

Trend of Security in the Arctic Ocean

The Arctic Region is the area north of the latitude line of 66 degrees 33 minutes north latitude, most of which is covered by the Arctic Ocean. There are eight countries in the Arctic Region: Russia, the United States, Canada, Denmark and Norway that border the Arctic Ocean, and Finland, Sweden and Iceland that do not border it. In 1996, the Arctic Council was established, which aims to promote cooperation, coordination, and interaction among the Arctic states, with the involvement of the indigenous communities and other inhabitants on common Arctic issues (e.g., sustainable development and environmental protection).

In recent years, the utility of the Northern Sea Route is increasing due to the abundance natural resources, needs to shorten sea routes between Europe and Asia in accordance with the decrease of seawater, and to avoid the sea areas that are at risk of international conflicts and piracy. For these reasons, the Arctic states have been more proactively promoting efforts to acquire their interest in resource development and use of the sea route. On the other hand, each Arctic state has its own claims in terms of the demarcation of maritime boundaries based on the United Nations Convention on the Law of the Sea, and extension of continental shelf. It is considered that some of these coastal states including Russia are promoting efforts to provide new military capabilities for the purpose of securing their interest and defending their territories. Traditionally, the Arctic Region has been used for deployment of strategic nuclear forces and as a transit route for them. In addition, due to the decrease of sea ice, surface ships can now navigate for longer period of time and in wider areas than before, and it is considered that the region could be used for deploying maritime forces or maneuvering military forces by using maritime transport capabilities of armed forces in future. For these reasons, the strategic importance of the region is increasing.

Russia shows its clear intention to place strategic importance on the Arctic Region in its various policy papers. At the same time, it has been showing the most active movement compared to other Arctic states, based on the following factors: Russia has the largest exclusive economic zone (EEZ) among the Arctic states, the abundance of potential resources in the EEZ, the utility of the Northern Sea Route along the coastlines of Russia and its influence to Russian mainland, and its military superiority among other Arctic states, with deployment of dominant military capabilities including the Northern Fleet. In 2007, Russia restarted patrol by long-range bombers in the Arctic Region, which had been stopped since 1992, and it also announced restarting patrol by ballistic missile submarines, nuclear-powered (SSBN). In September 2012, a missile cruiser that belongs to the Northern Fleet was deployed to the Laptev Sea in the Arctic Region for the first time as a Russian surface ship. In addition, in September 2013, a fleet of vessels of the Northern Fleet advanced to the eastern Arctic Ocean to transport materials used for reopening the Temp airfield on Kotelyny Island of the New Siberian Islands. The operation of the airfield was resumed in October 2013. Furthermore, in 2014 the Russian Naval Air Force further enhanced patrol operation above the Northern Sea Route.

Among the non-Arctic states, 12 countries including Japan and China have been granted observer status in the Arctic Council. China, in particular, is showing intention to be actively involved in the activities in the Arctic Region, such as conducting research activities by sending the scientific research ship Xue Long (Snow Dragon) to the Arctic Ocean.



Trend of Expanding Development of Unmanned Vehicles



In recent years, the demand for unmanned vehicles is rapidly increasing not only in the field of military use but also in disaster relief, industry and agriculture field. Factors behind this include the fact that unmanned vehicles can conduct missions that are not suitable for human beings called 3D (Dangerous, Dirty, Dull), such as dangerous missions conducted in the airspace of the area occupied by the enemy, missions in the area contaminated by chemical substances and radiation, and dull missions such as long hours monitoring and surveillance. In addition, they are more cost-effective than manned vehicles for the following reasons: space and equipment for crew such as cockpit is not required; there is no need to secure the safety of the pilot; and it is possible to reduce the size.

One of the unmanned vehicles for military use is an unmanned aerial vehicle (UAV), which was initially used for aerial targets in training and reconnaissance purposes, and has been developed to a multi-purpose vehicle to conduct various missions and a vehicle for attack. Recently developed UAV include stealth type, carrier-based type, and ones equipped with supersonic flight capability. Other unmanned vehicles include Unmanned Ground Vehicle (UGV), Unmanned Maritime Vehicle (UMV), Unmanned Surface Vehicle (USV), and Unmanned Undersea Vehicle (UUV), whose usage has been expanding in land and maritime missions. These vehicles are developed and used for the same purpose as UAV. They are also developed and used in accordance with geographical features and usage, such as clearing land and naval mines, and responding to nuclear disaster¹. Although previous types of unmanned vehicles were developed based on the platform for manned vehicles such as aircraft and cars, it is reported that in recent years more neo-futuristic platforms have been developed, including ones representing insects, walking with two legs like human beings, or walking with four legs like animals. With the progress of various technology including information and communication technology (ICT), it is expected that types of vehicles could shift from man-controlled type to fully autonomous type in future². Such vehicle is called Lethal Autonomous Weapons System (LAWS)³, which performs various tasks automatically ranging from target determination to attack. Analysts note that the advancement of artificial intelligence may lead to the deployment of LAWS in actual combat in the near future.

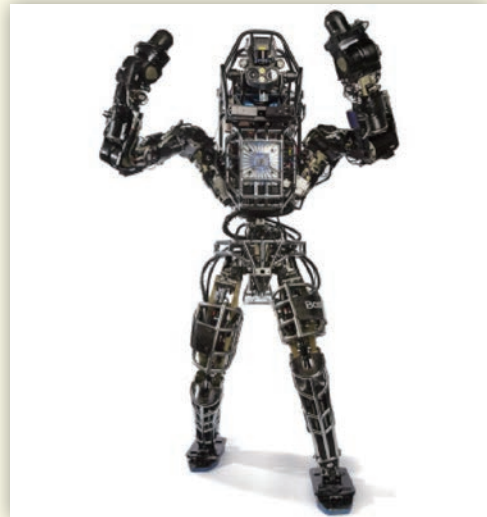
Amid the increasing demand for unmanned vehicles, the United Nations and the countries that use UAV have raised operational issues, such as violation of sovereignty caused by UAV flying over other countries, collateral damage caused by the attack by UAV, and mental fatigue of UAV pilots, and various measures have been discussed regarding these issues.

On the other hand, due to their characteristics, the utility of unmanned vehicles are widely recognized in many countries and it is expected that development and introduction of unmanned vehicles will be further promoted, instead of manned vehicles.

¹ During the aftermath of the nuclear disaster occurred at the Fukushima Daiichi Nuclear Power Station on March 11, 2011, the U.S. Forces dispatched the unmanned reconnaissance aircraft Global Hawk to conduct intelligence operation.

² The current unmanned vehicles are also able to perform a certain level of autonomous activities such as travelling.

³ In May 2014, systems for controlling robotic weapons were discussed for the first time at an informal meeting of the United Nations Convention on Certain Conventional Weapons (CCW).



(Bipedal walking type unmanned vehicle: Boston Dynamics website)

Japan's National Security Secretariat was established in January 2014. The MOD sent me to the Cabinet Secretariat in May 2013 to draft the National Security Council Establishment Law, and I continue to work at the secretariat now.

The National Security Secretariat runs the National Security Council as part of its planning and coordination efforts to ensure that individual policies handled by ministries and agencies are sufficiently coordinated and to ensure that national security policy is consistent. My primary role is to ascertain the current state of issues requiring attention while considering points of contention in the National Security Council and the policies that should be put in place.

Making good policy requires sharing information among everyone involved and having earnest policy debates. The Ministry of Defense has extensive knowledge about defense and military matters, while the Ministry of Foreign Affairs is well versed in areas such as regional affairs, international law, the economy, public relations, and culture. In fact, various ministries and agencies provide the National Security Secretariat with a wealth of information, both in terms of quality and quantity. My own work entails experiencing something new every day, whether its attending visits by Secretary General of the National Security Secretariat, Mr. Yachi, to the U.S. and Europe or witnessing firsthand the struggles made overseas by Japanese diplomats. The knowledge I have acquired through working in the Ministry of Defense serves as a foundation for new information and experiences that are creating new ideas.

At a time when international affairs are becoming increasingly strained and opaque, it is critical that our government comes together and makes use of the depth and breadth of the wisdom of its ministries and agencies to fully protect the foundation that support Japanese citizens' well-being. To serve as lubricant to make this mechanism work, we, staff of the National Security Secretariat, are working hard towards our goals together from state-level perspective.



Shigeyuki Uno (far back), attending talks with U.S. Secretary of Defense Hagel and Director General of the National Security Secretariat Yachi

Difference between “Dynamic Defense Force” and “Dynamic Joint Defense Force”



The NDPG 2010 specified to build a dynamic defense force, which proposed the concept of deterrence by conducting continuous and strategic implementation of ISR (intelligence, surveillance and reconnaissance) activities. However, due to recent increasing and prolonged gray zone security situation trends – (the situation that is neither exactly peacetime nor conflict), and the concern that such situations could escalate into a more serious situation, the security environment surrounding Japan is becoming more severe. For these reasons, the concept of the NDPG 2010 may no longer be adequate to maintain or build the required deterrence capabilities to respond to such situations. Based on this background, the new NDPG the new NDPG propose to prevent escalation of situations, demonstrating Japan’s resolution to protect the country and its high capabilities, through strategic implementation of training and exercise to adapt to changes in situations, and responsively reinforce defense posture through prepositioning of units to respond to security environment and rapid deployment. This shows a new concept of deterrence to replace with the concept of deterrence proposed in the NDPG 2010, mainly focusing the ISR activities, to deal with circumstances with higher intensity, responding to the increasingly severe security environment.

The Statement by the Minister of Defense, which was released when NDPG 2010 was formulated, stated that, “not only ensuring the “quality” and “quantity” of equipment but the amount of the SDF activities will be the focus.” However, as the “Dynamic Defense Force” does not include the logic of defense force build up to develop both the “quality” and “quantity”, the focus was placed solely on an increase in the “amount of activities” of defense force. Therefore, it had to be said that ensuring the “quality” and “quantity” of defense force that supports the activities of the SDF, which increasingly require higher effectiveness than before, had not necessarily been sufficient.

In the light of such a situation, the concept of “Dynamic Joint Defense Force” presented by the new NDPG, for the first time, implemented the capability assessment based on a joint operation regarding various anticipated circumstances, from the viewpoints that ensuring not only the amount of activities but also a sufficient level of “quality” and “quantity” of defense force will be required in order to build an effective deterrence particularly in the present security environment. Based on this, the following points were determined: functions and capabilities that require particular emphasis will be drawn from a comprehensive perspective; assured ensuring of maritime supremacy and air superiority; ensuring “quality” and “quantity” of defense force by focusing on developing the mobile deployment capability; strengthening a wide range of logistical support foundations in order to perform a variety of activities in an effective manner.

Deployment of Ground Troops to the Southwestern Region and Enhancement of Rapid



The GSDF has decided to promote the following operations to strengthen the defense posture in the southwestern region based on a three-step concept of deterrence and response: “dispatch of units from peacetime”; “rapid deployment”; and “recapturing.”

[Dispatch of Units from Peacetime]

- First, deploy dispatch a GSDF coast observation unit to Yonaguni Island to organize the structure required to carry out regular and persistent ISR activities.
- Also, strengthen the posture of the remote islands in the southwestern region defense by establishing area security units in the remote islands where no SDF units are deployed, in order to enable an immediate response in the case of various contingencies, including disasters.

[Rapid Deployment]

- In order to be able to respond swiftly to and deal effectively and nimbly with various situations, the GSDF will transform two divisions and two brigades respectively into two rapid deployment divisions and two rapid deployment brigades that are furnished with advanced mobility and ISR capabilities. In doing so, the rapid deployment divisions and brigades shall introduce mobile combat vehicles (MCVs) suitable for transportation by aircraft and other means, as well as organize rapid deployment regiments that immediately respond to various situations.

[Recapturing]

- In a bid to conduct sufficient amphibious operations, which land, recapture and secure without delay any remote islands that might be invaded, an amphibious rapid deployment brigade (tentative name) of several regiment-scale units specializing in amphibious operations will be established.

In order for the GSDF to implement a more effective, new defense posture in the southwestern region, it is essential to improve rapid deployment capability of the GSDF units and to be able to carry out swift and flexible nation-wide operations.

To achieve this, new equipment such as tilt-rotor aircraft, amphibious vehicles and MCVs will be installed, as well as organizing a new integrated headquarters (Ground Central Command (tentative name)) that controls the regional armies of the GSDF, as well as promote efficiency and rationalizing command and control function of each regional army headquarters. At the same time, a “mobile ground defense force that responds rapidly” will be established to realize a Dynamic Joint Defense Force.

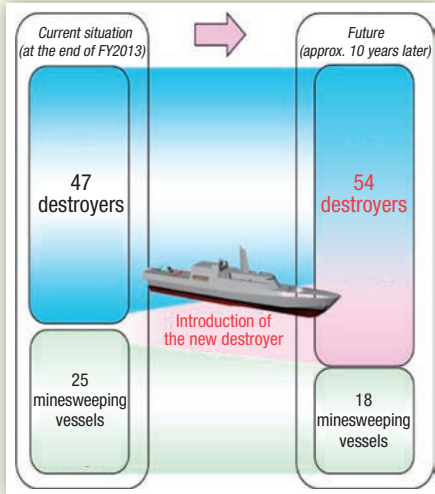
Increasing the Number of Destroyers and Submarines

The new National Defense Program Guidelines specify to ensure sea superiority in order to effectively conduct various operations, such as around-the-clock surveillance and anti-submarine warfare, and to secure the defense of the surrounding waters and the safety of maritime traffic.

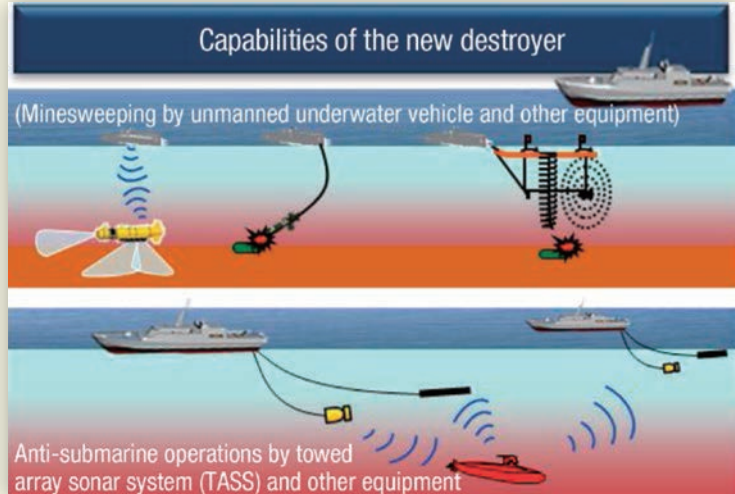
For this reason, in terms of the MSDF squadron, the guidelines specify to increase the number of destroyers to 54, and the number of submarines from 16 to 22, following on from the 2010 Guidelines.

In accordance with this increase, the total number of escort divisions and submarine divisions will be increased by one unit, respectively, from the current number of divisions, resulting in 14 destroyer units and 6 submarine divisions.

In addition, in light of the increase in the number of destroyers, for the purpose of securing the necessary capabilities, “new destroyers” will be introduced while taking account of the cost situation. The new destroyers will be equipped with detachable facilities, as well as capabilities for anti-mine operations which were traditionally conducted by minesweeping vessels, in order to respond to various operations. Furthermore, the body of the destroyer will be made more compact compared to the existing general purpose destroyers, by carefully selecting equipment and functions. For example, they will be equipped with a towed array sonar system (TASS) instead of a sonar system on the body. The detail will be reviewed with the Ministry of Defense, aiming to start procurement in the second half of the period of the new Mid-Term Defense Program.



Future posture of destroyers and other vessels (plan)



Functions of the new destroyer (Minesweeping by unmanned underwater vehicle and other equipment)

Enhancement of the Posture of Air Defense and Patrol and Surveillance

For the purpose of enhancing the defense posture in the southwestern region, the ASDF plans to increase the number of F-15 fighters at Naha Air Base from one squadron to two squadrons. In addition, in order to keep up with the modernization of military air power of the surrounding countries and to ensure the ability to take adequate response in future, it is planned to modernize the current F-15 fighters and improve the capability of F-2 fighters, as well as continually introduce of F-35A fighters, which procurement started in FY2012. Furthermore, in light of the operational posture of the fighter units and the geographical characteristics of the southwestern region, it is planned to introduce new aerial refueling/transport aircraft required for the fighter units to conduct various operations in the airspace surrounding Japan.

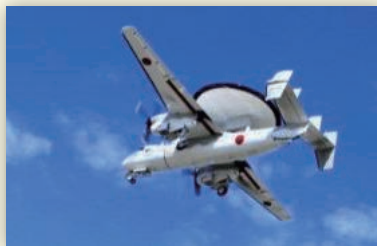
Moreover, the capability of surface-to air PATRIOT guided missile system will be further improved, and new interceptor missile with advanced capabilities (PAC-3 Missile Segment Enhancement [MSE]) will be introduced, which is capable of responding to cruise missile and aircrafts, as well as conducting ballistic missile defense (BMD).

In addition to such efforts, considering the situation that military activities are becoming more active in other countries in the sea areas and airspace surrounding Japan, including the southwestern region, it is planned to develop an infrastructure to deploy a mobile air control and warning radar in the offshore islands in the southwestern region, and to improve the current E-767 airborne warning and control system (AWACS), in order to ensure a watertight surveillance posture in peacetime.

Since the territory of Japan includes many offshore islands, the role of airborne early-warning groups that complement the fixed warning and control radars is important for the surveillance of the airspace surrounding Japan. Considering this situation, a new squadron consisting of E-2C early warning aircrafts, the 603rd Squadron, was established at Naha Air Base in April 2014, for the purpose of further enhancing the surveillance posture in the southwestern region. Furthermore, a new airborne warning and control system (AWACS) will be developed in the future, due to the necessity of ensuring the surveillance posture that can respond to various situations from the earliest stage for a prolonged period of time.



F-15 fighter



E-2C early warning aircraft



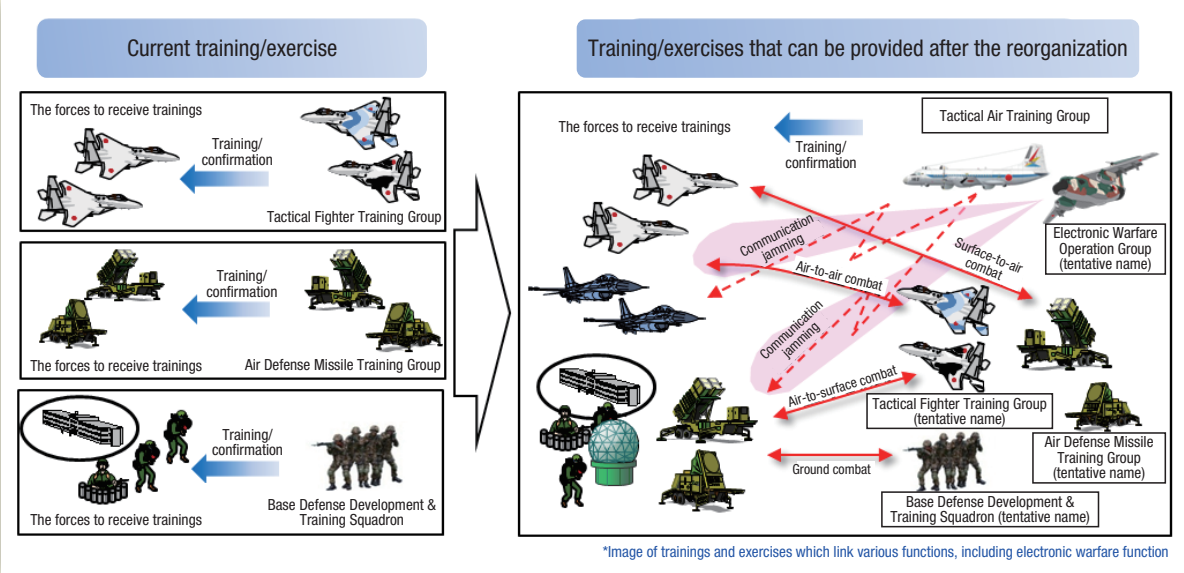
F-35A fighter

Formation of the Tactical Air Training Group

Recent years have witnessed phenomenal modernization of equipment and enhancement of military technology accompanying scientific and technological advancements. Accordingly, it is demanded that the Ministry of Defense adapt appropriately to the changes in the combat style at the tactical level, including electronic warfare and unit operations that utilize networks. Therefore, in FY2014, to more effectively improve the SDF's advanced tactical skills in order to prevent the relative decrease of Japan's air defense capabilities and to ensure the maintenance of air superiority, the ASDF has announced it would reorganize the groups that provide trainings and exercises and that are under the direct control of the Air Defense Command, including the Tactical Fighter Training Group (Nyutabaru Air Base), the Air Defense Missile Training Group (Hamamatsu Air Base, Chitose Air Base) and the Base Defense Development & Training Squadron (Hyakuri Air Base), as well as groups related to electronic warfare, into the Air Tactics Development & Training Wing.

Previously, investigation and research related to combat skills, tactics and trainings for the forces were provided by the training units that are organized by function in the ASDF.

The formation of the Air Tactics Development & Training Wing will enable not only to operate units by function as before, but also to conduct systematic and continuous investigation and research of combat skills and tactics in which multiple functions are linked. Furthermore, providing trainings in which various functions, including electronic warfare function, are linked will improve the capacity of the operation of units and enable effective responses to various situations.



Introduction of Endurance Unmanned Aerial Vehicles (EAVES)

The new National Defense Program Guidelines considers that it is becoming more and more important to respond to various situations at the right time and in the right manner, and to grasp military movements of other countries in peacetime in order to protect lives and property of Japanese people and defend Japan's territorial land, waters and airspace without fail, as well as ensure information superiority by conducting persistent ISR activities in a wide area surrounding Japan to detect various signs at the early stage.

In light of this perspective, unmanned aerial vehicles (UAV) have superior capabilities, as they can confine the danger and burden to the crew and conduct persistent ISR activities in a wide area. UAVs are essential for the Ministry of Defense and SDF to respond to various situations in the current security environment, since they can gather information in relatively remote areas from Japan's territorial waters and airspace, which is difficult to do with the SDF's current equipment, as well as conducting persistent ISR activities in the airspace when the situation turns into an emergency.

For this reason, the new Mid-Term Defense Program specifies to introduce UAV in order to ensure the security in the sea areas and airspace surrounding Japan and to enhance intelligence capability.



Endurance Unmanned aerial vehicles (UAV) (image)

Reemployment of SDF Pilots

- The reemployment system for SDF pilots is intended to prevent the outflow of young pilots to civil aviation companies in an unregulated manner, and for the employment of SDF pilots over a certain age by civil aviation companies.
- The SDF started this system in 1962 in order to ensure the appropriate age composition of SDF pilots and maintain the strength of the ASDF. So far, approximately 750 pilots of fighters and transport aircraft have worked at civil aviation companies and elsewhere.
- According to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), due to the expanding demand for air transportation in the Asia-Pacific Region, approximately 4.5 times more numbers of pilots will be necessary by 2030, and it is expected that there will be a shortage of 9,000 pilots per year. As there is a high demand for the trained SDF pilots among civil aviation companies, especially new ones, allowing transfer of SDF pilots over a certain age within a reasonable level that does not interfere with the missions of the SDF is meaningful from the viewpoint of development of Japan's aviation industry.
- In view of the important roles the reemployment system has played to date, the Ministry of Defense announced it would re-start the system on 14 March 2014, taking the neutrality and fairness of official duties into consideration. The Ministry will also promote the appointment of those pilots reemployed under the reemployment system as SDF Reserve Personnel to support the operations of the forces.

Air Defense Identification Zone (ADIZ)

- The Ministry of Defense defines the Air Defense Identification Zone (ADIZ) in the area surrounding Japan in order to identify aircrafts flying around Japan by using radar and take effective countermeasures against intrusions into Japanese airspace.
- Generally, the ADIZ is set by each country as its own air defense measures; however, it does not mean that it defines the boundaries or areas of territorial airspace or land for the country.
- The ADIZ of Japan is used to identify the nationality of the aircraft flying around Japan and whether there is a danger of intrusion into Japanese airspace, and to judge whether scramble should be conducted. For example, if a fighter with unidentified nationality is flying toward Japanese airspace through the ADIZ, ASDF fighters will scramble, regarding the situation as "a danger of intrusion." On the other hand, an aircraft that merely passes through the ADIZ does not usually make it a target of scramble actions.
- As above, not all the aircraft flying across the ADIZ are regarded as the target of scramble actions in Japan. For example, in terms of civil aircraft, the flight plans are usually submitted to the aviation authorities in advance in accordance with international standards, and therefore, the aircraft of other countries flying across the ADIZ will not be regarded as a target of scramble actions, as long as they follow the planned courses and fly under the control of the air traffic controller. As such, Japan's ADIZ does not infringe the principle of the freedom of overflight over the high seas recognized under international law.



What kinds of international rules are there concerning ocean navigation?



First, there is the United Nations Convention on the Law of the Sea, which sets out that the high seas are open to all states. The law establishes the concept of “freedom of the high seas.” This concept includes the notion of free surface and air navigation, allowing all nations’ ships and aircraft to freely navigate oceans and the airspace above them in principle. As this right is recognized by international law, any violation of this right is impermissible.

Furthermore, free surface and air navigation are recognized in exclusive economic zones (EEZs).

On the matter of territorial water navigation, all nations’ vessels may in principle continuously and swiftly pass through other nations’ territorial waters in a manner that is not “prejudicial to the peace, good order or safety” of that coastal nation. This is referred to as the “right of innocent passage”. As a general rule, coastal nations are not allowed to interfere with other nations’ innocent right of passage. On the other hand, in the case of airspace, foreign aircraft is not subject to the right of innocent passage. As such, flight through territorial airspace requires the permission of that nation.

What happens when a foreign country’s vessel passes through territory not subject to the “right of innocent passage”?



The United Nations Convention on the Law of the Sea establishes that actions such as using force against a coastal nation, gathering military information or conducting military training, fishing, and surveying are not considered “innocent.” In order to prevent such non-innocent passage, coastal nations are able to take necessary measures in their own territorial waters.

In such cases, if said foreign vessel is in violation of Japanese law, measures will be taken, such as stoppage of the vessel and on-the-spot inspection. For example, continued intentional loitering of a foreign vessel within Japan’s territorial waters violates the Act on Navigation of Foreign Ships through the Territorial Sea and Internal Waters and permits Japan to forcibly remove such vessels from its waters.

However, under international law, warships or government vessels for non-commercial purposes belonging to a foreign nation are generally exempt from foreign jurisdiction, and coastal nations are not permitted to take measures such as on-the-spot inspections and seizures.



VOICE

Voice of SDF Personnel on Warning and Surveillance Operations

— Comments from the Squadron Commanding Officer



JASDF Hamamatsu Airbase (Hamamatsu City, Shizuoka Prefecture)
Lieutenant Colonel (ASDF) Hidetoshi Tsurugai, Commanding Officer, Airborne Early-Warning Group, Flight Warning and Surveillance Wing, the 602nd Squadron
(currently Captain, 5th Aircraft Control and Warning Squadron, JASDF Central Aircraft Control and Warning Wing)

The 602nd Squadron operates the E-767 early warning and control aircraft (AWACS) and is in charge of warning and surveillance operations for areas surrounding Japan. The E-767 is operated by approximately 20 air crew, each of whom are delegated operational responsibilities such as operating aircraft, radar, and communications equipment, or overseeing warning control and intelligence operations with a day-to-day solemnity.

Since September 2012, the number of scrambles as air space anti-intrusion measures has increased in Japan. As an ASDF personnel protecting Japanese airspace, I feel it is a worthwhile task to undertake these warning and surveillance operations at the front lines amid this intense security environment. We work day and night with a persistent sense of urgency, heightened awareness, and sense of duty.

I feel a great sense of pride but also great responsibility when getting into one of the only four E-767s in the world to carry out these duties. I will continue to work with this E-767 AWACS and the crew of the 602nd Squadron to steadfastly defend Japan's airspace.



Hidetoshi Tsurugai (far right) commanding personnel during a warning and surveillance operation



An E-767 taking off for an aircraft warning mission in the Southwest area

A New Chapter for the 603rd Squadron — Comments from a Squadron Commander

JASDF Naha Air Base (Naha City, Okinawa Prefecture)
Lieutenant Colonel Masao Murakami, 603rd Squadron Commander,
Flight Early-Warning Group, Airborne Early-Warning Group



Created on April 20, 2014, the 603rd Squadron is the JASDF's newest unit. As its first commander, I lead the 603rd Squadron's daily warning and surveillance operations in the airspace of southwestern Japan.

In the Southwest, despite the extremely vast amount of airspace subject to warning and surveillance, there are a limited number of warning control radar systems installed. The 603rd Squadron therefore has to do its surveillance from the air and from a distance. While it is not an easy task to perform warning and surveillance of such a wide area, we work day and night with a strong sense of duty and urgency with the belief that our efforts directly contribute to the defense of Japan.

Our unit was originally based in Misawa Air Base in Aomori Prefecture. It was after the unit's realignment was decided that the personnel and their family members, along with our equipment, made the hasty move to Okinawa. To be honest, I'm sure that the realignment conducted in such hectic circumstances created hardships at times for the personnel. But to put it the other way around, it goes to show that the assignment demanded of us is important, and I find this work very rewarding.

Recent years have seen an increase in aircraft scrambling by the ASDF, and detecting as far away as possible aircraft that could intrude into Japanese airspace allows us to respond more quickly. We intend to dedicate ourselves to a unified effort as the 603rd Squadron, never letting our guard down as the first line in our nation's defense.



Ceremony to mark the creation of the 603rd Squadron



Masao Murakami (right) receiving the unit commander's standard from the Minister of Defense Onodera

Q&A

Formation of the Amphibious Rapid Deployment Brigade (Tentative Name)



The new National Defense Program Guidelines specifies to formulate the Amphibious Rapid Deployment Brigade (tentative name). What is the role of this brigade?



At present, a regiment unit which consists of approximately 700 personnel called the Western Army Infantry Regiment is based at JGSDF Camp Ainoura in Nagasaki Prefecture. The role of this regiment is to respond to the invasion of offshore islands of Japan by guerillas and special operations force, as well as conduct disaster relief operations. It currently has the functions to conduct amphibious landing operations to the islands by a helicopter or boat, however, in order to defend the territory of Japan, which consists of more than 6,800 islands, it is extremely important to develop a new capability that can respond to full-scale amphibious operations, in which rapid deployment of forces is required.

The Amphibious Rapid Deployment Brigade (tentative name) is specialized in the defense of islands, and consists of approximately 3,000 personnel that will be divided into units for conducting amphibious landing, units for operating amphibious vehicles, units for providing fire support for the amphibious landing, and other units. It is planned to be organized by FY2018.

In order to accumulate know-how on amphibious operations, the GSDf has been conducting combined trainings with the U.S. Marines since 2005, and their proficiency is highly praised by the U.S. Marines.



GSDf Western Army Infantry Regiment personnel jumping off from a moving helicopter one after another during an infiltration exercise

What is the difference between the U.S. Marine Corps and the Amphibious Rapid Deployment Brigade (tentative name) in terms of conducting amphibious operations?



The U.S. Marine Corps has well-balanced, various capabilities required for amphibious operations such as amphibious landing, fire support, and maritime transport. It is capable of taking the initiative to conduct amphibious operations. On the other hand, the Amphibious Rapid Deployment Brigade (tentative name) conducts amphibious operations as a joint operation with the MSDF and ASDF and is different from the U.S. Marine Corps in this regard.



Q&A

Cyber Defense Group



What is the Cyber Defense Group?



The Cyber Defense Group was launched at the end of March 2014 with the aim of capably responding to threats from increasingly sophisticated and complex cyber attacks. The group provides 24-hour monitoring of the MOD and the SDF network and response to situations involving cyber attacks.

What will change with the establishment of the Cyber Defense Group?



The Cyber Defense Group will allow for the centralized collection of and research into information pertaining to cyber attack threats, information that had previously been decentralized among the various SDF departments. Accordingly, the results of these efforts will be shared throughout the entire MOD, and will enhance efforts aimed at improving security throughout the government and further bolster collaboration with the private sector. As an example, currently, the group is raising the level of government-wide security through efforts that include sending personnel to the National Information Security Center (NISC). Leveraging the achievements of the group going forward will make an even greater contribution to initiatives at the government at large.



Will the protection of the defense industry, critical infrastructure, and other private companies fall under the purview of the Cyber Defense Group?



At present, there are no plans to have the Cyber Defense Group provide direct protection for systems and networks owned by private corporations involved in national defense or critical infrastructure. However, collaboration with organizations in the defense industry is a priority for the MOD. To collaborate with private organizations, the Cyber Defense Collaboration Council (CDC) was established in 2013 as an intermediary between the MOD and the defense industry, with information sharing and other initiatives being explored. Through such endeavors, the future state of collaboration with the private sector will also be considered



Ceremony for the Presentation of the Unit Flag to the Cyber Defense Group

Japan-U.S. Cybersecurity Cooperation

Seeking the ideal means to ensure the stable and continued use of cyberspace, the MOD and SDF facilitate better coordination with related ministries and agencies, as well as organizations in other countries. In particular, close cooperation on protecting cyberspace as a platform supporting numerous operations is critical between Japan and the U.S., which share an alliance.

Director General-level and Division Director-level staff have been holding regular meetings among different departments to discuss various issues related to information communication. Initiatives are also underway at various levels among Japan and U.S. defense personnel, one of which includes the establishment of the Japan-U.S. Cyber Defense Policy Working Group (CDPWG), whose actions include policy-level talks.

In the 2+2 Meeting in October 2013, an agreement was reached to improve collaboration on initiatives concerning cyberspace, a new strategic sector. In addition, developing a response to issues pertaining to topics such as cyberspace was established as one of the objectives of reviewing the Guidelines for Japan-U.S. Defense Cooperation. These and other initiatives demonstrate the important role that cyberspace will play in future Japan-U.S. defense collaboration, and it will be important to utilize the framework of the newly-established CDPWG to push Japan-U.S. cyber collaboration to a new level. Going forward, efforts seeking to resolve cyberspace-related issues will be further bolstered while further coordination is sought with cyberspace-related talks between the U.S. and Japan, which represent a framework for the U.S. and Japanese governments as a whole.



Japan-U.S. Cyber Defense Policy Working Group (CDPWG)

Participation in Disaster Relief Activities (the Tsubaki Rescue Operation) in the Search for Persons Gone Missing Following Typhoon No. 26

JGSDF Camp Nerima (Nerima-ku, Tokyo)

Lieutenant Colonel (GSDF) Jun Kameyama, Regimental Executive Officer, JGSDF 1st Infantry Regiment



Acting on orders from our Commanding General in the 1st Division in connection with a request for assistance from the Governor of Tokyo on October 16, 2013, we immediately set out for the site.

With human lives our primary duty, we fought through landslides, building rubble, and driftwood day and night. We worked to find the survivors as quickly as possible as we thought about how worried their families must be. In addition, for this disaster relief effort, a joint task force comprised of GSDF, MSDF, and ASDF personnel—each with their own duties—was formed. Even if the locations and specifics of the work they performed varied, everyone was the same in their concern for the victims.

As we carried out our efforts, elementary school students held up handmade signs near the airport and around town to offer us encouragement. The sight of the children filled us with great strength and reminded us once again that the SDF exist to serve local communities and the people of Japan.



Elementary school students (in Izu Oshima) supporting disaster relief personnel with handmade placards

1st Transport Unit, JMSDF (Kure City, Hiroshima Prefecture)

1st LCAC Unit

Lieutenant (MSDF) Terukuni Yoshida, then-Craftmaster (now employed with the 1st Transport Unit)

The mission we had been given in this disaster relief effort was to transport heavy machinery and vehicles belonging to the JGSDF, police, and other organizations that had been loaded onto the “Osumi” transport vessel in Yokosuka to Oshima. We used LCACs (landing craft air cushions) to transport pistons between transport vessels on standby on and off the coast of Oshima and got many vehicles onto land.

During our first transport effort, under the pressure of the “72-hour time limit after which the probability of survival is said to plummet,” we used 2 LCACs to conduct nonstop operations for 27 hours, which I had never experienced.

The long hours no doubt exhausted those in the unit. Yet, because of our sense of mission in the relief effort and the slogan of “all for the victims”, we curiously felt little fatigue until our mission was completed.



An LCAC performing a landing on Izu Oshima

JASDF Iruma Airbase (Sayama City, Saitama Prefecture)

Technical Sergeant (ASDF) Kazuki Kitamura, 402nd Air Wing, 2nd Air Transport Unit

Typhoon No. 26 in Izu Oshima in October 2013 caused large mudflows and other damage. The disaster relief efforts conducted by GSDF, MSDF, and ASDF personnel in response included searching for missing persons and distributing relief goods. As an air transport crew member in the 402nd Air Wing, my responsibilities included transporting goods and personnel to the affected area in a C-1 transport aircraft.

Some of the specific duties of air transport crew members providing disaster relief are transporting goods, vehicles, and personnel needed for air-based searches, and loading and unloading daily necessities for affected areas into and out of transport aircraft. We also used the aircraft to evacuate elderly hospital patients to the mainland.

These efforts saw everyone in the 2nd Tactical Airlift Group work day and night with those in the 1st and 3rd Tactical Airlift Groups to fly here and there and carry out our duties. While I sincerely hope such a disaster never happens again, I am dedicated to daily training to keep myself fully capable of responding with everything I have in the event that I am ever called upon to perform similar duties.



Kazuki Kitamura, inside a C-1 transport aircraft

South Sea Rescue Field Exercise

JGSDF Camp Zentsuji (Zentsuji City, Kagawa Prefecture)
 Second Lieutenant (GSDF) Yuji Izumi, Training Officer, Medical Corps, 14th Logistics Support Unit



The South Sea Rescue Field Training Exercise conducted by the JGSDF Middle Army in October 2013 was done in preparation for an earthquake originating in the Nankai Trough. With central support from Kochi Prefecture, the training focused on—among other things—establishing response guidelines and coordinating with related local governments.

The medical corps that I am a part of works with the Kochi University Medical School Hospital, which has been designated the central hospital for disasters in the prefecture. In addition to building first aid centers and hospital rooms and deploying outdoor surgery systems, the corps coordinates with related organizations such as DMAT¹ as part of the emergency medical care we provide. During training, Kochi University Nursing School students acted as patients and told us their conditions with a strong sense of realism. As makeup had been used to make bodily wounds look genuine, trainees constantly worked with a sense of urgency.

Emergency transport to a wide-area medical evacuation center² and DMAT transport to isolated regions let us closely coordinate with MSDF warships and JGSDF helicopters.

As an earthquake originating in the Nankai Trough would cause extreme destruction, I hope to use the experience gained in this training exercise and continue to improve my skills in order to save as many lives as possible should such occur.



GSD medical personnel checking a patient's condition in collaboration with DMAT

¹ DMAT (Disaster Medical Assistance Team): A highly-mobile medical team dispatched during the acute stage of a disaster (roughly within 48 hours after the disaster occurs)
² Wide-area medical evacuation center: A facility that temporarily accommodates patients brought in from disaster sites

VOICE

For Young People Who Will Ensure Maritime Security in the Future

—Short-Term Exchange Program for Next-Generation Naval Officers

MSDF Staff College (Meguro-ku, Tokyo)

Captain (MSDF) Toshihiko Inomori, International Planning Group Leader, Planning Section, Planning Department



Organized every year by the MSDF Staff College, the Short-Term Exchange Program for Next-Generation Naval Officers seeks to promote cooperation among countries through their navies. Naval officers of Lieutenant Commander class from various countries come to Japan and interact with the student MSDF personnel in the school's Command and Staff course for approximately two weeks.

The program, which began in 2000, originally targeted Pacific Rim countries. 2010 saw the program expand to countries in South Asia, the Middle East, and Africa, and the contents of the program have changed significantly. Program participation grows each year, with 23 countries participating in 2013.

In FY2013, the program included lectures, training, and seminars focused on "issues faced by navies." We lectured our security policy and so on to promote understanding of the participants from each country, and the training session provided an opportunity for participants to strengthen relationships. Planned primarily by students from the college, the seminars allowed for wide-ranging discussions concerning how to ensure maritime security and the sharing of seamanship knowledge.

The participating naval officers, who were all of commanders, had a certain amount of work experience and an flexibility as young people. I believe the exchange program comes at the right time to encourage interactions among the naval officers who will see to ensuring the security of their countries in the future. We continue to conduct this program with the expectation that these participants will lead the way in further naval cooperation among various countries over the next 10 to 15 years as the people who will ensure maritime security.

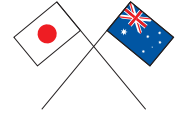


Participants from the Djibouti Navy, receiving a course completion certificate from the Principal of the JMSDF Staff College

VOICE

Defense Attaché (Australia)

Embassy of Japan in Australia
Captain (MSDF) Hiroyuki Nakamura, Defense Attaché



Working in the capital city of Canberra at the Embassy of Japan in Australia makes me realize how the defense relations between Japan and Australia are becoming stronger at an accelerated pace. The frequency of meetings involving the Ministry of Defense and SDF participation, training and other forms of operational coordination, and interaction among Defense Attachés aimed at collecting military intelligence are clearly increasing.

The deepening of Japan-Australian relations became clear in the rescue efforts for Malaysia Airlines flight 370. The SDF dispatched two SDF P-3C patrol aircrafts to Perth in Western Australia. These joint rescue efforts with Australia, which demonstrated the cooperative capability our countries nurtured through joint training, and the fluidly-conducted maintenance and supply operations that took advantage of the Japan-Australia Acquisition and Cross-Servicing Agreement, showed the ability of MSDF air units and Australian Air Force patrol units to work together in a practical capacity.

Our National Security Strategy establishes Australia as a partner that shares universal value and strategic benefits, and dictates ongoing efforts to enhance our cooperative relationship. Australia reform its national defense capabilities and framework by 2030. With the peace and stability of areas around Japan a key contributor to Australia's national interests, the importance of maintaining good relations between Japan and Australia will continue to grow.

Although there is sometimes trouble in living here because of cultural and lifestyle differences, as Defense Attaché, I will continue to work being proud to be involved in strengthening Japan-Australia relations, and I look forward to making my life abroad an even more fulfilling one.



Hiroyuki Nakamura
(in front of the Embassy of Japan in Australia)

Japan-U.S. Defense Chief Security Dialogue



In April 2014, the Chief of Staff of the Joint Staff made a visit to the United States and held a meeting with the U.S. Chairman of the Joint Chiefs of Staff at the Defense Chief Security Dialogue.

The two chiefs exchanged opinions regarding the necessity of strengthening deterrence and response capabilities of the SDF and the U.S. Forces according to the trend in the Asia-Pacific Region and through enhancement of defense cooperation between Japan and the United States, and also discussed about the role of each country's military capabilities through a review of the Guidelines for Japan-U.S. Defense Cooperation.

The dialogue started in 2013 between the United States and the allied countries, and this was the first one held between Japan and the United States.

As the security environment surrounding Japan is becoming increasingly severe, frank exchange of views through direct dialogue between the top-level uniformed personnel of Japan and the United States has extremely important significance for the peace and stability not only in Japan but also in the region.

During this dialogue, the Chief of Staff of the Joint Staff and the U.S. Chairman of the Joint Chiefs of Staff agreed that the SDF and the U.S. Forces will continue sharing information and promoting efforts to improve the effectiveness of bilateral actions between Japan and the United States, in order to effectively respond to common security issues, while maintaining the long-term strong relationship based on the Japan-U.S. alliance.



Chief of Staff, Joint Staff Iwasaki and U.S. Chairman of the Joint Chiefs of Staff Dempsey at the Japan-U.S. Defense Chief Security Dialogue

Deployment of the U. S. Forces Equipment with Advanced Capabilities (Such as P-8 Patrol Aircraft and Global Hawk) to Japan

The United States has been promoting efforts that place a focus on the Asia-Pacific Region (rebalance to the Asia-Pacific Region), and as announced in the Joint Statement of the U.S.-Japan Security Consultative Committee (2+2) on October 3, 2013, Japan and the United States confirmed that deployment of equipment with more advanced capabilities to Japan has a strategic importance and will contribute to the security of Japan and the region. Among other measures, the United States intends to deploy its equipment including MV-22 Osprey, P-8 patrol aircraft, Global Hawk, and F-35B to Japan in order to modernize its capabilities. In December 2013, six P-8 patrol aircraft were deployed by the U.S. Navy to Kadena Air Base, as part of the phased replacement of P-3 aircraft, for the first time outside of the United States. Replacing with P-8 patrol aircraft, which has more advanced capabilities, will improve patrol capabilities of the United States Forces Japan. As for Global Hawk, the temporary deployment to Misawa Air Base started in May 2014. Once the stable operation of Global Hawk has been established, the intelligence capability of the U.S. Forces will be further improved. The deployment will improve deterrence capabilities of the U.S. Forces in Japan, which consequently will contribute to the defense of Japan and maintaining the peace and stability of the region surrounding Japan.



P-8 patrol aircraft deployed to Kadena Air Base



Global Hawk of the U.S. Air Force arriving at Misawa Air Base
(Website of U.S. Misawa Air Base)

(ADMM)-Plus Humanitarian Assistance and Disaster Relief (HA/DR) and Military Medicine (MM) Exercise

Colonel (GSDF) Yoshitaro Matsushita, Deputy Director of Medical Logistics, Joint Staff (medical)



I participated in this exercise, which was organized by ADMM-Plus, in June 2013.

Based on the idea that relief efforts and medical assistance would be needed in the event of a disaster, this training was conducted in host country Brunei as a joint effort between the Experts' Working Group on Humanitarian Assistance and Disaster Relief¹ on HA/DR² and the Experts' Working Group on Military Medicine (EWG on MM³). The training scenario has a relief unit, including medical teams from various countries, gathering to provide relief, receiving a request from a nation hit by a large typhoon. Fleet, aircraft, rotorcraft, and medical treatment teams from Japan participated in the exercise.

Due to the necessity for relief efforts to be tailored to the affected nation during a disaster, it is essential to have a multinational coordination center (MNCC⁴). For this exercise, I was the leader on the Japan side for the MNCC. My assignment was to ensure effective relief efforts by integrating all avenues for receiving a variety of requests from the affected region into the MNCC, coordinating with the leadership of each country's military, and conducting appropriate and timely dispatch of rescue forces. A standard operating procedure (SOP⁵) from the medical field proved very helpful in our activities. This SOP was created mainly by Japan and Singapore as the co-chairs for the military medicine aspect of ADMM-Plus. The exercise had each country treat and evacuate disaster victims according to the SOP and verify the effectiveness of the SOP. It was a major achievement that these countries were able to go beyond differences in tradition and culture to create the SOP, which I believe will play a major role in future international relief efforts. The exercise also served to strengthen relationships between each country's military and to foster trust.

- 1 EWG (Expert's Working Group)
- 2 HA/DR (Humanitarian Assistance / Disaster Relief)
- 3 MM (Military Medicine)
- 4 MNCC (Multi-National Coordination Center)
- 5 SOP (Standard Operating Procedure)



SDF medical corps personnel talk about therapeutic measures with an Indonesian medical officer



Medical treatment being administered by personnel from Japan, Brunei, and Indonesia

The Fifth Japan–ASEAN Defense Vice-Minister-Level Meeting



From 17 to 19 February 2014, the Fifth Japan–ASEAN Defense Vice- Ministerial Forum was held in Ginowan City in Okinawa Prefecture. It was held outside Tokyo for the first time, since the government is promoting international conferences in Okinawa Prefecture, and it also provided an opportunity for the participants to deepen understanding of various aspects of Japanese culture.

One of the agendas at the meeting was the possibility of cooperation between Japan and ASEAN in terms of equipment and technology in non-traditional security fields. It was the first time that cooperation in the equipment and technology field was discussed at the forum. The participants expressed their expectation for cooperation in the response to natural disasters, which is one of the challenges in the Asia-Pacific Region, specifically in terms of transportation capability of the MOD and the SDF, and equipment and technology cooperation in the field of command and communication system and sensors.

In addition, on the last day of the meeting, the MOD introduced equipment and technology in the non-traditional security fields to the vice-ministers of other countries, through the panel exhibition and display of the actual equipment, including explosive ordnance disposal robots, through-wall human detection equipment, and hand throw type reconnaissance robots. At the exhibition venue the participants were listening to the explanation attentively and asking a lot of questions, which showed their great interest in equipment and technology cooperation between Japan and ASEAN countries.

The year 2013 marked the 40th anniversary of ASEAN-Japan Friendship and Cooperation, and further cooperation and development is necessary. It is important to continue promoting efforts to look for specific and practical cooperation through events such as Japan–ASEAN Defense Vice- Ministerial Forum.



A scene from the exhibition of equipment

VOICE

New World —Participating in Vehicle Maintenance Training

Timor-Leste Defense Force
Logistic Service Component Maintenance Company Abraon De Jesus Mendes

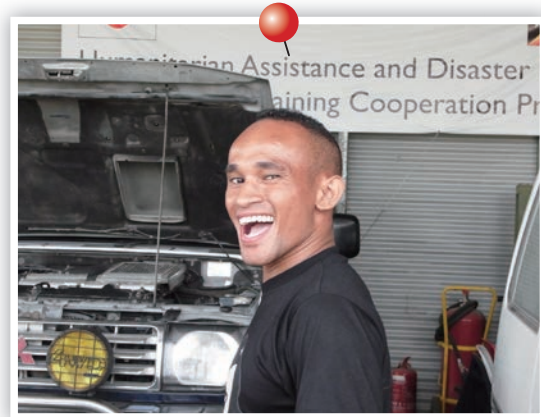


I joined the Timor-Leste Defense Force in 2009 out of a desire to defend the independence of East Timor and contribute to social progress as a soldier.

I became part of the Maintenance Company, where my senior serviceman taught me about changing tires and oil. The Ministry of Defense began offering vehicle maintenance training in December 2012, and it made me very happy to have been able to take part in phase I and II. Opportunities to systematically learn about vehicle maintenance are virtually nonexistent in this country. The latter half of phase II, in particular, provided a nonstop stream of new experiences as GSDF members became my instructors. We always chatted each other up when working and did cleaning during breaks. Although it was difficult to get good at being punctual and communicating, I learned that doing so was a major part of teamwork and safety management. At the end, instructors showed me how to perform maintenance in the field and their speed astounded me. My goal now is to study hard and become able to repair the many non-operational vehicles sitting at camps.

I really enjoy training with GSDF personnel. The instructors teach us closely and repeatedly review things we find difficult. Break times find us teaching each other Tetun and Japanese, and every day I learn to say more and more.

Someday I would like to see one of the GSDF maintenance garages where my instructors work. I also plan to work hard to see that the Timor-Leste Military, so lacking in many things, can one day repair vehicles by themselves.



At auto mechanics garage

Collaboration between the Multilateral Joint Military Exercise Cobra Gold and the Official Development Assistance

The MOD and the SDF participate in a multilateral joint military exercise (Cobra Gold), which is held in Thailand annually, hosted by the United States and Thailand, and is proactively promoting efforts to improve the joint operation capabilities of the SDF, various skills and the collaboration capability in multilateral operations. At the “Cobra Gold 14,” the SDF conducted operations under the collaboration with the Official Development Assistance (ODA), which was the first case in its training.

During the training, five personnel from a medical team of the SDF provided healthcare treatment and consultations to the residents in rural areas of Thailand. In collaboration with this operation, the Ministry of Foreign Affairs (Embassy of Japan in Thailand) decided to provide healthcare facilities equipped with beds and medicine cabinets to three primary schools through the Grant Assistance for Grassroots Human Security Projects; thus contributing to improving welfare in Thailand in a tangible form.

The MOD and the SDF will continue working in close collaboration with the Ministry of Foreign Affairs on a regular basis in the civilian sector such as healthcare assistance. It is expected that the combination of the international contribution schemes of each organization will produce a synergy effect, which will enhance the effectiveness of international cooperation.



Japanese Ambassador to Thailand Sato presenting the architectural rendering of the school infirmary to the Ministry of Education of Thailand



An SDF medical officer examining a local resident

Embassy of Japan in Thailand Political Division, Researcher Saya Kiba

Prior to the “Cobra Gold 14,” the local elementary schools that were used for the training sites had requested the Embassy of Japan in Thailand to provide support for creating healthcare facilities that can be used by the local residents after the training. Following this, the embassy conducted field research and at the same time requested the Royal Thai Army and the U.S. Forces to provide public health data. Through such coordination, it was decided to provide healthcare facilities that will help to improve basic medical care services in the local area. During the training period of “Cobra Gold 14,” the SDF medical team provided health education and treatments at these elementary schools, and Shigekazu Sato, Japanese Ambassador to Thailand, attended the groundbreaking ceremony for the healthcare facilities.

The collaboration between the SDF and ODA has been implemented previously in various countries where international peace cooperation activities were conducted, including Iraq, Haiti, Timor-Leste, and South Sudan. This collaboration in Thailand was a trial case to find how a synergy effect can be achieved in Japan’s international cooperation activities through the coordination and collaboration between the SDF and the embassy and a valuable opportunity for the Ministry of Foreign Affairs as well to deepen understanding of the SDF’s international peace cooperation activities. It was also a valuable experience for the SDF to deepen understanding of economic cooperation.

VOICE

Participation in Submarine Rescue Exercise in the Western Pacific (Pacific Reach 2013)

JMSDF Submarine Flotilla 2 (Kure City, Hiroshima Prefecture)
Captain (MSDF) Eiji Futa, Commanding Officer, Chihaya submarine rescue vessel



This submarine rescue vessel exercise was conducted in the Western Pacific by nations with submarine rescue capabilities with the goal of improving these capabilities and strengthening relationships of trust among these nations' navies. This exercise has been conducted every two to three years since 2000. This was the 6th exercise to have been conducted, and was the second time Japan participated as the host, the first being in 2002. Japan, Republic of Korea, and Australia were the three participants with warship units. The U.S. and Singapore were the core training coordinators, with numerous other countries participating as observers.

Conducted in September 2013, the exercise plan had to be altered in response to a typhoon that had arrived in the area. However, amid harsh environmental circumstances marked by high waves in the aftermath of the typhoon, a deep-submergence rescue vehicle of the Chihaya submarine rescue vessel, docked to a submarine on the ocean floor assuming the occurrence of an accident and rescued its crew. By placidly carrying out their duties in the face of stormy weather, we were able to demonstrate the impressive extent of the MSDF's submarine rescue vessel capabilities, seen as some of the greatest in the world. I believe the exercise taught everyone much about submarine rescues and provided valuable experience, along with strengthening relationships of trust among the navies of the participating nations.



Eiji Futa (center), engaged in an operation at the RIC (Rescue Information Center) on the Chihaya submarine rescue vessel

VOICE

Firsthand Account of Defense Cooperation and Exchange

JGSDF Camp Ichigaya (Shinjuku-ku, Tokyo)
Sergeant (GSDF) Major Tomoyuki Nakata, Policy and Programs Department, GSO (currently the-Central Intelligence Unit)



For the roughly 4 years since being assigned to the International Policy Planning Section (currently the International Security Cooperation and Policy Office) in 2010, my duties have included interpretation and English translation of materials used in meetings.

Defense cooperation and exchange continues to be a critical means of fostering trust. Although due to the time differences between Japan and our counterpart countries there were often coordination work done over late night or early morning international phone calls, I always felt my work was rewarding and approached it with pride.

It is no easy task to maintain good relations with the U.S. Army, Marine Corps, and other countries' ground forces. I give the greatest possible attention to every word and phrase I utter and every word I write to avoid miscommunicating our intentions to our counterparts. Although the work requires a great deal of mental stamina and perseverance, I will continue dedicating myself every day to fulfilling my duties.



Tomoyuki Nakata (left), interpreting at a conference among military personnel

* This column was written when Sergeant Major Nakata was a member of the Policy and Programs Department of the GSO.

VOICE

America-Japan-Australia Trilateral Exercise (Exercise Cope North Guam)



JASDF Tsuiki Airbase (Chikujo-gun, Fukuoka Prefecture)
First Lieutenant (ASDF) Taiji Yamashita, Arms Platoon, Armament Maintenance Squadron,
8th Air Wing Maintenance Supply Group

I took part in the Japan-U.S.-Australia Trilateral exercise among air forces in Guam (Cope North Guam 14) as a Support and Maintenance Team Member in the F-2 Fighting Fleet in February 2014. The aim of the exercise was to improve pilots' tactical skills, and the Support and Maintenance Team's mission was to provide various forms of support including preparing the aircraft and ordnance to be used in the exercise to ensure that operations went smoothly from start to finish. To this end, we worked closely with all relevant departments to make the arrangements for USAF facilities and regulations, conducting the exercise without issue. I was impressed by the well-mannered treatment shown to us by the United States Air Force and Royal Australian Air Force personnel throughout the course of making arrangements with relevant departments, and each organization learned about how to maintain each other's aircraft in our interactions. The experience was an extremely valuable one that allowed us to learn more about each other and strengthen friendships.

I believe the coordination among the three countries will be deepened further in the areas of not only security but also disaster relief and humanitarian assistance. I hope to make the most of this valuable experience and promote further understanding and trust among U.S., Japanese, and Australian personnel.



Japanese, U.S., and Australian maintenance personnel who participated in Cope North Guam 14 (Taiji Yamashita: front row, far right)



In this globalized age where people, capital and information transfer freely between borders, there have been new kinds of threats emerging such as natural disasters and terrorism, which call upon an international cooperation to address.

We can see some examples of such cooperation from past earthquakes or flooding in many countries, including the recent case of the missing flight MH 370 of Malaysia Airlines where many countries dispatched their ships and planes to aid in the search.

Such joint operation requires effective coordination. In Asian countries, especially, a kind of unofficial coordination that relies on personal networking is highly essential to success.

I had a chance to study at the National Defense Academy of Japan (BODAI) during 1975-1979 as the 23rd term student and was one of the first Thai students there funded by the Thai government. Back then, there were other foreign students there only coming from Singapore. By now, there are more than 150 Thai military graduates from BODAI working in all the three services of the Royal Thai Armed Forces. Every year, at a class reunion in Bangkok, we can hear all the alumni gathered at the reunion sing the school anthem “Boei Daigakko Gakuseika” altogether at the end of the event. It is a truly rare thing to see outside BODAI.

In coordination both between countries and armies, the BODAI alumni networking is greatly helpful. Even if some alumni don't know each other personally, they can coordinate easily thanks to this connection.

At present, BODAI provides education for students from many ASEAN countries. From this, we can see the growth of this network in ASEAN which will contribute to joint cooperation in the future.

All the foreign alumni have received education and training to make them good military officers. If the Ministry of Defense of Japan gives them further opportunities to go back and study courses in Japan such as professional courses in each field and senior courses, it will allow them to grow further in their government service career, and will strengthen this BODAI alumni network.



Admiral Tanarat Ubol (far right), receiving a visit from and exchanging views with a former academy exchange student, currently working for the Information Fusion Center in Singapore.

Strengthening Relations Between Fellow Squadron: No. 3 Squadron of the Royal Air Force (RAF) and 201st Squadron JASDF



ASDF Chitose Air Base (Chitose, Hokkaido)

Lieutenant Colonel (ASDF) Yoshifumi Nakata, Squadron Commander, the 201st Squadron, 2nd Squadron
(Currently at Defense and Operation Division, Headquarters, Air Defense Command)



The 201st Squadron of the ASDF based at the ASDF Chitose Air Base and the No. 3 Squadron of the RAF based at RAF Coningsby announced a sister squadron relationship on July 18, 2013 as part of efforts to strengthen collaboration and exchange between Japanese and British defense forces.

Sister squadrons are flight units that regularly conduct activities together. In 2013, three members of the No. 3 Squadron, including Commanding Officer Ian Townsend, visited the 201st Squadron, exchanging views on topics such as squadron duties and flight operation and boarded one of the ASDF's F-15s. Through the exchange, it was an extremely interesting experience that reminded us of the many similarities we share in areas such as the operation of our units, and illuminated our differences in things like the extent to which we each use simulators.

We will be visiting the No. 3 Squadron of the RAF next, and I am eagerly looking forward to the discoveries we will make together. I hope to continue strengthening the bond we share with the No. 3 Squadron of the RAF so that we can further improve our skill in running our units.



Japanese and British sister squadrons, strengthening relations
(Wing Commander Townsend: 3rd from left, Lieutenant Colonel Nakata: 3rd from right)



The two squadron commanders who completed a signing ceremony for the sister squadron.

RAF Coningsby (Lincolnshire, England)

Lieutenant Colonel Ian Townsend, Wing Commander, No. 3 Squadron



In response to an agreement made by the RAF Chief of the Air Staff in August 2011 during a visit to Japan, No 3 (Fighter) Squadron (3(F)Sqn) were tasked to conduct an exchange visit to Japan in order to establish a UK/JASDF sqn-based affiliation.

3(F) Sqn were selected to participate in this exchange as 2 Japanese officers had previously served with the Sqn. In Oct 1927, Lieutenant Yoshir Kamei of the Imperial Japanese Navy became the first RAF foreign exchange officer, followed by Captain Sersuku Namba^(note) from the Japanese Air Service who were to study the organisation, flying operations and daily running of an RAF fighter sqn.

In Jul 2013, 3 officers from 3(F) Sqn visited Chitose Airbase and were hosted by the 201st TFS. The aims of the visitors from the UK were very similar to those of the Japanese officers almost 90 years earlier with an emphasis on sharing information on how we conduct fighter operations. Of particular interest was the similarity in approach taken between the 2 nations in homeland defense and the delivery of Quick Reaction Alert fighters, a role undertaken at both RAF Coningsby and Chitose Airbase.

Having been exceptionally well hosted, a strong relationship has been formed between the 2 Squadrons and regular correspondence is undertaken updating each other on activities. A reciprocal visit to the UK is planned in the summer (2014) where 3(F) Sqn will, once again, host Japanese officers.

Note: Kanji characters are unknown because no corresponding record on the Japanese side remains.

VOICE

Participating in the Multinational Combined Task Force (CTF 151)

JMSDF Escort Division 4 (Kure City, Hiroshima Prefecture)
Captain (MSDF) Hiroaki Tajiri, Escort Division 4 Commander



I assumed this post in December 2013 as part of the 17th Counter-Piracy Marine Unit and served in this capacity until April 2014. In addition to the escort missions which the SDF has done, my unit has started to participate in Combined Task Force 151 (CTF 151).

CTF 151 is a multinational initiative led by the U.S. that seeks to address counter-piracy operations. Units from the participating countries conduct surveillance (zone defense) for designated waters based on the laws of their country and in coordination with CTF 151 headquarters.

When we received reports in January 2014 from a ship that had been attacked by pirates, aircraft was sent out from the destroyer Samidare on a search. It found and began tracking a suspicious vessel. The operation was later handed over to a P-3C patrol aircraft, a French naval vessel belonging to an EU unit. The suspicious vessel turned out to be of Indian registry and had been boarded by pirates. The crew was safely released and the pirates arrested. Our success was the product of effective information sharing and coordination among each country's counter-piracy units, and was an achievement that demonstrated the consummate professionalism on the part of each unit member towards the missions they were given.

That same month our convoy was visited by the Commander of CTF 151, Commodore Aage Buur Jensen of the Royal Danish Navy. The visit proved to be a valuable opportunity to exchange views concerning improving information sharing and cooperation towards making counter-piracy operations more effective.

Today, despite the unforgiving conditions we face so far away from Japan with temperatures above 50 degrees Celsius and humidity close to 100% on many of the days, we continued to engage in counter-piracy operations to maintain maritime traffic safety, contribute to the stability and development of Japan, and help ensure peace and stability among the international community.



CTF 151 Commander and Commodore in the Royal Danish Navy (front row center) and Hiroaki Tajiri (front row, second from left)

Japan International Cooperation Agency (JICA)
 South Sudan Office Director Atsushi Hanatani
 (currently Senior Research Fellow, JICA Research Institute)

JICA has been acting in Juba since 2006, and after the dispatch of the SDF to UNMISS from 2012 onwards has been cooperating with the SDF in the support of nation building in South Sudan. The SDF has assisted us in carrying out ODA projects such as the construction of the water treatment plant and the preparation of a site for the jetty alongside the Nile River. JICA in turn has helped the SDF in the road maintenance task by conducting a technological survey on the road. Through these activities the SDF and JICA have enhanced their partnership and have also conducted joint road cleanup campaign, in which they cleaned up the roads with the local residents with the intent of raising the locals' awareness of how to dispose waste adequately.

Although worsened public safety in December of 2013 forced JICA personnel to evacuate the country, I hope public safety and ODA/PKO coordination will be soon restored.

UNMISS Headquarters

Captain (GSDF) Junko Araki, Intelligence Officer
 (currently with the International Peace Cooperation Activities Training Unit, JGSDF Central Readiness Force)

I am working in Juba as an intelligence officer for #5 UNMISS Headquarters since January 2014.

The JMAC (Joint Mission Analysis Center) where I work is staffed with 23 personnel, composed of civilians, military personnel, and police officers. As part of the Information Management Group, I work with majors from the Netherlands and Yemen and am primarily responsible for putting data gathered from within and outside of UNMISS into databases and preparing statistical data related to battles, crimes, domestic evacuee numbers, etc. in South Sudan.

Although I sometimes have a hard time because of the unstable situation I must work within, including a deteriorating security situation in South Sudan since December 2013, and the highly-restrictive living conditions, every day is extremely fulfilling as I communicate with people of different nationalities within and outside of the tasks we perform while acquiring expertise in information management from different countries and learn so much from other cultures and past missions in which I have participated.

I am grateful that I have been a part of the UN missions through my work at the UNMISS Headquarters and would like to accomplish my duties till the very end of my term.

* This column was written by the author during her field work.



Atsushi Hanatani (center), cleaning the road with SDF personnel



Junko Araki (left), coordinating with UNPOL (UN police) personnel

Manuals for the United Nations Peacekeeping Operations Units



The United Nations (U.N.) which has been conducting reconstruction supports for many countries in which national land was destroyed by conflicts and other crises facilitating the effort to create manuals for the U.N. peacekeeping operations (PKO) units as part of new initiatives in order to clarify the capabilities required for the PKO units, and to promote understanding of the participating countries. This initiative is based on the intention to improve the efficiency of the PKO units' operation, and the manuals will be used as guidelines when units from different countries participating in PKOs are to conduct joint missions, and when training the troops in their countries before dispatch.

The manuals will be created according to types of forces, such as engineer and aviation, and will incorporate topics including the capabilities, missions, equipment, and organization of units that are required in each field.

Japan is involved in the creation of manuals in three fields: engineer, logistics, and transportation. For the Engineer Unit Manual Working Group consisting of 23 countries, Japan has been selected as the chair country since the activities of the Engineering Unit in Cambodia, Timor-Leste, Haiti, and South Sudan, where it is currently dispatched, are highly praised, and Japan has been selected as the chair country of the "Engineer Unit Manual Working Group," in which 23 countries are participating, and is leading the formulation of the engineer unit manual. The first Workshop of Engineer Unit Manual was held in Tokyo in March 2014, and experts from the participating 14 countries and three international organizations exchanged opinions regarding the basic concept toward the formulation of the engineer manual.

At the opening remarks, Minister of Defense Onodera expressed Japan's intention to actively promote efforts for the formulation of the manual, as a country that plays a leading role in international peace cooperation activities.

Working toward the completion of the manual in the early 2015, Japan will continue taking the initiative to lead other countries in the effort to formulate the engineer unit manual.



The first Workshop of Engineer Unit Manual (Tokyo)

VOICE

Participation in International Emergency Relief Efforts in the Wake of Typhoons in the Philippines

4th Escort Flotilla, MSDF (Kure City, Hiroshima Prefecture)
Rear Admiral (MSDF) Hisanori Sato, the 4th Escort Flotilla Commander



Since the international disaster relief efforts it carried out in Honduras in 1998, the SDF have since taken part in 13 instances of international disaster relief activities. The international disaster relief joint task force that went to the Philippines was one of the largest ones in our history. Under the joint task force commander, a medical treatment and flight support unit, a marine detachment, and an air transport unit were formed and led by the GSDF, ASDF, and MSDF, respectively. These units performed relief efforts in affected areas as the first joint task force with a mission overseas.

In the afflicted areas, the medical treatment team in the medical treatment and flight support unit patrolled different areas providing medical care and performing other duties, the air transport unit transported relief goods and typhoon victims temporarily evacuating the area, and the marine detachment maintained a center for marine operations for the medical treatment and flight support unit. When I was sent to help as the joint task force commander, I wanted very much to repay the Philippines for the support unit they quickly sent to Japan to help after the Great East Japan Earthquake. My top priority was accurately ascertaining the situation on the ground and what was needed, and I focused on ensuring efficient support operations.

Our rescue efforts involved numerous instances of working with units from not just the disaster-stricken Philippines but also the UN, U.S., UK, Australia, and other countries. Through this experience, I felt deep down that not only had we helped the Philippines, but we had also improved relations with other countries.



Hisanori Sato (left of center), exchanging views with U.S. commanders

VOICE

6th Logistics Support Regiment (Higashine City, Yamagata Prefecture)
First Lieutenant (GSDF) Yukino Oshiro, Operation Training Officer, Medical Care Team of
the International Disaster Relief Unit



As the Medical Operation Officer for the Medical Care Team of the International Disaster Relief Unit in the Philippines, I was in charge of liaison and coordination with local medical care providers and other organizations. Working in those conditions amid a tangle of confused information, I got a direct sense of the importance of not only accurately identifying medical needs but also ensuring good coordination with different countries from the outset.

The thorough Japanese medical care we provided to the victims on site earned us their deep trust, and the great acclaim we received for our meticulous support so distinctive to Japan was a great source of happiness and pride for me as a member of the medical care team. It was a very meaningful experience to have helped provide medical care and other services as part of the international disaster relief activities carried out by the SDF with their excellent disaster relief capabilities, and to have been able to support people from so many different countries.



Yukino Oshiro (far right) with nurses from the Philippines Department of Health

VOICE

JASDF Komaki Airbase (Komaki City, Aichi Prefecture)
Captain (ASDF) Hiroko Mochizuki, the 401st Squadron, the 1st Air Transport Unit Group



From November 15 to December 20, 2013, the 401st Squadron dispatched two C-130H transport aircraft to assist in international disaster relief efforts in the wake of the typhoons in the Philippines. My contribution as a copilot involved flying between Manila and afflicted areas, airlifting typhoon victims and relief goods allocated to Japan by a multinational coordination center. Looking at the disaster sites from the aircraft, the landscape was full of trees and houses blown or knocked down by the typhoons. Although relief efforts continued for days on end, typhoon victims carrying air cargo formed long lines every day at the airport. Among the support provided by numerous countries in these efforts was the help from U.S., Australian, and Philippine military forces in loading and unloading cargo. Being a part of it all made me realize the importance of air transport when major disasters strike and the expectations that the countries in the Asia-Pacific region have for Japan. The experience also served as an opportunity to work alongside female soldiers from various countries and taught me about the role women play in international support efforts and the extent of their involvement.



Local support personnel and Hiroko Mochizuki (center)



Royal Navy liaison officer
Lieutenant Commander Joe Currin



JS DDH ISE and HMS ILLUSTRIOUS exchanged liaison officers during Relief Operations in the Philippine Islands in 2013. As the Royal Navy representative, I had the privilege of spending a week onboard JS DDH ISE working with the Joint Task Force (JTF) staff of the SDF. I joined ISE on November 27 after she had completed several days of operations delivering aid to the Eastern Philippines. HMS ILLUSTRIOUS was positioned off the island of Panay in the west. However both ships shared a common purpose and approach to their respective operations. Providing assistance to those affected by Typhoon Haiyan was the primary focus for all onboard HMS ILLUSTRIOUS and within the Japanese JTF. Whilst attending daily JTF meetings I witnessed a number of structures and procedures that are similar to our own; it is clear that tradition and protocol are an important part of the JMSDF and they draw close parallels to the RN. I very much enjoyed my time on board ISE together with the SDF personnel while they performed their Relief Operations. As Island nations our Maritime Forces share much in common. This exchange has reinforced our similarities in terms of ethos and doctrine.



Joe Currin conducting a briefing (center)

Working at the Organisation for the Prohibition of Chemical Weapons (OPCW)



The Organisation for the Prohibition of Chemical Weapons (OPCW) (The Hague, Netherlands)
Former Major General (GSDF) Ichiro Akiyama, Director of Inspectorate (first term: 1997-2002,
second term: 2004-2009)

The OPCW monitors the state of efforts to dispose of chemical and other weapons through member nation reports and inspections by the Inspection Division. During my first term as the organization's first Director of Inspectorate, I and 230 staff from 57 countries began inspection operations. My second term saw me replace nearly half of my staff in order to innovate operations that had begun to lose substance. Both of these tasks were quite difficult.

When I resigned, the Director-General gave me an undeserved compliment, saying he was "grateful for my integrity and competency." I also had the honor of attending the ceremony when the OPCW won the Nobel Peace Prize in December 2013. I am proud that I, however unwittingly, played a part in "Proactive Contribution to Peace" espoused by Prime Minister Shinzo Abe.

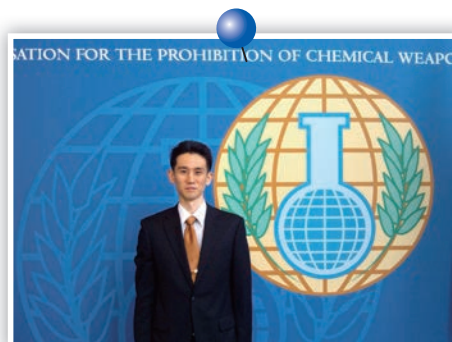
The capabilities and dedicated efforts of Japanese nationals, including the personnel dispatched from the GSDF, have been highly valued at the OPCW. This is the result of the GSDF continued efforts to develop human resources through language training, synthesizing and analyzing chemical substances, and disposing of aging chemical weapons, and is what I want everyone in Japan to know.



November 28, 2013 – Ichiro Akiyama, making a courtesy call on Prime Minister Shinzo Abe ahead of the Nobel Peace Prize ceremony for OPCW (Cabinet Public Relations Office)

The Organisation for the Prohibition of Chemical Weapons (OPCW) (The Hague, Netherlands)
Captain (GSDF) Shintaro Seino, Inspector

Many people in Syria, including young children, have become victims of a toxic chemical attack delivered by 140 mm rockets. My duty as an inspector at the OPCW is to monitor the disposal of chemical weapons at chemical weapon disposal facilities and other locations and verify the number of such weapons. While the activities on site are conducted in a very hot and demanding environment, I plan to make the most of the education and work experience gained through the GSDF and dedicate myself to the destruction of all chemical weapons.



Shintaro Seino at OPCW headquarters
(with the OPCW logo in the background)

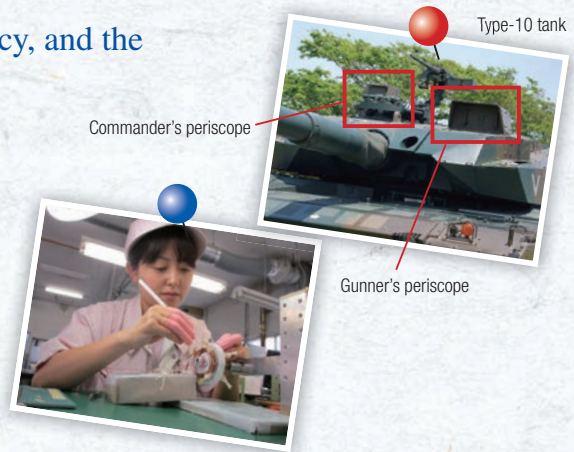
**Product Development Dedicated to Angle Accuracy, and the
Craftsmanship Behind Its Success**

Tamagawa Seiki Co., Ltd.
No. 1 Office Manager Takashi Kumagai

Following its founding near the Tamagawa River in 1938, Tamagawa Seiki Co., Ltd. built a factory in Iida City, Nagano Prefecture, the hometown of the company's founder. There it built oil gauges for aircraft during the Pacific War. The company continued to work for the defense industry even after the war, developing quality products that began with angle sensors, servomotors, and gyro instruments. In addition to equipment mounted on tanks and other combat vehicles (power amplifiers, slip rings, gun turret rotation and boom hoisting motors, etc.), recent years have seen our company making sophisticated machinery including control systems for flying objects, land-based systems, aircraft, and ship-mounted equipment.

One of Tamagawa Seiki's distinguishing features is the sensors that use winding wire, which is where the company began, and most of the angle sensors and winding wire for motors used for defense, air, and space applications are handmade by women. Our high-precision angle sensor magnet wire is 0.1 mm gauge or lower, and the sophisticated craftsmanship involved in putting dozens of coil bundles into an iron core without error while maintaining a steady tension when winding allows us to make high-precision products.

Winding has been perpetuated as women's work at Tamagawa Seiki, with techniques being passed down over the years. It takes at least five years for a person to become able to do winding work on their own, and our company has endeavored to build a workplace that allows women to keep working even after marriage and childbirth. As we move forward, we will continue to maintain the characteristics that allow us to focus on quality.



An employee conducting winding work for a resolver (angle sensor) that turns into parts of commander's periscopes and gunner's periscopes

Bringing High Precision Grinding Techniques to the Next Generation

President Yasuhiko Yotsui, Yotsui Kousakusyo, Ltd.



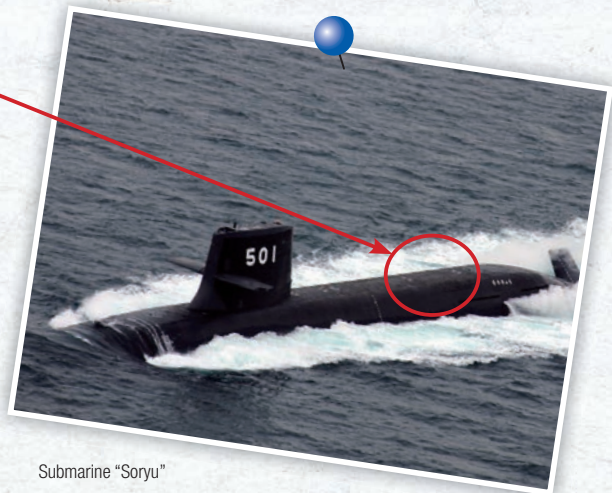
For almost 100 years since our founding in 1917, Yotsui Industries has been engaged in shipbuilding as a subcontractor to a builder in Kobe. Nearly 100% of the products we make are for defense applications, and our focus is on the production and repair of parts for submarines and escort vessels. We have been working with submarines since 1957 and the Oyashio, the first submarine Japan built after the war, in our efforts to provide high-quality products using manufacturing technologies developed through many years of experience and achievements.

Because of the environments in which submarine parts are used, high pressure resistance is an extremely important factor in their production. Just as in space, even the slightest opening can cause disaster for submarine passengers. Movies have shown scenes where the actor closes a hatch in a passageway to prevent water from flooding an adjacent area. Manufacturing these hatches requires scrupulous attention and many years of experience, and is only possible using 1/1000 mm grinding techniques. Over the last 10 years, we have consistently hired younger workers and engaged proactively in the transfer of techniques from older to younger employees, techniques which have been developed through experience for which mere machining techniques are no substitute.

Although it is often said recently that young people today have no affinity for manufacturing, I believe we can engender in our workers a dedication to high quality and a passion for work by making them aware of their role in our country's defense.



Conducting grinding work for a submarine hatch



Submarine "Soryu"

Serious about our Mission to Protect Aircraft and Passengers with Highly-Practiced Skills

Yuichiro Matsushima, Aircraft Division Manager and Senior Managing Director, Fujiwara Co., Ltd.



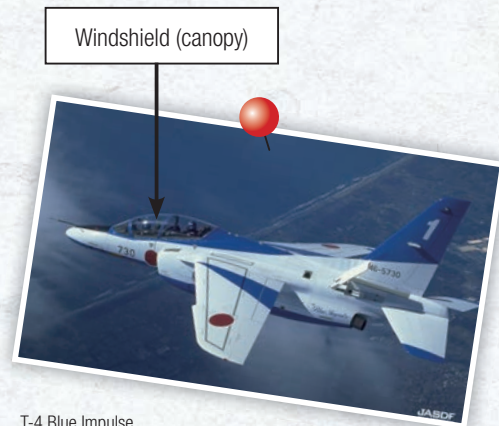
Fujiwara Co., Ltd. was founded in Nagoya soon after the war ended. We are the only manufacturer in Japan who has made windshields for defense-related aircraft and helicopters for 68 years.

First, we produce semi-finished goods of complex shapes that start from primarily acrylic resins specially processed to be of high strength and precision. Then we use our own eyes to check for optical distortions and other phenomena that could obstruct pilots' field of view and thoroughly polish them out for the final product, employing sophisticated techniques achieved through many years of experience.

Much of what we do to satisfy needs in terms of optics is highly dependent on human sensation and sensibility, which cannot be clearly defined by rules or standards. It is no exaggeration to say that our production of windshield products is supported by the skills of our engineers, who have been with us for a decade or more. However, as it has been difficult to plan our business from a long-term perspective, our workforce of skilled workers has rapidly aged and there was a long period of time when few younger workers were hired. The passing on of our techniques has thus not proceeded as we would have liked, and we are now barely surviving by keeping retirees on. We now fully realize the importance of uninterrupted hiring of young people and their continued efforts in order to pass on the techniques that take so long to develop.



Polishing windshield glass



T-4 Blue Impulse

Check Out Dual Wavelength Infrared Sensors!

In our times, where computerization is at such an advanced level, it is said that one's information gathering capabilities directly influence their abilities to fight. Thus, the sensors and devices that actually collect the information are playing an increasingly important role. In particular, infrared sensors are useful for detecting a variety of targets as they detect heat and can therefore be used anytime day or night. The SDF employs them in a range of equipment including searching and tracking systems, monitoring systems, missile guidance systems, and fire control systems.

The number of pixels in an infrared sensor is being increased in order to achieve high-definition infrared images that can pick up even minute details. Initiatives are underway to improve sensors' target extraction and discrimination capabilities by acquiring images at multiple infrared wave bands, which leads to gaining more information from the target objects.

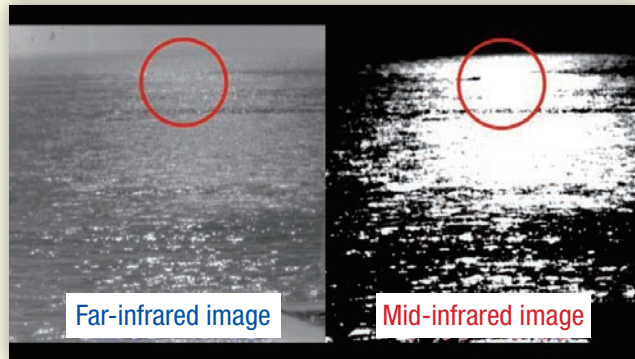
Dual band infrared sensors currently being researched at the Ministry of Defense are capable of taking infrared images at a 1024 x 1024 pixel resolution equivalent to HD at both mid- and far-infrared wave bands simultaneously. As for detector elements, by leveraging Japan's vaunted semiconductor technologies, quantum dot infrared sensors, which can be produced indigenously, were selected and for the first time in the world, a large number of pixels density and high-definition dual wavelength infrared sensors were materialized.

With dual wavelengths, we can anticipate improvements in acquiring images suited to a variety of environments as well as advanced target identification and discrimination capabilities. Dual band infrared sensors will also be useful among general consumers as a dual-use technology for ensuring safety and security (disaster prevention, security, and monitoring) as well as collision avoidance (in cars and robots).



High-definition dual wavelength sensor
(1024 x 1024 pixels)

Visibility of a small boat in images using two infrared wavelengths



Examples of images taken of a small boat navigating the sea, using two different wavelengths



The small boat becomes visible when the two images are combined

The High Technical School Soft Baseball Team, a National Tournament Winner!

JGSDF Camp Takeyama (Yokosuka City, Kanagawa Prefecture)
 Defense Instructor (Baseball Team Advisor) Tetsuya Tsurubuchi, High Technical School of the JGSDF



The Soft Baseball Team of the High Technical School of the JGSDF (“High Technical School”) joined the Japan High School Baseball Federation in 2008. In the summer of 2013, its sixth year in the Federation, the team took part for the first time in the 58th National High School Soft Baseball Tournament and skillfully played their way to becoming the national champions.

The High Technical School allows students aged 15 through 18 who have graduated from a middle school to live a dormitory life studying and playing sports for three years while receiving an education to one day become SDF regular personnel. Students here can also receive their high school diploma thanks to a partnership with the Kanagawa Prefectural Yokohama-Shuyukan Senior High School.

In the tournament, the High Technical School Baseball Team played from August 26 to 30, shrugging off the pressure of being new to the tournament. They advanced smoothly for the brackets, achieving a walk-off win in the finals after going into extra innings against Nitta High School, a strong rival from Shikoku. In the final innings, an ace and then High Technical School student Samejima, despite having injured his right calf, marshaled his mental toughness and continued to pitch without complaint to avoid disturbing his fellow teammates’ concentration. The sight of his teammates single-mindedly protecting the field behind him and their words of encouragement (“even if they get a hit, we’ll get the points back!”) was what kept him going. It made my eyes well up with tears to later hear about their pitiful plight.

The 23 third-year students (including Samejima) of the 56 members of the High Technical School Baseball Team that took part in the tournament graduated on March 21, 2014, leaving their nest at the school to take up duties in defense of their country.



High Technical School Baseball Team members who received the championship flag and medal at the closing ceremony for the 58th National High School Soft Baseball Tournament (August 30, 2013)

60 Years with the GSDF's Reserve Personnel System and Voices of Reserve Personnel



The GSDF's Reserve Personnel system marks its 60th anniversary in FY 2014.

The SDF Reserve Personnel system, which seeks to respond to changes in the security environment surrounding Japan, has seen its own changes. Formulated in FY 1997, the SDF Ready Reserve Personnel system puts reserve Ready Personnel into frontline units alongside active-duty SDF personnel. The Reserve Personnel Candidate system, which targets those with no experience as SDF personnel, was put together in 2001 to develop and expand Japan's defense infrastructure, ensure stable procurement of SDF Reserve self-defense Personnel, and make effective use of the private sector's top-caliber specialized skills. The Great East Japan Earthquake in 2011 provided the first opportunity for Ready Reserve Personnel and Ground, Maritime and Air SDF Reserve Personnel to muster for disaster relief. Expectations among local communities and the country at large were fulfilled as Ready Reserve Personnel performed duties such as searching for missing persons and providing livelihood support while Reserve Personnel provided interpretation services, camp security, and other forms of logistics support.



First SDF Reserve Personnel call-up training

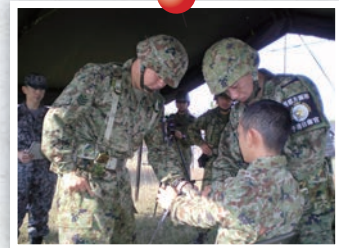


Poster for 60th anniversary of Reserve Personnel System

Reserve First Lieutenant (GSDF) Kiyoharu Hayata
Kumamoto Provincial Cooperation Office (Kumamoto City, Kumamoto Prefecture)
(Magokoro Adult Day Care Center, Koshi Suzukake Garden Director)

Participation in the Chinzei 25 Exercise

The first time I was called up for the Chinzei 25 exercise, which is conducted by the GSDF Western Army, was for five days in November 2013. Having been engaged in nursing-related duties during peacetime, the training provided me with many first experiences, among which were the transport of prisoners of war and other personnel and the receiving of them at collecting points. Although there were times when I was bewildered, the excellent examples provided by active-duty SDF personnel during training helped me a great deal. At the same time, feeling the weight of the responsibilities we would face as reserve personnel carrying out our duties alongside active-duty SDF Reserve Personnel in an emergency renewed my determination to enthusiastically participate in future training opportunities.



Kiyoharu Hayata (far right), conducting a body search for prisoners of war

Hiroshima Provincial Cooperation Office (Hiroshima City, Hiroshima Prefecture)
Reserve Leading Seaman Kenji Nakata
(Amami FM D-WAVE Broadcast Production Department)

Supporting the SDF that takes Responsibility for Security

My decision to become a SDF Reserve Personnel was a desire to help the SDF that takes responsibility for security in Japan. After my time with the SDF, I returned to civilian life as a salesperson back home in Amami Oshima. I currently work as an "operator," producing radio programs and manipulating broadcasting equipment. I have just joined the company and am still quite green with much to learn, but I work hard as part of the staff that make our daily radio shows a success. Just like our broadcasts, the SDF play an important role in disaster response and in emergencies as a highly respected organization that ensures the safety and security of the Japanese people. As a SDF Reserve Personnel I will keep my role in mind in order to execute my mission should a crisis occur.



On the job at a radio station

Aichi Provincial Cooperation Office (Nagoya City, Aichi Prefecture)
Reserve Airman First Class Yukinari Takeguchi, (Mitsubishi Heavy Industries, Inc.)

Preparing to Do My Part for the SDF

My work involves using the experience I accumulated with the ASDF to maintain equipment mounted on F-15 fighters at Mitsubishi Heavy Industries. The Great East Japan Earthquake occurred five years after I left the SDF. Watching media coverage of situations at disaster sites, I volunteered to become a SDF Reserve Personnel out of a desire to help in some way. Although I only have a little experience in the reserves, I plan to use the knowledge and experience I developed as an SDF personnel and dedicate myself to training so that I can do my part for the SDF in an emergency.



Yukinari Takeguchi, working at Mitsubishi Heavy Industries

Q&A

The MOD and SDF as Highly-Skilled Organizations



What kind of qualifications etc. do those working for the MOD or the SDF possess?



For the purpose of executing the missions reliably in any given situation, including situations involving defense and security, disaster response, and peacekeeping operations in foreign countries, the MOD/SDF possess the ability to act without relying on private infrastructure or technologies for a certain period of time, that is, "self-sufficiency" as an organization. Consequently, MOD officers and SDF personnel are equipped with a variety of qualifications and skills (e.g. SDF regular personnel, administrative officials, technical officials, and instructors).

For example, with regard to the operation of equipment, there are qualified personnel such as large special-purpose vehicle operators, licensed mariners, small boat operators, commercial pilots, automotive mechanics, weather forecasters, and wireless operators. There also are personnel with skills such as rangers, airborne personnel, divers, medical technicians, inflight technicians, gunners, buglers, and personnel skilled in combative techniques and/or skiing. Furthermore, at camps, bases, and other locations where personnel perform daily tasks, there are personnel who have special qualifications and skills such as architects, electricians, boiler engineers, hazardous material handlers, dietitians, network specialists, logistics personnel, and firefighters. Personnel support themselves to secure their own food, clothing, and shelter that serve as the foundation of SDF operations. In addition, medical doctors, nurses, pharmacists, emergency medical technicians, and other such qualified personnel engage in medical activities at SDF hospitals and camp clinics. Personnel with teacher's license also work at SDF educational institutions.

As such, the MOD/SDF has an aspect as an organization comprised of highly-skilled individuals with a variety of qualifications, which makes it a microcosm of our society.



Weather forecaster giving a briefing



Certified air traffic controllers conducting air traffic control

Making More Extensive Use of Hokkaido's Training Environment

With vast training areas that include the Yausubetsu Maneuver Area, Hokkaido-Dai Maneuver Area, and Kamifurano Maneuver Area, Hokkaido is home to about half of all the space dedicated to GSDF maneuver areas. It is an advantaged training environment that allows for a variety of training tailored to different training purposes and unit sizes.

To remain capable of quickly and precisely responding to a variety of situations such as an attack on an island in the area, the SDF must constantly expand and enhance various training programs. It is therefore critical to make more extensive use of the many advantages offered by Hokkaido's training environment.

While it may seem a burden for SDF to have to travel as far as Hokkaido, this traveling is itself critical to ensuring that GSDF units are capable of shipping out to anywhere in the country.

SDF units' proficiency will be further enhanced with new firing ranges that let SDF personnel take part in training involving a mix of weaponry including tanks and artillery, new landing training grounds for the newly-launched "amphibious rapid deployment brigade (name pending)," and even higher-quality training environments in Hokkaido.



Hokkaido's training environment (image)

VOICE

Female SDF Regular Personnel (Enlisted Personnel) Working in Various Locations

JGSDF Camp Kokubu (Kirishima City, Kagoshima Prefecture)

Sergeant (GSDF) Mami Nagae, Wire Communications Sergeant, 12th Infantry Regiment Heavy Mortar Company



I work as a wire communications sergeant with the Heavy Mortar Company. Like other SDF personnel, I conduct general affairs work after conducting various drills, including long-term exercises and training in such subjects as shooting, marching, and urban warfare. This keeps me very busy, and at times it is physically demanding.

In October 2013, I married a senior SDF personnel from the same company as myself. As we are both SDF personnel, if either of us is participating in an exercise or an educational program, it is hard to find time for the two of us. However, this in turn has allowed us to care for each other. I put effort into making breakfast even on days that I have rigorous training from the early morning, and my husband helps out with the housework. His “thank you always” makes it all the worthwhile. I hope we can continue to be a couple that support each other. I want to keep my family happy as a wife and at the same time steadily fulfill my national defense duties as an SDF personnel.



Mami Nagae (in front), conducting wire communications work during a company training

JMSDF Tateyama Air Base (Tateyama City, Chiba Prefecture)

Petty Officer Third Class (MSDF) Yukiko Noda, the 211th Squadron, the 21st Air Unit



I am the first woman to be working as a flight navigator in MSDF patrol helicopter. It was my experience in helicopter operations during the Great East Japan Earthquake that inspired me to become a flight navigator. During disaster recovery, I maintained the helicopters' electronic equipment. Many helicopters set out from Tateyama Air Base on search and rescue missions for people gone missing. Seeing the many civilians helping out gave me a strong desire to help as an aircrew member.

MSDF patrol helicopters are operated by two pilots and two flight navigators who duties include maritime patrol and rescue operations. Because of the small number of people involved, success is only achievable if every person carries out their duties to the fullest extent. This led to moments of frustration as instruction was sometimes harsh. However, I will keep training and continue working hard so that I can be a navigator capable of handling any task required of me.



Yukiko Noda, conducting preflight inspections

JASDF Iruma Airbase (Sayama City, Saitama Prefecture)

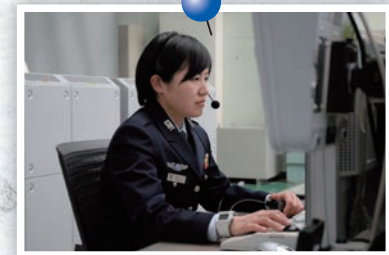
Staff Sergeant (ASDF) Kana Sakikawa,

Air Defense Control Unit, Central Air Defense Control Corps, Central Airborne-Warning Control Group



I am currently a member of the Air Defense Control Unit at Iruma Airbase. The unit's primary duties during peace time involve measures to prevent the encroachment of Japanese airspace, for which it conducts 24-hour surveillance operations using radar. The measures I undertake to protect Japan's airspace include scrambling interceptors when unidentified aircraft are detected. Recent years have seen increased aircraft activity around Japan's periphery, and the number of scrambles has increased. As such, my workplace has been engulfed by heightened tension on an increasing number of instances. At the same time, it is rewarding to work in an environment where there is no difference between men and women.

I will continue to be proud of the work I do in my mission to protect this blue sky as a member of the Warning and Control Unit on the front line of national defense.



Kana Sakikawa monitoring vessel wakes

Childcare Support from the Ministry of Defense and Self-Defense Forces



The hours worked by members of Ministry of Defense and the Self-Defense Forces, and SDF personnel in particular, are irregular due to things like night shifts and periods of regular personnel reassignment. To provide childcare services suited to self-defense force members' unique circumstances and ensure their ability to rapidly respond to situations, childcare facilities are being built inside government buildings, and systems are being put in place to allow parents to put their children in temporary care when suddenly called into work.

Childcare facilities inside government buildings provide services for children aged zero to preschool age that include extended day care, temporary childcare, overnight childcare, and emergency temporary childcare, in addition to basic childcare. The Ministry of Defense and SDF built childcare facilities at JGSDF Camp Mishuku in 2007, at JGSDF Camp Kumamoto in 2009, in the JMSDF Yokosuka Naval Base district in 2010, and at JGSDF Camp Makomanai in 2011. Another facility will be built in the JGSDF Asaka dormitory district in 2015.

Temporary childcare for when a disaster or other situation that urgently requires a parent's presence at the office involves temporarily providing childcare at a camp or base (150 locations as of March 31, 2013) for usually five days for children whose parents have nowhere else to turn and must check in for work. The necessary safety mats, baby bedding, and other necessities are provided.

There are also programs that include those that give parents time off to help ensure a good work-childcare balance. One of these is leave to look after children's health (including giving vaccinations and administering medical exams), which gives SDF personnel with children up to kindergarten age 5 days of leave a year if they have one child, and 10 days of leave for two or more. There are also personnel who arrive at work early and leave late, some of whom have kindergarten-age or younger children, send their elementary school-age children to afterschool activities, or look after a family member. These personnel are permitted to change their work start and end times without changing the number of hours they work in a day.



Childcare facility inside government building "Konohana Nursery" (Yokosuka area)

VOICE

Aspirations of First-Generation Nursing Students of the Medical Education Department at the National Defense Medical College



National Defense Medical College (Tokorozawa City, Saitama Prefecture)

Tomoka Akiho, SDF regular personnel candidate and nursing school student, Nursing Faculty, Medical Education Department

Now that my matriculation ceremony is over, I now feel like a real nursing student at the National Defense Medical College. I am extremely proud to wear the uniform of the college. Whether study, training, or student life, I work with drive and enthusiasm in everything I do to become a good SDF nurse and avoid bringing shame to the uniform. In the future, I hope to and make international contributions and take part in disaster relief activities. To this end, I will spend the next four years maintaining an awareness of things going on around me and working with my peers as I develop useful skills.

While I know there will be difficulties to face as a first-generation student, there will also be things that only such students can accomplish. I will make every effort possible as I push on.

National Defense Medical College (Tokorozawa City, Saitama Prefecture)

Asaka Abe, technical officer candidate and nursing school student, Nursing Faculty, Medical Education Department

I felt considerable trepidation in my decision to enter the National Defense Medical College. I would leave my family to become part of the Ministry of Defense—an experience unknown to those who attend general universities—and become a first-generation student at that. But I was also expecting great happiness and fulfillment for the opportunity to learn how to grow into a working adult as well as a nurse. Although many things were unfamiliar and confusing when I began my studies, these feelings turned to genuine happiness as I met the teachers and senior classmates in other faculties who took pains to teach me properly and the dependable people at my level, the people who thought and acted with me.

Over the next four years at the National Defense Medical College, I will remain committed to everything I do.



Tomoka Akiho (right) studying with classmate Asaka Abe (left)



How does the SDF collaborate with local communities?



The GSDF Northern Army has provided assistance with creating snow sculptures at the Sapporo Snow Festival—an event visited by more than two million people every year—since the event's sixth iteration held in 1955. Every year for about a month, roughly 15,000 SDF personnel joined in various activities such as building snow sculptures, performing maintenance, and transporting snow. The Northern Army has thus become indispensable to the snow festival, and will continue to collaborate in these efforts and further strengthen relations with the local community.



Sculpting the Sultan Abdul Samad Building out of snow



Based in Okinawa, the MSDF Fleet Air Wing 5 makes the most of its positioning at the Hachinohe Air Base in Aomori Prefecture and works together with local SDF personnel using P-3C patrol aircraft to transport snow every year from Mt. Hakkoda to places in Okinawa such as elementary schools, foster care facilities, and children's centers. As it rarely snows in Okinawa, this was the first time for most of these children to see real snow. The children built snowman together with the SDF personnel, threw themselves down on the snow, and delighted in the feel of the snow. In return, sugarcane grown in Okinawa was delivered to children in Hachinohe, Aomori Prefecture so they could enjoy Okinawa flavor.

Through these efforts, the MSDF P-3C patrol aircraft serves as a bridge between Naha and Hachinohe City that makes children smile.



Students of Ueno Elementary School in Miyakojima, playing in snow from Mt. Hakkoda



Two especially important tasks in Okinawa are building good relations with residents and local governments around the base, and gaining their understanding and trust concerning defense-related matters. The ASDF Naha Air Base is therefore making efforts to foster goodwill and trust through diligent work at traditional Okinawan events such as the Naha Harii (traditional boat race) and Eisa Festival in Naha City as well as volunteer activities including cleaning efforts in places such as Mabuni Hills (Mabuni-no-Oka) in Itoman City and Senagajima Island in Tomigusuku City.



ASDF Personnel Participating in the Naha Harii (traditional boat race)

Introduction of Historical Buildings

The SDF owns a number of historical buildings. The most famous examples include Nogikan (built in 1898) in the GSDf Camp Zentsuji in Kagawa Prefecture, and the cavalry school of the Imperial Japanese Army (built in 1911) in Camp Narashino, Chiba Prefecture.

In addition, there is Shirakabe Heisya (White Wall Barrack) Public Historical Center adjacent to the GSDf Camp Shibata in Niigata Prefecture that was built in 1874 as barracks of the 8th Infantry Battalion of Tokyo Garrison of the Imperial Japanese Army. It is very old and has significant historic value. Although it is built by a traditional Japanese construction method, the influence of the French-style military system and architectural designs can be seen in many places. In particular, “blend of Japanese and Western styles” and “the roof trusses that show the progress of architectural technology in Japan” are highly praised from the viewpoint of architectural study, and are preserved in the original condition as much as possible. Furthermore, the barrack stores documents related to Lord Mizoguchi, the family who once ruled the area around the camp in the Edo Period, the 16th infantry regiment of the former Japanese Army that was stationed from the Meiji Period to the start of the second world war, and the 30th Infantry Regiment of the GSDf that is stationed after the war to present. These materials and the building are open to the public.



Roof trusses of Shirakabe Heisya Public Historical Center (GSDf Camp Shibata)



The cavalry school of the Imperial Japanese Army (GSDf Camp Narashino)



Nogikan (GSDf Camp Zentsuji)

Why not visit historical buildings in the camps and bases in your neighborhood?

Towards the Tokyo 2020 Olympic and Paralympic Games



It was announced on September 7, 2013 that Tokyo will be hosting the 2020 Olympic and Paralympic Games. To better prepare for the event, the MOD set up the MOD/SDF Special Action Committee on the Tokyo 2020 Olympic and Paralympic Games on September 10, chaired by the Defense Minister. The committee is working towards the success of the event with the support of all organs of the Ministry.

At the Tokyo 1964 Olympic and Paralympic Games, the SDF provided a variety of support, including an aerobatic demonstration performed by the Blue Impulse aerobatic team. For 2020, the SDF will cooperate with other authorities to handle security and other safety measures. The GSDF Asaka training grounds are the planned site for the Shooting Sport competition.

We have witnessed many Olympic medalists of SDF personnel trained in the JSDF Physical Training School, which now offers nine special courses: wrestling, boxing, judo, shooting, archery, weight lifting, track and field, swimming, and modern pentathlon. With the help of past SDF medalists, the MOD is investing considerable effort to assist SDF athletes capable of competing at an international level. The Ministry will also be supporting the training of athletes in women's rugby and canoeing.



Defense Minister Onodera (on the left) and SDF medalists exchanging views during a meeting of the MOD/SDF Special Action Committee

Ofunato Daiichi Junior High School Third-year student Kei Yoshino, President of Student Council

We came up with the concept of “expressing our thanks for earthquake recovery assistance and our hopes for the future” for our school trip and visited the MOD on September 5, 2013.

I will never forget the SDF personnel that came to Ofunato soon after the earthquake struck. Their rescue efforts and subsequent help with cleaning up debris and setting up soup kitchens gave us a sense of security, safety, and hope.

I am thankful for having the opportunity to show—in front of General Shigeru Iwasaki, Chief of Joint Staff and everyone else—the recovery that Ofunato has made and to present them with a “big-catch flag” we made with our good wishes for them.

We will continue to marshal our wisdom and strength to bring about a full recovery as soon as possible.



Big-catch flag expressing good wishes (Ofunato Daiichi Junior High School students and the Chief of Joint Staff (far left))



Surrounding a newly-planted “yumemachizakura” tree (Tokyo Metropolitan Oshima High School students and Parliamentary Vice-Minister of Defense Kenji Wakamiya (center))

Tokyo Metropolitan Oshima High School Second-year student Yumi Takeda, President of Student Council

We visited the MOD on February 22, 2014 to express our gratitude to the members of the MOD/SDF who came to our aid during the Izu Oshima landslide disasters caused by typhoon No. 26 in October 2013. Every school on the island presented colored paper and saplings of yumemachizakura trees—a type of tree that was developed in Oshima—as a token of gratitude.

The SDF personnel and MOD officers kindly talked to us, which relaxed our nervousness. We were deeply moved when we learned that those who attended the ceremony and tree planting were the ones who had helped rebuild Izu Oshima. We are glad to be able to express our gratitude directly to them.

Lastly, we want to take this opportunity to express our thanks to the personnel involved in the Oshima disaster relief activity and staff that made our visit to the ministry possible. Thank you so much.