

# Summary

## **Special Column**

The Current Situation in the Southwestern Region

ARAKI Junichi

The goal of this article is, within the scope of the severe security environment in the surrounding area our country is facing recently, to introduce to a broad audience the present situation in the southwest area that is becoming a focal issue.

First a summary of the ongoing changes to the structural dynamics of the international community and nations near Japan is presented. Next the geopolitical characteristics will be organized and the current situation in the East China Sea, to include various actions in the airspace, will be explained. Finally, based on that information the author touches on taking on the burden of protecting the related airspace and states his opinion regarding recognition of the problems.

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## **The Air Power Symposium 2016**

The Air Power Center on Friday March 18 2016, held a symposium with the theme "Considering the Multi-faceted Debate on Deterrence." We gained a permission to publish the talking points of the symposium from the keynote speaker (Professor Tsuchiyama) as well as the participating instructors (Professor Ogawa and Assistant Lecturer Shibai). The notes are below.

On Deterrence, Why Now

TSUCHIYAMA Jitsuo

In the mid-1960s, due to the successful nuclear tests by China and Japan's economic growth, the debate regarding nuclear deterrence started with it being asked whether or not Japan should possess nuclear weapons. At that time, possession of nuclear weapons was of great

concern also within the diplomatic discussion over the return of Okinawa, since the mandatory conditions for the reversion of Okinawa were removal of all nuclear weapons. However, Japan is the only country to have experienced a nuclear attack and thus the Japanese society did not accept discussing nuclear deterrence nor was the theory researched much in Japan's academic community. Yet, the understanding of nuclear deterrence created in the cold war system following the World War II is indispensable in understanding and conducting international politics and diplomacy. That post-cold war situation exists today along with the same aspects. Of course, the post-cold war deterrence theory is not the same as in the cold war era. There are debates claiming nuclear weapons have entered into "the second nuclear age" but there are also many voices calling for a world without nuclear weapons. Now again, considering about nuclear deterrence theory is of great significance.

## Challenges to Extended Deterrence for Japan

OGAWA Shinichi

U.S. extended deterrence is composed of extended nuclear deterrence (nuclear umbrella) and extended conventional deterrence. The main challenge North Korea's nuclear-armed missiles (if any) pose on Japan is not deterrence but how to destroy the mistakenly-fired ones. The North is unlikely to launch its nuclear missiles against Japan or South Korea, since such an action is very likely to result in the fall of its regime by U.S. counterattack. That said, Japan must strengthen its missile defense to cope with unauthorized and accidental launches of North Korea's missiles. Overwhelming time-urgent counterforce capability of U.S. strategic nuclear force and stationing of U.S. conventional force in Japan uphold the credibility of the U.S. extended deterrence vis-à-vis China. Rapid increase in China's conventional military capability, however, may enable China to carry out a quick fait accompli military action to grab Japanese islands. In order to deter such an attack, Japan, arguably with U.S. support, must build up a robust denial capability around the threatened islands, make efforts to maintain air and naval balance in the theater, and reinforce its

sustainability of war-fighting.

## Deterrence from a Game Theory Perspective

SHIBAI Kiyohisa

This article firstly explores some game models and solutions, and secondly analyzes the deterrence theory, especially nuclear deterrence with them. Game models of nuclear deterrence have been popular in international politics since Thomas Schelling's Strategy of Conflict was released in 1960. However, the strategic forms and Nash Equilibrium which Schelling showed is not enough to derive the optimal strategies for deterrence. Accordingly, I present the extensive forms with incomplete information which complement the strategic forms as an in-depth model because the Bayesian Game and Perfect Bayesian Equilibrium can describe the credibility of deterrence in more detail.

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## Articles

Crisis Management as a Means to Respond to "Gray-zone Situations"

YAMASHITA Aihito

The focus of the article is to explore the effectiveness and the limits of the application of the geopolitical crisis management methods in dealing with areas of potential conflict regarding national interests. Particular focus is given to the character of crisis management, while comparing and contrasting with those of "deterrence" and "defense". The model discussed in the research delineates a three category system with peacetime at one end, wartime at the other and what is called the "gray zone" in the middle. Crisis management in this research refers to the methods used in the "gray zone" situations.

Operational Theory and JASDF

YANAGIDA Osamu

The articles goal is to attempt to extract elements from current

operational theories and then explain how they can be used in JASDF operations. The article, via analysis of concepts such as Effects-Based Approach to Operations (EBAO), Maneuver Warfare, and OODA loop theory found in European and U.S. doctrine, states items for consideration toward formally documenting the operational theories the Air Self Defense Force should be applying.

## Air Power of the USAAC in the Interwar Period KOMORI Atsushi

This article is an analysis, from the point of innovation, of the U.S. Army Air corps' development of air power during the interwar period. U.S. Army Officer, William Mitchell, with audacious behavior continually demanded for an end to the old order and reorganization, but his attempt ended in failure. Instead, it was people who diligently studied the future possibilities of Air Power and who little by little unwaveringly struggled in obscurity that brought about change. It was the result of the accumulation of sustained efforts. This paper explains that it was "quiet creators" whom "quietly constructed" which supported innovation.

## US Forces Operational Concept for A2/AD – Air-Sea Battle , Offshore Control, and Deterrence by Denial – AOYANAGI Kanako

This paper compares the effectiveness of, and future prospects for, U.S. military strategic concepts such as counter-A2/AD, Air Sea Battle (ASB), Off Shore Control (OSC) and Deterrence by Denial (DBD). The US military has come to propose ASB, which includes mainland strike, as a counter A2/AD strategic concept. To counter that is OSC with its economic blockade as a main focus. Including ASB which is the main punitive deterrence, DED is proposed as OSC's main counter strategy. The debates on various U.S. strategic and operational concepts continue to pile up and are ever changing. It is necessary for our nation, especially as an allied nation, to expand and deepen the collective

research on the progress of U.S. strategic thought in regards to what is required of us.

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### **Air Power Reference Material**

The Air Power Research center summarizes foreign articles related to Air Power studies as a part of research activities and then utilizes them for further research. This time the summaries and abstracts of 3 articles are found below.

United States Air Force

*Air Superiority 2030 Flight Plan*

UNO Yoshiaki

The U.S. by 2030 may have to operate in a highly contested environment and theater-wide, so-called general air superiority, may not be feasible to obtain. For the purpose of conducting joint operations the USAF will aim at obtaining selective air superiority at specific times and locations. Toward that aim it is necessary to synchronize joint operations in several domains and recommends each service possess agile and adaptable capabilities.

United States Department of Defense

*Annual Aviation Inventory and Funding Plan -Fiscal Years 2017-2046-*

MATSUMOTO Yasuhiro

The US Department of Defense has publically released the annual report related to future aircraft combat power. It describes the DOD's efforts over the next 10 years to provide balanced combat power, however, if the austere budget situation continues the number of fighter aircraft that will be retired will exceed the procurement numbers. Protecting the US Congress's mandate to maintain 1900 combat aircraft is becoming difficult. A decrease in future fighter numbers may impact USFJ's combat capabilities and may also impact how our own nation should

structure our combat air power.

United States Department of Defense  
*Freedom of Navigation Report for Fiscal Year 2015*  
MOCHIZUKI Hiroko

The U.S. DOD publically published the results of the U.S. Militaries' FY2015 Freedom of Navigation enforcement operations. The main point of the operations is to demonstrate the U.S. does not accept the coastal states excessive maritime claims. They were conducted not just against nations antagonistic to the U.S. but friendly and neutral nations as well. The U.S. recognizes the "gradual expansion" operation China is attempting in the South China Sea, on the other hand the activities are not conducted against China alone and they avoid trying to increase conflict between the two nations. These actions can be considered a message to China prompting them to act in accordance with international law.