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Revised Japan-US Alliance and Increasing Chinese Influence

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President Ma Ying-jeou of the Republic of China Proposes the South China Sea Peace Initiative

The dispute over sovereignty of the South China Sea area lurked under the surface for decades. In recent years, however, this dispute has emerged as one of the major flashpoints in the Asia-Pacific region. Over the past five years, with most of the claimants engaging in actions to further their own interests, instead of searching for constructive solutions, the South China Sea has witnessed an increased level of activity. Amidst rapidly escalating tensions, it is especially important for nations to demonstrate self-restraint and propose peaceful solutions with the potential to benefit all—and the ROC is playing exactly this role.

Complying with the spirit of the East China Sea Peace Initiative and the principles of protecting sovereignty, shelving disputes, pursuing peace and reciprocity, and promoting joint exploration and development, President Ma Ying-jeou proposed the South China Sea Peace Initiative at the 2015 ILA-ASIL (International Law Association and American Society of International Law) Asia-Pacific Research Forum on May 26. Like the East China Sea Peace Initiative, this initiative again calls upon all parties to embrace reconciliation and cooperation, and turn what seems like impossible tasks into the possible. This initiative includes five key points, which urge the other nations in the region to:

- Exercise restraint, safeguard peace and stability and refrain from taking any unilateral action that might escalate tension;
- Respect the principles and spirit of international law, including the Charter of the United Nations and the United Nations Convention on the Law of the Sea, and to peacefully settle disputes through dialogue and jointly uphold the freedom and safety of navigation and overflight;
- Ensure that all parties concerned participate in maritime cooperation and shared codes of conduct in order to enhance peace and prosperity;
- Shelve sovereignty disputes and establish a regional cooperation mechanism for the development of resources under integrated planning; and
- Coordinate and cooperate on nontraditional security issues such as environmental protection, scientific research, maritime crime fighting, humanitarian assistance and disaster relief.



President Ma proposes the South China Sea Peace Initiative at the 2015 ILA-ASIL Asia-Pacific Research Forum. (Source: Office of the President, ROC)



President Ma meets Ms. Lori Damrosch, the president of ASIL, and Professor Torsten Stein of ILA at the Office of the President. (Source: Office of the President, ROC)

Immediately after the release of the initiative by President Ma, Jeff Rathke, the acting deputy spokesman of the State Department of the United States, expressing the US response to this proposal, said that the US “appreciate[s] Taiwan’s call on claimants to exercise restraint, to refrain from unilateral actions that could escalate tensions, and to respect international law as reflected in the Law of the Sea Convention.” The European Parliament and the Congress of Belgium also expressed their welcome of this initiative, saying that it is a desperately needed solution that will help to facilitate regional peace, security, and stability, and deescalate tension.

To practice what it preaches, the ROC has been exercising self-restraint in its management of Pratas and Taiping (Itu Aba) islands. Since 2000, the ROC has been stationing Coast Guard personnel, instead of military forces, on both islands in order to avoid unnecessary provocation and possible miscalculations. In addition, the ROC’s construction work on Taiping Island aims only to renovate the aging dock and runway so as to solve the problem of unloading supplies. None of the ROC’s actions in the South China Sea are intended to change the status quo in the area, which is in stark contrast to the land reclamation activities taken by its neighbors.

Despite its efforts, the ROC has not been included in any mechanisms for negotiation of South China Sea issues. As in any successful diplomatic solution, none of the relevant parties should be excluded from talks aimed at resolving disputes. The ROC’s management of the two islands in the South China Sea and its maintenance of maritime security in their surrounding areas are solid reasons why the ROC must not be absent from discussion of South China Sea issues. If the ROC can participate in relevant talks and successfully promote the essence of the South China Sea Peace Initiative, it will make a contribution to the peaceful resolution of regional disputes.

Beijing's Maritime Silk Road: A Friendlier Version of the "String of Pearls"

Ou Si-fu

Introduction

The Maritime Silk Road (MSR) concept first emerged during Chinese Leader Xi Jinping's trip to Southeast Asia in October 2013. Subsequently, in the fall of 2014, Xi visited Sri Lanka, the Maldives and India to promote the MSR. In April 2015, Xi traveled to Pakistan bearing multibillion-dollar investments meant to highlight the benefits of the MSR. China* hopes that the MSR will alleviate neighboring countries' security concerns, and it can be seen as a friendlier version of the "String of Pearls"—an economics-first, military-later strategy. Beijing's southward pivot currently focuses on economic cooperation, but no doubt the MSR will help the People's Liberation Army Navy (PLAN) enhance its strategic reach and logistics in the Indian Ocean.

String of Pearls

The phrase of "String of Pearls" first appeared in a 2005 internal report entitled "Energy Future in Asia" and issued by defense contractor Booz Allen Hamilton to the Pentagon. The "String of Pearls" refers to the strategic relationships that China is building along the sea lanes from the Middle East to the South China Sea in ways that not only suggest defensive and offensive positioning to protect China's energy security, but also serve broad security objectives. China is also building up its military forces in the region to be able to project air and sea power from the Chinese Mainland and Hainan

Island. For instance, China has upgraded a military airstrip on Woody Island and increased its presence through the deployment of oil drilling platforms and ocean survey ships.

The controversy concerning the "String of Pearls" is attributable to the assumption that China wants to challenge other navies in the Indian Ocean and dominate regional sea lines. However, the "String of Pearls" strategy has many weak points.

During a 2009 testimony before the US-China Economic and Security Review Commission, Daniel Twining argued that the Pentagon has uncovered a plan on the part of Beijing to construct naval facilities stretching like a string of pearls from Southeast Asia to the Persian Gulf. China is constructing deep-water port facilities capable of berthing warships at Gwadar, Pakistan; Rangoon and Kyaukpyu, Myanmar; Chittagong, Bangladesh; Sihanoukville, Cambodia; and elsewhere. In late 2009, PLA Rear Admiral Yin Zhou (retired) attracted extensive international media attention when he suggested in an interview that China requires a stable and permanent supply and repair base to support its overseas counter-piracy activities. With an aircraft carrier program expected to be realized over the next decade, the PLAN may have even greater incentive

* For clarity, this article uses "China" when referring to Mainland China, and "Taiwan" when referring to the Republic of China.

to improve its support options. In November 2014, the *Namibian Times* presented an unofficial Chinese report outlining steps for the construction of eighteen ports in the Indian Ocean, where China also hopes to establish overseas strategic support bases. These bases will be established in various regions: Pakistan, Sri Lanka and Myanmar in the northern Indian Ocean; Seychelles and Madagascar in the central southern Indian Ocean; and Djibouti, Yemen, Oman, Kenya, Tanzania and Mozambique in the western Indian Ocean. In May 2015, China negotiated the establishment of a military base in the strategic port of Djibouti. Djibouti overlooks the narrow Bab al-Mandeb Strait, which is the channel separating Africa from the Arabian Peninsula and leading into the Red Sea and northward to the Mediterranean. China aims to install a permanent military base in Obock, Djibouti's northern port city. China is also pursuing military access to the Maldives, a tiny group of islands off the Indian coast.

In addition, China is also building commercial

port facilities in the Indian Ocean, but has not yet established any naval bases there; instead, it is pursuing what Daniel Kostecka, a senior US naval analyst, calls a “places not bases” strategy, or the “dual use logistics facilities” proposed by Christopher Yung, a senior research fellow in the US National Defence University. These places or facilities seem to be equivalent to Russia's material-technical supply points for its Navy. A base is a military facility established on a permanent basis, where weapons are stockpiled and combat missions can be initiated. However, Russia has material-technical supply points in many countries, from the Maldives on an occasional basis to the Syrian port of Tartus. While these are not bases like the former base at Cam Ranh Bay in Vietnam, they have a degree of permanence, maintenance capabilities, personnel, stockpiles of POL (petroleum, oil, & lubricants) and spare parts.

The controversy concerning the “String of Pearls” is attributable to the assumption that China wants to challenge other navies in the Indian Ocean



According to a 2009 testimony produced by the US, China plans to construct several naval facilities stretching like a string of pearls from Southeast Asia to the Persian Gulf. (Graphic design: Li Yi-jie)

and dominate regional sea lanes. However, according to James Holmes, a professor of US Naval War College, the “String of Pearls” strategy has many weak points: 1. India is the home team in any Sino-Indian contest. India is closer to potential theaters of action, boasts more manpower and bases, and knows the physical and cultural terrain of the region better than the more remote China does. It can deploy plausible access denial forces to curb any Chinese incursions into the Indian Ocean. 2. New Delhi is not alone in the maritime competition. Strong coastal states like Japan, Australia, and the US have a stake in deterring Chinese incursions into India’s backyard, New Delhi can rally support for coalition-building. 3. The “String of Pearls” would not be as fearful and formidable as some might perceive. An array of Chinese bases would amount to a thinly fortified defense perimeter around the region’s natural hegemon. No island chains occupied by competitors lie off India’s shores, as they do off China’s. Without geographic strongpoints, it would be straightforward for the Indian military to break through any Chinese defense perimeter at one point or another. 4. Not only does India hold a central position in the region and sit astride sea lanes leading to and from the Persian Gulf, it also holds geographic strongpoints of its own. The Andaman and Nicobar Islands, for instance, stand on the western approaches to the Strait of Malacca. The Indian military can deploy surveillance assets and anti-access forces along the island chains in the Indian Ocean, which would compound the Chinese leadership’s so-called Malacca dilemma and block any excessive Chinese pretensions.

China revealed a broader vision of this concept that includes linking the MSR with China’s existing “String of Pearls.” It has since become apparent that China’s name for the “String of Pearls” is the MSR.

The Maritime Silk Road

The MSR concept was first announced by Xi when he visited Southeast Asia in October 2013. This proposal, introduced during a speech to the Indonesian parliament, calls for increased maritime cooperation between China and the ASEAN (Association of Southeast Asian Nations) countries. The MSR harks back to an ancient land-based trade route that extended from Southeast Asia to Venice via South Asia, Africa and the Middle East. In terms of concrete steps, the MSR calls on China to work with partners to develop maritime infrastructure, especially ports. While the MSR was originally proposed specifically to the members of ASEAN, during a meeting with leaders of Sri Lanka, the Maldives, India and other nations, China revealed a broader vision of this concept that includes linking the MSR with China’s existing “String of Pearls.” It has since become apparent that China’s name for the “String of Pearls” is the MSR.

From the perspective of Shannon Tiezzi, an associate editor of *The Diplomat*, the MSR is an attempt at re-branding for China. While the MSR has been promoted by the top leadership, China has never officially used the term “String of Pearls,” which originated in an internal Pentagon paper. China has thus lost control of its messaging to a certain extent. The “String of Pearls” is often viewed as a military initiative with the aim of providing the PLAN with access to a series of ports in the Indo-Pacific region. This has caused some concerns, particularly in India, about being encircled by China. However, the use of the new term MSR allows China to reframe its strategy of investment in maritime infrastructure in ASEAN and further west, while clarifying China’s strategic goals.

Zhou Bo, a senior colonel of the PLA, suggested that the MSR could be used against the controversy concerning the aims of the “String of Pearls” strategy, and noted that China’s only two aims in the Indian Ocean were economic growth and the security of Sea Lines of Communication (SLOC). The former can be achieved through trades with



littoral states. With regard to the latter aim, the PLAN has participated in international military efforts to combat piracy in the waters near Somalia since the end of 2008. The Indian Ocean, and hence the security of SLOCs from Bab-el-Mandeb, Hormuz, to the Malacca Strait, is vitally important for China. Access, rather than bases, is what truly interests the PLAN in the Indian Ocean.

China insists that its investment in regional maritime infrastructure is economically motivated and will bring economic benefits to host countries. In other words, China's creation of the MSR aims to integrate all existing cooperative efforts, promote connectivity with neighboring and regional countries, and enable all to share development opportunities. Beijing's economic mega-projects in the Indo-Pacific region will help to mitigate security concerns, making the trade-based MSR a friendlier version of the military-motivated "String of Pearls."

In April 2015, Xi visited Pakistan and unveiled a \$46 billion infrastructure program. In a column written to the Pakistani news media, Xi said: "We need to form a 1+4 cooperation structure with the Economic Corridor at the center and Gwadar port, energy, infrastructure and industrial cooperation being the four key areas driving development across Pakistan and delivering tangible benefits to its people." If realized, the program would be China's biggest splurge on economic development in another country to date. In the next fifteen years, it aims to build a 2,000-mile economic corridor connected by roads, railways and pipelines between Gwadar in Pakistan and Kashgar in Xinjiang. The network will ultimately connect to other countries as well, potentially creating a regional trading boom.

While the economic corridor program is described by Chinese officials as a flagship project, Chinese economic aid to other "pearls" is equally attractive. Djibouti is currently proceeding with fourteen lavish megaprojects worth some \$9.8 billion with Beijing's help. Of the \$5.056 billion provided to Sri Lanka by China from 1971 to 2012, around 94%, or \$4.761 billion, came between 2005 and 2012. China has committed another \$2.18 billion

to Sri Lanka from 2012 to 2014. With its no strings overseas-aid policy, China has replaced Japan as the biggest donor to Sri Lanka.

But even if the MSR is an exclusively economic strategy, it may still have strategic implications. Sri Lanka can be seen as a gateway port to the western coast of India and further west to Iran, a vital exporter of oil to China. Chinese loans paid for 85% of construction costs for the brand new port of Hambantota. While this port is located in the southern part of the island, which is historically not on a traditional shipping route, it is perfectly located to meet the strategic objectives of the MSR. Beijing has proclaimed Pakistan to be China's "iron brother," and desires to gain a foothold at Gwadar port. If this plan is realized, China will gain a route through the warm Arabian Sea—just opposite the Gulf of Oman, a significant international route for oil tankers traveling from the Persian Gulf to Japan and western countries. Also, the Gwadar-Kashgar corridor has tremendous strategic advantages: China is deeply concerned by the fact that its trade depends on the narrow passage through the Strait of Malacca. In the event of a future war in Asia, the Strait of Malacca could easily be blockaded by the US or other hostile powers. The Gwadar-Kashgar corridor therefore can serve as a shortcut for the shipment of goods from Europe to China, while avoiding the Strait of Malacca.

The MSR will undoubtedly help to increase China's growing military presence in the Indian Ocean. In 2014, according to a Pentagon annual report, China deployed submarines to the Indian Ocean for the first time to support its counter-piracy patrols. A Shang-class nuclear-powered attack submarine (SSN) conducted a two-month deployment in the Indian Ocean between December 2013 and February 2014, and a Song-class diesel-powered attack submarine (SS) patrolled in the Indian Ocean in September and October. The Song also conducted the first foreign port call with two stops in Colombo, Sri Lanka.

The MSR's Future Challenges

For many countries along the MSR, Beijing's ambitions can bring much-welcomed economic boosts. However, such an ambitious and far-reaching initiative may also lead to some of the knotty disputes that Beijing has been trying to avoid, including the island disputes involving six countries in the South China Sea, China's border dispute with India, anti-China sentiment in Sri Lanka, instability along Myanmar's border with China, terrorism in Pakistan and unrest in the western Chinese region of Xinjiang. If these territorial disputes cannot be solved peacefully, this will have an unfavorable effect on the MSR initiative. Furthermore, implementing the MSR will entail significant risks for China and its partners. Beijing's past difficulties regarding investments in infrastructure abroad, especially through bilateral arrangements, suggest that many of the proposed projects may well end up as little more than a series of expensive boondoggles. Given Chinese construction companies' poor track records in foreign countries, a major increase in the scale of their external activities increases the risk of damaging political blowback that could harm Beijing's image or lead to instability in the host countries—particularly if the efforts do not generate enduring benefits for local economies.

Furthermore, New Delhi is also planning its own counterbalancing measures. In response to Beijing's MSR proposal, India has launched its Project Mausam, a transnational initiative meant to revive its ancient maritime routes and cultural ties with countries in the region. Entitled Project Mausam: Maritime Routes and Cultural



The PLA has started to deploy submarines in the Indian Ocean. The picture shows a Song-class submarine of the PLA spotted by Japan in the East China Sea. (Source: Japan Joint Staff)

Landscapes across the Indian Ocean, this project will focus on those areas swept by the monsoon winds used by Indian sailors in ancient times for maritime trade, which extended from East Africa, the Arabian Peninsula, the Indian subcontinent and Sri Lanka to the Southeastern Asian archipelago. An agreement signed between New Delhi and Teheran in May 2015 will allow India to renovate Chabahar Port, which is just a few miles away from Gwadar Port. Chabahar Port in

The MSR seeks to achieve short or medium-term objectives, while the "String of Pearls" will be based on longer term considerations, but may grow in importance. Both the MSR and the "String of Pearls" are part of Beijing's comprehensive "go-out strategy," which seeks to protect China's increasing global interest.

southeast Iran is central to India's efforts to open up a route to landlocked Afghanistan and offset China's activities at Gwadar Port in Pakistan.

Finally, the MSR has to deal with the US "rebalancing" strategy. Xi expressed his new Asian security concept in a speech at the fourth summit of Conference on Interaction and Confidence-building Measures in May 2014, saying that it is for the people of Asia to manage the affairs of Asia, solve problems of Asia and uphold the security of Asia. Many analysts believe his statement has signaled a message to Washington that it should play a lesser role in the region. Xi's plans appear to reflect a worldview in which China increasingly sides with developing powers rather than working alongside the US within the existing Western-dominated international order.

Beijing is perhaps still a generation away from establishing meaningful blue water navy, so in the interim, it has relied on non-military activities, such as combating piracy, disaster relief, and non-



combatant evacuation operation (NEO), to extend its influence. It has also enhanced military exchanges with a broad range of countries in Asia and beyond, and ramped up military diplomacy, engaged in anti-piracy exercises, increased naval visits, and conducted technical service stops at ports around the world. Its strategy of obtaining access to a limited number of military bases, combined with access to overseas commercial facilities, will only create a light military footprint. In the words of Daniel Wagner, the CEO of Country Risk Solutions, China really has no choice but to “walk softly and carry a small stick.” In short, the MSR seeks to achieve short or medium-term objectives, while the “String of Pearls” will be based on longer term considerations, but may grow in importance.

Conclusion

It has been predicted that China’s economic output will eventually surpass that of the US at some point in the not-so-far future, while the US remains a dominant military force. The fulcrums of economic and military power are separating. Both the MSR and “String of Pearls” are part of Beijing’s comprehensive “go-out strategy,” which seeks to protect China’s increasing global interests. In order to make the most of China’s charm offensive, the MSR plays up collective economic cooperation and benefits and plays down security concerns. The “String of Pearls” has lagged behind the MSR as a priority for Beijing, which has regarded the MSR as a bid to reframe China’s rise in a non-threatening way.

The MSR is a friendlier version of the “String of Pearls,” and epitomizes an “economics-first and military-later” strategy. There is no compelling evidence to suggest that the PLAN has engaged in basing activities of an overtly military nature. Nevertheless, this does not mean that it has no future intention to do so. The MSR will help Beijing increase its strategic reach and influence in the Indian Ocean. Perhaps just as important as China’s economic assistance is a major military deal that is

unlikely to be publicized during Xi’s visit. Pakistan has agreed to buy eight Chinese submarines to counter India’s naval dominance in the Indian Ocean. Xi’s aggressive maritime ambition is a wake-up call for the countries along the MSR. Many ASEAN countries have focused on their asymmetric capabilities, which take the form of anti-access/area denial (A2/AD). Taking a lesson from the PLAN’s modernization process, Vietnam has built up a modest submarine fleet and emphasized ASW (anti-surface warfare) as its core capability.

China’s blue navy aspiration has also shifted the balance across the Taiwan Strait to Beijing’s favor. Chinese coercion of Taiwan through military means will weaken the US and Japan’s strategic influence in the Western Pacific, encouraging the PLAN to focus increased resources on the South China Sea and eventually the Indian Ocean. To redress this imbalance across the Strait, Taiwan has initiated an effort to build new submarines on its own, which is known as the Indigenous Defensive Submarine (IDS) program. However, US support remains vital if Taiwan is to succeed in its IDS program. A credible underwater warfare capability of Taiwan could help the US strategic rebalance in Asia by deterring rapidly growing Chinese naval capabilities.

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Revised Guidelines for Japan-US Defense Cooperation and Their Implications

Yang Ya-chi & Lin Po-chou

Despite strong protests from opposition parties and the public, Japan's ruling coalition formed by the Liberal Democratic Party and the New Komeito Party passed the Peace and Security Legislation Development Bill and the International Peace Support Bill in Japan's Diet, and the bills are expected to be enacted by the end of this year.

The implications of the approval of the bills are manifold, but the most prominent are that it will officially recognize Japan's right to collective self-defense. This has been one of the most important goals of Prime Minister Shinzo Abe, and it will allow implementation of the newly revised Guidelines for Japan-US Defense Cooperation, which was passed by Japan and the United States in the 2+2 talks during April and May.

This is the third revision of the guidelines drafted by the two countries in 1978 for the initial purpose of keeping US troops stationed in Japan for national security and making clear the roles and missions in security of the two countries. In 1997, the second revision expanded the focus of the Japan-US alliance to not only security within Japan but also areas surrounding Japan, as the two realized that crises involving North Korea and the Taiwan Strait had the potential to affect Japan. Over the eighteen years, the regional security situation has again changed, with China* now regarded as a major source of regional crisis, and non-traditional security threats such as natural disasters and terrorism recognized as being indifferent to borders. This situation has made Japan and the US feel the necessity of updating their

security alliance in the form of the third revision.

However, further complications also led to the recent revision. In spite of the US reassurance by means of its "rebalancing" strategy to its allies and friendly nations that a strong American presence will remain in the Asia-Pacific region to counter a potentially threatening China, many countries, including the US' most important Asian ally of Japan, are still concerned whether the US will manage to maintain enough power to fulfill this commitment. In Japan's case, an increased role in security is believed, mostly by the current administration, to be needed. And for the US, it is all too willing to see Japan shouldering a greater share of the defense burden through a newly designed division of labor, given that its defense is still suffering from the consequence of a slow economic growth and the lingering effect of the War on Terror. What is more, the redefinition of the Japan-US alliance, like the redefinition of the right to collective self-defense, is regarded by the Abe cabinet as a step toward a "normal" country that enjoys comprehensive and autonomous defense. Driven by a combination of subjective and objective conditions, Japan and the US finally inked the revision.

According to the third revision, Japan-US defense cooperation is classified as five types of situations involving corresponding cooperative measures. The first consists of **cooperative measures for peacetime**. For this part, the Japanese Self-Defense Forces (JSDF) and US Armed Forces will enhance interoperability, readiness and

* For clarity, this article uses "China" when referring to Mainland China, and "Taiwan" when referring to the Republic of China.



US Secretary of Defense Ash Carter meets with Japanese Prime Minister Shinzo Abe to discuss Japan-US security cooperation. (Source: US Department of Defense)

vigilance during peacetime to prepare for all possible situations in the future. Major areas for cooperation in these situations include intelligence, surveillance and reconnaissance (ISR); air and missile defense; maritime security; asset protection; training and exercises; logistic support and use of facilities. The second consists of **responses to emerging threats to Japan's peace and security**. The alliance will respond to situations that are expected to have an influence on Japan's peace and security. In addition to measures during peacetime, the alliance will also cooperate in areas such as noncombatant evacuation, handling of refugees, maritime security and search and rescue.

The third consists of **actions in response to an armed attack against Japan**. This section is divided into when an armed attack against Japan is anticipated and when the attack actually occurs. In the first type of situation, Japan and the US agree to intensify information and intelligence sharing and policy consultation. In the second type, the JSDF will take primary responsibility in air defense and maritime defense operations and measures to counter ballistic missiles and ground attacks, whereas the US Armed Forces will conduct operations to support and complement the JSDF. A noteworthy change is that this section includes so-called "gray-zone" incidents. Although the definition of "gray-zone" can be broad, what Japan specifically has in mind is an

"unconventional" invasion as initiated by uniformed officers disguised as fishermen or unarmed personnel. The previous guidelines do not provide any basis for the US to assist Japan in responding to an unconventional, indirect invasion like this. With the new revision, the US can support and complement Japan accordingly to deal with potential security threats not traditionally considered military invasions, thus enhancing cooperation between the two countries in a more seamless manner.

The fourth type of situation consists of **actions in response to an armed attack against a country other than Japan**. In compliance with international law and their respective laws and with full respect for sovereignty, Japan and the US are entitled to conduct operations to respond to attacks against a foreign country in a close relationship with Japan, when the attacks will as a result threaten Japan. The fifth consists of **cooperation in response to a large-scale disaster in Japan**. While Japan is still in charge of dealing with these disasters, the US can provide such support as research and rescue, transportation, supply, and medical services through the coordination mechanism of the alliance.

In addition to defining the labor of division from peacetime to wartime, Japan and the US also agree to enhance cooperation for regional and global peace and security (by means of international peacekeeping operations and humanitarian assistance/disaster relief, maritime security, partner capacity building, noncombatant evacuation operations, ISR, training and exercises and logistic support), promote and improve trilateral and multilateral cooperation, cooperate in the areas of space and cyberspace, and cooperate in defense equipment and technology. The objective is for the alliance to take a leading role with other partners to "provide a foundation for peace, security, stability and economic prosperity in the Asia-Pacific region and beyond." A close examination of the content of the third revision reveals several key changes in the Japan-US alliance.

Defense Objective: Homeland Security →

Security around Japan → Regional & Global Affairs

As mentioned above, the initial guidelines aimed to maintain the security of Japan itself. At that time, US troops had been withdrawn from Vietnam after the Vietnam War. To ensure continuous presence of US forces in Japan, Japan signed the guidelines with the US and agreed to share part of the cost. The second revision of the guidelines was intended to grant the JSDF the right to provide logistic support to the US during crises from surrounding areas such as North Korea and the Taiwan Strait. Under the recent revision, the JSDF's missions and cooperation with the US Armed Forces have expanded from situations in areas surrounding Japan to regional and global affairs and are no longer limited by geological restrictions. This has therefore promoted the Japan-US alliance from a bilateral relationship to one that bears regional and global significance.

Areas of Cooperation: Homeland Defense → Traditional Security → Non-traditional Security and Defense Industry

The new guidelines have expanded the scope of Japan-US cooperation from traditional threats to non-traditional threats and defense industry cooperation. The two will share technology and information in the areas of space and cyberspace, and will work together, as well as with other nations, in researching, developing, designing, producing, testing and evaluating weapons and equipment. This will allow the Japan-US alliance to keep pace with the changing security environment, deal with emerging security threats in the 21st century, and engage in more diversified cooperation.

Coordination Mechanism: Wartime → Military Coordination → Whole-of-Government Coordination

In the initial guidelines, it was articulated that a coordination center should be established for emergency liaison when an armed attack

against Japan is imminent. In the second revision, the mechanism was merely for military coordination during wartime. Under the third revision, however, the US and Japan will establish a standing mechanism that will include all relevant governmental agencies from the two countries, and enable “seamless” responses in all phases from peacetime to wartime. This will allow the US and Japan to enhance their strategic communication, interoperability and policy coordination in every aspect of their defense and security relationship.

Japan Is Expected to Become More Involved in Such Areas as the South China Sea

As Japan and the US agree to enhance cooperation in maritime security and help partners build capacity for purposes such as ensuring maritime security, Japan is expected to become more involved in matters such as the disputes in the South China Sea. This involvement can take the form of information and intelligence sharing with the US, joint patrols and reconnaissance with the US Armed Forces, and capacity-building assistance to and cooperation with sovereignty claimants in the South China Sea, such as the Philippines and



Japan-US alliance will strengthen ties with other allies. This picture shows the training of JGSDF Western Army Infantry Regiment, which participates in Exercise Talisman Saber, a joint exercise led by the US and Australia, for the first time in 2015. (Source: Japan Ground Self-Defense Force)



Vietnam. These measures can all be conducted during peacetime with relatively little sensitivity and low possibility of worsening the already complicated South China Sea situation, and can enable the Japan-US alliance to extend into South China Sea affairs.

Transformation of the Japan-US Alliance: From a Bilateral Alliance to a Multilateral Alliance

Following the recent revision, Japan and the US will take measures to promote and improve trilateral and multilateral relations, notably with countries like South Korea, Australia, the Philippines and even Vietnam and India. These relations can take the form of three spheres. In the inner sphere, Japan and the US will work on security matters both directly and indirectly related to the alliance in the five types of situations mentioned above. In the second sphere, the alliance can work with South Korea and Australia in areas such as countering ballistic missile attacks, ISR, sales of weapons and equipment and non-traditional security crises. In the outermost, but still important sphere, the alliance can work with the Philippines, Vietnam and India in provision of weapons and equipment, capacity building, personnel training and use of facilities. If Japan and the US manage to expand the alliance's relations with other countries, they will transform the alliance from a bilateral to a multilateral one, thus making it an alliance shared by and beneficial to more countries.

Implications for Taiwan

Taiwan holds a positive attitude toward any effort favorable to the maintenance of regional peace and security. With the new revision of Guidelines for Japan-US Defense Cooperation, some experts believe, Japan is able to provide support to the US in contingencies in the Taiwan Strait. In reality, however, even if the legal basis is there for Japan to take action, considering its "One China" policy, Japan may not want involvement in contingencies

in the Taiwan Strait, unless they impede or threaten the prosperity and security of Japan and Japanese citizens. For instance, if there is a maritime blockade or even military threat against Taiwan, Japan's maritime transport through the Strait and Japanese citizens in Taiwan will certainly be affected by this situation. Only then is it likely for Japan become involved in a contingency in the Strait.

Another often neglected but noteworthy aspect is related to Japan's assistance in maritime capacity building, which in the case of the Philippines to the form of the provision of ten 200-ton patrol vessels and personnel training. In fact, Japan had already been providing such aid through official development assistance (ODA) even before the guidelines were revised. While the Philippines may deploy the patrol vessels it has received in waters where it and China have disputes (such as Scarborough Shoal and the Second Thomas Shoal), it may also deploy them in the overlapping economic waters between Taiwan and the Philippines. Given that Taiwan and the Philippines are also engaged in disputes in the South China Sea, and previous incidents have revealed many of the Philippines' inappropriate, and sometimes even brutal, maritime law enforcement practices, Japan's initially benign intention to help increase the Philippines' maritime capacity may affect the security and rights of Taiwan's fishing vessels operating in relevant waters, however marginally and indirectly. With the new revision highlighting Japan's capacity building assistance, it can be expected that Japan will take note of the possibility of the aforementioned situation, help increase the discipline and quality of Filipino coast guard personnel, and encourage the Filipino government to accelerate negotiation and establishment of a fisheries agreement with Taiwan, so as to better solve the disputes between the two countries.

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Observations of China's Aircraft Development*

Shu Hsiao-huang

Among the rapid military advances of the People's Liberation Army (PLA) in recent years, one of the most prominent developments is the PLA Air Force's (PLAAF) ongoing aircraft projects, which include the manufacture of fifth-generation fighters (defined as the fourth generation by the PLA), the improvement of fourth-generation fighters (defined as the third generation by the PLA), and the production and testing of large transport and civil aircraft. The completion of these projects will significantly upgrade China's air power, which may pose potential threats to neighboring countries, including American military bases in Asia. This article introduces China's three major aircraft development and briefly suggests possible countermeasures.

Fifth-generation Fighters

In a space of less than two years, China has developed two types of fifth generation fighters: the J-20 and J-31. Surprisingly fast as this process may be, it does not seem likely that the PLAAF will be able to retire all of its older fighters. The PLAAF is therefore also retrofitting its fourth-generation fighters, such as the J-10, J-11C, J-15 and J-16. Information from the Internet seems to show that the PLAAF is also developing other types of military aircraft. However, there is no way for the outside world to prove that the PLAAF is indeed proceeding with some sort of conceptual development or scientific experiments.

J-20

China has simultaneously developed two

fifth-generation fighters. However, it is widely believed that J-20 is the only officially-approved next-generation fighter. At present, at least six J-20 prototypes have been shown to have been built. Compared with the first prototype, the more recent prototypes are apparently more mature, and have improved designs and modifications. It is speculated that J-20 will be commissioned starting in 2017.¹

There are considerable differences in appearance between J-20 and mainstream fighters of other countries, indicating that China's aircraft industry has developed the capabilities to independently design its military aircraft, as opposed to simply copying the designs of other countries. Although some details, such as the design of the stealth airframe and control surfaces, still resemble those on the US-made F-22 or F-35, the J-20's high-swept delta wings and huge canards are more similar to those of Russia's MiG 1.44 prototypes, and may imply that China received assistance from certain countries in the design phase of J-20.

Thus far, Western countries have been unable to decide whether J-20 is a long-range interceptor or a fighter bomber. With the vast expanses of ocean surrounding its borders, however, if China aims to ensure air superiority within the First Island Chain, deny the US Air Force (USAF) and Japan Air Self-Defense Force (JASDF), and even threaten US military bases within the First Island Chain, its next-generation fighters must be able to fly far enough with a sufficient load of munitions. Since 1992, China has purchased Su-27, a large long-range fighter, for the purpose of defending its vast

* For clarity, this article uses "China" when referring to Mainland China, and "Taiwan" when referring to the Republic of China.

airspace. This may be one of the explanations why J-20 is such a large aircraft.² Some in the media speculate that J-20 can fly as far as 4,000 kilometers and has an operating radius of over 1,500 kilometers, which is enough to cover the airspace above the South China Sea. However, this one feature may cause problems for J-20. It seems that the biggest problem has to do with J-20's engines. Currently, J-20 still uses Russian-made AL-31F engines. Neither China's indigenous WS-15 engines nor Russia's 117S engines, which are still under development, can meet J-20's needs. In the future, it is therefore likely that J-20 will continue to use AL-31F. The inadequate thrust provided by these engines will be one of the key factors contributing to J-20's inability to realize its true potential.

J-31

After J-31's maiden flight on October 31, 2012, the development of this model seems to have stalled. Although J-31 was one of the fighters demonstrated at the 2014 Zhuhai Airshow, its look remains almost unchanged when compared with its previous public appearance, and it still uses RD33 engines. Thus far, no second prototype of this model has been displayed. As for the fighter's role in the PLAAF, there has been various speculation. Some believe it is competing with J-20 for the position as the next-generation fighter, some say it is another next-generation fighter complementary to J-20, and still others argue it will serve as one of China's carrier-



The PLAAF demonstrates the indigenous J-31 fighter in the 2014 Zhuhai Airshow. (Source: Asia-Pacific Defense Magazine)

based fighters. However, experts do not believe it will be developed into a carrier-based fighter, given that J-15 is the only type of aircraft deployed on China's aircraft carrier at present. Most believe that J-31 is being privately developed by Shenyang Aircraft Corporation for export.

Despite this, in the 2014 Zhuhai Airshow, there was a model of a fighter which resembled J-31 in appearance, but whose airframe configuration has apparently been rearranged. Chinese media claims the PLAAF is developing a new stealth fighter or carrier-based fighter. The Western media, on the other hand, speculates this new model appears to be a derivative of J-31 that embodies significant changes in design, including foldable wings and a modified vertical tail. The new model might be named Project 350 or J-35.³ It is therefore possible that the momentum to advance J-31 will continue. However, as the development of J-20 shows, it will take several years for J-31 to mature.

There may be an unknown number of older fighters still in commission in the PLAAF. The development of J-20 is apparently not fast enough to fill the need for a complete replacement. Considering that the development of fourth-generation fighters is mature, China needs to keep producing and retrofitting these fighters to fill the gap.

J-18

There has been constant news about China's development of a short take-off/vertical landing (STOVL) fighter. A recent piece of information has revealed China's efforts to develop a power system for STOVL fighters, so as to meet the needs of future amphibious operations. In Russia and the Western countries, the use of auxiliary vertical engines has

been well-established. Russia's older YAK-38 and its successor, YAK-141, were both developed based on this concept.

Thus far, J-18's possible configuration, power system and operational capabilities remain unknown. However, it is unlikely that China will adopt the same approach used in the US and Western countries to develop their STOVL fighters. A more realistic approach is for China to work with Russia and develop a new STOVL to be used on amphibious assault ships.

Retrofitting the Fourth-generation Fighters

China's ability to simultaneously develop two models of fifth-generation fighters has surprised the world. However, it is confusing that despite this, China continues to retrofit its fourth-generation fighters, such as J-10 and J-11. In the case of the US, it is working on the development and mass production of its only fifth-generation fighter: F-35. Given that the F-35 project has taken up a large portion of the available budget, neither the US Air Force nor the US Navy plan to procure any older-generation fighters, such as F-15, F-16C/D and F/A-18E/F. They have also abandoned plans to retrofit active-duty fighters, given that fourth-generation fighters are no longer sufficient to defend against future air threats.

A possible explanation of China's retrofit effort is that there are an unknown number of older fighters still in commission in the PLAAF, including J-7, J-8, and JH-7. The development of J-20 is apparently not fast enough to fill the need for a complete replacement. Considering that the development of fourth-generation fighters, such as J-10 and J-11, is mature, China needs to keep producing and retrofitting these fighters to fill the gap. The retrofit effort includes producing J-10B and J-11C aircraft with the new AESA Radar, J-16's with multiple functions, and the carrier-based J-15. China has also procured Su-35 from Russia.

J-15

J-15 is a copy of the Russian-made Su-33. It is

currently China's only carrier-based fighter. Given that China's aircraft carrier *Liaoning* is equipped with a ski-jump ramp, but has no launch system, aircraft without powerful take-off thrust cannot be deployed on the carrier. Without the support of auxiliary aircraft, it will be difficult for *Liaoning* to conduct far-sea operations and exert the core functions of an aircraft carrier strike group. It can at best be deployed in waters within the First Island Chain and serve as a long-distance floating base for the PLA Navy (PLAN) under the cover of H-6 bomber and Y-8 electronic ISF mission aircraft. For example, it can be deployed in the South China Sea to harass the US' anti-submarine aircraft and cover the movements of its own submarines.

Su-35

Although China is producing next-generation fighters and retrofitting older fighters copied from Russian designs, it is still negotiating with Russia concerning the procurement of Su-35 fighters. This seems to indicate that China is still in need of advanced fighters from Russia to further improve the capacity of its fighter industry and the warfighting capabilities of the PLA. It is believed that the procurement is likely to be finalized in either 2015 or 2016. After that, a total of 24 Su-35s may be deployed along the southeast coast of China at the disposal of the PLAN's aviation units.

It is also reasonably believed that after acquiring a limited number of Su-35s, China will find ways



China plans to procure 24 Su-35s from Russia. The picture shows the Su-35 in demonstration in the 2014 Zhuhai Airshow. (Source:Asia-Pacific Defense Magazine)

to learn from the design of the model's engines, airframe structure, aerodynamics, radar and avionics systems, so as to improve its existing fighters. This is powerful support for the foregoing conclusion that J-20 is not mature enough to completely replace all older fighters.

Large Aircraft

China's development of large aircraft will set the PLAAF on the track toward establishing a strategic air force. A prerequisite for China to build an all-round air force is the ability to build on its own aircraft necessary for the performance of various military missions, so that it will not be subject to export restrictions on sensitive military equipment imposed by other countries.

In the case of modifying large aircraft into long-range ISR aircraft, China only has the KJ-2000, which is modified from the IL-76, and the TU-154MD, which is modified from civilian airliners. Given that only a small number of KJ-2000s were modified from IL-76s, China's development of large electronic warfare (EW) aircraft has been limited. This has forced China to modified retired TU-154M civilian airliners for military purpose. Since 1995, some of the TU-154Ms have been modified into TU-154MD electronic intelligence (ELINT) aircraft, while others have been modified with canoe-shaped antenna and SAR radar for the purpose of air plotting. These TU-154MDs still keep the codes and coating of civilian airliners and are mostly deployed in the Nanjing Military Region. Recently, there have been multiple cases in which TU-154MDs were intercepted by F-15Js of the JASDF. Some analysts state that although they are modified from old civilian airliners, the TU-154MDs outperform Y-8s both in speed and flight altitude.

China has also modified Y-8s into dozens types of aircraft, such as airborne early warning aircraft, ELINT aircraft, and anti-submarine aircraft. ELINT aircraft modified from Y-8s are usually designated as *Gao Xin* (High New). But since Y-8s are powered by four turboprop engines, their flight range, altitude

and speed are relatively inferior to those of jet airliners. Moreover, as medium-sized transporters, Y-8s do not have room to accommodate much electronic surveillance equipment. In the future, China will need to build large aircraft to be used as the next-generation strategic ELINT platforms.

China has made significant achievements in its development of large aircraft. Y-20 has finished its test flight, and indigenous C919 airliners are in the assembly phase and will be ready for test flights this year or next. Y-20 is similar to, or slightly larger than, IL-76 in size, but is smaller than the US C-17. C919 is roughly in the same size as the Airbus A320 or Boeing 737. Currently, China is testing its indigenous high by-pass ratio turbofan jet engine on IL-76. Large aircraft are crucially important in the development of the PLAAF. If the Y-20 is successful, it will significantly improve the PLAAF's strategic transport capabilities, enabling it to project troops, equipment, weapons, personnel or relief aid to other areas. Moreover, both Y-20 and C919 have the potential to serve as aerial tankers, airborne early warning aircraft, and EW aircraft, thus expanding the PLAAF's operational scope and capabilities.

As a countermeasure, the US should work with Asian allies and friendly nations to enhance air defense, ISR capabilities, and intelligence sharing, so as to establish a comprehensive common operating picture.

How to Counter the PLAAF

Stealth fighter technology was formerly dominated by the US. However, the technology is no longer the exclusive domain of the US, as China has developed J-20 and J-31, and Russia has developed the new T-50. The trend has forced Asia-Pacific nations to face a new wave of air defense pressure, and has also changed many of these countries' fighter retrofit plans. Both Japan and South Korea



The PLAAF demonstrates a new-concept fighter, which is believed to be a future carrier-based fighter, in the 2014 Zhuhai Airshow. (Source: Asia-Pacific Defense Magazine)

have changed their procurement projects and shifted their focus to procuring F-35. This is yet another proof that fourth-generation fighters are no longer sufficient to counter future air threats.

A recent report from the Washington-based Center for Strategic and Budgetary Assessments (CSBA) concludes that Chinese fighters equipped with air-to-air missiles will force US ISR aircraft and aerial tankers as far as 500 to 750 nautical miles off the coast of the Mainland, which will affect the deployment of the USAF.⁴ As a countermeasure, the US should work with Asian allies and friendly nations to enhance air defense, ISR capabilities, and intelligence sharing, so as to establish a comprehensive common operating picture. This will also help to relieve the US from some airborne threats. More specifically, the US should work with friendly countries to develop next-generation long-range surface-to-air missiles able to deter the PLA,

and provide countries seriously threatened by China's air force, such as Taiwan, with STOVL fighters to ensure their counterattack capabilities in the face of airborne threats. The US should also develop fighters exclusively for export to allies and friendly nations, so that when F-16 is no longer in production, there will still be new fighters to help these countries respond to challenges from China's or Russia's next-generation fighters. These countermeasures are all favorable in ensuring that the US, its allies and friendly nations can maintain and enhance their air superiority, and will also help to reduce some of the pressure the US is facing in the First Island Chain.

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1 "China Bans Export of its New Stealth Fighter," *Combat Aircraft*, 2015, Vol. 16, No. 3, p.96.

2 Yefim Gordon & Dmitry Komissarov, *Chinese Air Power: Current Organization and Aircraft of all Chinese Air Forces*, (Surrey: Midland, 2010), p.5.

3 "Chinese Navy's Stealth Future," *Combat Aircraft*, Vol. 15, No. 12, December 2014.

4 "Trends in Air-to-Air Combat: Implications for Future Air Superiority," CSBA, 2015, p.70.

ROC Armed Forces Military Exhibition Commemorates the 70th Anniversary of Victory over Japan

This year marks the 70th anniversary of the Republic of China's victory over Japan in the second Sino-Japanese war. To commemorate this crucially important chapter in the history of the ROC, the Ministry of National Defense organized the Armed Forces Military Exhibition in Hukou, Hsinchu County. President Ma Ying-jeou hosted the opening of the exhibition, inspected the aviation and ground troops of the three services, and honored ten veterans taking part in the bloodiest and largest battle in the history of the ROC with commemorative medals, so as to show the nation's utmost respect to the heroes in the war. In addition to celebrating the 70th anniversary of victory over Japan, the Armed Forces Military Exhibition was also intended to verify the capabilities of the ROC Armed Forces. Key equipment of the Army, Navy and Air Force was demonstrated at the event, including the AH-64E attack helicopter, the UH-60M utility helicopter, the P-3C patrol aircraft, the retrofitted IDF fighter equipped with Wan Chien GPS guided cluster bombs, the PAC-III missile system, and the

indigenous UAS.

During the airshow, the ROC Air Force painted participating IDF and F-16 aircraft with “shark’s head” and “flying tiger” designs, which recalled the World War II period in which American pilots helped train ROC pilots. Equipment once used during the war, such as replicas of the P-40 fighter, Hawk-III fighter, and the M4 tank, were also exhibited, and attracted considerable attention from visitors.

In his remarks, President Ma emphasized that the eight-year war against Japan was led by the ROC government under the leadership of Chairman Chiang Kai-shek, and amply displayed the bravery of the ROC Armed Forces. These facts do not allow any alteration or distortion. The President also noted that this commemorative exhibition did not seek to show off or provoke hatred; instead, it was intended to recall the bitterness of war and invasion and to prevent future war. “War must be prevented from happening again, because there is no winner in any war,” stressed President Ma.



An F-16B (front) and an F-CK-1B (back) are painted with designs used on fighters during the second Sino-Japanese war. The fighters fly in formation in the ROC Armed Forces Military Exhibition dedicated to commemorate the 70th anniversary of victory over Japan. (Source: ROC Air Force Headquarters)

NCSIST Takes Part in Paris Air Show to Showcase Indigenous Defense Capabilities

After the National Chung Shan Institute of Science and Technology (NCSIST) was transformed from a military facility to an administrative entity, it participated in the Paris Air Show, held between June 15 to 21 this year, for the first time with a delegation consisting of members from Aerospace Industrial Development Corp (AIDC) and several other local defense companies. Through this biannual international aerospace exhibition, the delegation expected to demonstrate to the world the ROC's indigenous defense R&D capabilities.

For the airshow, the NCSIST displayed four types of indigenously-made missiles: the HF II anti-ship missile, the HF III supersonic anti-ship missile, the TK III surface-to-air missile capable of air defense and countering anti-ballistic missiles, and TC II mid-range air defense missile. The nineteen other products include the Ray Ting 2000 artillery multiple-launch rocket system, the Kestrel anti-armor rocket, the Cardinal II unmanned aircraft system, the 3D rotating phased array radar system,

the high resolution MWIR thermal imager, the electro-optical sight system, the open architecture command control system, the air traffic control tower simulator, the rotary engine, and the small turbofan engine, to name only a few. In addition to the static demonstration, the NCSIST also played a product and image marketing video with brilliant audio-visual effect to draw attention, and has successfully attracted interested international professionals to inquire about these advanced systems.

Considering multiple factors such as the reality in the international environment, the confidentiality of defense technologies, regional military balance, and the maintenance of humanity, most of the products, however superior they are, are not for export. The goal of the NCSIST is to display the technological capacity of Taiwan's defense industry, so as to seek opportunities to cooperate with advanced international defense companies to design, develop and produce critical component parts.



The large picture on the left shows the NCSIST booth in the Paris Airshow. The small pictures on the right, from top to bottom, show the Ray Ting 2000, the 3D rotating phased array radar system, the HF III supersonic anti-ship missile, and Cardinal II UAS. (Source: NCSIST)

US-ROC Military Exchanges and Interaction Grow Closer



Exchanges and interaction between the ROC Armed Forces and US Military grow closer. The picture shows the training of personnel of the ROC Army Aviation Special Force Command. (Source: Shu Hsiao-huang, ODS associate research fellow)

Since the World War II, the ROC Armed Forces and the US military have maintained a relatively cooperative relationship and close friendship. Despite the lack of official diplomatic ties, the US continued to provide defensive armaments to the ROC based on the *Taiwan Relations Act*, and carry out dialogues and exchanges between military and civilian personnel through proper channels. In particular, ever since President Ma took office in 2008, the administration's "zero accident" approach for engagement with the US has won trust and support from the US government, which is therefore willing

to deepen exchanges and cooperation with the ROC.

Moreover, Mainland China's vigorous development of its military forces with little transparency and ambiguous intentions deeply concerns regional countries and the US. To counter potential threats from Mainland China, the US continues to implement its "Rebalancing toward Asia" policy through the development of enhanced ties with regional allies and friendly nations, including the cultivation of security and military cooperation. In such a context, exchanges and interaction between the US and ROC have recently

appeared to be moving in the direction of greater closeness and transparency. Examples of this trend include:

- A reconnaissance platoon of the ROC Army Aviation was invited to a joint training with the US Green Beret Special Forces in the second half of 2014. The joint training will continue in the second half of this year;
- An ROC marine officer was invited to the Pacific Command Amphibious Leaders Symposium (PALS) held from May 19 to 21 and to a US amphibious landing exercise;
- A photo of the ROC Chief of General Staff and the Navy Commander participating in the inauguration ceremony of the new PACOM Commander was posted on the Facebook Page of the US Navy. The American Institute in Taiwan (AIT) then confirmed the news, saying that the participation of the two high-ranking figures reveal the robust security and cooperative relations between the US and ROC;
- The 601st Aviation Brigade of the ROC Army Aviation Special Force Command and the 25th Combat Aviation Brigade of the US Army has established a sister-unit relationship. The two brigades will push forward projects such as exchange of personnel and joint training;
- The ROC Psychological Warfare Battalion and the 7th Psychological Operations Group of PACOM signed a cooperation agreement calling for the two parties to establish a strategic communication platform for exchanges of visits and training;
- A mechanized infantry unit of the ROC Army is scheduled to visit the 2nd Stryker Brigade Combat Team of the 25th Division stationed in Hawaii in the second half of this year for exchanges and training; and
- The US Congress' National Defense Authorization Acts call for the enhancement of US-ROC military cooperation.

It should be noted that deepened US-ROC military exchanges and cooperation will not only improve the ROC Armed Forces' capabilities but also serve to further the peace and stability of the region and promote the security interests of the US. It is expected that US-ROC military ties will continue to advance and yield mutual benefits.

F-35s Criticized for Weaknesses in Visual-range Air Combat

The media has reported that, in a dogfight, an F-35A fighter lost to a much older F-16D fighter, the aircraft the F-35A is intended to replace. According to a paper written by a test pilot, the F-35 cannot exceed the fourth-generation fighter in maneuverability. During a mock visual-range air-to-air dogfight, the F-35A involved was at an energy disadvantage when compared with an F-16D, even when the F-16D was carrying two fuel tanks under its wings. Moreover, the F-35A's high-tech helmet

was too big to be used in a dogfight, given that it hindered the pilot from seeing aircraft coming from behind.

However, Pentagon and Lockheed Martin defended the F-35A. They explained that the F-35A actually used in the exercise, coded the AF-2, was an aerodynamics test aircraft not intended for combat testing. Moreover, the F-35A's sensors are sufficient to enable the pilot to find, detect, and destroy enemy aircraft at long range, before the enemy can identify

it. Furthermore, visual dogfights will no longer be required in future combat missions. A study entitled “Trends in Air-to-Air Combat: Implications for Future Air Superiority” written by John Stillion, a senior fellow at the Center for Strategic and Budgetary Assessments (CSBA), also concludes that the use of guns in air combats has declined, and asserts that future combat will depend on missiles and sensors at long range.

Recently, tests involving the F-35 fighter series have turned out to be a huge success. On June 19th, an F-35B successfully took off from the ground ski-jump ramp of the Patuxent River Naval Air Station for the first time, proving that the new-generation fighter can operate on the United Kingdom’s new aircraft carrier, *HMS Elizabeth*, which uses a similar

type of ski-jump ramp. In another example, an F-35B of the Royal Air Force successfully deployed a Paveway IV bomb, a weapon developed by the UK, from its internal weapons bay. Furthermore, two F-35Bs completed another series of test flights from USS Wasp over the course of eight days in May. This amphibious assault ship has a new “Thermion” coating to protect the deck and prevent the engine thrust from causing erosion. Another CSBA report suggests that the US consider deploying the STOVL (short takeoff and vertical landing) version of the F-35B at small airfields near the First Island Chain, given that they do not require long runways and large bases, and use their stealth and high survivability to gain advantages in short-range standoff strikes.



Pentagon defends F-35A against criticism about the fighter's weakness in a dogfight with F-16. The picture shows an F-16C and an F-35A flying in formation. (Source: US Air Force)

2015 Defense Forum on Regional Security

On June 30, the Department of Integrated Assessment (DIA) of the Ministry of National Defense (MND) held the 9th Defense Forum on Regional Security. With the theme of Challenges and Opportunities of the Republic of China in New International and Asia-Pacific Security Situations, the forum brought together experts from six countries, namely the United States, Japan, South Korea, India, Indonesia and Singapore, as well as scholars from Taiwan, to share and exchange their perspectives. The forum consisted of three sessions, and each had three presenters. Summaries of the nine presentations are as follows:

Session I: International Security Situations and Geostrategy

Dr. Kim Jinho from Dankook University of South Korea was the first presenter in the first session. Dr. Kim noted that the rise of China has brought changes to the power structure of the Asia-Pacific region. China's increased national strength and regional influence is affecting the existing framework, worrying the US and regional countries in competitive or conflicting relationships with China. Nevertheless, while regional countries stand with the US on the issue of security, with China's economic strength on the rise, they also maintain relationships with China for economic reasons. Despite its growing significance, China's development model can still be a threat to the region, given that China's Asia-Pacific policy is based merely on its perspective of Chinese values and lacks the more comprehensive global values that would connect it to the international community.

Dr. Alan Chong from Nanyang Technological University of Singapore spoke about four factors with the potential to overcome the dilemma between competition and cooperation faced by great powers in the Asia-Pacific region. Upholding an optimistic



Vice Minister of the MND, Mr. Chen Yong-kang, speaks in the opening ceremony. (Source: Shu Hsiao-huang, ODS associate research fellow)

outlook, Dr. Chong suggested that economic interdependence, ASEAN's function of binding regional powers in a collaborative arrangement, the US' role as an external balancer, as well as the community of fate ushered in by emerging natural disasters and humanitarian aid/disaster relief (HA/DR) operations, can serve to ease the temptation of war.

Mr. Zack Cooper from the Washington-based Center for Strategic and International Studies (CSIS) took a more critical perspective toward the regional order, and assumed that war is possible and worst-case scenarios should be identified to better prepare against them. Mr. Cooper observed that for decades, Taiwan and the US have prioritized an invasion of Taiwan by China as the most likely military contingency. However, China's growing military power is posing a wider array of challenges. Using several matrixes, Mr. Cooper categorized four types of challenges posed by China: short and high-intensity war (short war), long and high-intensity war (protracted war), short and low-intensity war (coercion campaign), and long and low-intensity

war (long-term competition). He noted that military requirements for these four types of conflicts vary greatly. While Taiwan and the US have the capabilities needed to deal with a short war, they do not have comprehensive capabilities to deal with the other three types of war. Given that effectiveness across the full spectrum of challenges calls for a different set of capabilities for each scenario, Taiwan and the US have to prioritize capabilities based on more than their suitability for a short war. To that end, they need to work toward a more specialized division of labor to deal with all four types of challenges.

Session II: Changes and Potential Conflicts in the Regional Security Landscape

At the beginning of session two, Mr. Hajime Kuramochi from the Ocean Policy Research Institute of Sasakawa Peace Foundation of Japan elaborated on the implication of the US rebalancing strategy for US-Japan, China-Japan and Taiwan-Japan relations. Under the framework of the US rebalancing strategy, Japan is playing a greater role and shouldering heavier responsibilities in the US-Japan alliance. Moreover, with the US now shifting its attention

from the Cold-War mission of countering Russia to dealing with a rising China—particularly its behavior in the South China Sea—one of the key issues for the US-Japan alliance is how the Japanese Self-Defense Force will support the US military in the South China Sea. In addition, the relationship between China and Japan seems to be shifting from the previous “cold political but hot economic relations” to the current “cold political and economic relations.” Japan’s support of the US in the South China Sea may to a certain extent affect the future of China-Japan relations. As for Taiwan and Japan, the people-to-people exchanges between the two are strong, especially with Taiwan’s generous support to Japan after the Great East Japan Earthquake. However, there is little security cooperation between the two. But security cooperation does not always mean supply of arms. Instead, Taiwan and Japan can focus on personnel education, joint training, and joint development of new equipment. By doing so, Taiwan and Japan can help support the US rebalancing strategy.

Dr. Arie Setiabudi Soesilo from the University of Indonesia commented on China’s “One Belt, One Road” initiative, saying that despite the grandness of its vision, this initiative is going to face the



Vice Minister Chen takes a group photo with presenters from the US, Japan, South Korea, India, Indonesia and Singapore, as well as scholars from Taiwan. (Source: Shu Hsiao-huang, ODS associate research fellow)



Former Vice Minister, Dr. Lin Chong-pin, addresses as the moderator of the first session. (Source: Shu Hsiao-huang, ODS associate research fellow)

difficulties in coordinating the social, political and economic development of countries along the belt and road. From Indonesia's perspective, the "One Belt, One Road" initiative is a beautiful concept, but this concept will encounter obstacles along the path to realization. It is true that the Indonesian government is in need of China's support and financial aid to its infrastructure, but in reality, the Indonesian people are somewhat skeptical about the quality of made-in-China products. This is perhaps one of the factors hindering trade between China and Indonesia.

Dr. Monika Chansoria from the Centre for Land Warfare Studies of India observed that after the US proposed its rebalancing strategy, India has also been rebalancing its relations with neighboring countries not only in South Asia but also in Southeast and Northeast Asia. Shifting from a "Look East" to an "Act East" strategy, Indian Prime Minister Narendra Modi is trying to consolidate the nation's relations the ASEAN states, hoping to engage with them through defense cooperation, such as exchange of intelligence and bilateral or multilateral exercises, and through stronger economic-related cooperation, such as the India-Myanmar-Thailand Trilateral

Highway Project, so as to prevent one particular power from dominating the region. India is also paying more attention to the situation in the South China Sea and has asserted its stance of following international law, such as the 1982 United Nations Convention on the Law of the Sea, in dealing with maritime sovereignty disputes. In the future, security interdependence and cooperative mechanisms will be the way forward for India-ASEAN relations.

Session III: Challenges and Opportunities in International and Regional Changes

Mr. Yoshiki Nakata from Japan's Mitsubishi Heavy Industries Ltd. suggested that Prime Minister Shinzo Abe's New National Defense Program Guidelines is a way to realize a "proactive contribution to peace." The three pillars of the new guidelines include building up dynamic joint defense capabilities for Japan, strengthening the US-Japan alliance, and facilitating security cooperation in the Asia-Pacific region, as well as in the international community. In particular, with regard to the second pillar, the US and Japanese governments renewed the US-Japan Defense Cooperation Guidelines in this April, so as to enable the two countries to establish a seamless cooperative posture. Mr. Nakata stressed that strengthening the alliance will not only work to strengthen Japan's national security—the first pillar—but also serve as a "public commons" for security cooperation in the Asia-Pacific region—the goal of the third pillar. A strengthened US-Japan alliance will therefore help to improve the regional security environment.

Dr. Dustin Kuan-hsiung Wang from National Taiwan Normal University spoke about feasible ways of promoting cooperation in the South China Sea, as well as Taiwan's role. In the first part of his presentation, he noted that while disputes over sovereignty and delimitation of exclusive economic zones (EEZ) connected with natural resources seem to present intractable difficulties for the time being, fishery resources are migratory and are not limited by manmade delimitations. In this regard,

cooperation in the utilization and management of fishery resources is a feasible and practical way of initiating a regime of regional cooperative arrangements. This would also sidestep the issue of sovereignty, while focusing on a common interest—the use of living resources—and deferring long-term negotiations on delimitation of continental shelves and their possible deposits of hydrocarbon resources. In the second part of his presentation, Dr. Wang talked about the legal status of Taiping (Itu Aba) Island. Although the Philippines has described it as a “rock” without the right of claiming EEZ in the memorial submitted to the Arbitral Tribunal, the Taiping Island is in fact the largest (0.49 square kilometers) natural land feature in the area, and possesses a fresh water supply sufficient to sustain more than 120 personnel since the 1950s. Hence, the government of the Republic of China on Taiwan is entitled to claim the legal status of the Taiping Island.

Mr. Ian Easton from the Washington-based Project 2049 Institute talked about a possible invasion by the People’s Liberation Army (PLA) and its implications for Taiwan’s defense transformation and force development. He identified two of the core missions in the PLA’s military investments: to attain the ability to use coercive and/or annihilative military force against Taiwan, and to build up capabilities that would militate against US actions to aid Taiwan’s defenders. Recognizing the threat, Taiwan has prioritized the development of capabilities to deter, delay, or, if necessary, defeat a PLA invasion attempt. Nevertheless, if the US and Taiwan cannot reenergize their relations, it is not clear whether Taiwan will be able to keep pace with the might of the rapidly growing PLA. Mr. Easton therefore provided four suggestions in this regard.

First, unless the US includes Taiwan in its rebalancing strategy, the US will not be able to maintain a favorable balance against China, and Taiwan will not be able to ensure its security. The peace and stability of the Taiwan Strait depends on the upgrade of US-Taiwan relations. The two can achieve that end through flexible diplomatic measures. Second, solely relying on arms sales is not

wise for US-Taiwan security relations. Instead, the US should begin a long-term campaign to integrate Taiwan into regional affairs by such means as inviting Taiwan to participate in joint exercises and negotiations over territorial disputes. Third, Taiwan should “pivot” its focus and energies away from China and back to the US, and do more to highlight its security concerns and desire for a closer US-Taiwan relationship. Finally, as for defense matters, the ROC Armed Forces should expand its stockpiles of mobile theater missiles and drones and deploy more of them close to Mainland China. The ROC Armed Forces should also construct deeply buried underground military facilities, and devote great effort to camouflage, concealment, deception, force dispersal, rapid repair, and other force preservation and resiliency measures, so as to complicate a PLA invasion. Lastly, the ROC Armed Forces should continue to ensure their C4ISR capabilities.



General Zheng Te-mei, President of the National Defense University, speaks in the closing ceremony. (Source: Shu Hsiao-huang, ODS associate research fellow)



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