### The Military's Role in Disaster Relief Operations: A Japanese Perspective

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### Introduction

Militaries have played an important role in various aspects of disaster relief operations, such as transportation, communication, medical care, food and water supply, and infrastructure reconstruction. However, the Great East Japan Earthquake was a "complex disaster"<sup>2</sup> consisting of earthquake, tsunami, and nuclear accident, which required a response that went beyond the conventional framework of the disaster relief mission of the Japan Self-Defense Forces (SDF). The SDF established a Joint Task Force and called up Ready Reserves and Reserves for the first time in its history. More than 100,000 personnel were deployed for disaster relief activities, which was the largest-scale mobilization of the SDF. At the same time, the SDF cooperated with foreign partners: the U.S., which carried out Operation *Tomodachi*, and Australia, which engaged in airlift operations using large-scale transport aircrafts, to name a few. The role that the SDF played in this unprecedented crisis is often referred to as being "the last line of defense."

The role of the military in the response to a major natural disaster is diverse and is influenced by the "strategic culture" of the contributing countries. A report by the Stockholm International Peace Research Institute (SIPRI) published under the entrustment of the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) states that, "One of the key variables that influence contributing countries" policies on sending military assets for IDRA (international disaster relief assistance) is their national strategic culture, which relates to the perceived and actual role of the military in the society and the world."<sup>3</sup> Similarly, a report of the Wilton Park Conference points out that while some countries call for civil-military

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<sup>&</sup>lt;sup>2</sup> A complex disaster is defined as "multiple disasters happening at the same time or in sequence." It is deemed that "In such disaster scenarios there is a tendency for damage to be magnified as the disasters are interrelated." Reconstruction Design Council in response to the Great East Japan Earthquake, "Towards Reconstruction: Hope beyond the Disaster," (June 25, 2011).

<sup>&</sup>lt;sup>3</sup> SIPRI, *The Effectiveness of Foreign Military Assets in Natural Disaster Response* (Stockholm: SIPRI, 2008), p. 9.

separation in disaster response, others have a successful record of civil-military coordination.<sup>4</sup> In this context, how can the SDF's domestic and international disaster relief activities be assessed? What role should it assume in the disaster-prone Asia-Pacific region, where the affected governments sometimes fail to provide necessary assistance? The humanitarian assistance principle that the military is a means of the "last resort" in the response to natural disasters is widely understood, also in Japan. In some instances, however, the military becomes the first responder. In the wake of the Great East Japan Earthquake, as many as 107,000 SDF personnel were engaged in the relief operations. These operations, instead of prompting fears among the local population, provided stability on site to the residents.<sup>5</sup> The aim of this paper is to shed light on how this phenomenon should be understood.

This paper is structured as follows. Section 1 provides an overview of the debate on the role of the military in natural disaster response. In this section, the background of the "last resort" concept is examined, namely, that military capabilities and assets should be used only as a "last resort" in humanitarian assistance operations. Section 2 looks at how the SDF's disaster relief missions have been assessed in Japan, and as a case example, reviews the SDF's operations in the wake of the Great East Japan Earthquake. This section shows that while some countries in the post-Cold War era position disaster relief as a "new mission," disaster relief missions in Japan are commonly seen as being part of the SDF's mission. Section 3 presents the example of the Japan-U.S. partnership in the aftermath of the Great East Japan Earthquake and examines how disaster response may impact the management of alliances.

#### 1. The Military's Role in Disaster Relief Operations

Disaster response can be conceptualized as a cycle with four phases: prevention/

<sup>&</sup>lt;sup>4</sup> Wilton Park Conference 994, "The Use of Military Assets in the Humanitarian Response to Natural Disasters: 28-30 September 2009," <a href="http://www.wiltonpark.org.uk/resources/en/pdf/22290903/22291307/wp994-reports">http://www.wiltonpark.org.uk/resources/en/pdf/22290903/22291307/wp994-reports</a>.

<sup>&</sup>lt;sup>5</sup> Disaster relief missions transform the image of the SDF in some instances. Fumio Yamashita, former head of cultural affairs of the Japanese Communist Party, was hospitalized in Rikuzentakata City in Iwate Prefecture when the Great East Japan Earthquake struck, and was rescued from a near death experience. He is said to have noted, "I have long said that the SDF went against the Constitution, but never more have I been more thankful of the SDF," and held tightly onto the blanket distributed by the SDF. Shinichi Sano, *Tsunami to genpatsu* (Tsunami and the Nuclear Power Plant), (Kodansha, 2011), pp. 52-57.

mitigation, preparedness, response, and relief/recovery.<sup>6</sup> In most cases, local governments and authorities lead these series of activities, where in domestic disasters, fire departments, police, medical centers, and other actors are the responders.<sup>7</sup> The military's response is reserved primarily for larger scale disaster operations. The mainstream view is that the military plays a limited and supplementary role. According to UNOCHA statistics, humanitarian assistance can be broken down into approximately 40% food, 10% health and sanitation, and other key sectors including water, agriculture, and economic infrastructure. Only 0.1% of the total humanitarian assistance is directly related to security.<sup>8</sup> Furthermore, although the Hyogo Framework for Action, adopted in January 2005 at the United Nations World Conference on Disaster Reduction (WCDR), underscores the "resilience of the community" and promotes partnerships between public entities.

### Humanitarian Assistance and Disaster Relief (HA/DR) by the Military: "Last Resort" or "New Mission"

International disaster relief operations are, in principle, led by civilians and supported by the military. Civilian and military actors are expected to coordinate in accordance with their respective traits and capacities. The "Guidelines on the Use of Military and Civil Defence Assets in Disaster Relief" (Oslo Guidelines) created by UNOCHA in 1994 identify the use of the military facilities and capacities of foreign militaries as a means of "last resort." In other words, "foreign military and civil defence assets should be requested only where there is no comparable civilian alternative and only the use of military or civil defence assets can meet a critical

<sup>&</sup>lt;sup>6</sup> "Mitigation" refers to efforts aimed not at the complete elimination of the impacts of natural disasters but their minimization. This requires a combination of infrastructure-based measures, including the construction of breakwaters and levees, as well as people-oriented measures, including disaster education and training. Reconstruction Design Council in response to the Great East Japan Earthquake, "Towards Reconstruction: Hope beyond the Disaster," (June 25, 2011), pp. 35-36. The main role of the military is deemed to be in the area of people-oriented measures of education and training.

<sup>&</sup>lt;sup>7</sup> "Participants: Governmental Disaster Management Agencies," Chapter 8, Damon P. Coppola, *Introduction to International Disaster Management*, second edition (Amsterdam: Butterworth-Heinemann, 2011).

<sup>&</sup>lt;sup>8</sup> UNOCHA, Annual Report 2009, cited in Coppola, Introduction to International Disaster Management, p. 455.

humanitarian need."<sup>9</sup> In the *UNHCR Handbook for Emergencies*<sup>10</sup> published by the Office of the United Nations High Commissioner for Refugees (UNHCR), "Working with the military" is listed as the last item. This section provides a detailed account of the types of military transport aircrafts, cargo capacity, the length of the runway needed for takeoff and landing, among other matters, based on practical needs.

This concept of a "last resort" is consistent with SDF's approach toward its disaster relief missions.<sup>11</sup> In general, the disaster relief missions of the SDF are based on three principles: contribution to common good, urgency, and no comparable civilian alternatives. *Contribution to common good* means that the SDF's operations are carried out with the aim of giving social protection to the lives or assets of the people in order to maintain public order. *Urgency* means that there is a recognized pressing need for the operations of the SDF. *No comparable civilian alternatives* means that there is no appropriate option other than the deployment of SDF units.

Thus, the basic principle is that involving the military in HA/DR is a "last resort." Meanwhile, the military, possessing superior mobility as well as the ability to set up critical infrastructures, has the capacity to become the first responder in a disaster area. A major turning point in the debate on how the capacities and assets of the military should be utilized came when an earthquake struck off the coast of the Indian Ocean in December 2004.<sup>12</sup> Following this disaster, 16 foreign governments provided military assets; 14 UN specialized agencies, 38 local organizations, and 195 international humanitarian organizations carried out disaster relief during a three-month period. The military capabilities provided by 35 countries amounted to 75 helicopters, 41 vessels, 43 fixed-wing aircrafts, and over 30,000 personnel. The task of coordinating these assets could not have been more daunting.

<sup>&</sup>lt;sup>9</sup> UN Office for the Coordination of Humanitarian Affairs (UNOCHA), *Oslo Guidelines: Guidelines* on the Use of Foreign Military and Civil Defence Assets in Disaster Relief, revision 1.1 (November 2007), p. 8.

<sup>&</sup>lt;sup>10</sup> UNHCR, UNHCR Handbook for Emergencies.

<sup>&</sup>lt;sup>11</sup> For example, an interim report of the Central Disaster Prevention Council concerning the Great East Japan Earthquake stated as follows: "The earthquake was followed by a major tsunami which struck a wide area, causing many missing people and isolated settlements mainly in the coastal areas. As a result, saving lives became the number one priority. In addition to the firefighting headquarters, the fire department, and the police, the SDF were mobilized on a national scale and conducted massive search and rescue operations in parallel with the emergency fire response teams of the fire department, the interprefectureal emergency rescue units of the police, the rot police of prefectures, and the Japan Coast Guard." (emphasis by author) Council on Disaster Countermeasures Promotion, "Interim Report: Rebuilding a Strong Japan by Drawing on the Lessons Learned from the Great East Japan Earthquake," (Tokyo: March 7, 2012).

<sup>&</sup>lt;sup>12</sup> SIPRI, *The Effectiveness of Foreign Military Assets in Natural Disaster Response* (Stockholm: SIPRI, 2008), pp. 87-88.

According to the report compiled by SIPRI under the entrustment of UNOCHA in light of the experience of the earthquake in the Indian Ocean, the functions the military is expected to fulfill in HA/DR may be summarized into the following seven categories: 1) Collecting and analyzing local information and assessing the situation; 2) Budgeting for the immediate conduct of operations in the disaster area; 3) Providing replenishment support that leverages the military's ability to set up critical infrastructures; 4) Having trained personnel who are on standby in case of emergencies; 5) Possessing self-reliant capabilities for providing equipment, transportation, heavy machinery, and infrastructure assistance; 6) An efficient decision-making mechanism; and 7) Providing stability on site to the affected people by carrying out activities as uniformed personnel of a public entity. Whether or not stability on site is provided, however, depends largely on the proficiency and morale of the military conducting the operations.

These changes in trends are related to the recurring debates on the role of the military. Looking back in history, it becomes apparent that contemporary disaster relief organizations have their roots in the civil defense programs during World War II. Later, due to the influence of the Cold War between the U.S. and Soviet Union, the civil defense programs of the West included early warning systems, evacuation shelters, and search and rescue. Examples include the Disaster Management Agency of the UK, the Office of Critical Infrastructure Preparedness and Emergency Preparedness of Canada, and the Federal Emergency Management Agency (FEMA) of the U.S. that was established pursuant to the Federal Civil Defense Act of 1950.<sup>13</sup>

The end of the Cold War, however, transformed the role of the military in disaster relief. The urgency of civil defense in preparation for a U.S.-Soviet nuclear war dissipated, and the military was expected to fulfill a mandate that exceeded the traditional mission of national defense. For example, the concept of "military operations other than war (MOOTW)"<sup>14</sup> adopted by the U.S. military in 1993 assumed that there was a decreased possibility of a major conflict of a Cold War nature occurring and that the military should respond to small-scale and low-intensity conflicts. For this reason, HA/DR were positioned as a "new mission" on the same level with other operations, including search and rescue, peace operations, arms control, civil military activity, sanctions, drug countermeasures, and the rescue

<sup>&</sup>lt;sup>13</sup> Coppola, Introduction to International Disaster Management, pp. 4-5.

<sup>&</sup>lt;sup>14</sup> US Department of the Army, Field Manual 100-5 (FM 100-5) Washington, DC, June 14, 1993.

of nationals.

# 2. The Disaster Relief Operations of the SDF from a "Strategic Culture" Perspective

In the context of the cautious and progressive debates surrounding HA/DR, what is the positioning of the disaster relief missions of the SDF? This section first addresses the organizational culture of the SDF and the strategic culture of Japan as they relate to disaster relief missions. The operations of the SDF in response to the Great East Japan Earthquake are then examined as a case example.

## (1) The "Strategic Culture" of Japan and the Disaster Relief Mission of the SDF

After the end of the Cold War, the military began to assume wider non-traditional missions, including PKO, anti-piracy activities, and non-proliferation of weapons of mass destruction. HA/DR were also included as new missions. Nevertheless, in Japan, which faces many natural disasters and where there is broad public support for the disaster relief missions of the SDF, disaster relief mission was not by any means recognized as a "new mission." This is supported by statistical data. In the 61-year period between FY1951 and FY2011, including periods when there was a National Police Reserve and the National Safety Force, the Ground Self-Defense Force (GSDF) was deployed to disasters on approximately 20,000 occasions and approximately 14 million personnel were dispatched.<sup>15</sup> The GSDF is the main arm of the SDF which is dispatched for domestic disasters. Its 157 bases and sub-bases located nationwide are always prepared for disaster deployments. Should an earthquake occur that is above 5-lower on the Japanese seismic scale-the benchmark for "major disaster," the GSDF will swiftly collect information using aircrafts and other means as well as "deploy independently" upon receiving information.<sup>16</sup> The SDF's initial response in disasters was reviewed based on the lessons learned from the 1995 Great Hanshin-

<sup>&</sup>lt;sup>15</sup> Yoichiro Izumi, "*Saigai haken to Rikujojieitai* (Disaster Relief Missions and the Ground Self-Defense Force)," *The Journal of Military History*, Vol. 48, Issue 1, pp. 136-139. According to this calculation, GSDF alone is deployed to approximately 330 disasters annually on average.

<sup>&</sup>lt;sup>16</sup> The Self-Defense Forces Act, Article 83, stipulates that disaster relief missions are carried out pursuant to requests from local public entities, among other stakeholders. However, paragraph 2 of the same article recognizes that the SDF may be deployed independently when "there is a natural disaster or other kinds of disasters, and based on the situation, it is deemed that there is a particularly urgent need for deployment and there is no time to wait for the request in the preceding paragraph."

Awaji Earthquake, and this was put into practice in the wake of the Great East Japan Earthquake.

The broad public support for the SDF's role in disaster relief missions may be confirmed from the public opinion survey on the Ministry of Defense and the SDF that has been conducted regularly by the Cabinet Office since 1972. According to the 2012 survey, the largest percentage of the respondents, 82.9%, supported the notion that "disaster relief mission (including disaster relief and emergency transport of patients during disasters)" was the purpose of the SDF's existence. This was approximately 4% higher than the percentage of respondents that answered "ensuring the nation's safety (prevent invasion of foreign countries)" (78.6%). Even in past public opinion surveys, the percentage of respondents who said they support disaster relief missions was around 8 to 9% higher than the percentage that said they support national defense missions.<sup>17</sup> Furthermore, disaster relief missions had nearly double the support of other missions, including "contribution to international peace cooperation operations" (48.8%) and "maintenance of order in the country" (47.9%).

The deployment of the SDF in response to the Great East Japan Earthquake has further heightened this positive evaluation of the SDF's role in disaster relief. An astounding 97.7% of the respondents in the 2012 survey said they "appreciate" the deployment of the SDF in response to disasters, while only 1.3% of the respondents said they "do not appreciate" such deployments.<sup>18</sup> In addition, 91.7% of the respondents said they have a positive impression of the SDF. This was the highest percentage ever recorded since the opinion survey has been conducted.

It is one of the features of Japan's "strategic culture" to position domestic disaster relief operations as a mission of the SDF. In domestic natural disasters, the fire department and the police are the main responders, while the SDF's operations are anticipated primarily for major disasters that exceed these disasters. The disaster relief missions of the SDF are based on rigid principles, which are in line with the aforementioned Oslo Guidelines—the concept that disaster relief by the military is a "last resort."<sup>19</sup> The SDF engage in disaster relief operations totally unarmed.

<sup>&</sup>lt;sup>17</sup> In past surveys, the difference was approximately 8% in 2000 and 9% in 1995.

<sup>&</sup>lt;sup>18</sup> "Highly appreciate" 79.8%, "Appreciate to a certain degree" 17.9%, "Do not appreciate very much" 1.3%, "Do not appreciate at all" 0%. Cabinet Secretariat Public Relations Office, "Public Opinion Survey on the Self-Defense Forces and Defense Issue," Public Opinion Survey Report (January 2012 survey).

<sup>&</sup>lt;sup>19</sup> For details, see footnote 11.

Furthermore, disaster relief missions are considered as assistance for local HA/DR operations. This basic policy holds true also when the SDF are deployed as members of the Japan Disaster Relief Team, in which the SDF do not provide assistance to civil authorities. In recent years, due to the risk of escalation into complex humanitarian emergencies (CHE) originating from ethnic and religious conflicts, there are known cases in which countries have dispatched armed units for international HA/DR operations.<sup>20</sup>

## (2) The Great East Japan Earthquake and the SDF: Deployment in Response to a Major Disaster

On March 11, 2011, an earthquake measuring a maximum 7 on the Japanese seismic scale struck off the coast of Sanriku. Subsequently, a major tsunami submerged approximately a 500km-wide area along the coastal areas of Iwate, Miyagi, and Fukushima Prefectures, leaving local government offices temporarily unable to function. In addition, radioactive material leaked from the Fukushima Daiichi Nuclear Power Station, making the Great East Japan Earthquake a complex disaster consisting of earthquake, tsunami, and nuclear accident. In the face of this unprecedented national crisis, the SDF deployed at most 107,000 personnel during a 174-day period from March 11 to August 31 (to December 26 for the nuclear disaster). The response effort became "the SDF's biggest operation" in history.

The following paragraphs examine the role of the military in disaster relief operations from three aspects: (1) relief operations immediately after a disaster; (2) coordination of operations based on local needs; and (3) transition to the recovery phase and the withdrawal of units.

First, relief operations immediately after a disaster. In the case of the Great East Japan Earthquake, the SDF mobilized units from all corners of the country and engaged in relief operations in the immediate aftermath of the disaster, even as the SDF's own bases suffered damages. Even as the GSDF's Tagajo Camp and the Air Self-Defense Force's (ASDF) Matsushima Air Base in Miyagi Prefecture, among other bases, were damaged by the disaster, on the day of the disaster, the SDF mobilized approximately 8,400 personnel. Three days later, the Joint Task

<sup>&</sup>lt;sup>20</sup> Examples of international emergency relief operations in which some of the participating units were reported to have been carrying weapons of self-defense include the 2004 tsunami off the Indian Ocean, the 2005 Hurricane Katrina in the U.S. and earthquake in Pakistan, and the 2010 earthquake in Haiti and flooding in Pakistan.

Force-Tohoku (JTF-TH) was established, with the Maritime Self-Defense Force's (MSDF) Yokosuka Regional District and ASDF's Commander in Chief of the Air Defense Command under the command of the GSDF's Headquarters of the Northeastern Army. Disaster relief was provided through joint operations.<sup>21</sup> By one week after the disaster, more than 100,000 personnel were mobilized. At most, approximately 107,000 personnel (including Ready Reserves and Reserves), approximately 540 aircrafts, and approximately 60 vessels were mobilized.<sup>22</sup> This significantly exceeds the 26,000 personnel who were deployed in the wake of the 1995 Great Hanshin-Awaji Earthquake. As a result of such large-scale efforts, between March 11 and August 31, the SDF saved 19,286 lives or approximately 70% of all lives saved. Furthermore, the SDF located 9,505 bodies — approximately 60% of all located bodies.<sup>23</sup> The SDF were instructed to "handle the bodies carefully out of consideration for the families" and respected the dead by reflecting Japanese views on life and death. These activities became one of the reasons why the SDF's operations were highly praised by the people.<sup>24</sup> From a mental health perspective, however, such operations "took a toll on the personnel." <sup>25</sup> To what extent the SDF will be tasked with such activities in future disaster relief missions is an issue open to review.

<sup>&</sup>lt;sup>21</sup> GSDF units included 5 divisions, 4 brigades, 3 engineer brigades, 1 artillery brigade, and 1 antiaircraft artillery brigade. At most, approximately 70,000 personnel were deployed. MSDF units included approximately 200 aircrafts, 50 vessels, and 14,000 personnel. ASDF units included approximately 240 aircrafts and 22,000 personnel.

<sup>&</sup>lt;sup>22</sup> For an overview of the operations, see also the following. Chapter 7 "Japan: Toward the Establishment of a Dynamic Defense Force," The National Institute for Defense Studies, ed., *East Asian Strategic Review 2012* (Tokyo: Japan Times, pp. 237-267); "Special Feature: Response to the Great East Japan Earthquake," *Defense of Japan 2011; "Higashinihondaishinsai jieitaitogoninmubutai genshiryokusaihabutai katsudohokoku* 2011.3.11-3.31 (Great East Japan Earthquake: SDF Joint Task Force, Nuclear Disaster Relief Unit Activities Report, March 11-31, 2011)," *Mamoru*, Special Issue, pp. 4-23.

<sup>&</sup>lt;sup>23</sup> Reconstruction Design Council in response to the Great East Japan Earthquake, "Towards Reconstruction: Hope beyond the Disaster," p. 56 (Source: Emergency Disaster Response Headquarters materials).

<sup>&</sup>lt;sup>24</sup> Lietenant General Eiji Kimizuka, Commanding General of the Joint Task Force-Tohoku,is said to have used this expression based on the following verbal instruction of (then) Minister of Defense Toshimi Kitazawa: "Do not think of the bodies as deceased. Until they are handed over to the families, please handle the bodies carefully as you would to save a living person." Eiji Kimizuka, *"Higashinihondaishinsai to jieitai* (The Great East Japan Earthquake and the Self-Defense Forces),"

*The Journal of Military History*, Vol. 48, Issue 1, p. 6. See also Akira Sudo, *Jieitai kyuenkatsudo nitshi: tohokuchihotaiheiyojishin no genbakara* (Journal of the SDF's Relief Operations: From the Site of the Tohoku Pacific Ocean Earthquake (Tokyo: Fusosha, 2011), p. 8. At the time of writing this book, the author was then the GSDF Northeastern Army Policy Advisor.

<sup>&</sup>lt;sup>25</sup> Eiji Kimizuka, "*Higashinihondaishinsai to jieitai* (The Great East Japan Earthquake and the Self-Defense Forces)," p. 9.

The second aspect is that the operations of the units have to be revised based on the local needs which change as time passes. While life-saving operations, notably, the search of missing people, were the focus of the SDF's operations initially after the disaster, by March 18, seven days after the disaster, emphasis shifted to life-saving support to those affected. The SDF was responsible for transportation, water supply, food supply, bathing services, medical care, and epidemic prevention, among its other tasks. Ultimately, this was done on an unprecedented scale—the SDF transported 13,906t of supplies, supplied 32,985t of water, provided 5,005,484 meals, and provided bathing services to 1,092,526 people. Later on, local needs changed as temporary housing units were constructed in the disaster area and people moved into the units. Accordingly, the activities of local private companies and local municipalities became the focus of operations.<sup>26</sup>

The third issue regards the transition to the recovery phase and the withdrawal of units. The broad range of life-saving support provided by the SDF to those affected fostered "stability on site" in the disaster area. However, it was demanded of the units to gradually withdraw from the affected areas, while continuing to offer stability on site.<sup>27</sup> The supports provided by the SDF, such as transportation and food services, were turned into businesses one by one. It is worth noting that while the SDF searched for private businesses to carry on their services and continued to provide stability on site, preparations were undertaken for the withdrawal of the units.

Coordination with local administrative departments is essential for maintaining life-saving support. Because the local governments of Miyagi, Fukushima, and Iwate Prefectures themselves were heavily damaged, the Joint Task Force expanded into a liaison and coordination role.<sup>28</sup> In Miyagi Prefecture, a regional liaison and coordination office was set up at the Headquarters of the Northeastern Army in Sendai, where JTF-THHQ was co-located, to oversee the entire operations. After

<sup>&</sup>lt;sup>26</sup> As worded by General Kimizuka, "First it is saving lives. Then begins life-saving support for those who survived. Debris must also be removed. In addition, we located, transported, and buried bodies and searched for missing people. Then, we were asked to create and level the land for the construction of temporary housing. After that, we managed water supply, food supply, and bathing services. The needs change constantly." Eiji Kimizuka, "*Higashinihondaishinsai to jieitai* (The Great East Japan Earthquake and the Self-Defense Forces)," p. 5.

<sup>&</sup>lt;sup>27</sup> Eiji Kimizuka, "*Higashinihondaishinsai to jieitai* (The Great East Japan Earthquake and the Self-Defense Forces)," pp. 4-9.

<sup>&</sup>lt;sup>28</sup> GSDF Headquarters of the Northeastern Army (Commander of JTF-TH), "*Higashinihondaishinsai taisho (gaikyou setsumei)* (Response to the Great East Japan Earthquake (Explanation of Overall Situation)," (July 4, 2011, material distributed at press conference at the Japan National Press Club).

March 17, the JTF Deputy Chief of Staff under the JTF-TH Commander was in charge of the liaison and coordination work, and liaison officers from each GSDF division and brigade were assigned to the office. These assigned units had the task of coordinating with the respective municipalities. In Fukushima Prefecture, the Fukushima Prefecture Liaison and Coordination Office (headed by the Chief of Staff of the 12th Brigade) assumed the liaison and coordination role, and from April 27, the JTF Deputy Chief of Staff served this role. In Iwate Prefecture, the Iwate Prefecture Liaison and Coordination Office (headed by the head of the 9th Division) assumed the liaison and coordination role.<sup>29</sup>

### (3) The Great East Japan Earthquake and the SDF: Response to the Accident at the Fukushima Daiichi Nuclear Power Station

Of the operations carried out by the SDF after the Great East Japan Earthquake, the response to the accident at the Fukushima Daiichi Nuclear Power Station was the most serious and unpredictable. This owed to the fact that the SDF could not sufficiently obtain the necessary information as the crisis continued to unfold, including the meltdown of the reactor core, the hydrogen explosion at the reactor building, and the leakage of radioactive material, all caused by the loss of power due to the earthquake and tsunami.<sup>30</sup> As of March 11, a nuclear emergency situation was declared, and an order was issued for the SDF to respond to the nuclear disaster.

The Central Nuclear Biological Chemical Weapon Defense Unit of the GSDF Central Readiness Force led the nuclear disaster relief mission, which consisted of approximately 500 personnel, including MSDF and ASDF personnel. The SDF's operations in response to the industrial hazard, including hazardous materials (HAZKAT), were wide-ranging, including monitoring of the nuclear reactor (e.g., temperature measurements, aerial photographs, radioactive material collection flights), cooling of spent fuel pool (e.g., water discharging activities), evacuation assistance, and transport of supplies and personnel. The video of water being discharged from a large transport helicopter (CH-47) sent out a message that all

<sup>&</sup>lt;sup>29</sup> Before the Joint Task Force was established, the Miyagi Prefecture Liaison and Coordination Office and the 6th Division Liaison and Coordination Office were in charge.

<sup>&</sup>lt;sup>30</sup> (Then) Chief Cabinet Secretary Yukio Edano said in an interview with the Independent Investigation Commission on the Fukushima Nuclear Accident, "If No.1 (Fukushima Daiichi) goes, then No. 2 (Fukushima Daini) would go. If No. 2 goes, then Tokai would go. It was a cycle of negative thoughts." The Independent Investigation Commission on the Fukushima Nuclear Accident, "Fukushima Investigation Report," (Discover21, 2012), p. 89.

possible means were being taken to cool the nuclear power station.<sup>31</sup> (Coordination between Japan and the U.S. for the response to the nuclear accident is examined in the following paragraph.)

#### 3. The Japan-U.S. Alliance over HA/DR

Due to the nature of the Great East Japan Earthquake—a complex emergency comprised of earthquake, tsunami, and nuclear accident, the Japan-U.S. partnership expanded to an unprecedented scale covering a range of areas from disaster relief to nuclear response. The HA/DR operations carried out by the U.S. forces is called Operation *Tomodachi*. At most, the U.S. forces mobilized approximately 16,000 personnel, approximately 15 vessels, and approximately 140 aircrafts. Two weeks after the disaster on March 24, the Joint Support Force (JSF) was established with Admiral Patrick M. Walsh, Commander of the U.S. Pacific Fleet, serving as Commander. Admiral Walsh and General Ryoichi Oriki, Chief of Staff, Joint Staff Office of the JSDF, were in daily contact by telephone, and a range of efforts were made to keep in close communication.

HA/DR operations by the U.S. forces became a symbol of the *kizuna* (bonds of friendship) that the bilateral alliance represented. As this paper has discussed, disaster response is in principle an operation led by civilian actors. Before the Great East Japan Earthquake, the Japan-U.S. alliance was hardly expected to fulfill a core role in disaster response. Indeed, following the Great Hanshin-Awaji Earthquake, recommendations were made regarding joint operations between Japan and the U.S., reflecting on the fact that the capacities of the U.S. forces were not amply harnessed in the response to the aforementioned earthquake. Nevertheless, many challenges stood in the way of operationalizing such recommendations.<sup>32</sup>

<sup>&</sup>lt;sup>31</sup> "The step taken by the SDF as a last effort in order to protect the people at the risk of their own lives was meaningful. In addition, this action sent out a decisive message to the U.S." Akihisa Nagashima, "*Genpatsu taisho: nichibei kyoryoku no butaiura* (Response to the Nuclear Accident: The Behind the Scenes of Japan-U.S. Cooperation)."

<sup>&</sup>lt;sup>32</sup> Robert D. Eldridge and Tomoaki Murakami, eds., "12.26 Indoyo tsunami kara ichinen: jindoshien oyobi daisaigainiokeru gunminkyoryoku no kaizen ni mukete (One Year After the 12.26 Indian Ocean Tsunami: For Improving Humanitarian Assistance and Military-Civilian Cooperation in Disaster Response)," (Osaka School of International Public Policy and Center for International Security Studies and Policy Symposium Report, 2005); Wallace C. Gregson, James North, and Robert D. Eldridge, "Responses to Humanitarian Assistance and Disaster Relief," *Securitarian*, No. 557-559 (April-June 2005); Robert D. Eldridge, "Time for a Japan-U.S. Mutual Assistance Treaty," *The Japan Times*, March 30, 2011.

Despite this, as a result of the unfolding of the Great East Japan Earthquake national crisis, the mutual trust between the Japanese SDF and the U.S. forces functioned as a strong *kizuna*. The two sides coordinated their "response to the nuclear accident by likening it to war, with the situation changing moment by moment. This was the first time that full scale bilateral cooperation was carried out from decision making to the implementation of response under the existing Japan-U.S. security arrangements."<sup>33</sup>

The military is in essence designed to respond to crises. In this sense, it is not coincidental that the Japan-U.S. alliance functioned to coordinate bilateral relations. Already in the 1997 Guidelines for Japan-U.S. Defense Cooperation, it was stated that "The two Governments will under normal circumstances establish a bilateral coordination mechanism involving relevant agencies." The establishment of a bilateral. coordination center was therefore in line with the procedures for response during contingencies. In the next section, for reasons of convenience, this paper outlines the bilateral coordination mechanism according to the state level and operational level.

#### (1) Policy Coordination at the State Level

The Great East Japan Earthquake was an unprecedented crisis, initially making it difficult to grasp the overall picture of the crisis.<sup>34</sup> Already as of the evening of March 11, the U.S. Embassy in Tokyo delivered a list of U.S. assistance containing approximately 20 items. The list is said to have included equipment for responding to the nuclear accident, including the unmanned aerial vehicle (UAV). However, between March 15 and 16, amid the ongoing hydrogen explosion at Fukushima Daiichi Nuclear Power Station, the two sides were unable to close the gap in their views. A decision-making mechanism had to therefore be explored, which would bring together the Prime Minister's Office and the White House.

Amid this sense of crisis, the U.S. deployed not only personnel from the U.S. Embassy in Tokyo and members of the U.S. forces in Japan, but also headquarter staff from the Pacific Command (PACOM) in Hawaii and members of the Chemical Biological Incident Response Force (CBIRF) of the U.S. Marines. In the nuclear

<sup>&</sup>lt;sup>33</sup> Akihisa Nagashima, "*Genpatsu taisho: nichibei kyoryoku no butaiura* (Response to the Nuclear Accident: The Behind the Scenes of Japan-U.S. Cooperation)," *VOICE*, July 2011.

<sup>&</sup>lt;sup>34</sup> Andrew Feickert and Emma Chanlett-Avery, "Japan 2011 Earthquake: U.S. Department of Defense (DOD) Response," *CRS Report for Congress*, R41690 (June 2, 2011), <a href="http://www.fas.org/sgp/crs/row/R41690.pdf">http://www.fas.org/sgp/crs/row/R41690.pdf</a>.

area, as many as 160 support staff, including members of the Nuclear Regulatory Commission (NRC) and the Department of Energy, were sent to the U.S. Embassy in Tokyo.<sup>35</sup>

At the National Security Council (NSC) in Washington, there were concerns about the response to the nuclear accident at Fukushima Daiichi Nuclear Power Station. According to Jeffrey A. Bader<sup>36</sup>, then senior director for East Asian Affairs at NSC, the largest ever interagency coordination team was established to examine a variety of factors, including the operation of international flights, food supply, safety of the ocean, safety of fish species, and radioactive contamination in the Pacific Ocean. A decision was then made to set a 50-mile radius voluntary evacuation zone. Dr. John Holdren from NSC considered the "worse case" scenario in cooperation with the Lawrence Livermore National Laboratory. It was concluded that assuming there is a meltdown at more than one reactor and there is radiation leakage from the spentfuel pools of two reactors, radiation levels exceeding the U.S. Government standard will not reach a 75- to 100-mile radius of Tokyo. In the end, NSC's conclusion was in line with the view of the Japanese Government.

A Japan-U.S. coordination meeting was formally launched ten days after the disaster on March 22 to conduct overall coordination between the two countries, including the response to the nuclear accident. It met on approximately 40 occasions nearly every day until mid-April.<sup>37</sup> At the meeting, working teams were established on: (1) radiation screening; (2) processing of nuclear fuel rods; (3) nuclear reactor; and (4) medical and life-saving support. Information was shared on the situation of the nuclear reactors, among other matters, and exchanges of views took place on coordination of assistance and measures for the stabilization of the nuclear reactors and spent-fuel pools. The U.S. called this coordination mechanism the "Hosono Process," taking the name of then Special Advisor to the Prime Minister Goshi Hosono. It was a high level meeting participated also by U.S. Pacific Fleet

<sup>&</sup>lt;sup>35</sup> The Independent Investigation Commission on the Fukushima Nuclear Accident, "Fukushima Investigation Report," pp. 363-364.

<sup>&</sup>lt;sup>36</sup> Jeffrey A. Bader, "Inside the White House During Fukushima: Managing Multiple Crises," *Foreign Affairs*, March 8, 2012.

<sup>&</sup>lt;sup>37</sup> The Independent Investigation Commission on the Fukushima Nuclear Accident, "Fukushima Investigation Report," p. 364.

Commander David Walsh and NRC Chairman Gregory B. Jaczko.<sup>38</sup>

#### (2) Coordination at the Operation Level

As was noted already, bilateral coordination centers at the military level were swiftly set up in Ichigaya (Ministry of Defense), Yokota (U.S. Forces Japan), and Sendai (Joint Task Force-TH). The setup proceeded more smoothly than the policy coordination at the state level. In order to coordinate the SDF and U.S. forces, approximately 80 personnel from the Ministry of Defense's internal bureaus and staff offices were assigned to the three locations, and mutual coordination was conducted through means such as video conferencing that linked the U.S. Embassy in Tokyo.<sup>39</sup> The PACOM Commander was in contact with his SDF counterpart, the Chief of Staff, who conducted overall coordination. The Yokota Air Base of the U.S. forces in Japan became the center of the "hub-and-spoke" for the transport of relief supplies. Furthermore, the coordination center set up at the Sendai Garrison of the GSDF Headquarters of the Northeastern Army (U.S. name: Camp Sendai) coordinated relief operations at the frontline.<sup>40</sup> Initially, around 20 personnel from Japan and the U.S., respectively, participated, and were later joined by members of the Ministry of Land, Infrastructure, Transport and Tourism, prefectural offices, airport offices, and private contractors in charge of airport civil engineering, among other stakeholders.

The bilateral coordination centers, established for the first time as a vehicle to respond to the disaster, faced many challenges. As pointed out in the Ministry of Defense's "Lessons on the Response to the Great East Japan Earthquake (Interim Report)" released in August 2011, the challenges included: (1) insufficient arrangements for the initial necessary coordination; (2) obscure definition of the

<sup>&</sup>lt;sup>38</sup> The Independent Investigation Commission on the Fukushima Nuclear Accident, *Fukushima Investigation Report*, Chapter 12, "Japan-U.S. Relations Regarding Response to Nuclear Accident," p. 370. According to Nagashima who participated in the meeting, "From the Japanese side, the participants included Advisor Hosono as the head, relevant government officials, members of the SDF Joint Staff, and senior members of the Tokyo Electric Power Company. From the U.S. side, the participants included minister of the U.S. Embassy in Japan, members of the U.S. forces in Japan and NRC, and senior officials from the Department of Energy." Akihisa Nagashima, "*Genpatsu taisho: nichibei kyoryoku no butaiura* (Response to the Nuclear Accident: The Behind the Scenes of Japan U.S. Cooperation)."

<sup>&</sup>lt;sup>39</sup> According to the report of the Independent Investigation Commission on the Fukushima Nuclear Accident, "From the Japanese side, staff from the Ministry of Defense's bureaus and Joint Staff attended (abridged), as well as staff from the (Ministry of Foreign Affair's) Japan-U.S. Security Treaty Division and the First North America Division." "Fukushima Investigation Report," pp. 364-365.

<sup>&</sup>lt;sup>40</sup> At the bilateral coordination center, Colonel Jiro Hiroe of the GSDF and Colonel Greg Timberlake of the Marine Corps conducted the coordination.

center's role; and (3) unclear U.S. contact point at the Ministry of Defense. At the Japan-U.S. summit meeting in May 2012, the leaders of both countries agreed to smoothen bilateral coordination while bearing in mind the outcomes of Operation *Tomodachi*. These efforts are expected to play a role in the Japan-U.S. "dynamic defense cooperation."

Remarks made by Colonel Craig Kozeniesky of the U.S. Marine Corps, "This is not America. Let's do it the Japanese way,"<sup>41</sup> convey the atmosphere at the time of the disaster. In overseas operations, deep understanding of the local culture, history, and religion may determine the success or failure of the operations. In this sense, the approach taken by the U.S. forces in Japan, which has had daily exchanges with Japan for many years, was a vital element in the implementation of Operation *Tomodachi*.

## (3) Operation *Tomodachi* by the U.S. Forces and its Implications for Japan-U.S. Partnership

The U.S. forces distributed in-kind assistance, totaling approximately 280 tons of food, approximately 7.7 million liters of water, and approximately 45,000 liters of fuel. It also transported approximately 3,100 tons of cargo. In terms of the flow of operations of the U.S. forces, the activities may be classified into the following three phases. The first phase was emergency assistance, in which focus was given to the search and rescue and the transportation of supplies, including water and food. The second phase was relief, in which the emphasis was placed on relief operations and life-saving support. The third and last phase was restoration. In this phase, the U.S. forces focused on restoring infrastructure to pre-earthquake levels. In the first phase of emergency assistance, the U.S. forces were able to act quickly to offer large-scale assistance in part due to the planned use of the carrier strike group (CSG) during the U.S.-Republic of Korea joint military drills, including the aircraft carrier USS Ronald Reagan. By two days after the disaster, the Ronald Reagan CSG arrived off the coast of Sendai. Along with the helicopters and P-3C patrol aircrafts on board, among other aircrafts, the U.S. forces supported the search and rescue of the missing people.<sup>42</sup> Furthermore, the U.S. forces participated in joint searches along the coastal

<sup>&</sup>lt;sup>41</sup> *"Tomodachi sakusen Kozeniesky taisa 'koko wa nihonryu de yaru' to shirei* (Operation *Tomodachi* Colonel Kozeniesky orders 'Let's do it the Japanese way')," *SAPIO*, August 17 and 24, 2011 issue.

<sup>&</sup>lt;sup>42</sup> Noboru Yamaguchi, "*Higashinihondaishinsaigo no nichibeidoumei* (The Japan-U.S. Alliance After the Great East Japan Earthquake)," *Kokusai Mondai* (International Affairs), No. 608 (January and February 2012), pp. 9-18.

areas with the SDF, the Japan Coast Guard, police, and fire departments. In the second phase of relief, it is well known that the U.S. forces transported supplies and personnel on a large scale basis. This includes the transport of relief supplies and GSDF units by the amphibious assault ship USS Essex and other means. Lastly, the symbolic operation of the third phase of restoration was the recovery of the functions of the Sendai Airport, which was serving as the center of transport. While the Sendai Airport became unusable due to the earthquake and tsunami, thanks to the restoration work of approximately 300 U.S. marines and military personnel, among others, the 1,500 m runway was able to be restored five days after the disaster, and the transport of relief supplies was made possible on March 19.

#### Conclusion

It is not easy to objectively assess the role of the military in disaster relief operations. As former Prime Minister Shigeru Yoshida once said in his address at a graduation ceremony of the National Defense Academy of Japan, "the people will appreciate and praise the SDF only when our nation is facing crisis and confusion, when we are attacked by foreign forces, or when necessity arises for you to embark on disaster relief missions."<sup>43</sup> The military, despite positioned as a "last resort" for the provision of HA/DR, is at times conducting operations on the frontlines. While these are not welcome situations, if there are lives which can be saved by making use of the capabilities of the military, then surely the utilization of these capabilities is in line with the spirit of humanitarian assistance.

While bearing in mind the dilemmas of the humanitarian assistance operations of the military, this paper makes the following three conclusions.

First, while HA/DR operations are considered "non-traditional missions" of the military, disaster relief operations conducted in Japan had always been deemed standard activities of the SDF. SDF has a long history of carrying out disaster relief missions based upon three principles—contribution to common good, urgency, no comparable civilian alternatives—which fostered its "organizational culture" of serving the local residents. Furthermore, the SDF's disaster relief operations have earned the solid support of the Japanese people and shaped a Japanese way of "strategic culture." By combining these two cultures—the organizational

<sup>&</sup>lt;sup>43</sup> Former Prime Minister Shigeru Yoshida, Address at the Graduation Ceremony of the National Defense Academy of Japan, March 26, 1957.

and strategic cultures—Japan is able to avoid the risk of the politicization and militarization of HA/DR. This has been proven through the operations of the SDF in response to the Great East Japan Earthquake.

Secondly, dynamic cooperation between Japan and the U.S. in the area of HA/DR is expected to contribute to "public goods" in an uncertain Asia-Pacific region. In response to the national crisis of the Great East Japan Earthquake, Japan mobilized more than 100,000 personnel and conducted integrated operations for the first time in disaster relief operations. The U.S. also demonstrated the *kizuna* of the Japan-U.S. alliance to Japan through its response to the disaster and nuclear power station accident under Operation *Tomodachi*. Bilateral cooperation in HA/DR ultimately demonstrated the profile and capabilities of the Japan-U.S. alliance. The two countries will likely continue to build upon these initiatives aimed at "dynamic defense cooperation."

Thirdly, the SDF has the potential to function as Japanese style "soft power." As the operations after the tsunami off the coast of the Indian Ocean in December 2004 demonstrated, it is still common in this region for the military to be in charge of disaster relief operations. The reason being that, in the Asia-Pacific region<sup>44</sup>, infrastructure development and the government's response capability are at times insufficient. In the cases of the tsunami in the Indian Ocean (2004) and the earthquake in Pakistan (2005), the reason was that there was considerable reliance on the capacities and assets of foreign militaries. The responses to crises of this nature are concerns shared by all countries in the region, and potentially may serve as an opportunity for regional cooperation.

For example, the ARF Disaster Relief Exercise (ARF-DiREx), a multilateral disaster relief exercise carried out by the ASEAN Regional Forum (ARF), may serve as a good opportunity to build up capacities in such areas as search and rescue training, medical care, construction and restoration work, and training for the transportation of disaster victims. Japanese capacity-building assistance incorporates the concept of achieving mid- to long-term development in tandem with increasing national resilience and restoration ability. Japan co-hosted ARF-DiREx 2011 with the Government of Indonesia in March 2011. The drill assumed that a major earthquake

<sup>&</sup>lt;sup>44</sup> For more information on the issues of Japanese soft power, see Tomonori Yoshizaki, "The Role of the Military in Peace-Building: A Japanese Perspective," The National Institute for Defense Studies, ed., *The Role of the Military in Peacebuilding A New Approach to Conflict Resolution in the Twenty-first Century*, (November 2009), pp. 97-121.

and tsunami occurred off the coast of Manado in Indonesia. Approximately 300 members of the SDF as well as members of the Ministry of Foreign Affairs of Japan, the Japan International Cooperation Agency (JICA), and other entities were expected to participate. Due to the Great East Japan Earthquake which occurred immediately prior to the drill, however, the MSDF's large-scale transport vessel Osumi and landing craft air cushions (LCAC) and the ASDF's transport aircrafts, among other equipment, quickly returned to Japan for the disaster response.

In the Asia-Pacific region, where there is little tradition of multilateral security cooperation, "institutionalization" in which HA/DR serve as catalyzers may be effective. The ARF's practical drills, for example, are in line with *The Asia-Pacific Guidelines for the Use of Foreign Military Assets in National Disaster Response Operations* promoted by ASEAN.<sup>45</sup> These guidelines continue to be reviewed by the Asia-Pacific Conference for Military Assistance to Disaster Relief Operations (APEC MADRO) and are supported by UNOCHA.<sup>46</sup> While such attempts at institutionalization do not yield tangible effects overnight, it may serve as a base framework for pursuing common responses in the disaster-prone Asia-Pacific region.

Disaster relief missions and international emergency relief activities, both of which harness the traits of the SDF, have the potential to strengthen the *kizuna* between Japan and the U.S. through HA/DR operations as well as to promote Asia-Pacific regional cooperation. Further still, based on the considerable support in Japan for the efforts of the SDF, the outlook seems promising for the potential of Japanese "soft power."

<sup>&</sup>lt;sup>45</sup> Standard operating procedures based on the Guidelines include Standard Operating Procedure for Regional Standby Arrangements And Coordination of Joint Disaster Relief and Emergency Response Operations (SASOP), <a href="http://www.aseansec.org/publications/SASOP.pdf">http://www.aseansec.org/publications/SASOP.pdf</a>>.

<sup>&</sup>lt;sup>46</sup> <http://ochaonline.un.org/roap/APCMADRO/tabid/7303/language/en-US/Default.aspx>.