

# Japan 2011 Earthquake: U.S. Department of Defense (DOD) Response

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# Overview

With almost 40,000 U.S. troops stationed in Japan, the March 11, 2011, earthquake and tsunami is unique in that U.S. forces and associated resources were located in close proximity to deal with the crisis. All services—Army, Navy, Marine Corps, and Air Force—are present in Japan in various capacities. In addition, U.S. forces train regularly with their Japanese Self Defense Force (SDF) counterparts, including many humanitarian assistance and disaster relief exercises.

With 100,000 SDF troops called up to respond to the disaster, U.S. forces were able to coordinate their efforts almost immediately to provide support for the Japanese responders. Within five days of the earthquake, the SDF had deployed 76,000 personnel (45,000 ground, 31,000 air and maritime); 194 rotary aircrafts and 322 fixed-wings; and 58 ships. As of March 16, the SDF had rescued 19,300 people, in addition to supporting activities at the troubled nuclear reactors.<sup>1</sup>

#### **Operational Update**<sup>2</sup>

DOD officials report that as of the morning of March 17, 14 U.S. naval ships and their aircraft and 17,000 sailors and Marines are now involved in humanitarian assistance and disaster relief efforts in and around Japan. These efforts have included 132 helicopter sorties and 641 fixed-wing sorties moving both people and supplies, assisting in search and rescue efforts, and delivering 129,000 gallons of water and 4,200 pounds of food. These totals are increasing by the hour, although some helicopter activities have been limited by poor weather and visibility. All search and rescue assets from Okinawa, the southernmost part of Japan, have been moved to Yokota Air base outside of Tokyo to be deployed to the north. Further details are in the sections on each branch's operations below.

#### DOD Funding<sup>3</sup>

On March 12, Secretary of Defense Gates authorized U.S. Pacific Command (USPACOM) to continue disaster relief operations and approved \$35 million in Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) funding for these purposes. As the scope and duration of DOD's support becomes better defined, it is possible that additional funding will be required.

## Status of DOD Facilities and Personnel

Initial DOD efforts after the earthquake were focused on what can be described as "force protection," such as relocating naval vessels and aircraft so that potential damage from the impending tsunami would be mitigated, as well as protecting and accounting for U.S. military personnel, 43,000 dependents, and 5,000 DOD civilian employees stationed in Japan. These force

<sup>&</sup>lt;sup>1</sup> Japanese Ministry of Defense, http://www.mod.go.jp/j/press/news/2011/03/16d.html

<sup>&</sup>lt;sup>2</sup> Cheryl Pellerin, "Ships, Aircraft Support Japan Relief Effort," American Forces Press Service, March 16, 2011.

<sup>&</sup>lt;sup>3</sup> Operational Update provide to CRS by the Office of Secretary of Defense Office for Legislative Affairs, March 16, 2011.

protection efforts appear to have been successful, as there were no reported DOD-related fatalities and no reports of major damage to DOD facilities or equipment.<sup>4</sup>

#### Voluntary Departure of DOD Dependents<sup>5</sup>

After the State Department authorized voluntary departure for family members and dependents of U.S. government personnel who wish to leave northeast Japan on March 17, DOD stated that it would implement the State Department's plan for eligible DOD dependents. It was reported that Navy bases in the Tokyo area will begin voluntary evacuations for family members as early as the evening of March 17. The Navy reportedly has the capability to evacuate up to 10,000 people per day.

# **Operation Tomodachi<sup>6</sup>**

DOD's relief effort has been designated "Operation Tomodachi"—Japanese for "friend"—and consists at this point primarily of search-and-rescue missions and the delivery of humanitarian aid. U.S. airlift capability is particularly valuable in reaching survivors in the devastated areas. The U.S. airbase Misawa, located in Aomori prefecture in northeastern Japan, was shaken violently by the earthquake but escaped with only minor damage. The facility is being used as a forward operating base for both U.S. and SDF forces. In addition, the government of Japan granted permission for U.S. forces to use Yamagata airport, the first time such an allowance has been approved. SDF troops are also using the facility.<sup>7</sup>

#### **Response to Damaged Nuclear Reactors**

It is not yet clear to what extent DOD will be involved in responding to the problems at the affected nuclear reactor. On a force protection level, U.S. forces both ashore in Japan as well as at sea and in the air are well-equipped to monitor radiation levels as well as to decontaminate personnel and equipment that might become contaminated by radiological materials. On March 15, sensitive instrumentation on the USS *George Washington* in Yokosuka detected low levels of radioactivity from the Fukushima plant.

As the crisis surrounding the stricken reactors at the Fukushima Dai-ichi facility intensified, it appeared that the United States was stepping up efforts to assist the government of Japan (GoJ). On March 16, news outlets reported that the Global Hawk drone would fly over the reactor site in order to collect data and imagery for the GoJ.<sup>8</sup> On March 17, the U.S. Navy Seventh Fleet reported that five high-pressure water pumps from Sasebo and 100 Nuclear, Biological, Chemical

<sup>&</sup>lt;sup>4</sup> Cheryl Pellerin, "Military Gears Up to Help Japan," American Forces Press Service, March 11, 2001.

<sup>&</sup>lt;sup>5</sup> Operational Update provide to CRS by the Office of Secretary of Defense Office for Legislative Affairs, March 17, 2011 and Erik Slavin, "Navy to Begin Voluntray Evacuation of Families in Japan," *Stripes.com*, March 17, 2011.

<sup>&</sup>lt;sup>6</sup> Information in this section is taken from Fred W. Baker III, "U.S. Forces Provide Relief Aid to Japan," *American Forces Press Service*, March 13, 2011; Chris Carroll et al, "Relief Efforts Limited Days After the Earthquake," *American Forces Press Service*, March 13, 2011; and Phil Stewart, "More U.S. Ships Head to Japan, Radiation Risk Eyed," *Reuters.com*, March 14, 2011.

<sup>&</sup>lt;sup>7</sup> "Japan, U.S. Engage in Record-scale Cooperation for Quake Relief," *Sankei News*. March 17, 2011.

<sup>&</sup>lt;sup>8</sup> "Northrop Drone Set to Overfly Japan Reactor, Seek Data on Damage," *Bloomberg News*. March 16, 2011.

(NBC) suits and masks were delivered to the government of Japan to be employed at the troubled Fukushima plant. The Naval Disometer Center is sending 2,000 personal disometers (devices to monitor radiation exposure on individuals) to Japan. The U.S. military also contributed two fire trucks to Japanese authorities for use at the site.

# Naval Activities9

The USS *Ronald Reagan* Carrier Strike Group, which includes the cruiser USS *Chancellorsville*, the destroyer USS *Preble*, and the combat support ship USS *Bridge*, was diverted from military exercises around Korea and is now conducting operations off the coast of east Honshu. The USS *Ronald Reagan*, with its 3,200 sailors and 2,480 aviators and air wing personnel and 85 aircraft, in addition to conducting flight operations, is expected to serve as a refueling platform for helicopters from the Japanese SDF, Japanese Coast Guard, and civilian authorities involved in rescue and recovery efforts. Seventeen members of the *Reagan's* crew were exposed to low-level radiation and were successfully decontaminated.<sup>10</sup>

Guided missile destroyers USS *Fitzgerald*, USS *John S. McCain*, USS *McCampbell*, and the USS *Curtis Wilbur* are also operating in close proximity to the USS *Ronald Reagan* Group, and the destroyer USS *Mustin* is at sea south of the disaster site. As of March 16, the group has already flown scores of sorties to deliver around 40 tons of humanitarian supplies to the affected areas.

The USS *Tortuga*, an amphibious dock landing ship that had been docked at the U.S. naval base in Sasebo, picked up over 90 SDF vehicles and nearly 300 SDF forces from Hokkaido, Japan's northernmost island, and delivered them to northern Honshu. The Tortuga also transported 5,000 bottles of water and 5,000 Meals Ready to Eat (MREs).

The USS *Essex*, an amphibious assault ship with the 31<sup>st</sup> Marine Expeditionary Unit aboard, and the USS *Harpers Ferry* and USS *Germantown* amphibious dock landing ships have arrived in the Sea of Japan and will conduct operations from Japan's west coast due to concerns about radiation levels closer to the Fukushima reactor site on the east coast. This position will allow access to undamaged roads to deliver relief supplies. One primary mission will be the re-opening of the severely damaged Sendai airport in order for it to serve as an operating base for disaster response in the surrounding area.

The USS *Blue Ridge*, the Seventh Fleet's command ship, arrived in the Okinawa vicinity and loaded personnel and additional supplies. It is expected in the disaster region within the next day.

#### **Marine Corps Ground Activities**

The III Marine Expeditionary Force is opening a command element and two forward refueling points at the Yamagata airport, located about 35 miles from Sendai.

Two U.S. Marine Corp Humanitarian Assistance Support (HAS) teams from the III Marine Expeditionary Force have arrived in the affected area, with two more HAS teams expected in the

<sup>&</sup>lt;sup>9</sup> Information reported on U.S. Navy Seventh Fleet Facebook page, March 16-17, 2011.

<sup>&</sup>lt;sup>10</sup> Cheryl Pellerin, "Ships, Aircraft Support Japan Relief Effort," American Forces Press Service, March 16, 2011.

region in the coming days. Landing in a heavily damaged Air SDF airfield, the Marines worked with ASDF personnel to unload relief supplies headed for a survivors' refuge center near Kesennuma, a coastal city north of Sendai particularly hard hit by the tsunami. The HAS teams will deliver water and other supplies, survey damaged infrastructure in need of repair, and monitor the spread of potential disease among the displaced population.

## Air Activities<sup>11</sup>

In the early hours immediately following the earthquake, Yokota Air Base was used to recover airline traffic and as an alternate airfield for planes that could not land at Tokyo's Narita Airport. Initial air operations from Naval Air Facility Atsugi and the USS *Ronald Reagan* were focused on identifying survivors in need of assistance as well as delivering water, blankets, and food. Additional helicopters conducted surveys of the at-sea debris fields, looking for survivors, and also conducted search and rescue missions along the coastline. Two U.S. Navy P-3 Orion aircraft also participated in survey operations.

U.S. Air Force and Marine helicopters and transport aircraft have been moved from Okinawa to U.S. military bases on Honshu to assist with operations. In addition, Carrier Airwing Five began relocating scores of tactical fixed-wing aircraft from Atsugi to Okinawa and Guam to provide for incoming aircraft to be used in relief operations. Delivery of generators and helicopters to Misawa is ongoing.

An RQ-4 Global Hawk, an unmanned, long-endurance aircraft that performs surveys of large geographic areas, was deployed from Anderson Air Force Base in Guam to assist with disaster relief. Using radar and optical surveillance, the aircraft will be able to assess damage to infrastructure throughout the affected area.<sup>12</sup>

## Ground Activities<sup>13</sup>

The U.S. Army in Japan reportedly provided a 10-person team of translators, communications experts, and combat medics upon request of the Japanese Self-Defense Forces to help with disaster assessment efforts in the Sendai area. It was also reported that throughout Japan, similar efforts were undertaken at the request of local Japanese authorities by DOD personnel to aid and assist Japanese communities affected by the earthquake and tsunami. In addition, the U.S. Army Corps of Engineers Japan District provided an administrative system to help the U.S. Army Japan disaster assessment team with debris-removal efforts, and the Corps is also working on a plan to clear debris from airfields that are critical to logistic and humanitarian efforts.<sup>14</sup>

<sup>&</sup>lt;sup>11</sup> Information in this section is taken from Fred W. Baker III, "U.S. Forces Provide Relief Aid to Japan," *American Forces Press Service*, March 13, 2011; Chris Carroll et al, "Relief Efforts Limited Days After the Earthquake," *American Forces Press Service*, March 13, 2011; and Phil Stewart, "More U.S. Ships Head to Japan, Radiation Risk Eyed," *Reuters.com*, March 14, 2011.

<sup>&</sup>lt;sup>12</sup> "Air Force Officials Use Global Hawk to Support Japan Relief Efforts," Air Force News Today. March 16, 2011.

<sup>&</sup>lt;sup>13</sup> Chris Carroll et al, "Relief Efforts Limited Days After the Earthquake," *American Forces Press Service*, March 13, 2011 and Devon James, "Misawa Sailors Assist Clean Up at Local Fishing Port," United States Pacific Command, March 14, 2011.

<sup>&</sup>lt;sup>14</sup> Cheryl Pellerin, "Ships, Aircraft Support Japan Relief Effort," American Forces Press Service, March 16, 2011.

# Background: U.S. Military Presence in Japan<sup>15</sup>

Current U.S. military presence in Japan consists of approximately 38,000 military personnel, 43,000 dependents, 5,000 DOD civilian employees, and 25,000 Japanese workers. U.S. forces are stationed in Japan pursuant to the U.S.-Japan Treaty of Mutual Cooperation and Security of 1960.

U.S. military strength in Japan is about 38,000 ashore and 11,000 afloat, and U.S. forces are dispersed among 85 facilities located on Honshu, Kyushu, and Okinawa.<sup>16</sup> Total acreage of U.S. bases is approximately 77,000 acres. United States Forces Japan (USFJ) bases and facilities range in size from a several-thousand-acre training area to a single antenna site.

On mainland Japan, there are seven different bases/posts: Yokota and Misawa, representing the Air Force; Camp Zama, representing the Army; Iwakuni; the Marine Corps; and Yokosuka, Atsugi, and Sasebo, the Navy.

<sup>&</sup>lt;sup>15</sup> Information in this section is taken directly from the U.S. Forces Japan website, http://www.usfj.mil/, accessed on March 16, 2011.

<sup>&</sup>lt;sup>16</sup> See **Figure 1**.



Figure 1. U.S. Bases in Japan

Source: Adapted by CRS. (6/1/06)

# U.S. Army, Japan (USARJ)<sup>17</sup>

U.S. Army, Japan (USARJ) consists of about 2,000 soldiers and is charged, during peacetime, with operating port facilities and a series of logistics installations throughout Honshu and Okinawa. USARJ participates actively with the Japan Ground Self Defense Force in bilateral training exercises and the development of bilateral plans. It commands and supports U.S. Army assigned units, attached units, and augmentation forces and employs these forces in support of the Commander. USARJ maintains defense facilities, war reserves, and operational project stocks. USARJ/9<sup>th</sup> Theater Support Command (TSC) is headquartered at Camp Zama.

#### **U.S. Marine Corps**

The III Marine Expeditionary Force (MEF), which is under the operational command of Marine Forces Pacific, consists of approximately 16,000 Marines, who are garrisoned primarily on Okinawa and southern Honshu. III MEF is headquartered at Camp Courtney, Okinawa.

#### U.S. Marine Corps Bases, Japan<sup>18</sup>

U.S. Marine Corps Bases, Japan, consists of approximately 9,000 military and civilian personnel and includes two air stations and nine camps/housing areas throughout Okinawa and mainland Japan. Its primary mission is to provide installation support and services, including force protection and quality of life, to forward-deployed Marine and Naval forces, other service members, civilians, retirees, family members, and others associated with U.S. Marine Corps Bases, Japan. HQs, U.S. Marine Corps Bases, Japan, is located at Camp Foster, Okinawa.

#### U.S. Navy<sup>19</sup>

Commander, Naval Forces, Japan, consisting of about 6,000 personnel, is responsible for maintaining and operating the port facilities and providing base and logistic support for those surface, subsurface, aviation, and amphibious elements of the U.S. Seventh Fleet that operate from Japan as part of the Forward Deployed Naval Forces (FDNF). U.S. Commander Navy Forces, Japan, participates with the Japan Maritime Self Defense Force in exercises and planning. CNFJ is headquartered at Yokosuka.

#### **U.S. Seventh Fleet**

U.S. Seventh Fleet, which is under the operation control of Commander, Pacific Fleet, has about 13,000 sailors, 18 ships, and 100 airplanes operating from Japan as part of the Forward Deployed Naval Forces.

<sup>&</sup>lt;sup>17</sup> Information in this section is taken directly from the U.S. Forces Japan website, http://www.usfj.mil/, accessed on March 16, 2011.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

# U.S. Air Force Japan (USAFJ)<sup>20</sup>

The U.S. Air Forces, Japan/Fifth Air Force mission is to maintain the deterrent force posture of the United States and to conduct offensive and defensive air operations, should deterrence fail. Supporting that mission are approximately 13,000 military and civilian personnel located at units throughout Japan. In addition to the tactical air roles, USAFJ provides theater airlift and operational support with cargo airlift. USAFJ participates with the Japan Air Self Defense Force in bilateral training exercises and the development of bilateral plans. Fifth Air Force is headquartered at Yokota Air Base and is commanded by Commander, U.S. Forces Japan in a dual-hatted capacity.

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<sup>&</sup>lt;sup>20</sup> Ibid.