particularly Perry's squadron's visit to Uraga obliged Edo Shogunate to defend Tokyo bay. The first defensive and inspection line from Cape Kenzaki to Cape Sunosaki intended to confirm the purpose of arrival of ships and ordered them to expel from Edo bay, and the second defensive line from the cape Kannon to the cape Huttsu intended to sink them simultaneously by all forts around the line in case of invading across the line (Fig. 1). The first artificial fort (Shinagawa *O-daiba*) was constructed near the coastline of Edo Castle. Though at first 12 forts were scheduled to be construct, only 6 forts were built due to finance and technical problems. The line between the cape Huttsu in Chiba Prefecture and the cape Kannon in Kanagawa prefecture "to repel" foreign vessels at the end of Edo Period had geopolitical merits of the narrowest sea area in Tokyo bay. Meiji government had also determined to construct artificial lands or forts on the sea. The each distance among forts called *Kai-hous* was approximately 2.5 km considering shot-range at that time. Having been used enormous amount of stone or sand, they were gathered and transported from Chiba and Kanagawa prefectures. A variety of techniques such as construction technology of Shinagawa *O-daiba*, traditional masonry technique and most

advanced engineering works or diving technology (such as helmet type of diving apparatus) were used at the construction. Because of deep water (about 40m around the third *Kai-hou*) and too fast current, construction work sometimes ran into difficulties and took a toll of lives. However it took 43 years for the construction of *Kai-hous* to complete works.

The History and Situation of *Kai-hous* in Tokyo Bay

The first *Kai-hou* is located at the westward 2.3km offshore Futtu city of Chiba prefecture, and belongs to the Ministry of Finance. Its area is 23,000m² at high tide. The depth of water is around 1-3 m. As it is not preserved, sand used as its base appears exposed and neglected; some structures have collapsed (Fig. 2 and 3). The second *Kai-hou* is located at the further westward offshore 2.5 km from the first *Kai-hou* offshore the Cape Futtsu. Its area is 41,000m² at high tide. The depth of water is around 8-10 m. The second *Kai-hou* also seems to have been neglected. Having been equipped with radar and used for emergency drills, recently the ministry of land, infrastructure, transport and tourism (hereinafter MILT) has maintained and reused the second *Kai-hou*.



Fig. 2 The Whole View of the first Kai-hou. (Google Earth)



Fig. 3 Several Parts of Military Facilities Collapsed on the Side of the first Kai-hou. (T. Hayashibara)

The third *Kai-hou* is located at the northward offshore 2.5 km from the Cape of Kannon. Its area was 26,000m² at high tide. The depth of water is the deepest of all *Kai-hous* at around 40m. Although it took 30 years to complete the construction, one third of the third *Kai-hou* was submerged due to Great Kanto earthquake of 1923. Since these became obstacles on navigation route, the removal project was implemented in 2000-

2007. All structures seen on the surface of the sea were moved away. Though we cannot confirm, underwater remains (basic parts of the structure) appear to be intact.

Act on the Protection of Cultural Properties and Kai-hous

Archaeological Heritage Site

Act on the Protection of Cultural Properties (1950) adopted the legal terminology “buried cultural property” for the first time as a conception including ruins or relics. As long as underwater objects are found within the territorial sea, raised objects or artifacts could be treated as “buried cultural property” (Cabinet Legislation Bureau, September 18th, 1960). Then archaeological heritage sites would be delimited by arbitrary zoning around the areas which could contain “buried cultural property” or ruins. In case of the first and second *Kai-hous*, historical facts are evident. Among Shinagawa *O-daibas* which is historically and technically relevant to *Kai-hous*, the third and sixth *O-daibas* were designated as National historic site in 1926 by *Historical Spot, Scenic Beauty and Natural Monument Preservation Law* (1919). In 1995, the Agency for Cultural Affairs referred to heritage of industrial modernization as a type of cultural property due to a revision of the criteria of the designation for Historical Spot, Scenic Beauty and Natural Monument. Therefore the legal range of cultural property was extended from mid-Meiji era to end of WW II. In August 1 of 2002, Cultural Properties Department proclaimed that it surveyed to register Tokyo bay gun battery ruins as heritage of industrial modernization. It selected Motosu gun battery, the first and the second *Kai-hous* from a body of Tokyo bay gun battery ruins as “heritage of industrial modernization”. Research products could nominate as national historic site. In April 30 of 2003, Futtsu City Council of Cultural Property confirmed that the proposal of designation of historic sites should be embodied within the year on the memorandum titled “Respecting the Protection and Practical Utilization of the first *Kai-hou* and the Cape Futtsu” (Kosaka, 2004). Although more than 20 years have elapsed since then, the report is yet to be published. According to “the distributive map of ruins in Futtsu City” made in March 1975 for the first time, all Motosu gun batteries, the first and second *Kai-hous* weren’t registered as archaeological heritage sites. It was not until 1987 that the first and second *Kai-hous* were not only registered in “Map of Ruins,” but also Motosu gun Battery was registered in “the map.” Motosu gun battery, the first and second *Kai-hous*

were registered in “the distributive map of ruins in Chiba prefecture” (March2000). Consequently the construction works shall be notified within 60 days in compliance with articles 92-95 of *Act on Protection of Cultural Properties*.

In July 2010, it turned out that a branch office of MILT destroyed considerable parts of the second *Kai-hou* registered as archaeological heritage site. Worried the second *Kai-hou* might collapse by typhoon or earthquake, the construction began in 2007 so as to remove obstacles on navigation routes. A section chief of Tokyo Bay Waterway Office told that no report was given from Third Regional Coast Guard Headquarters who owns the second *Kai-hou*, we didn't perceive the second *Kai-hou* was included in Archaeological Heritage Site. In the meantime it was revealed that the construction was the whole renovation of the second *Kai-hou*, and Futtsu City Council of Cultural Property held an urgent meeting in July2010. We inquired the Chiba Prefecture Board of Education about this problem, and the Board replied as follows. First concerning the well-known archaeological heritage site registered as “the second *Kai-hou*,” the construction had been carried out without any notification or consultation for both prefecture and city Board of Education. Secondly, as regards the third *Kai-hou*, Tokyo Bay Waterway Office removed the sunken rocks and tried to record the state of ruins and to open the information to the public 2000 to 2007. Thirdly, as regards the construction of the second *Kai-hou*, a request paper (August 11, 2010) which stipulated the fact that many people in Futtsu committed to this construction was submitted to Tokyo Bay Waterway Office.

The Different Treatment of *Kai-hous* by Different Administration

Both the first and second *Kai-hous* have the Futtsu city's land register. These registers were decided as *the matter respecting the jurisdiction of Kai-hous* (decree 72) (Takahashi, 2004a). The third *Kai-hou* belonged to Yokosuka city. When sunken rocks were removed due to safe navigation, its land register was erased prior to the construction.

Since 35% of the third *Kai-hou* became sunken debris, the underwater structures up to the depth of 23m from the surface were removed in 2007. This construction raised so called “Large-sized Barracks” from plenty of remains in February 2005. This was transported to Umikaze Park owned by Yokosuka city in February 2006, it is

permanently open to the public since March 1 of 2006 (Fig. 4). A Body, which developed into NPO in February 2009, posed a problem about the conservation of the third *Kai-hou* remains in January 2007. There were some remains raised other than “Large-sized Barracks.” The Body held a symposium on the relocation to Oppama of other remains of the third *Kai-hou* in July 2007. “Large-sized Barracks” was designated as important cultural properties by Yokosuka city in March 10 of 2009. Regarding this chance as the best timing, the NPO consulted with MILT about the treatment of remains of third *Kai-hou*. Thus three remains named Observation Station, Searchlight and Side Storage Room were determined to be selected and relocated them to City Ground in Natsui land. After this construction was carried out in 2010, three underwater remains were open to the public in April in the following year.



Fig. 4 Large-sized Barracks of the 3rd Kai-hou Raised in February, 2005 is Permanently Open to the Public in Umikaze Park of Yokosuka City. (T. Nakada)

Then the NPO moved to get the designation of remains exhibited at Oppama as important cultural property. Designation of cultural properties by Agency for Cultural Affairs is of great use when citizens make applications for subsidy. Consequently three structures were additionally designated as important cultural properties. It is worthy of notice that Tokyo

Bay Waterway Office was willing to disclose their own actual conditions exposed by the removal construction to citizens. This suggests that the office recorded certainly information of building technology through observing remains raised (Takahashi, 2004a). “The construction History of the Third *Kai-hou* in Tokyo bay” (a volume of 630 pages) published in March 2010 by Tokyo Bay Waterway Office based upon lots of information is the precious and exhaustive document record.

World Heritage and *Kai-hous*

Etuko Takahashi who was one of authors of “The construction History of the Third *Kai-hou* in Tokyo bay” stated that though a body of gun batteries in Tokyo bay including Shinagawa *O-daiba* deserved World Heritage, the current state remained seriously critical (Asahi Shimbun, 2009). Such a point of view is extremely significant. Because

viewing or estimating *Kai-hous* in light of world heritage never permits different treatment of remains by the different authorities. Moreover from a view of World Heritage, historic remains including *Kai-hous* must be perceived as “in totality; the conditions of integrity to properties” (Operational Guidelines of the World Heritage Convention, para. 89). In fact, the first, second and third *Kai-hous* are constructed like arc shape between Cape Huttu and Saruis land. This could be overviewed as a landmark of the entrance of Tokyo bay, as Sumihisa Takahashi (1927-2005) emphasized repeatedly. He proposed the first *Kai-hou* and Motosu gun battery at the end of the Cape Futtsu be regarded as Historic sites (Takahashi, 2002). In this sense, the expression of “*Kai-hou* three brothers” by the chief Kazuo Kosaka of Tokyo Bay Fort Fan Club is very symbolic. As regards the raised relics other than remains transported to Umikaze park, he stated it was desirable that Futtsu city conserve the rest of the raised relics which have historical relation with the first, second and third *Kai-hous*. This shows eloquently his deep insight.

The idea of Kosaka and *World Heritage Convention* seems almost the same. The subjects of the convention are monuments, architectural works, elements or structures of an archaeological nature etc., which are of “outstanding universal value” from the historical point of view (articles 1 and 2). The Basic scheme of the Convention is to draw up the World Heritage List (article 11). The registration of the list is examined and decided based on applications by each state parties. The World Heritage Committee were created in order to examine such applications in detail.

The World Heritage Committee drew up the global strategy in 1994. It mentioned new types of heritage such as cultural landscape, industrial heritage and modern architecture that had not ever been designated. Japan also added a new type of cultural property called cultural landscape to *Act on the Protection of Cultural Properties* in April 2005. Its definition articulates “indispensable subjects to understand our lives or livelihood selected from lives or livelihood of people living in the region and landscape formed by its cultural climate” (article 2.1.5). Japanese provisional list have been drawn up by Agency for Cultural Affairs based upon the opinion of Council for Cultural Affairs. World cultural heritage special committee has made reference to the operational guidelines accepting proposals of prefectures and municipalities since 2007. It is

expected that such selection is based on not political but purely archaeological examination.



Fig. 5 The Whole View of the 2nd Kai-hou in February, 2000. (Tokyo Bay Fort Fan Club)



Fig. 6 The Whole View of the second Kai-hou. (S. Takayama)

Administrative tasks about *Kai-hous*

The proposal to the First and the Second Kai-hous

Before the destruction of considerable parts of the second *Kai-hou* was revealed, in the regular prefectural assembly in 2008 Mitsuru Yoshimoto proposed that the first and second *Kai-hous* be world heritage. In the assembly, when he questioned about survey of Agency for Cultural Affairs, the chief of board of education replied that although the first and second *Kai-hous* were selected as one of 50 sites and indeed the research was carried out, the report remains to be published as of February 2004. When Yoshimoto questioned whether a body of Tokyo bay forts should be registered and conserved as world heritage, the chief of board of education replied that the registration of world heritage needed the designation of national historic in advance (Yoshimoto, 2008).

In the assembly in December 2010 soon after the destruction of the second *Kai-hou* was revealed, when Yoshimoto inquired whether the report was published, the chief of board of education replied that as of February 2011 it had not been published. Though Chiba Prefectural Board of Education alleged the report would decide the significance of the first and second *Kai-hous* (Yoshimoto, 2011), as of January 2014 it has yet to be published.

The Present Conditions and Problems on the Second *Kai-hou*

As the second *Kai-hou* has let alone for about 70 years since its abandonment, it has fallen into ruin (Fig. 5). The revetment protection and restoration works were

implemented as “Renewal Project” by MLIT in 2007, some works were completed in 2013 (Fig. 6). However, in the construction, due to insufficient cooperation between project executors and administrative officers, the advance archaeological research was not implemented in conformity with *Act on the Protection of Cultural Properties* (Tokyo Bay Waterway office). When we participated in a marine inspection in 2012, we confirmed the state covered with concretes to rivet the coastline. The fact that the legal archaeological research was not implemented means that regardless of registration of archaeological heritage sites, “the degree of importance as cultural heritage” is never verified. Therefore researches to get hold of the current state and pick up poor information of remains is strongly required. It is desirable that such researches be carried out and the researchers publicly disseminate their products.

The Treatment as Cultural Property of Parts of Foundations Left behind under the Third *Kai-hou*

The depth of water of the third *Kai-hou* is around 40m. That of the second *Kai-hou* is only 1-4 m. The construction period of the third *Kai-hou* was much longer than that of the second *Kai-hou*. The amount of stones and sand used by the construction was approximately 16 times larger than that of the first *Kai-hou*, and about 4 times larger than that of the second *Kai-hou*. It is remarkable that underwater basic structures are still left behind on the seabed. Although we have not confirmed, it would be natural that the underwater basic parts be preserved in situ. Nobody can mention this information. Though Board of Education of Yokosuka city seems unaware of the fact, these remains are underwater cultural heritage. These remains were constructed about 120 years ago. These structures should be valued as not separate remains but integral part of the third *Kai-hou*. Such an understanding would enable us to learn the actual conditions of marine engineering works. However, it seems difficult that we implement archaeological researches to confirm the actual state. Because the sea area of the third *Kai-hou* is important point due to heavy traffic, and the depth of water is about 40 m. Accordingly we require the authorities to recognize underwater basic remains.

Conclusion

At the opening of a NHK TV program (August 31 of 2013) titled “Megaquake: the revival of Great Kanto earthquake,” “an artificial island” from the sky view was introduced as a marine important place for seismic observation or anti-terrorism policy. Seemingly the

foundation of the island was covered with sand, so never did we dream that the island is underwater cultural heritage. However we assert the island is none other than the second *Kai-hou*. The fact that this historically important island was introduced as quite different island seems to have changed even the original value of the island. The construction technology of *Kai-hous* under turbulent times in the early years of Meiji era was excellent enough to have been required the transfer to the United States when it planned to construct *Kai-hou* in Chesapeake bay (Committee for Publishing a Construction History of Tokyo bay the third *Kai-hou*, 2005). A document titled “Matters respecting the construction of *Kai-hou* in Tokyo bay: An inquiry from US ambassador” (July 1906) was found in Diplomatic Archives of the Ministry of Foreign Affairs of Japan. Japan inquired whether US also own the document in reply. That’s why an unknown history between Japan and US was revealed. In July 2003, Tokyo Bay Waterway Office found the official document in the US National Archives and Records Administration. These facts show that an appraisal which Japan solely devoted itself to import is not necessarily right. Japan had already exported the world highest level of technology to the US at that time.

Yokosuka city consulted with the Agency for Cultural Affairs in May 2013 to designate Saruis land as national historic site based on *Act on the Protection of Cultural Properties*. The city has been trying to maintain it as a park since it was transferred from the government in 2007. As Takahashi and Kosaka pointed out, if we regard a body of batteries including *Kai-hous* as one package “in totality”, the designation of only one part as historic site could also contribute to “the totality” provided in the *World Heritage Convention*. A statement on national historical site submitted to the Agency for Cultural Affairs in 2014 is expected.

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Biography

Tatsuya Nakada (b. 1969) is an associate professor of Graduate School of Tokyo University of Marine Science and Technology. He is a member of the board of Association for regional and Cultural Studies. His specialty is International Law, *inter alia* Law of the Sea. His main themes most particularly include “Fishery Subsidies and International Fisheries Law” and “Archaeological Heritage Management and UNESCO Convention on the Protection of the Underwater Cultural Heritage”. In the process of emerging of international community laws, recently he has been always considering how well such laws should be incorporated into Japanese legal system.

Toshiaki Hayashibara (1960) has completed master's degree at Graduate School of Literature of Toyo University. He is a member of the board of Asian Research Institute of Underwater Archaeology. His specialty is archaeology; his main themes include Japanese prehistory bronze ware research, underwater cultural heritage and Archaeological Heritage Management. In the process of participating in underwater cultural heritage research all over Japan, he has most gradually come to have his doubts about treatments of underwater cultural heritage by Japanese management of archaeological heritage. Recently he has been actively giving presentations on underwater cultural heritage and Archaeological Heritage Management.