

### Characteristics of Current Security Environment

▶ P.41

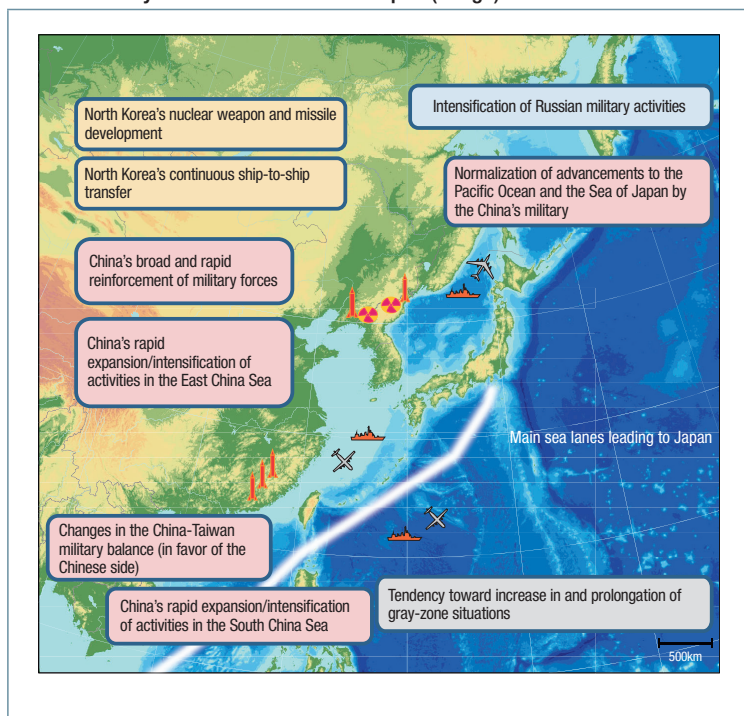
- 1 As uncertainty over the existing order is increasing, inter-state competition is becoming prominent across the political, economic and military realms.  
Gray zone situations are becoming persistent over a long period of time. "Hybrid warfare," a method of altering the status quo that intentionally blurs the boundaries between the military and non-military realms, is sometimes adopted.
- 2 Technological progress is about to fundamentally change how security should be managed.  
Importance of domains of space, cyberspace, and electromagnetic spectrum; and game-changing technologies that could drastically change the conduct of future warfare
- 3 Security challenges, which cannot be dealt with by a single country alone, are prominently emerging.  
Security of maritime traffic; securing stable use of new domains: space and cyberspace, response to proliferation of weapons of mass destruction (WMDs); and response to regional conflict and international terrorism

### Military Trends in the Neighboring Countries of Japan

▶ P.43

- 1 The United States possesses the world's largest comprehensive national power. The United States engages in rebuilding of its military power, strengthens alliances and partnerships, and frames the Indo-Pacific as a priority region.
- 2 China is strengthening capabilities in the domains of space, cyberspace and electromagnetic spectrum in addition to nuclear, missile, naval and air forces. China engages in unilateral, coercive attempts to alter the status quo based on its own assertions that are incompatible with existing international order. In the East China Sea and other waters, China is expanding and intensifying its military activities at sea and in the air. Such Chinese military developments represent a serious security concern.
- 3 North Korea has not carried out the dismantlement of all WMDs and ballistic missiles in a complete, verifiable and irreversible manner: there has been no essential change in the country's nuclear and missile capabilities. Such military trends in North Korea pose a serious and imminent threat to the security of Japan.
- 4 Russia's military activities are trending upward in the Far East. Continued attention needs to be paid to Russian military development.

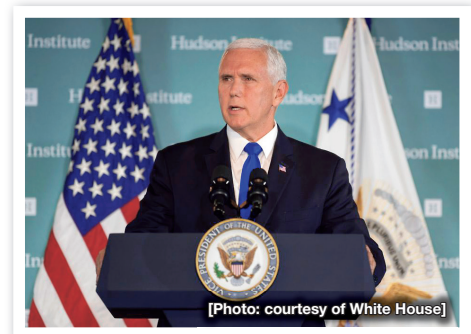
Recent Security Related Issues around Japan (image)



# United States

## Overview ▶ P.47

- 1 The United States recognizes that the primary concern in U.S. security is strategic competition with China and Russia, which are revisionist powers. Especially, the United States is sharpening its deterrence stance against China.
  - As an initial response to China's continued militarization of areas in the South China Sea, the United States disinvented the Chinese navy to the multilateral Rim of the Pacific Exercise (RIMPAC).
  - The U.S. forces carried out repeated Freedom of Navigation Operations in the South China Sea, transit through the Taiwan Strait, and bomber flights over the South China Sea.
  - The United States imposed sanctions on a Chinese military organ and a leader.
  - The United States imposed tariffs on Chinese hi-tech products, heightened scrutiny of Chinese investment in the United States, and charged espionage agents.
- 2 In a speech about the United States' policy towards China, Vice President Mike Pence mentioned an incident in which a Chinese naval vessel approached abnormally close to a U.S. Navy vessel conducting Freedom of Navigation Operations. He went on to say that the U.S. Navy will continue to fly, sail, and operate wherever international law allows and U.S. national interests demand.
- 3 The Trump administration's stance on China has bipartisan support in Congress, which appears likely to be maintained going forward.
- 4 Under the recognition that North Korea's nuclear capabilities constitute a threat to the United States, it has maintained sanctions and continues its efforts to pursue the denuclearization of North Korea, maintaining firm military readiness including through U.S. Forces in Korea



Vice President Mike Pence making a speech about China

## Trends in Security and Defense Policies ▶ P.47

- 1 The United States has positioned the Indo-Pacific region as a priority region, and maintains a forward military presence in the region. In June 2019, the United States released the Indo-Pacific Strategy Report (IPSR), indicating its policy to ensure combat-credible forces to be forward-postured in the region, and reinforce and expand its alliances and partnerships, and evolve them to be networked.
- 2 The United States has been making efforts to maintain military advantages to deter and defeat aggression by great powers, requesting the largest research and development budget in 70 years, and a 15% and 10 % year-on-year increase in the space-related budget and in the cyber-related budget, respectively.
- 3 Regarding nuclear power, the United States released the Nuclear Posture Review (NPR) in February 2018. It indicates the policy that, in order to deter across a spectrum of adversaries, threats and contexts, in addition to sustaining and replacing the nuclear triad (submarine-launched ballistic missiles (SLBMs), intercontinental ballistic missiles (ICBMs) and strategic bombers), the United States will modify a small number of existing SLBM warheads to provide a low-yield option. In addition, the United States withdrew from the Intermediate-Range Nuclear Forces (INF) Treaty in August 2019, claiming Russia's material breach. President Trump also mentioned the need for arms control involving China, which has beefed up medium-range missile capabilities outside the scope of the INF Treaty.
- 4 Regarding missile defense, the Missile Defense Review (MDR) was published in January 2019. It notes that North Korea has the ability to threaten the U.S. homeland with its nuclear missiles. It also pointed out that Russia and China are developing advanced cruise missiles and hypersonic missiles that challenge existing missile defense systems. Under this recognition, the MDR sets out a policy of expanding and modernizing existing systems, and promoting development of new technologies taking advantage of space.
- 5 President Trump instructed the Department of Defense (DoD) to start the necessary processes to establish the Space Force. The DoD forwarded to Congress a legislative proposal to create the Space Force within the Department of the Air Force.

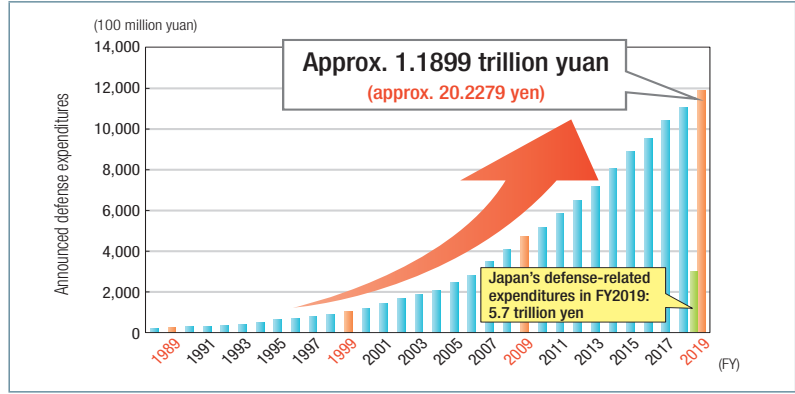


MDR released by the United States

### Rapid Military Modernization ▶ P.58

- 1 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.
- 2 Bolstering these capabilities will reinforce China's "Anti-Access/Area-Denial (A2/AD)" capabilities and lead to the establishment of operational capabilities further afield.
- 3 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.

Changes in China's Defense Budget



Chinese small UAV (unmanned aerial vehicles) drones using "swarm" technology

[Jane's by IHS Markit]

### Activities in the Surrounding Sea Area and Airspace of Japan ▶ P.70

- 1 The Chinese Navy and Air Force have expanded and intensified their activities in the surrounding sea areas and airspace of Japan, including the area surrounding the Senkaku Islands. They are also conducting activities based on a unilateral claim on the Senkaku Islands, and cases involving the one-sided escalation of activities have been seen, creating a situation of great concern to Japan.
- 2 China is likely planning to make such activities routine, given that the Chinese Navy and Air Force are more frequently advancing to the Pacific Ocean and Sea of Japan in recent years. It appears that China continues to improve the quality of its activities, and efforts can be seen to build practical joint operational capabilities.
- 3 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 by deploying aircraft. China continues unilateral efforts to change the status quo by coercion to create a fait accompli.



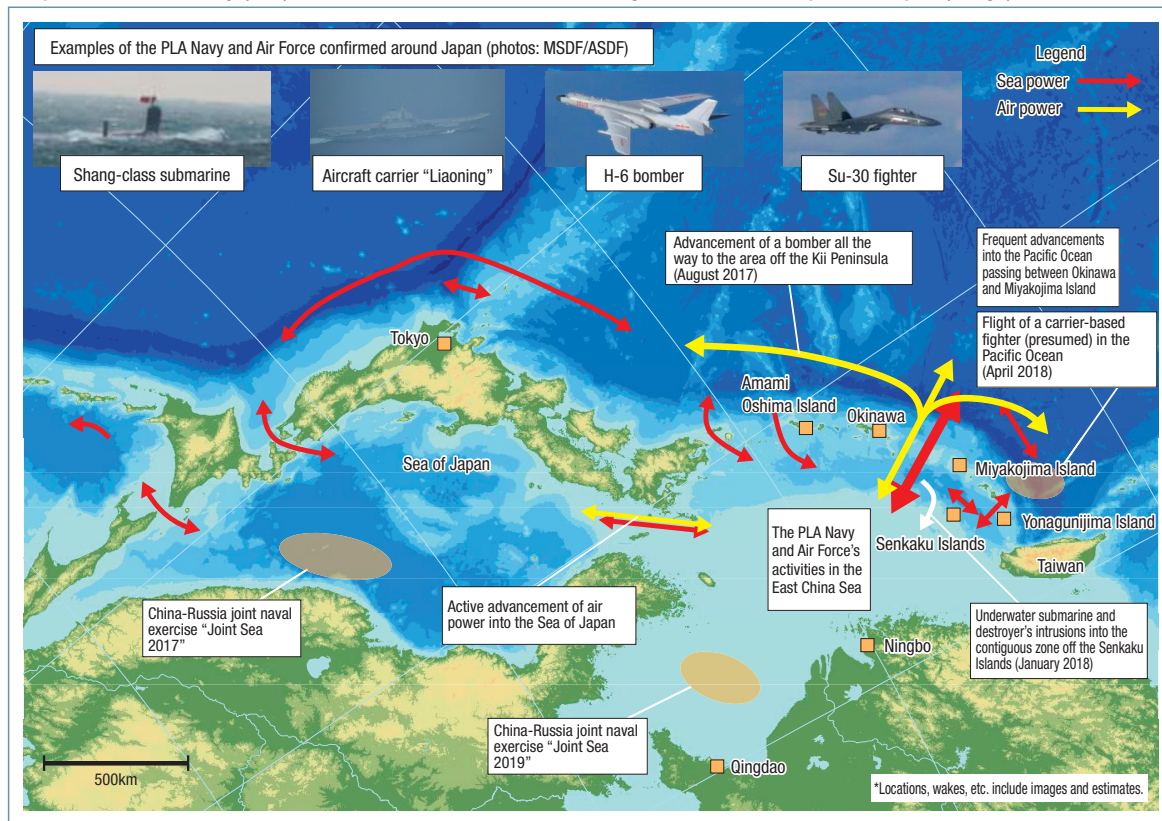
[Jane's by IHS Markit]

A Renhai-class destroyer appeared in the international naval review (April 2019)



Chinese Y-9 patrol aircraft confirmed for the first time within Japan's Air Defense Identification Zone in the East China Sea (March 2019)

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



Activities in Distant Seas

P.77

- 1 China is steadily increasing its capabilities to conduct operations in more distant seas such as the Indian Ocean in recent years.
- 2 While it is thought that the "Belt and Road" Initiative includes a strategic intention to expand its influence in the region, it is possible that the construction of infrastructure based on the initiative will further promote the activities of the PLA in the Indian Ocean, Pacific Ocean and elsewhere. Furthermore, 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 joint exercises.

Relations with Countries and Regions

P.81

- 1 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, developments feeding mutual antagonism emerged between the United States and China.
  - Raising of import tariffs by China as countermeasures against the same measures by the United States
  - Abnormally close approach by a Chinese naval vessel to a U.S. Navy vessel conducting Freedom of Navigation Operations in the South China Sea, etc.
- 2 It has been confirmed that regarding military exchange, which has remained stable in recent years, there are activities indicating a possible change.
- 3 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.
- 4 Regarding Taiwan, since the inauguration of the Tsai administration, five countries severed diplomatic relations with Taiwan, while they established relations with China. While the United States has continued and reinforced its engagement in Taiwan, China has repeatedly expressed its strong protest against Taiwan's independence.
- 5 The overall military balance between China and Taiwan is shifting in favor of China, and the gap appears to be growing year by year.



Abnormal approach by a Chinese naval vessel to a U.S. Navy vessel, reportedly occurred in the South China Sea

### Overview

P.92

- 1 North Korea has repeatedly expressed the intention to work towards denuclearization at the U.S.-North Korea summit meeting in June 2018 and other occasions. North Korea has announced the suspension of nuclear tests and test-firing of ICBMs, and publicly destroyed the Punggye-ri nuclear test site. Moreover, North Korea announced that it will dismantle the missile engine test site and launch platform in the Tongch'ang-ri district in the future, and that it will close the nuclear facilities in Yongbyon if the United States lifts sanctions.
- 2 On the other hand:
  - It is assessed that North Korea has already miniaturized nuclear weapons to fit ballistic missile warheads;
  - North Korea possesses and deploys several hundred ballistic missiles capable of reaching, every part of Japan and
  - North Korea continues to possess capabilities for conducting surprise attacks against Japan utilizing a Transporter-Erector-Launchers (TEL) and submarines.
- 3 In light of the above, there has been no essential change in North Korea's nuclear and missile capabilities. Military trends in North Korea continue to pose a serious and imminent threat to the security of Japan.
- 4 It is now necessary to keep close watch on what kind of concrete actions North Korea will take towards the dismantlement of nuclear weapons and missiles.



The second U.S.-North Korea summit meeting (February 2019)



Nodong

### Current Status of the Nuclear and Missile Development

P.94

- 1 The possibility cannot be discounted that the sixth nuclear weapons test in September 2017 was of a hydrogen bomb.
- 2 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. In May, July and August 2019, North Korea launched a new type of short-range ballistic missiles (presumed) and others nine times toward the Sea of Japan.
- 3 Regarding ballistic missiles, North Korea aims to:
  1. increase the firing range of ballistic missiles;
  2. enhance the accuracy and operation capabilities necessary for saturation attacks;
  3. improve its ability to conduct surprise attacks; and
  4. diversify the forms of launches.

### Ship-to-Ship Transfer

P.108

- 1 North Korea is presumed to be evading the United Nations (UN) Security Council sanctions by conducting ship-to-ship transfers in the high seas, which are forbidden under the terms of the UN Security Council resolutions. It is pointed out that illegal ship-to-ship transfers of oil products and coal by North Korea were increasing rapidly.



A North Korean-flagged tanker strongly suspected of engaging in ship-to-ship transfers (March 2019)

Chapter 2  
 P.117

# Russia

## Trends in the Vicinity of Japan ▶ P.125

- 1 Russia appears to be stepping up military activities not only in the Arctic, Europe, areas near the United States, and the Middle East, but also in the Far East, so close scrutiny of developments in this regard will be required.
- 2 The number of scrambles against Russian aircraft in the Far East has remained high. In addition, Russian aircraft intruded into Japan's territorial airspace in June and July 2019.
- 3 Regarding the Northern Territories, Russia announced that it deployed surface-to-ship missiles to Etorofu and Kunashiri Islands in 2016. It is reported that three Su-35 fighter aircraft were deployed in Etorofu Island in 2018, showing a military build-up by Russia.
- 4 In the large-scale Vostok 2018 exercise, in addition to units of the Eastern Military District, units of the Central Military District and the Northern Fleet participated. Notable features of this year's exercise were that the size was considered the largest since the time of the Soviet Union, and that China and Mongolia participated for the first time.



An Admiral Gorshkov-class frigate: confirmed for the first time by the Maritime Self-Defense Forces (MSDF) (April 2019)



Vostok 2018, a military exercise by Russia (September)

[AFP/Jij]

## Modernization of Nuclear Forces and Development of New Weapons ▶ P.120

- 1 In order to supplement its inferiority in conventional forces and to strike a balance with the nuclear forces of the United States, Russia has prioritized the modernization of nuclear forces. Under the recognition that the United States' installation of missile defense systems both at home and abroad undermines the balance of nuclear forces, Russia is moving forward with the development of new weapons such as the Avangard hypersonic glide vehicle (HGV) that are said to be capable of reliably penetrating the systems.
- 2 The United States provided notice of its intention to withdraw from the INF Treaty, and announced its intention to develop surface-launched intermediate-range missiles capable of carrying conventional warheads. In response, Russia announced plans to develop a ground-launched adaptation of the existing sea-launched intermediate-range cruise missile system, along with hypersonic ground-launched intermediate-range cruise missiles.



[Jane's by IHS Markit]

9M729 ground-launched cruise missiles unveiled by Russia

Chapter 3  
P.158

## Military Science and Technology

- 1 Major states endeavor to develop weapons that leverage cutting-edge, potentially game-changing technologies that could drastically change the conduct of future warfare.
- 2 States are developing autonomous drones equipped with artificial intelligence (AI).
- 3 The United States indicates that Russia and China are developing advanced hypersonic missile capabilities that challenge existing missile defense systems.
- 4 Reports have been published of successful tests and planned deployment of electromagnetic railguns and high-power laser weapons that are expected to provide more effective firepower.

CH-7 "Caihong-7," stealth unmanned aircraft developed by China



[Jane's by IHS Markit]

Chapter 3  
P.162

## Space Domain

- 1 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.
- 2 In outer space, various countries are rapidly developing their capabilities to ensure their military superiority. 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.
- 3 In order to respond to these threats, the United States is considering creating a space force with status equal to that of the army, the navy and the air force.

Launch of BeiDou 42 and 43, a Chinese satellite positioning system by China on November 19, 2018



[Avalon/Jiji Press Photo]

Chapter 3  
P.167

## Cyber Domain

- 1 Information and communications technology (ICT) advancements are further enhancing 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.
- 2 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 military forces and destroying infrastructure.
- 3 Cyber attacks have frequently been carried out against information and communications networks of government organizations and military forces of various countries. Government agencies such as those in Russia, China, and North Korea are suspected of engaging in some cyber attacks.

Threat message from the WannaCry malware attack, which caused huge damage worldwide



[Jiji]

Chapter 3  
P.173

## Electromagnetic Domain

- 1 Securing use of the electromagnetic spectrum is indispensable for the operation of communication equipment and radar systems. Major countries have recognized electronic attacks for interrupting adversaries' use of electromagnetic spectrum as a means to effectively hamper adversaries' military performance, enhancing electronic warfare capabilities.
- 2 It is reported that China routinely conducts jamming operations against communication and radar systems and GPS satellite systems in exercises.
- 3 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.



Krasukha-4, an electronic warfare system Russia reportedly used in Syria

Chapter 3  
P.176

## Maritime Domain

- 1 In the waters and airspace in the East and South China Seas, it has become increasingly common for countries to unilaterally assert their rights or take actions, based on their unique assertions which are incompatible with the existing international order.
- 2 Piracy seen at various locations has become a threat to maritime traffic. The international community is collectively conducting counterpiracy operations.
- 3 The Arctic Ocean has traditionally been used for the deployment of strategic nuclear forces and as their transit route. With the decrease in sea ice in recent years, ships have been able to navigate for a longer period of time and more extensively than before. It is therefore considered that the region could be used for maneuvering military forces in the future.

Chapter 3  
P.180

## WMDs

- 1 The transfer and proliferation of WMDs, such as nuclear, biological and chemical (NBC) weapons, and ballistic missiles that deliver such weapons, have been recognized as a significant threat since the end of the Cold War.
- 2 In particular, there still remain strong concerns that non-state actors, including terrorists, against which traditional deterrence works less effectively, could acquire and use WMDs. Additionally, the proliferation of ballistic missiles has the risk of leading to the destabilization of that region.

Chapter 3  
P.185

## International Terrorism and Regional Conflicts

- 1 Conflicts or disputes concerning racial, religious, territorial, resources and other issues are occurring or continuing at various locations in the world.
- 2 International terrorist groups' activities have remained a grave challenge for the international community. Terrorism threats have diffused and deepened on the diversification of terrorist attacks and others.