

# Initiatives to Protect the Lives and Property of the People as well as Securing the Territorial Land, Water and Airspace

## Chapter 1 P. 318 Effective Deterrence and Response

The SDF persistently engages in warning and surveillance activities in the waters and airspace surrounding Japan during peacetime so that it can respond to various contingencies immediately and seamlessly.

### Ensuring Security of the Sea and Airspace Surrounding Japan

P. 318

1 In FY2016, there were 12 confirmed incidents of activities by Chinese Navy vessels including passage through the Southwestern Islands such as the sea areas between the main island of Okinawa and Miyako Island. In June 2016, a Chinese Navy combatant vessel entered Japan's contiguous zone to the north of the Senkaku Islands for the first time. Since then, Chinese Navy vessels have continued their activities in the sea areas surrounding Japan.

Due to such circumstances, the MOD/SDF is working to strengthen the collaboration with relevant government ministries and agencies such as sharing information with the Japan Coast Guard.

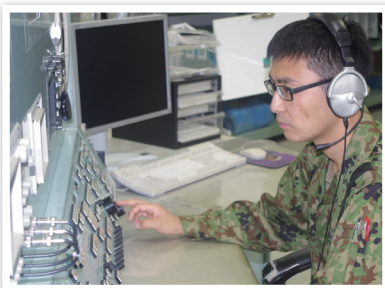
2 In FY2016, ASDF aircraft scrambled 1,168 times, which was 295 times more than the previous fiscal year and the highest figure since scrambles commenced in 1958. Among them, the number of scrambles against Chinese aircraft was 851, which was 280 times more than the previous fiscal year, and sets a record high.

The MOD/SDF continues to take all possible measures necessary to engage in warning and surveillance activities in both the sea and airspace around Japan as well as engages in strict airspace anti-intrusion measures.

3 In May 2017, there was an incursion into Japan's territorial airspace by a small unmanned aircraft (drone)-like object that was flown from a Chinese government vessel, which had intruded into Japan's territorial waters near the Senkaku Islands. (This was the second incident of an incursion into territorial airspace by Chinese authorities since 2012).



An ASDF F-15J fighter scrambling



GSDF personnel conducting coast observation

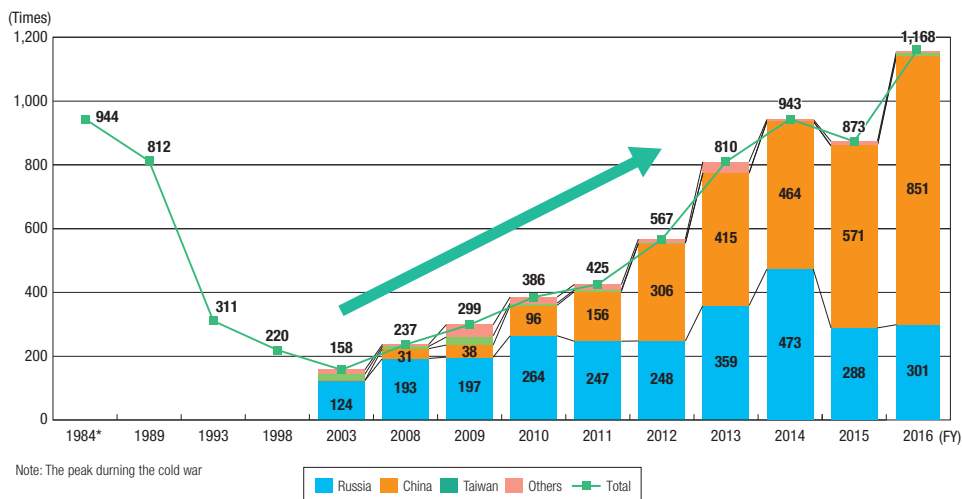


MSDF P-3C patrol aircraft conducting warning and surveillance activities



ASDF E-767 airborne warning and control system aircraft conducting warning and surveillance activities

#### Number and Breakdown of Scrambles since the Cold War



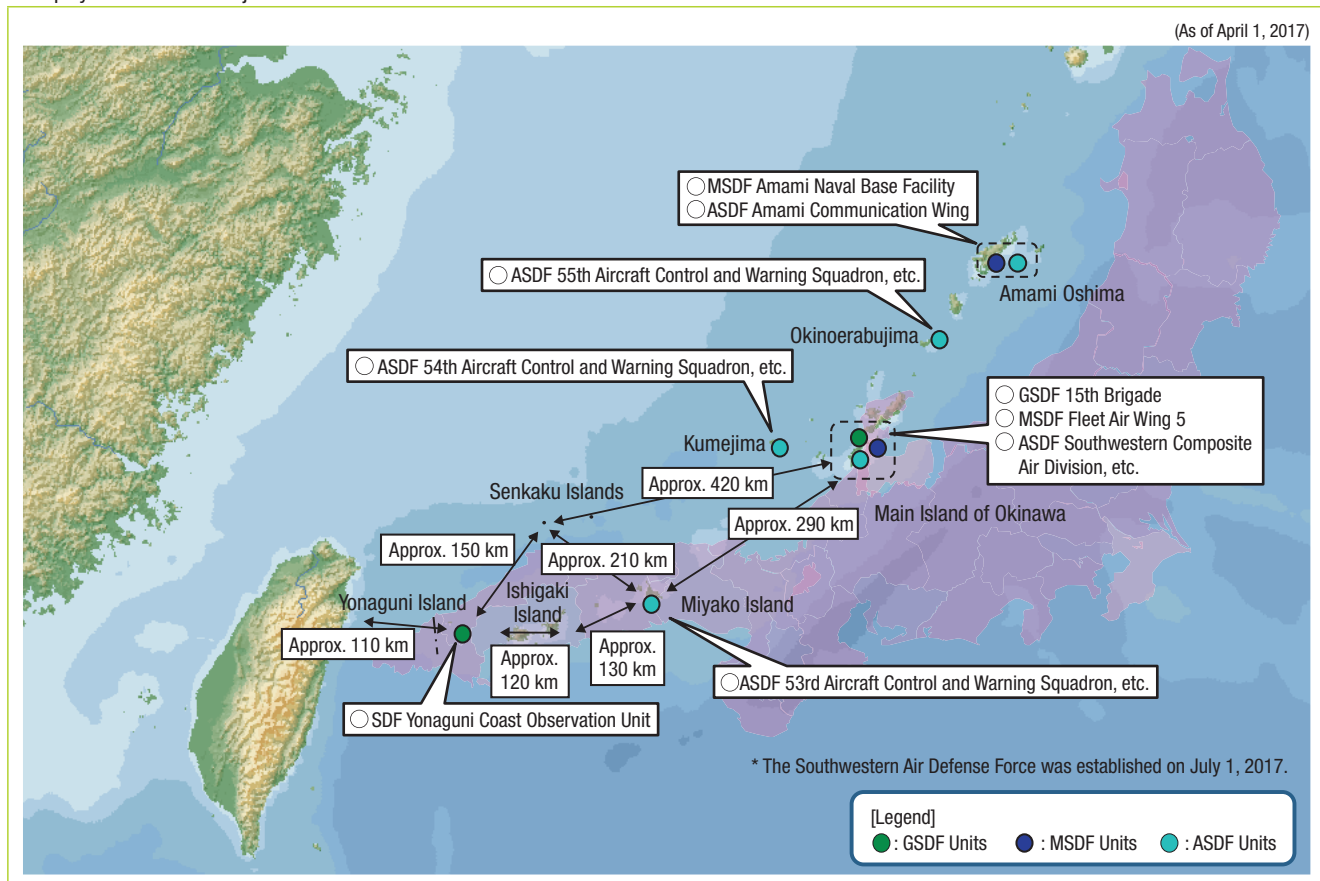
## Defending Japan's Remote Islands

▶ P. 324

- In order to respond to attacks on Japan's remote islands, it is important to position troops and so forth in accordance with the security environment, and also to detect signs at an early stage and to obtain and secure maritime and air superiority through persistent intelligence, surveillance, and reconnaissance (ISR) conducted by the SDF from peacetime.

If signs of attack are detected in advance, troops will be swiftly deployed and concentrated in an area expected to be invaded ahead of the deployment of enemy units, and deter and remove enemy attacks through joint operation combining all of the three services (the GSDF, MSDF, and ASDF). In case of an invasion of the islands, the SDF suppresses the enemy force by ground attack from aircraft and vessels, and then implements operations to retake the islands through the amphibious landing of GSDF units and other initiatives to retake.
- For defense posture buildup in the southwestern region, the ASDF established the 9th Air Wing in Naha Air Base in January 2016, while the GSDF formed the Yonaguni coast observation unit in Yonaguni in March of the same year. The ASDF also formed the Southwestern Air Defense Force in July 2017. Going forward, the SDF will deploy some units including an area security unit in charge of the initial responses in Amami Oshima, Miyako Island, and Ishigaki Island in the southwestern region. In addition, the SDF will establish an "Amphibious Rapid Deployment Brigade" (provisional name) equipped with a full function for amphibious operations, and acquire SH-60K rotary wing patrol helicopters.
- In order to secure capabilities for swift and large-scale transportation and deployment, initiatives are underway to enhance rapid deployment capabilities through: the improvement of Osumi class transport LST (Landing Ship, Tank); a review of the role of multipurpose vessels; and the introduction of V-22 Ospreys and C-2 transport aircraft.

### Deployment Status of Major Units in the Southwestern Islands



# Initiatives to Protect the Lives and Property of the People as well as Securing the Territorial Land, Water and Airspace

## Response to Ballistic Missile Attacks

▶ P. 327

- 1 Japan's ballistic missile defense (BMD) is based on an effective multi-tier defense system with upper tier interception by Aegis-equipped destroyers and lower tier by Patriot PAC-3, both interconnected and coordinated by the Japan Aerospace Defense Ground Environment (JADGE).
- 2 Since the beginning of 2016, North Korea has conducted ballistic missile launches at frequencies and of a content that were unprecedented, and this tendency continues in 2017.
- 3 In order to improve its response capability against ballistic missile attacks, the MOD will acquire advanced ballistic missile interceptors (SM-3 Block IIA) for BMD, which is currently being developed jointly by Japan and the United States and intends to acquire the enhanced capability type of Patriot PAC-3, PAC-3 Missile Segment Enhancement (MSE), as soon as possible.
- 4 The MOD has conducted studies on a future ballistic missile interception system since FY2016. The FY2017 budget also covers expenses for the implementation of simulations, including measures to improve defense capabilities against ballistic missiles.



Test launch of SM-3 Block IIA conducted in waters off Hawaii (February 2017)

## Response to Attacks by Guerillas, Special Operations Forces and Others

▶ P. 332

- 1 Illegal activities by infiltrated armed agents, and sabotage carried out by guerillas or special operation forces can pose a serious threat to peace and security, even if they are small-scale infiltrations and attacks.
- 2 The MOD/SDF conducts joint exercises and training with relevant agencies such as the police force and the Japan Coast Guard, and strives to strengthen cooperation with these agencies.

## Initiatives towards Ensuring Maritime Security

▶ P. 334

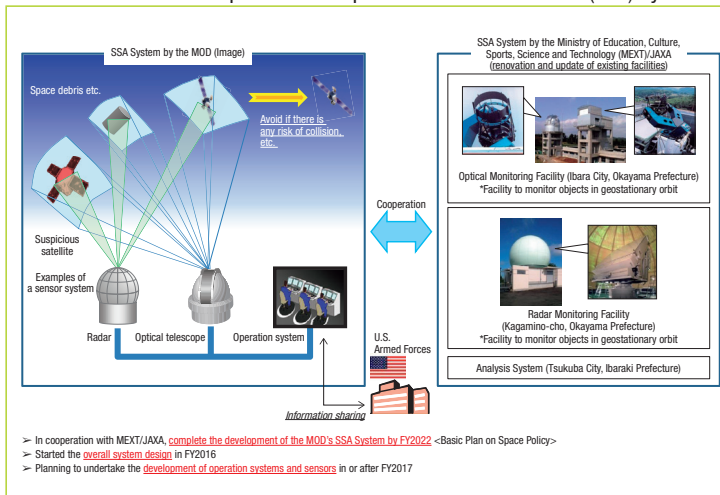
- 1 For maintaining the order of "Open and Stable Seas" and to ensure the safety of maritime transport, the MOD/SDF promotes various kinds of initiatives such as implementing counter-piracy operations, providing capacity building assistance to coastal countries, and conducting joint training in close cooperation with Japan's allies.
- 2 As pertains to the relationship with China, consultation meetings have been held between the defense authorities of both countries towards the commencement of early implementation of the maritime and air communication mechanism in order to avoid and prevent unexpected situations.

## Responses in Space

▶ P. 334

- 1 From the perspective of further promoting cooperation in space between the defense authorities in Japan and the United States, the two countries established the "Space Cooperation Working Group (SCWG)" in April 2015 and proactively consider activities in broad areas such as: (1) promotion of policy-related consultation on space, (2) closer information sharing, (3) cooperation for nurturing and securing experts on this subject matter, and (4) implementation of tabletop exercises.
- 2 Going forward, the MOD will develop a sensor system, which can perform constant surveillance of space debris and suspicious satellites, in order to ensure the safety of satellites contributing to Japan's use of outer space including the SDF's activities.

### Initiatives for the development of the Space Situational Awareness (SSA) System



## Response to Cyber Attacks

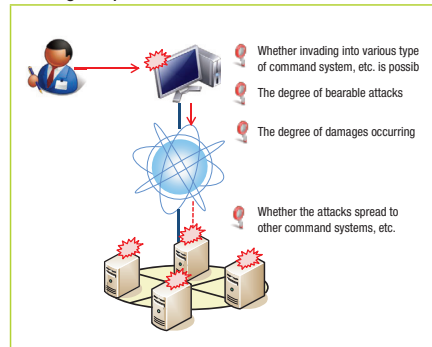
▶ P. 338

- 1 The SDF Supervised Units of Communication Systems are monitoring MOD/SDF communications networks around the clock. In addition, the MOD/SDF is engaged in holistic measures including: the introduction of intrusion prevention systems in order to increase the safety of information and communications systems, development of defense systems, establishment of rules stipulating the posture and procedures for responding to cyber attacks, improvement of human resources and technological bases, and research on leading-edge technology.
- 2 Considering that cyber attacks occur beyond national borders, it is important to promote cybersecurity cooperation with countries other than the United States as well. Japan will continue to strengthen international cooperation in the cyber field through exchanges of views with relevant organizations including defense authorities of other countries and active participation in cyber defense exercises.
- 3 In order to appropriately deal with the threat posed by cyber attacks, which are becoming increasingly sophisticated and skillful by the day, the FY2017 budget sets out to develop a system for conducting practical cyber training using a cyber training space that simulates the SDF's command and control system, as well as a system for conducting penetration tests to examine the vulnerability of the SDF's command and control system using the same method as actual cyber attacks. Along with these initiatives, personnel increases have also been budgeted.



SDF personnel from the Cyber Defense Unit participating in cyber security exercises

### Image of penetration test



## Response to Large-Scale Disasters

▶ P. 341

- 1 Due to heavy rain caused by Typhoon No. 10, which moved through the Tohoku region and Hokkaido Prefecture from August to September 2016, the SDF dispatched approximately 3,800 personnel to carry out rescue operations for isolated individuals, searches for missing persons, water supply assistance, and other disaster relief activities in Iwate and Hokkaido Prefectures.
- 2 For implementing epidemic control measures against the outbreak of avian influenza in Hokkaido, Miyagi, Chiba, Niigata, Gifu, Saga, Kumamoto and Miyazaki Prefectures, approximately 9,100 SDF personnel were dispatched to engage in disaster relief dispatch activities from November 2016 to March 2017.
- 3 The SDF transports by aircraft emergency patients from isolated islands and remote areas with insufficient medical facilities (transportation of emergency patients). In FY2016, out of a total of 516 cases of disaster relief dispatches, 409 cases involved the transportation of emergency patients.



Rescue activity in Iwaizumi (Iwate Prefecture) (September 2016)

## Rescue and Transport of Japanese Nationals Overseas and Others

▶ P. 345

- 1 The SDF stands ready to dispatch its units swiftly. Specifically, the SDF maintains operational readiness by which the GSDF designates a helicopter unit and leading transport unit personnel, the MSDF designates vessels such as transport ships (including ship-based aircraft), and the ASDF designates airlift units and personnel for dispatch.
- 2 In December 2016, the SDF carried out its first exercise for the rescue of Japanese nationals overseas and others, in which it went through the whole rescue process. In the annual multilateral joint exercise Cobra Gold that took place in February 2017 in Thailand, the MOD/SDF conducted an exercise for the rescue of Japanese nationals overseas and others with the cooperation of the Japanese Embassy in Thailand and other agencies, and strengthened collaboration with the Ministry of Foreign Affairs.



Activities for avian influenza epidemic prevention measures (Gifu Prefecture) (January 2017)



Exercise for rescue of Japanese nationals overseas and others conducted in Thailand in cooperation with the Japanese Ministry of Foreign Affairs, the Japanese Embassy in Thailand, and other relevant agencies (February 2017)

Chapter 2

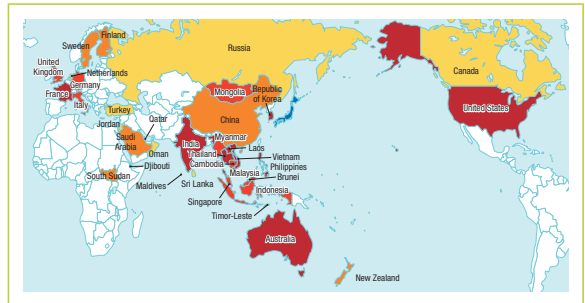
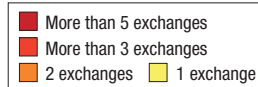


# Active Promotion of Security Cooperation

The MOD/SDF will enhance bilateral and multilateral defense cooperation and exchanges, and will more actively promote United Nations Peace Keeping Operations (UN PKO), counter-piracy operations, international peace cooperation activities, and other relevant missions to address global security issues.

Number of high-level bilateral dialogues and consultations (June 2016–June 2017)

\* "High-level" refers to Minister, State Minister, Parliamentary Vice-Minister, Administrative Vice-Minister, Vice-Minister of Defense for International Affairs, and the Chief of Staff of each SDF branch.



Chapter 2



# Towards Strategic International Defense Cooperation

## Major Multilateral Security Dialogues, etc.

P. 354, P. 357

### 1 ASEAN-Japan Defence Ministers' Informal Meeting and the Vientiane Vision

In November 2016, the Second ASEAN-Japan Defence Ministers' Informal Meeting was held in Vientiane, Laos. At the meeting, Defense Minister Inada proposed Japan's own initiative called the "Vientiane Vision: Japan's Defense Cooperation Initiative with ASEAN" as a guideline for the Japan-ASEAN defense cooperation. The "Vientiane Vision" is the first of its kind to present, in a transparent manner, an overall picture of the priority areas of the future direction of ASEAN-wide defense cooperation, and it was welcomed by all ASEAN member states.



Defense Minister Inada attending the ASEAN-Japan Defence Ministers' Informal Meeting in Laos (November 2016)

### 2 International Institute for Strategic Studies (IISS) Asia Security Summit (Shangri-La Dialogue)

In June 2017, at the 16th Shangri-La Dialogue in Singapore, Defense Minister Inada delivered a speech at the second plenary session on "Upholding the Rules-Based Regional Order." Defense Minister Inada also held bilateral and trilateral meetings with other participating countries to exchange opinions on regional situations and defense cooperation including the situations in North Korea and the East and South China Seas, and to confirm the measures for strengthening future cooperation with the countries.

## Capacity Building Assistance

P. 358

Through the capacity building assistance program launched in 2012, Japan has provided assistance in various areas such as humanitarian assistance and disaster relief, PKO, maritime security, and international law to 12 countries mainly in the Asia-Pacific region.



MSDF personnel giving an oceanography lecture as part of capacity building assistance for the Indonesian Navy (January 2017)

## Multilateral Joint Training in the Asia-Pacific Region

P. 362

In the Asia-Pacific region, the MOD/SDF actively participates in multinational training in non-traditional security fields, such as humanitarian assistance and disaster relief, as well as Non-combatant Evacuation Operation (NEO), in addition to traditional training that has been conducted conventionally in preparation for combat situations.



Opening ceremony of the multilateral joint exercise Cobra Gold in Thailand co-hosted by the United States and Thailand (February 2017)



MSDF destroyer Fuyuzuki (front) withdrawing after completing at-sea replenishment with the Royal Australian Navy's replenishment ship, Success (center), at the Australian Navy-hosted multinational maritime exercise Kakadu 2016 (September 2016)



Aircraft of participating units conducting formation flying led by the U.S. Air Force's B1 bomber aircraft (far left) in the Japan-U.S.-Australia joint exercise in Guam (Exercise Cope North Guam 2017) (An ASDF F-15J fighter and F2 fighter can be seen at the bottom right of the B1.) (February 2017)

## Chapter 2



## Ensuring Maritime Security

- 1 For Japan, a maritime state, strengthening order on the seas based on fundamental rules, such as the rule of law and the freedom of navigation, as well as ensuring safe maritime transport, is a foundation of peace and prosperity, which is extremely important. For this reason, in cooperation with relevant countries, the MOD/SDF promotes various initiatives including counter-piracy activities and capacity building assistance in this field for coastal countries alongside sea lanes, and makes use of various opportunities to enhance joint training and exercises in waters other than those in the immediate vicinity of Japan.
- 2 For counter-piracy operations, the SDF surface force and air force have participated in the Combined Task Force 151 (CTF 151) and conducted its missions in cooperation with other countries.
- 3 From March to June 2017, the SDF dispatched a CTF 151 commander.



Commemorative photograph of 180,000 vessels and ships in total of the Deployed Forces for Counter-Piracy Enforcement (August 2016)



Destroyer Suzutsuki of the counter-piracy team rushed to a commercial ship whose engine room had caught on fire while navigating through the Gulf of Aden and was stranded in mid sea, and also conducted warning and surveillance activities (November 2016)



CTF 151 Commander Rear Admiral Fukuda (front row, sixth from left) and staff officers of the CTF 151 Headquarters in Bahrain

## Chapter 2



## Efforts for International Peace Cooperation Activities

Japan proactively engages in international peace cooperation activities and makes multi-layered contributions to international peace cooperation activities.

### United Nations Mission in the Republic of South Sudan (UNMISS)

▶ P. 387

- 1 January 2017 marked five years since the dispatch of the first engineering unit. In all of the PKOs conducted by Japan, the SDF engineering unit has made a record number of achievements. The nation-building process of South Sudan is entering a new phase due to the efforts made by the international community.
- 2 As a result of a comprehensive consideration of the SDF's activities in South Sudan, the Government of Japan considered that it could move on to a new phase regarding SDF engineering activities in the capital city of Juba, and the activities of the SDF engineering unit were terminated at the end of May 2017. Meanwhile, Japan continues to dispatch SDF personnel to UNMISS Headquarters and contribute to the United Nations peacekeeping operations as a member of UNMISS.



Personnel of the 11th unit loading containers for its withdrawal (May 2017)



SDF personnel listening to an address at the Ceremony for the Return of the Unit Flag (May 2017)



Headquarters staff coordinating with the personnel of other countries at UNMISS Headquarters (April 2017)

### Cooperation for the UN Peacekeeping Operations in the Area of Human Resources Development

▶ P. 390

To support UN PKOs, Japan has co-hosted the United Nations Training of Trainers (TOT) with the United Nations, dispatched SDF personnel as instructors to PKO centers in other countries, and dispatched SDF personnel as instructors to the United Nations Project for Africa Rapid Deployment of Engineering Capabilities.

Chapter 3

P. 394

# Human Foundation and Organization that Supports the Defense Force, and Active Participation of Female SDF Personnel

## Human Foundation and Organization that Supports the Defense Force ▶ P. 394

In order to exert its defense capabilities with the maximum effectiveness, it is extremely important that the MOD/SDF further enhances and strengthens their human foundation and organization, which supports the defense force.

### Recruitment and Employment

- 1 Due to the declining birthrate and greater advancement into higher education, the environment of recruiting SDF personnel is increasingly severe. Amid such a situation, the MOD/SDF is recruiting qualified personnel nationwide in various categories.
- 2 The MOD/SDF has the systems in place such as the SDF Reserve Personnel System in which SDF Reserve Personnel, who normally engage in their own professions, become SDF personnel upon the issuance of a defense call-up order, or other orders, and engage in their SDF missions.



Newly hired MSDF personnel receiving basic education

### Measures to ensure effective use of human resources

From the perspective of ensuring the robustness of the SDF and making effective use of human resources under a constrained budget, measures for personnel system reform have been implemented in order to adapt to the advancement of equipment as well as diversification and internationalization of SDF missions.

## Promotion of Work-Life Balance and More Active Participation of Female Personnel ▶ P. 403

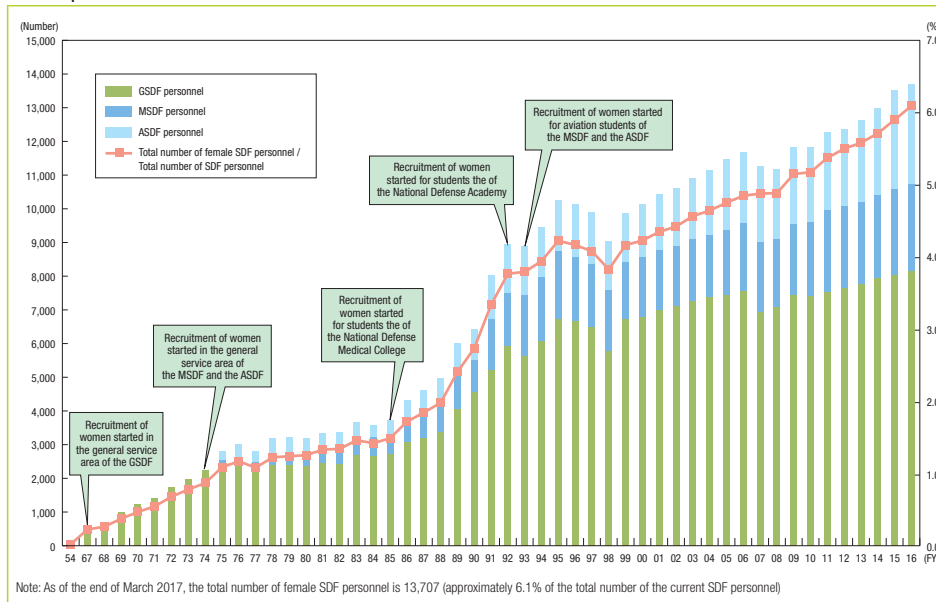
- For the promotion of more active participation of female personnel and work-life balance of all SDF personnel in a unified manner, the MOD/SDF implements “working style reform” (promotion of telework, expansion and enhancement of flextime system, etc.), “reform to realize a successful career with a balanced life between childrearing and nursing care, etc.” (development of internal crèche facilities, etc.), and “reform for promoting successful female personnel” (setting numerical targets regarding the recruitment and promotion of female employees, etc.).
- The MOD formulated the “Initiative to Promote Active Participation of Female SDF Personnel” in April 2017, in which it unveiled its conceptual policy for promoting the active participation of female SDF personnel.
  - 1 The MOD has made it possible to deploy female personnel to some units, such as GSDF infantry companies and tank companies, and essentially abolished the restriction on the deployment of female personnel across the whole SDF organization.
  - 2 The MOD will expand the recruitment of female SDF personnel and aims to double the percentage of female personnel among all SDF personnel.

ASDF personnel making use of an internal crèche facility at the MOD



Female MSDF pilot flying a helicopter

### Changes in the number of female SDF personnel at each SDF branch and their percentage as a share of all SDF personnel



### Enhancement of Medical Functions

▶ P. 408

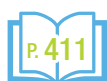
The MOD/SDF is enhancing and strengthening their capabilities in military medicine to be able to appropriately carry out a variety of missions, including in response to various emergency events and international peace cooperation activities.

- 1 The MOD aims to establish an efficient and high-quality medical care system at the National Defense Medical College Hospital, and is taking steps to strengthen the function of the hospital as a training and research center for defense medicine.
- 2 The MOD/SDF is working to develop a framework to protect the lives of personnel who are injured on the frontline as much as possible, in order to enable SDF personnel with the appropriate knowledge and training to provide specialized first aid on the spot before the injured SDF personnel are transferred to hospitals and other medical facilities.
- 3 The MOD/SDF is undertaking preparations for the enhancement of capabilities to respond to infectious diseases, a potential global threat.



GSDS personnel conducting training of medical evacuation of the injured

### Chapter 4

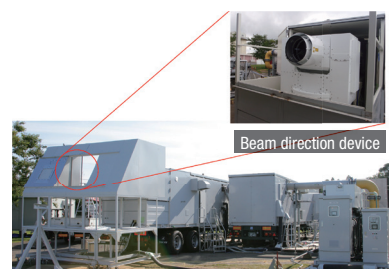


## Measures on Defense Equipment and Technology

### Promotion of Research and Development for Ensuring Technological Superiority

▶ P. 411

- 1 The MOD formulated the Defense Technology Strategy in August 2016, which presents a specific direction for various measures that should be implemented strategically. This aims to ensure Japan's technological superiority, invent and deliver advanced equipment in an effective and efficient manner, and deal with various policy issues pertaining to defense and civilian technologies. The MOD promotes various measures in light of the Medium- to Long-Term Defense Technology Outlook and the Research and Development Vision based on the Defense Technology Strategy.
- 2 The "Innovative Science & Technology Initiative for Security" is a funding program which issues Call for Proposals and entrusts basic researches regarding advanced civilian technology, with the expectation that the studies would contribute to future research and development in the defense field. In FY2017 the MOD expanded the program to enable the awards of large-scale and long-term research projects.



Initiatives for high-power energy technology designated as one of the advanced technology fields with the potential to play a game changing role (Medium-to-Long Term Defense Technology Outlook)

### Defense Production and Technological Bases

▶ P. 415

Defense production and technological bases are an important and indispensable foundation supporting Japan's defense capabilities.

To maintain and enhance these capabilities, the MOD implements various measures such as the visualization of the supply chain in the defense industry and the adoption of a new procurement method in acquiring an escort ship (new destroyer) based on the Strategy on Defense Production and Technological Bases formulated in June 2014.

The MOD will promote defense equipment and technology measures in collaboration with relevant ministries and agencies as well as companies and other relevant organizations. For example, the MOD seeks to adopt the rapidly developing cutting-edge civilian technology for equipment and to conduct a matching between the MOD/SDF and small and medium-sized enterprises that possess technical capabilities available for use in equipment.

### Efforts toward Project Management, etc.

▶ P. 420

- 1 In order to manage the acquisition process throughout the entire life cycle of the equipment, the MOD selected 12 types of equipment for project management to realize the strategically most efficient and effective acquisition of defense equipment. In FY2017, Middle-range SAM (improved version) moved to the mass production and deployment phase.
- 2 The MOD/SDF intends to realize the cost reduction and stabilization of procurement of equipment and services by utilizing long-term contracts, promoting the efficiency of equipment maintenance and implementing bulk purchases.



First F-35A fighter for which the last assembly was carried out within Japan (eligible equipment for project management focused equipment)



## Defense Equipment and Technology Cooperation

▶ P. 426

Based on the Three Principles on Transfer of Defense Equipment and Technology, Japan promotes cooperation in defense equipment and technology with other countries in order to contribute to promoting the maintenance and enhancement of defense production and technological bases, as well as contributing to the promotion of peace and international cooperation.

- 1 For the purpose of ensuring a maintenance base for common equipment between Japan and the United States, the Japanese government has been working to enable the involvement of Japanese industries in the manufacturing process in preparation for the acquisition of F-35A fighter aircraft. In addition, Japan also established a common maintenance base for the United States Marine Corp's Osprey (MV-22) aircraft and the GSDF's Osprey (V-22) aircraft within the GSDF Camp Kisarazu, and commenced Periodic Maintenance Inspection (PMI) of MV-22 aircraft.
- 2 An arrangement on a Joint Preliminary Study on potential collaborative opportunities for Future Combat Air Systems/Future Fighter was signed between the United Kingdom and Japan in March 2017, which the two countries will exchange ideas on the potential for future collaboration.
- 3 At the Japan-Philippines Summit Meeting in September 2016, the two leaders agreed on the transfer of five MSDF TC-90 training aircraft. In March 2017, two TC-90 aircraft were transferred to the Philippine Navy.
- 4 In order to respond to the needs of Japan's friendly nations, the SDF Law was revised to enable the MOD to grant or transfer SDF's equipment which are no longer used to the governments of developing states, for lower price than the current price.

MV-22 under maintenance at the Japan-U.S. shared maintenance infrastructure



MSDF TC-90 training aircraft receiving water discharge at its transfer destination in the Philippines

## Chapter 5

P. 434

# Interaction with Local Communities and Japanese Citizens

## Collaboration with Local Communities

▶ P. 434

The MOD/SDF conducts a variety of cooperation activities to support civilian life. Such activities further deepen the trust between local communities/people and the SDF as well as significantly contribute to the maintenance and vitalization of local communities.



MSDF underwater disposal personnel (Okinawa) and underwater mines explosion (Iwo-To)



ASDF Blue Impulse flying over the Kumamoto Castle at the Kumamoto Reconstruction Flight Festival

## Various Public Relations Activities

▶ P. 438

The MOD/SDF publicizes current circumstances of the SDF both at home and abroad. For example, as part of the commemoration of the SDF's anniversary, the SDF Marching Festival is held at Nippon Budokan every year. In addition, annual reviews by the SDF—a troop review, a fleet review, and an air review—are hosted in rotation by the GSDF, MSDF, and ASDF, respectively. In 2016, a troop review was held at the GSDF Asaka Training Area. The MOD/SDF also publishes a monthly public relations pamphlet in English, and makes proactive efforts to disseminate information to the international community.



FY2016 troop review