Section 2. Effective Responses to New Threats and Diverse Contingencies

The primary role of the National Defense Program Guidelines is to provide an effective defense response to new threats and diverse contingencies.

This section explains the role of the SDF in response to new threats and diverse contingencies under the joint operations posture as well as efforts which the Ministry of Defense and the SDF have made. (See Part II, Chapter 2, Section 2)

1. Response to Ballistic Missile Attacks

While various efforts have been made by the international community for the non-proliferation of ballistic missiles and weapons of mass destruction, proliferation still continues.

Among the countries surrounding Japan, Russia and China have deployed quite a few ballistic missiles. In 2006, North Korea launched seven ballistic missiles, and in April 2009, announced plans for a test launch of a "communications satellite," which was then launched on April 5, 2009. These events serve to reconfirm that the threat from ballistic missiles is a reality. (See Part I, Chapter 2, Section 2) (See Reference 1-2)



Combat Information Center (CIC) of the Aegis destroyer *Chokai* in an SM-3 flight test

Against this background, Japan began developing a ballistic missile defense (BMD) system in FY 2004 in order to improve readiness in response to ballistic missile attacks. Necessary amendments were subsequently made to the SDF Law in 2005. In the same year, the Security Council and Cabinet decided to begin Japan-U.S. joint development of advanced BMD interceptor missiles.

Following the *Kongo* Aegis Destroyer's²³ successful flight test of a Standard Missile-3 (SM-3) in 2007, the *Chokai* Aegis Destroyer conducted a flight test of a SM-3 in the sea off Hawaii's Kauai Island in November 2008. The test proved that the Aegis BMD system on the *Chokai* functioned properly, although the SM-3 failed to intercept a simulated ballistic missile target due to a malfunctioning of the warhead.

In September 2008, the Japanese ASDF successfully shot down a simulated ballistic missile target using Patriot Advanced Capability-3 (PAC-3)²⁴ interceptors at White Sands Missile Range New Mexico, U.S.

In addition to the assignment of ballistic missile capability to the two Aegis vessels, the success in the flight test of the Patriot PAC-3 shows that Japan is steadily building up its own multi-tier defense system against ballistic missile attacks. (See Fig. III-1-2-1)

1. Japan's Ballistic Missile Defense

(1) General Situation of BMD System Development

a. Basic Concept

The BMD system has been developed by Japan and serves to improve the capability of the Aegis destroyers and Patriot systems currently maintained by the SDF. Furthermore, with JADGE (Japan Aerospace Defense Ground Environment), the basic concept is efficient execution of a multi-tier defense system with upper tier interception by Aegis destroyers in coordination with lower-tier interception by Patriot PAC-3. (See Reference 28-29)

b. Configuration of the BMD System

Japan's BMD system consists of Aegis destroyers to intercept ballistic missiles at the mid-course phase, Patriot PAC-3 to intercept ballistic missiles at the terminal phase, the sensor systems to detect and track ballistic missiles, and the command, control, battle management and communications systems to systematically counter ballistic missiles by effectively coordinating the weapons systems and the sensor systems. (See Fig. III-1-2-2)

c. Policy for Introducing the BMD System

In developing the BMD system, existing equipment will be utilized from the perspective of developing an effective and efficient system while reducing costs. Beginning with capability improvements of the Aegis destroyers and Patriot system, an improved model of the current ground radar system will also be employed in the area of sensors. In addition, a newly developed radar (FPS-5)²⁵, which is able to deal with both conventional airborne threats (aircraft and others) and ballistic missiles, has been introduced. The same also applies to JADGE.

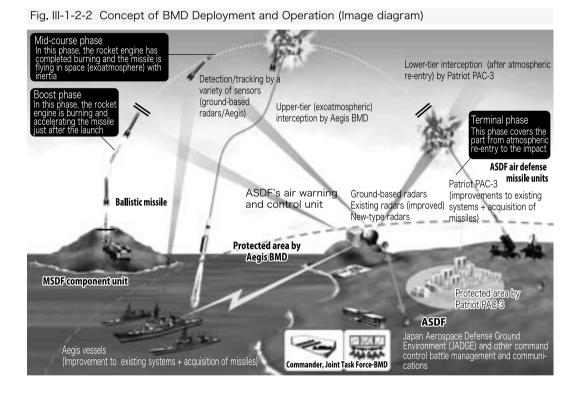
Fig. III-1-2-1 The History of Efforts for BMD Development in Japan

1995	Commenced a comprehensive study on the posture of the air defense system of Japan and a Japan-U.S. joint study on ballistic missile defense			
	North Korea launched a ballistic missile over Japanese territory			
1998	The Security Council and the Cabinet meeting approved the Japan-U.S. joint cooperative technical research on ballistic missile defense (BMD) for a part of a sea-based upper-tier system.			
1999	Started the joint Japan-U.S. technical research on four major components for advanced interceptor missiles			
2000	The Security Council and the Cabinet meeting approved the Mid-Term Defense Program (FY 2001 - FY 2005) with a decision to continue the Japan-U.S. joint cooperative technical research on a sea-based upper-tier system and to take necessary measures after the review of its technical feasibility			
2002	Decision by the United States on the initial deployment of BMD			
2003	The Security Council and the Cabinet meeting approved the introduction of BMD system and other measures, and the deployment of BMD in Japan started			
2004	The Security Council and the Cabinet approved the National Defense Program Guidelines and the Mid-Term Defense Build-up Program, with a decision to take necessary measures after examining possible transition of the joint technical research to a development stage, together with continued efforts of build-up to establish a necessary defense posture including development of the BMD system			
2005	The Security Council and the Cabinet approved a Japan-U.S. Cooperative Development on advanced interceptor missiles for BMD			
2006	North Korea launched seven ballistic missiles toward the Sea of Japan			
2007	Started the deployment of Patriot PAC-3 units SM-3 test-launch by Aegis-equipped destroyer Kongo			
2008	Test-launch of Patriot PAC-3 SM-3 test-launch by Aegis-equipped destroyer Chokai			
2009	Missile launch by North Korea			

d. Development Status of the BMD System

By the end of FY 2008, the MSDF equipped its *Kongo* and *Chokai* Aegis destroyers with SM-3s, and the ASDF deployed Patriot PAC-3 to four fire units of the 1st Air Defense Missile Group (Narashino, Takeyama, Kasumigaura and Iruma), one fire unit of the 4th Air Defense Missile Group (Gifu), and Air Defense Missile Training Group and 2nd Technical School (Hamamatsu). By way of continuing the development of the BMD system, the Ministry of Defense and the SDF have the present objective of constructing a system by FY 2011 that links four Aegis destroyers (with added BMD capability), 16 Patriot PAC-3 FUs²⁶ (Air Defense Missile Groups and educational expenses), four FPS-5 radars and seven FPS-3 upgraded radars (improved model) through various types of command, control, battle management and communications systems, such as JADGE.

In this fiscal year's budget, a total of approximately 87.3 billion yen (contract basis amount, excluding initial expenses) has been appropriated for development of BMD system outlays for 1) enhancement and strengthening of the operational basis 2) continued development of intercept systems.



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[COLUMN]

Voice of SDF Personnel Engaged in PAC-3 Flight Test

Staff Sergeant Kenichi Sato

Fire Platoon, Fourth Air Defense Missile Unit, First Air Defense Missile Group, ASDF

I am assigned to the Fourth Air Defense Missile Unit of the First Air Defense Missile Group, whose principal mission is to defend the Tokyo metropolitan area with Patriot PAC-3 against ballistic missile attacks, etc.

Patriot PAC-3 is a system that assumes the role of Japan's ballistic missile defense (BMD) at the final stage. In order to confirm that it can put out the maximum capabilities, it is necessary to conduct tests in which missiles are actually launched to intercept targets. However, they cannot be conducted inside Japan due to limitations on maneuver area. We conduct missile launches in the U.S.

In September 2008, Japan's first Patriot PAC-3 flight test was held at White Sands Missile Range in the U.S. I felt that this opportunity would allow me to show what I had learnt during my regular training so I was very enthusiastic about participating in the test. As a result I was chosen to participate in the flight test unit.

Since it was Japan's first flight test and also because it was held in the U.S., there were many issues that needed to be dealt with. However, our unit was able to launch the PAC-3 missile and successfully intercept the target, thanks to our concerted efforts. I will never forget the sense of accomplishment I felt at that time. In addition, I am confident that our success proved to demonstrate the capabilities of the ASDF not only to people in Japan but also to the world.

The difficulty of intercepting a ballistic missile is likened to "shooting down a bullet fired from a gun with another gun." However, I realized that an extremely reliable response with a ballistic missile defense system is possible by means of the precise operation of the Patriot PAC-3, which consists of a radar that detects the missile, a firing control device that accurately computes the missile trajectory and, ultimately, the PAC-3 missile, which independently intercepts a ballistic missile.

In the future, I hope to hand down the knowledge and skills acquired through this flight test to our juniors in order to contribute to the further reinforcement of my unit and to the advancement of Japan's BMD capability.



Staff Sergeant Sato in front of a PAC-3



PAC-3 missile on impact

(2) Future Capability Improvement

The proliferation of ballistic missile technology continues and the possibility remains that in the future, ballistic missiles will be furnished with countermeasures to avoid interception. Furthermore, expansion of the defense coverage and improvement of interception probability are also required in response to conventional ballistic missiles. Thus, it is essential to improve the kinetic performance of interceptor missiles and undertake initiatives to advance the efficiency and reliability of the BMD system.

From this perspective, with regards to the state of capability improvements for Aegis destroyers and the Patriot system, the "Mid-Term Defense Program (FY 2005-FY 2009)" states those necessary measures will be undertaken following consideration on the state of development in the United States. In addition, a Japan-U.S. cooperative development project concerning an advanced interceptor missile commenced from 2006 based on results obtained from Japan-U.S. cooperative BMD research which had started in 1999. Thus, efforts to improve future capabilities are being made. (See Fig. III-1-2-3 and 4)



FPS-5 deployed on Shimo-koshiki island

2. Improvement in Legislation and Operations

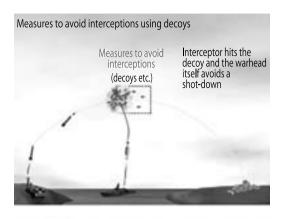
(1) Legal Measures regarding Responses to Ballistic Missiles

In response to the event that ballistic missiles or other objects²⁷ are launched toward Japan as armed attacks, defense operation orders for armed attack situations will be ordered and the missiles will be intercepted.

On the other hand, in the event ballistic missiles are launched towards Japan and an armed attack situation is not acknowledged, the SDF may take the following measures giving adequate consideration 1) to provide a prompt and appropriate response and 2) to ensure civilian control.

- **a.** When the Minister of Defense determines that there is a possibility that ballistic missiles or other objects will come flying toward Japan, the Minister of Defense may order SDF units to take measures to destroy the ballistic missiles upon approval of the Prime Minister²⁸.
- b. Furthermore, in addition to the above, there may be cases where the situation changes suddenly, such as when almost no information is available concerning missile launches or when missiles are launched mistakenly or accidentally and there is no time for the Minister of Defense to obtain Prime Ministerial approval. In preparation for such events, the Minister of Defense may prepare emergency response procedures approved by the Prime Minister during peacetime. Then, in accordance with these emergency response procedures, the Minister of Defense may issue an order in advance to SDF units, within a specified period of time, to destroy ballistic missiles when they actually do fly toward Japan. (See Fig. III-1-2-5) (See Reference 30)

Fig. III-1-2-3
Future Measures to Avoid Intercepting Ballistic Missiles



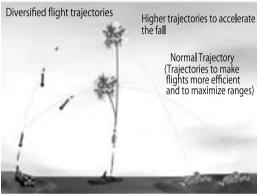
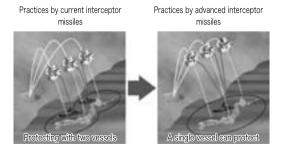


Fig. III-1-2-4 Images of Expanding Protected Areas through Future Improvement in Capabilities of BMD Missiles (Image Diagram)



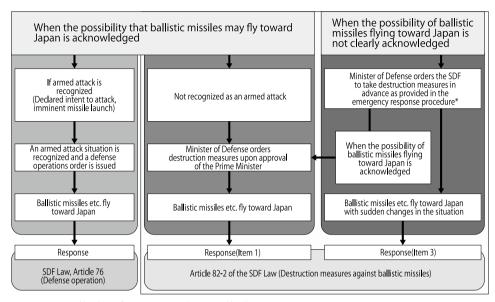


Fig. III-1-2-5 Flow of Response to Ballistic Missiles

Note: Formulated by the Defense Minister and approved by the Prime Minister

(2) Concept of Ensuring Civilian Control of Military

Responses against ballistic missiles require the government to assess the possibility of missiles flying toward Japan by comprehensively analyzing and evaluating the specific situation and international circumstances. In addition to the SDF destroying the missile, it is also necessary to alert and evacuate the people for their protection, undertake diplomatic activities, information gathering by the departments concerned and reinforce readiness for emergencies.

In view of the gravity of such incidents and the necessity of action by the Japanese government as a whole, Prime Ministerial approval (Cabinet decision) and orders by the Minister of Defense are required so that the Cabinet and Minister of Defense may sufficiently fulfill their responsibilities. Furthermore, the participation of the Diet is also defined with a provision in the law on reporting to the Diet. (See Reference 32)

(3) Operational Efforts

a. Responses to Ballistic Missiles through Joint Operations

In cases where a BMD Joint Task Force is formed to deal with incoming ballistic missiles, the Commander of the Air Defense Command is to serve as Commander of the Joint Task Force, and various postures for effective defense are to be put in place under a unified command through JADGE, etc. Furthermore, the GSDF will play a leading role in dealing with damage caused by the impact of ballistic missiles.

b. Japan-U.S. Cooperation in Response to Ballistic Missile Attacks

Further cooperation with U.S. forces in Japan as well as with the U.S. government is required for efficient and effective operation of the BMD system. Thus, related measures were agreed upon at the Japan-U.S. Security Consultative Committee (2+2) meetings in 2005, 2006 and 2007.

Also, at the Japan-U.S. defense ministers meeting in November 2007, with progress in development of the BMD system, both Japan and the U.S. agreed to advance cooperation with a focus on operational aspects. (See Chapter 2, Section 3 and Chapter 2, Section 3)

3. Missile Defense of the United States and Japan-U.S. BMD Cooperation

(1) Missile Defense of the United States

The United States aims to develop a multi-tier missile defense system in which interception systems suited for each of the 1) boost phase, 2) mid-course phase and 3) terminal phase of the ballistic missile flight path are combined for complementary missile defense. These systems are being deployed as they become available²⁹. (See Fig. III-1-2-6)

Early detection of ballistic missiles Surveillance ground-based by satellites radars Mid-course phase Re-entry vehicle (warhead) Apogee Boost phase Re-entry vehicle (warhead) Terminal phase Launch **Impact** System Interception at the boost phase Interception at the mid-course phase Interception at the terminal phase Terminal High Altitude Patriot PAC-3 Area Defense System (THAAD) Ground-Sea-based Medium Extended Air Airborne Laser based Aegis system(SMD) Defense System (ABL) system(GMD) (MEADS) Airborne Laser: Airborne deployed system for the interception of ballistic missiles at the boost phase Ground-based Mid-course Defense System: An interception system for long range ballistic missiles at the mid-course phase from a fixed silo on the ground Sea-based Mid-course Defense System: An interception system for intermediate range ballistic missiles from a sea-based Aegis-equipped destroyer
THAAD : Terminal High Altitude Area Defense System: An interception system for short- to medium-range ballistic missiles from a movable launcher at the terminal phase MEADS: Medium Extended Air Defense System: A missile system under development by the U.S., Germany and Italy as a replacement for the Patriot PAC-3

Flg. III-1-2-6 Example of the U.S.'s multi-layered defense concept against ballistic missiles

Japan and the U.S. have formed a close coordination concerning ballistic missile defense, and a part of the missile defense system possessed by the U.S. is being deployed in our country step by step.

To begin with, in June 2006, the USFJ deployed a transportable radar for BMD at the ASDF Shariki sub base (Aomori Prefecture) ³⁰. Also, BMD capability equipped Aegis destroyers have been forward deployed in Japan and surrounding areas since December 2006. Furthermore, in October 2006, Patriot PAC-3 were deployed at Kadena Air Base in Okinawa Prefecture, and in October 2007, a Joint Tactical Ground Station (JTAGS)³¹ was deployed at Misawa Air Base in Aomori Prefecture.

The development of a part of the U.S. missile defense system in our country will serve to secure the safety of the people of Japan.

(2) Japan-U.S. Joint Development of Improved Missiles

In 1998, the government decided to commence Japan-U.S. joint cooperative research on a sea-based upper-tier system in FY 1999.

This cooperative research was not aimed for the BMD system which started to be deployed in FY 2004. Rather, this Japan-U.S. joint technical research has been conducted bearing in mind improving the capabilities of interceptor missiles for the far future, and the design, prototype production and necessary testing of four major components³² of the interceptor missiles were completed.

Since Japan-U.S. joint cooperative technical research had acquired prospects for solving initial technical issues, in December 2005, the Security Council and Cabinet decided to shift to a joint development phase of the interceptor missile with improved capabilities using the results of this research as the technological foundation. In June 2006, the Japanese and U.S. governments reached official agreement on this matter. In the budget for this fiscal year, approximately 23.9 billion yen was appropriated for the joint development of the future BMD system. (See Fig. III-1-2-7) (See Reference 31)

(3) Relationship to the Three Principles on Arms Exports

Japan's BMD program consists of capability improvements to the Aegis destroyers and Patriot system possessed by Japan, and does not conflict with the Three Principles on Arms Exports.

On the other hand, with regard to the Japan-U.S. joint technical development, which is aimed for improved BMD capability for the future, it will be necessary to export arms concerned with BMD from Japan to the U.S., as part of development. In accordance with the Chief Cabinet Secretary's statement made in December 2004, it was

SM-3 (currently under deployment) SM-3 (currently under deployment) Clam shell-type Unitary nose cone nose cone → Improved 13.5" kinetic warhead reliability in 21" kinetic warhead One-color infrared target détection Two-color infrared seeker seeker → Improved identification • 13.5" DACS capability → Expandéd target search range → Improved maneuverability 13.5" rocket motor 21" rocket motor Expanded propulsion Effects Expanded protected area Improved intercept capability Capability to respond to future ballistic missiles DACS: Divert and Altitude Control System

Fig. III-1-2-7 Outline of the Japan-U.S. Joint Development of Advanced Interceptor Missiles for BMD

determined, when the transition to joint development was decided in December 2005, that the Three Principles on Arms Exports would not apply under the condition that strict controls are maintained and a framework for the provision that arms required to be exported to the U.S. would be developed through coordination with the U.S.

In June 2006, letters concerning the provision of arms and arms-related technology to the U.S. were exchanged which established a framework to provide arms and arms-related technology under tight controls—for example, prohibiting use for other purposes and prohibiting the transfer to third countries without Japan's agreement in advance. (See Part II, Chapter 2, Section 2)

(4) Strengthening Japan-U.S. Cooperation on BMD

Since the decision was made to introduce BMD systems to Japan, efforts have been continuously made to strengthen Japan-U.S. BMD cooperation.

As a policy for strengthening the Japan-U.S. Security Arrangements, the Mid-Term Defense Program states the Government of Japan will strengthen Japan-U.S. bilateral efforts to enhance ballistic missile defense capabilities and promote cooperation with the U.S. in the areas of defense policy, operations, and equipment and technology. Furthermore, the Cabinet decided to exchange letters concerning BMD cooperation between the Minister for Foreign Affairs and the U.S. Ambassador to Japan. A Memorandum of Understanding (MOU) on BMD cooperation was signed between the (then) Japan Defense Agency and the U.S. Department of Defense in 2004.

Furthermore, in June 2006, the Minister for Foreign Affairs and the U.S. Ambassador to Japan exchanged a letter concerning BMD cooperation which included cooperation on Japan-U.S. joint development.

4. Response to North Korean Missile Launch

On March 12, 2009 (Japan time, the same shall apply hereinafter in this section), the International Maritime Organization informed member states, including Japan, that it had received communication from North Korea of an intended test launch of a "communications satellite." According to the information, Pyongyang had designated a part of the Sea of Japan and of the Pacific Ocean as danger zones from April 4 to 8 between 11:00 and 16:00.

The Government of Japan announced that a launch of a rocket, even if it was a satellite, would constitute a clear violation of UNSC resolutions 1695 and 1718, which prohibit North Korea from engaging in any ballistic missile programs. The Government of Japan strongly urged Pyongyang to cancel its plan since the launch would be a blow to ongoing efforts such as 6-party talks toward a détente in the Korean Peninsula, and as such, would be detrimental to the peace and stability of the area.

On the other hand, since there was a risk of North Korea launching a rocket in spite of Japan's warnings, it was necessary to take all possible measures to protect the safety and security of our country, although it was unlikely that the rocket would fall within Japanese territory.

Thus, on March 27, 2009, the Government developed a response policy to the North Korea missile launch at the Security Council of Japan, and the Minister of Defense issued an order for measures to be implemented to destroy ballistic missiles and other objects pursuant to Article 82-2, Paragraph 3 of the Self-Defense Forces Law.

The SDF formed a BMD Joint Task Force and dispatched two Aegis destroyers (*Kongo* and *Chokai*) equipped with SM-3 missiles to the central Sea of Japan and deployed Patriot PAC-3 units at SDF bases in the Tohoku region (Iwate and Akita) and the Tokyo metropolitan area (Saitama, Chiba and Tokyo) in order to be prepared for objects falling on Japan's territory.

It was presumed that a missile that had been launched from North Korea at 11:30 a.m. on April 5, 2009 flew eastward and at around 11:37 a.m. passed over the Tohoku area and headed toward the Pacific. The Ministry of Defense promptly transmitted the information obtained by Shared Early Warning (SEW) and the various radars of the SDF to the Prime Minister's office, etc.³³

Moreover, The SDF collected information by aircraft so as to confirm the safety of the Tohoku region.

On April 6, 2009, after considering the subsequent circumstances, the Minister of Defense issued an order for the termination of the measures to destroy ballistic missiles or other objects and withdrew SDF forces.

The Ministry of Defense then conducted a comprehensive and expert analysis of the missile launched by North Korea, which was released on May 15, 2009³⁴. (See Part I, Chapter 2, Section 2)



PAC-3 missiles deployed in the Tohoku region

2. Response to Attacks by Guerillas and Special Operations Forces

Since Japan is highly urbanized, small-scale infiltrations and attacks can pose a serious threat to the peace and security. Such attacks may take various forms including illegal actions by armed agents³⁵, and destructive actions by guerillas and special operations forces which constitute a form of armed attacks on the territory of Japan.

1. Responses to Attacks by Guerillas and Special Operations Forces

(1) Basic Concept

In the event of an armed attack on Japan by guerillas or special operations forces, Japan will respond by means of defense operations. Forms of armed attacks on Japan include 1) destruction of facilities and attacks on people by irregular forces such as guerillas and 2) subversive activities, assassination of important figures and raids on operation centers by regular forces such as special operations forces.

(2) Operations to Respond to Attacks by Guerillas and Special Operations Forces

In operations to respond to attacks by guerillas or special operations forces, an intelligence gathering posture is established to detect guerillas or special operations forces at the earliest possible time to be captured or destroyed. It is important at this time to quickly gain control of the situation to minimize damage from assault.

a. Search and Detection of Guerillas and Special Operations Forces

Efforts will be made to detect various types of vessels and submarines, which transport guerillas or special operations forces, at an early stage and interdict them at sea through patrols³⁶ in surrounding waters by escort ships or MSDF/ASDF aircraft. When the possibility of infiltration into Japanese territory by guerillas and special operations forces is suspected, GSDF patrol units will engage in warning and surveillance activities in coastal areas.

In the event of an infiltration, patrol and air units will search and detect the guerillas or special operations forces. Furthermore, as required, a guarding posture will be established for the prompt deployment of guarding units to secure key facilities.

b. Capture and Defeat of Guerillas and Special Operations Forces

In the event that guerillas or special operations forces are detected, combat forces will be promptly assembled in the area to besiege them, upon which they will be captured or destroyed. (See Fig. III-1-2-8) (See Reference 32-33)

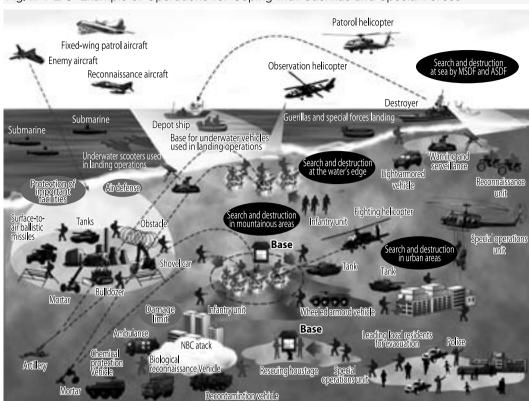


Fig. III-1-2-8 Example of Operations for Coping with Guerillas and Special Forces



GSDF ranger training in a mountain area

2. Response to Armed Agents

(1) Basic Concept

While the police assume primary responsibility for responding to illegal activities of armed agents, the SDF will respond in principle as shown in Fig. III-1-2-9, in accordance with situational developments. (See Reference 32-33)

(2) Measures for Strengthening Cooperation with the Police

a. Establishing the Framework for Strengthening Cooperation

For the SDF to deal with armed agents it is important to cooperate with the police agency. Accordingly, in 2000, the Basic Agreement concluded in 1954 between the (then) JDA and National Public Safety Commission, to provide cooperation procedures in case of public security operations to suppress mass violence was revised, enabling its application to illegal activities by armed agents³⁷. In addition, local agreements were concluded in 2002 regarding public security operations between GSDF divisions/brigades and prefectural police forces.

Furthermore, guidelines were jointly formulated with the National Police Agency in 2004 for dealing jointly with public security dispatches in the event of armed agent concerns.

b. Joint Exercises with the Police

By July 2005, the GSDF divisions/brigades and each prefectural police force, which are parties to the local agreements, had conducted joint map maneuver exercises to strengthen mutual cooperation at the local level in preparation for dealing with armed agents. Based on the results of these table-top exercises, in October 2005, the Northern Army and Hokkaido prefectural police conducted joint field exercises for the first time. Such joint field exercises were held in FY 2008 between the 12th Brigade and the prefectural police of Niigata and Nagano

Tightening the security of SDF Can be handled by the police force facilities Transporting police officers and providing various materials and equipment to the police as necessary Clarifying the event status through information collection activities Tightening the security of SDF facilities Implementation measures By the police Transporting police officers and providing ot be handled by police force various materials and (Actions by the Cases where actual status of the infitrators or event is unknown equipment to the police SDF)

Identifying the as necessary

Collecting information prior to the issuance of status

Tightening the security of SDF Cannot k the p the order for public security operations as facilitiés necessary for the Transporting police officers condition Responding with public and providing security operations various materials and equipment to the police Recognized as a military attack Responding with defense operations

Fig. III-1-2-9
Basic Concept for Responding to Armed Agents

Prefectures; the 10th Brigade and the prefectural police of Toyama, Ishikawa and Fukui; the 1st Brigade and the prefectural police of Tokyo Metropolitan and Chiba; the 3rd Division and the prefectural police of Hyogo, Shiga and Kyoto; the 6th Brigade and the prefectural police of Miyagi, Fukushima and Yamagata; the 1st Combined Division and the prefectural police of Okinawa; and the 5th Division and the Hokkaido prefectural police, and so on. These exercises served to confirm cooperation guidelines in the event of a public security operation.



GSDF inspection training jointly conducted with the police

3. Response to Nuclear, Biological and Chemical Weapons

In recent years, there has been strong recognition of the danger of Nuclear, Biological and Chemical (NBC) weapon proliferation and the means for transporting such weapons, as well as related equipment and materials, to terrorists and rogue states. In the event that such weapons of mass destruction are used, it is likely there will be indiscriminate mass casualties and contamination of an extensive area. The sarin gas attack³⁸ on the Tokyo subway in 1995 and the incidents of mail in the United States containing anthrax³⁹ in 2001 are evidence of the fact that these weapons have already been used.

(1) Basic Concept

In the event of the use of NBC weapons in Japan in a way which corresponds to an armed attack, the SDF will abate the armed attack and rescue victims. Furthermore, in the event of the use of NBC weapons in a way which does not correspond to an armed attack but against which the general police alone cannot maintain public security, the SDF will conduct public security operations to suppress the armed attack and assist victims in cooperation with related agencies. Furthermore, when the incident does not fall under the category of defense operations or public security operations, the SDF will conduct disaster relief dispatches and civilian protection dispatches to conduct intelligence gathering concerning



GSDF NBC protection training

the extent of the damage; decontamination activities; transport of the sick and injured; and medical activities led by the chemical protection units of the GSDF and medical units of the ASDF, GSDF and MSDF.

(2) Initiatives of the Ministry of Defense and the SDF in Response to NBC Weapons

The Ministry of Defense and the SDF have improved the capability for responding to NBC weapon attacks. Specifically, the Central NBC Weapon Defense Unit with enhanced flexibility of operation was newly formed under the Central Readiness Force. Also, there has been an increase of chemical protection unit personnel, and improvement of all types of protection equipment including chemical protection vehicles, decontamination vehicles, personnel protection equipment and chemical protection clothes. It also conducts research and development on subjects including NBC reconnaissance vehicles, portable automatic sensors for chemical agents as well as decontamination sets. Furthermore, the GSDF has designated personnel to take initial action in the

event of special-type disasters in order to allow operations to begin within approximately one hour. The MSDF and ASDF have also acquired protective equipment and materials to be used on vessels and at bases. (See Part II, Chapter 2, Section 4 and Part II, Chapter 2, Section 5)

(3) Response to Substances Related to Nuclear and Radiation Weapons

Substances related to nuclear and radiation weapons have various effects on the health of those exposed to them, even in the event they do not directly damage the body. Thus, appropriate protection and exposure control is required taking into consideration the characteristics of such substances.

In the event that a response to such substances is necessary, the SDF will conduct operations using of protective masks and chemical protection vehicles, in cooperation with related organizations including measurement of the contamination situation and transportation of the sick and injured.

(4) Response to Biological Weapons

Biological agents used to make biological weapons have certain incubation periods, and it is difficult to determine whether a disease is caused by biological agents based on the initial symptoms alone. For this reason, in the event that biological agents are dispersed secretly, anthropogenic causes may be suspected only after damage has occurred and spread. Thus, it is anticipated that detection before the damage has spread will be extremely difficult.

In the event of an outbreak of such damage, medical institutions will assume primary responsibility for responding to the situation and the SDF will be responsible mainly for decontamination, transportation of patients and medical activities. (See Fig. III-1-2-10)

Aerosol biological agents Fixed biological agent Fixed biological agent warning equipment Aerosol biological agents warning equipment Sample collection **Decontamination activities** Information gathering in polluted areas and analysis (network environment) Portable biological agent detection equipment Decontamination and triage of infected individuals Dispatch of expert teams Advanced outdoor testing facility Quarantine unit (with outdoor capabilities) for patients with infections diseases (Biological agent medical laboratory units) Sending back patients to the rear Infectious disease designated Notification of identification madical institutions Microorganism identification facility

Fig. III-1-2-10 Image of Future Response to Biological Weapons

Opening of the New SDF Central Hospital as the Core SDF Hospital

The new SDF Central Hospital in JGSDF Camp Misyuku (Setagaya-ku, Tokyo) was completed in March 2009 and opened in the following month. The SDF Central Hospital is a medical institution jointly operated by the Ground, Maritime and Air Self-Defense Forces, providing medical service not only to SDF personnel but also to ordinary citizens.

The new hospital has decontamination equipment, aseptic rooms and a burns treatment center, which have the capability to deal with nuclear, biological and chemical (NBC) emergencies, as well as new strains of influenza.



The hospital, equipped with such facilities, will treat patients infected with life-threatening diseases in the case of armed attacks using biological agents and other situations. It will be also able to cooperate in response to terrorism using chemical agents like the sarin attacks in the Tokyo subway system. Furthermore, it contributes to international peace cooperation activities, with the hospital providing education to SDF medical personnel scheduled to be dispatched overseas.

The hospital has an earthquake-proof construction, capable of resisting seismic shocks comparable to the Great Hanshin-Awaji Earthquake. Its cogeneration system (power generation system in which two types of energy are generated from a single fuel type, also known as combined heat power generation) allows the hospital to supply its own energy needs and is capable of supplying electricity in emergencies, while implementing energy-saving measures. Furthermore, the hospital has water and fuel storage capacity for approximately 5–days' demand in order that it may serve as a disaster relief center that can respond to large-scale disasters.

* Newly installed main facilities include:

Rooftop heliport capable of CH-47 (large cargo helicopter) landings and takeoffs

→ Capable of accepting patients swiftly

Decontamination facilities, aseptic rooms, burns treatment center, etc.

→ Capable of handling a variety of diseases and injuries, including burn injuries from radiation.

(5) Response to Chemical Weapons

Unlike biological agents, the outbreak of injury with chemical agents used to make chemical weapons is generally fast so a rapid initial response at the time of injury is exceedingly important.

With respect to chemical agents, the chemical protection units of the GSDF are equipped to respond to chemical agents through the use of their chemical protection clothes and vehicles. The chemical protection units and medical units of the GSDF dispatched for disaster relief dispatches will detect the chemical agents using detective devices, transport and treat victims, and conduct decontamination and medical activities



Landing Craft Air Cushion transporting a tank up onto a beach

in contaminated areas. Even when the situation does not require SDF dispatch, as required, the SDF will lend chemical protection clothes and dispatch chemical protection unit personnel as liaison officials to the relevant agencies.

3. Response to Aggression on Japan's Offshore Islands

According to the NDPG, the geographical features of Japan are considered vulnerable from a security perspective, due to narrow lands, long coastlines and many islands. In particular, invasion of these islands can be anticipated as one form of armed attack against Japan.

In order to respond to aggression on islands, it is important to detect signs at an early stage through activities routinely conducted by the SDF including patrols and military information gathering. Response to this aggression has many points in common with the form of ground defense operations. However, if signs of aggressions are detected in advance, operations will be conducted to prevent invasion of the enemy forces. When no signs of aggression are detected in advance and the islands in question are occupied, operations will be conducted to defeat the enemy.

These operations will enable the SDF to swiftly concentrate troops to prevent and destroy enemy forces through the mobile transportation and deployment of forces through joint operations.

4. Warning and Surveillance of the Sea and Airspace Surrounding Japan and Response to Violation of Airspace and Armed Special Operations Vessels

In order for the SDF to respond swiftly to not only a full-scale invasion situation but also new threats and diverse contingencies, it is extremely important to routinely conduct warning and surveillance activities in Japan's territorial waters and airspace as well as gather and process information required for defense. For this purpose, the SDF is engaged in various activities directly linked to ensuring the peace and security of Japan.

1. Warning and Surveillance in Sea Areas Surrounding Japan

The MSDF patrols the sea areas surrounding Hokkaido, the Sea of Japan and the East China Sea about once a day, using P-3C patrol aircraft. Furthermore, warning and surveillance activities are conducted with the flexible use of destroyers and aircraft as required, such as for surveillance of a possible missile launch. Thus, a state of readiness is maintained for situations in areas surrounding Japan.

As an additional measure, GSDF coastal surveillance units and MSDF security posts conduct 24-hour warning and surveillance activities in the major sea straits.



MSDF P-3C patrol aircraft carrying out surveillance operations

2. Warnings and Emergency Takeoffs (Scrambles) in Preparation against Violation of Territorial Airspace

The ASDF conducts daily 24-hour surveillance of Japan's territorial and adjacent airspace using nationwide radar, E-2C early warning aircraft and E-767 early warning and control aircraft. Furthermore, some fighters are always kept on standby for immediate takeoff (scramble). When any aircraft suspected of violating Japan's territorial airspace are detected, scrambled fighters will approach them to assess the situation and monitor the aircraft as necessary. In the event that an airspace violation does occur, an evacuation warning will be issued.

In FY 2008, there were 237 scrambles by the ASDF⁴⁰. (See Fig. III-1-2-11) (See Reference 32-33)

Fig. III-1-2-11 Number of Scrambles in the Last Decade and its Breakout

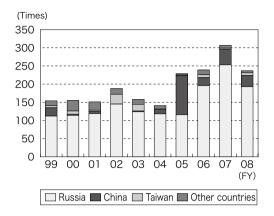
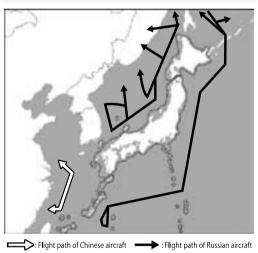


Fig. III-1-2-12 Example of flight patterns of Russian and Chinese aircraft against which scrambles were directed



3. Response to Submarines Submerged in Japan's Territorial Waters

With respect to foreign national submarines navigating underwater in Japan's territorial waters⁴¹, an order for maritime security operations⁴² will be issued promptly, and the SDF will request the submarine to navigate on the surface of the water and show its flag, in accordance with international law. In the event that a submarine does not comply with the request, it will be requested by the SDF to leave territorial waters. (See Reference 32-33)

The MSDF is enhancing and improving capabilities for detecting, identifying and tracking foreign



ASDF personnel boarding an F-15 during a scramble

submarines navigating underwater in the territorial waters of Japan, as well as making Japanese government intentions clear to these submarines. It is also maintaining and improving capabilities for responding to submarines in shallow water areas.

4. Response to Armed Special Operations Vessels

(1) Basic Concept

The Japan Coast Guard, as a police organization, is primarily responsible for responding to suspicious armed special operations vessels (unidentified vessels). However, in the event that it is deemed extremely difficult or impossible for the Japan Coast Guard to respond to a situation, an order for maritime security operations will be issued in a timely manner and the SDF will respond in cooperation with the Japan Coast Guard. (See Reference 32-33)

Taking into consideration lessons learned and reflecting on the unidentified vessel incident off the Noto Peninsula in 1999⁴³ and the unidentified vessel incident in southwest Kyushu in 2001⁴⁴, the government has taken all necessary precautionary measures in order for effective and safe measures to be taken against unidentified vessels, while the Ministry of Defense and the SDF have strengthened cooperation with relevant ministries and agencies.

(2) Ministry of Defense and SDF Efforts to Respond to Unidentified Vessels

a. Enhancement of Equipment

The MSDF took the following steps: 1) improved the speed of the new-type missile boats⁴⁵; 2) established the MSDF Special Boarding Unit⁴⁶; 3) equipped destroyers with machine guns; 4) furnished forcible maritime interdiction equipment (flat-nose shells)⁴⁷; and 5) improved the sufficiency ratio of essential military vessel personnel.

b. Measures for Strengthening Cooperation with the Japan Coast Guard

(i) Development of a Framework for Strengthening Cooperation

In 1999, the (then) Defense Agency and the Japan Coast Guard jointly developed the Manual on Joint Strategies concerning Unidentified Vessels which made stipulations concerning information liaison systems, initial response outlines and division of roles (joint response guidelines) before and after the announcement of maritime

security operations in the event an unidentified vessel is discovered.

(ii) Joint Exercises with the Japan Coast Guard

The Ministry of Defense and the Japan Coast Guard conduct periodic mutual training, information exchanges and joint exercises. Also, cooperation is strengthened through joint exercises between the MSDF and the Japan Coast Guard, based on the manual, in relation to pursuit and capture guidelines for unidentified vessels and communication between the MSDF and the Japan Coast Guard.



MSDF Special Boarding Unit carrying out on-the-spot inspection training

5. Response to Large-Scale and Unconventional Disasters

The SDF conducts a variety of disaster relief activities when such disasters occur including search and rescue for

disaster victims and ships or aircraft in distress, flood control, medical treatment, prevention of epidemics, water supply and transportation of personnel and goods. Recently, the SDF has played a major role in responding not only to natural disasters but also to various other disasters.

1. Outline of Disaster Relief Dispatches

(1) Types and Frameworks of Disaster Relief Dispatches

a. Dispatches upon Request (General Form of Disaster Relief Dispatch)

In principle, the SDF dispatches units for disaster relief upon the request of prefectural governors and other officials⁴⁸. This is because prefectural governors and other officials assume primary responsibility for disaster control measures and are in a position to grasp the overall condition of the disaster. Therefore, it is considered most appropriate for dispatches to be made upon their request.

Municipal mayors can ask governors to request a disaster relief dispatch by the SDF, but in the event that mayors are unable to make such a request to the prefectural governor, they can inform disaster conditions to the Minister of Defense, or those designated by the Minister.

After receiving such requests from governors, the Minister of Defense or other personnel designated by the Minister can immediately dispatch units as necessary according to the disaster situation.

In exceptional circumstances when the situation is particularly urgent and a request must be made immediately, the Minister of Defense or those designated by the Minister may authorize a discretionary dispatch (discretionary dispatches). In order to render discretionary dispatches even more effective, the Disaster Prevention Plan⁴⁹ was amended in 1995 to establish the basis⁵⁰ for SDF unit commanders and other officials to order discretionary dispatches.

Procedures from the request for SDF disaster dispatch up to its withdrawal are shown in Fig. III-1-2-13

Particular urgency with no time to wait for a request from prefectural governors Demand a request from the prefectural governnor Request for withdrawal Prefectural governors Director-General of the Japan Coast Guard Municipal mayor Head of the Regional Coast Guard Headquarter Airport General Manager 1) Procedure for request Direct notification (when a request cannot be demanded) ·Normally requested in writing Request for dispatch ·Requested verbally or by telegram or telephone in case of The Minister of Defense or the individual designated by the Minister emergency (a written request should later follow) Order of dispatch 2) Content of request ·Condition of the disaster and the Dispatch of units Dispatch of units Alarm in such cases as disasters reason for the request (discretionary dispatch) (SDF) ready reserve (personnel) ·Desired length of dispatch (SDF) reserve (personnel) ·Desired area for dispatch and desired activities Other items for reference. Disaster relief operations *Request made to the nearest station or base ·Order for withdrawal Implementation orders for disbandment Withdrawal of units² Disbandment of alarm³

Fig. III-1-2-13 Flow of Events from the Point of Request to Dispatch and Withdrawal

Notes: 1. SDF ready reserve personnel and SDF reserve personnel will be summoned by urgency.

2. Units are all withdrawn together.

3. Disbandment of SDF ready reserve personnel and SDF reserve personnel.

b. Earthquake Disaster Prevention Dispatch

When an alert⁵¹ is issued based on the Law Concerning Special Measures for Large-Scale Earthquakes Countermeasures⁵², the Minister of Defense is authorized to order an earthquake disaster prevention dispatch based on the request of the Director of the Earthquake Disaster Warning Headquarters (the Prime Minister), even prior to the occurrence of an earthquake.

c. Nuclear Disaster Dispatch

When a nuclear emergency alert is issued based on the Special Law on Nuclear Disaster Countermeasures⁵³, the Minister of Defense is authorized to order a nuclear disaster dispatch upon request of the Director of the Nuclear Disaster Countermeasures Headquarters (the Prime Minister).

(2) Authority of SDF Officers in Disaster Relief Dispatches

Under the Self-Defense Forces Law and other legislation, officers of units requested for disaster relief dispatches, earthquake disaster prevention dispatches or nuclear disaster dispatches have the authority to implement evacuation procedures, for example, in order to effectively conduct the activities. (See Reference 32)

2. Initial Operations Posture and Implementation Status of Disaster Relief Dispatches

(1) Initial Response to the Disaster

Based on lessons learned from the Great Hanshin-Awaji Earthquake disaster, the SDF has maintained its posture for an initial response to ensure disaster relief operations are conducted promptly. The GSDF has designated approximately 2,700 personnel, 410 vehicles and 30 helicopters nationwide as initial response units to be dispatched for disaster relief operations within about 2 hours. The MSDF has vessels designated for emergency dispatch at each base in addition to aircraft on standby alert, and the ASDF is prepared with its rescue and transportation aircraft on standby alert.

Furthermore, in the event that information is received of the occurrence of a strong earthquake greater than level- 5 on the Japanese seismic scale, the SDF will independently dispatch aircraft to gather site information and is in the position to transmit this information to the Prime Minister's Office. Furthermore, depending on the circumstances, liaison officers will be dispatched to the concerned local public authorities for information gathering purposes.

The SDF has formulated various contingency plans for responses to large-scale earthquakes, which are under consideration at the Central Disaster Management Council. Since a Tonankai or Nankai Earthquake, for example, is expected to affect a wide area, extending from the Tokai to the Kyushu region, and considerable tsunami damage is also foreseeable, the SDF's Contingency Plan for Tonankai/Nankai Earthquakes stipulates that each SDF shall systematically cooperate to respond to disasters and emergencies. Within 72 hours of such an earthquake, the GSDF shall send units of approximately 70,000 personnel to disaster-stricken areas, the MSDF shall dispatch about 60 ships and about 50 aircraft and the ASDF shall operate about 70 aircraft, including reconnaissance, rescue and transportation planes.

(2) Implementation Status of Disaster Dispatches

a. Transportation of Emergency Patients

The SDF uses its aircraft to transport emergency patients from isolated islands and remote areas with insufficient medical facilities (transportation of emergency patients). In FY 2008, out of a total of 606 cases of disaster relief operations, 424 cases involved the transportation of emergency patients with as many as 405 cases being dispatches to such isolated islands as the Nansei Islands (Okinawa and Kagoshima Prefectures), the Goto Islands

(Nagasaki Prefecture), the Izu Islands and the Ogasawara Islands.

Furthermore, in the event that aircraft of other organizations are unable to respond, due to reasons including a short endurance distance, transportation of emergency patients will be provided by vessels navigating areas of ocean far from the mainland.

In response to a request by the Governor of the Tokyo Metropolitan Government, on November 24, 2008, the MSDF transported patients requiring urgent treatment from Kozu Island. This brought the total number of transportations from the Izu Islands to 1,500.

b. Firefighting Support

In FY 2008, there were 95 dispatches of firefighting support, the second largest number of dispatches after transportation of emergency patients.

Within this category, dispatches for neighborhood firefighting were the highest in number, with 79 cases in FY 2008. Furthermore, upon the request of prefectural governors for disaster relief dispatches, the SDF also conducts aerial firefighting activities in locations where firefighting conditions were difficult, such as mountain and forest areas. (See Fig. III-1-2-14) (See Reference 34)

J				,	•
Description	Number of dispatches	Perosnnel	Vehic l es	Aircraft	Vessels
Responses to storm, flood and earthquake disasters	6	28,409	8,303	611	0
Transporting emergency patients	424	2,122	2	458	0
Search and rescue	38	4,037	455	114	22
Assisting firefighting	95	6,103	751	168	4
Other	43	520	74	59	0
Total	606	41,191	9,585	1,410	26

Fig. III-1-2-14 Record of Disaster Relief Dispatches (FY 2008)



GSDF UH-1 helicopter fighting an Imabari mountain forest fire



GSDF personnel searching for missing people after the Iwate-Miyagi Inland Earthquake

[COLUMN]

Voice of SDF Personnel who was Engaged in Disaster Relief Dispatch (Iwate-Miyagi Inland Earthquake)

Master Sergeant Shinji Saito Fourth Company, 20th Infantry Regiment, GSDF

Receiving information that a person who went stream fishing alone was missing, a search party was dispatched immediately. However, we were not able to approach the target area on land, due to conditions of the area. Therefore it was decided that a search party of four top rangers, with myself as leader, be organized and a helicopter be dispatched to the area.

After locating the car of the missing person from above, we descended with a hoist sling to the spot, with everyone in the party determined to search and find the missing person without fail. Because of the threat of secondary disaster from the aftershocks of the earthquake, combined with the



Master Sergeant Saito (left) explaining the progress of the search to the family of a missing person

fuel level of the helicopter, our activity was restricted to roughly 2 hours.

Searching the route going down the stream, based on information received, we found footprints on an animal path, but we lost the prints along the way. Our search around the area failed to locate the person. Turning back and searching another route, we found footprints again. They were identified as long rubber boots with spikes, used for stream fishing. Since the footprints were still fresh, we were all extremely excited that the person might be nearby. However, there was a crack in the ground with an elevation difference of roughly one meter, and the path ahead was missing. We shouted with all of our might but received no response. We returned again and this time headed upstream, searching for tracks and shouting very loudly to call the person. Hoping that the missing person might be found around the next curve or in the next 10 meters, we went ahead, calculating the time left. Making as much use of the time left as possible -- counting down the minutes and seconds -- we searched but could not find the person.

We gathered the belongings found inside the car and returned to the command post where his relatives were waiting. When we handed over the items to the family members, with sadness and pain in our hearts, they wept, saying, "These belong to our father. He left these there..." Trying to control our feelings and hold back tears, we explained to the family members how the search was conducted, showing photos of conditions in the area and of footprints, comparing them with the map of the area.

c. Response to Natural Disasters

On June 14, 2008, an earthquake occurred with the hypo center in the southern inland region of Iwate Prefecture, causing soil avalanche, blocked rivers and roads, and water outage (magnitude of 7.2) ("2008 Iwate-Miyagi Inland Earthquake"). On the same day, the GSDF 9th Artillery Regiment commander received a request from the Iwate prefectural governor, while the GSDF 6th division commander received a request from the Miyagi prefectural governor, and they conducted the following activities: search for missing people, rescue of isolated people by helicopter, water supply, food service, bathing support, and others. The total numbers of personnel, vehicles and aircraft are approximately 26,300, 7,970 and 580, respectively.

On July 24, 2008, a 6.8 magnitude earthquake occurred off the northern coast of Iwate Prefecture, causing landslides, the total or partial destruction of buildings, and water outages. On the same day, the JGSDF 9th Artillery Regiment commander received a request from the Iwate prefectural governor and the JGSDF 6th division commander also received a request from the Aomori prefectural governor, and they conducted disaster relief operations. The total numbers of personnel, vehicles and aircraft are approximately 1,800, 270 and 40, respectively.

In the 2008 Iwate-Miyagi Inland Earthquake, since a large number of major roads were blocked and mainly mountainous areas were affected, helicopters capable of flexible operation played an important role in rescue activities in isolated villages. Remote controlled bulldozers also played an important role in ensuring the safety of the rescue activities. SDF large helicopters (CH-47) played an indispensable role in transporting such heavy equipment. Furthermore, a number of helicopters, both the SDF and private helicopters, flew over the disaster-stricken area in an unorganized manner, highlighting the importance of aircraft control and ensuring safe flights.

3. Efforts for Preparation for Disaster Relief

(1) Efforts for Preparation for Disaster Relief

In order to respond to natural disasters with speed and accuracy, the SDF carries out various disaster prevention drills, including joint disaster prevention exercises, in addition to formulating disaster relief plans. At the same time, it promotes active participation in local government disaster prevention drills.

In FY 2008, as a Comprehensive Drill for Disaster Management, the SDF carried out its joint disaster prevention exercises in cooperation with the Kinki-Region Disaster Prevention Drill of the Government, drills in cooperation with the Comprehensive Disaster Prevention Drill of Shizuoka Prefecture, and the Joint Disaster Prevention Drill by Eight Prefectures and Municipalities, Tsunami Disaster Prevention Drills in cooperation with

the Ministry of Land, Infrastructure and Transport and Tourism and relevant local governments in the Kyushu region, and a comprehensive drill to respond to nuclear disasters in cooperation with the Ministry of Economy, Trade and Industry and the Ministry of Education, Culture, Sports, Science and Technology.

Individual units have also conducted disaster prevention drills with relevant local governments. For example, the GSDF North-Eastern Army conducted the largest contingency drill for earthquakes, In which 18,000 people and 24 local governments participated, including Iwate and Miyagi Prefectures.



GSDF personnel distributing water after the Iwate-Miyagi Inland Earthquake

(2) Cooperation with Local Governments

It is also important for the SDF to strengthen cooperation with local governments in peacetime in order to conduct disaster relief operations smoothly.

In addition to participating in a number of disaster prevention drills, the SDF promotes strengthening of cooperation with local governments, including enhancing information liaison systems and consistency with disaster control plans

The post of Liaison and Coordination Officer for Citizen Protection and Disaster Relief Operation Countermeasures was created at the SDF Regional Cooperation Headquarters to work at ensuring cooperation with local governments in peacetime.

Human cooperation that utilizes SDF experience and knowledge in disaster prevention operations is extremely effective in strengthening cooperation with local governments.

SDF personnel temporarily serve as staff in the Disaster Prevention Bureau of the Tokyo Metropolitan Government, and mutual exchanges of civilian personnel are conducted between the Central GSDF Headquarters and Hyogo Prefecture. Upon the request of local governments, the SDF recommends retired SDF personnel to

share their experience and knowledge in this field. As of April, 2009, the number of SDF personnel currently working in sections of local governments related to disaster prevention is 167 people in 43 prefectures and 97 municipalities across the country. (See Reference 35)

The following actions to be taken by local governments are important for the Ministry of Defense and the SDF to conduct disaster relief activities more effectively.

a. Securing Staging Areas and Heliports

Disaster relief operations units require a staging area⁵⁴ at the site as a base for activities to secure a command post, lodging, parking and to accumulate necessary materials. Furthermore, due to the fact that activities using vehicles may be restricted at the time of a disaster, it is necessary to install heliports⁵⁵ at and nearby the disaster site to enable helicopters to transport emergency patients and materials and to engage in firefighting. At this time, in order to ensure smooth operations at the staging area and the take-off and arrival of helicopters, it is necessary to clearly designate evacuation centers, staging areas and heliports as well as making these locations commonly known to the public in peacetime.

b. Marking Building Numbers

In order for aircraft to efficiently carry out disaster relief operations such as gathering information and transporting people and materials, it is useful to mark numbers on the rooftops of facilities to identify buildings important for disaster prevention, such as prefectural offices and schools.

c. Securing Facilities for Liaison and Coordination

It is also essential for facilities to be established within prefectural government buildings sites for liaison and coordination with the SDF, such as a temporary communication site for liaison and coordination, a designated area for liaison personnel, as well as parking areas.

d. Arrangements for Materials and Equipment

It is important to develop a disaster prevention map for common use by all disaster prevention organizations which indicate the location of evacuation areas, heliports, etc. Furthermore, it is necessary to coordinate on a daily basis to secure water sources such as reservoirs, while maintaining firefighting equipment for aerial firefighting by helicopter.

(3) Development of a Response Manual for Various Disasters

Clarifying basic responses in advance and consolidating the recognition of parties concerned is an effective way of responding more promptly and appropriately to disasters which occur in various forms. For this purpose, in November 2000, the (then) Defense Agency and SDF developed a response manual⁵⁶ for various types of disasters which compiled issues to be noted for each type of disaster. Copies of this manual were distributed to relevant organizations and local public bodies.

(4) Response to Nuclear Disasters

The Special Measures Law on Nuclear Disaster Countermeasures was enacted based on lessons learned from the critical accident which occurred at the uranium processing plant in Tokaimura, Ibaraki Prefecture in 1999. In accordance with this, the Self-Defense Forces Law was partially revised⁵⁷.

Following the nuclear criticality accident at Tokaimura, the ASDF, GSDF and MSDF have provided transport support, assistance for evacuating residents and monitoring of airborne and seaborne radiation levels in comprehensive nuclear disaster prevention exercises conducted primarily by the Ministry of Economy, Trade and

Industry since 2000. This serves to improve effectiveness including a review of cooperation guidelines between government agencies and local bodies at the time of a nuclear disaster.

Further, the Mid-Term Defense Program states that in addition to nuclear disasters, capabilities for responding to NBC will be strengthened in order to deal with other special disasters⁵⁸.

6. Response to Other Events

1. Improvement in Guard Postures for SDF Facilities

(1) Operations for Guarding SDF Facilities

When there is a danger of a terrorist attack on facilities and areas of the SDF and USFJ within Japan and in the event it is deemed particularly necessary to prevent damage, the Prime Minister may order SDF units to conduct operations to guard facilities and areas (guarding operations).

Part of the authority given to police officials under the Law Concerning the Execution of Duties of Police Officials are applied correspondingly to SDF personnel dispatched for guarding operations⁵⁹. Further, the amended Self-Defense Forces Law provides that SDF personnel have authority to use weapons beyond the limitations of Article 7 of this law. (See Reference 32-33)

The Ministry of Defense and the SDF exchange opinions concerning guarding operations with the police and Japan Coast Guard in order to ensure the effectiveness of such operations. In addition, exercises for guarding operations have been conducted at USFJ facilities and areas throughout Japan since 2003.

(2) Use of Weapons to Guard SDF Facilities in Normal Circumstances

The authority for use of weapons in the course of guarding SDF facilities⁶⁰ within Japan has been stipulated⁶¹.

2. Maintaining Posture to Transport Japanese Nationals Overseas

(1) Amendment of Self-Defense Forces Law

In addition to the currently utilized government aircraft and ASDF transport aircraft, in 1999, SDF ships and the helicopters onboard were added as a means of transport for transporting Japanese nationals overseas in the event of disasters, riots or other states of emergency in foreign countries. Further, SDF personnel became authorized to use the minimum necessary weapons in order to protect the lives and bodies of themselves and Japanese nationals and thus transportation conditions were reinforced. Furthermore, the transportation of Japanese nationals overseas became a primary SDF mission in January 2007.



GSDF personnel carrying out training for guarding SDF facilities

(2) Postures of the ASDF, GSDF and MSDF

In order to transfer Japanese nationals overseas from diplomatic establishments and transport them safely to local airports and harbors, the GSDF designates dispatch personnel for helicopter guidance units⁶², the MSDF designates transport ships and air units, and the ASDF designates airlift units and personnel for the dispatch, in order to maintain posture for readiness.

Furthermore, the mission for the transportation of Japanese nationals overseas needs to be conducted in close cooperation between the ASDF, GSDF and MSDF. To meet this need, joint exercises using transport aircraft and ships are conducted. Also, exercises for transporting Japanese nationals overseas have been conducted as part of the annual Cobra Gold multinational exercise in Thailand since 2008, and some staff members of the Japanese Embassy and Japanese residents in Thailand joined in. Through the exercise, the SDF has strived to improve their capabilities for fulfilling the mission and learned about cooperation measures with the Ministry of Foreign Affairs as well as SDF's activities overseas.



GSDF personnel carrying out training for transportation of Japanese nationals overseas

3. Response to Situations in Areas Surrounding Japan

In the event of situations in areas surrounding Japan, the Ministry of Defense and the SDF will provide materials and services as rear area support and conduct rear area search and rescue activities or ship inspection activities as stipulated in the Law to Ensure Security for Situations in Areas Surrounding Japan and the Ship Inspections Operations Law. Furthermore, rear area support was entrenched as a primary mission of the SDF in January 2007.

4. Responses to "New-Type Flu"

Based on the revised action plan for countermeasures against the new-type flu⁶³, in March 2009, the Ministry of Defense and the SDF prepared the MOD Contingency Plan for countermeasures against the new-type flu⁶⁴. This plan lays out the postures to be improved, details of measures and other necessary matters to enable the Ministry of Defense and the SDF to implement appropriate and swift countermeasures against the new-type flu.

The basic policies of this plan stipulate that the Ministry of Defense and the SDF collaborate and cooperate closely with related organizations under normal circumstances. In the case of an outbreak of the new-type flu at home and abroad, the Ministry of Defense and the SDF will ensure that its duties are carried out flawlessly and carry out the new-type flu countermeasures upon requests from relevant organizations, while ensuring the safety of SDF personnel. Specific examples of SDF activities include epidemic control measures for poultry⁶⁵, transportation of Japanese nationals overseas, quarantine support by medical officers, transportation of relief supplies, diagnosis/treatment at the National Defense Medical College Hospital and SDF hospitals.

In order to ensure the effectiveness of this plan, reviews are under way for the development of specific operational procedures.

At the request of the Ministry of Health, Labour and Welfare, the Ministry of Defense and the SDF dispatched a total of 1,260 SDF doctors and nurses from the National Defense Medical College and SDF medical units to Narita, Osaka and other main airports between April 30- June 1, 2009, to provide quarantine assistance. These activities are based on the following developments: the WHO (World Health Organization) raising its alert level for the new-type flu (A/H1N1), which had broken out in Mexico and other countries, to phase 4 (state in which continued human-to-human transmission of the virus causing community-level outbreaks is observed); the announcement of the Ministry of Health, Labor and Welfare of a domestic outbreak of the new-type flu; and the basic policy for countermeasures against the new-type flu stipulating strengthening of quarantine and border control.

5. Military Intelligence Collection

In order for effective operation of defense capabilities to deal with new threats and diverse situations, it is necessary to detect signs of various situations in advance and collect, analyze and share information promptly and appropriately. For Japanese national security, broader and more comprehensive intelligence capabilities are essential.

For this reason, the Ministry of Defense and the SDF comprehensively analyze and assess a variety of information and have diversified the means of collecting intelligence. Specific intelligence collection activities include: 1) collecting, processing and analyzing radio waves in relation to military communications and radio waves emitted from electronic weapons bound for Japan from overseas; 2) collecting and analyzing high-resolution commercial satellite imagery data⁶⁶; 3) ISR activities by ships and aircraft and so on; 4) collecting and organizing a variety of open source information; 5) information exchanges with defense authorities of other nations; and 6) intelligence activities such as those conducted by defense attachés and other officials⁶⁷. Moreover, in order to enhance the capability of collecting a variety of intelligence and comprehensively analyzing and assessing information by responding to the security environment and technical trends, the Ministry of Defense and the SDF develop capable personnel, improve equipment and devices for intelligence collection as well as strengthen the capability of intelligence organizations such as the Defense Intelligence Headquarters, which support the above-mentioned capabilities.

Further, the Principles for Strengthening Intelligence Functions (of the Prime Minister's Office) was adopted at an Intelligence Capability Enhancement Review Committee of the Prime Minister's Office in February 2008. In order to strengthen the Prime Minister's Office control tower function in relation to national security, by recognizing the extreme importance of strengthening intelligence functions of the Prime Minister's Office, the Ministry of Defense will cooperate to implement measures such as close cooperation with policy side, intelligence collection, integration and analysis, and information security. Moreover, it will continue to provide necessary security information to the Prime Minister's Office in a timely and appropriate manner.

[COLUMN]

Voice of SDF Personnel of the Special Airlift Group

Airman First Class Hidetoshi Yoshimi 701st Air Squadron, Special Airlift Group, ASDF

The 701st Air Squadron of the Special Airlift Group to which I belong provides transport for international emergency relief and for state guests, etc.

I had been taking aircraft-related studies since junior college and, in hope of getting an aircraft-related job after graduation, joined the ASDF. Learning that there would be an examination for personnel for the Special Airlift Group, I hoped to work in special operations, such as the transporting of the prime minister and other important figures, and took the examination. Fortunately, I was able to pass.

After joining the group, I underwent training, starting with training in providing service to important people, readiness training for contingency situations during flight, and training on air cargo loading. I have also received training and education in knowledge and skills related to aircraft and aircraft navigation. On the ground, I mostly make preparations and adjustments for the next airlift assignment.

The happiest moment in the course of my duties on various missions is when the passengers say "thank you." Being a novice at the job, however, I



Airman First Class Yoshimi during passenger service training



Special Airlift Group after its 200th mission in November 2008

still have difficulty making duty adjustments in unfamiliar lands and in overcoming jet lag when missions for transporting important guests are repeated.

I am working on physical conditioning and the maintenance of my physical strength in order to successfully fulfill my various duties. I am a member of a soccer team inside the military base. Through training and games during off-work hours and on holidays, I try to refresh myself to maintain both physical and mental health in order to contribute to the achievement of the mission of my group.