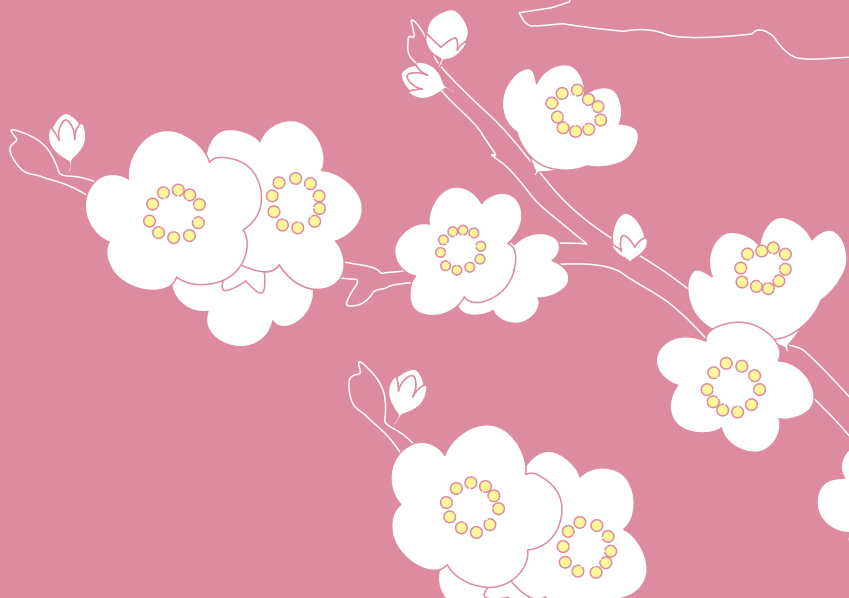


2020

DEFENSE OF JAPAN



Overview

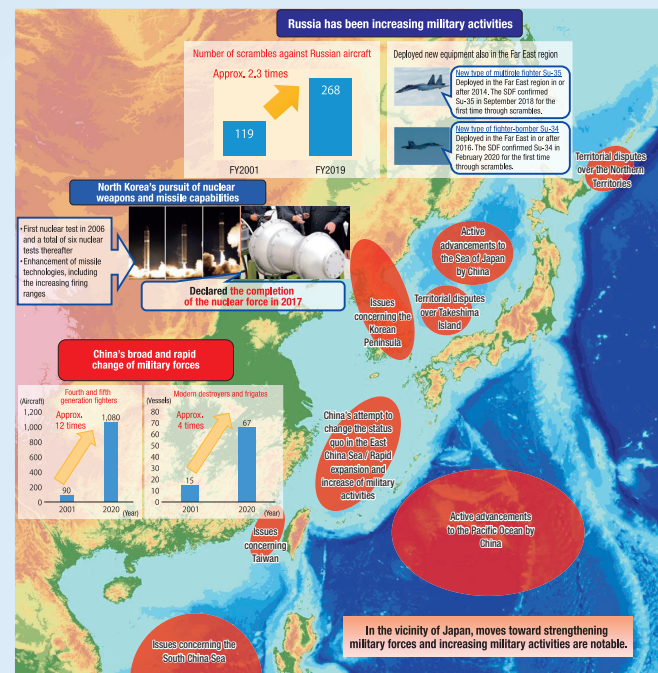
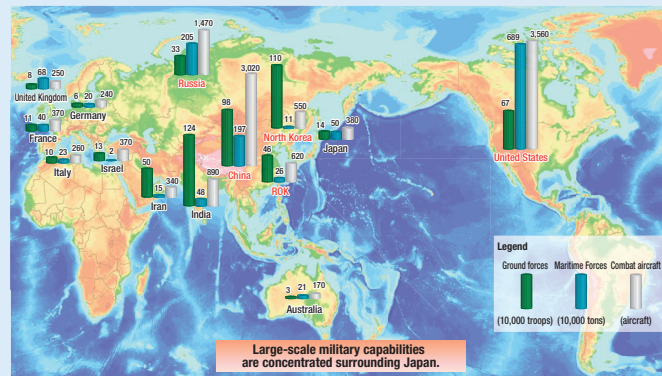
Current Trends in Security Environment

- Uncertainty over the existing order is increasing, and inter-state competition is becoming prominent across the political, economic and military realms.
 - Complex measures required due to “hybrid warfare”
 - Prolonged gray-zone situations
- Technological progress exerting significant influence on security
 - Importance of domains of space, cyberspace, and electromagnetic spectrum
 - Game-changing technologies that could drastically change the conduct of future warfare (artificial intelligence (AI), hypersonic, and high-power energy technologies, etc.)
- Emergence of security challenges, which cannot be dealt with by a single country alone
 - Need to secure stable use of new domains: space and cyberspace; need to ensure security of maritime traffic; response to proliferation of weapons of mass destruction (WMDs); and response to international terrorism
- It is necessary to keep an eye on the COVID-19 infection, which is bringing about diverse impacts and restrictions to military activities of respective countries.

Security Environment Surrounding Japan

- Military powers with high quality and quantity are concentrated in Japan's surroundings, where clear trends such as further military buildup and an increase in military activities are observed.
- A regional cooperation framework in the security realm has not been sufficiently institutionalized in the Indo-Pacific region and longstanding issues of territorial rights and reunification continue to remain.
- Recent years have seen a continued tendency towards the prolongation of “gray zone” situations that are associated with territories, sovereignty and economic interests, and such situations may increase and expand in the future.

Regional Security Environment surrounding Japan etc.



United States

Overview

- The United States recognizes strategic competition with revisionist powers, namely China and Russia, as the central challenge to U.S. security. Especially, the United States ranks China at the top of its list of priorities and places the greatest emphasis on the security of the Indo-Pacific region to strengthen deterrence against China.
 - Under the recognition that nuclear capabilities of North Korea, classified as “rogue regimes” in its strategic documents, constitute an extraordinary threat to the United States, it has maintained sanctions and continues to pursue denuclearization of North Korea, while maintaining strong military readiness of the U.S. forces including U.S. Forces Korea.
- The United States prioritizes the allocation of military forces to the Indo-Pacific region and Europe while reducing forces in the Middle East and Africa. The United States, however, still needs to deal with security issues in the latter regions, which makes it difficult to describe that such transition of the U.S. force posture is smoothly progressing.
- The United States has indicated that certain allies, which are pointed out as bearing a small burden, should bear it appropriately. It has requested NATO member states to swiftly achieve their national defense spending goals, and has required the Republic of Korea (ROK) to shoulder a bigger share of the costs associated with U.S. Forces Korea.
 - Amid rising tensions between Iran, the U.S. military killed the commander of the Quds Force of Iran's Islamic Revolutionary Guard Corps in Iraq. In response, Iran launched ballistic missiles towards Iraq bases where U.S. Forces were stationed.
 - Against growing tensions in the Middle East, the U.S. military reinforced its posture in the region. Additionally, the United States established the International Maritime Security Construct (IMSC) and conducted activities by naval vessels and other equipment, along with countries including the United Kingdom.



President Trump announcing the Iranian ballistic missile attack in Iraq [U.S. DoD]

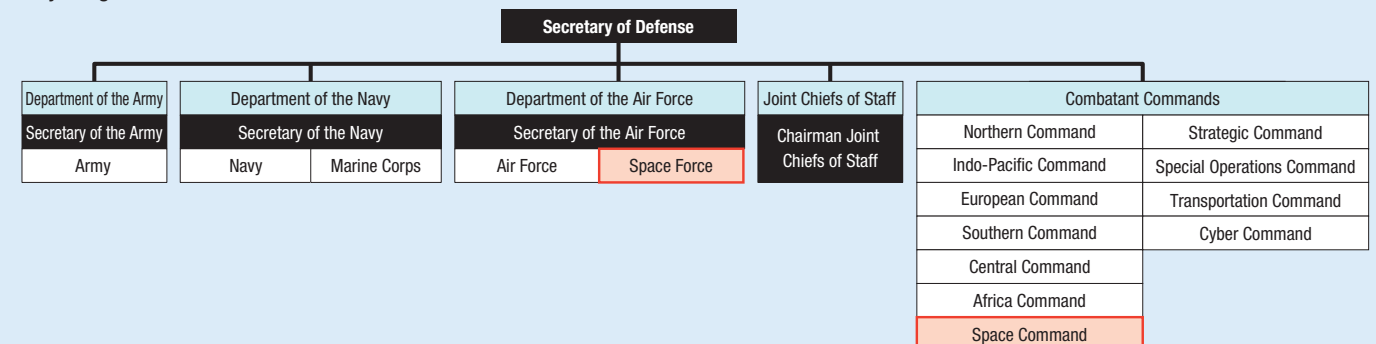
Trends in Security and Defense Policies

- Based on the Nuclear Posture Review (NPR) released in February 2018, the United States modified a portion of its existing SLBM warheads into low-yield warheads. Additionally, the United States conducted test launches of its intermediate-range ground-launched cruise missile and ballistic missile, which had been restricted by the Intermediate-Range Nuclear Forces (INF) Treaty. It also mentioned the necessity for arms control that includes China, which has beefed up medium-range missile capabilities outside the scope of the INF Treaty.
- The United States founded the Space Command as a Unified Combatant Command and then established the Space Force as the sixth branch of its military, within the Department of the Air Force (a new military service established for the first time in 70 years after the establishment of the Air Force).



Unveiling the new US Space Force logo [U.S. DoD]

Major organizational chart of the DoD



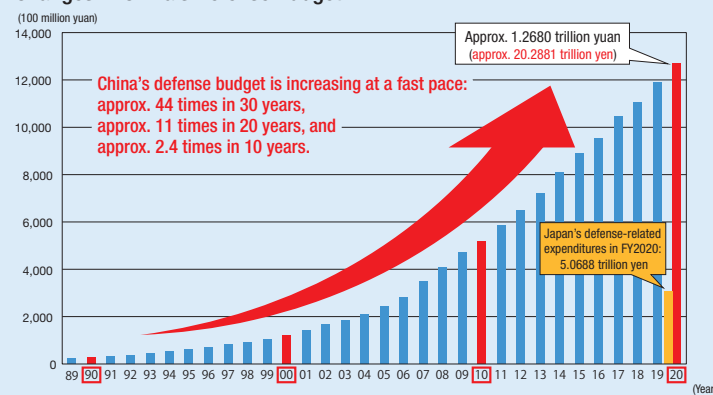
Chapter
2

China

Rapid Military Modernization

- In order to fully transform the people's armed forces into world-class forces by the mid-21st century, China has sustained high-level growth of its defense budget without transparency, engaging in broad, rapid improvement of its military power in qualitative and quantitative terms with focus on nuclear, missile, naval and air forces. In doing so, it has attached importance to strengthening its operational capabilities in order to steadily acquire information superiority, and also enhanced its capabilities in the domains of space, cyberspace and electromagnetic spectrum.
- Bolstering these capabilities will reinforce China's "Anti-Access/Area-Denial (A2/AD)" capabilities and lead to the establishment of operational capabilities further afield.
- While implementing a policy of civil-military fusion across the board, with the aim of promoting two-way links between military and civilian resources in various fields, China is striving to develop and acquire cutting-edge technologies that can be used for military purposes, and improve its operational capabilities.
- Chinese forces' efforts to use artificial intelligence (AI) technology under the awareness that "intelligent warfare is on the horizon"

Changes in China's Defense Budget

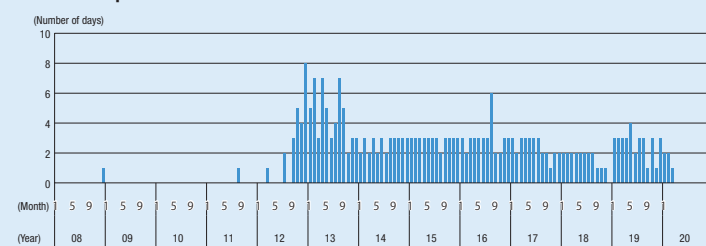


Launch of China's first indigenous aircraft carrier "Shandong" (December 2019) [Avalon/Jiji Press Photo]

Activities in the Surrounding Sea Area and Airspace of Japan

- China has relentlessly continued unilateral attempts to change the status quo by coercion in the sea area around the Senkaku Islands, leading to a grave matter of concern.
- The Chinese Navy and Air Force have in recent years expanded and intensified their activities in the surrounding sea areas and airspace of Japan, and there are cases involving the one-sided escalation of activities.
- China is believed to be aiming to build up capabilities for operations in more distant waters and airspace, including those to project armed forces to waters including the so-called second island chain, beyond the first island chain.
- China has been continuing activities viewed as training of maritime and air forces making forays into the Pacific and the Sea of Japan, being suspected of intending to regularize these activities.
- In the South China Sea, China is moving forward with militarization, as well as expanding and intensifying its activities in the maritime and aerial domains, thereby continuing unilateral attempts to change the status quo by coercion to create a fait accompli.

Changes in number of days on which Chinese government vessels intruded into the Japanese territorial waters

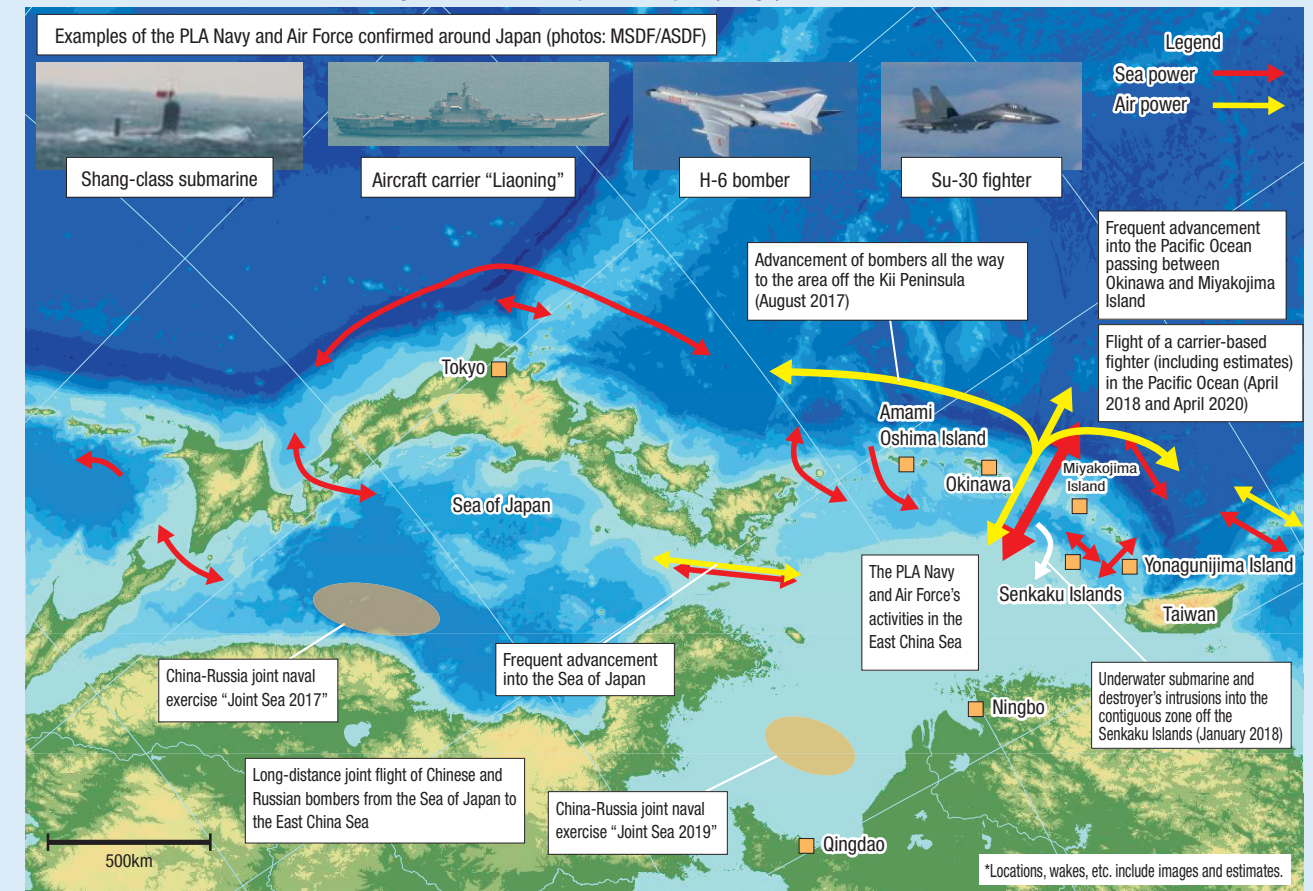


Identification in the contiguous zone

Year	Number of days (days)	Total number of identified vessels (vessels)
2012	79	407
2013	232	819
2014	243	729
2015	240	709
2016	211	752
2017	171	696
2018	158	607
2019	282	1,097
2020	83	289

*The figure for 2012 is that from September to December, and the figure for 2020 is as of the end of March.

PLA's Recent Activities in the Surrounding Sea Area and Airspace of Japan (image)



Activities in Further Distant Seas

- China is steadily increasing its capabilities to conduct operations in more distant seas such as the Indian Ocean in recent years.
- China has been promoting its "Belt and Road" Initiative, and China's support for the construction of port infrastructure in Indian Ocean countries as well as Pacific island countries could lead China to secure bases available for its military purpose. The Chinese military is possibly taking on the role of the shield behind the initiative by such means as the stabilization of areas via counter-piracy activities and the improvement of counter-terrorism capabilities in coastal states through joint exercises.

Relations with Countries and Regions

- There are various issues between the United States and China, such as trade issues, issues concerning the South China Sea, the Taiwan issue, the Hong Kong issue, and human rights issues regarding Uighur and Tibet.
- While the United States has been toughening its stance on China, China has maintained an uncompromising stance on its "core interests." Concerning trade and military issues, mutually keep themselves in check between the United States and China.
- While the United States has continued and reinforced its engagement in Taiwan, China has repeatedly expressed its strong protest against Taiwan's independence.
- Taiwanese President Tsai Ing-wen was reelected with the highest-ever number of votes and has reiterated her opposition to the "One country, Two Systems" principle, which China keeps in check.
- The Solomon Islands and Kiribati established diplomatic relations with China, and as a result, the number of countries having diplomatic relations with Taiwan declined to 15 from 22 in May 2016, when President Tsai took office.
- The overall military balance between China and Taiwan is shifting in favor of China, and the gap appears to be growing year by year. The United States continues selling arms (such as F-16 fighters) to Taiwan under the Taiwan Relations Act.
- Moves to review projects have been seen among some countries cooperating in the "Belt and Road" Initiative, due to such factors as their deteriorating financial situation.



Taiwanese President Tsai Ing-wen and Director Brent Christensen, American Institute in Taiwan (AIT)

Chapter
2

North Korea

Overview

- North Korea has conducted six nuclear tests so far, and is assessed to have already miniaturized nuclear weapons to fit ballistic missile warheads. In addition, North Korea repeatedly launches ballistic missiles in recent years at an unprecedented frequency, aiming to promote the development of weapons of mass destruction (WMDs) and ballistic missiles and the enhancement of its operation capabilities. Such military trends in North Korea pose grave and imminent threats to Japan's security.
- At the U.S.-North Korea summit meeting held in June 2018, Chairman Kim expressed his intention to work towards the complete denuclearization of the Korean Peninsula, but the second U.S.-North Korea summit meeting in February 2019 ended without any agreement being reached between the two countries.
- At the December 2019 Plenary Meeting of the Central Committee of the KWP, Chairman Kim announced the intention to continue developing strategic weapons until the United States rolls back its hostile policy towards North Korea.



Nodong missile [Korean News Service/Jiji]

Current Status of the Nuclear Development

- The possibility cannot be discounted that the sixth nuclear weapons test in September 2017 was of a hydrogen bomb.
- Given the technological maturity obtained through the past six nuclear tests, it is assessed that North Korea has already miniaturized nuclear weapons to fit ballistic missile warheads.

Current Status of the Missile Development

- Since 2016, North Korea has launched more than 70 ballistic missiles and others, and the following characteristics have been observed: (i) increase the firing range of ballistic missiles; (ii) enhance the accuracy, continuous fire capability, and operational capabilities necessary for saturation attacks; (iii) improve its ability to conduct surprise attacks; (iv) develop ballistic missiles that fly at low altitudes on irregular trajectories; and (v) diversify the forms of launches.
- In particular, North Korea has developed more advanced missile-related technologies in recent years. The three types of new short-range ballistic missiles that have been involved in a series of launches since May 2019 are distinctive in that they use solid fuel and fly at lower altitudes than conventional ballistic missiles. North Korea is thus believed to be trying to breach missile defense networks, and there are concerns that such advanced technologies will be applied to longer-range missiles.
- North Korea is relentlessly pursuing increasingly complex and diverse modes of attack and is steadily strengthening and improving its attack capabilities. These enhancements in its capabilities make early detection of the signs of a launch and the interception of the missiles more difficult, thereby posing new challenges for the information gathering, early warning, and interception postures of relevant countries, including Japan.



Image publicly released by North Korea when it launched short-range ballistic missiles (July 2019) [JANES]



Image publicly released by North Korea when it launched an SLBM "Pukguksong-3" (October 2019) [JANES]

Current Status of Ship-to-Ship Transfer, etc.

- North Korea is presumed to be evading the UN Security Council sanctions by conducting ship-to-ship transfers on the high seas and other techniques, and it is pointed out that in 2019, North Korea illicitly imported a volume of petroleum products far in excess of the cap set by UN Security Council resolutions.

Chapter
2

Russia

Overview

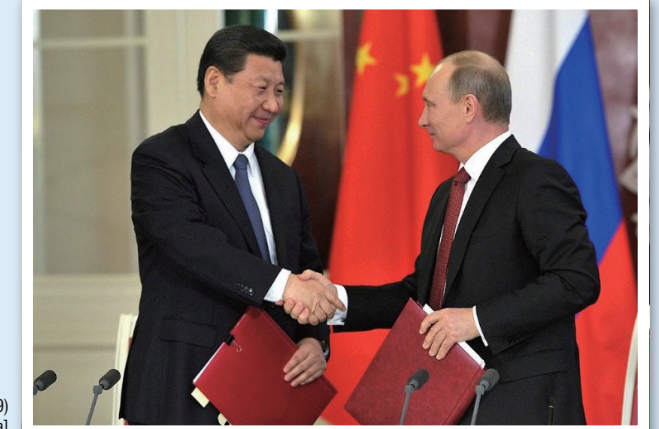
- Russia is modernizing its military equipment, including strategic nuclear forces, and is stepping up military activities, so close scrutiny of developments in this regard will be required.
- Regarding conventional forces, Russia is developing fifth generation fighters and heavy unmanned combat aerial vehicles, and is also stepping up its activities in the realms of space and electromagnetic spectrum.



Strategic bomber "TU-160" visiting South Africa for the first time; Front: Lieutenant-General Kobylash, commander of Russia's Long-Range Aviation (right) and South African Minister of Defence and Military Veterans, Mapisa-Nqakula [Russian Ministry of Defence]

Advancement in the Military Cooperation with China

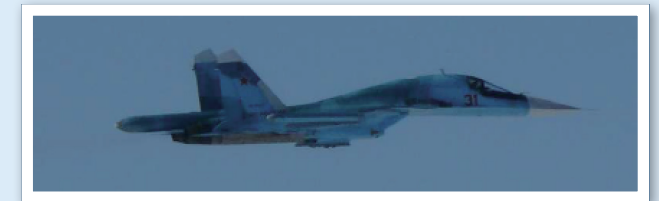
- In July 2019, two Russian Tu-95 long-range bombers carried out joint air patrol with two Chinese H-6 bombers from the Sea of Japan to the East China Sea.
- In September 2019, Russian Minister of Defence Shoigu and, Vice Chairman of the Chinese Central Military Commission Zhang, signed a package of documents on military and military-technical cooperation.
- The authorities of both countries clearly denied that they would form a military alliance, but attention should be paid to future developments in light of recent advancement in their military cooperation.



Russian President Putin and Chinese President Xi (June 2019) [Presidential Executive Office of Russia]

Activities in Japan's Northern Territories and the Vicinity of Japan

- Russia continues to station AFRF in the Northern Territories, which are inherent territories of Japan, and has recently been increasing the AFRF's activities.
- In June 2019, two Tu-95 long-range bombers flew around Japan, and intruded into Japan's territorial airspace twice when they flew northward over the Pacific Ocean. In July, one Russian A-50 early warning and control aircraft intruded into Japan's airspace above the territorial waters of Takeshima Island. In February 2020, two Su-34 fighter-bombers deployed to the Far East were observed for the first time.
- In October 2019, the Eastern Military District announced that drills to repel landings by a hypothetical enemy assault force were to be held in the Sakhalin and Primorsky regions, involving up to 8,000 personnel, more than 3,000 units of tanks and military equipment, and up to 50 planes and helicopters.
- Even amid the spread of the COVID-19 pandemic within the forces, military activities have remained active.



Su-34 fighter-bomber

Chapter
2

Middle East, North Africa, and Other Regions

Overview

- The Middle East is a major source of energy supply for the world and contains major routes for international commerce. Japan is also dependent on the region for approximately 90% of its crude oil imports. Peace and stability in the Middle East region is extremely important for the peace and prosperity of the international community, including Japan.
- On the other hand, the Middle East and Africa region has been experiencing constant conflicts and unrest throughout the 20th century. In recent years, tensions have risen due to the situation in the Gulf region and the Middle East peace process.
- In some countries that experienced the Arab Spring, which occurred at the beginning of 2011, civil wars and the activities of terrorist organizations are ongoing.

Situation in the Gulf Region

- Opposing the resumption of sanctions by the United States, Iran has implemented its measures to reduce compliance with the Joint Comprehensive Plan of Action (JCPOA) by stages since May 2019. The United Kingdom, France and Germany referred the developments to the JCPOA Joint Commission under the JCPOA Dispute Resolution Mechanism. In response, Iran suggested the possibility of considering withdrawal from the NPT, but stated that if Europe observes the agreement, it would return to compliance with the agreement.
- Since May 2019, the United States has expanded the number of U.S. troops deployed to the Middle East in response to Iran's threats. On the other hand, since October 2019, there have been multiple attacks on U.S. military bases in Iraq and one American was victimized, which triggered military retaliation between the United States and Iran. However, both countries clearly showed their intent to avoid further escalation.
- Since May 2019, sporadic events affecting the navigation safety of civilian vessels have occurred in the waters of the Middle East. The United States and other countries including European countries promote efforts to safeguard maritime security in the region.
 - The United States advocated the Maritime Security Initiative and subsequently established the International Maritime Security Construct (IMSC), in which seven countries, including the United Kingdom, Australia, Saudi Arabia, the UAE, and Bahrain, participate, in addition to the United States.
 - Eight European countries, including France, Denmark, and the Netherlands, issued a statement to politically support the creation of a European-led maritime surveillance mission in the Strait of Hormuz (EMASOH).
- Iran also presented a plan named HOPE (Hormuz Peace Endeavor) as an independent effort to maintain maritime security. In addition, Iran conducted the Maritime Safety Belt, the first trilateral military exercise with the Chinese and Russian navies in the Gulf of Oman and other areas.



Damage to an Iraqi military base hosting U.S. military caused by a ballistic missile attack by Iran [AFP/Jiji]



An oil tanker on fire after having been attacked in the Gulf of Oman in June 2019 [EPA/Jiji]

Chapter
3

Trends Concerning New Domains and Relevant Challenges Facing the International Community

Military Science and Technology

- As civilian technologies have been rapidly developing, further technological innovation is expected to dramatically change battle scenes in the future.
- It has been pointed out that the rapid AI progress has been exerting a great impact on the military field, including the application for autonomous unmanned vehicles and the cyber domain, in addition to the improvement in data processing capacity.
- The United States indicates that China and Russia are developing advanced hypersonic weapons that challenge existing missile defense systems.
- High-power energy weapons, such as electromagnetic railguns, high-power laser weapons, and high-power microwaves, are being expected as a means to counter various airborne threats.



A manned aircraft and an autonomous unmanned vehicle flying in harmony [Russian Ministry of Defence]

Space Domain

- Major countries make efforts to enhance the capabilities of a variety of satellites and launch them for the purpose of enhancing C4ISR (command, control, communication, computer, intelligence, surveillance, and reconnaissance) functions.
- In outer space, various countries are promoting use thereof in order to maintain their own peace and security. It has also been noted that China and Russia have been enhancing capabilities to impede the United States and its allies from using outer space.
- In order to respond to these threats, countries are restructuring space-related organizations within their forces.

Long March 5, which China successfully launched in December 2019 [Avalon/Jiji Press Photo]



Cyber Domain

- Information and communications technology (ICT) advancements are further increasing the dependence of military forces on information and communications networks. For this reason, cyber attacks are recognized as an asymmetrical means to impede the military activities of adversaries at low cost. Many foreign military forces are developing offensive capabilities in cyberspace.
- It has been pointed out that China and Russia are bolstering the offensive cyber capabilities of their militaries for the purpose of obstructing the network of adversaries' military forces and destroying their infrastructure.
- Cyber attacks have frequently been carried out against information and communications networks of not only government organizations and military forces but also business corporations and academic organizations in various countries. Attacks attempting to steal critical technologies, secrets or personal information have also been confirmed.

Electromagnetic Domain

- Securing use of the electromagnetic spectrum is indispensable for the operation of communication equipment and radar systems. Major countries recognize electronic attacks for interrupting adversaries' use of electromagnetic spectrum as an asymmetrical means to effectively hamper adversaries' military performance, enhancing electronic warfare capabilities.
- China regularly conducts force-on-force exercises to effectively accomplish missions in complicated electromagnetic environments, thereby improving practical capabilities.
- It is reported that Russia used various electronic warfare systems in eastern Ukraine and Syria to interrupt adversaries' command and control traffic and radar systems, improving electronic warfare capabilities.

LMADIS, which allegedly shot down an Iranian drone over the Strait of Hormuz in 2019 [U.S. Marines]



COVID-19 Infection

- The COVID-19 infection poses not only sanitary problems but exerts influence broadly on society and economy of respective countries, revealing the vulnerability of supply chains and causing serious damage on local economies and concerns over prolonged economic sluggishness worldwide.
- Respective countries are utilizing their military forces' sanitary capabilities and transportation capacity to deal with the infection domestically, and have also been contributing to the prevention of global spread of the infection. In the meantime, military training or bilateral/multilateral exercises have been suspended or postponed, and the infection has brought about diverse impacts and restrictions to military activities as well. If the spread of infection is further prolonged, this may exert various impacts on countries' military capability.
- It is said that while actively providing medical goods and dispatching medical experts to countries where the infection is spreading, China has been making propaganda efforts in various manners, including the spread of disinformation, amid growing social uncertainties and confusion due to the spread of infection.
- The COVID-19 pandemic may expose and intensify strategic competition among countries intending to create international and regional orders more preferable to themselves and to expand their influence. We need to closely watch such moves with great concern as security issues.

Seafood market in Wuhan city, Hubei Province, China, closed due to the COVID-19 pandemic



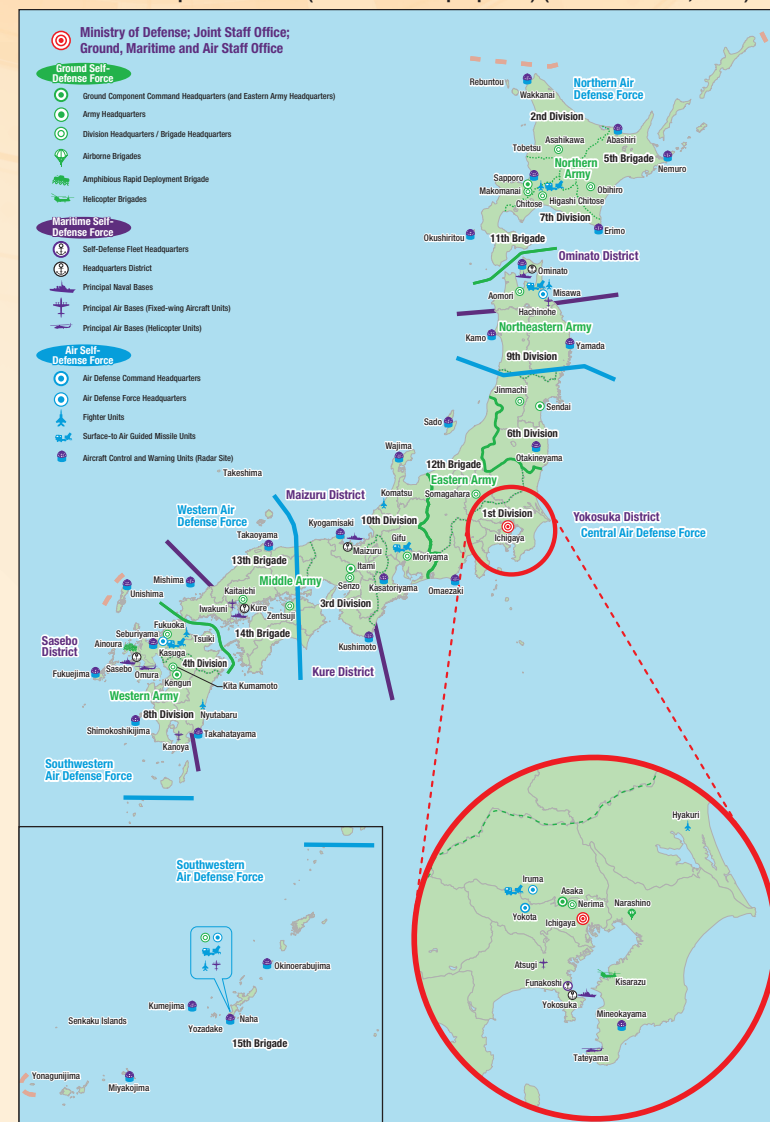
Chapter 2

Organizations Responsible for Japan's Security and Defense

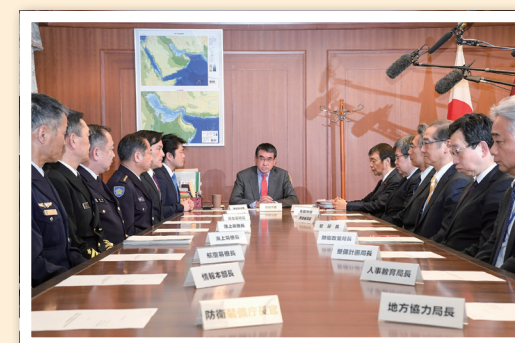
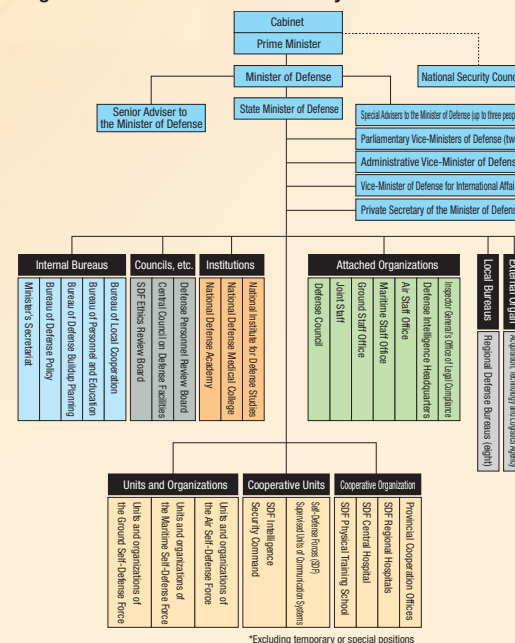
Organizations of the MOD/SDF

To fulfill their mission of defending Japan, the MOD/SDF consists of various organizations, mainly the Ground, Maritime, and Air Self-Defense Forces as armed forces.

Location of Principal SDF Units (for illustrative purposes) (As of March 31, 2019)



Organizational Chart of the Ministry of Defense



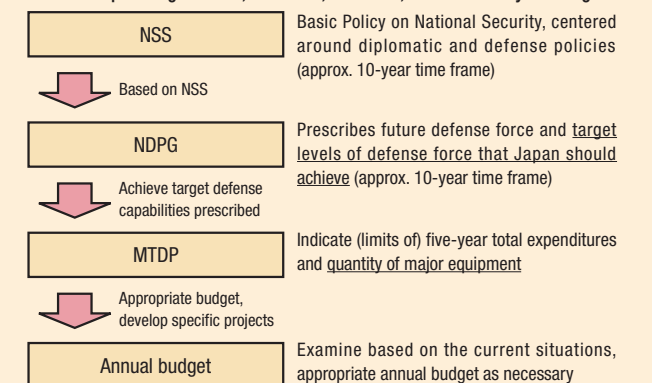
Chapter 3

Japan's Security and Defense Policy

National Security Strategy (NSS)

The NSS developed in December 2013 specifies, as Japan's fundamental principle of national security, that Japan will contribute more proactively than ever before to the peace, stability, and prosperity of the international community, while committed to continuing the path as a peace-loving nation, and seeking its own security as well as peace and stability in the Asia-Pacific region from the perspective of a "Proactive Contribution to Peace" based on the principle of international cooperation.

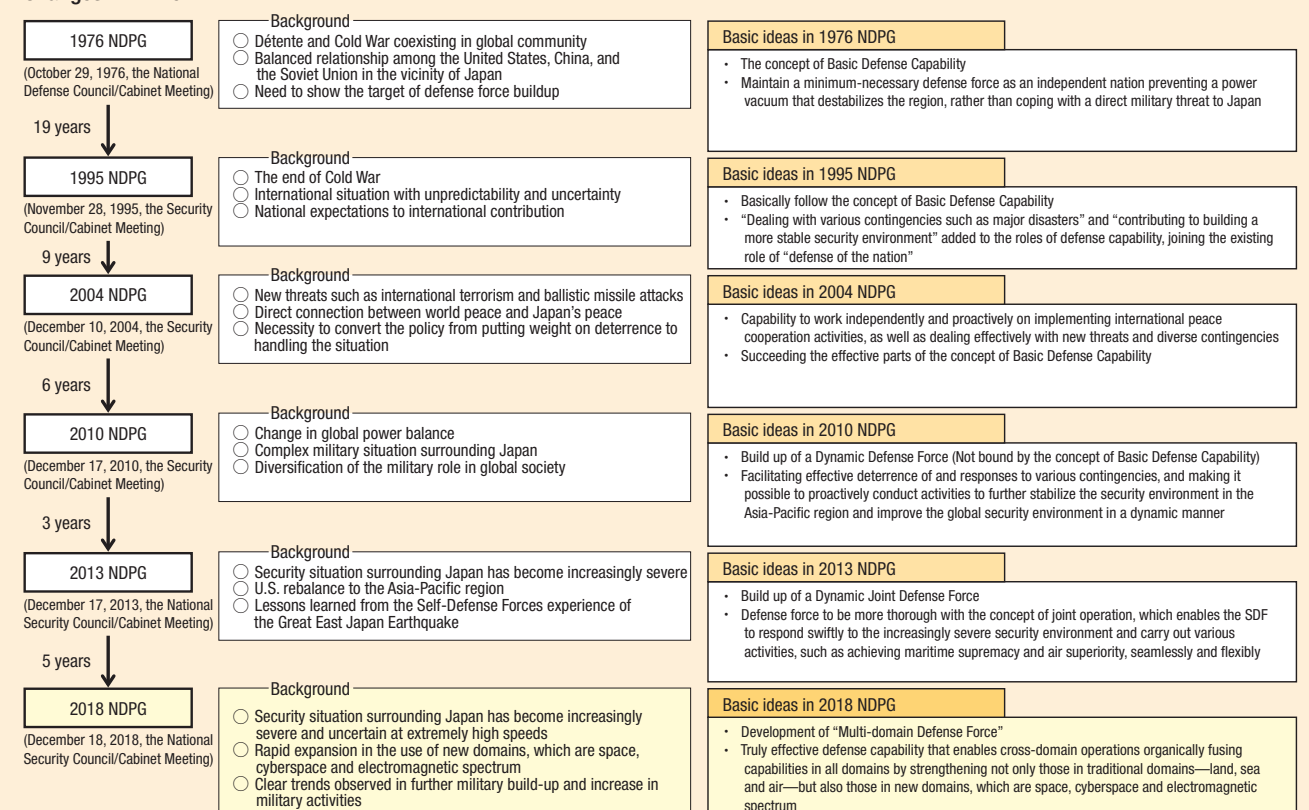
Relationship among the NSS, the NDPG, the MTDP, and the fiscal year budget



The National Defense Program Guidelines for FY2019 and Beyond (NDPG)

- The NDPG was approved by the National Security Council and the Cabinet in December 2018.
- The NDPG establishes the posture of Japan's defense forces and the level to achieve, envisioning approximately 10 years

Changes in NDPG



Japan's Basic Defense Policy

The following are set forth as national defense objectives:

- to create, on a steady-state basis, a security environment desirable for Japan by integrating and drawing on the strengths at the nation's disposal;
- to deter threats from reaching Japan by making opponents realize that doing harm to Japan would be difficult and consequential; and
- should a threat reach Japan, to squarely counter the threat and minimize damage.

Under the basic precept of maintaining an exclusively defense-oriented policy, Japan will strengthen each of the means by which to successfully achieve these national defense objectives: Japan's own architecture for national defense; the Japan-U.S. Alliance; and international security cooperation.

Priorities in Strengthening Defense Capability

In order to adapt to increasingly rapid changes in the security environment, Japan will enhance priority capability areas as early as possible.

- **Strengthening Capabilities Necessary for Cross-Domain Operations**
 - Strengthening capabilities in the new domains of space, cyberspace and electromagnetic spectrum
 - Strengthening capabilities in the traditional domains, such as capabilities in maritime and air domains, stand-off defense capability, comprehensive air and missile defense capability, and maneuver and deployment capability
 - Strengthening sustainability and resiliency by promoting necessary measures for securing ammunition and fuel, ensuring maritime shipping lanes, and protecting important infrastructure.
- **Strengthening core elements comprising defense capability**
 - Strengthening core elements of defense capability by reinforcing the human resource base, technology base, and defense industrial base, reviewing equipment structure, etc.

Organization of Self-Defense Forces (SDF)

- **Joint Operation to Realize Cross-Domain Operations**
 - The SDF will establish new units in the domains of space, cyberspace and electromagnetic spectrum, strengthen its posture, build comprehensive air and missile defense capability, and maintain a maritime transport unit as an integrated unit.
- **Ground Self-Defense Force (GSDF)**
 - The GSDF will maintain rapidly deployable basic operational units furnished with advanced mobility and intelligence, surveillance, and reconnaissance (ISR) capabilities, and mobile operating units equipped with specialized functions. The GSDF will strengthen its ability to deter and counter threats by taking measures including persistent steady-state maneuvers.
 - To be able to counter an invasion of remote islands, the GSDF will maintain surface-to-ship guided missile units and hyper-velocity gliding projectile units for remote island defense.
- **Maritime Self-Defense Force (MSDF)**
 - The MSDF will maintain reinforced destroyer units including a new type of destroyers (FFM), minesweeper units, and embarked patrol helicopter units, and will organize surface units. The MSDF will establish patrol ship units to enable enhanced steady-state ISR in the waters around Japan.
 - In order to conduct underwater ISR, and to engage in patrols and defense in the waters around Japan, the MSDF will maintain reinforced submarine units.
 - In order to conduct wide-area airborne ISR, and to effectively engage in patrols and defense in the waters around Japan, the MSDF will maintain fixed-wing patrol aircraft units.
- **Air Self-Defense Force (ASDF)**
 - The ASDF will maintain ground-based warning and control units capable of conducting sustained surveillance in the airspace around Japan, and air warning and control units capable of conducting airborne warning, surveillance and control also during situations with heightened tensions, such as "gray-zone" situations.
 - The ASDF will maintain fighter aircraft units reinforced by high-performance fighter aircraft, and aerial refueling and transport units.
 - The ASDF will maintain unmanned aerial vehicle units which enable it to conduct information collection in areas remote from Japan and persistent airborne monitoring during situations with heightened tensions.

Medium Term Defense Program (FY2019–FY2023; MTDP)

- The MTDP sets forth the policy for the build-up of defense capability, and main projects for the five-year period from FY2019 to FY2023.
- In order to build a structure that is capable of realizing cross-domain operations, the SDF will conduct reorganization of its major units.
- The SDF will conduct programs to strengthen capabilities in both new and traditional domains.
- The SDF will conduct programs to strengthen core elements of defense capabilities, including reinforcement of the human resource base.

Chapter 4

Build-up of Defense Capability and Defense-Related Expenditures in FY2020

Build-up of Defense Capability in FY2020

In FY2020, as the second year of the NDPG and the MTDP, the MOD/SDF will steadily implement initiatives toward building a Multi-domain Defense Force based on the NDPG and the MTDP.

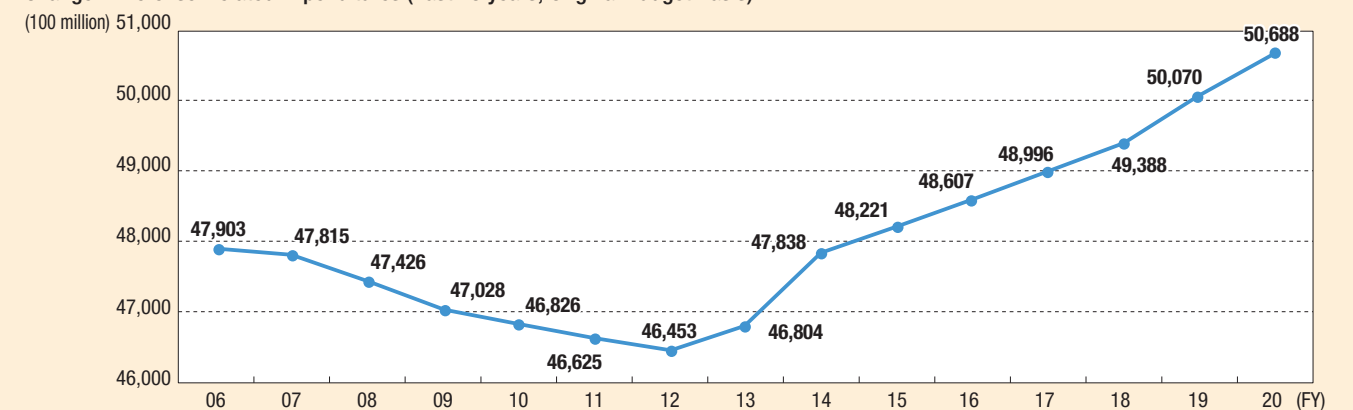
Main Projects of Build-up of Defense Capabilities in FY2020 (Priorities in strengthening capabilities necessary for cross-domain operations)

Capabilities that should be acquired and strengthened	Outline	
Capabilities in space domain	<ul style="list-style-type: none"> Development of systems for Space Operations Squadron etc. Procurement of SSA satellites (space-based optical telescopes) 	<ul style="list-style-type: none"> Procurement of SSA system Strengthening of information-gathering capability using outer space, etc.
Capabilities in cyber domain	<ul style="list-style-type: none"> Enhancement of Cyber Defense Group, etc. Securing and development of cyber talents 	<ul style="list-style-type: none"> Enhancement and strengthening of the systems and networks Utilization of cutting-edge cyber technologies, etc.
Capabilities in electromagnetic domain	<ul style="list-style-type: none"> Research and development of devices to neutralize the radar of opponents who intend to invade Japan, including development of standoff electronic warfare aircraft Strengthening of capabilities to minimize electromagnetic jamming from opponents who intend to invade Japan through procurement of fighters (F-35A/B) with superior electronic protection capability, etc. Enhancement of systems of electronic warfare units, etc. 	
Capabilities in Maritime and Air Domains	<ul style="list-style-type: none"> Procurement of P-1 patrol aircraft (× 3), Procurement of SH-60K patrol helicopters (× 7) Construction of destroyers (× 2), a submarine, and a minesweeping vessel Establish a Temporal Unmanned Aerial Vehicle Unit (Tentative name) Partial refurbishment of Destroyer JS "Izumo" for takeoff and landing by F-35B Japan-led development of F-X 	<ul style="list-style-type: none"> Establishment of Squadron for Aerial Refueling and Transport Establishment of F-35A squadron in Misawa Air Base Introduction of small UUV for underwater defense, etc.
Stand-off defense capability	Procurement of stand-off missiles, etc.	
Comprehensive air and missile defense capability	Procurement of SM-3 Block IIA	Modification to the Patriot system, etc.
Maneuver and deployment capability	Procurement of type-16 mobile combat vehicles (× 33)	Procurement of type-19 155mm wheeled self-propelled howitzers (× 7), etc.
Sustainability and resilience	Procurement of Type-20 5.56mm rifle (× 3,283)	Procurement of SFP9 (× 323), etc.

Defense-Related Expenditures in FY2020

In order to adapt to increasingly rapid changes in the security environment, Japan must strengthen its defense capability at speeds that are fundamentally different from the past. To this end, in light of the NDPG and the MTDP, defense-related expenditures for FY2020 were increased by 61.8 billion yen from the previous fiscal year to 5.0688 trillion yen (an increase of 1.2% from the previous year). Defense-related expenditures has increased for the eight consecutive years.

Change in Defense-Related Expenditures (Past 15 years; Original Budget Basis)



Note: The figures above do not include SACO-related expenses, the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), expenses for the introduction of new government aircraft, and expenses for the three-year emergency measures for disaster prevention/reduction and national resilience. Including these expenses, total defense-related expenditures were as follows: 4,813.6 billion yen in FY2006, 4,801.3 billion yen in FY2007, 4,779.6 billion yen in FY2008, 4,774.1 billion yen in FY2009, 4,790.3 billion yen in FY2010, 4,775.2 billion yen in FY2011, 4,713.8 billion yen in FY2012, 4,753.8 billion yen in FY2013, 4,884.8 billion yen in FY2014, 4,980.1 billion yen in FY2015, 5,054.1 billion yen in FY2016, 5,125.1 billion yen in FY2017, 5,191.1 billion yen in FY2018, 5,257.4 billion yen in FY 2019, and 5,313.3 billion yen.

Chapter
1

Japan's Own Architecture for National Defense

Response from Peacetime to Grey Zone Situations

Persistent Intelligence, Surveillance and Reconnaissance (ISR) in the Area Surrounding Japan

- The Self-Defense Forces (SDF) is engaged in persistent intelligence collection and warning and surveillance during peacetime over Japan's territorial waters and airspace, as well as the surrounding sea and airspace so that it can respond to various contingencies immediately and seamlessly.



GSDF personnel engaged in warning and surveillance activities



MSDF P-3C conducting warning and surveillance activity in the area surrounding Japan



ASDF radar site engaging in warning and surveillance activities 24 hours a day and 365 days a year

- As part of its regular warning and surveillance activities in Japanese territorial waters, the SDF is carrying out information gathering on vessels suspected of violating the UN Security Council sanctions. During the period from 2018 to the end of March 2020, the SDF has observed 24 cases of seaborne rendezvous by (ship-to-ship transfer) North Korean vessels.
- In response to these illicit maritime activities, including ship-to-ship transfers by North Korean vessels, the United States, Australia, Canada, New Zealand and France carried out early warning surveillance activities with aircraft using the U.S. Kadena Air Base in Japan. In addition, naval vessels of the U.S. Navy, the United Kingdom, Canada, Australia and France carried out enforcement of United Nations Security Council sanctions imposed against North Korea in sea areas surrounding Japan.



A North Korea-flagged tanker strongly suspected of committing a ship-to-ship transfer (December 2012)

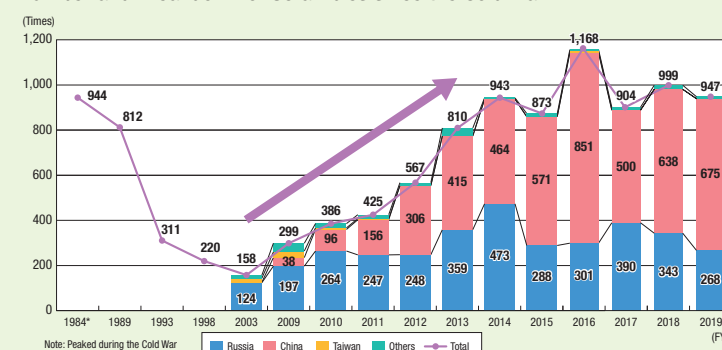
Small ship of unidentified nationality

NAM SAM 8

Warnings and Emergency Takeoffs (Scrambles) in Preparation against Intrusion of Territorial Airspace

- The Air Self-Defense Force (ASDF) detects and identifies aircraft flying in airspace surrounding Japan using warning and control radars as well as early-warning and control aircraft. If any suspicious aircraft heading to Japan's territorial airspace are detected, fighters and other aircraft scramble to approach them in order to confirm the situation and monitor the aircraft as necessary.
- In FY2019, ASDF aircraft scrambled 947 times, the third largest ever recorded. Breaking this figure down, ASDF aircraft scrambled 675 times in response to Chinese aircraft, and 268 times in response to Russian aircraft.

Number and Breakdown of Scrambles since the Cold War



Defense of Japan including its Remote Islands

Defense of Japan's Remote Islands

- In response to attack on Japan including its remote islands, the SDF will quickly maneuver and deploy requisite units to block access and landing of invading forces while ensuring maritime and air superiority. Even when maintaining maritime and air superiority becomes untenable, the SDF will block invading forces' access and landing from outside their threat envelopes. Should any part of the territory be occupied, the SDF will retake it by employing all necessary measures.
- In order to strengthen its defense architecture in the southwestern region, a surface-to-air missile unit and a surface-to-ship guided missile unit were deployed to Miyakojima Island in March 2020. The GSDF will deploy an area security unit in charge of the initial response and other units also in Ishigaki Island.
- As part of measures to enhance the persistent ISR posture, the ASDF established Airborne Warning and Control Wing by upgrading the Airborne Early Warning Group in March 2020 and will establish a temporal unmanned aerial vehicle unit (tentative name) within FY2020.
- In order to secure capabilities for swift and large-scale transportation and deployment of units, the MOD established a Tactical Airlift Wing that operates Osprey in March 2020.



Establishment ceremony of the Airborne Warning and Control Wing (March 2020)

Response to Missile Attacks

- Currently, Japan's Ballistic Missile Defense (BMD) is an effective multi-layered defense system with the upper tier interception by Aegis equipped destroyers and the lower tier by Patriot PAC-3, both interconnected and coordinated by the Japan Aerospace Defense Ground Environment (JADGE).
- In order to effectively and efficiently counter increasingly complex and diverse airborne threats by optimum means and minimize damage, the SDF will establish a structure to conduct integrated operation of various equipment for missile defense and air defense equipment, thereby providing persistent nation-wide protection from peacetime and also enhancing the comprehensive air and missile defense capability that can simultaneously deal with multiple, complex airborne threats.
- As for the introduction of the land-based Aegis system (Aegis Ashore), in June 2020, it was decided to suspend the process. Future direction will be examined based on the discussion at the NSC.



Launched Aegis-equipped Destroyer JS "Maya" (March 2020)

Responses in the Domains of Space, Cyberspace and Electromagnetic Spectrum

Responses in Space Domain

- The MOD aims to establish SSA system by FY2022 to monitor and maintain an accurate picture of conditions in space. The MOD is also working to deploy radar to monitor threats to Japanese satellites, such as space debris, and its operating system.
- In preparation for full-scale SSA operation and introduction of defense equipment, the ASDF established Space Operations Squadron in May 2020.



Establishment ceremony of Space Operations Squadron (May 2020)

Response in Cyber Domain

- The MOD/SDF has taken comprehensive measures to ensure the safety of information and communication systems and respond to cyber attacks by a specialized unit, etc.
- The Cyber Defense Group will be further expanded by about 70 personnel to approximately 290 in FY2020.

Response in Electromagnetic Domain

- The MOD/SDF will: enhance its ability to appropriately manage and coordinate the use of electromagnetic spectrum; strengthen information collection and analysis capabilities related to electromagnetic spectrum, and develop an information sharing posture; and strengthen capabilities to neutralize the radar and communications of opponents who intend to invade Japan.
- In addition to the establishment of the GSDF Electronic Warfare Unit, in FY2020, the SDF will also proceed with development of standoff electronic warfare aircraft for jamming, and R&D aimed at the procurement of potentially game-changing technologies, such as high-power microwave devices and a high-energy laser system (HEL).

Efforts of the MOD/SDF in response to the Spread of Novel Coronavirus Disease (COVID-19)

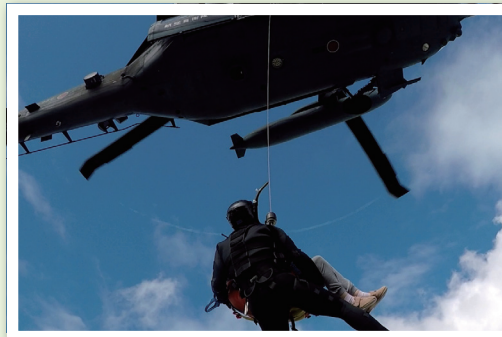
- In order to prevent the spread of COVID-19, the MOD/SDF gathered all their strength to carry out various activities. None of the SDF personnel engaged in the activities got infected (as of May 31, 2020.)
- In addition to activities in the cruise ship Diamond Princess, the MOD/SDF implemented disaster relief pertaining to rescue for prevention of the spread of COVID-19, disaster relief for reinforcement of border control against COVID-19, and education on infection protection for employees of the local governments.
- The SDF hospitals and the National Defense Medical College Hospital (NDMCH) have been accepting COVID-19 patients. A clinical trial of Avigan (favipiravir) tablets was also started.
- The MOD/SDF disclosed protective measures of "JSDF's standards" in order to prevent the spread of COVID-19. At the same time, through the ministerial telephone conversations, the defense authorities shared information, lessons learned and knowledge obtained primarily while taking infection control measures.



A SDF medical officer collecting PCR samples from the crew of the cruise ship (February 2020)

Response to Large-Scale Disasters

- The SDF works in collaboration with local governments, engaged in various activities such as the search and rescue of disaster victims and ships and aircraft in distress, and preventing epidemics. In FY2019, the SDF conducted 449 disaster relief operations, including the disaster relief in response to the flooding caused by heavy rain accompanying a front in August 2019 (Northern Kyushu Heavy Rain), the 2019 Boso Peninsula Typhoon (Typhoon Faxai) and the 2019 East Japan Typhoon (Typhoon Hagibis).
- At the beginning of a disaster, the SDF will maintain response readiness to any damage and need for activities while giving the first priority to life-saving activities. For livelihood support, the SDF will coordinate the division of roles, response policy, activity period, and other matters with relevant parties including the local governments and ministries concerned at the local response headquarters, etc.
- The SDF strengthened dissemination of information so that people can easily access the information related to support.



ASDF personnel engaging in activities to save lives using a rescue helicopter at the time of Typhoon Hagibis (October 2019)

Information Gathering Activities for Ensuring the Safety of Japan-related Vessels in the Middle East

- In order to ensure peace and stability in the Middle East and the safety of Japan-related vessels, as a part of Japan's independent initiative, the Cabinet decided to dispatch MSDF vessels for the purpose of gathering information and to utilize the existing counter-piracy unit.
- On January 11, 2020, two P-3C (fixed-wing patrol aircraft) left Japan to replace the counter-piracy unit and began information gathering activities on the 20th. Destroyer JS "Takanami" left port on February 2 and began information gathering activities in the field on February 26. On May 10, 2020, Destroyer JS "Kirisame" left Japan to replace "Takanami."



MSDF personnel of Destroyer JS "Takanami" engaging in information gathering activities in the Northern Arabian Sea (February 2020)

Chapter
2

Japan-U.S. Alliance

Significance of the Japan-U.S. Security Arrangements

- The Japan-U.S. Security Arrangements based on the Japan-U.S. Security Treaty, which marked the 60th anniversary in 2020, together with Japan's own national defense architecture, constitute a cornerstone for Japan's national security.
- The Japan-U.S. Alliance, with the Japan-U.S. Security Arrangements as its core, plays a significant role for peace, stability and prosperity of not only Japan but also the Indo-Pacific region and the international community.

Ceremony commemorating the 60th anniversary of the signing of the Japan-U.S. Security Treaty (January 2020)
[Website of Prime Minister's Office of Japan]

Outline of the Guidelines for Japan-U.S. Defense Cooperation

The Guidelines manifest a strategic vision for a more robust Alliance and greater shared responsibilities by modernizing the Alliance and enhancing its deterrence and response capabilities in all phases, from peacetime to contingencies.

Policy Consultations between Japan and the United States

- Japan-U.S. Summit Meeting
At the meeting held in New York on September 25, 2019, the leaders reaffirmed the recognition that the Japan-U.S. Alliance is stronger than ever before, and shared the view on continuing to further strengthen the unwavering Japan-U.S. Alliance.
- Japan-U.S. Defense Ministerial Meeting
At the meeting held in Washington D.C. on January 14, 2020, Minister of Defense Kono explained the cabinet decision made in December 2019, which is to send the SDF to the Middle East, and Japan and the United States have confirmed the following points:
 - The Ministers confirmed that we have to avoid further escalation of the situation in the Middle East;
 - The Ministers confirmed the importance of full implementation of the UN Security Council resolutions for a complete, verifiable and irreversible dismantlement of all North Korea's WMD and ballistic missiles of all ranges;
 - The Ministers confirmed that they oppose unilateral attempts to change the status-quo by coercion in the East and South China Seas, and work together to make sure that the rule of law and the freedom of navigation are firmly established;
 - The Ministers confirmed that they continue to closely work together to even strengthen the alliance capability to deter and respond, and to materialize the aligned strategies of both countries;
 - The Ministers reaffirmed that they cooperate with various partners, including conducting joint exercises and capacity building to maintain and strengthen a free and open Indo-Pacific with Japan-U.S. Alliance being the cornerstone;
 - The Ministers confirmed to work closely together for the steady implementation of the U.S. forces realignment initiatives, including the acquisition of Mageshima, a candidate site for a permanent FCLP facility;
 - The Ministers confirmed that the relocation to Henokosaki is the only solution to avoid the continued use of MCAS Futenma, and;
 - The Ministers reaffirmed that Japan and the United States continue to work together with the shared recognition that understanding and cooperation from the local communities is crucial for the maintenance of operational readiness of the USFJ.



Japan-U.S. Defense Ministerial Meeting (January 2020)

Strengthening Ability of Japan-U.S. Alliance to Deter and Counter Threats

In order to ensure Japan's peace and security, Japan and the United States are advancing cooperation in various fields, including "Cooperation in Space and Cyber Domains," "Comprehensive Air and Missile Defense," "Bilateral Training and Exercises," "ISR Activities," "Maritime Security," "Logistics Support," and "Cooperation in Response to a Large-Scale Disaster in Japan."



Japan-U.S. Bilateral Exercises (November 2019)

Strengthening and Expanding Cooperation in a Wide Range of Areas

- In order to create a desirable security environment including maintaining and enhancing free and open maritime order, and with an eye on increasing Japanese and U.S. presence in the Indo-Pacific region, Japan and the United States are conducting bilateral activities in such areas as "Maritime Security," "Humanitarian Assistance/Disaster Relief," and "Trilateral and Multilateral Training and Exercises," and promoting cooperation in the areas of "Defense Equipment and Technology Cooperation" and "Joint/Shared Use."

Steady Implementation of Measures Concerning the USFJ

- The presence of USFJ provides deterrence, while on the other hand, given the impacts of the stationing of the USFJ on the living environment of the local residents, it is necessary to make efforts appropriate for the actual situation of each area in order to mitigate the impacts.

Stationing of the USFJ

- It is necessary to maintain the presence of the USFJ and its readiness to make rapid and agile responses in case of emergency in Japan and its surrounding areas even in peacetime, so that Japan-U.S. Alliance based on Japan-U.S. Security Arrangements provides enough as a deterrence contributing to the peace and stability of the defense of Japan and the region.
- Therefore, Japan accepts the stationing of the U.S. Forces based on the Japan-U.S. Security Treaty and it is a cornerstone of Japan-U.S. Security Arrangements.

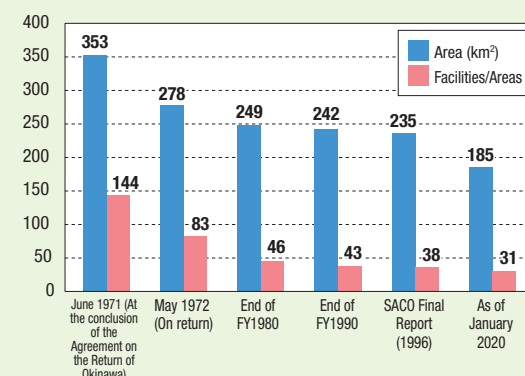
Stationing of the U.S. Forces in Okinawa

- Approximately 70% of USFJ facilities and areas (for exclusive use) are concentrated in Okinawa Prefecture, occupying approximately 8% of the land area of the prefecture and approximately 14% of the main island of Okinawa. Therefore, it is necessary to make utmost efforts to mitigate the impact on Okinawa, while also considering the above-mentioned security standpoints.
- Regarding distribution of functions offered by MCAS Futenma, the development of facilities is being promoted to transfer the function of accepting transient aircraft in contingencies to Tsuiki Air Base and Nyutabaru Air Base.
- For the construction of the Futenma Replacement Facility, the land-fill operation has been carried out in the waters south of Camp Schwab. In April 2020, the Okinawa Defense Bureau submitted to Okinawa Prefecture an application for change of land-fill work related to addition of the work to improve the soil foundation, etc., based on the Act on Reclamation of Publicly-owned Water Surface.
- The following progress has been made involving the return of USFJ land:
March 2015: West Futenma Housing Area within Camp Zukeran (Camp Foster) (approximately 51 ha) was returned.
December 2016: A major portion of the Northern Training Area (approximately 4,000 ha) was returned. This is the largest of its kind since the reversion of Okinawa to the mainland.
July 2017: A portion of MCAS Futenma (approximately 4 ha along Ginowan City road 11) was returned.
March 2018: A portion of Makiminato Service Area (Camp Kinser) (approximately 3 ha of land to expand Route 58) was returned.
March 2019: A portion of Makiminato Service Area (Camp Kinser) (approximately 2 ha of land near Gate 5) was returned.
March 2020: Portions of land at Camp Zukeran (Warehouse Area of Facilities and Engineering Compound) (approximately 11 ha) were returned.

Stationing of the U.S. Forces in Regions Other than Okinawa

- In regions other than Okinawa, the MOD is implementing measures to secure the stable stationing of the U.S. Forces by maintaining its deterrence and trying to mitigate the impact on local communities, such as realignment of USFJ and its facilities and areas.
- As a permanent FCLP facility, in December 2019, the MOD acquired more than half of the land on Mageshima in Nishinoomote City, Kagoshima Prefecture, and is conducting various surveys in preparation for the development of SDF facilities.

Changes in Number and Area of the USFJ Facilities and Areas (Exclusive Use) in Okinawa



US Marine Corps MV-22 Osprey flew to the Kokubudai maneuver Area, Kagawa Prefecture, for exercise (December 2019)

Chapter
3

Security Cooperation

The MOD/SDF will create a desirable security environment for Japan by promoting multi-faceted and multi-layered security cooperation.

Strategic Promotion of Multi-Faceted and Multi-Layered Defense Cooperation

Efforts under the Vision of a "Free and Open Indo-Pacific"

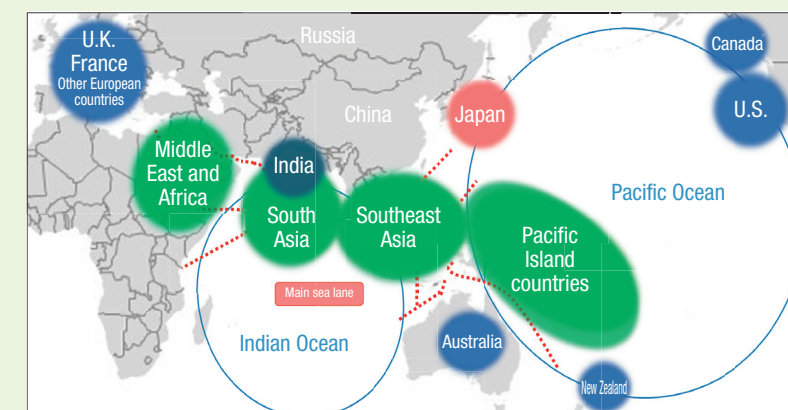
Three pillars of the vision
(i) Promotion and establishment of the rule of law, freedom of navigation, free trade, etc.
(ii) Pursuit of economic prosperity (improving connectivity, etc.)
(iii) Commitment to peace and stability

MOD's Approach to the Vision of a "Free and Open Indo-Pacific"

- 1 Achieve stable use of Japan's main sea lanes by utilizing defense cooperation and exchanges
- 2 Avoid unexpected situations by promoting mutual understanding and confidence
- 3 Contribute to peace and stability in the Indo-Pacific region by cooperating with partner countries

The Indo-Pacific region is the core of the world's vitality, supporting more than half the world's population. It is important to establish this region as a free and open global commons to secure peace and prosperity in the region as a whole.

In order to promote a "Free and Open Indo-Pacific," the MOD/SDF will strengthen defense cooperation and exchanges with countries in the region.



Promotion of Defense Cooperation and Exchanges

- **Australia:** In November 2019, a Japan-Australia Defense Ministerial Meeting was held. The Ministers agreed to deepen and expand bilateral defense cooperation.
- **India:** In September 2019, a Japan-India Defense Ministerial Meeting was held. In November of the same year, a Defense Ministerial Meeting and the first Japan-India 2+2 Foreign and Defense Ministerial Meeting were held. The Ministers reiterated their commitment to advance bilateral security cooperation.
- **ASEAN:** In November 2019, at the ASEAN-Japan Defence Ministers' Informal Meeting, Vientiane Vision 2.0, an updated version of Vientiane Vision, was announced. Meetings with the defense ministers of each country were held.
- **ROK:** In November 2019, the ROK government announced the suspension of the notification to terminate the Japan-ROK GSOMIA. In response, Defense Minister commented that bilateral cooperation between Japan and the United States and between Japan and the ROK, and trilateral cooperation between the three countries are important amid the severe security environment in East Asia, and that he considered that the above decision by the ROK government was made from a strategic perspective with an understanding of such situation.
- **European countries, Canada, and New Zealand:** Meetings with the defense ministers of European countries and New Zealand were held on the occasion of the ADMM-Plus held in November 2019, and meetings with the defense ministers of European countries and Canada were held at the Munich Security Conference in February 2020. In October 2019, the Chief of Staff, GSDF visited Canada for the first time.
- **China:** In October 2019, the Chinese vessel visited Japan for the first time in about 10 years. In December of the same year, Defense Minister visited China for the first time in 10 years and held a meeting with China's Defense Minister.
- **Russia:** In August and September 2019, the GSDF band participated for the first time in the Spasskaya Tower International Military Music Festival in Moscow. In November of the same year, Commander-in-Chief of the Russian Navy visited Japan for the first time in 18 years.
- **Pacific Island Countries:** From January to February 2020, State Minister of Defense visited Fiji, PNG, and Tonga for the first time as one of Ministry's top three politicians.
- **Middle Eastern Countries:** Defense Minister attended the Manama Dialogue held in November and the Doha Forum in December 2019 for the first time as a Japanese Defense Minister. In addition, the Minister visited Jordan and Oman for the first time and held defense ministerial meetings. He also had telephone conversations with defense ministers of various other countries in the Middle East.



Japan-Australia Defense Ministerial Meeting (November 2019)



Japan-India "2+2" (November 2019)



State Minister of Defense Yamamoto talking with Minister for Defence, National Security and Foreign Affairs of Fiji (January 2020)

Promotion of Multilateral Security Cooperation

- Multilateral framework initiatives, such as the ASEAN Defence Ministers' Meeting (ADMM)-Plus and the ASEAN Regional Forum (ARF) have made steady progress and served as an important foundation for discussion and cooperation and exchanges in the security field in the Asia-Pacific region. Based on Vientiane Vision 2.0, a guideline for future ASEAN-Japan defense cooperation, in addition to bilateral cooperation, Japan has strengthened cooperation under multilateral frameworks.
- Japan has contributed to the enhancement of multilateral cooperation in the region by holding the Japan-ASEAN Defense Vice-Ministerial Forum and the Tokyo Defense Forum annually.
- Moreover, Japan has proactively participated in international conferences hosted by international organizations and private organizations, as well as service-to-service exchange initiatives.

Proactive and Strategic Initiatives for Capacity Building

- Since 2012, the MOD/SDF has provided capacity building in such areas as HA/DR, peacekeeping operations (PKO), and maritime security to 15 countries and one organization in the Asia-Pacific and other regions.
- In 2019, the number of capacity building programs conducted by means of dispatch was 126 (11 countries, 20 officials), and the number of those conducted by means of invitation was 75 (four countries, one organization and six trainees).
- Specifically, from September to October 2019, Japan has provided guidance on techniques to PNG Military Band, which participated in the Royal Edinburgh Military Tattoo in Australia, hosted by the United Kingdom. In addition, Japan implemented programs in Laos, Mongolia, Cambodia, the Philippines, Sri Lanka, Malaysia, Myanmar, Djibouti and other countries.

Ensuring Maritime Security

- For Japan, a maritime nation, strengthening the order based on fundamental norms, such as the rule of law and the freedom of navigation, as well as ensuring safe maritime transport, is the foundation for its peace and prosperity, which is extremely important.
- The SDF has been dispatching the Deployment Surface Force for Counter Piracy Enforcement, the Deployment Air Force for Counter Piracy Enforcement, and the Deployment Support Group for Counter Piracy Enforcement since 2009 in order to protect vessels from acts of piracy in the waters off the coast of Somalia and in the Gulf of Aden.
- In addition to strengthening cooperation with coastal states of the Indo-Pacific region through exercises and port calls, the MOD has been implementing capacity building in maritime security of coastal countries, and working on cooperation for maritime security within regional security dialogue frameworks such as the ADMM-Plus.

Cooperation in Use of Space and Cyber Domains

- Regarding cooperation in the use of space domain, the MOD/SDF has taken part in the annual SSA multinational tabletop exercise (Global Sentinel) and the Schriever Wargame, a multinational tabletop exercise on space security, hosted by the U.S. Forces.
- Regarding cooperation in the use of cyber domain, the MOD has held cyber dialogues with the respective defense authorities of the United States, the United Kingdom, Australia, and others. In December 2019, Japan formally participated for the first time in the cyber defense exercise hosted by NATO, in which Japan used to participate as observer. Additionally, the SDF is expanding its scope of cooperation such as by holding a follow-up seminar for cybersecurity personnel of the People's Army of Vietnam.



ASEAN-Japan Defence Ministers' Informal Meeting (November 2019)



Chief of Staff, JS Yamazaki participating in the multilateral forum Raisina Dialogue 2020 (January 2020)



GSDF Central Band officer providing guidance to the Papua New Guinea Military Band (September 2019)



MSDF personnel leaving for counter-piracy operation off the Coast of Somalia and in the Gulf of Aden (November 2019)

Initiatives for Arms Control, Disarmament and Non-Proliferation

- The proliferation of WMDs and missiles that can deliver them, as well as the proliferation of not only conventional arms but also goods and sensitive technologies of potential military use, pose a pressing challenge to the peace and stability of the international community. International discussions related to Lethal Autonomous Weapons Systems (LAWS) are also under way.
- Since April 2018 the MOD/SDF has been sending a personnel as a member of the Group of Experts of the 1540 Committee established pursuant to the UN Security Council Resolution 1540 (adopted in April 2004) to prevent the proliferation of WMDs and their means of delivery to non-state actors.

Efforts to Support International Peace Cooperation Activities

The MOD/SDF has been proactively undertaking international peace cooperation activities working in tandem with diplomatic initiatives, including the use of ODA for resolving the fundamental causes of conflicts, terrorism and other problems.

Dispatch to the Multinational Force and Observers (MFO)

- In April 2019, the Government of Japan decided to dispatch staff officers, and later two staff officers were dispatched to the MFO headquarters as the first "Internationally Coordinated Operations for Peace and Security."
- The dispatched officers engage in liaison and coordination between Egypt and Israel, and the MFO as a Deputy Chief of Liaison and an Assistant Liaison Operation Officer at the MFO headquarters, which is located in the south camp at Sharm El-Sheikh in the southern part of the Sinai Peninsula.

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

- The peace and stability of South Sudan is not only essential for the country itself; but also for the peace and stability in Africa as a whole, as well as a crucial issue that should be dealt with by the international community.
- Japan currently dispatches four officers (logistics, information database, engineering, and aviation operations officers) to the UNMISS headquarters.

Support to the UN Triangular Partnership Project (UNTPP)

- The UNTPP was founded using funds from Japan as a project to support training for military engineers and the procurement of heavy equipment by the UN DOS. Japan has been dispatching a total of 164 GSDF personnel to Africa to provide nine training sessions for a total of 277 members from eight African countries.
- Considering that 30% or more of PKO personnel are from Asia, Japan has been implementing the projects in Asia and the surrounding regions.
- In addition, given that strengthening sanitation capacity to ensure the safety of deployed personnel has become an issue in UN peacekeeping operations, medical training was implemented in October 2019

International Disaster Relief/Activities

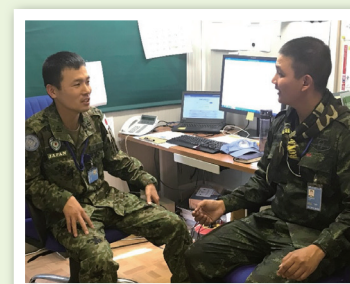
- To contribute to the advancement of international cooperation, the SDF has engaged in international disaster relief activities proactively from the viewpoint of humanitarian contributions and improvement of the global security environment.
- In recent years, international disaster relief activities were carried out from November to December 2019 in response to the heavy rains and floods in the republic of Djibouti and from January to February 2020 in response to the major bush fires in Australia.



Personnel of the National Institute for Defense Studies providing explanations about UN Security Council Resolution 1540 to lawmakers of Pacific Islands in New Zealand (September 2019)



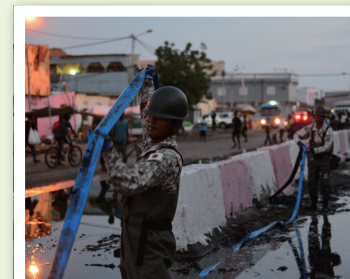
GSDF personnel serving on the MFO headquarters (April 2020)



GSDF personnel serving on the UNMISS headquarters (December 2019)



GSDF personnel providing training on the operation of heavy machinery (February 2020)



SDF personnel engaging in international disaster relief activities for heavy rains and floods in the Republic of Djibouti (November 2019)

Chapter
1

Human Resource Base that Sustains the Defense Capability

Reinforcing Human Resource Base

- The NDPG specifies that the core element of defense capability is SDF personnel, and that securing human resources for SDF personnel and improving their ability and morale are essential to strengthening defense capability. This has become an imminent challenge in the face of shrinking and aging population with declining birth rates. Also in light of the sustainability and resilience of defense capability, the SDF needs to work even further to reinforce the human resource base that sustains the defense capability.

Effective Use of Human Resources

The NDPG and others plan to raise the mandatory early retirement age by one year during the period of the MTDP from 2020, and another one year during the period of the next MTDP in stages for each rank. The retirement age of personnel from the rank of Ichii (Captain (GSDF, ASDF)/Lieutenant (MSDF)) to Issu (Master Sergeant (GSDF, ASDF)/Petty Officer 1st Class (MSDF)) was raised in 2020. In addition, in order to ensure an operating ratio with a limited number of personnel, the crew system was introduced in some MSDF vessels, where some crews take shifts to increase the number of operation days. The introduction of this crew system to new types of destroyers (FFM) is being considered.

Improvement of Living and Work Environment and Treatment

The SDF will steadily renew aged everyday life/workplace fixtures, secure the necessary quantities of everyday necessities in addition to accelerating the securing and reconstruction of the necessary barracks and housing, and proceed with measures against aging and earthquake proofing of facilities.

In addition, the SDF will improve their treatment based on the special nature of their missions and work environment. Specifically, in order to ensure appropriate treatment in accordance with the risk and special nature of their missions and the characteristics of the area of the office, the SDF will make improvements to special work allowance, etc. and procure portable beds and better emergency rations to improve their ability to respond to disasters.

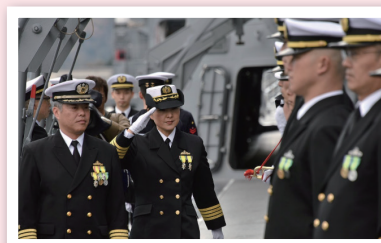
Further Promotion of Work-Life Balance and Women's Participation

Working Style Reform

The MOD/SDF is promoting correction of long working hours and encouraging taking leave to ensure proper work-life balance so that every member can exert his/her full potential.

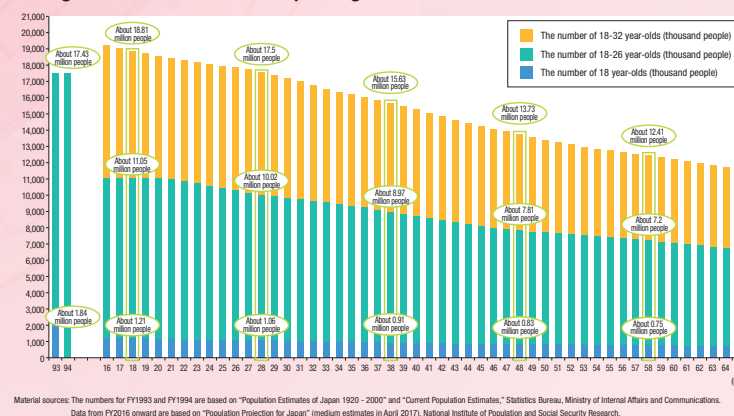
Women's Participation

In terms of employing and promoting female SDF personnel, the MOD/SDF sets out a personnel management policy to ensure equal opportunity between men and women and assign the right person to the right place based on the person's motivation and ability/aptitude. In December 2019, a woman assumed the role of commanding officer of an Aegis destroyer for the first time, promoting active participation of female SDF personnel. In addition, the MOD/SDF has been reviewing the restriction of assignment of female personnel. With the removal of the restriction on female assignments in submarines in December 2018, assignment restriction against females was completely removed with the exception of the units where female personnel cannot be assigned for reasons of maternity protection (a part of the GSDF Nuclear Biological Chemical (NBC) Weapon Defense Unit [chemical] and Tunnel Company Units).



Captain Otani was appointed as the first female commanding officer of an Aegis destroyer (December 2019)

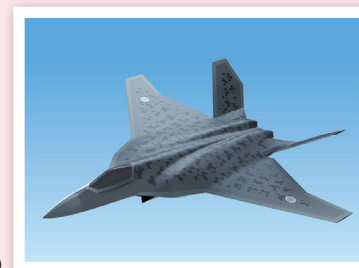
Changes in the Number of People Eligible to Join the SDF


Chapter
2

Measures on Defense Equipment and Technology

Reinforcing Technology Base

- Review of the Medium- to Long-Term Defense Technology Outlook is now underway in order to ensure Japan's technological superiority in the strategically important equipment and technology field, including technologies pertaining to new domains and other potentially game-changing important technologies.
- As for development of the fighter (F-X), improving technological reliability and reducing the development cost, the MOD is pursuing the best approach to realize Japan led development with international cooperation in sight.



The fighter (F-X) (image)

Optimizing Equipment Procurement

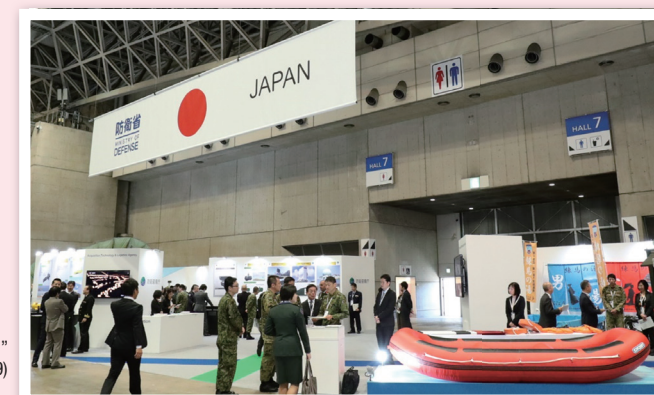
- The MOD has been promoting effective and efficient equipment acquisition by selecting 18 items for major programs designated for project management. At the same time, the MOD strives to cut equipment procurement costs by making bulk orders utilizing long-term contracts.
- To enhance the level of performance management, the MOD makes every effort. The specific efforts include constant monitoring of goods and service deliveries from both sides, facilitating the internal management system concerning the execution process of FMS procurement, and strengthening cooperation with the U.S. government through close Japan-U.S. consultations.

Strengthening Defense Industrial Base

- In order to strengthen Japan's defense industrial base, the MOD identifies four lines of effort: (1) reforming the existing contract system towards creating a competitive environment among defense companies; (2) strengthening risk management of supply chain for defense equipment; (3) further participation of Japan's defense industry in sustainment and maintenance of imported equipment, etc.; and (4) promoting appropriate overseas transfer of defense equipment under the Three Principles on Transfer of Defense Equipment and Technology.

Defense Equipment and Technology Cooperation

- Based on the Three Principles on Transfer of Defense Equipment and Technology, Japan promotes cooperation in defense equipment and technology with other countries in order to contribute to the maintenance and strengthening of technological and industrial bases, as well as contributing to the promotion of our national security, peace and international cooperation.
 - Transfer of parts and maintenance equipment of the UH-1H utility helicopters to the Philippines started in March 2019, and was completed in September 2019.
 - From the viewpoint of promoting defense equipment and technology cooperation, the ATLA has participated in international defense equipment exhibitions. Moreover, the Public-Private Defense Industry Forum was held with the Philippines and other countries.



"Defence and Security Equipment International Exhibition and Conference: DSEI Japan 2019" held in Makuhari Messe (November 2019)

Chapter
3

Enhancing Intelligence Capabilities

- For formulating defense policy accurately in response to the changes in the situation and for operating defense capabilities effectively in dealing with various situations, it is necessary to grasp medium- to long-term military trends in the neighboring countries of Japan and to detect the indications of various situations promptly. To this end, the MOD/SDF is making efforts to collect information swiftly and accurately daily by using various methods.

Examples of intelligence collection means used by the MOD/SDF include: (1) collecting, processing and analyzing military communications and signals emanating from electronic weapons in the air over Japan; (2) collecting, processing, and analyzing data from various imagery satellites (including Information Gathering Satellite); (3) surveillance activities by ships, aircraft and other assets; (4) collecting and organizing a variety of open source information; (5) information exchanges with defense organizations of other nations; and (6) intelligence collection conducted by defense attachés and other officials.



Commander IGARASHI, Defense Attaché to Malaysia

Chapter
4

Elements that Sustain Defense Capability

SDF Training

Training and exercise conducted by units in each service can be broadly divided into training for individual SDF personnel to improve the necessary proficiency for their respective fields, and training and exercise for units to enhance their systematic capabilities. Training for individuals is conducted one-on-one in stages based on occupational specialties and individual ability. Training and exercise for units is conducted depending on the size of unit, from small to large; meanwhile, large-scale comprehensive training including coordination between units is also conducted.

In order to effectively respond to various contingencies and enhance its deterrence effectiveness, based on the NDPG and MTDP, SDF's joint training and exercises and Japan-U.S. bilateral training and exercises are to be conducted in a tailored and visible way. While leveraging the lessons learned from these training and exercises, the SDF is conducting regular studies and reviews of its plans to address contingencies.



Newly joined members of the SDF conducting basic training

Enhancement of Medical Functions

For the SDF to perform its mission, SDF personnel must remain in good health through appropriate health management. Also, it is important for the SDF to make continued efforts to enhance and strengthen its capabilities in military medicine for maximally protecting the lives of the personnel who respond to a variety of services.

Under the circumstances where the SDF's missions are becoming more diverse and internationalized, it is important to appropriately and accurately carry out various medical activities, such as medical support in disaster relief and international peace keeping activities, and capacity building in the medical field.

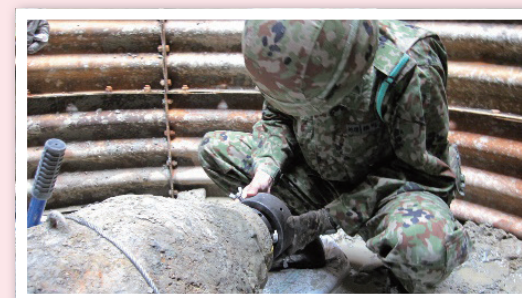
Efforts of the MOD/SDF in response to the spread of COVID-19, the SDF hospitals and the National Defense Medical College Hospital (NDMCH) have been accepting COVID-19 patients since February 1, 2020. As of May 31, the SDF Central Hospital, the SDF hospitals in Sapporo, Yokosuka, Hanshin, Fukuoka, and Kumamoto, and the NDMCH accepted 430 COVID-19 patients.

Chapter
5

Interaction with Local Communities and Japanese Citizens

Collaboration with Local Communities

The MOD/SDF conducts various cooperation activities to support the lives of citizens, including the disposal of unexploded ordnance and underwater mines. At the Sokuirei-Seiden-no-gi (Ceremony of the Enthronement of His Majesty the Emperor at the Seiden [State Hall]), a national event, the GSDF presented ceremonies. As for Tokyo 2020 Olympic and Paralympic Games to be held in 2021, SDF athletes are going to participate in the games. In addition, the MOD/SDF would take security measures, including warning and surveillance over Japan's territorial waters and airspace, including the area around the venues, relief provisions for victims in an event of a large-scale terrorist attack, and response to cyber attacks.



SDF personnel defusing unexploded ordnance by hand



Gun salutes at the Sokuirei-Seiden-no-gi (October 2019)

Measures to Promote Harmony between Defense Facilities and Surrounding Areas

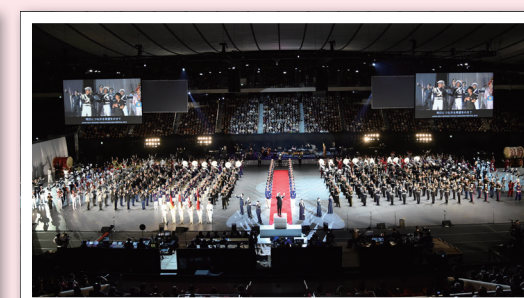
In order to promote harmony between defense facilities and surrounding areas, the MOD has taken measures to prevent, reduce or mitigate aircraft noise and other impacts caused by activities or by the establishment/operation of airport and other defense facilities in the surrounding area.

For stable stationing of the USFJ, it is essential to develop understanding and cooperation of the local governments and residents in vicinities of U.S. bases. The MOD will work to constantly take various other measures, including coordination for unit operation of the USFJ with the local governments and other parties, provision of subsidies pertaining to the USFJ realignment, immediate report to the local governments in cases of an incident or accident, and exchange promotion between the USFJ and local residents.

Moreover, in response to the acceleration of domestic and overseas initiatives to achieve sustainable global environment, the MOD, as a member of the government, also needs to contribute to solving environmental problems, while at the same time implementing measures with more focus on the coexistence of SDF/USFJ facilities and areas with surrounding areas.

Events and PR Facilities

The MOD/SDF conducts activities to widely inform nationals of the current circumstances of the SDF. These activities include the GSDF Fuji Fire Power Exercise, cruises to experience MSDF vessels, and demonstration flights and boarding experiences on aircraft. Furthermore, as part of the commemoration of the SDF anniversary, the SDF Marching Festival is held at Nippon Budokan arena every year. In 2019 the festival was held in Gymnasium 1 of the National Yoyogi Stadium due to renovation of Nippon Budokan, and approximately 38,500 visitors in total came.

Lieutenant Colonel Fukuda, 11th Squadron, Flight Group,
who leads the Blue Impulse

FY2019 SDF Marching Festival

Initiatives for Public Document Management and Information Disclosure

The MOD/SDF is working for proper management and response to requests for information disclosure by reforming the awareness of personnel and the organization culture, enhancing the checking framework, for example.



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