Section 3 Maritime Trends

Maritime security is of critical importance to Japan, a maritime nation surrounded by sea. For example, Japan relies on sea transport to import energy resources. Accordingly, ensuring secure sea lanes is vital for the survival of the nation. Securing the stable use of one of the

global commons, the "seas," is a key security issue for the international community. In recent years, maritime trends in the countries concerned are drawing attention, including their compliance with relevant international norms¹.

Trends Related to the "Principle of the Freedom of the High Seas" in the East China Sea and South China Sea

The United Nations Convention on the Law of the Sea (UNCLOS) provides for the principles of "freedom of navigation in the high seas" and "freedom of overflight over the high seas"2. Nevertheless, in the waters and airspace in the periphery of Japan, especially the East China Sea and the South China Sea, 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 law and order. This has caused situations of undue infringement upon such principles.

The East China Sea has recently seen numerous cases of acts which go against the principles of freedom of navigation in the high seas and freedom of overflight over the high seas. In March and April 2011 and in April 2012, Chinese helicopters and other aircraft that appeared to belong to the State Oceanic Administration (SOA) flew close to Japan Maritime Self-Defense Force (JMSDF) destroyers which were engaged in monitoring and surveillance in the East China Sea. In January 2013, a Chinese naval vessel directed fire-control radar at a JMSDF destroyer navigating in the East China Sea and is suspected to have directed fire-control radar at a helicopter carried onboard a JMSDF destroyer. In May and June 2014, fighters of the People's Liberation Army (PLA) of China flew abnormally close to aircraft of the JMSDF and of the Japan Air Self-Defense Force which were flying over the East China Sea.

On November 23, 2013, the Chinese government announced that it established "the East China Sea Air Defense Identification Zone (ADIZ)" including the Senkaku Islands which China described as if they were a part of China's "territory," that it obligated aircraft flying in the said zone to abide by the rules set forth by the Chinese Ministry of National Defense, and that the PLA would take "defensive emergency measures" in the case where such aircraft does not follow the instructed procedures. Japan is deeply concerned about such measures, which are profoundly dangerous acts that unilaterally change the status quo in the East China Sea, escalating the situation, and that could cause unintended consequences in the East China Sea. Furthermore, the measures unduly infringe the freedom of overflight over the high seas, which is the general principle of international law. Japan is demanding China to revoke any measures that could go against the principle of freedom of overflight over the high seas. The United States, the Republic of Korea (ROK), Australia, and the European Union (EU) have expressed concern about China's establishment of such zone.

The South China Sea has also seen many similar acts. In March 2009, Chinese ships, including a naval vessel, a maritime research ship of the SOA, a Bureau of Maritime Fisheries' patrol ship, and trawlers, approached a U.S. Navy acoustic research ship operating in the South China Sea to obstruct its operations. In addition, in December 2013, a

For example, the United Nations Convention on the Law of the Sea (UNCLOS) comprehensively sets forth the rights and obligations under international law related to the use and development of the oceans and their regulations. UNCLOS was adopted in 1982 and entered into force in 1994 (Japan ratified it in 1996)

UNCLOS, Article 87, Paragraph 1 (a) and (b)

Chinese naval vessel cut across the bow of a U.S. Navy cruiser operating in the South China Sea at point blank range. In August 2014, a Chinese fighter is speculated to have flown abnormally close to and obstructed a U.S. Navy patrol aircraft over the South China Sea³. These cases go against the principles of freedom of navigation in the high seas and freedom of overflight over the high seas, and are dangerous acts that could cause unintended consequences⁴.

In addition, friction between China and ASEAN member states and other countries has surfaced over issues including the sovereignty of islands and other features. Against this backdrop, China, on the grounds of the so-called "nine-dash line" whose validity under international law has been described as ambiguous, has asserted sovereignty over the Spratly Islands, among other areas. On this basis, China has proceeded with land reclamation and other development work in some land features on a rapid and massive scale, as well as obstructed fishing and other vessels of countries approaching the features, etc. by firing warning shots and water cannons at the vessels. Contesting states – the Philippines and Vietnam – as well as the United States and other countries have expressed concern over China's assertive and dangerous acts that could cause unintended consequences.

Despite these numerous acts that could pose risks

to securing the stable use of oceans, in recent years progress has been made on efforts to avert and prevent unintended consequences in the sea. In April 2014, navies of participating countries of the Western Pacific Naval Symposium (WPNS), including Japan, the United States, and China, reached agreement on the Code for Unplanned Encounters at Sea (CUES)⁶. CUES sets forth a code of conduct for unexpected encounters by vessels or aircraft of the navies of each country. In November 2014, the United States and China agreed on measures pertaining to mutual notification of military activities, as well as on rules of behavior to avert collisions in waters and airspace in accordance with UNCLOS, CUES, and other frameworks. In January 2015, the Fourth Joint Working Group Consultation was held with a view to implementing the "Maritime and Aerial Communication Mechanism between Japan-China Defense Authorities" for averting incidental collisions between Japan and China. It is strongly hoped that these initiatives designed to avert and prevent unintended consequences in the seas and skies will supplement the existing international law and order, and that the countries concerned, including China, refrain from unilateral actions that heighten tension and act on the basis of the principle of the "rule of law."

See Part I, Chapter 1, Section 3 (China); Part I, Chapter 1, Section 6 (Southeast Asia)

Trends in the Arctic Ocean

The Arctic Ocean, which covers most of the Arctic Region, borders Russia, the United States, Canada, Denmark, and Norway⁸.

In recent years, decreases in sea ice have increased potential for the uses of the Northern Sea Route and the exploration of natural resources. For these reasons, the Arctic states have been more proactively promoting efforts to acquire their interest in resource development and use of the sea route. On the other hand, there exist unresolved issues among the Arctic states over the demarcation of maritime boundaries based on UNCLOS and extension of the continental shelf. It is considered that some of these

Arctic states including Russia are promoting efforts to deploy new military capabilities for the purpose of securing their interest and defending their territories. Traditionally, the Arctic Region has been used for the deployment of strategic nuclear forces and as their transit route. In addition, due to the decrease of sea ice, surface ships can navigate for longer periods of time and in wider areas than before. In this regard, the region could be used for deploying maritime forces or maneuvering military forces using the maritime transport capabilities of military forces in the future. The strategic importance of the region is thus increasing.

Some analysts have noted that these incidents occur as many countries including the United States treat an exclusive economic zone (EEZ) the same as high seas based on UNCLOS from the perspective of freedom of navigation, whereas China treats EEZ as being similar to territorial waters. It is considered that the United States respects the provisions of UNCLOS while it has not concluded the convention.

According to the written testimony of U.S. Assistant Secretary of Defense for Asian and Pacific Security Affairs David Shear before the Senate Committee on Foreign Relations dated May 13, 2015, the United States has enhanced its presence in and around the South China Sea to protect U.S. national interests in the South China Sea, such as peaceful resolution of disputes, freedom of navigation in the high seas, and freedom of overflight over the high seas. For example, U.S. military forces are conducting port calls of naval vessels, carrying out ISR activities, and exercising with neighboring countries. In addition, the U.S. Navy has announced that the littoral combat ship (LCS) USS Fort Worth, which has been rotationally deployed to Singapore since December 2014, conducted patrol in waters near the Spratly Islands in May 2015, which marked the first time an LCS operated in these waters.

See Part I. Chapter 1, Section 6-4 (Trends concerning Sovereignty Over the South China Sea)

CUES sets forth safety procedures and notification methods for unplanned encounters at sea by the naval vessels and air force aircraft of participating countries of the WPNS. CUES is not legally binding and does not supersede the annexes of the Convention on International Civil Aviation and other international treaties.

During the Fourth Joint Working Group Consultation, the two sides agreed to coordinate on the mechanism's naming to "Maritime and Aerial Communication Mechanism" in order to clarify its coverage of aircraft.

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

Maritime Security Efforts of Countries

With regard to oceans, not only for economic development but also for the national security of each country, it has become even more important to promote appropriate rule-making and to make concerted efforts by the international community to address risks and ensure freedom of navigation while respecting such rules. "Open and Stable Seas" constitute the basis for peace and prosperity of the international community as a whole. In this regard, each state has been tackling on its own or with others various issues including piracy, unidentified vessels, illegal dumping, contraband, human smuggling, maritime disasters, and the removal of hazardous substances, for maintaining the stability of sea lanes of communication.

United States

The United States deems that its safety and economic security depend upon the secure use of the world's oceans, and that the United States has a vital interest in maritime security. Based on this recognition, the United States leads the Combined Maritime Forces (CMF)⁹ to counter piracy and advance maritime safety, including tackling terrorism in waters surrounding the Middle East and Africa, such as the Gulf of Aden, the Persian Gulf, and the Indian Ocean. In waters surrounding Central America, the United States conducts operations to counter illicit trafficking, primarily drug trafficking with European and Western Hemisphere countries¹⁰. The United States thus dispatches vessels to the various sea areas of the world and takes actions to combat piracy, organized crime, terrorism, and the proliferation of weapons of mass destruction (WMDs).

The U.S. National Security Strategy, released in February 2015, states that the United States has an enduring interest in freedom of navigation as well as the safety and sustainability of the maritime environment, and that it would therefore maintain the capability to ensure the free flow of commerce, to respond quickly to those in need, and to deter those who might contemplate aggression. In June 2014, President Barack Obama unveiled the "United States Counter Piracy and Maritime Security Action Plan," by which he presented the guidelines to strengthen maritime security as it relates to counter piracy. In accordance with the National Strategy for Maritime Security established in 2005¹¹, this Action Plan sets forth the policy for the repression of piracy and related maritime crime. It then outlines the guidelines for implementing tasks under the leadership of an interagency policy committee, covering the areas of prevention of attacks, response to acts of maritime crime, and enhancing maritime security and governance. In addition, the Action Plan sets out frameworks for combating piracy and enhancing maritime security off the Horn of Africa and in the Gulf of Guinea¹². Furthermore, Furthermore, "A Cooperative Strategy for 21st Century Seapower," jointly released by the U.S. Navy, Marine Corps, and Coast Guard in March 2015, expresses the view that U.S. forward naval presence is essential to accomplishing missions including protecting the maritime commons, and that by operating jointly with allies and partners, naval forces can effectively address the threats to maritime security.

NAT₀

NATO has the Standing NATO Maritime Groups, which are a multinational, integrated force made up of vessels from member countries. Through the Groups' routine exercises and maintenance of rapid deployment capability, NATO has provided deterrence in the sea to member countries. To combat the threat of piracy, NATO has deployed vessels of the Standing NATO Maritime Groups to off the coast of Somalia and the Gulf of Aden to engage in counterpiracy activities. In Operation Ocean Shield that NATO has been conducting since August 2009, NATO's mission is to carry out counter-piracy activities by boat, as well as to help countries that requested it build up their capacities to counter piracy. Furthermore, NATO identifies acts of terrorism as a threat to its member countries. Following

CMF is a multinational force, which operates to promote maritime security, stability, and prosperity, under the U.S. Central Command. Forces from 30 countries participate in CMF, and the CMF Commander concurrently serves as the Commander of the U.S. Fifth Fleet. CMF is comprised of three combined task forces: Combined Task Force 150 (CTF-150), which is tasked with maritime security operations; Combined Task Force 151 (CTF-151) with counter piracy operations; and Combined Task Force 152 (CTF-152) with maritime security operations in the Persian Gulf. The Japan Self-Defense Forces deploy units to CTF-151.

Fourteen European and Western Hemisphere countries, including the United States, conduct Operation Martillo to combat illicit trafficking, including the trafficking of narcotics, precursor chemicals, bulk cash, and weapons, as well as organized crime along the sea areas surrounding Central America. From the U.S. Forces, Joint Interagency Task Force South under the U.S. Southern Command carries out the operation. According to a report by the U.S. Southern Command to the House Armed Services Committee, the Operation's accomplishments included the disruption of about 132 tons of cocaine in FY2013.

A comprehensive national strategy for maritime security to integrate Department-level strategies related to maritime security and ensure their effective and efficient implementation. This strategy identifies today's threats to maritime security as: nation-state threats; terrorist threats; transnational criminal and piracy threats; environmental destruction; and illegal seaborne immigration. To address these threats, the strategy states that the United States needs to enhance international cooperation, strengthen maritime intelligence capabilities, embed security into commercial practices, integrate government and private sector efforts, and assure continuity of the marine transportation system.

Framework for Combating Piracy and Enhancing Maritime Security off the Horn of Africa: Recognizing that piracy off the coast of Somalia has grave impact on global maritime transport, this framework states that the United States would promote measures, such as provision of persistent interdiction-capable presence at sea off the Horn of Africa, strengthening of international counter-piracy frameworks, and appropriate law enforcement exercises.

Framework for Combating Piracy and Enhancing Maritime Security in the Gulf of Guinea: Recognizing that the Gulf of Guinea suffers from factors, including weak governance in neighboring countries, lack of appropriate naval and law enforcement forces, and government corruption, which make the issue of piracy and maritime crime more complex and serious, this framework states that the United States would promote measures, such as strengthening of regional maritime capacity through the provision of training and equipment, expansion of combined operations with African partners, and facilitation of the development of an integrated strategy among the Gulf of Guinea nations.

the 2001 terrorist attacks in the United States, NATO has conducted Operation Active Endeavour since October 2001 and has been implementing counter-terrorism activities, including maritime patrols in the Mediterranean Sea, as part of the collective defense pursuant to Article 5 of the North Atlantic Treaty.

In January 2011, NATO unveiled the "Alliance Maritime Strategy." The advancement of globalization has facilitated terrorism and the proliferation of WMDs. Based on this recognition, the Strategy outlines NATO's intention to carry out efforts to ensure its contribution to deterrence, crisis management, collective defense, maritime security, among other areas. These efforts include: (1) deepening cooperative relations with appropriate countries and international actors, such as the EU and the United Nations; and (2) developing fully capable, flexible, rapidly deployable, interoperable, and sustainable maritime forces. In addition, the Wales Summit Declaration adopted at the NATO Summit in September 2014 states that NATO would continue to intensify and expand its implementation of the measures outlined in the Strategy, and further enhance the Alliance's effectiveness in the maritime domain.



NATO forces participating in the counterpiracy mission, Operation Ocean Shield [NATO website]

3 | EU

With many of its member states facing the ocean, the EU has high maritime traffic and economic activity in the sea. To date, the EU has actively engaged in counter-piracy activities off the coast of Somalia and in the Gulf of Aden in order to maintain maritime stability¹³. In June 2014, the European Council adopted the "EU Maritime Security Strategy," for purposes including presenting the EU's framework for the development of the maritime policies of EU member states and protecting the strategic maritime interests of the countries. The Strategy construes piracy, terrorism, the proliferation of WMDs, and restrictions to the freedom of navigation as threats. It sets forth comprehensive, cross-sectoral, coherent, and efficient approaches to maritime security, including: (1) Promote rules-based good governance at sea; (2) Promote coordination amongst member states and with other international organizations and partners; and (3) Enhance the role of the EU as an actor that conducts conflict prevention, crisis response, and management of maritime interests.

4 United Kingdom

The United Kingdom is an island nation surrounded by sea, and has a heritage of engaging actively in maritime activities, including maritime trade. The United Kingdom still possesses many overseas territories and has an exclusive economic zone (EEZ) which extends about 25 times the U.K. terrestrial extent. Due to these factors, the United Kingdom proactively deploys its forces to NATO-and EU-led multinational forces¹⁴ in order to ensure the maritime security of the sea areas surrounding the United Kingdom, including its overseas territories, and by extension, the seas of its neighboring countries.

In May 2014, the U.K. government released "The UK National Strategy for Maritime Security" The United Kingdom considers that ensuring maritime security is

¹³ The EU has conducted the counter-piracy operation Operation Atalanta in this sea area, which became the EU's first maritime mission, since December 2008. Vessels and aircraft that countries deploy escort ships, conduct patrols in these waters, among other activities.

¹⁴ The United Kingdom rotationally deploys forces to Operation Ocean Shield organized by NATO and Operation Atalanta organized by the EU. The headquarters of both operations are located at the Northwood Maritime Command Headquarters in the United Kingdom. The United Kingdom also deploys forces to CMF-led operations.

This Strategy is a strategy document released jointly by four departments: the Foreign and Commonwealth Office; the Home Office; the Ministry of Defence; and the Department for Transport.

synonymous with the advancement and protection of the United Kingdom's national interests, at home and abroad. Based on this recognition, the Strategy identifies objectives, such as promoting a secure international maritime domain and upholding international maritime norms, developing the maritime governance capacity and capabilities of states in areas of strategic maritime importance, and assuring the security of vital maritime trade and energy transportation routes. To these ends, the Strategy lists measures, including: (1) attain a comprehensive understanding of the maritime domain through the use of information resources across departments and agencies, among other means; (2) work closely with maritime partners through championing regional initiatives as a proponent of freedom of navigation; (3) share information with partners and support capacity-building efforts in areas of strategic importance; and (4) coordinate joint operations between maritime departments and agencies and seek to procure common equipment.

France

France, with its many overseas territories, is deemed to have the second largest EEZ in the world. About 62% of this EEZ is in the Pacific region, and about 24% is in the Indian Ocean. France attaches importance to its maritime strategy in the Asia-Pacific, identifying itself as "a sovereign power and a player in the security of the Indian Ocean and the Pacific"16. The French Armed Forces station their units in French territories, including Polynesia and New Caledonia, and deploy frigates, landing ships, and other equipment. "France and Security in the Asia-Pacific," which the Ministry of Defense released in April 2014, underscores that France is a maritime nation and has participated in various regional cooperation forums on maritime issues¹⁷. It then outlines France's intention to build strong partnership relations with Asia-Pacific countries¹⁸.

Australia

Australia is a maritime nation surrounded by ocean, and much of the country's trade relies on sea transport¹⁹. Under these circumstances, Australia's security largely hinges on regional maritime security.

In light of the above, Australia sets out the "Indo-Pacific" concept and presents its commitment to prioritizing the stability of this region in its Defence White Paper published in 2013. In particular, in order to prevent adversary forces from establishing a presence in Southeast Asia and in other neighboring regions, and to maintain stable sea lanes on which Australia depends, the Australian Defence Force (ADF) carries out patrol activities in the Indian Ocean, the South China Sea, and the South Pacific Ocean. In addition, the ADF provides patrol vessels to South Pacific countries²⁰ and mobilizes ADF assets to guard the coasts.

China

China also relies on sea transport for over 90% of its trade cargo²¹. Accordingly, ensuring the security of China's sea lanes constitutes a critical part of the "basic safeguards for ensuring sustainable economic and social development"22, one of China's "core interests." Therefore, as a member of the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)²³, China shares information and participates in cooperative arrangements related to piracy in Southeast Asia. Since December 2008, China has deployed naval vessels to off the coast of Somalia and the Gulf of Aden and has been involved in international efforts to repress piracy. Through such activities, China has contributed to ensuring maritime security.

Meanwhile, in the South China Sea, China and ASEAN member states have conflicting assertions over the sovereignty of such areas as the Spratly Islands²⁴

¹⁶ France identifies itself as "a sovereign power and a player in the security of the Indian Ocean and the Pacific" in the French White Paper.

¹⁷ France has actively taken part in such forums as the IISS Asia Security Summit (Shangri-La Dialoque), the Indian Ocean Naval Symposium, and the South Pacific Defence Ministers' Meeting.

For example, France and India have established a strategic partnership. They conduct joint exercises among their land, naval, and air forces, respectively, and have equipment cooperation. In addition, France carries out close political dialogue with Malaysia and extends cooperation, including capacity-building support for the submarine unit of the Malaysian Armed Forces.

According to the Australian Department of Infrastructure and Regional Development, between July 2012 and June 2013. Australia's exports and imports transported by sea amounted to AUD 405.7 billion. According to the Australian Department of Foreign Affairs and Trade, Australia's exports and imports of goods in 2012 totaled AUD 510.2 billion.

See Part I, Chapter 1, Section 5-3-4

According to the website of the Central People's Government of China, over 90% of China's export and import cargo, such as crude oil, iron ore, food, and container, are transported by sea.

Then-State Councilor Dai Bingguo, "China will unswervingly follow path of peaceful development" (December 7, 2010, Ministry of Foreign Affairs of China website)

As of May 2015, the contracting parties to ReCAAP are the following 20 countries: Australia; Bangladesh; Brunei; Cambodia; China; Denmark; India; Japan; the ROK; Laos; Myanmar; the Netherlands; Norway: the Philippines: Singapore: Sri Lanka: Thailand: United Kingdom: United States: and Vietnam.

The area surrounding the Spratty Islands is expected to have offshore resources such as oil and natural gas. In addition, the area is a maritime transport hub and is blessed with rich fishery resources.

and the Paracel Islands²⁵. In recent years, the countries concerned, including China, have stepped up their activities to assert their sovereignty. Developments associated with the freedom of navigation in the sea have been subject to increasing international concern.

Southeast Asia

Southeast Asia is located at the crossroads of traffic, linking the Pacific and the Indian Oceans, such as the Straits of Malacca and the South China Sea. This region, however, has maritime security issues, including disputes over the sovereignty of the South China Sea and piracy.

In 2002, ASEAN and China signed the Declaration on the Conduct of Parties in the South China Sea (DOC)²⁶ aimed at peacefully setting the issues over the South China Sea. Currently, official consultations are held with a view to establishing the Code of the Conduct of Parties in the South China Sea (COC). The COC is deemed to contain more specific content than the DOC and be legally binding. In addition, there have been developments related to settling issues through arbitral proceedings set out in UNCLOS.

In January 2013, the Philippines instituted arbitral proceedings pursuant to UNCLOS for the dispute between the Philippines and China over its assertions and actions in the South China Sea. In response, in February 2013, China issued a notification to the Philippines stressing that the issue be settled bilaterally and that China would not agree to arbitral proceedings²⁷. In December 2014, China released a paper alleging that the arbitral tribunal does not have jurisdiction over this case. That same month, Vietnam, another contesting state, requested the arbitral tribunal to take into consideration Vietnam's assertions over the South China Sea. In this regard, there has been a trend among some countries concerned to work towards a peaceful solution of the issue in accordance with international law.

In the Southeast Asia region, multilateral cooperation has also made progress to deal with wide-ranging security issues, including piracy and other transnational issues. With regard to counter-piracy measures, Indonesia, Malaysia, Singapore, and Thailand conduct the Malacca Strait Patrols²⁸. In addition, efforts have been under way to share information related to piracy and build a cooperation arrangement in accordance with ReCAAP.

Section 4 Outer Space and Security

Outer Space and Security

Nearly 60 years have passed since a satellite was launched into outer space for the first time in the history of mankind. In recent years, technology leveraging outer space has been applied to various areas. No state is allowed to own outer space, and it is freely available to all nations. Major countries thus make proactive efforts to use outer space¹. For example, meteorological and observation satellites are used to observe weather as well as land and waters; communication and broadcasting satellites are used for the Internet and broadcasting; and positioning satellites are used to navigate aircraft and ships. These satellites have widely prevailed in social, economic, scientific, and other areas as essential infrastructure for the public and private sectors.

In major countries, military forces are actively involved in outer space activities and utilize a variety of satellites. There is no concept of national borders in outer space, meaning that the utilization of satellites enables the observation of, communication at, and positioning on any area on Earth. Thus, major countries make efforts to enhance the capabilities of a variety of satellites and launch them for the purpose of enhancing C4ISR functions². Such satellites include image reconnaissance satellites reconnoitering military facilities and targets, satellites gathering radio wave information for military communications, communication satellites for military communication, and positioning satellites for navigating naval vessels and aircraft and enhancing the precision of

- China, Taiwan, Vietnam, the Philippines, Malaysia, and Brunei assert sovereignty over the Spratly Islands. China, Taiwan, and Vietnam assert sovereignty over the Paracel Islands
- See Part I, Chapter 1, Section 6-4, Footnote 41
- In the case of the arbitral tribunal in accordance with UNCLOS, even if either party to a dispute does not agree to bring the case before the arbitral tribunal, the tribunal may continue the proceedings and make its award, at the request of the other party to the dispute
- The Malacca Strait Patrols are comprised of: the Malacca Strait Sea Patrols which commenced in 2004 by the navies of Indonesia, Malaysia, and Singapore to monitor piracy and other activities in the Malacca-Singapore Strait (Thailand participated in 2008); aircraft patrol activities which commenced in 2005; and information sharing activities which commenced in 2006.
- The Outer Space Treaty (The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies) that came into force in October 1967 defines such matters as the use of the Moon and other celestial bodies for peaceful purposes, the freedom in principle of exploration and use of outer space, and the prohibition of ownership. However, no clear international agreement has been reached on the definition of outer space, though according to one of the concepts, outer space is considered space located 100 km or further away from the Farth's surface.
- The term "C4ISR" stands for command, control, communication, computer, intelligence, surveillance, and reconnaissance. The 1991 Gulf War is considered "the first high-tech war conducted in outer space in the history of mankind."