

Regarding the Artwork Rescue Operations Conducted by JCAM at the Rikuzen-Takata City Museum

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1. Application for Post-Disaster Assistance (March 11 through ca. May 22)

The Rikuzen-Takata City Museum (hereinafter referred to as the City Museum) is located on the Sanriku seacoast, and suffered massive damage in the tsunami that occurred on March 11, 2011. Given the resulting state of the surrounding area, it seems that the tsunami entirely swamped the two-story building, killing all six employees.

After the disaster, those involved with the city's Sea and Shell Museum, city Board of Education, prefectural Board of Education, Iwate Prefectural Museum, staff from other museums in the prefecture and members of the Self-Defense Forces all worked on the removal of dirt and rubble from the site. Meanwhile, the historical, natural history, archaeological and ethnographic materials rescued from the four cultural facilities in the city (the City Museum, Sea and Shell Museum, library and archaeological materials office) were moved to the abandoned Oide Primary School. The materials that particularly required emergency stabilization were transferred to the prefectural museum, or through the efforts of the prefectural museum, to related facilities both in the prefecture and other locations in Japan.

However, this did not include the 156 art works (for a total of 336 items), consisting of 83 paintings (263 items), 71 calligraphic works (71 items) and two sculptural works (2 items). On May 6, 2011, museum and cultural properties staff members from within the prefecture carried the works from the second floor storage area to the second floor display galleries, where the city Board of Education was forced to have them remain, given that there were no determined rescue organizations or storage locations identified for the works.

On May 12th, Asaka Hiroshi, chief senior cultural properties specialist of fine arts division, cultural properties department of the Agency for Cultural Affairs, surveyed the disaster site with members of the Rikuzen-Takata local government, the Iwate Board of Education and staff members of the Iwate Museum of Art. The Iwate Board of Education submitted a request for assistance to the Agency for Cultural Affairs in the last week of May, and thus began rescue operations at the site as one part of the cultural properties rescue operations.

2. JCAM Participation and the Rescue Operations Organizational Structure (May 23, 2011 onwards)

The Japanese Council of Art Museums (referred to hereafter as JCAM) was one of the constituent groups of the Committee for Salvaging Cultural Properties and Other Materials Affected by the Great East Japan Earthquake and Related Disasters (referred to hereinafter as the Rescue Committee). JCAM received a request on May 22nd from the Rescue Committee, and on May 23rd decided to participate in the rescue operations along with the Independent Administrative Institute National Art Museum (referred to hereinafter as the National Art Museum). While the City Museum was not a member of JCAM, the Protocols for Instituting Rescue Operations When Disasters Occur established in June 1998 by JCAM includes the article,

“The objects of assistance will be the art museum activities of member museums seeking assistance, and when a member museum [in this case, Iwate Museum of Art] or its operators [Iwate prefecture] receives an assistance request, that member museum will be the principal operator in the rescue operations for cultural properties in that area.”

Thus since staff members from the Iwate Museum of Art, a JCAM member, had participated in the Agency for Cultural Affairs survey conducted on May 12th and rescue operations preparations had already begun, essentially all requirements stipulated for JCAM participation had been met. Three members of the JCAM Great East Japan Countermeasures Headquarters -- namely Itô Yumi of the Museum of Modern Art, Kamakura and Hayama, Kaizuka Tsuyoshi of the Bridgestone Museum of Art and the author -- became the chief JCAM participants in this operation. Ms. Itô, a conservation and restoration specialist, was in charge of various types of guidance and organization, while

Mr. Kaizuka was responsible for recruiting and dispatching rescue operations staff. Matsumoto Tôru of the National Museum of Modern Art, Tokyo, was the chief representative of the National Art Museum in this operation. These staff members met with Yamanashi Emiko (National Research Institute for Cultural Properties, Tokyo) who was in charge of the Rikuzen Takata team of the Rescue Committee's Administrative Office, the Iwate Board of Education (Kamata Tsutomu, and Arai Yûsuke, Lifelong Learning Culture Division), the Rikuzen-Takata City Board of Education (Koiwa Takaaki), and Iwate Museum of Art (Ôno Masakatsu, Nemoto Ryôko and others), to discuss and arrange the dispatch of staff members and advance work on the project. Tanaka Atsushi and Emura Tomoko of the Rescue Committee Administrative Office also carried out work and were involved in communications.

The author discussed where the Committee should headquarter its work in a series of emails with Mr. Kamata of the Iwate Board of Education. His immediate response was:

"Ichinoseki city is the closest location, and if you can secure accommodation, that would be the most appropriate operational base. But if you were to start a new search, I think you will find that most of the lodging in the southern part of the prefecture has been taken, and Kitakami city also has most rooms reserved for disaster recovery. I would suggest looking for lodging in areas north of Kitakami city."

I immediately began investigations on the Internet. It is 60.2 km from Ichinoseki station area to the City Museum. A volunteer's website provided the information that it takes a bus approximately 1.5 hours to travel from near Ichinoseki Station to the center of Rikuzen-Takata. It takes that much time to get to the disaster zone from the closest operational center Ichinoseki. Clearly this was a different situation than that encountered in the Great Hanshin-Awaji Earthquake.

In the end I thought that it would be good to visit the City Museum as soon as possible. Therefore on May 28th, the day after the JCAM Annual Meeting held in Akita city, I made a personal visit to the site. As Mr. Kamata had indicated, all of the hotels in Ichinoseki were full, but I was able to secure accommodation in Kitakami city. Though most of the rental cars available in the Ichinoseki Station area were already being used for rescue operations, I was able to get on a cancellation waiting list. On May 28th I set out with a large-scale map and a rental car equipped with GPS, heading towards the City Museum. This visit allowed me to get a grasp of how to reach the designated area and the state of affairs in the area around the museum and inside the museum itself.

When Ms. Itô received my email with my report on this visit, she suggested to the JCAM Countermeasures Headquarters members that relevant staff visit the museum to conduct a survey and hold planning meetings.

3. Selecting and Preparing Institutions that Requested Assistance (June 13 – July 13, 2011)



Fig.1
Onsite Survey at Rikuzen Takata City Museum
(June 13, 2011, photo: author)

Based on this suggestion, on June 13th, nine members of the above-named groups met in the City Museum and conducted a more detailed survey in order to suggest plans for how paintings and calligraphic works should be moved (fig. 1). A further meeting was held at Iwate Museum of Art on June 14th. The discussion that day centered on selecting a site for the emergency treatment of works.

There was a large glass window on the City Museum's west side (the side facing away from the ocean), but the tsunami outflow waves had easily broken it. That meant that large amounts of rubble could accumulate within the building itself. The majority of the artworks and calligraphies were stored at the time in the museum storage areas, and thanks to the walls and doors of those storage areas remaining firm, there was less physical damage to the works than initially supposed. They had however been soaked in seawater that included sand and dirt. Thus they had to be transferred to an appropriate location where they could be dried, fumigated, given

emergency treatment and then temporarily stored. Because the cardboard boxes and vinyl sheeting that they were wrapped in prevented drying after the event, the majority of the works and their boxes were covered in large amounts of mold. Given the large scale of the works, including two no. 500 canvases, 13 no. 13 canvases and 3 no. 200 canvases, a suitable site for their removal could not be determined in just one day.

The conditions set by the Rescue Committee for a suitable site, indicated to the Iwate prefectural staff, were: 1) a site where secondary disasters, such as earthquakes or tsunami, were least likely to occur; 2) a site where transportation was convenient and where materials and restorers could easily travel to; 3) a site that could handle large amounts of large-scale works, including those of the no. 500 canvas size; 4) a site with security and climate control that could be fully managed; 5) a site with a water supply; and 6) a site with electricity.

However, it was not easy to find a facility that could receive such a large number of works given their dirty state. The facilities that met these requirements in the coastal area were already being used as evacuation shelters, and there were almost no facilities in the prefectural cities that could be used as is to meet these requirements. The Iwate Board of Education and Iwate Museum of Art thought it would be possible to build prefabricated units on the Iwate Museum of Art's grounds, but the on-site survey of June 13th indicated that in such a case it would take at least three 70–80 square meter-buildings to suffice. This would be a building to receive damaged works, a place to carry out emergency treatment and then a place to temporarily store the works after treatment. A further consideration of the costs involved made the group determine that the pre-fab idea would not be possible. Then the members from Iwate prefecture thought of a second suggestion, namely the former Iwate Prefectural Sanitation Research Laboratory (located in Morioka city, hereinafter referred to as the Prefectural Sanitation Research Laboratory, fig. 2).



Fig.2
Former Iwate Prefectural Sanitation Research Laboratory
(June 14, 2011, photo: author)

The Prefectural Sanitation Research Laboratory is a four-story building that fell out of use in April 2001. It was easily accessed from the train station, and there was ample space for work, decontamination, storage and office space. However it was necessary to install temporary water pipes and electricity and conduct a major cleanout. These matters were coordinated by the accountant for the Iwate Board of Education, Mr. Kamata and Mr. Arai. On June 20th we were able to get an approximate schedule of the restoration of electricity and water facilities. The first two floors of the building would be used, and the preparations began on July 13th, continuing until the day before the works were delivered from Rikuzen-Takata.

4. Supplemental Recruitment of On-Site Staff (June 22nd onwards)

Supplemental recruitment of on-site staff began on June 22nd, once transportation vehicles had been secured, and the transfer work staff had been essentially finalized by July 1st. Emails were sent out with information on the detailed situation in the disaster zone and the City Museum itself, the equipment that each participant should bring with them to the site, the equipment that could be provided by the Rescue Committee and JCAM, the contents of the work involved and other information that had been prepared by the Rescue Committee and JCAM itself.

5. Transfer of Materials from the City Museum and their Disposition within the Former Prefectural Sanitation Research Laboratory (July 12–14)

The process of wrapping and removing materials from the City Museum consisted of the delivery of wrapping materials and preparations on July 11th, and then wrapping and transfer on July 12th, 13th and 14th (figs. 3-4). The two Rescue Committee administrative office members, three Rikuzen-Takata Board of Education members, two Iwate Board of Education members, and 13 members from JCAM member museums (from 11 JCAM member museums including the Iwate Museum of Art and the National Art Museum), five staff members from Katolec, a JCAM supporting member, for a total of 25 working on this operation. As noted above, it was 1.5 hours by car from the JR Ichinoseki Station, the closest accommodation, to the City Museum site. The staff members made morning/evening round trips in two station wagons. This was a time of ongoing high humidity and heat, with several days of over 30 C degrees, and the resulting mold at the City Museum meant that health hazards were going to be a factor in the operation. This meant that all staff members had to be outfitted with helmets, masks, goggles and protective clothing. With these preparations in hand, the 156 works were carried down from the second floor to the first floor of the City Museum, photographs taken, and then they were wrapped, boxed and put in transport vehicles. Work proceeded as the staff members implemented various means of preventing heat stroke and accidents. Thanks the self-reliance of the staff members involved and timely communications from JCAM, all work was carried out with good success. The works were loaded into a 10-ton truck and a 2-ton rental truck, and transferred to the Former Prefectural Sanitation Research Laboratory on July 14th. The works were all moved into the new facility by that evening.



Fig.3
Rescue Operations at the Rikuzen Takata City Museum
(July 13, 2011, photo: Egami Yuka)



Fig.4
Rescue Operations at the Rikuzen Takata City Museum
(July 14, 2011, photo: Egami Yuka)

6. Fumigation and Setting Up in the Former Prefectural Sanitation Research Laboratory (July 15 – August 20, 2011)

Preparations were made for fumigation between July 15 and August 8, with the work carried out by Arp Gas Fumigation from August 9th through 16th. The considerable amount of time that passed between the receipt of the materials at the Laboratory on July 14th and the beginning of fumigation operations were because the NRICPT began surveys on July 15th regarding the risk of cancerous causing materials being created by the sterilization and fumigation of materials that had been submerged in seawater. After a detailed study, on August 8th they reported, “In the case of fumigation of disaster-affected paintings, as long as fumigation was carried out on fully dried paintings, there were no great risks involved in carrying out the sterilization and fumigation process.”

The Laboratory was readied for operations to be conducted after the fumigation process, which was completed on August 20th. Temporary water pipes were laid, electricity was reconnected, and cleaning was carried out thanks the cooperation of the Iwate Board of Education. The further setup and operations, such as expenses, materials and equipment acquisition, dispatch of staff, became the responsibility of the Rescue Committee administrative office and JCAM. We received worktables, chairs, white boards and other equipment from the Iwate Museum of Art. We installed 19 lamps, 13 window screens, and 52 curtains, along with shelving and refrigerators. Given various

circumstances, we contracted for a 30-amp electrical supply. We abandoned the idea of installing air conditioners. In order to lessen the amount of mold in the interior air, we also planned and installed a ventilation plant, but given the small electricity supply we were not always able to achieve full ventilation amounts. Because there were no phone lines, communication was conducted on personal mobile phones and JCAM computers running on a Wi-Fi Internet service through JCAM's LAN router. Given the lack of security facilities at the site, we did not publicize either the facility name or location.

7. Emergency Treatment, Transfer of Works and Worksite Dismantling (August 21 – September 30, 2011)

The flip side of the positive aspects of the site, such as its large workspaces, is that the Laboratory also had many limitations. Starting on August 21, the staff dispatched by JCAM, conservation specialists, Rescue Committee administrative office staff and others, worked together on emergency treatment on works and their positioning. Participants in the operation came from all over the country, from as far south as Kyushu and as far north as Hokkaido (fig. 5).

The emergency treatment procedures consisted of: 1) photographing and recording their pre-handling state; 2) removing frames and other mountings; 3) removal of mold and dirt; 4) photographing them post-handling and recording what procedures were carried out; and 5) temporarily placing them in simple wrapping.



Fig.5
Emergency Treatment at the former Iwate Prefectural Sanitation Research Laboratory (September 16, 2011)

The conservation specialists mentioned above were conservators from JCAM member museums and universities (Tohoku University of Art and Design and Tokyo University of the Arts) as well as some from the private sectors who volunteered their efforts for this rescue operation. They determined what handling was needed depending on each affected work's particular damage, and directed support staff, indicating what work was required and any particular areas of concern. Specialists carried out specialized procedures. The recording staff was in charge of recording what work was conducted on which piece, supplying materials to the work process and helping with communications between staff members.

Staff member rotation was carried out on an approximately 5-day basis, with no permanently assigned staff at the Laboratory. Hence, staff planned to share their information through files online (Iwate File), with shifts arranged so that they could each continue their respective work, with a leader set each day. The shift chart was also posted online for staff member reference. Egami Yuka, Kobayashi Tadashi (Hyôgo Prefectural Museum of Art), Fujimaki Kazue (Itami City Museum of Art) and five others provided communications support to the entire work team by compiling information, broadcasting and updating it as needed. How this process was handled may prove to be an important example for future efforts. While there is a strong image of cultural properties rescue work involving wearing helmets, masks and goggles as they enter a disaster zone and carry out large amounts of material, in fact the work done by the recording staff at the Laboratory, and the editing/production work of the Iwate Files online provided critical information to the work team and were an essential element for the smooth operations on site.

Emergency treatment took approximately one month, ending on September 25th. On September 17th 20 oil paintings were transferred to the Iwate Museum of Art, with the remainder of the oil paintings and calligraphies taken to the museum on September 29th. From August 21st through September 29th, a total of 48 staff members from 29 JCAM member museums participated in the operation, with a further 35 other individuals involved.

8. Behind-the-Scenes Support for Operational Sites

The cultural properties rescue operations were not conducted solely at the City Museum and the Laboratory. Behind-the-scene support was also provided for these two sites by all manner of people and institutions.

The extremely busy members of the Rikuzen-Takata Board of Education and the Iwate Board of Education, along with the staff members of the Iwate Museum of Art, one of the core museums in the prefecture, were some of the many people fully occupied with recovery operations within Iwate prefecture. The great kindness of museum director and the other members of the Iwate Museum of Art staff contributed greatly to the rescue operations by storing all of the City Museum artworks in their museum's storage area. The prefectural art museum staff members not only traveled to the Laboratory to work on site, they also provided regular updates of local information that were essential to the rescue operations. The staff members from JCAM member museums that carried out the Iwate File editing and transmission work from their respective institutions and homes, the colleagues who covered work for the staff members dispatched on the rescue teams, and the many who responded to the JCAM requests for assistance. All must be duly mentioned and sincerely acknowledged in this report.

9. Issues Confronted in the Rescue Operations and the Next Organizational Structure for Cultural Properties Rescue

The above description gives an overview of the rescue operations, omitting detailed procedures, and this may give the impression that work proceeded without any problems. However that was not actually the case. All of the surplus infrastructure, funding, local government staff and regional business, the government decision-making systems and sharing of information between relevant parties of the disaster-affected areas and prefectures were all affected by the negative conditions brought about by the disaster. As well, the Rescue Committee administrative offices were also greatly concerned about funding of their operations. Amidst such circumstances, every day presented itself with searching for the shortest route to resolving the new issues that constantly arose. The following four points should be made about these issues.

1) The Timing of the Requests for Support

The Iwate Board of Education sent their request for support to the Agency for Cultural Affairs on May 18th. The Agency then contacted the Rescue Committee between May 20th and 22nd. The JCAM response office did not receive the information that the art works remained as is in the City Museum until May 22nd. If the request for support had been submitted earlier, if information gathering, surveys and preparations had proceeded more quickly, then the works could have been transferred out of the disaster zone at a stage when the mold and other problems were relatively little advanced, and this would have meant a lessening of the operation and costs involved in mold-removal and eradication.

2) Local Response Headquarters

There was no local cultural properties response headquarters established in Iwate prefecture. If such a local response headquarters for cultural properties rescue had been established, it could have been a place where information about the advance troops from various disciplines and the rescue teams was gathered and a center for local Boards of Education and rescue committee administration, so that with the comings and goings of the various people involved, there would have been a clearer sharing of information.

3) Operational Funds – Securing Financial Resources and Their Speedy Provision

The Rescue Committee administrative office provided the essential materials and funding for the movement of artworks out of the City Museum as well as the setup of the Laboratory. However, the administrative office was not able to secure enough funding (donations received from the Foundation for Cultural Heritage and Art Research)

and use those funds for staff travel and other expenses until August 1. JCAM dispersed approximately 2.6 million yen (travel expenses, car rental, materials expenses) from the donations it had assembled, and indeed without these resources from JCAM, the initial phase of the operations would have been greatly hampered. The travel expenses for those dispatched to the worksites prior to August 1st were largely borne by the museums, local governments and foundations where rescue operation staff worked. Given that it was by no means easy for member museums to use their ordinary travel budgets to meet the needs of this extraordinary situation, it must be noted that a great number of involved people expended considerable effort on the explanations and arrangements needed to secure these funds. The question then arose, who was responsible for the 1.5 million yen cost of the fumigation of the City Museum artworks. This problem could not be easily resolved and a considerable amount of discussion and time was invested in the process. And this is just one of the funding issues that this rescue operation faced. There was a fear that the JCAM funds would not be sufficient for the staffing costs up until the end of the emergency treatment operations of this rescue operation that started fully in July, and the author is aware that the Rescue Committee administration did not take that much responsibility for expenses. Hence various different types of steps were considered for the lessening of costs. The 2-ton truck and station wagons arranged in the disaster area were used heavily for the transport of materials and staff. For example, when materials and equipment were transported from Tokyo to the City Museum, to lower costs we borrowed a truck from Katolec Corp. that was scheduled to be returned to Hokkaido. We had it stop off at the Miyagi Museum of Art to load more equipment and materials, and had them drop all of these items at the Iwate Museum of Art in Morioka city on July 7th. The equipment and materials were transferred to the rental 2-ton truck on July 11th and the author drove the truck, accompanied by Itô Yumi to the City Museum.



Fig.6
Building Storage Racks at the former Iwate Prefectural Sanitation
Research Laboratory (July 9, 2011, photo: author)

The two large wood racks that were used to support the artworks as they were covered with vinyl sheeting and fumigated was constructed from materials purchased from a home supply center in Morioka city and constructed by a JCAM-assembled team including staff from the Iwate Museum of Art (fig. 6). The majority of the work done to retrofit the Laboratory was not outsourced, but rather the rescue staff themselves carried out most aspects of the retrofit. These were some of the cost saving measures that we had to take during the time when we should have been concentrating our time and efforts on the rescue work itself. In order to expedite cultural properties rescue efforts, it is desirable to secure funding from national sources to cover such elements as travel costs,

material and equipment costs and transportation costs. JCAM will also work to secure its own independent funds in the future. However, we cannot rely in each independent organization's own efforts for cultural properties rescue work.

Further, even after the Rescue Committee administration office decided to take responsibility for the fumigation expenses, normal financial regulations stipulated that the process had to be put to a general bid, and it was thus 20 days until bidding was completed on July 11th. Surely there is a case for making an arrangement that will allow the timely dispersal of funding in the case of cultural properties rescue.

4) Information Sharing Over the Internet

Because there was no permanent staff on site at the Laboratory, I have noted above that plans were made for information to be shared between participants over the Internet. However, regardless of whether permanent staff were on site or not, clearly it is essential for those involved in cultural properties rescue work to all share information on the Internet. During the rescue work JCAM used the documents function in Gmail. There are many other sites that have similar functions, namely a site with free, password authentication, mailing list management, schedule management,

photo sharing, file sharing services. As in this instance, we had to set up this site after the disaster struck and spend considerable time and effort to create rules for the system. In the future it would be better if there were an up-and-running system operated by those involved in the field who were used to using it.

Information sharing online will surely be useful to provide information across fields in the time of disaster when specialists in the various fields of history, natural sciences and arts are all seeking assistance.

In order to prepare for the next major disaster, we should consider the issues listed above and it would seem apparent that there is a need for the prompt implementation of a system for cultural properties rescue operations, and information sharing between related groups and individuals on a regular basis. It goes without saying that the heart of this system would be an administrative presence like the Rescue Committee administrative office during the Tohoku interventions.

10. What Supported Us During the Rescue Operation

“Everyone worked everyday, in silence.”

This could be said about both the work conducted at the City Museum and at the Laboratory. There were actually 138 staff involved in this rescue operation is 138, with close to 700 involved overall. When we include the behind-the-scenes support activities, then the numbers grow substantially far beyond those listed. Further we must not forget the many who registered to help but then were not able to participate due to being unable to make suitable arrangements in their normal work places.

What supported the unstinting efforts of the staff members and behind-the-scenes members who responded and participated from all over the country, as well as the fundraising activities, was their shared desire to protect cultural properties and their belief in restoring, even if partially, the effort and affection that those who lived and those who died in the areas affected by the Great East Japan Earthquake and Related Disasters had put into their local collections and facilities. Based on that will and belief, undoubtedly the long-winded rescue and support operations will continue into the future. I would like to take this opportunity to express my heartfelt gratitude to all those who supported this rescue operation.

Finally, as I conclude this report, I would like to offer my prayers for the souls of all those who died in this disaster and to the late Tanaka Chiaki.