

Briefing Memo

“Control of the Air” and “Air Superiority” in the American Military

YANAGIDA Osamu

Research Fellow, America, Europe, and Russia Division

Regional Studies Department

Introduction

Japan currently does not use the term “SEIKU-KEN (control of the air)” in official documents, and instead uses the term “air superiority” in National Defense Program Guidelines and DEFENSE OF JAPAN (Annual White Paper). This is because, in the past, the Minister of Defense expressed skepticism about the “Japanese phrase” “SEIKU-KEN ” in the Diet and because it inherits methods for expressing that concept from “air superiority.”¹

On the other hand, the American military uses the terms “control of the air” and “air superiority” as important military terms with different meanings, and those terms still occupy important positions, especially in modern, cross-domain operations under multi-domain operational environments. Therefore, in order for the Ministry of Defense and the Self-Defense Forces to communicate smoothly and reliably with the US Department of Defense and the American military, it is necessary to understand these terms accurately and separately from their unique understanding and method in Japan.

With that in mind, this article is a brief historical summary of how the American military’s terms of “control of the air” and “air superiority” have been defined or interpreted until now.

1 “Control of the Air” and “Command of the Air”

In Japan after WWII, it was common to recognize the concept of “SEIKU-KEN ” as Giulio Douhet’s “command of the air” because of the effects of WWII. Douhet’s “Command of the Air” is the title of his book (1921) that advocates for the creation of an air force, which did not exist at the time, to protect Italy after WWI. In his book, Douhet advocates for commanding and conquering the aerial territory with bombers to destroy the air power of enemy countries across the Alps by creating an air force centered on modern-day strategic bombers.² This strategic concept overlaps with the image of strategic bombing carried out in WWII, and in Japan, the phrase “SEIKU-KEN ” is considered to be rooted in the image of

¹ Proceedings of the 63rd Session of the House Plenary Sitings and Committee, No. 13, “Questions from Mr. Oide Shun Regarding an Explanation of the Purpose of a Bill Partially Amending the Act for Establishment of the Ministry of Defense.” (March 26, 1970), p. 379.

² Giulio Douhet, *The Command of the Air*, translated by Dino Ferrari, Office of Air Force History, Washington, D.C., 1963, pp. 24-25; Edited by Kataoka Tetsuya, *Encyclopedia of Strategic Thinkers* (Fuyo Shobo Publishing, 2003), p.316-317.

“large-scale aggression and destruction.”

On the other hand, the term “control of the air,” which is still used by the American military, was first used in William Mitchell’s 1925 book *Winged Defense*. In his book, “control of the air” as described by Mitchell means an air force consisting mainly of fighters that is superior to the enemy and a state in which relative freedom of action has been acquired through the abilities of the air force, or in other words, it literally means “dominantly controlling the operational airspace.”³ As such, the term “control of the air” that Mitchell began to use did not presume a specific strategy or operational initiative, as was espoused by Douhet’s “command of the air.”

However, in Japan, the term “SEIKU-KEN” (it means “control of the air”) still has a strong “negative image” of large-scale aggression and destruction, and it is thought that this has hindered understanding of the term’s original meaning. As such, from this point forward, the definition and interpretation of “control of the air” and “air superiority” in the American military will be analyzed by dividing them into four representative periods (WWII, the founding of the US Air Force, the latter half of 20th century, and the present day).

2 Concept in WWII

The basis of the US Army Air Forces’ operational actions during WWII was the War Department Field Manual FM 100-20, “Command and Employment of Air Power” (hereinafter referred to as the “Field Manual”). In this Field Manual, “complete control of the air” is set as the general goal of air operations in WWII, and it explains that “Complete control of the air can be gained and maintained only by total destruction of the enemy’s aviation.”⁴ From this description, the Field Manual sets the goal of air operations as “complete control of the air,” which is the highest state of “control of the air,” and can be thought of as creating a similar state to the “command of the air” described by Douhet.

What, then, was the specific meaning of “control of the air” during WWII? The Field Manual explains complete control of the air by saying “operations in the theater must be carried on continuously and intensively to gain and maintain air supremacy and to provide security from hostile air operations.”⁵ From this description, it can be said that the American military’s “control of the air” refers to a state in which it is possible to provide “constant” (although not complete) security to an allied force from enemy air attacks. And, in the strategy of the time, the allied units in the theater that would inevitably become the main force were ground units (including units operating the airfield). In other words, the American military’s term “control of the air” during WWII meant “control and authority to be able to constantly

³ William Mitchell, *Winged Defense*, (Dover Publications, Inc. Mineola, New York, 1988), p. 222.; Kataoka Tetsuya, *Encyclopedia of Strategic Thinkers*, p. 322-324.

⁴ War Department Field Manual, FM 100-20, *Command and Employment of Air Power*, (War Department, 21 July 1943), p. 6.

⁵ FM 100-20, p. 6.

protect the main ground units in the theater from enemy air attacks.”

On the other hand, the term “air superiority” means the results of air combat victories and air attacks carried out while acquiring “control of the air,” that is to say, “combat results.” According to the Field Manual, activities to acquire and maintain air superiority are (provisionally) expressed as “operations...to provide safety from enemy air attacks.” “Attack on hostile airdromes, the destruction of aircraft at rest, and by fighter action in the air”⁶ are listed as examples of these activities, and as a result, the Field Manual explains how (constant) “control of the air” can be provided. In other words, the American military’s “air superiority” during WWII meant “combat results” and the like that pushed forward the virtual front line in the air so as to acquire “control of the air” over ground forces in enemy territory.

3 Concept at the Founding of the US Air Force

The US Air Force, which was founded after WWII, created a US Air Force Dictionary to standardize terms used within the Air Force. In the US Air Force Dictionary published in 1956, “control of the air” and “air superiority” are defined as different terms. Amongst them, the largest change from the WWII Field Manual is that “control of the air” is defined as a broader concept, including air power-related control during peace times.

The “control of the air” mentioned in the US Air Force Dictionary is divided into both a broad sense and a narrow sense, with the former (the broad sense) explaining new definitions and interpretations, including for peacetime. The broad sense of control of the air here is defined as “A kind of control by which a nation is able through its own relative strength to maintain a dominant position with respect to air power and national air capacity, and to exert through this strength desired influence on the actions of another nation or nations either in peace or war.”⁷ In other words, the American military’s official definition of “control of the air,” when viewed in the broad sense, means the control and authority with regards to air power that a sovereign state has in its “territorial air” during peace time, and when confined to an emergency, as in the narrow sense, it means forcibly obtaining equivalent control in the theater or operational area. The US Air Force once again defined the narrow sense of control of the air in an interpretation that is similar to that used by Mitchell, that is, “the physical control of airspace through the use of military air vehicles.”⁸ Thus, the US Air Force’s official definition of “control of the air” became a term that could be used for both defensive and offensive operations, depending on the location (inside or outside an area).

On the other hand, “air superiority,” according to the US Air Force Dictionary, is “That superiority in air power or air control, local or general, held when an air force has greater combat effectiveness than that of an opposing air force, esp. if the degree of this superiority

⁶ FM 100-20, Section 3.

⁷ Woodford Agee Heflin, Editor, *The United States Air Force DICTIONARY*, Air University Press, 1956, p. 141.

⁸ Ibid.

permits the conduct of air operations without prohibitive interference by the opposing air force.”⁹ “Air superiority” defined in this way means the outcome of a purely offensive engagement, and the extent of “US air operations” are described as “without prohibitive interference by the opposing air force.” In other words, in contrast to how the American military’s “control of the air” expresses national level control, “air superiority” has become a term used to describe the outcomes of engagements by combat units and is limited to emergency situations.

In addition, if the difference between the two terms is expressed in terms of concepts for ground operations, “control of the air” means permanent “control” such as of territory that has been acquired by the nation, whereas “air superiority” can be said to mean provisional “combat results,” such as pushing forward the virtual front line in the air by winning battles, and the basic idea of both terms in the American military continues to the present day.

4 Concept in the Latter Half of the 20th Century

In the latter half of the 20th century, the American military, which was based on integrated operations,¹⁰ began to actively prepare integrated doctrine documents (joint publications) in order to unify the terms and concepts used. In addition to and in conjunction with this, the doctrine documents of each military branch similarly became more important.

In the 1998 edition of the Air Force Doctrine Document AFDD 2-11, “Counterair Operations,” the foreword states that “Control of the air is a necessity for the American way of war, providing enormous military advantages.”¹¹ This is not the “complete control of the air” in the WWII Field Manual or Douhet’s “command of the air,” but it shows that the US Air Force’s universal goals are the acquisition of “control of the air” in a more achievable operational area, and then maintaining “control of the air” in the skies above the controlled area. In addition, as for the definition of “control of the air,” it is safe to say that there was no new discussion of it in the American military doctrine documents and that there was no change from the 1950s-era US Air Force Dictionary.

On the other hand, the definition of “air superiority” has been lightly revised in the American military doctrine documents in response to changes in operational environments, especially since the end of the 20th century. This positioning of the term “air superiority” can be said to correspond to changes in operations and tactics.

For example, in the 1998 edition of the US Air Force doctrine document, “air superiority” is defined as “that degree of dominance in the air battle of one force over another which

⁹ Ibid., p. 37.

¹⁰ Under the Goldwater-Nichols Department of Defense Reorganization Act of 1986, the American military began to base its operations around “integration” rather than the military branches. Goldwater-Nichols Department of Defense Reorganization Act of 1986 (PL 99-433).

¹¹ AFDD 2-1.1, *Counterair Operations*, (6 May 1998), p. 1.

permits the conduct of operations by the former and its related land, sea, and air forces at a given time and place without prohibitive interference by the opposing force.”

The expressions “degree of dominance in the air battle” and “at a given time and place” in this definition have not changed since the days when the US Air Force called the doctrine document a “Field manual”. On the other hand, in the descriptions showing the “combat results” expressed in the latter half of the definition, the “air forces” that are targets of the opposing force have expanded to “one force,” and the “air operations” that should be protected via air superiority have changed to descriptions of “operations by... land, sea, and air forces,” that assume integrated operations. In other words, the American military’s “air supremacy” has evolved not as a term used at the level of military strategy, such as by the Department of Defense, but as a term used at the operational level and below for operations and tactics carried out by units.

5 Concept in the Present Day

The concepts of “control of the air” and “air superiority” in the American military, in order to conquer the strong opponents that are envisioned, obtain their effects by carrying out multiple cross-domain operations under a multi-domain operational environment.

In the 2015 edition of the US Air Force doctrine document, the US Air Force states that “Counterair operations are conducted across all domains and determine the level or degree of air control.”¹² As for “control of the air,” which is the goal of counterair operations, it explains that “The level of air control can range from a parity (or neutral) situation, where neither adversary can claim control over the other, to local superiority in a specific area, to supremacy over an entire operational area.”¹³

From this interpretation, the current American military, in recognition of the harsh operating environment from enemy A2/AD, etc., acknowledges that it is difficult to set strategic goals by simply interpreting “uniform control” across an entire operational area like the “control of the air” in the past. As a result, the American military currently interprets the strategic goal of “control of the air” not just as pursuing a state of uniform control and advantage for the American military over the operational area, but also allowing for the existence of various influences, including the existence of “adversarial influence” and “parity” wherein neither the US or an adversary can obtain influence.

¹² AFDD annex 3-01, *Counterair Operations*, (27 Oct. 2015), p. 3.

¹³ *Ibid.*

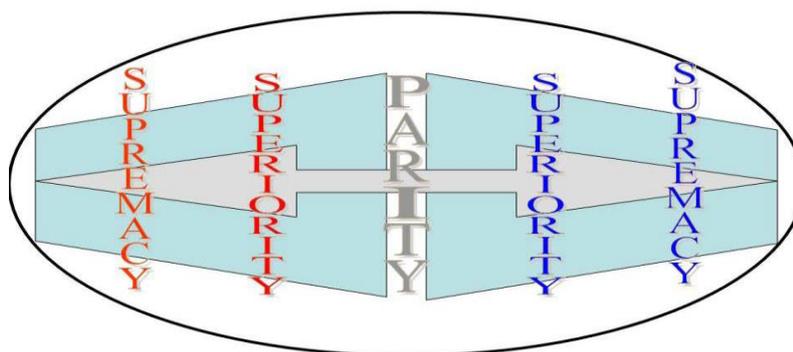


Figure: Level of influence expressed by control of the air (source: AFDD annex 3-01, 2015 edition)

In addition, the current definition of “air superiority,” as defined in the 2018 edition of the Joint Publication integrated doctrine document, was drastically revised from the previous “degree of dominance in the air battle” to “degree of control of the air.”¹⁴ This makes it clear that “air superiority” is positioned as “influence” obtained not just in traditional “air battles” but also “across all domains” Regarding the specific degree in the definition, it is expressed as “That degree of control of the air by one force that permits the conduct of its operations at a given time and place without prohibitive interference from air and missile threats.”¹⁵ This change means that, due to the progress of military technology such as stealth, it can be said that air superiority will not only provide the traditional protection to other friendly “integrated forces,” but will also include operational actions that invade the enemy air defense networks while utilizing their self-protection abilities (Penetrating Counter Air: PCA).¹⁶

6 Conclusion

This paper analyzed the American military’s concepts of “control of the air” and “air superiority” from a historical perspective. Over the long term, the American military’s “control of the air” and “air superiority” have changed based on different interpretations and concepts from those in Japan.

The American military’s “control of the air” was defined as a general term that does not limit acquisition processes or methods, unlike Douhet’s “command of the air,” which is associated with large-scale aggression and destruction. However, in WWII, the term “complete control of the air” was adopted and used to pursue a situation similar to Douhet’s “command of the air.” Therefore, it can be said that immediately after WWII in the United States, the

¹⁴ JP 3-01, *Countering Air and Missile Threats*, (02 May 2018), p. GL-8.

¹⁵ Ibid.

¹⁶ A concrete example of PCA is an attack operation carried out by a stealth bomber (attack) while avoiding (invalidating) the enemy's air defense network (system). Enterprise Capability Collaboration Team, “Air Superiority 2030 Flight Plan,” U.S. Air Force, (May 2016), pp. 3-4.; [https://www.af.mil/Portals/1/document/airpower/Air Superiority 2030 Flight Plan.pdf](https://www.af.mil/Portals/1/document/airpower/Air%20Superiority%2030%20Flight%20Plan.pdf).

expression “control of the air” was accompanied by the same image of large-scale destruction as Douhet’s “command of the air.”

However, the US Air Force, which became independent from the US Army after WWII, redefined “control of the air” as a general term that applies even during peace time. This meaning of “control of the air” is similar to the “control” and “authority” that modern states generally have in their “territorial air.” Therefore, when the American military sets “control of the air” as a target for military operations, it means a so-called “sanctuary” similar to its territorial air, where the American expeditionary forces will be safe from enemy attacks in the operational area. It can be said that such a change in definition came about by rendering the enemy’s air power non-functional, but not destroyed, which the American military carried out in the Vietnam War and the Gulf War, for example.

Additionally, supposing the harsh operating environment from enemy A2/AD, etc., in current times, it has been recognized that it is difficult to pursue a uniform control of the entire operational area and that it is also difficult to pursue the “control of the air” that the American military has set as one of its military-strategic goals. As such, the American military, as one of the interpretations of “control of the air,” has allowed influences from both sides to be intertwined in a complicated manner. However, despite such changes in interpretation, the “control of the air” in defensive operations remains the same as “authority and control in territorial air” and is an important protection target that should eliminate the enemy’s influence.

On the other hand, the American military’s “air superiority,” unlike Japan’s, has devolved as an operational term that expresses the combat outcome of offensive operations. For example, the American military applies the term “air superiority” when an expeditionary force newly acquires “control of the air” in an operational area or when the range of already-held “control of the air” is expanded, and it is clearly stated in American Joint Publication integrated doctrine documents that operational classification in these cases should also be set as “Offensive Counter Air (OCA),” that is, it should be set as an offensive operation.¹⁷

This kind of “air superiority” similar to the American military’s has been greatly affected by changes in the concepts of unit operations. For example, “air superiority” protected “air operations” during WWII and the Vietnam War, etc., when it was assumed that the military branches had different operations, but the protection of “air superiority” has expanded to “integrated operations” since the Gulf War, which was based on integration operations between the military branches. In addition, premised on cross-domain operations like in the present, the acquisition of “air superiority” has also been expanded from the idea of only prevailing in aerial combat to include utilizing all operational areas.

In these ways, the American military’s terms “control of the air” and “air superiority” are

¹⁷ Air superiority is explained by American Joint Publication integrated doctrine documents as being obtained by “Offensive Counter Air (OCA)” JP 3-01, Countering Air and Missile Threats, (02 May 2018), p. I-11, IV-1, IV-2.

still important in American military operations, and at the same time, have a large influence on cooperation with Japan. As such, from the perspective of facilitating joint US-Japan collaboration, it is necessary to understand these terms used by the American military not just in a conventional understanding, but to understand them with the new definition that changes in conjunction with the operating environment.

(June 16, 2020)

The views expressed in this column are solely those of the author and do not represent the official views of NIDS.

We do not permit any unauthorized reproduction or unauthorized copying of the article.

Please contact us at the following regarding any questions, comments or requests you may have.

Contact NIDS at plc-ws1@nids.go.jp (replace the brackets [] with the @ symbol and email your message)

Website: <http://www.nids.mod.go.jp/>