

Part I

Security Environment Surrounding Japan

Chapter 1

Overview

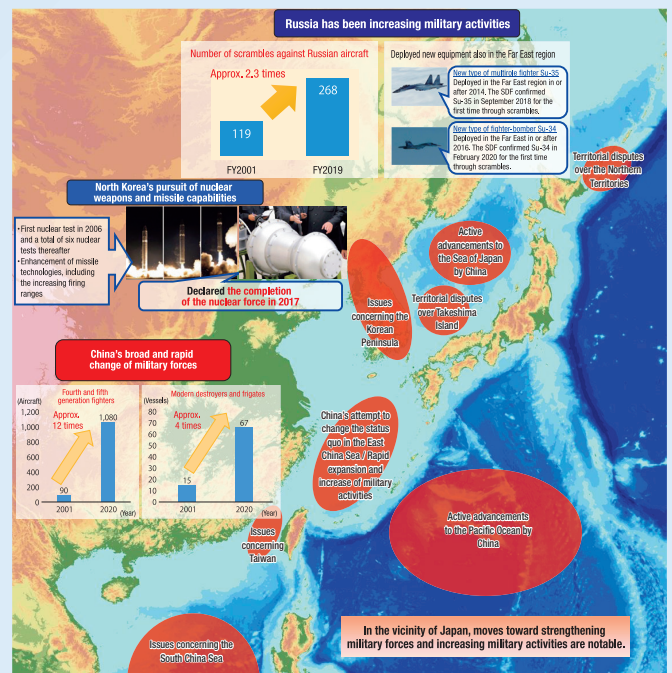
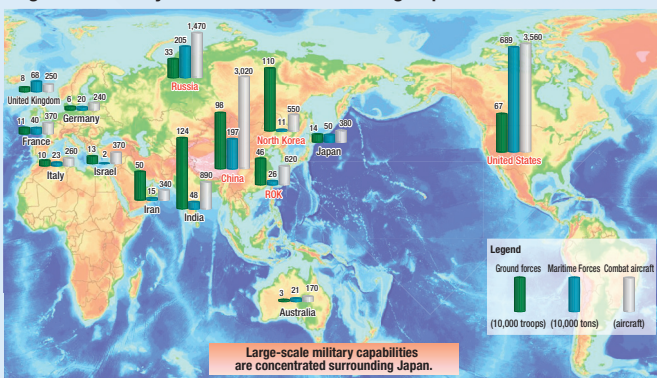
Current Trends in Security Environment

- 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.



Chapter
2

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]

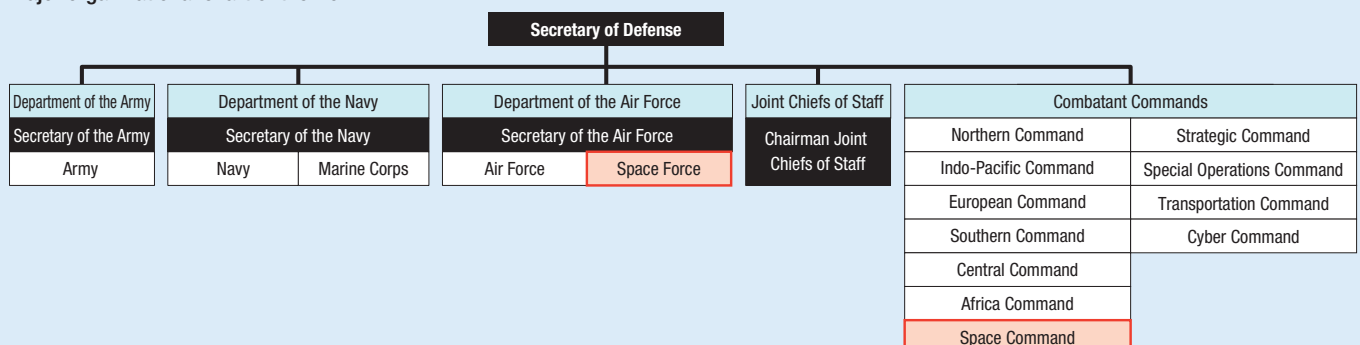
Trends in Security and Defense Policies

- 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]

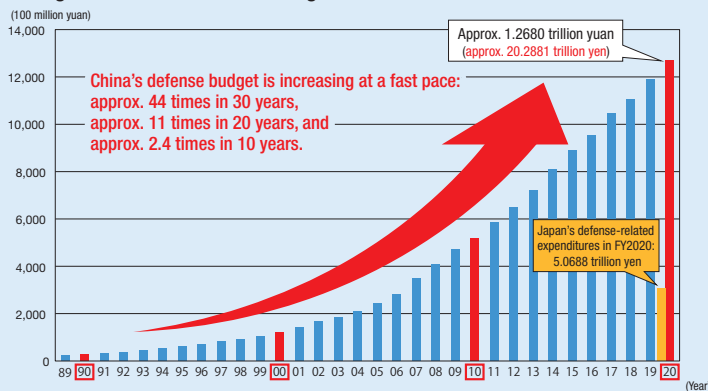
Major organizational chart of the DoD



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

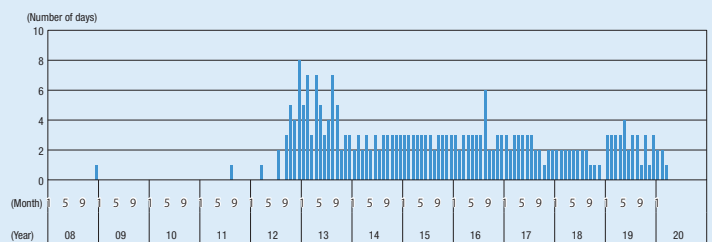


Launch of China's first indigenous aircraft carrier "Shandong" (December 2019) [Avalon/Jiji Press Photo]

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

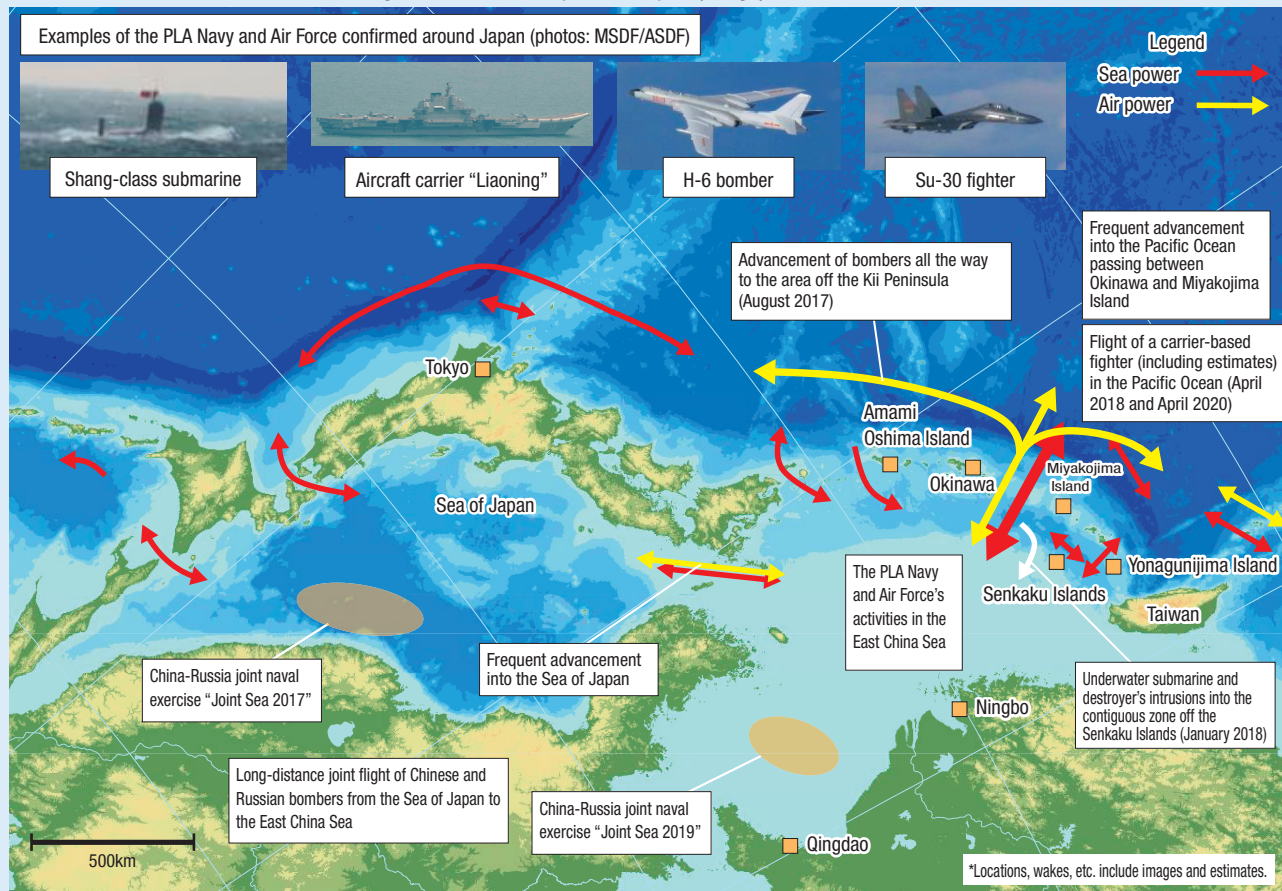


Identification in the contiguous zone

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]

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]

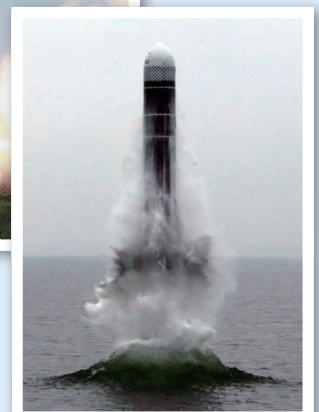


Image publicly released by North Korea when it launched an SLBM "Pukguksong-3" (October 2019) [JANES]

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.

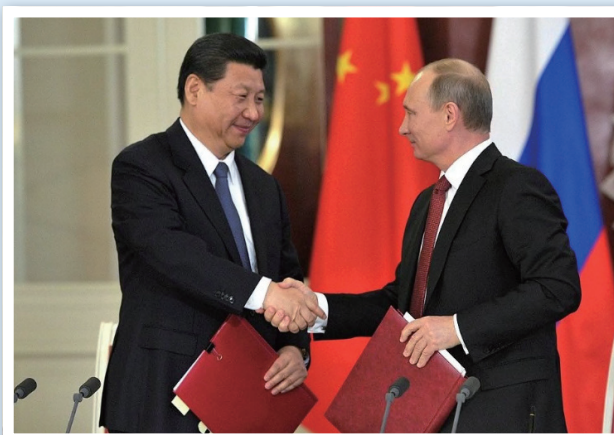
Strategic bomber "TU-160" visiting South Africa for the first time; Front: Lieutenant-General Kobylash, commander of Russia's Long-Range Aviation (right) and South African Minister of Defence and Military Veterans, Mapisa-Nqakula [Russian Ministry of Defence]



Advancement in the Military Cooperation with China

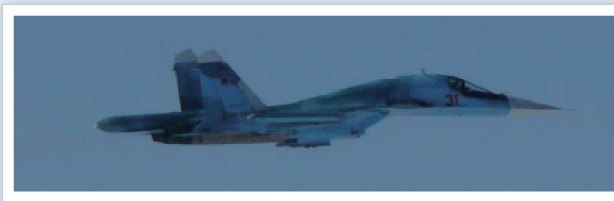
- In July 2019, two Russian Tu-95 long-range bombers carried out joint air patrol with two Chinese H-6 bombers from the Sea of Japan to the East China Sea.
- In September 2019, Russian Minister of Defence Shoigu and, Vice Chairman of the Chinese Central Military Commission Zhang, signed a package of 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

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.

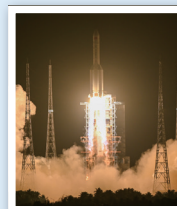


A manned aircraft and an autonomous unmanned vehicle flying in harmony [Russian Ministry of Defence]

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]



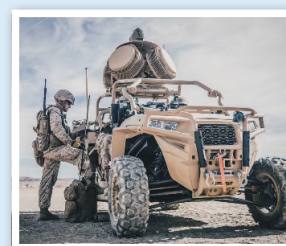
Cyber Domain

- 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

