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Polarizing Republican Foreign Policy Visions: Trump's America First and Its Implication for the U.S. Allies Kuyoun Chung

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## The Korean Journal of Security Affairs

Polarizing Republican Foreign Policy Visions: Trump's America First and Its Implication for the U.S. Allies

Kuyoun Chung 5

US-China Relations and Role of the USFK: Balancer and Stabilizer

Inseok Yoo 22

A Study on Strengthening Space Cooperation between South Korea and Australia in the New Space Era

Geunho Song 46

Building Tomorrow's Defense: The Role and Challenges of the National Defense Advanced Science and Technology Academy

Seongho Jeong, Boyoung Choi 67

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Kuyoun Chung

## Polarizing Republican Foreign Policy Visions: Trump's America First and Its Implication for the U.S. Allies

Kuyoun Chung

#### Abstract

This article examines the polarizing foreign policy visions within the Republican Party as observed in the lead-up to the 2024 U.S. presidential election. Former President Trump's foreign policy, characterized by "America First," is populist and rooted in economic nationalism, capitalizing on economic grievances among U.S. voters. In the context of U.S.-China competition, this approach aims to restore a balance of power favorable to the U.S. while placing greater security burdens on allies, reinforcing restrictive immigration policies, and adopting a tough trade stance. As East Asia is expected to be a focal point of U.S.-China competition during President Trump's second term, there will likely be increased demands for greater security contributions from U.S. allies, particularly South Korea and Japan, along with more responsibilities for ensuring regional stability. However, contrary to common perceptions, former President Trump is not expected to adopt an isolationist stance; rather, he is predicted to seek both domestic and international capacities to recover American strength.

Key Words: Donald Trump, Retrenchment, Restraint, Populism, Republican Party, America First, MAGA

#### Introduction

This article examines the polarizing foreign policy visions within the Republican Party of the U.S. and discusses their strategic implications for its allies and regional security in East Asia. Looking back on the 2024 presidential election, the competitiveness between candidates is difficult to comprehend, especially from a retrospective voting perspective. In 2024, former President Trump was facing trials related to multiple criminal allegations, while the incumbent President Biden's administration was dealing with high inflation, public frustration over ongoing illegal immigration, and the prolonged Israel-Hamas conflict. Moreover, Biden's perceived reluctance to take decisive action in the Ukraine conflict may have been interpreted as evidence of incompetence, leading to negative evaluations of his presidency. Although the Democratic Party eventually opted to replace Biden with Vice President Kamala Harris as its candidate, approval ratings remained stably competitive due to the highly polarized political environment.

The political polarization in the United States has developed over several decades, characterized by an increasingly conservative Republican base and a more progressive Democratic constituency. It began with the erosion of conservative Southern Democrats, who had acted as a buffer since the New Deal era of the 1930s. As these lawmakers either lost elections or retired, the political landscape shifted. In the 1980s, President Reagan and the Republican Party transformed the American South into a stronghold of conservatism, using anti-communism and evangelicalism as key ideological pillars. At the same time, support for the Democratic Party grew in the Northeast and West, contributing to a broader partisan realignment. The election of President Obama in 2008 further accelerated this shift, with significant portions of the New Deal coalitionparticularly low-income, less-educated white voters-shifting their allegiance to the Republican Party. However, this trend became even more pronounced following the election of President Trump in 2016, which deepened the partisan divide and led to political deadlock, even impacting foreign policy. This shift has raised concerns both domestically and internationally, especially given the substantial authority the U.S. president wields over foreign policy-an area where party polarization has had particularly significant global implications.

These concerns are magnified from the experiences of the Trump administration from 2017 to 2021. Key aspects include a transactional approach to alliances, the promotion of anti-intellectualism exemplified by the withdrawal from the Paris Climate Accord, attempts at U.S.-China economic decoupling, a trade war, populist anti-immigration policies, and an inclination to abandon the liberal international order and global leadership that the United States has maintained since World War II. While it is important to understand how President Trump's personality shaped his foreign policy choices, it is even more alarming that a significant segment of the American electorate has supported such policies.

Such polarization is especially pronounced within the Republican Party, as evidenced by candidates participating in the 2024 Republican presidential primaries. For instance, Florida Governor Ron DeSantis and entrepreneur Vivek Ramaswamy have expressed dissatisfaction with the United States' internationalist foreign policy, particularly taking a negative stance on support for Ukraine. In contrast, former New Jersey Governor Chris Christie and former U.N. Ambassador Nikki Haley advocated for the traditional foreign policy of the Republican Party, which emphasized US global leadership and primacy. While former President Trump's America First foreign policy has not become the primary doctrine of the Republican Party, the existing polarization is unlikely to diminish easily. Now that Trump has been reelected, America First foreign policies that were not fully implemented during his first term are likely to be pursued without obstacles in his second term.

This article seeks to explore the background of the current divisions within the Republican Party and to examine how the party's foreign policy tradition can coexist with the America First foreign policy championed by Trump. Contrary to some debates, Trump is not an isolationist; it is unlikely that he would withdraw U.S. troops stationed abroad or allow the nuclear armament of its allies. Nevertheless, a foreign policy of restraint and retrenchment is expected to become pronounced. Therefore, this study analyzes the dynamics of foreign policy debates within the Republican Party, the underlying reasons for these changes, and their implications for the security landscape in East Asia and allies in the region.

#### Foreign Policy Debate within GOP and the Rise of America First

#### Contending perspectives on Foreign Policy in the Republican Party

Debates regarding the foreign policy visions within the Republican Party are not new. While conceptualizations of those visions may vary in existing literature, the party's conservative foreign policy framework can be broadly categorized into three types: conservative internationalism, conservative non-interventionism, and conservative realism.<sup>1</sup>) These perspectives interact to shape the Republican Party's foreign policy in practice. It is important to note that conservatism itself does not perfectly align with the party's policy framework. As a right-leaning party, the Republican Party advocates for limited government, rejects the expansion of

Colin Dueck, 2018. "The Future of Conservative Foreign Policy" *Texas National Security Review* Vol. 2, No. 2: 171-176; Nadia Schadlow, "The Conservative Realism of the Trump Administration's Foreign Policy" *Texas National Security Review*Roundtable: The Future of Conservative Foreign Policy (November 30, 2018); ColinDueck, *Hard Line: The Republican Party and US Foreign Policy Since World War II* (New Jersey: Princeton University Press, 2010).

federal authority, and incorporates elements of cultural and social traditionalism, resulting in its current form.<sup>2</sup>) Besides, there are variations in policy preferences among Republican presidents, making generalization difficult.

First, the mainstream position within the Republican Party since 1952 can be defined as conservative internationalism. Following President Dwight Eisenhower's victory over the isolationist Robert Taft in the 1952 presidential primaries, the party has adhered to an internationalist foreign policy. While Taft is commonly regarded as an isolationist, some argue that his campaign platform included internationalist elements.<sup>3</sup>)

The party platform unveiled at the 1952 Republican National Convention explicitly supported the United Nations and included commitments to expand free trade and a policy of rollback against the Soviet Union. As documented in the Republican Party Platform of 1952, Eisenhower's administration declared support for the UN during the Cold War. The Republican Party's internationalist foreign policy aimed to expand U.S. military and economic power, support the global spread of democracy, collaborate with allies sharing strategic interests, maintain a forward deployment of U.S. forces, and preserve American global influence through international trade and diplomatic engagement. In short, conservative internationalism is grounded on the belief that the spread of freedom benefits the United States and that the liberal international order serves as a safeguard for national security.<sup>4</sup>) In contrast to realism, conservative internationalism values freedom and seeks to expand it within the international community. Thus, it aims to maintain a balance of power favorable to the United States and its democratic allies.<sup>5</sup>)

Second, conservative non-interventionism is more closely aligned with a stance of restraint. While advocating for a reduction in U.S. foreign policy engagements, proponents support maintaining a strong military but express concerns that unnecessary foreign military interventions could jeopardize American security. While skeptical of the spread of American values, they emphasize the importance of exemplifying those values. However, this vision of foreign policy has been significantly marginalized within the Republican Party, particularly following the onset of the Cold War and the terrorist attack on September 11, 2001.

Finally, conservative realism is often seen as analogous to Trump's America

<sup>2)</sup> Alan Abramowitz, *The Great Alignment*(New Haven: Yale University Press, 2018); Gary Millerand Norman Schofield, 2008. "The Transformation of the Republic an and Democratic Party Coalitions in the US" *Perspective on Politics* Vol. 6, No. 3: 433-450.

<sup>3)</sup> Arthur M. Schlesinger, Jr., "The New Isolationism", *The Atlantic* (May 1952); W. Reed West, "Senator Taft's Foreign Policy" *The Atlantic*, (June 1952).

<sup>4)</sup> Paul D. Miller, "Conservative Internationalism out of Power," FPRI (October 31, 2017).

<sup>5)</sup> Henry R. Nau, Conservative Internationalism: Armed Diplomacy under Jefferson, Polk, Truman, and Reagan (New Jersey: Princeton University Press, 2015).

First doctrine. This perspective argues that, given the limitations of U.S. power, foreign interventions should be minimized and strategic priorities should be reassessed. Conservative realism avoids interfering in the pursuit of values by other countries and refrains from trying to spread American values. Proponents of conservative realism are also particularly sensitive to the costs associated with foreign policy, especially regarding military interventions. As highlighted in the National Security Strategy report issued by the Trump administration, the approach favors results-oriented security strategies over those relying on ideological considerations. The report outlines several key factors that must be taken into account to enhance American freedom and prosperity.<sup>6</sup>)

First, the report emphasizes nationalism. It prioritizes the protection of American sovereignty, territory, borders, and homeland security over the maintenance of the international order. This perspective posits that responding to these threats is more critical than the United States' foreign expansion aimed at upholding the liberal international order.<sup>7</sup>) Former President Trump echoed this nationalist sentiment by expressing concerns that decisions made within multilateral organizations such as the United Nations or NATO could infringe upon American sovereignty.

Second, Trump calls for an active response to great power competition and the restoration of regional balances of power. He argues that the rise of China, characterized as a selective revisionist state, is a direct result of the liberal international order.<sup>8</sup>) By integrating into the U.S.-led free market economy, China accelerated its economic growth and achieved great power status. Trump's opposition to liberal order stems from his belief that U.S. engagement policies have enabled China to compete as a great power. In this context, Trump promotes the principle of "peace through strength" instead of engagement with China, attempting to regain U.S. advantage in great-power competition.

Third, Trump insists on increasing burden-sharing among allies. He argues that the United States lacks the capability to bear all security burdens alone or to completely control the outcomes of such efforts. For instance, at the outset of his first administration, Trump urged Muslim-majority countries in the Middle East to take action against extremist groups like the Islamic State (ISIS) and sought to modernize alliances, thereby increasing the security responsibilities of allies and reducing the US security burden in the region.

<sup>6)</sup> Nadia Schadlow, "The Conservative Realism of the Trump Administration's Foreign Policy" *Texas National Security Review Roundtable: The Future of Conservative Foreign Policy*(November 30, 2018).

<sup>7)</sup> Christopher Layne, *The Peace of Illusions: American Grand Strategy from 1940 to the Present* (Ithaca, Cornell University Press, 2007).

<sup>8)</sup> Bonnie Glaser, "China as a Selective Revisionist Power in the International Order" ISEAS Yusof Ishak Institute Perspective Issue 2019, No, 21.

Polarizing Republican Foreign Policy Visions: Trump's America First and Its Implication for the U.S. Allies

Fourth, Trump fundamentally questions the idea of renewing the "international order." He contends that the United States has pursued an international order that it has never fully achieved, while regional balances of power are increasingly threatened by revisionist states. His concerns extend to Russia and Iran, which are engaged in conflicts in Ukraine and the Middle East, respectively, and to China, which is expanding its territorial claims in the South China Sea. Additionally, both Russia and China continue to spread disinformation that undermines the legitimacy of U.S. global leadership. Trump believes that restoring a favorable regional balance of power for the United States and its allies precedes any successful attempt to renew an international order. Given the declining phase of U.S. relative power, Trump does not seem to prioritize achieving primacy as traditional Republican presidents would have done.

Finally, while Trump understands the idea of American exceptionalism, he asserts that the United States does not need to act as the world's police force. He believes that economic recovery within the U.S. and the restoration of national economic confidence will serve as the foundation for success in ongoing great power competition.<sup>9</sup>)

In summary, former President Trump's America First foreign policy is a complex amalgamation of conservative non-interventionism, conservative realism, and, at times, conservative internationalism. During his first administration, he withdrew from international agreements and organizations such as the Paris Climate Accord, the Trans-Pacific Partnership, and UNESCO. However, he did not significantly reduce or withdraw U.S. troops stationed abroad; rather, he increased defense spending by approximately \$225 billion compared to the previous Obama administration. This increase demonstrates Trump's commitment to the principle of peace through strength in the context of great power competition. One notable distinction between mainstream conservative internationalism within the Republican Party and Trump's America First doctrine lies in the emphasis on nationalism. This focus further underscores the values of reciprocity and sovereignty.<sup>10)</sup> For instance, the first Trump administration initiated numerous renegotiations of free trade agreements and launched a trade war with China. Nonetheless, it is important to recognize the influence of so-called foreign policy establishments - such as John Bolton, Herbert McMaster, Jim Mattis, and Mark Esper-who aligned more closely with conservative internationalism and may have tempered the president's foreign policies during that period. However, should a second Trump administration emerge, the absence of such moderating forces could significantly alter the nature of foreign policy.

<sup>9)</sup> Politico, 2017. "Full Text: Trump's 2017 U.N. Speech Transcript."

<sup>10)</sup> Peter Navarro, *The True Meaning of Trump's MAGA: Lessons from the 2022 Republican Red Wave That Never Happened* (New York: A Bombardier Books, 2023).

#### Rise of America First, or MAGA

The rise of the America First foreign policy, also known as MAGA, during the 2024 presidential campaign has been more theoretically organized than in the previous campaign, although it remains a work in progress. The Trump campaign has attempted to trace the origins of America First and the "Make America Great Again" (MAGA) slogan back to the Ronald Reagan era.<sup>11</sup>) For instance, President Reagan delivered a notable speech at the 1980 Republican National Convention, stating, "Democratic economic policies have left millions of Americans unemployed and deprived them of the 'fair opportunity' to learn new skills... It is time to put Americans back to work... The Republican Party will lead a new consensus across America that shares the values of family, work, community, peace, and freedom."12) The Trump camp asserts that this speech encapsulates the core values of MAGA. While both Reagan and Trump communicate primarily with the working-class electorate, Trump's rhetoric is informed by a belief that American workers have been harmed by the "unfair globalization" policies of the Reagan administration. Specifically, the acceptance of China into the World Trade Organization is viewed as detrimental to American manufacturing and agriculture.<sup>13)</sup>

In this context, the Trump administration critiques Reagan's free trade ideology, arguing that trade must be "fair." Thus, they openly label their foreign policy stance as one of populist economic nationalism.<sup>14</sup>) Indeed, Trump exhibits strong populist characteristics, positioning himself as a self-made millionaire who distinguishes himself from the corrupt mainstream establishment in Washington, incompetent politicians, and greedy "globalist" Wall Street investors. He has successfully rallied voter opposition against these groups, effectively leveraging the economic anxieties of his constituents. Thus, Trump can be seen as a populist capitalizing on voter discontent.<sup>15</sup>)

Secondly, the expansion of conservatism within the Republican Party is rooted in the party's longstanding preference for "small government." This preference has been present for many years and became particularly pronounced in response to President Franklin D. Roosevelt's New Deal policies. The emergence of a welfare state based on the New Deal, along with subsequent developments such as social security, Medicare, and Lyndon B. Johnson's "Great Society" address, marked a significant expansion of the federal government's role. Opposition to these policies

<sup>11)</sup> Robert O'Brien, 2024. "The Return of Peace Through Strength," Foreign Affairs (June 18, 2024).

<sup>12)</sup> Ronald Reagan, Acceptance of the Republican Nomination for President (July 17, 1980).

<sup>13)</sup> Gerald F. Seib, "Can Republican Find Consensus on Foreign Policy?" Foreign Affairs (January 9, 2024).

<sup>14)</sup> Navarro, The True Meaning of Trump's MAGA.

<sup>15)</sup> Ronald F. Inglehart, Pippa Norris, "Trump, Brexit, and the Rise of Populism: Economic have-nots and Cultural Backlash" Harvard Kennedy School Faculty Research WorkingPaper Series (August 2016).

has been articulated by figures such as Herbert Hoover, Robert Taft, Ronald Reagan, Newt Gingrich, and George W. Bush, who criticized the New Deal legacy primarily from an economic perspective, advocating for a reduction in federal government spending.

The Tea Party movement, which gained momentum following the passage of President Obama's American Recovery and Reinvestment Act of 2009, further solidified the Republican Party's conservative legislative base by leveraging economic grievance. In the aftermath of the 2008 financial crisis, American voters expressed significant levels of discontent and anger towards government spending, particularly among Tea Party supporters, who exhibited heightened resentment. This sentiment translated into widespread dissatisfaction with the Washington establishment, the Democratic Party, and President Obama, resulting in a growing support for extreme conservative figures. Moreover, these individuals have adopted increasingly conservative positions on social issues, a trend that former President Trump effectively capitalized on during the 2016 election.<sup>16</sup>) In fact, many of the claims advocated by the Tea Party were translated into policy during the first Trump administration, such as the repeal of the Affordable Care Act (ACA), increased enforcement against illegal immigration, heightened border security with Mexico, hostility towards Muslims and Islam, challenges to President Obama's eligibility to run for office, and opposition to abortion and same-sex marriage.<sup>17</sup>) Trump's recent appointment of Elon Musk and Vivek Ramaswamy as heads of 'Department of Government Efficiency,' or DOGE, align with this orientation within the Republican party.

Thirdly, a skeptical attitude towards internationalism can be attributed to factors such as the decline of American manufacturing due to China's participation in the World Trade Organization and the fatigue associated with the prolonged conflicts in Afghanistan and Iraq, which have lasted over two decades. Concerns regarding the decline of U.S. manufacturing were already articulated within the Republican Party in 1996 by political adviser Patrick Buchanan, who proposed a revision of trade and immigration policies based on reciprocity. Additionally, as the wars in the Middle East extended beyond responses to the 9/11 terrorist attacks to involve nation-building efforts, dissatisfaction among American voters grew.

In this context, Trump declared at the 2016 Republican National Convention that "America First, not globalism, will be our creed." In sum, the America First agenda articulated by former President Trump can be viewed as a policy framework that combines populism and economic nationalism. This approach

<sup>16)</sup> Bryan T. Gervais and Irwin L. Morris. 2018. *Reactionary Republicanism: How the Tea Party in the House Paved the Way for Trump's Victory*(New York: Ox ford University Press).

<sup>17)</sup> Michael Espinoza, "Donald Trump's Impact on the Republican Party" in Toby James Ed., *The Trump Administration: The President's legacy Within and Beyond America* (London: Routledge, 2024). p. 134.

emphasizes reciprocity and rejects globalism, qualitatively distinguishing itself from traditional conservative internationalism. This policy framework is becoming more conspicuous, although it is worth noting that various factions within MAGA are beginning to emerge.

#### MAGA Foreign Policy and Its Variants

During the 2024 U.S. presidential election campaign, conservative think tanks in the United States are eagerly producing policy proposals aimed at the Trump camp. Among these are notable works, including a recent publication by Peter Navarro, former director of the Office of Trade and Manufacturing Policy, and the official agenda put forth by the Trump campaign, titled "Agenda 47."<sup>18</sup>)

In his recent work, Peter Navarro articulates the key principles of MAGA. The first principle focuses on revitalizing the American manufacturing base, which he discusses from a populist perspective. He advocates for tariffs on China to improve the livelihoods of blue-collar workers in swing states like Michigan, Pennsylvania, and Wisconsin, particularly those without a college education.

The second principle emphasizes border protection. Navarro underscores the necessity of building a border wall to deter illegal immigrants from countries such as Guatemala, Honduras, and El Salvador, arguing that these immigrants threaten jobs for American blue-collar workers. This framing also reflects a populist strategy.

Lastly, Navarro calls for an end to America's "endless wars," particularly in the Middle East, which he attributes to "globalist warmongers" like George W. Bush and Dick Cheney. He argues that the costs associated with these wars should be redirected toward building domestic infrastructure, education, and tax relief.

These themes are further echoed in "Agenda 47," which includes proposals such as eliminating welfare for undocumented immigrants, reducing energy dependence on the Middle East, strengthening military capabilities, enhancing missile defense systems, increasing burden-sharing from NATO allies, establishing fair trade practices through the "Trump Reciprocal Trade Act," ending the Ukraine war, and cutting social welfare budgets for climate change and undocumented immigrants.

The positions outlined in both reports are reflected in the platform released just before the Republican National Convention in 2024. A common theme is the emphasis on America's internal scarcity, which shapes a foreign policy that favors retrenchment from a geoeconomic perspective and adopts a reciprocal approach to restore the US advantage in great-power competition. Interestingly, this

<sup>18)</sup> Navarro, The True Meaning of Trump's MAGA.

perspective seeks to embrace the interests of various voter groups supporting the Republican Party, including cultural conservatives, white working-class individuals, and traditional establishment Republicans, revealing a motivation to unify these groups through populist strategies.<sup>19</sup>

Consequently, the current America First foreign policy marks a departure from the Republican Party's traditional support for free trade and globalization, pivoting instead towards predatory tariffs, export controls, anti-globalization measures, and strategic industrial policies. Although initially targeted at China, the implications of this policy are increasingly global.

Furthermore, this America First foreign policy can be categorized into three main types, as shown in <Table 1>. These categories may not fully align with existing theoretical frameworks, but they represent converging and conflicting processes among the competing interests within the Republican Party. This indicates a lack of consensus on Trump's America First approach even within the party. Trump himself pursued various foreign policy types during his first administration, and whether these differences will converge in the future remains uncertain. Some within the party speculate that a compromise between Trumpism and Reaganite policies is possible,<sup>20</sup>) but given Trump's tendency to avoid rigid ideological commitments, the outcome remains unpredictable.

As illustrated in <Table 1>, the America First foreign policy takes on various forms. The way the U.S. sets its strategic goals significantly influences its global leadership, balance of power, alliances, and regional commitments.

It should be noted that the key figures associated with each variant mentioned in <Table 1> do not share a singular perspective, and there is no clear sign of political mobilization among them. A variant emphasizing a strategy of 'restraint' may believe that former president Trump shares their views; however, Trump neither ended a war nor reduced U.S. forces abroad during his first presidency. While it is evident that Trump takes a position of restraint compared to any other president elected since the Cold War, his first administration's foreign policy also aligned with variants prioritizing 'priority' or 'primacy.'

During his second term, Trump is likely to adopt a pragmatic approach within the three categories outlined in <Table 1>, depending on the specific issues and context. For instance, there is a shared understanding among various factions of the Republican Party regarding China and trade policies. As long as the U.S. strategic priority focuses on competition with China, it is predictable that the U.S. will not abruptly withdraw forward military forces in the Indo-Pacific as it prefers to maintain a balance against China. Likewise, Trump would prioritize

<sup>19)</sup> Ben Rhodes, "A Foreign Policy for the World as It Is," Foreign Affairs(June 18, 2024).

<sup>20)</sup> Matthew Kroenig and Dan Negrea, *We Win They Lose*(New York: Republic Book Publisher, 2024); Alexander Gray, "The 4 Great Myths of Donald Trump's Foreign Policy," *The National Interests* (May 28, 2024).

	Restraint	Priority/Retrenchment	Primacy
Strategic goal of the US	Reduce International Commitment	Restore balance of Power	Global leadership and Preponderance
Perception on Alliance	Bandwagoning on the US; Need to reduce security commitment	Bandwagoning on the US; but alliance is a security asset, demanding more burden sharing	Alliance is a security asset, demanding more burden sharing
International Organizations and Institutions	Reduce the US' freedom of action	Reduce the US' freedom of action	Important instruments to maintain US global leadership and primacy
Militarized intervention	Non-intervention	Prioritize Asia; Selective forward deployment	Forward deployment in Asia, Middle East, Europe
Trade	Economic Nationalism, Reshoring, increasing tariff	Economic Nationalism, Reshoring, increasing tariff	Economic Nationalism, Reshoring, increasing tariff
Russia-Ukraine War	Opposition to US intervention	Reduce US involvement, Prioritizing Asia	Continue US assistance to Ukraine
Middle East	Reduce US Commitment	Empower regional allies and partners to maintain regional security	US commitment and involvement, cooperation with regional allies and partners
Related figures	James D. Vance Steve Bannon Peter Navarro Richard Grenell	Elbridge Colby Steve Yates Fred Fleitz	Mike Pompeo Mike Pence Nikki Haley

#### <Table 1> Variants within MAGA Foreign Policies

Source: Majda Ruge, Jeremy Shapiro, "Polarized Power: The Three Republican Tribes that could define America's relationship with the World" European Council on Foreign Relations (November 17, 2022).

maintaining a regional balance of power and preventing the emergence of another revisionist competitor. This effort may require regional allies to contribute to stability and sustain a balance of power favorable to the US in each region. To this end, Trump would not only aim to strengthen deterrent capabilities in each region but would also raise the issue of expanding the security burden and role-sharing among regional allies. It is important to note that the concept of burden-sharing has evolved from simple cost-sharing to increasing security commitments across various domains, effectively transforming into a form of collective defense. The idea of collective defense between the US and its allies, leading to discussion about a networked security architecture, will remain necessary and relevant under the second Trump administration. This approach would involve pooling deterrent capabilities in the military domain and establishing resilience of the security architecture through cooperation on emerging technologies and the rearrangement of economic supply chains.

Meanwhile, Trump rejects the idea of U.S. foreign policy being constrained by international institutions or agreements. He believes that globalization has led to political and economic disadvantages for the United States.<sup>21</sup>) Trump has expressed concerns that decisions made in organizations like the UN or NATO could infringe upon U.S. sovereignty, particularly criticizing NATO for insufficient defense spending by European member countries, which he views as a threat to U.S. security.

To concentrate on competition with China in the Indo-Pacific, Trump would minimize the potential for crisis escalation in Europe or the Middle East. At the same time, as previously mentioned, the US and its allies in both regions would strengthen deterrent capabilities to control any escalation and encourage regional allies to take a greater role in maintaining regional balance.

In the context of the Middle East, Trump has emphasized a reduced U.S. role by rebalancing regional power distribution around Israel and highlighting the Abraham Accords as a key foreign policy legacy. He has expressed support for Israel during the current Israel-Hamas conflict, influenced by the evangelical groups that back him, and he is likely to maintain commitments to Israel as part of restoring his previous achievements. However, he is also expected to place greater emphasis on the roles of European allies in ensuring stability in the region while encouraging both sides to end the dispute immediately.

Divisions within the Republican Party regarding the Ukraine conflict are expected to become more pronounced. The Biden administration's approach to the war can be characterized as constrained interventionism, striking a balance between the need for a robust response to revisionist powers like Russia and China and the desire to minimize direct conflict with these great powers.<sup>22</sup> As the war prolongs, American voters will likely favor a risk-averse approach. Trump views the Ukraine-Russia conflict not as a struggle between democracy and authoritarianism, but rather as a geopolitical issue, making him more inclined to align with calls for restraint. He has already emphasized that European allies

<sup>21)</sup> Robert O'Brien, "The Return of Peace through Strength," Foreign Affairs(June 18, 2024).

<sup>22)</sup> Peter Harris, Iren Marinova, Gabriella Gricious, 2023. "War in Ukraine in a Polarized America," LSE Pubic Policy Review Vol. 3, No. 1:1-8.

should take the lead in regional security effort and has even suggested ending the Ukraine war early, leveraging its dynamics with Russia and China. However, whether the U.S. can successfully drive a wedge in the China-Russia partnership remains uncertain.

Regarding Taiwan, since it is not a treaty-based ally, the extent of U.S. security commitments during a crisis in the Taiwan Strait remains unclear. There is a strong possibility that the U.S. will demand greater roles from Indo-Pacific allies to share the burden of maintain stability in the Taiwan Strait. While Trump has supported enhancing Taiwan's deterrence capabilities, he remains relatively cautious about military engagement, reflecting his geopolitical perspective rather than a geostrategic one.<sup>23)</sup>

All of these efforts oriented toward a strategy of restraint are based on former President Trump's priority of focusing on competition with China. However, while Trump prefers to outcompete China, his emphasis on restraint and retrenchment could create a power vacuum in Europe and the Middle East, making these regions more susceptible to the influence of revisionist powers such as Russia and China. This approach is less likely to create a global balance of power favorable to U.S. interests in the long run. To address this, Trump is expected to request that allies take on greater security burdens. However, his transactional approach may provoke negative reactions from these allies, potentially leading them to hedge against the U.S. under the America First foreign policy vision.

In summary, while Trump's foreign policy commitments may embody a blend of various MAGA approaches - in practice, a mix of restraint and retrenchment rooted in a populist strategy emphasizing domestic scarcity - it appears to be gaining traction among American voters and may continue into the foreseeable future. At its best, this foreign policy stance could lead to a regional balance of power favorable to the U.S. while weakening the liberal rules-based order. The revisionist powers like China and Russia are likely to feel emboldened by a return of Trump's emphasis on restraint and retrenchment. Given Trump's lack of commitment to the liberal order, the already weakened liberal framework is expected to deteriorate further.

#### Implication for the U.S. Allies in the Indo-Pacific

Following a decisive Republican victory in the 2024 Presidential Election, the America First foreign policy may persist beyond Trump's second term and will likely enjoy substantial voter support. The strategy of exploiting economic grievances through populism and economic nationalism is expected to remain a

<sup>23)</sup> Andrew Byers and Randall Schweller, "Trump the Realist," Foreign Affairs(July 1, 2023).

cornerstone of the Republican Party. Consequently, U.S. foreign policy is likely to prioritize economic and immigration issues that directly affect the daily lives of American voters. At the same time, the foreign policy of restraint and retrenchment in Europe and the Middle East may increasingly focus on competition with China.

It is crucial to understand not just a few of Trump's policy positions but the underlying factors that influenced these choices. For South Korea, which must navigate security and economic relationships with the U.S., grasping the background of Trump's policy positions is vital.

As a key ally of the U.S. and its largest trading partner, South Korea may face dual challenges from a second Trump administration regarding both burden-sharing and trade deficit issue. South Korea should lead negotiations with the new administration in a manner that preserve the cooperative achievements established during the Biden administration. To date, the Yoon Suk Yeol administration has aligned its foreign policy with that of the Democratic administration in the U.S. by promoting an Indo-Pacific strategy that emphasizes liberal internationalism. In light of escalating great power competition, the Yoon government has moved away from the previous administration's strategic ambiguity to a stance of strategic clarity, seeking to enhance cooperation with the U.S. and other like-minded democratic countries. As the U.S.-led security architecture further evolves into a latticework, South Korea aims to transition from being a security consumer to an active security provider.

The latticework includes layered security coalitions built by the U.S. and its regional allies to enhance integrated deterrence capabilities and strengthen the resilience of the security architecture through a unified defense industrial base.<sup>24</sup>) Ultimately, this aims to establish a favorable balance of power against China in the longer term. Such dynamics reflect the understanding that the current U.S.-China competition is not merely a bilateral rivalry between two great powers; it represents a struggle between two competing international orders, along with the formation of coalitional hegemony among like-minded countries.<sup>25</sup>) As long as Trump prioritizes the U.S.-China competition, this approach can align with America First principles, although it may weaken elements of a rules-based framework that legitimizes U.S. leadership in the region.

Consequently, during the second term of the Trump administration, cooperation among U.S. allies in the region will become increasingly important, but much will depend on the domestic political circumstances within each ally. His distinctive bilateral, transactional approach could complicate collaboration among allies. Given this context, South Korea should prioritize proactive consultations

<sup>24)</sup> Becca Wasser, "Networked Deterrence in a Multipolar Indo-Pacific" United States Studies Centre (February 2024).

<sup>25)</sup> Ian Clark, Hegemony in International Society(New York: Ox ford University Press, 2011).

not only with the new U.S. administration but also with regional partners such as Japan, Australia, New Zealand, and Vietnam across various domains, including security, economy, and technology.

In this context, the prospects for trilateral cooperation between South Korea, the United States, and Japan, as well as for initiatives like AUKUS and QUAD, which are grounded in a latticework security architecture, appear promising. The main objective of South Korea-U.S.-Japan trilateral cooperation is to coordinate policies on North Korea and deter its provocations. This coordination may benefit the United States, even under the Trump, especially as the trilateral ties between Russia, China, and North Korea are strengthening. However, if North Korea temporarily refrains from provocations due to direct dialogue between Trump and Kim Jong Un of North Korea, the significance of trilateral cooperation could diminish. There might also be attempts to shift the focus of South Korea-U.S.-Japan trilateral cooperation toward countering China.

It remains uncertain whether Trump would adopt the 'fire and fury' strategy again to escalate tensions on the Korean Peninsula, a tactic he used against North Korea to push for diplomatic engagement with Kim Jong Un. While Trump's escalation could be seen as a negotiating tactic, a critical concern is that he might simply accept North Korea's nuclear capabilities and propose a unilateral agreement: a nuclear freeze in exchange for sanctions relief, as a way of control further provocations near Chinese territory. However, with improving relations between North Korea and Russia as well as the emerging alignment between North Korea and China, it is anticipated that North Korea will have little incentive to negotiate with the United States. Furthermore, the Yoon Suk Yeol administration is unlikely to take on the role of arbiter in this situation.

In summary, the Trump administration is expected to focus on great power competition with China through strategies of restraint and retrenchment. To this end, it will seek to enhance deterrent capabilities against great powers by cooperating with its allies. In regards to North Korea and Iran, which are seen as secondary threats to the U.S., Trump may rely on the deterrence provided by allies in each region to manage their provocations. To mitigate the risks associated with the second Trump administration, South Korea should not only align its perceptions of U.S.-China relations with the U.S., but also to stress the mutual benefit generated by the South Korea-U.S. alliance. South Korea should lead bilateral or minilateral initiatives that elevate its status and role within the Indo-Pacific security architecture. Lastly, the issue of North Korea should be approached proactively to align U.S. policy with the goal of denuclearization that serves South Korea's interest before Trump and Kim Jong Un resume their summitry.

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#### **References**

#### 1) Books

- Alan Abramowitz, The Great Alignment (New Haven: Yale University Press, 2018).
- Ian Clark, *Hegemony in International Society* (New York: Oxford University Press, 2011).
- Colin Dueck, Hard Line: The Republican Party and US Foreign Policy Since World War II (New Jersey: Princeton University Press, 2010).
- Michael Espinoza, "Donald Trump's Impact on the Republican Party" in Toby James Ed., *The Trump Administration: The President's legacy Within and Beyond America* (London: Routledge, 2024).
- Bryan T. Gervais and Irwin L. Morris. 2018. *Reactionary Republicanism: How the Tea Party in the House Paved the Way for Trump's Victory* (New York: Oxford University Press).
- Matthew Kroenig and Dan Negrea, *We Win They Lose* (New York: Republic Book Publisher, 2024).
- Christopher Layne, *The Peace of Illusions: American Grand Strategy from 1940 to the Present* (Ithaca, Cornell University Press, 2007).
- Henry R. Nau, Conservative Internationalism: Armed Diplomacy under Jefferson, Polk, Truman, and Reagan (New Jersey: Princeton University Press, 2015).
- Peter Navarro, *The True Meaning of Trump's MAGA: Lessons from the 2022 Republican Red Wave That Never Happened* (New York: A Bombardier Books, 2023).
- Barry R. Posen, *Restraint: A New Foundation for US Grand Strategy* (Ithaca: Cornell University Press, 2014).

#### 2) Articles

- Andrew Byers and Randall Schweller, "Trump the Realist," *Foreign Affairs* (July 1, 2023).
- Colin Dueck, 2018. "The Future of Conservative Foreign Policy" *Texas National Security Review* Vol. 2, No. 2: 171-176.
- Bonnie Glaser, "China as a Selective Revisionist Power in the International Order" ISEAS Yusof Ishak Institute Perspective Issue 2019, No, 21.

- Peter Harris, Iren Marinova, Gabriella Gricious, 2023. "War in Ukraine in a Polarized America," LSE Pubic Policy Review Vol. 3, No. 1:1-8.
- Ronald F. Inglehart, Pippa Norris, "Trump, Brexit, and the Rise of Populism: Economic have-nots and Cultural Backlash" Harvard Kennedy School Faculty Research Working Paper Series (August 2016).
- John J. Mearsheimer and Stephen Walt, "The Case for Offshore Balancing: A Superior US Grand Strategy," *Foreign Affairs* Vol. 95, No. 4: 70-83.
- Gary Miller and Norman Schofield, "The Transformation of the Republican and Democratic Party Coalitions in the US" *Perspective on Politics* Vol. 6, No. 3: 433-450.
- Paul D. Miller, "Conservative Internationalism out of Power," FPRI (October 31, 2017).
- Robert O'Brien, "The Return of Peace through Strength," *Foreign Affairs* (June 18, 2024).
- Ben Rhodes, "A Foreign Policy for the World As It Is," *Foreign Affairs* (June 18, 2024).
- Majda Ruge, Jeremy Shapiro, "Polarized Power: The Three Republican Tribes that could define America's relationship with the World" European Council on Foreign Relations (November 17, 2022).
- Nadia Schadlow, "The Conservative Realism of the Trump Administration's Foreign Policy" Texas National Security Review Roundtable: The Future of Conservative Foreign Policy (November 30, 2018).
- Gerald F. Seib, "Can Republican Find Consensus on Foreign Policy?" *Foreign Affairs* (January 9, 2024).
- Becca Wasser, "Networked Deterrence in a Multipolar Indo-Pacific" United States Studies Centre (February 2024).

#### 3) Magazines or Newspaper articles

- Alexander Gray, "The 4 Great Myths of Donald Trump's Foreign Policy," *The National Interests* (May 28, 2024).
- Arthur M. Schlesinger, Jr., "The New Isolationism", The Atlantic (May 1952).
- W. Reed West, "Senator Taft's Foreign Policy" The Atlantic, (June 1952).

## US-China Relations and Role of the USFK: Balancer and Stabilizer

Inseok Yoo

#### Abstract

As a cornerstone of the alliance between the United States (US) and the Republic of Korea (ROK), US Forces Korea (USFK) has played critical military and political roles at various levels: global, regional (Northeast Asia), and local (Korean Peninsula). Despite the significance of these roles, the size of the USFK has consistently decreased over the years, owing largely to concerns within US strategic circles about military "overcommitment" and the fear of "entrapment." This article addresses this contradictory phenomenon by focusing on the nature of US-China relations. It analyzes the evolving role of USFK using two theoretical frameworks: balance of power (balancer) and hegemonic stability theories (stabilizer). These frameworks help explain how USFK's roles as a balancer and stabilizer have evolved alongside changing dynamics in US-China relations. This study reveals that, in response to these changes, the primary role of USFK shifted from being a balancer to a stabilizer and has since reverted to that of a balancer once again. During the early Cold War period, USFK focused on deterring China, while its role evolved to stabilizing Northeast Asia during the detente period and the post-Cold War era. However, the recent intensification of US-China strategic competition has reinforced USFK's role as a balancer once again. The article argues that reductions in the size of USFK over time reflect shifting geopolitical dynamics rather than a declining importance of its presence. The role of USFK in promoting US-led hegemonic stability in Northeast Asia, maintaining equilibrium in power dynamics, and ensuring US influence in the region justifies its continued presence.

Key Words: US-China Relations, ROK-US Alliance, USFK, Balancer, Stabilizer

The United States Forces Korea (USFK) has maintained its presence on the Korean Peninsula for over 79 years, predating the establishment of the Republic of Korea (ROK). As the cornerstone of the alliance between the US and ROK, USFK has played a pivotal role in deterring North Korean aggression and ensuring South Korea's defense, significantly contributing to the security and stability of both the Korean Peninsula and Northeast Asia. Despite this critical role, the size of USFK has steadily decreased over the years, mainly due to concerns within US strategic circles about military "overcommitment" and the "fear of entrapment."<sup>1)</sup> This study explores why the US has maintained a military presence in South Korea for so long, despite these negative factors.

To address this inquiry, this research expands the temporal and geographical scope of USFK's role beyond a pivotal link in the US-ROK alliance, highlighting its intersection with broader US regional strategies. During the Cold War era, the USFK's significance was not prominently emphasized in the containment strategy against the Soviet Union, nor was it limited to its military role of deterring North Korea and defending South Korea. In this context, the study posits two key assertions. First, strategic assessments of the Northeast Asian region, particularly concerning China, are critical factors influencing policies regarding USFK. Second, USFK's overall political roles, rather than its military role alone, hold greater significance in US strategy concerning Northeast Asia.

The US-China relations are a key factor influencing USFK policy for several reasons. First, USFK's presence and operations concern not only Korea but also the broader geopolitical dynamics in East Asia, where China's influence and actions are substantial. Moreover, the US threat assessment in the region has evolved to encompass threats from North Korea alongside the combined threats posed by both North Korea and China. Second, the US sought to maintain a balanced military presence in South Korea to effectively deter North Korea's aggression while avoiding actions that could exacerbate tensions with China. Third, since the Korean War, it has been assumed that China would intervene in any subsequent conflict on the Korean Peninsula. This assumption directly impacts USFK's planning and readiness and overall US security strategy in the region. Lastly, the intensifying strategic competition between the US and China

The troop size, which once reached 325,000, has steadily decreased to its current level of 28,500. The USFK has experienced five significant troop withdrawals, including the consideration of a complete withdrawal. This indicates that nearly every US administration has addressed the issue of USFK. Major withdrawals occurred during the following periods: 1948– 1949 (first withdrawal), 1953–1955 (second withdrawal), 1970–1971 (third withdrawal), 1977 –1978 (fourth withdrawal), and 1990–1992 (fifth withdrawal), resulting in a partial readjustment to the current level of USFK.

significantly shapes the future direction of USFK policy, affecting decisions about force posture and alliance dynamics.

Two assumptions were verified using the theoretical frameworks of balance of power and hegemonic stability theories, which employ the concepts of balancer and stabilizer. This analytical approach helps determine the dynamic interplay among US-China relations, regional security dynamics, and the strategic role of USFK in the region.

Positing that significant shifts in US-China relations occur approximately every 20 years, this study seeks to illuminate how these changes have affected the USFK's policy focus between the roles of balancer and stabilizer. It argues that the continued presence of USFK can be understood in the context of the US regional hegemonic stability strategy. The study emphasizes how the political and military roles of these forces support US hegemony in Northeast Asia.

The remainder of this paper is structured as follows. Section 2 reviews previous research and theoretical backgrounds relevant to the questions raised, before presenting the analytical framework. Section 3 provides an empirical analysis of how the role and size of USFK have changed in response to changes in US-China relations. Finally, Section 4 discusses the implications for the US-ROK alliance and regional security.

#### **Theoretical Review**

#### Puzzle of Reduction and Longevity

The puzzle of the USFK's reduction and longevity refers to the ongoing presence of military personnel on the Korean Peninsula despite a gradual reduction in troop numbers over time. Analyzing the phenomena of USFK's reduction and continued presence simultaneously is complex. The reduction in troop numbers may stem from strategic adjustments aimed at better leveraging advanced military technologies and operational strategies. Advances in technology enable more efficient force deployment and enhanced capabilities, which can lead to a reduced need for a large presence while maintaining effectiveness.

However, a more nuanced analysis reveals deeper levels of reasoning. The continued presence of USFK has historical roots dating back to the Korean War, which initially necessitated a substantial ground forces. Over time, perceptions of the necessity and scale of this presence have evolved. There has been a growing recognition within US policy circles of the need to balance maintaining a credible deterrent and addressing concerns about the size of ground forces stationed abroad, which may be viewed as excessive in military contexts.<sup>2</sup>)

<sup>2)</sup> Draft Memorandum from Secretary of State Rusk to President Johnson, "Study of Possible

From a military standpoint, there is a perception that USFK provides "excessive assurance" to South Korea, with assessment of the North Korean threat shifting based on the current situation.<sup>3</sup>) Moreover, the role of deterrence against North Korea does not require a large ground force, given the potential for various strategies, such as relying on naval and air forces or rapid deployment to the Korean Peninsula from other regions. Furthermore, concerns about entanglement related to the USFK's role as a tripwire have significantly influenced decisions to reduce troop numbers.

Many studies highlight the continuity of Cold War dynamics on the Korean Peninsula, the persistence of the US-ROK alliance, the various roles of USFK, and changes in international circumstances. The primary argument posits that USFK's role in deterring North Korea has been crucial, given the ongoing threat from North Korea and the enduring Cold War dynamics on the peninsula. However, this argument often fails to thoroughly examine the mechanisms driving the reconfiguration of USFK, making it difficult to fully understand the phenomena of troop reduction and continuity. If the primary role of USFK was to deter North Korea, it is challenging to explain why troop numbers have decreased from around 60,000 to 28,500 since the mid-1970s, even as North Korea's military capabilities have rapidly increased. These changes should be informed by both the need to deter North Korea and broader considerations of US strategic interests in Northeast Asia.

In this context, some argue that, similar to the North Atlantic Treaty Organization(NATO)'s transformation after the Cold War, the role of USFK has shifted from primarily deterring North Korea to stabilizing Northeast Asia, which provides ongoing justification for its presence.<sup>4</sup>) However, these arguments do not fully address how the balance of power and hegemonic stability shaped the security landscape in Northeast Asia during the Cold War and after. Furthermore, it is more accurate to consider the shift in USFK's role from 'deterrer' to 'stabilizer' during the detente period rather than the early post-Cold War era. While USFK is unquestionably a key component of the US-ROK alliance, it is

Redeployment of U.S. Division now Stationed in Korea," June 8, 1964, FRUS 1964---1968, Vol. XXIX, "Part 1: Korea,"; "US Policy toward Korea," Department of State Policy Planning Council, June 15, 1968, FRUS, 1964-1968, Vol. XXIX, Part 1, Korea.

<sup>3)</sup> The assessment of North Korea's threats during the Cold War has been a subject of ongoing debate. Generally, evaluations within South Korea suggested that North Korea held a military advantage if US reinforcements were not included. In contrast, US assessments of the military balance between North and South Korea varied slightly based on the situation, but the prevailing view was that the South Korean military was capable of defending against an attack from the North.

<sup>4)</sup> Taehyo Kim, "The Future of USFK and ROK-U.S. Alliance," *Journal of Korean Unification Studies*, Vol. 13, No. 2 (2004); Bonggyu Park, "US Forces Korea and Northeast Asian Situation," *Korea and International Society*, Vol. 5, No. 4(2021).

essential to recognize that it has distinct characteristics that do not entirely align with the nature of the alliance.

Some argue that USFK continues to exist due to the various roles it has played, but this explanation is overly broad. Various factors have influenced the reconfiguration of USFK, including the US's global and Asian strategies, threat assessments, alliance relationships, domestic politics, financial conditions, and leadership tendencies. The evaluation of how each of these factors influenced decisions varies depending on the researcher's viewpoint and interests. However, most existing studies have addressed the issues surrounding USFK's reduction or continuity separately, leading to limited analysis of these opposing phenomena. To understand these issues comprehensively, it is necessary to analyze and evaluate USFK's role beyond mere deterrence against North Korea. Specifically, we must identify the fundamental reasons for USFK's continued presence despite changes in the international system and security environment.

Therefore, any comprehensive analysis of the evolution of USFK must consider both military efficiency and political imperatives. Effective policy reviews strive to integrate military and political considerations seamlessly. This synergy ensures that USFK's role improves deterrence capabilities while also contributing to the broader stability goals of Northeast Asia. To support this analysis, the terms "balancer" and "stabilizer" will be defined more clearly.

#### Balance of Power (Balancer) and Hegemonic Stability (Stabilizer)

Balance of Power refers to the distribution of power among actors in international relations, which can be based on various factors, such as military and economic resources.<sup>5</sup>) It can also refer to a state of equilibrium between two roughly equal forces, providing stability and preventing one actor from dominating others. The early version of the balance of power requires a 'balancer' state to shift its support from one side of the scale to the other, depending on which side is weaker, in order to regulate the system. Neorealists argue that stability and relentless conflict, primarily through the balance of power.<sup>6</sup>)

Hegemonic stability theory posits global stability is more likely to be achieved when a single dominant power, or hegemon, exists to provide leadership and maintain order within the international system. This hegemon provides public goods such as security, a stable currency system, and open trade routes, facilitating cooperation among states. By setting and enforcing rules, the hegemon reduces uncertainty and prevents conflicts. The theory argues that the presence of a

<sup>5)</sup> The concept of balance of power is open to various interpretations. However, this study adopts the commonly used definition to facilitate comparison with hegemonic stability theory.

<sup>6)</sup> Kenneth N. Waltz, Theory of International Politics (Massachusetts: Addison-Wesley, 1979).

dominant state can create conditions for economic growth, political order, and peace within the international system.<sup>7</sup>)

Different theoretical perspectives offer varying views on which type of system is more stable. Therefore, it is necessary to examine the meaning of balance and stability, as well as the relationship between the two. Morgenthau's explanation is helpful in understanding the conceptual difference between balance and stability. Morgenthau defines balance as a state of stability comprised of autonomous elements within the system, while clearly distinguishing between balance and stability. Specifically, the purpose of balance is to maintain stability without destroying the components of the system. If stability were the sole purpose, one component could destroy or overwhelm others to achieve stability.<sup>8</sup> This interpretation refers to equilibrium stability and suggests that hegemonic stability is not the primary objective of the balance of power. Morgenthau considers the concept of balance to be inherently included within the concept of stability. Scholars advocating for the balance of power theory generally agree that a balanced state signifies stability.

On the other hand, hegemonic stability theory posits that stability is ensured not by a balanced state but by the presence of a hegemon. A hegemon maintains stability by providing public goods related to the economy or security at both global and regional levels. Therefore, in hegemonic stability theory, the stabilizer is synonymous with the hegemon, meaning the concept does not necessarily assume the preservation of the system's constituent states. Depending on the scholar, the concepts of stability and balance may overlap, be inclusive of one another, or be defined in various ways.

The terms balancer and stabilizer are commonly used in international relations (IR), but they carry nuanced differences in their meanings and implications. While the theory of balance of power relatively well defines the balancer, a precise definition of a stabilizer remains elusive. The term "stabilizer" in IR has mostly been used in the field of international political economy in the context of hegemonic stability theory,<sup>9</sup>) receiving little attention from the security community.<sup>10</sup>) In many cases, "stabilizer" and "balancer" are considered synonymous or used interchangeably. The distinction between a balancer and a stabilizer becomes especially relevant when analyzing foreign policy decisions,

<sup>7)</sup> Robert Gilpin, *War and Change in World Politics* (Cambridge: Cambridge University Press, 1981).

<sup>8)</sup> Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace 2nd Ed.* (New York: Alfred A. Knopf, 1954), p. 157.

<sup>9)</sup> Kindleberger asserted that "for the world economy to be stabilized, there has to be a stabilizer, one stabilizer" (Kindleberger 1973, 292).

<sup>10)</sup> Duncan Snidal, "The Limits of Hegemonic Stability Theory," *International Organization*, Vol. 39, No. 4 (1985).

military deployments, and international interventions. Understanding whether a state primarily acts as a balancer, a stabilizer, or both can shed light on its strategic motivations and the broader implications for global and regional stability. Therefore, a more precise and rigorous definition of "stabilizer" is required.

The concept of a stabilizer encompasses that of a balancer, which makes it somewhat challenging to clearly distinguish between the two. However, balancers and stabilizers can be differentiated based on their intrinsic characteristics and the contexts in which they operate. The concept of the balance of power is derived from the metaphor of a scale, while the role of a stabilizer is informed by principles from diverse fields such as chemistry, mechanics, economics, and politics. The functions of stabilizers in international relations can be inferred from their roles in different contexts, such as counterweights and safety mechanisms.

Balancers and stabilizers differ in their objectives, capabilities, methods, and means of playing their primary role. A balancer primarily focuses on managing power dynamics within specific regions or between major actors. This is typically achieved through deterrence, containment, alliances, coalitions, or warfare to restore balance. In this process, military force often serves as the primary tool, and the balancer's actions are typically reactive, responding to changes in circumstances.

In contrast, a stabilizer not only maintains balance but also takes on a broader role in mitigating threats, promoting collaboration, and creating sustainable peace and order. Stabilizers often engage in proactive efforts to address the root causes of instability and cultivate a favorable environment. Their approach extends beyond the mere balance of power; they actively pursue stability through a variety of strategies, including balancing threats and fears. In the context of hegemonic stability, both the balance of power and the "balance of fear" are significant.<sup>11</sup>) Although the balance of threat and the balance of terror are conceptually distinct within alliance and nuclear theories, in a broader sense, the balance of fear can be viewed as a nuance idea that lies between the two.

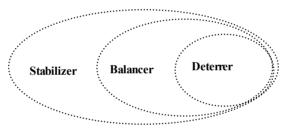
Based on this analysis, the role of a stabilizer can be outlined as follows: First, it maintains system stability through the exercise of hegemony. Second, it plays a preventive role in managing potential sources of instability within the system, guided by agreements centered on the common interests of all members. These common interests may pertain to issues like peace and stability or specific challenges collectively recognized by all states. In this regard, a stabilizer can act

<sup>11)</sup> While the balance of power primarily focuses on military capabilities, the balance of fear relies more on the will to act. The concept of the balance of fear is similar to the "balance of threat" or the "balance of terror," but there are subtle differences.(Walt 1987, 17-33; Sagan and Waltz 2002). Fear, by definition, includes threats, as it describes a strong, unpleasant emotion caused by the awareness or perception of danger. In this context, fear is associated more with emotional responses to potential risks and dangers rather than immediate, direct threats, and is typically less intense than terror.

as a buffer that helps prevent crises from escalating solely through its presence. Third, a stabilizer helps maintain a balance of fear among states. Fourth, it contributes to system stability as a coordinator and facilitator. The role of a coordinator is comparable to that of a counterweight in a balancing act. Fifth, a stabilizer can sustain stability through "dual deterrence" by exercising deterrence and political control over both adversaries and allies.

In sum, a stabilizer maintains stability and order by alleviating tensions and creating predictability within a given region. Its primary focus is on maintaining stability through proactive measures such as diplomacy, military presence, or economic engagement. The role of a stabilizer on a global scale typically requires a hegemonic power. However, at the regional level, middle powers or lesser states can also fulfill the stabilizer role under certain circumstances, acting as safety valves, coordinators, or facilitators.<sup>12</sup>)

<Figure 1> Conceptual relationships between Stabilizer, Balancer, and Deterrer



Although stabilizers, balancers, and deterrers all aim to achieve stability, the concept of a stabilizer is the most comprehensive. The following is a simplified diagram illustrating the conceptual categories and relationships between these three terms, which serves as a foundation for conceptual and analytical comparison.

#### Analytical Framework

The USFK has performed a multifaceted set of roles at global, regional, and local levels. When categorizing USFK's roles across these three levels into military and political dimensions, six combinations of roles can be identified. Table 1 shows that USFK's roles at the global, regional, and local levels as both a balancer and a stabilizer can be categorized into six combinations.

<sup>12)</sup> Andrew F. Cooper et. al., *Relocating Middle Powers, Australian and Canada in a Changing World Order* (Vancouver, BC: University of British Columbia Press, 1993).

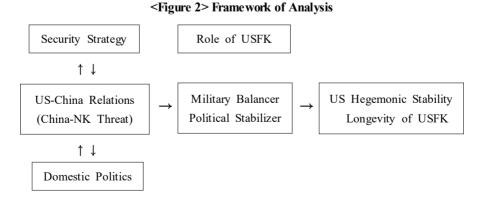
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Role	Global	Regional	Local
Military Balancer	Contain the USSR	Deter and Defend against the PRC	Deter and Defend against the DPRK
Political Stabilizer	Maintain Global Hegemon	Stabilize the NEA	Stabilize the Korean Peninsular (Dual Deterrence)

During the Cold War, USFK's military role was multifaceted, encompassing deterrence against the Soviet Union, deterrence against a combined North Korean-Chinese attack, and defensive roles in the event of deterrence failure. While the explicit deterrent role of USFK was part of the early Cold War containment strategy against the Soviet Union, the actual primary target of deterrence in Northeast Asia was the combined North Korean-Chinese forces.

Politically, USFK has served as a symbol of the US commitment to the defense of South Korea. One of USFK's critical political functions has been its dual containment strategy against both North and South Korea. Moreover, USFK's presence has provided leverage in the US's relationships with other Northeast Asian countries.

In addition to performing a balancing role to prevent dominance by any single power in the region, USFK also functioned as a public good, helping to maintain stability in Northeast Asia. This stability impacts not only relations with China but also neighboring countries like Japan and Taiwan. The security dynamics of Northeast Asia are significantly shaped by mistrust and threat perceptions among nations, transcending ideological and bloc divides. Given these regional characteristics, the USFK has played a role that extends beyond being merely a military balancer; it acts as a political stabilizer that mediates and balances mutual concerns among states.



In the context of the US's regional strategy in Northeast Asia, this paper focuses on the relationship between the US and China. It employs the key analytical concepts related to the military balancer and political stabilizer roles of USFK. There is no clear distinction between deterrence and stabilization within the military and political domains. Credibility based on political will is essential for effective deterrence. Deterrence involves not only military power but also political, diplomatic, and economic strategies. In international politics, deterrence is generally defined as compelling a potential adversary to refrain from military aggression, with military force regarded as a critical means of both conventional and nuclear deterrence.<sup>13)</sup> Furthermore, depending on the emphasis placed on deterrence and stabilizer role, the deployment and operation of actual military forces can differ significantly, allowing USFK's role to be classified as either military or political.<sup>14)</sup> Factors such as security strategy and domestic politics also influence US-China relations.

#### The US-China Relations and Role of the USFK

#### Early Cold War Era Hostility (1950–1970): Deterrer and Balancer

The early Cold War era was marked by intense hostility between the US and China. The US considered China a more dogmatic and belligerent adversary than the Soviet Union and pursued a strategy aimed at containing China. In the US security strategy, the intense rivalry and imminent threat of aggression necessitated a robust military presence and strategic alliances to prevent conflicts and manage regional power dynamics.

The primary goal of the US military presence in the Western Pacific was to contain China, with the USFK playing a pivotal role in that strategy. The Eisenhower administration's decision to maintain two infantry divisions and deploy tactical nuclear weapons in Korea was driven more by the strategic necessity of countering China than solely by the ROK-US Mutual Defense Treat y.<sup>15</sup>) Although the Chinese People's Volunteer Army had withdrawn, there

<sup>13)</sup> Patrick Morgan, Deterrence: A Conceptual Analysis (Beverly Hills, CA: Sage, 1977), pp. 18-19.

<sup>14)</sup> For example, during the Nixon administration's review of the withdrawal of USFK, the term "political stabilizer role" of USFK in Northeast Asia was frequently used. Memorandum for HAK, NSSM 154 -United States Policy Concerning the Korean Peninsular, April 3, 1973, RG 273, The Role of U.S. Forces, Annex A, pp. 6-7.

<sup>15)</sup> The issue of the retention of USFK was specifically addressed in "NSC 154/1," dated July 2, 1953. This document assumed that China had not abandoned its pursuit of objectives through military force. It recommended policies to exert pressure on China, including blocking its admission to the United Nations, enforcing an embargo against China, and strengthening military support for Taiwan (FRUS 1952-54, 1341-1344).

remained a significant need to deter broader threats across Northeast Asia and to prepare for potential Chinese military support in the event of North Korean provocations.<sup>16</sup>)

Under the Kennedy and Johnson administrations, the US maintained its policy of "isolation and containment" toward China. This strategy aimed to limit China's influence in the international arena and curb its capacity to spread communist ideology and military power. The US reinforced alliances and military bases in Asia, proving support for Taiwan, South Korea, and Japan. These alliances served as a buffer against potential Chinese expansion. The U.S. also maintained a strong military presence in the Pacific to deter aggression and provided military and economic aid to neighboring countries, such as India, presenting China as a common threat to regional stability.

From China's perspective, the US was viewed as its primary adversary, representing the pinnacle of imperialism and hegemony, and thus the greatest ideological and security threat. China's hostility toward the US intensified due to its indirect confrontation with the US during the Vietnam War and the ongoing tensions over Taiwan. In particular, China perceived the US military presence in Asia as a platform for potential aggression against China. Consequently, during this period, China adopted a Soviet-centric approach to counter the US, which it regarded as its greatest security threat.<sup>17</sup>

Despite the hostility, the Soviet Union's expansion, the Sino-Soviet split, and the Vietnam War led to a recognition of the need to improve relations. By the late 1960s, the US was facing challenges from Soviet military expansion and economic competition from Western Europe and Japan, while involvement in the Vietnam War weakened its hegemonic position and fueled antiwar sentiment at home. Recognizing a unique strategic opportunity, President Nixon sought to leverage the Sino-Soviet split to foster a cooperative relationship with China, thereby undermining the Soviet Union and facilitating a peaceful resolution to the Vietnam War.

The Nixon administration considered relaxing its "isolation and containment" policy toward China, which included withdrawing US forces from Taiwan and redeploying military forces throughout Asia. Furthermore, the US adjusted its "two and a half war" strategy – originally accounting for simultaneous Soviet and Chinese attacks in Europe and Asia – to a "one and a half war" strategy that no longer regarded China as a significant threat.<sup>18</sup>) In this context, USFK was viewed as a top candidate for reduction among overseas general-purpose forces.

During this period, Chinese leaders recognized the need to improve relations

<sup>16)</sup> FRUS 1958-1960, Vol. XVIII, Japan; Korea, pp. 559-570.

<sup>17)</sup> Dong-Ryul Lee, "Sino-US détente in 1972: background, strategy, and historical implications of China," *National Strategy*, Vol. 20, No.3(2014).

Memorandum for the President from HAK, Subject: U.S. Military Posture, October 2, 1969, NSC Institutional Files, NPM.

with the United States. Following the 1969 Zhenbao Island border conflict, China began to show a strong desire to improve relations with the US while increasing its perception of the Soviet Union as its primary adversary. Domestically, the need to calm the chaos of the Cultural Revolution fueled this shift.

By the late 1960s, as the US reassessed the Chinese threat, it had also reconsidered the size and deployment of USFK. The shift in Vietnam policy, as well as North Korean provocations such as the Blue House raid and the capture of the USS Pueblo, prompted a fundamental reassessment of US policy on the Korean Peninsula. This led to discussions about withdrawing all US forces, including nuclear weapons, from South Korea.<sup>19</sup> The primary reasons for this policy shift included both a perceived military overcommitment to defending South Korea and a fear of becoming entangled in another potential war.

Building on Johnson's review of the policy concerning the Korean, the Nixon administration viewed the complete withdrawal of US ground forces from South Korea as a critical test case for the Nixon Doctrine. Nixon believed that if relations with China improved, the deterrent capability of US air and naval forces would be sufficient to maintain political influence even with reduced military involvement.

As China altered its strategy to counter the Soviet threat by leveraging the "US card," it became necessary to reconsider the role of US forces in Asia. From China's perspective, USFK was more than just a military matter; it was a symbolic and substantive component of the strategic triangular relationship between the US, China, and the Soviet Union, as well as the security order in Northeast Asia. This included key issues such as Taiwan, Vietnam, and Japan.

Both the US and China recognized the need to end their adversarial relationship and work toward reconciliation. However, the long-standing animosity and lack of direct contact continued to pose significant impediments to improving relations. The USFK issue remained sensitive for both nations, especially for those with vivid memories of the Korean War, making it difficult to gauge each side's intentions.

#### Detente Until the End of the Cold War (1971–1991): Stabilizer

The international security environment underwent dramatic changes between the era of detente and the end of the Cold War. The US-China relations shifted from extreme hostility to reconciliation and cooperation. The USFK issue became an important topic in negotiations aimed at improving US-China relations, closely intertwining with the security of Northeast Asia. As detente began, the US and China recognized that they could reach a common understanding regarding the role of USFK.

<sup>19) &</sup>quot;US Policy toward Korea," Department of State Policy Planning Council, June 15, 1968, FRUS, 1964-1968, Vol. XXIX, Part 1, Korea

China accepted the USFK role as a stabilizer while strategically using it to counter threats from the Soviet Union and Japan, secure US support for the "One China Policy," and maintain influence over North Korea. As China sought to end hostilities with the US and pursue reconciliation and cooperation, it laid the groundwork for a shift toward reform and opening policies. In the Northeast Asian strategic landscape, China began to see the presence of USFK as a public good that contributed to regional stability, rather than as a threat.<sup>20</sup>

The US concluded that the withdrawal of its forces from Korea would raise concerns in Japan and South Korea about being "abandoned." It also raised apprehensions about China's responses to the Soviet threat, Japan's potential remilitarization, and the increased risk of conflict between North and South Korea. All of these factors could undermine the US's regional hegemony.<sup>21</sup>) The Nixon Doctrine aimed to reduce military involvement while also maintaining political influence. Therefore, the US concluded that further reductions in USFK, after the partial reduction of ground forces, would be detrimental to regional stability. <sup>22</sup>)

The different internal perspectives on USFK among regional countries also significantly influenced the shaping of a new security order in Northeast Asia. Each country assessed the presence of USFK based on its own strategic interests, leading to complex responses and strategic maneuvers. These strategic calculations went beyond traditional alliances and antagonistic relationships. Regional countries saw USFK through various lenses, employing concepts such as the balance of power and balance of fear to safeguard their national security interests.

Recognizing the differing perceptions of USFK's presence among these countries, the US emphasized its role as a stabilizing force that could address the fears of all countries in Northeast Asia. Notably, China was willing to accept this stabilizing role.<sup>23</sup>) During this period, US-China relations transitioned from extreme hostility to a form of "tacit alliance" through détente, which included an implicit agreement and compromise on USFK's stabilizing role in the region.

At the same time, the Soviet Union began actively expanding its naval power to enhance its national interests in the Pacific. This shift marked a turning point in the Cold War rivalry between the US and the Soviet Union, as the competition

<sup>20)</sup> Memorandum for the President from HAK, Report on Meetings with Brezhnev, May 11. 1973. DDRS

<sup>21)</sup> Memorandum for HAK, NSSM 154 -United States Policy Concerning the Korean Peninsula, April 3, 1973, RG 273, The Role of U.S. Forces, Annex A, pp. 6-7. NPR.

<sup>22)</sup> In addressing the issue of reducing USFK, the Nixon administration did not consider the assessment of the North Korean threat to be a key factor. Although USFK could be withdrawn immediately from a military standpoint, its "political role" in the broader Asia strategy was deemed crucial (NPM 1973b).

<sup>23)</sup> John Ikenberry, "American hegemony and East Asian order," Australian Journal of International Affairs, Vol. 58, No. 3(2004), p. 355.

extended beyond the Atlantic into the Pacific. In response to the Soviet Union's maritime strategy, the US Navy sought to strengthen its naval strike forces and broaden its range of maritime operations.<sup>24</sup>) Furthermore, the US redefined the roles of USFK and the United States Forces Japan (USFJ) in the Pacific region, reinforcing its maritime-focused security strategy. In 1979, China notified the Soviet Union of its decision to terminate the Sino-Soviet Treaty of Friendship, Alliance, and Mutual Assistance, leading to a sharp deterioration in Sino-Soviet relations.

When the Carter administration attempted to withdraw US troops from South Korea again in the late 1970s, China expressed concerns that such a withdrawal would destabilize the Korean Peninsula and increase Soviet influence in the region.<sup>25</sup>) While China did not publicly oppose the withdrawal – possibly to avoid straining relations with North Korea – it may have been concerned about the potential rise of Soviet power and the risks of regional instability. Chinese diplomats even communicated to their foreign counterparts that China wanted the US 7th Fleet to stay in the region.<sup>26</sup>) Consequently, China was tolerant of the presence of US troops in East Asia when the Soviet Union sought to expand its influence over Vietnam and North Korea.

The Soviet Union sought to expand its influence into the Pacific and counter the US Navy in the Western Pacific region, while maintaining a somewhat ambivalent stance regarding USFK. Publicly, the Soviet Union called for the withdrawal of USFK concerning North Korea, but in reality, it did not desire the removal of the US 2nd Infantry Division. The Soviets believed that the presence of USFK contributed to regional stability.<sup>27</sup>) In addition, the Soviet Union regarded the U.S. security commitment and the presence of USFK as advantageous, as they were wary of potential aggression from North Korea and the prospect of Japan's rearmament.

Just as the leaders of China and the Soviet Union had feared, the Carter administration acknowledged that if North Korea instigated a military conflict, it would almost certainly lead to a confrontation with China or disrupt US-China relations. Therefore, the removal of USFK was considered undesirable, as it could weaken deterrence and negatively affect stability in Northeast Asia.

Despite contentious issues like US arms sales to Taiwan in the 1980s, US-China relations gradually improved. The Reagan administration made efforts

<sup>24)</sup> Kwang ho, Jung, "The Soviet Maritime Strategy in the Cold War and The U.S. Response," *Journal of Military History*, No. 89(2013).

<sup>25)</sup> Jonathan D. Pollack, "U.S.-China Relations and The Security of Korea," Asian Perspective, Vol. 8, No. 1(1984).

<sup>26)</sup> U.S. Congress, Senate, Committee on Foreign Relations. (1978). "U.S. Troop Withdrawal from the Republic of Korea." 95th Congress 2nd Session, January 9, 1978. p. 14.

<sup>27)</sup> US Congress 1978, p. 9.

to improve Washington-Beijing relations at the height of concerns over Soviet expansionism. Shortly after establishing diplomatic relations, the US Congress passed legislation granting China the status of a "most favored nation." By 1983, China was added to the list of allied nations for advanced technology exports, further easing restrictions. These measures facilitated a rapid trade expansion between the two countries, coinciding with China's preferences at that time. Following Reagan's visit to China in April 1984, the US government approved Beijing's purchase of American military equipment.

During this period, USFK played a vital role in a strategy known as dual deterrence. This approach involved the US enhancing South Korea's defense capabilities to maintain a power balance while also preventing the outbreak of war on the Korean Peninsula by deterring "military adventures" from both North and South Korea. This dual deterrence strategy helped to avoid military escalation and contributed to a more stable political environment in Northeast Asia.<sup>28</sup>)

Following détente, the US and China ceased to view each other as adversaries and refrained from deploying forces against one another. Both countries adopted a "joint management" strategy to establish a foundation for improving their bilateral relations. This strategy involved navigating and influencing regional countries' strategic calculations regarding USFK, thereby shaping the overall security landscape in Northeast Asia.

Contrary to the global Cold War order, the US-China détente significantly reduced tensions in Northeast Asia. The role of USFK evolved from primarily serving as a deterrent to functioning as a stabilizer, allowing for a more stable and cooperative regional environment. As a stabilizer, USFK utilized various methods to maintain peace and prevent conflicts, which included not only military deterrence but also political and diplomatic efforts to maintain regional order.

However, there were limitations to progress toward a fully cooperative relationship beyond temporary shared interests between the US and China. Above all, while both states expressed a willingness not to pursue hegemony, their true intentions differed significantly. This was considered a major factor contributing to the inherent fragility of US-China relations.<sup>29</sup>

After the détente, although the US and China no longer viewed each other as enemies and avoided overtly aggressive strategies or military deployments against one another, China was steadily preparing military countermeasures to address the potential US military containment and deterrence against China. During Deng Xiaoping's era, China's military strategy expanded, incorporating a "Near-Sea

<sup>28)</sup> Inseok Yoo "Analysis of North Korea's Perception and Behavior toward the United States Forces Korea(USFK): From a Perspective of Regime Security and Balance of Threat," *National Security and Strategy*, Vol. 23, No. 4(2023).

<sup>29)</sup> Harry Harding, *A Fragile Relationship: The United States and China Since 1972* (Washington D.C.: Brookings Institution, 1992).

Active Defense" approach.<sup>30)</sup> To support this military strategy, China sought to improve relations with the Soviet Union in the late 1980s and acquired advanced military equipment such as Su-27 fighter jets, Kilo-class submarines, and Sovremenny-class destroyers.

With the reduced threat from the Soviet Union and ongoing cooperative relations with the US, a favorable strategic environment emerged for China to focus on strengthening its national power through economic development. As China's rapid rise in national strength boosted its confidence, it prompted strategic countermeasures from the US, transforming the perception of each other from cooperation to competition.

# Strategic Ambiguity in the Post-Cold War(1991–2011): From Stabilizer to Balancer

The post-Cold War era, lasting from 1991 to 2011, witnessed significant changes in the international security landscape.<sup>31</sup>) The collapse of the Soviet Union led to a unipolar world dominated by the US. However, this era was also marked by both increased cooperation and competition among global and regional powers. Despite the emergence of the "China threat" debate in the early 1990s, the dominant view in the US was that collaboration with China could help maintain the liberal international order. As a result, the focus of the US national security strategy shifted from strategic competition among major powers to preparing for various threats and uncertainties. Consequently, the military sought to transform itself into a more agile force capable of responding quickly and adaptably to emergencies and conflicts.

The East Asia Strategic Initiative of 1990 and 1992 outlined a three-phase reduction and adjustments of US forces stationed in the Asia-Pacific region, scheduled to be completed by the end of the century. However, the first phase of withdrawal from South Korea was suspended largely due to North Korea's nuclear weapons program. The second phase was postponed indefinitely and ultimately never executed. The US concluded that a fundamental change to USFK would be undesirable for the stability of Northeast Asia, thereby resulting in only a minor reduction in forces.

<sup>30)</sup> Liu Huaqing, often referred to as the "father of the Chinese Navy," argued that the US had established an "oceanic barrier" to contain China, represented by the First Island Chain and the Second Island Chain. He advocated for long-term preparations for expansion to the Second Island Chain, which includes the Mariana Islands, Guam, and Palau. Ho-seop, Jung, "US-China Maritime Hegemony Competition: Focusing on the Island Chain Concept in the Western Pacific Region," *National Security and Strategy*, Vol. 24, No. 3(2024), pp.24-27.

<sup>31)</sup> Although there is no exact point marking the end of the post-Cold War era, it is generally viewed as occurring in the early 2010s, when tensions between the U.S. and China began to escalate.

The Clinton administration emphasized the importance of the US forward presence in Asia and its alliance with Japan.<sup>32</sup>) In line with the new East Asia strategy, the US intended to keep a total of 100,000 troops in the region, highlighting the significance of the Marine Corps and other military forces stationed in Okinawa. Alongside strengthening the US-Japan alliance, this strategy also aimed to address strategic challenges, such as China's rise and North Korea's development of nuclear capabilities.

During the early Bush administration, China's rise was perceived as a potential threat, prompting a shift in security strategy focus to East Asia and a review of overseas base realignment. Following the 9/11 attacks, the Bush administration prioritized the war on terror while also designating China as a strategic competitor and increasing counterbalancing strategies against it. This shift raised great concerns in China about potential encirclement or concerted containment. However, China did not react aggressively; instead, it maintained a cooperative attitude toward US-led anti-terrorism efforts. The Chinese leadership continued to focus on economic development to achieve domestic stability while avoiding direct interference and competition from the US.

Under the defense transformation of the Bush administration, the emphasis shifted from large-scale permanent deployments to the importance of capabilities for rapid intervention, particularly mobility and flexibility. In November 2003, the US announced the "Global Posture Review," which formalized USFK's strategic flexibility. The US began taking steps to facilitate the transfer of USFK units to other regions, including the redeployment of the 2nd Brigade of the 2nd Infantry Division (3,600 troops) to Iraq in May 2004. A 2004 Department of Defense report to Congress emphasized the importance of quickly deploying forces to far-flung crises while deterring threats such as North Korea in the Asia-Pacific region. This included supplementing permanently stationed units with rotational and rapidly deployable forces such as Stryker brigades and rapid deployment air forces.<sup>33</sup>

In May 2005, General Campbell, Commander of the 8th US Army, stated that the US-ROK alliance was transitioning into a regional alliance, with the Combined Forces' operational scope potentially extending to Northeast Asia.<sup>34</sup>) However, South Korean President Roh Moo-hyun asserted that the country would not be drawn involuntarily into regional conflicts.<sup>35</sup>) In January 2006, both countries agreed to reconcile their differences, with South Korea respecting USFK's

US DOD, "US Security Strategy for the East Asia Pacific Region," (Washington, DC: DOD, 1995).

<sup>33)</sup> US DOD, "Strengthening U.S. Global Defense Posture Report to Congress," (Washington D.C. DOD, 2004), p. 12.

<sup>34)</sup> Chosun Ilbo, May 25, 2005.

<sup>35)</sup> Chosun Ilbo, March 9, 2005.

strategic flexibility and the US respecting South Korea's position of not becoming involuntarily involved in regional conflicts.<sup>36</sup>)

From China's perspective, the shift in the role of USFK has practical implications. Although there is a nominal reduction in troop numbers, it effectively results in a military strengthening. What may seem like a strategic retreat is actually a preparatory step back for future advances. The substantial reduction of military tasks within South Korea allows USFK to extend its defense responsibilities beyond the Korean Peninsula.<sup>37</sup>) China began to view the Bush administration's policy of realigning USFK and transitioning its role to a rapid response force in Northeast Asia as a strategy aimed at strengthening containment and deterrence against China.

The Obama administration intensified its response to China's growing strategy by implementing a "Pivot to Asia" policy.<sup>38</sup>) The 2012 Defense Strategic Guidance emphasized the need for military forces to be agile and adaptable to all types of situations, with a particular focus on countering China.<sup>39</sup>) A key goal of the strategic flexibility was to counter China's challenge. The establishment of new U.S. military bases in Central Asia and increased military cooperation with Southeast Asian countries, as well as the realignment and adjustment of USFK, were ultimately viewed as measures to counter China. The relocation of USFK to Pyeongtaek, initially motivated by the need to vacate the Yongsan Garrison in the early 1990s, ultimately strengthened the military posture against China.

China perceived the US's strategic flexibility as an attempt to strengthen containment against it.<sup>40</sup> However, until the Xi Jinping administration, the US strategy toward China was characterized by a mix of "cooperation and competition." While the US showed signs of a strategic shift aimed at containing and deterring China, it did not translate into specific strategic measures for that purpose. This was partly because both the US and China tended to view each other not as outright adversaries but rather as major powers that required global cooperation. During Obama's first term, the US strategy toward China maintained a subtle stance, oscillating between cooperation and competition. In other words, the US adopted an ambiguous hedging strategy, viewing China as either a potential partner or adversary. However, as the rivalry between the U.S. and China

<sup>36)</sup> Yonhap News, January 20, 2006.

<sup>37)</sup> Jaegwan, Kim, "China's Response to Relocation and Role Coordination of the U.S. Armed Forces in Korea," *Unification Policy Studies*, Vol. 13, No. 2(2004).

<sup>38)</sup> John J. Mearsheimer and Stephen M. Walt, "The Case for Offshore Balancing: A superior U.S. Grand Strategy," *Foreign Affairs*, Vol. 95, No. 4(2016).

<sup>39)</sup> US DOD, "Sustaining US Global Leadership: Priorities for 21st Century Defense," (Washington D.C. DOD, 2012), p. 4.

<sup>40)</sup> Wang Weimin and Xin Hua. "Redefinition of the ROK-U.S. Alliance and Implications for Sino-ROK Relations: A Chinese Perspective," *The Korean Journal of Defense Analysis*, Vol. 24, No. 3(2012), p. 291

intensified, this situation evolved into a clear confrontation.

#### Strategic Competition (2012-): Deterrer and Balancer

The era of strategic competition between the United States and China marks a significant return to traditional great power rivalry. This phase has witnessed a resurgence of deterrence and balance strategies that aim to manage the complex relationship between these two major powers. In response to China's growing influence and assertiveness, the US has emphasized the importance of deterrence and maintaining a balance of power in the Asia-Pacific.

The US has increased its military presence in the Asia-Pacific region, with USFK playing a critical role in this strategy. Key components of this approach include upgrading missile defense systems, increasing the frequency of joint military exercises with South Korea and other allies, deploying advanced weaponry and technology, and maintaining a robust forward-deployed military presence to respond swiftly to any potential aggression from China or North Korea.

The Pyongtaek Garrison, constructed with a total investment of \$150 billion from South Korea and the U.S., is the largest overseas US military base, covering an area of 14.48 million square meters. This base can also serve as a military hub or staging area for the US in Northeast Asia. Located near a harbor and an airport, Pyongtaek Garrison is strategically positioned to project US military power in the region. Some consider it a key global forward base due to its proximity to China and its role in deterring Chinese naval movements into the Pacific.

In 2015, Seoul and Washington agreed to install the Terminal High Altitude Area Defense (THAAD) in South Korea. This decision was primarily aimed at strengthening the US-ROK alliance in the face of escalating nuclear threats from North Korea and deepening Sino-American rivalry.<sup>41</sup>) However, the US deployed THAAD primarily to enhance surveillance and deterrence against China rather than North Korea. China expressed concern about THAAD's placement at the Pyeongtaek Base, citing fears that the system could potentially monitor its key military installations and missile capabilities.

The most significant change in U.S. national security strategy since the Trump administration has been the explicit recognition of China as the most serious threat and challenge. The Trump administration articulated an Indo-Pacific strategy aimed at containing China's aggressive expansion and put practical measures in place to achieve this goal. The Trump administration's National Defense Strategy revived the concept of strategic flexibility through "dynamic force employment."

<sup>41)</sup> Yong Sub, Choi, "Keeping the Americans in: The THAAD deployment on the Korean peninsula in the context of Sino-American rivalry," *Contemporary Security Policy*, Vol. 41, No. 4(2020).

This new defense strategy recognizes that long-term deterrence and defeat of strategic competitors require a different approach than dealing with regional adversaries. It proposed a flexible and unpredictable method of force employment that is "strategically predictable but operationally unpredictable."<sup>42</sup>) The logic of dynamic force employment may have influenced the rotational deployment of US ground forces in Korea. Former Defense Secretary Mark Esper stated in June 2020 that more rotational deployments would be pursued to increase strategic flexibility in response to global threats.

The Biden administration has prioritized revitalizing alliances such as NATO, the US-Japan alliance, and the US-ROK alliance to counterbalance China's military ambitions. The US has increased military deployments and naval patrols in the South China Sea and Taiwan Strait, reinforcing its commitment to freedom of navigation in contested waters. Forward-deployed forces, expanded joint military exercises, and rotational troop deployments in countries like Australia and the Philippines demonstrate a deterrent posture against potential Chinese aggression. There is growing bipartisan and public consensus in the U.S. about the necessity to contain China. The Indo-Pacific Command requested \$27.3 billion, which would focus on critical military capabilities to deter China, including a precision strike strategy against the Chinese mainland in emergencies.<sup>43</sup>

With the return of former President Trump to power, the possibility of renewed discussions on USFK withdrawal could increase, and the president's personal inclinations may significantly influence decisions about USFK realignment. However, it is important to note that the US hegemonic strategy has shown continuity, and internal government dynamics have substantially shaped the decision-making process for security policies. Notably, the strategy toward China is likely to remain central to the US hegemonic framework, and in this context, the role of USFK in deterring China is expected to expand significantly.

The strategic competition between the U.S. and China is a return to traditional great power rivalry, with a renewed focus on deterrence and maintaining a balance of power. Moreover, this competition spans economic, technological, political, and diplomatic domains, necessitating a comprehensive and multifaceted approach to counterbalance China's rise. This period emphasizes the importance of a robust and adaptable strategy for navigating the complexities of modern great power rivalry. As a result, the USFK is transitioning from a stabilizing force to a balancing role. This shift could significantly influence USFK's military capabilities and forward deployment strategies.

<sup>42)</sup> US DOD, "Summary of the 2018 National Defense Strategy," (Washington D.C.: DOD, 2018), pp. 5-7.

<sup>43)</sup> Chosun Ilbo, May 5, 2021.

# Conclusion

This study examines how the role of USFK has evolved in response to changes in US-China relations. The distinction between balancing and stabilizing roles can lead to variations in the military and political significance of military power, resulting in actual changes in the size, composition, deployment, capabilities, and overall operations of military forces. In sum, the continuation and reduction of USFK can be understood within the context of the hegemonic stability of US global and regional strategy, supported by the political and military role of USFK in Northeast Asia. The US has consistently sought to maintain its leadership and engagement in the region through its military presence and bilateral alliance system. Key objectives of its global strategy have included deterring threats to US security, ensuring regional stability, and preventing the rise of a hostile competitor.

Amid the intensifying strategic competition between the US and China, both countries are focused on achieving military superiority and the technological edge that enables it. The conflict between the US and China is particularly intense at the regional level in Northeast Asia. The US is likely to strengthen its presence of USFK to deter and contain China, while China many no longer recognize USFK's stabilizing role. The dynamic of US-China competition, alongside the strategies of regional countries in Northeast Asia, is expected to have a significant impact on the role and nature of USFK. Therefore, a meticulous assessment of Northeast Asia's security order and strategies is critical for strategic preparedness.

The issue of USFK realignment is likely to resurface at any time, as the necessity of US forces remaining in Korea solely to deter North Korea appears increasingly uncertain. Adjustments to the size of USFK deployments may occur in response to shifts in US strategic priorities. It is important to analyze and prepare for how the new US administration might shape its USFK policy. The next Trump administration is anticipated to emphasize the deterrence role of USFK as part of its strategy to contain China. In this context, demands for greater strategic flexibility from USFK are expected to rise, potentially designating USFK as rapid response forces in the event of crises outside the Korean Peninsula. The Trump administration is also likely to demand greater cost-sharing from South Korea. Therefore, a thorough assessment of the US-China relationship and US domestic politics is essential to prepare for any potential adjustments to the USFK structure.

This research makes theoretical contributions to the field of international security by developing the concepts of balancer in the balance of power theory and stabilizer in hegemonic stability theory. It also provides a useful case study for forecasting the trajectory of US global strategy and the security landscape of East Asia by analyzing the evolving role of USFK within the context of US-China relations.

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# References

- Choi, Yong Sub, "Keeping the Americans in: The THAAD deployment on the Korean peninsula in the context of Sino-American rivalry," *Contemporary Security Policy*, Vol. 41, No. 4(2020).
- Cooper, Andrew F., Richard A. Higgott, and Kim R, Nossal, *Relocating Middle Powers, Australian and Canada in a Changing World Order* (Vancouver, BC: University of British Columbia Press, 1993).
- Gilpin, Robert, *War and Change in World Politics*(Cambridge : Cambridge University Press, 1981).
- Harding, Harry, A Fragile Relationship: The United States and China Since 1972 (Washington D.C.: Brookings Institution, 1992).
- Ikenberry, G. John, "American hegemony and East Asian order," *Australian Journal of International Affairs*, Vol. 58, No. 3(2004).
- Jung, Kwang ho, "The Soviet Maritime Strategy in the Cold War and The U.S. Response." *Journal of Military History*, No. 89(2013).
- Jung, Ho-seop, US-China Maritime Hegemony Competition: Focusing on the Island Chain Concept in the Western Pacific Region, *National Security and Strategy*, Vol. 24, No. 3(2024).
- Kim, Jaegwan, "China's Response to Relocation and Role Coordination of the U.S. Armed Forces in Korea," *Unification Policy Studies*, Vol. 13, No. 2(2004).
- Kim, Taehyo. "The Future of USFK and ROK-U.S. Alliance," *Journal of Korean Unification Studies*, Vol. 13, No. 2(2004).
- Lee, Dong-Ryul. "Sino-US detente in 1972: background, strategy, and historical implications of China," *National Strategy*, Vol. 20, No.3(2014).
- Mearsheimer, John J. and Walt, Stephen M. "The Case for Offshore Balancing : A superior U.S. Grand Strategy," *Foreign Affairs*, Vol. 95, No. 4(2016).
- Morgan, Patrick. *Deterrence: A Conceptual Analysis* (Beverly Hills, CA: Sage, 1977).
- Morgenthau, Hans J. Politics Among Nations : The Struggle for Power and Peace 2nd Ed. (New York : Alfres A. Knof, 1954).

- Park, Bonggyu. "US Forces Korea and Northeast Asian Situation." Korea and International Society, Vol. 5, No. 4(2021).
- Pollack, Jonathan D. "U.S.-China Relations and The Security of Korea," Asian Perspective, Vol. 8, No. 1(1984).
- Sagan, Scott and Waltz, Kenneth N., *The Spread of Nuclear Weapons: A Debate. Renewed*(New York: W.W.Norton, 2002).
- Snidal, Duncan, "The Limits of Hegemonic Stability Theory," International Organization, Vol. 39, No. 4(1985).
- Snyder, Glenn H., *Deterrence and Defense: Toward a Theory of National Security* (Westport: Greenwood Press, 1961).
- Walt, Stephan M., *The Origins of Alliances* (Ithaca, New York: Cornell University Press, 1987).
- Waltz, Kenneth N., *Theory of International Politics* (Massachusetts: Addisson-Wesley, 1979).
- Wang Weimin and Xin Hua, "Redefinition of the ROK-U.S. Alliance and Implications for Sino-ROK Relations : A Chinese Perspective," *The Korean Journal of Defense Analysis*, Vol. 24, No. 3(2012).
- Yoo, Inseok. "Rethinking 'Strategic Flexibility' of USFK: From a Perspective of Deterrence and Stabilizer Role," *National Strategy*, Vol. 27, No. 3(2021).
- \_\_\_\_\_. "The Nixon Doctrine and Withdrawal of U.S. Troops from South Korea," *The Quarterly Journal of Defense Analysis*, Vol. 39, No. 2(2023).
  - \_\_\_\_. "Analysis of North Korea's Perception and Behavior toward the United States Forces Korea(USFK): From a Perspective of Regime Security and Balance of Threat." *National Security and Strategy*, Vol. 23, No. 4(2023).

. "U.S.-China Detente and the United States Forces Korea." *Korea and World Politics*, Vol. 39. No. 4(2023).

Chosun Ilbo March 9, 2005; May 25, 2005; May 5, 2021.

Yonhap News January 20, 2006.

DDRS

Memorandum for the President from HAK, Report on Meetings with Brezhnev, May 11. 1973.

- National Archives and Records Administration, Nixon Presidential Materials (NPM).
- 1973a, Memorandum for HAK, NSSM 154 -United States Policy Concerning the Korean Peninsular, April 3, 1973, RG 273, The Role of U.S. Forces, Annex A, pp. 6-7.
- 1973b, Memorandum for the President from NSC USC, Subject: Reexamination of the Korea Force Modernization Plan, May 30, 1973, RG 59
- US DOD. 1995. "US Security Strategy for the East Asia Pacific Region." (Washington, DC: US DOD).
  - . 2001. "Quadrennial Defense Review Report."
- . 2004. "Strengthening U.S. Global Defense Posture Report to Congress."
  - \_\_\_\_\_. 2012. "Sustaining US Global Leadership: Priorities for 21st Century Defense."
  - . 2018. "Summary of the 2018 National Defense Strategy."
- U.S. Department of State (DOS).
- NSC 154/1, "United States Tactics Immediately Following an Armistice in Korea," July 2, 1953, FRUS 1952-54, Vol. XV, Part 2, pp. 1341-1344.
- Memorandum of Discussion at the 411th Meeting of the National Security Council, June 25, 1959, Eisenhower Library, Whitman File, NSC Records. FRUS 1958-1960, Vol. XVIII, Japan; Korea.
- Draft Memorandum from Secretary of State Rusk to President Johnson, "Study of Possible Redeployment of U.S. Division now Stationed in Korea," June 8, 1964, FRUS 1964–1968, vol. XXIX, "Part 1: Korea."
- 1968, "US Policy toward Korea," Department of State Policy Planning Council, June 15, FRUS, 1964-1968, Vol. XXIX, Part 1, Korea
- Memorandum of Conversation1Washington, September 1, 1971, 9:30–11 a.m. FRUS, 1969–1976, Vol. XIX, Part 1, KOREA, 1969–1972, Document 106.
- U.S. Congress, Senate, Committee on Foreign Relations. (1978). "U.S. Troop Withdrawal from the Republic of Korea." 95th Congress 2nd Session, January 9, 1978.

A Study on Strengthening Space Cooperation between South Korea and Australia in the New Space Era

# A Study on Strengthening Space Cooperation between South Korea and Australia in the New Space Era

Geunho Song

#### Abstract

This study explores ways to enhance space cooperation between South Korea and Australia. It aims to strengthen Korea's space capabilities by leveraging Australia's strengths, including its rocket launch sites and satellite communication infrastructure. In addition to a growing demand for satellite imagery to manage natural disasters, Australia's space infrastructure presents strategic advantages for collaboration between the two countries. As the first country in the Asia-Pacific region to achieve success in space development, Australia has formed diverse space partnerships with advanced nations such as the United States, various European countries, and India.

To advance South Korea's space capabilities and expand its space economy in the New Space era, South Korea should consider strategic collaboration with Australia. Over the past 30 years, South Korea has successfully developed various satellites and Korean space launch vehicles, demonstrating its robust expertise in space technology. For South Korea to continue progressing in this field, international cooperation is essential. Australia prioritizes the development of its space industry through global partnerships. By combining Korea's talented workforce and advanced space technologies with Australia's infrastructure, both countries can contribute to significant space initiatives, such as space exploration and satellite navigation programs.

Key words: New Space Era, Space cooperation, Space Activities, ASA, KASA

# Introduction

Australia, a participant in AUKUS alongside the UK and the United States, has launched a plan to build a high-performance deep space radar capability to detect and track space objects and identify and suppress space-based threats in advance. Australia collaborates with the United States through the operation of the Canberra Deep Space Communication Complex in Canberra, Australia, whose antenna is used to control space communications for the Korean lunar probe, Danuri.

In November 2022, President Yoon Suk Yeol announced a roadmap for South Korea's future space economy, which includes policy directions aiming for a moon landing by 2032 and a Mars probe launch by 2045. These initiatives aim to position as a space economy powerhouse. The proposed six major policy directions are exploring the moon and Mars; emerging as a space technology powerhouse; developing the space industry; training space talents; ensuring space security; and fostering international cooperation.<sup>1</sup>) These policies provide a blueprint for expanding Korea's economic reach into space and strengthening collaboration with advanced space-faring countries to enhance its space capabilities.

In the era of New Space, where the private sector drives space development, major space-faring countries heavily invest in the space industry and exploration as private space companies lead the development of space instead of state-led space development. In recent years, South Korea has emerged as the world's seventh largest space power by advancing its space technology through various international collaboration and technological exchanges with the United States and European countries.

Previous research on Australia's space activities and policies has primarily concentrated on its satellite utilization policies. Notably, Lee Seo-rim evaluated Australia's 2013 satellite utilization policy as the country's first national space policy. Lim Chang-ho further analyzed Australia's satellite utilization policy, indicating that Australia focuses more on securing economic and practical benefits from space technology than on direct space system development. Lim concluded that Australia would enhance its space capabilities related to data processing, using satellite assets, ground station operation, and infrastructure construction, with aims to improve productivity through space development, enhance national security, create specialized labor jobs, and provide equitable information and services.<sup>2</sup>)

Many studies outside South Korea have examined Australia's international

<sup>1)</sup> Presidential Office, "President Yoon Announces Future Space Economy Roadmap," Nov. 28, 2022, https://www.president.go.kr/newsroom/press/Uc8g7TAf(accessed on April 28, 2023).

<sup>2)</sup> Lim Chang-ho, "Australia's satellite utilization policy," e - policy information center, aerospace researcher, 2015, p. 1.

A Study on Strengthening Space Cooperation between South Korea and Australia in the New Space Era

space cooperation. For instance, Lovett highlighted that Australia seeks to foster experts capable of sustaining the country's space initiatives through strengthened international collaborations.<sup>3</sup>) M. Rathnasabapathy discussed Australia's space cooperation in the Asia-Pacific region, emphasizing its advanced space technology and efforts to enhance international exchanges through international legal frameworks and organizations.<sup>4</sup>) Explaining Australia's space security program, Davis analyzed the growing importance of space in national security and the Australian government's initiatives to combat the growing threat in space through international cooperation.<sup>5</sup>)

Research on international cooperation between Korea and Australia remains limited in South Korea, with most studies focused on Australia's national space policy published in 2013. In contrast, Australia's partnerships with major advanced space countries are studied by many scholars and practitioners, as countries seek to collaborate with Australia to strengthen their space security and advanced space technology. Given this context, it is crucial to address the research gap on Korea-Australia space cooperation. In the New Space era, where private companies lead the space industry, it is essential to explore key issues surrounding this cooperation and identify effective pathways for collaboration.

Australia established a space development strategy aligned with its unique characteristics in the space policy announced in 2018. Since then, it has worked to enhance space security by collaborating with major allies on defense space capabilities as part of its space industry development. In this light, South Korea should develop a national space policy and strategy tailored to its own needs in the New Space era while considering the evolving space policies of other nations. This study aims to identify key areas for space collaboration between South Korea and Australia and to develop strategies that can strengthen their partnership. By comparing and analyzing the strengths, weaknesses, and complementary factors in both countries' space capabilities, this research seeks to illuminate ways to deepen their partnership and enhance their respective future space capacities.

<sup>3)</sup> Australian Strategic Policy Institute, "Australia in space: Views from The Strategist," 2018, http://www.jstor.com/stable/resrep23034. (accessed on Sep. 24. 2024).

<sup>4)</sup> M. Rathnasabapathy, "Role of emerging nations in ensuring long-term space sustainability," Acta Astronautica 219 (2024) p. 8–16,

https://doi.org/10.1016/j.actaastro.2024.01.050(accessed on Sep. 24. 2024).

<sup>5)</sup> Michael Davis, Australia's space security program, pp. 1-13, Springer, 2020.

## The trend of cooperation in space activities

#### Changes in the Global Space Activity Environment

In the era of new space, the development of private capital and advanced technology has significantly expanded the role of the private sector in space development, which was once predominantly by government agencies. As a result, the private sector has become a major player in space technology innovation. Competition for space exploration is escalating worldwide, with developed countries planning manned missions to the Moon and Mars. Since 2022, South Korea has been operating a lunar orbiter it launched and conducting research on lunar resource exploration. Developed countries have established and promoted space activity policies aimed at expanding space exploration and fostering the private space industry. These efforts are geared toward increasing public understanding of space and creating new values and economies through innovative technologies. Areas requiring substantial budgets, such as space exploration, satellite navigation system construction, and space security, are seeing increased international cooperation. This collaboration enables the continuous operation of space programs and ensures the safe use of space services. Moreover, the international community is united in addressing global challenges such as natural disasters, climate change, food security, and space threats. As space technology becomes increasingly crucial for improving quality of life and driving social and economic development, cooperation in space activities is on the rise.<sup>6</sup>)

### Scope and target of space cooperation

To examine the realm of space cooperation between South Korea and Australia, it is essential to first explore the potential areas where collaboration can occur between the two countries. In the New Space era, South Korea has the opportunity to enhance its space capabilities through international collaboration with advanced space technology countries. In this analysis, we intend to focus on several key elements of space activities where the two countries' collaborations can be fruitful: satellite navigation and satellite information, space exploration, space transportation services, and the training of experts in the space field.

First, Australia is the first country in Asia to successfully launch a satellite. It played a crucial role in facilitating space communication between the moon and the earth during the Apollo Lunar Landing Mission of the United States, allowing people all over the world to witness the event through satellite technology. Australia also recognizes the importance of using satellites to cope with natural

<sup>6)</sup> Jeong Heon-joo, Baek Yu-na and Jeong Yoon-young. "Space and international development cooperation: an exploratory analysis of the achievement of sustainable development goals using space technology." *Social science research* 33, no. 2 (2022): p. 129.

disasters and has considerable experience in developing navigation satellites. Technological cooperation with Australia is very vital for South Korea, which is in the process of building a Korean Satellite Navigation System (KPS) for the first time and has a wealth of experience in satellite utilization.

Second, lunar and Mars exploration as well as resource discovery on the Moon should be prioritized. Since 2022, Korea has sent a probe into the Moon's orbit to explore various lunar resources and identify potential landing sites for the Artemis manned lunar landing program. Australia is also a key participant in the Artemis program, collaborating closely with the United States on lunar exploration, making cooperation with South Korea in this area highly promising.

Third, South Korea faces geographical limitations, allowing satellite launches only towards 178 degrees south due to its proximity to China, Japan, and North Korea. However, Australia's vast territory makes it an ideal location for launching satellites. Australia's location enables launches from various angles, allowing multiple rocket launches at any time desired, and offers multiple rocket launch sites, making it one of the most attractive countries for rocket launches globally.

Lastly, South Korea and Australia work together to cultivate key space technology experts who can contribute to the future of space development. Training skilled professionals in the space sector can help South Korea develop cutting-edge space technology. Participation in various space technology development projects by the Australian government, research institutes, and space enterprises, will enhance the capabilities of South Korean space and IT talent, facilitating exchanges between talents in the two countries and helping to develop them into internationally competent space technology experts.

In this paper, we outline the scope and targets of space cooperation between

Classification	Field of space cooperation	Details
South Korea-Austral ia Space Cooperation	Satellite navigation, space communication, Space Situational Awareness	Development of KPS, development of space communication and utilization of Australian facilities related to space exploration, and sharing information on SSA
	Space exploration	Space exploration and resource exploration activities such as moon landing and Mars exploration
	Space transport service	Australia's use of space launch sites, development of small SLVs, cooperation in development of SLV technology, etc
	Training of Professional Space Personnel	Support for human resources educational cooperation in science and technology education, and growth of space enterprises

<Table 1> Scope and Target of Korea-Australia Space Cooperation

South Korea and Australia as crucial analysis tools for advancing South Korea's space capabilities.

# South Korea-Australia Space Policy

#### Australian Space Policy and Space Strategy

# Australia's Space Policy

Australia became the first country in the Asia-Pacific region to succeed in space development in 1967.<sup>7</sup>) The Australian Federal Science and Industry Research Organization (CSIRO) has been in charge of space affairs, focusing on fostering overall space industry development and international cooperation rather than operating independent space programs.<sup>8</sup>)

In 2013, Australia announced its first national space policy, Australia's Satellite Utilization Policy.<sup>9)</sup> This policy aimed to expand and develop Australia's economy through the space industry.<sup>10</sup>) It proposed seven basic policies and outlined the strategic direction for using satellite technology in Australia. The seven basic policies of Australia's national space policy are to focus on critical areas of space utilization for the country; to ensure accessible use of the international space system through overseas cooperation; to strengthen and expand international space cooperation; to organize domestic space activities in Australia; to promote collaboration among space-related industries; to support the advancement of science and technology; and to improve national security and economic stability through space activities. In addition, the policy proposed priority technology development in the space field. By 2018, Australia had secured space technology for position, navigation, and earth observation. By 2021, the space communication technology had secured and, by 2028, technologies related to space situational awareness, leaps in research and development, robot and automation, and space access technologies have been selected.11)

<sup>7)</sup> Australia successfully launched its first satellite WRESAT on 29 November 1967, Japan launched the Ohsumi satellite on 11 February 1970, and China launched the Eastern Hong satellite on 24 April 1970.

<sup>8)</sup> Korea Aerospace Research Institute, "Status of Australian Space Development," 2024.

<sup>9)</sup> Lee Seo Lim, "Australia's first national space policy," e - policy information center of the Korea Aerospace Research Institute, 2013, p.1.

<sup>10)</sup> Nam Ki-won, "Strategies and Implications of Canada and Australia's participation in lunar exploration and artemis," a collection of papers at the 2022 Spring Conference of the Aerospace Society.

<sup>11)</sup> Australian Government, Australia's Satellite Utilization Policy, 2013, https://csps.aerospace.org/sites/default/files/2021-08/Australia%20Sat%20Utilisation%20P olicy%209Apr13.pdf(accessed on Aug. 8. 2024).

The Australian Civil Space Strategy 2019-2028, published in April 2019, serves as Australia's major national space strategy and provides a comprehensive plan for national space activities.<sup>12</sup>)

The Australian Space Agency coordinates national space activities, fosters the Australian space industry and supports the expansion of space utilization while providing strategic advice on national space policy and the private space sector.<sup>13</sup>) Emphasizing national security, the growth of the space economy, innovation in space technology, and international space cooperation, the National Space Security Strategy is designed to safely utilize Australia's space assets and ensure the sustainable development of the space sector. It aims to create an integrated system for developing Australia's space industry, encourage commercial space development and investment, and strengthens cooperative relationships with other countries. It also seeks to enhance national capabilities in space through the establishment of the space industry, promoting research and development in space technology, and motivating and training future space personnel. The National Space Strategy coordinates comprehensive policies, including defense and commercial space strategies, ensuring consistent implementation across all related strategies.

Beginning in 2022, the Defense Space Command (DSpC) under the Ministry of Defense will oversee military space development programs, dual-use space programs, and military support. Private programs will be managed by the Australian Space Agency (ASA) under the Ministry of Industry, Innovation and Science, which will focus on civilian space policies. Australia's Defense Space Strategy was issued in 2022, with the Australian military tasked with building a space force to safeguard the country's national interests during wartime. In addition, this strategy ensures commercial and military access to space while presenting a vision for intergovernmental integration and cooperation with allies, partner countries, and businesses.<sup>14</sup>) The Defense Space Strategy outlines five main objectives:

- 1. Strengthening defense space capabilities to ensure joint forces' access to space in crowded and competitive space environments.
- 2. Maintaining military effectiveness across government bodies, allies, and partners supporting national security.
- 3. Increasing public awareness of the importance of space.
- 4. Enhancing Australia's independent space capabilities to foster a sustainable national space industry.

Australian Space Agency, "Advancing Space: Australian Civil Space Strategy 2019-2028," April 2019(accessed on Aug. 8, 2024).

<sup>13)</sup> Australian Space Agency, "Australian Space Agency Charter," 1 October 2018, https://www.space.gov.au/about-agency/publications/australian-space-agency-charter.

 <sup>14)</sup> Australia's Defense Space Strategy, 2022, https://view.publitas.com/jericho/australias-defence-space-strategy/page/1(accessed on Aug. 8. 2024).

5. Developing defense space organizations to ensure consistent, efficient, and effective use of space combat zones.

The Australian military will formalize the structure of the Defense Space Command, acquire necessary personnel, and establish capabilities to utilize all aspects of space functions as part of its defense space roadmap by 2023. Additionally, Australia plans to develop independent communication satellite, enhance space domain awareness and space control, and establish space-based information surveillance systems during the evolutionary period from 2024 to 2030. Finally, from 2013 to 2040, as Australia's defense space capabilities matured, the defense sector is expected to acquire the necessary experience, skills, and knowledge to secure a qualified workforce that can meet a wide range of operational requirements. The defense sector will also continue to develop Australia's defense space industry.

Australia's space commerce sector revealed a clear journey into space in the Australian Space Strategy published in 2019. The Australian Space Strategy, published by the Australian Space Agency, set a goal of creating 20,000 space-related jobs by 2030 and growing the space industry from \$5.2 billion in 2018 to \$12 billion. It identified seven key priorities to foster the space industry intensively. Major focus areas include access to space, such as earth observation, communication technology services, space situational awareness and debris monitoring, robotics and automation facilities on Earth and in space, and satellite and projectile launches using the Australian launch site.<sup>15</sup>) As the top government agency responsible for developing and coordinating the commercial space industry. the Australian Space Administration actively engages in international exchanges, enhancing Australia's role in the global commercial space market by leveraging its advanced space technology and favorable geographical position for space communication and space situational awareness. The agency leads commercial strategies in the space sector and supports Australian space companies in expanding their presence in the international market.<sup>16</sup>)

#### Australia's Space Power

Australia established and operated a ground tracking station in the 1960s to support major space programs, including NASA's Gemini, Apollo, Voyager, and Viking missions. In 1947, it also built and operated a ground tracking station to support the construction of a space rocket launch site for testing launch vehicles in the UK and Europe. During the Apollo moon mission, Australia played a critical

Australian Government, Australia's Satellite Utilization Policy, 2013, (accessed on Aug. 8. 2024).

<sup>16)</sup> Australian Trade and Investment Commission, "Australia's space sector takes off," https://international.austrade.gov.au/en/do-business-with-australia/sectors/space(accessed on Aug. 8. 2024).

role by tracking the Apollo spacecraft, communicating with astronauts, and transmitting lunar landing image to the world.<sup>17</sup>)

In November 1967, Australia launched its first satellite, WRESAT (the Weapons Research Estimation Satellite), using an American projectile. This achievement made Australia the third country in the world to design and successfully launch a satellite into orbit from its launch site. The U.S. Department of Defense, NASA, and the U.K.'s technology department assisted Australia with the satellite launch program. Lacking its own projectile, Australia used the U.S. Redstone rocket for the launch, becoming the third country to achieve this milestone, following Russia and the U.S.<sup>18</sup>) In the early stages of space development, however, Australia primarily supported foreign space initiatives by providing deep space communication services, rather than pursuing its own national space program.<sup>19</sup>)

After 2016, Australia began to recognize space as a national strategic industry. Observing the worldwide growth of the space economy and increased activity in space field from various countries, Australia aimed to capitalize on future opportunities in the commercial space market.<sup>20)</sup>

The Australian space industry currently generates an annual income of \$400 million and employs about 10,000 workers. There are more than 388 space-related companies, and 24 government organizations are involved in space initiatives. The country excels in communication satellites that integrate space data, Earth observation, and global navigation satellite services. Although Australia does not have the capacity to produce large satellites, it has limited capabilities to produce projectiles. Since 1985, Australia has developed its own Optus communication satellite and has been providing communication services through the U.S. space shuttle in orbit. The country has the ability to design, manufacture, and operate world-class communication satellites. In addition, Australia has established robust ground station networks and infrastructure to support Earth observation, providing global space situation recognition services with laser tracking capabilities for artificial satellites and space debris.<sup>21</sup>

<sup>17)</sup> The History of Australia's Space Program, *New Space Economy*, 2023.2.22., https://newspaceeconomy.ca/2023/02/22/history-of-australias-space-program-a-quick-overv iew/(accessed on Aug. 8. 2024).

<sup>18)</sup> Department of Defense, "50th anniversary of Australia's first satellite," 8 November 2017, https://www.dst.defence.gov.au/news/2017/11/08/50th-anniversary-australias-first-satellite (accessed on Aug. 8. 2024).

<sup>19)</sup> History of the Australian Space Agency, 2024.4.5., https://newspaceeconomy.ca/2024/04/05/history-of-the-australian-space-agency/(accessed on Aug. 8. 2024).

<sup>20)</sup> GAP, "The Australian Space Initiative," August 2017, https://globalaccesspartners.org/Australian\_Space\_Initiative\_GAP\_Taskforce\_Report\_Aug 2017.pdf(accessed on Aug. 8. 2024).

Geographically located in the southern hemisphere, Australia can launch space launch vehicles without affecting neighboring countries and can utilize its position near the equator for raising geostationary satellites. The vast Australian land has allowed for the establishment of various satellite bases in the southern hemisphere, and Australia is engaged in extensive international space cooperation with organizations such as NASA, the German Space Agency, and European Space Agency (ESA). The active participation of start-up companies in this sector

#### The Korean Government's Space Policy and Space Power

indicates a promising future for Australia's space market.<sup>22</sup>)

## South Korea's Space Policy

On November 28, 2022, the Yoon Suk Yeol government announced a roadmap for the future space economy, outlining policy directions for South Korea to become a space economy powerhouse by 2045. The six key policy direction proposed are exploring the Moon and Mars; advancing into a space technology powerhouse; fostering the space industry; developing space talents; ensuring space security; and promoting international cooperation.<sup>23</sup>

In December 2022, the National Space Development Committee, chaired by the Prime Minister, deliberated on and finalized the 4th Basic Plan for the Promotion of Space Development, a pivotal space development project. This plan serves as the main framework for implementing South Korea's space economy roadmap and aims for South Korea to become a global space economy powerhouse by 2045. The goals include expanding investment in space activities and increasing Korea's share of the global space market from the current 1 percent to 10 percent by 2045. The plan outlines five major long-term space development missions for the Korean space economy:<sup>24</sup> expansion of space exploration, completion of space transport capabilities, creation of a robust space industry, establishment of space security, and advancement of space science.

The Korea Aerospace Administration (KASA) was established in May 2024 to oversee South Korea's space activities. The KASA has set forth its policy direction

<sup>21)</sup> AustralianSpace Industry Capability, 2017. p. 7, https://www.space.gov.au/sites/default/files/2023-11/australian\_space\_industry\_capability\_ -\_a\_review\_0.pdf (accessed on Aug. 8. 2024).

<sup>22)</sup> Ahn Hyun-jun, <sup>¬</sup>How to Innovate the National Space Development System to Leap Space Power<sub>J</sub>, Sejong: Institute for Science and Technology Policy (STEPI), 2021, p. 96.

<sup>23)</sup> Ministry of Science and ICT, Future Space Economy Roadmap, 2022.11.28., https://www.korea.kr/briefing/presidentView.do?newsId=148908818(accessed on Oct. 28. 2024).

<sup>24)</sup> Ministry of ICT, "The 4th Basic Plan for Space Development Promotion ('23-27)," https://www.msit.go.kr/publicinfo/view.do?sCode=user&mPid=62&mId=63&publictSeqNo=3&publictListSeqNo=3&formMode=R&referKey=3,3(accessed on Oct. 22. 2024).

by presenting its vision to become one of the world's top five aerospace powerhouses and to industrialize the nation's main power . While serving as a control tower for aerospace policies, the KAI plans to articulate South Korea's space strategy, cultivate key talents in the space technology field, and contribute to the development of Korea's space economy in the era of New Space.<sup>25</sup>

#### South Korea's Space Power

Since 1999, South Korea has been operating satellites for various purposes, including Earth observation. It provides satellite imagery to the public through multipurpose practical satellites that monitor land use, gather geological information and agricultural data, and surveil disaster response. These satellites collect diverse information using various sensors such as optical, infrared, and radar in low-Earth orbit.<sup>26</sup>) Notably, the Chollian satellite operates at an altitude of 36,000 km in geostationary orbit, using weather and environmental satellite payloads to produce weather, marine, and environmental data to serve public needs across the Korean Peninsula.

South Korea lacks its own navigation service but relies on the U.S. GPS. To address this, the Korean government initiated a satellite navigation system project in 2022. This project aims to establish the Korean Positioning System (KPS), which will provide vital location, navigation, and time (PNT) information essential for key infrastructures in the country, including transportation, communication, and finance. The KPS project will develop its main system by 2035 and deploy a total of eight satellites in geostationary orbit over the Korean Peninsula. To successfully establish and operate its satellite navigation system, South Korea needs to seek international cooperation not only with the U.S. and Europe but also with Japan, India and Australia.<sup>27</sup>)

In May 2023, Korea successfully completed its third launch by installing the next-generation small satellite 2 aboard the KoreanSpace Launch Vehicle, Nuri. This accomplishment demonstrates South Korea's capability to land domestic practical satellites in space orbit. With the ongoing improvements to the reliability of the KSLV-II Nuri, South Korea has secured its own space transport capabilities and the potential for independently develop national space development, including

<sup>25)</sup> KASA's Space Policy,

https://www.spaceradar.co.kr/news/articleView.html?idxno=3591,KASA, "One of the top five aerospace powerhouses by 2045...First National Space Commission to be held," https://www.korea.kr/news/policyNewsView.do?newsId=148929721(accessed on Oct. 22. 2024).

<sup>26)</sup> KARI, "Korea Multipurpose Satellite(Arirang)," https://www.kari.re.kr/kor/sub03 03 01.do(accessed on Oct. 22. 2024).

<sup>27)</sup> Ahn So-hee said, "We are about to develop a Korean satellite navigation system... Driving the leap into a space powerhouse," *Dong-A Ilbo*, 2022.9.20., https://www.donga.com/news/article/all/20220919/115518383/1 (accessed on Oct. 22. 2024).

moon landing and Mars exploration.28)

When examining global space program budget, the U.S. leads with \$61,967 million, followed by China at \$11,935 million, France at \$4,204 million, Germany at \$2,527 million, India at \$1,934 million, and Australia at \$473 million. In contrast, South Korea's budget is \$724 million, which is significantly lower than those of other advanced countries.<sup>29</sup>) Expanding the budget is crucial for advancing research and development in aerospace and for the implementation of the National Space Force Development Plan, thereby enhancing South Korea's national space technology.

# System and Strategy for Strengthening Korea-Australia Space Cooperation

#### South Korea-Australia Space Development Cooperation System

Space cooperation between Korea and Australia began in May 2005 with the signing of an Memorandum of Understanding (MOU) on space technology cooperation and facility utilization between the Korea Aerospace Research Institute and the Australian Public Service Commission. In 2017, another MOU on Space-Based Augmentation System (SBAS) business cooperation was signed between the Royal Melbourne Institute of Technology (RMIT) and the Korea Aerospace Research Institute. In 2019, a significant meeting took place with the Australian Strategic Policy Institute, which plays a key role in establishing strategic policies in Australia's security, defense, and space sectors. The Korea-Australia Space Forum held in June 2021 further confirmed the potential of space cooperation between the two countries. In December 2021, the summit between Korea and Australia resulted in a signed MOU on space cooperation, upgrading their relationship to a comprehensive strategic partnership in celebration of the 60th anniversary of diplomatic relations. This included an agreement to expand security cooperation in the defense and defense sectors while also strengthening cooperation in satellite development, launch services, satellite navigation, and space industry.<sup>30</sup>)

<sup>28)</sup> Ministry of Science and ICT, "Our independent technology 'Nuri' was successfully launched for the third time...The era of "New Space" has begun," Policy Briefing, 2023.5.26., https://www.korea.kr/news/policyNewsView.do?newsId=148915600(accessed on Oct. 22. 2024).

<sup>29)</sup> Euroconsult, "Government Space Programs" 2021, https://www.euroconsult-ec.com/press-release/new-record-in-government-space-defense-spen dings-driven-by-investments-in-space-security-and-early-warning/ (accessed on Oct. 24. 2024).

<sup>30)</sup> Ministry of Science and ICT, *Policy Briefing*, "Strengthening cooperation with comprehensive strategic partnership in the South Korea-Australia space sector," 2021.12.13., https://www.korea.kr/news/policyNewsView.do?newsId=148896725. (accessed on Oct. 24. 2024).

A Study on Strengthening Space Cooperation between South Korea and Australia in the New Space Era

Australia has engaged in space surveillance and joint research projects with NASA for over 60 years, focusing on space data collection and analysis, space ground station technology development, remote robot technology, and radio telescopes. This long history of partnership has aided the development of Australia's space industry while promoting international space cooperation between the two countries. For South Korea to strengthen its space cooperation with Australia, it is crucial to participate in major space projects, expand joint research initiatives in the space field such as space exploration, facilitate the exchange of professional manpower, and invest in cultivating human resources.

#### Challenges and Strategies for Korea-Australia Space Cooperation

Mutual cooperation between Korea and Australia is feasible across several areas, including satellite navigation and satellite utilization, space exploration and space environment research, space transportation services, and space training. South Korea's space cooperation with Australia is vital to secure the necessary scientific and technological advancements as it aims to become a leading space power.

#### Satellite navigation, space communication, space Situational Awareness (SSA)

Australia provides accurate satellite navigation information by integrating data generated by navigation satellites from various countries such as GPS, GLONASS, QZSS, BeiDou, and IRNSS through the Positioning Australian program. By comprehensively utilizing satellite navigation facilities located in the country, Australia generates accurate navigation information to ensure the convenience in daily life.<sup>31</sup>) For the KPS project, Korea should aim to successfully implement this project by expanding technology exchanges not only with the European Union but also with Australia, which possesses extensive experience in operating satellite navigation systems. In addition, technology exchanges with Australia, which has excellent ground stations and control capabilities, are crucial for South Korea's use of deep space antennas in space initiatives, such as moon landing and Mars exploration and development of infrastructure for ground stations.

Space situational awareness plays a critical role in ensuring the peaceful use of space and is a key area of national security. South Korea has received space situational awareness information from the U.S. Space Command and currently monitors the space situation over the Korean Peninsula. Australia serves as a

<sup>31)</sup> Geoscience Australian, "About Positioning Australia," 2022.9.16., https://www.ga.gov.au/scientific-topics/positioning-navigation/positioning-australia/about-t he-program. (accessed on Oct. 24. 2024).

major partner in U.S. security, contributing significantly to space situational awareness. South Korea should improve its ability to recognize space situations and work towards ensuring the peaceful use of space by strengthening cooperation with Australia in the areas of space situational awareness and information sharing.

### Space exploration and space observation research

#### 1) Space exploration

Korea has successfully launched and operated a lunar probe 100 km above the Moon in 2022 and aims for a lunar landing in 2032, planning to operate a probe on the moon's surface. Meanwhile, Australia has developed a lunar rover, scheduled for launch it in 2026, tasked with collecting soil samples and transporting them to a lunar lander. Australia has been implementing its plan to become a space powerhouse through the Moon to Mars Initiative project since 2019.<sup>32</sup>) South Korea should also focus on developing an exploration rover for post-landing studies on the Moon through technical exchanges with Australia. Numerous countries have failed to land on the moon. Analyzing other countries' unsuccessful experiences and fostering international exchanges will be crucial for successful moon landing and lunar rover missions.

#### 2) Space observation research

Australia is a leading country in the research surrounding the Square Kilometer Array (SKA), a significant project within the international astronomical community. Small antennas capable producing powerful telescope effects will be built in South Africa and Australia, which will be used to investigate the creation and evolution of stars and galaxies, as well as the origin of cosmic magnetic fields. The Korea Astronomy and Space Science Institute (KASI), which has previously collaborated with NASA, will be able to contribute to major data processing and analysis efforts by jointly participating in significant astronomical programs led by Australia.<sup>33</sup>

#### A space transport service

The launch cost of Korea's Nuri space launch vehicle is 70 million won per kilogram, which is significantly higher than that of the U.S. Space X, at 3.14 million won per kg. The space agency recognizes the importance of recovering

<sup>32)</sup> Park Si-soo, "Australia dreams of leap into space power as lunar rover," *Sankyung Today*, 2023.12. 12, https://www.sankyungtoday.com/news/articleView.html?idxno=44114.(accessed on Oct. 24. 2024).

<sup>33)</sup> Joo Young-jae, "Australia's Space Industry Dream Grows With Strong Basic Science," Kyunghyang Shinmun, 2024.5, https://www.khan.co.kr/economy/economy-general/article/202405050900041. (accessed on Oct. 24, 2024).

A Study on Strengthening Space Cooperation between South Korea and Australia in the New Space Era

single-stage rockets and securing recycling technologies to lower the cost of future space transportation. By operating a reusable space launch vehicle, South Korea can shorten the satellite launch cycle and reduce launch costs. Australia possesses the best infrastructure for testing space launch vehicles and has an agreement with the U.S. Department of States to use its space launch site.<sup>34</sup>) If Korea's space launch vehicle development companies use Australia's advantageous spaceport facilities, they could significantly enhance Korea's reusable rocket technology and improve overall SLV technology by leveraging Korea's advanced SLV production capabilities alongside private sector expertise.<sup>35</sup>) In addition, technology development could be expedited by collaborating with Australia to utilize its space launch test facilities. It will support research and development activities that aim to build small SLV, lowering costs for Korean space vehicles and meeting the demand for small satellite launches.

#### Human Resources Development in Space

Possessing advanced science and technology capabilities is crucial for space development. Australia has been advancing its space technology through various education and training programs in space-related fields. The Australian Space Administration, along with universities and research institutes, is training talented individuals who will contribute to the country's space technology. This includes providing education on satellite technology and Earth observation data, combined with a scholarship program aimed at attracting excellent students.<sup>36)</sup> The Korea Space Administration or the Ministry of Science and ICT will support Korea's outstanding aerospace majors and IT experts to participate in Australia's space technology between Korea and Australia. In 2025, the Space Studies Program (SSP) competition organized by the International Space University(ISU) will be held in Korea to host various lectures, practice, and discussions for graduate students, researchers, and future space talents in the world's space field.<sup>37</sup>) It is a good opportunity to recognize the excellence of Korea's space exchange program,

https://www.donga.com/news/article/all/20240912/130037714/1.(accessed on Oct. 24. 2024).

<sup>34)</sup> Jeff Fousst, "New agreement enables U.S. launches from Australian spaceports," SPACENEWS, Octber 27, 2023, https://spacenews.com/new-agreement-enables-u-s-launches-from-australian-spaceports/(ac

cessed on Oct. 24. 2024).

<sup>35) &</sup>quot;Hanwha, Australia's Gilmore Space and Space Business Cooperation Agreement," The Dong-A Ilbo, 2024.9.12.,

<sup>36)</sup> SGAC, "SGC/IACAustralian Space Agency Scholarship," https://spacegeneration.org/australian\_space\_agency\_scholarship, Australia's leading space research centre, https://smartsatcrc.com/(accessed on Oct. 24. 2024).

<sup>37)</sup> Kim Young-joon said, "SSP 2025 Korea will be held, Korea's space power will also take off," ET news, 2024.8.5., https://www.etnews.com/20240805000144. (accessed on Oct. 24. 2024).

so it is necessary to expand the exchange activities of Korean and Australian students.

# Conclusion

The space development cooperation between South Korea and Australia has been limited compared to partnerships Korea has established with countries like the United States and European countries. South Korea has developed its satellite technology through technical cooperation with the United States, Israel, France, and Italy, while its rockets were primarily developed through collaboration with Russia and Ukraine. Significant progress has been made in advancing Earth observation and communication satellites, highlighted by the successful launch of the Nuri, KSLV, which positioned South Korea as the seventh nation capable of transporting payloads over 1.5 tons. However, South Korea's capabilities in satellite transport in geostationary orbit and space exploration still lag behind those of more advanced countries in space technology. In order to strengthen space cooperation between Korea and Australia, this study intends to present the following policy suggestions.

First, it is essential to develop advanced space technology through international partnerships. South Korea should enhance its space technology capabilities by forming partnerships with established space powers. Australia is a key participant in the U.S. Artemis program, possesses advanced space technology and is increasingly influential in the international space market. Korea should study Australia's space development plans, including its launch sites and exploration capabilities, and integrate relevant lessons into its own space strategy.

Second, South Korea should analyze Australia's latest space policies and programs to identify specific areas for collaboration. Australia is investing in the development of private companies' space technology and is home to several space companies with international cooperation capabilities, which are expected to enhance commercial profitability in the future.

Third, South Korea should focus on nurturing talent in space science through training programs. By providing government-supported opportunities Korean talent to participate in Australia's advanced training programs, Korea can advance its space science workforce. Korean university students and researchers will have the opportunity to train professionals capable of performing international tasks by participating in human resource training programs offered by the Australian Space Agency, state governments, universities, and research institutes.

Fourth, collaboration on Space Situational Awareness (SSA) is essential. Given that space situational awareness is crucial for national security, Korea should collaborate with Australia, a key U.S. defense partner, to develop expertise in this area. This partnership could help monitor activities on the Korean Peninsula and promote the peaceful use of space.

Fifth, it is important to strengthen cooperation between the Korea Aerospace Administration (KASA) and the Australian Space Agency. With the KASA's establishment, Korea should prioritize its partnership with the Australian Space Agency. KASA's goal of expanding its international influence can be achieved by taking a more leading role as a partner of the Australian Space Agency in international cooperation, previously managed by the Ministry of Science and ICT and the Korea Aerospace Research Institute.

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# References

- Ahn Hyun-jun, <sup>¬</sup>How to Innovate the National Space Development System to Leap Space Power<sub>J</sub>, Sejong: Institute for Science and Technology Policy (STEPI), 2021, p. 96.
- Ahn So-hee said, "We are about to develop a Korean satellite navigation system... Driving the leap into a space powerhouse," *Dong-A Ilbo*, 2022.9.20., https://www.donga.com/news/article/all/20220919/115518383/1 (accessed on Oct. 22. 2024).
- Australian Space Industry Capability, 2017. p. 7, https://www.space.gov.au/sites/default/files/2023-11/australian\_space\_industry capability - a review 0.pdf (accessed on Aug. 8. 2024).
- Australian Strategic Policy Institute, "Australia in space: Views from The Strategist," 2018, http://www.jstor.com/stable/resrep23034. (accessed on Sep. 24. 2024).
- Australian Government, Australia's Satellite Utilization Policy, 2013,
- https://csps.aerospace.org/sites/default/files/2021-08/Australia%20Sat%20Utilisati on%20Policy%209Apr13.pdf (accessed on Aug. 8. 2024).
- Australian Space Agency, "Advancing Space: Australian Civil Space Strategy 2019-2028," April 2019, (accessed on Aug. 8. 2024).
- Australian Space Agency, "Australian Space Agency Charter," 1 October 2018, https://www.space.gov.au/about-agency/publications/australian-space-agencycharter.
- Australia's Defense Space Strategy, 2022, https://view.publitas.com/jericho/australias-defence-space-strategy/page/1 (accessed on Aug. 8. 2024).
- Australian Government, Australia's Satellite Utilization Policy, 2013, (accessed on Aug. 8. 2024).
- Australian Trade and Investment Commission, "Australia's space sector takes off," https://international.austrade.gov.au/en/do-business-with-australia/sectors/space (accessed on Aug. 8. 2024).

Department of Defense, "50th anniversary of Australia's first satellite," 8 November 2017, https://www.dst.defence.gov.au/news/2017/11/08/50th-anniversary-australias-f irst-satellite (accessed on Aug. 8. 2024).

Euroconsult, "Government Space Programs" 2021, https://www.euroconsult-ec.com/press-release/new-record-in-government-spac e-defense-spendings-driven-by-investments-in-space-security-and-early-warni ng/ (accessed on Oct. 24. 2024).

- GAP, "The Australian Space Initiative," August 2017, https://globalaccesspartners.org/Australian\_Space\_Initiative\_GAP\_Taskforce\_ Report\_Aug2017.pdf (accessed on Aug. 8. 2024).
- Geoscience Australian, "About Positioning Australia," 2022.9.16., https://www.ga.gov.au/scientific-topics/positioning-navigation/positioning-aust ralia/about-the-program. (accessed on Oct. 24. 2024).
- "Hanwha, Australia's Gilmore Space and Space Business Cooperation Agreement," The Dong-A Ilbo, 2024.9.12., https://www.donga.com/news/article/all/20240912/130037714/1.(accessed on Oct. 24. 2024).
- History of the Australian Space Agency, 2024.4.5., https://newspaceeconomy.ca/2024/04/05/history-of-the-australian-space-agenc y/ (accessed on Aug. 8. 2024).
- Jeong Heon-joo, Baek Yu-na and Jeong Yoon-young. "Space and international development cooperation: an exploratory analysis of the achievement of sustainable development goals using space technology." *Social science research* 33, no. 2 (2022): p. 129.
- Joo Young-jae, "Australia's Space Industry Dream Grows With Strong Basic Science," *Kyunghyang Shinmun*, 2024.5, https://www.khan.co.kr/economy/economy-general/article/202405050900041. (accessed on Oct. 24. 2024).

KASA's Space Policy,

https://www.spaceradar.co.kr/news/articleView.html?idxno=3591 (accessed on Oct. 22. 2024).

KARI, "Korea Multipurpose Satellite(Arirang)," https://www.kari.re.kr/kor/sub03\_03\_01.do (accessed on Oct. 22. 2024).

- Kim Young-joon said, "SSP 2025 Korea will be held, Korea's space power will also take off," ET news, 2024.8.5., https://www.etnews.com/20240805000144. (accessed on Oct. 24. 2024).
- Korea Aerospace Research Institute, "Status of Australian Space Development," 2024.
- Lee Seo Lim, "Australia's first national space policy," e policy information center of the Korea Aerospace Research Institute, 2013, p.1.
- Lim Chang-ho, "Australia's satellite utilization policy," e policy information center, aerospace researcher, 2015, p. 1.
- M. Rathnasabapathy, "Role of emerging nations in ensuring long-term space sustainability," Acta Astronautica 219 (2024) p. 8–16, https://doi.org/10.1016/j.actaastro.2024.01.050 (accessed on Sep. 24. 2024).
- Michael Davis, Australia's space security program, pp. 1-13, Springer, 2020.
- Ministry of Science and ICT, Future Space Economy Roadmap, 2022.11.28, https://www.korea.kr/briefing/presidentView.do?newsId=148908818 (accessed on Oct. 28. 2024).
- Ministry of ICT, "The 4th Basic Plan for Space Development Promotion ('23-27)," https://www.msit.go.kr/publicinfo/view.do?sCode=user&mPid=62&mId=63& publictSeqNo=3&publictListSeqNo=3&formMode=R&referKey=3,3 (accessed on Oct. 22. 2024).
- Ministry of Science and ICT, "Our independent technology 'Nuri' was successfully launched for the third time...The era of "New Space" has begun," Policy Briefing, 2023.5.26., https://www.korea.kr/news/policyNewsView.do?newsId=148915600 (accessed on Oct. 22. 2024).
- Ministry of Science and ICT, *Policy Briefing*, "Strengthening cooperation with comprehensive strategic partnership in the South Korea-Australia space sector," 2021.12.13., https://www.korea.kr/news/policyNewsView.do?newsId=148896725. (accessed on Oct. 24. 2024).
- Nam Ki-won, "Strategies and Implications of Canada and Australia's participation in lunar exploration and artemis," a collection of papers at the 2022 Spring Conference of the Aerospace Society.

- Park Si-soo, "Australia dreams of leap into space power as lunar rover," *Sankyung Today*, 2023.12. 12, https://www.sankyungtoday.com/news/articleView.html?idxno=44114.(access ed on Oct. 24. 2024).
- Presidential Office, "President Yoon Announces Future Space Economy Roadmap," Nov. 28, 2022, https://www.president.go.kr/newsroom/press/Uc8g7TAf(accessed on April 28, 2023).
- The History of Australia's Space Program, New Space Economy, 2023.2.22, https://newspaceeconomy.ca/2023/02/22/history-of-australias-space-program-a -quick-overview/ (accessed on Aug. 8. 2024).

# Building Tomorrow's Defense: The Role and Challenges of the National Defense Advanced Science and Technology Academy

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## Abstract

This study examines the establishment and operational strategies of the National Defense Advanced Science and Technology Academy, aimed at developing highly skilled personnel for South Korea's defense sector. The research focuses on the governance structure, curriculum design, and career development pathways, highlighting the need for an integrated approach across all phases of training and institutional management. Using Israel's Talpiot program as a reference, the study identifies key challenges, such as institutional alignment and legislative support, and proposes strategies to ensure the Academy's long-term success. The study also emphasizes the importance of maintaining a sustainable talent pipeline to meet evolving national defense needs.

*Key words*: National Defense Advanced Science and Technology Academy, Talpiot program, curriculum development, defense personnel training, governance, legislative framework, institutional integration

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# I. Introduction

The Defense Reform Basic Plan, introduced in 2005, aimed to restructure South Korea's military by reducing standing forces to 500,000 by 2025 through troop reorganization. With the male population projected to decline to the mid-200,000s by 2020, it has become essential to integrate advanced science and technology into the military. This marks a shift from a manpower-intensive force to a technology-driven elite military. Acknowledging the limitations of Defense Reform 2.0 in addressing new security threats, the Yoon Seok-yeol administration launched the Defense Innovation 4.0 initiative in February 2023. Th initiative focuses on building a military proficient in AI and advanced technologies, shifting warfare strategies toward intelligent manned-unmanned operations across all domains, driven by hyper-connection and convergence. The effective management of AI and unmanned systems is closely tied to comprehensive human resource management.

In response to these challenges, the government has supported initiatives like the Cyber Specialist Officer Program (operating since 2011 through the Ministry of National Defense-Korea University) and the Science and Technology Specialist Officer Program (operating since 2014 through the Ministry of Defense-Ministry of Science and ICT). Building on these initiatives, the Graduate School of Security Science and Technology at KAIST began operating in early 2024, following discussions with the Ministry of National Defense (hereafter, MND) and the Ministry of Science and ICT (hereafter, MSIT). Furthermore, the Defense Advanced Science and Technology Academy Establishment Act (hereinafter, the Establishment Act) was enacted on January 16, 2024, providing a legal foundation for training defense professionals. Implementation of this act is scheduled to begin on January 17, 2026. The MND must enact the subordinate decrees and develop preparatory measures, including designing educational courses, to ensure the successful operation of the Defense Advanced Science and Technology Academy (hereafter referred to as "the Academy"). Before the law's enforcement, it is essential to explore various alternatives to ensure the Academy fulfills its purpose and operates effectively, avoiding the pitfalls of existing systems like the Science and Technology Specialist Officer program.

Operational experience from existing programs, such as the Science and Technology Specialist Officer, reveals that merely enacting the Establishment Law is insufficient for cultivating long-term committed national defense research and development (R&D) talent. The objectives of the Establishment Law remain somewhat vague. Article 2 of the Establishment Act authorizes the MND to designate and operate the Academy, which may overlap with existing institutions like the Science and Technology Specialist Officer Program and the KAIST Security Science and Technology Graduate School. Such overlap raises concerns about the Academy's unclear role and the potential for redundancy.

Furthermore, it may be more feasible to integrate a specialized track in science and technology within existing military academies rather than establishing a new institution. Systematic enhancements in governance are necessary to clarify the Academy's role. Despite initial indifference from the MND during the legislative process, it is now imperative to capitalize on the Academy's potential. Decisions on whether to abolish existing programs, the relationship with military academies, and the facilitation of long-term service for science and technology talent require careful consideration.

Ultimately, systematic discussions are needed to specify the bill and accompanying enforcement decrees and to establish a governance system that ensures the Academy operates effectively in line with its foundational goals. This study, based on the Establishment Act (sponsored by Representative Kim Jin-pyo, passed on January 16, 2024), anticipates its implementation in 2026 and aims to specify the content of the law, prepare enforcement decrees, and propose agendas to advance and innovate defense science and technology.

# **Discussion on Defense Advanced Science and Technology Policy**

#### Impact of Low Birth Rate on Military Strength

South Korea's unprecedented low birth rate poses a significant social challenge. According to a New York Times column by Ross Douthat (December 2, 2023), Korea's population decline is projected to surpass even that of medieval Europe during the Black Death in the 14th century. The total fertility rate has remained below 2.1 since 1983 and has entrenched itself at an ultra-low level of below 1.3 since 2002. Statistics Korea projects the rate will decline further from 0.72 in 2023 to 0.68 in 2024. Korea has ranked last in total fertility among OECD countries for eleven consecutive years, with the rate averaging 0.72 in 2023, compared to the OECD average of 1.58 in 2021.

To address the critical issue of low birth rates, the South Korean government has formulated a basic plan for tackling low birth rates and an aging society every five years. However, the approach has shifted in the 4th Basic Plan for Low Birth Rate and Aging Society (2021-2025) from solely increasing birth rates to prioritizing 'improving quality of life.' The demographic shifts caused by low birth rates and rapid aging have far-reaching impacts on the nation and society.

# Strategic Implications for Defense Policy

Low birth rates directly and significantly affect the supply of military personnel, which is crucial for national defense. According to Defense Innovation 4.0, the

continuing decline in the number of conscripts has resulted in a "population cliff." In 2020, the population of 20-year-old males was 334,322, but it sharply declined to 273,196 by 2022, marking the first population cliff. This number is projected to further decrease, reaching 230,000 by 2035 and plummeting to 119,099 by 2040, signaling a second population cliff. These demographic changes present substantial challenges for maintaining the current defense workforce beyond 2035.

This demographic decline is closely linked to the persistently low birth rate, with the total fertility rate dropping to 0.72 in 2023. The population is expected to decline until 2045, with a slight recovery anticipated thereafter.

#### **Overview of South Korea's Defense Reforms Since 2005**

Since 2005, South Korea has systematically reformed its military, shifting from a focus on troop quantity to enhancing the quality and technological sophistication of its forces. This transition is in response to challenges posed by a declining birth rate, which has reduced the pool of eligible military personnel. Defense Reform 2020, initiated during Roh Moo-hyun's administration, marked a pivotal change in military strategy, aiming to reduce reliance on large troop numbers while enhancing technological, informational, and strategic capabilities. A key part of this reform was reducing the standing army to 522,000 by 2022, offset by the integration of advanced weapon systems. Building on these changes, the 4th National Defense Reform Basic Plan (2014-2030) further emphasized a shift from quantitative to qualitative military strength. This plan focused on maintaining and enhancing military power through the adoption of cutting-edge technologies, ensuring the military's capabilities align with modern warfare demands. In March 2023, under the Yoon Seok-yeol administration, Defense Innovation 4.0 was introduced. This initiative aims to develop an AI-driven and technologically advanced force to address asymmetric threats, such as North Korea's nuclear capabilities. Defense Innovation 4.0 envisions transforming the South Korean military into a force capable of achieving superiority in future battle environments through advanced technology.

During Moon Jae-in's administration, Defense Reform 2.0 was implemented, reducing the scale of military personnel and equipment. This strategy assumed a diminishing threat from North Korea due to improving inter-Korean relations. However, the reductions highlighted limitations in addressing ongoing security threats, underscoring the need for continued technological advancements in military strategy.

Central to South Korea's forward-looking defense strategy is the 2023-2037 Defense Science and Technology Innovation Basic Plan, which aligns with Defense Innovation 4.0. This comprehensive plan outlines 30 strategic initiatives across ten areas, focusing on integrating advanced technologies such as AI, quantum computing, and unmanned systems. The objectives are clear: maintain security and establish a leading position in future battlefields through technological supremacy.

South Korea's military reforms since 2005 are critical for maintaining robust defense capabilities amid demographic challenges and evolving global threats. By reducing troop numbers and increasingly relying on advanced technologies, South Korea is positioning itself to effectively manage future security challenges, ensuring its military remains efficient, adaptable, and technologically advanced.

# Strategic Development of Defense Science and Technology Talent in South Korea: Lessons from Israel's Talpiot Program

Since 2014, the South Korean government has strategically advanced efforts to develop and retain defense science and technology talent, drawing significant inspiration from Israel's Talpiot program. This initiative, led by the MND and the MSIT, resulted in the establishment of the Science and Technology Specialist Office. This program aims to nurture defense experts by integrating rigorous academic training with military service, closely mirroring Israel's successful model.

The Science and Technology Specialist Officer recruits students from science and engineering disciplines across various universities. These individuals undergo two years of standard university education, followed by focused training. After this academic phase, they complete three years of military service, primarily engaging in research and development activities related to defense science and technology at the Agency for Defense Development. This model is inspired by Israel's Talpiot program, initiated in 1979, which aims to cultivate elite science and engineering talents to lead advancements in defense technologies. Each year, Talpiot selects about fifty exceptional high school graduates through a rigorous selection process. These students undergo three years of intensive academic coursework at Hebrew University, combined with military training. Upon earning their degrees, they are commissioned as second lieutenants and serve for six years, applying their specialized knowledge to enhance Israel's defense capabilities.

By adopting a similar framework, South Korea aims to replicate the success of Israel's approach in developing a skilled workforce proficient in integrating technical expertise with military applications. This initiative underscores South Korea's commitment to advancing its national defense capabilities through innovative science and technology education. It seeks to create a consistent pipeline of highly skilled personnel equipped to address modern defense challenges and strengthen the nation's strategic readiness.

Category	Science and Technology Specialist Officer (2014~)	Special Research Personnel (1973~)	Cyber Specialist Officer(2011~)	KAIST Graduate School of Security Science and Technology (2024~)
Purpose	Cultivation of science and technology talent (linked to military service/employment/ entrepreneurship)	Alternative service system for science and engineering majors	Cultivation of cybersecurity experts	Cultivation of security science and technology experts
Target	University sophomores	Individuals with a master's degree or higher	High school seniors /graduates or equivalent qualifications	Individuals with a bachelor's degree
Degree	Bachelor's degree	Master's, Ph.D.	Bachelor's degree	Master's, Ph.D.
Benefits	Scholarships, stipends	-	Scholarships, stipends	Scholarships, stipends
Mandatory Service	3 years (Defense Science Research Institute)	3 years (universities/nation al, public, and defense industry research institutes)	7 years (serving as a cyber security specialist officer)	Not applicable
Post-Service Options	Long-term service, employment/entrepre neurship, further education	-	Long-term service/employme nt/entrepreneurshi p	Not applicable
Annual Intake	20-25 (50 starting from 2024)	2,400	30	Around 20 (15 master's, 5 Ph.D.)
Educational Institution	KAIST	Individual universities	Korea University	KAIST
Remarks	MOU between MSIT and MND	-	Contractual academic program (employment conditional) between MND and Korea University	MOU between MND and MSIT

# <Table 1> Advanced Defense Science Talent Development System in South Korea

Source: Author's own work.

The Special Research Personnel System allows individuals with a master's degree or higher to fulfill their military service by working in designated research institutions for three years. The Military Science and Technology Soldier Program, introduced in 2018, enables those pursuing advanced degrees to serve in research roles for 18 months. The Cyber Specialist Officer Program, a collaboration between the MND and Korea University, commissions graduates as second lieutenants to serve as cybersecurity experts for seven years. This program supports approximately 30 undergraduates annually, offering full scholarships and a monthly stipend.

While these programs have achieved some success, they require improvements. The Science and Technology Specialist Officer Program, launched in 2014, has produced notable outcomes, such as 51 SCI-indexed journal articles. However, as of 2023, none of the 79 officers who completed their service opted for long-term service, partly due to the short service duration, which limits participation in meaningful research. Similarly, the Cyber Specialist Officer Program has been criticized for its lengthy service requirement and insufficient incentives, with only three out of 27 officers from the 2016 cohort choosing to stay long-term.

In response, the MND and MSIT launched the KAIST Graduate School of Defense Science and Technology in early 2024, initially admitting around 20 master's and doctoral students, with plans for expansion. This program involves KAIST faculty and recruits military and civilian experts as professors.

However, the fragmented management across ministries, unlike Israel's Talpiot program, limits the effectiveness of these initiatives. The National Defense Advanced Science and Technology Academy, modeled after Talpiot, has a legal foundation but faces criticism for not adequately addressing South Korea's defense needs. This could be seen as an example of mimetic isomorphism , where adopting foreign models without proper adaptation often fails to meet local needs (Powell & DiMaggio, 1991).

For the Academy to function effectively, it must be tailored to South Korea's specific context. The legislation passed in 2024, set to be implemented in 2026, provides an opportunity to address these deficiencies. A comprehensive review of governance and operational frameworks is essential to ensure the Academy's success. Israel's Talpiot program, established after the 1973 Yom Kippur War, aimed to drive defense innovation by harnessing the creativity of young scientific elites. Managed by the Israel Defense Forces (IDF), particularly the Air Force, the program selects about 50 top science students annually for a three-year intensive academic and military training program at Hebrew University. Graduates are commissioned as first lieutenants and serve for six years, applying their expertise to strengthen Israel's defense capabilities.

The program's success is rooted in three key proposals: leveraging the creativity of individuals in their twenties to develop innovative weapons, assigning the Air Force to manage the program, and condensing academic requirements into three years. Despite

Category	Talpiot Program	Science and Technology Specialist Officer Program	Advanced Defense Science and Technology Officer Program
Country	Israel	South Korea	South Korea
Establishment Year	1979	2014	2024(Legislation Passed)
Managing Institution	Israel Defense Forces (Air Force)	MND, MSIT	MND, KAIST
Selection Criteria	Top high school graduates (approx. 5% of students)	University students in science and engineering fields (2nd to 4th year, about 10 students annually)	High school graduates and 1st-2nd year university students (top 5%, competition ratio ~3:1)
Program Structure	3 years of academic training + 6 years of military service	2 years of academic education + 3 years of military service	4 years of academic education + 6 years of military service
Degree Awarded	Bachelor's degree	Bachelor's degree	Bachelor's/Master's degree (depends on the program)
Mandatory Service Duration	9 years (3 years university + 6 years service)	5 years (2 years university + 3 years service)	10 years (4 years university + 6 years service)
Focus Areas	Mathematics, Physics, Computer Science, Engineering	Science and Technology, R&D	Science, Technology, AI, Defense Innovation
Career Path	Defense R&D, military leadership, entrepreneurship	3 years at the Defense Science Research Institute (ADD), then general military duties	10 years as a researcher at ADD, then transition to general military duties
Scale	50-60 students annually	25 students annually	To be determined
Unique Features	Intensive training with top military and academic institutions	Alternative service option with shorter service duration	Modeled after Talpiot, focus on advanced tech integration in defense
Admission	Commissioned after obtaining a bachelor's degree (3 years)	Commissioned after bachelor's degree	Commissioned after obtaining a bachelor's degree (4 years)

# <Table 2> Talpiot, Science and Technology Specialist Officer, Advanced Academy

Source: Author's own work.

75

initial resistance, the program's rigorous selection process and goal-oriented management, overseen by MAFAT, have produced a network of Talpiot graduates, known as Talpinet, who collaborate on research and entrepreneurial ventures. This self-reinforcing cycle has made Talpiot a highly coveted program and a model of success in integrating top-tier talent, education, and management.

#### Literature Review

According to Kim et al. (2019), the Army is preparing for future warfare through systems such as the 'Dronebot Combat System' and the 'Warrior Platform.' However, they emphasized the inherent limitations posed by the lack of a dedicated science and technology staff function. Kim et al. proposed organizational and operational strategies to establish such a function. Additionally, with the emergence of a hyper-connected society driven by the Fourth Industrial Revolution, potential threats have increased, highlighting the need for enhanced cybersecurity policies. Shim and Jang (2018) recommended that the proportion of the defense budget allocated to cybersecurity should be gradually increased while the current science and technology infrastructure should be expanded to bolster the number of cybersecurity specialists.

Nam et al. (2013) pointed out that as warfare expands into the cyber domain and military structures transition from manpower-intensive to technology-intensive models, there is a growing need to cultivate cutting-edge defense science and technology personnel. They argued that Korea should adopt practices from Israel's Talpiot program to develop infrastructure for training elite talent. Kim (2023) emphasized that Israel's Talpiot program not only produces exceptional scientific talent but also fosters collaboration and networking among its graduates, creating a virtuous cycle that benefits research and development, as well as entrepreneurship. Kim further asserted that the current system for science and technology specialists in the Korean military should be reformed, suggesting that this would have significant implications for policies aimed at nurturing defense science and technology talent.

Lee (2021) observed that although South Korea established a program similar to Talpiot, called as the Science and Technology Specialist Officer Program, in 2014, it has not facilitated active participation of these officers in defense research and development. Moreover, the lack of long-term service cases suggests that the initial goal of emulating Talpiot has not been fully achieved.

# Analysis of the Establishment Act

#### Significance of the Establishment Act

The Establishment Act, proposed by Representative Kim Jin-pyo on July 28, 2023, was passed in January 2024. This law is set to be implemented on January 17, 2026. Its primary purpose is to cultivate specialized personnel who will lead the research and development of defense-related science and technology, thereby enhancing national security and bolstering defense capabilities through advancements in defense technologies. The law addresses the shortcomings of the existing Science and Technology Specialist Officer system, which was modeled after Israel's Talpiot program, by incorporating its strengths while adapting to the specific needs of South Korea's military environment. The aim is to establish a long-term system to cultivate and mobilize national defense science and technology personnel.

The Academy will select top talent from high school graduates and provide them with four years of defense-related science and technology education, in collaboration with institutions like the Korea Advanced Institute of Science and Technology (KAIST). During summer and winter breaks (12 weeks), cadets will undergo military training. Upon graduation, they will receive a joint degree from both the Academy and KAIST. Students who complete the bachelor's degree program will be commissioned as second lieutenants in the Army, Navy, or Air Force, while those obtaining a master's degree will be commissioned as first lieutenants. After commissioning, they will be required to serve for six years in defense research and development institutions, such as the Agency for Defense Development, in accordance with the Act on the Agency for Defense Development. Additionally, current cadets at the Army, Navy, and Air Force academies interested in a career as science and technology officers may apply for admission to the Academy's graduate program.

During the National Defense Committee's review of the bill, it was noted that there were discrepancies in the length of mandatory service and military training compared to other officer candidates, such as cadets from military academies, military scholarship students, and ROTC members. This raised concerns about the need to balance the training of defense science and technology experts with the development of military spirit and fairness in fulfilling military service obligations. To address these concerns, the mandatory service period was extended from four to six years to align with other officer candidates. Furthermore, the implementation date was pushed back from one year to two years after promulgation, allowing for inter-ministerial coordination, the preparation of enforcement ordinances, the development of admission procedures, and sufficient student outreach. The revised bill was approved with these amendments.

#### Analysis of the Major Provisions and Issues of the Establishment Act

The Establishment Act includes several notable provisions aimed at fostering advanced scientific and technological expertise within the defense sector. However, a detailed analysis of its key articles reveals critical issues that merit further consideration.

Firstly, the Act empowers the MND to designate and operate the Academy to provide the necessary education for individuals who will assume roles as officers responsible for conducting cutting-edge research and development in military science and technology. Additionally, the Act allows for the establishment of graduate programs within the designated Academy (Article 2). This provision suggests that the Academy will not be a newly created institution but rather a designation of an existing higher education institution. Given the Academy's affiliation with the MND, institutions such as the Korea National Defense University or the respective military academies could be considered potential candidates. Furthermore, since Science and Technology Specialist Officers are currently educated in collaboration with KAIST, coupled with the provision allowing for joint operation of curricula with KAIST (excluding military science education) as stipulated in Article 9, KAIST emerges a strong candidate for designation as the Academy.

Secondly, the duration of the undergraduate program is set at four years, while the master's and doctoral programs are each a minimum of two years (Article 4). Given the caliber of students expected to be selected for the Academy, it may be worth exploring the possibility of compressing the undergraduate program into three years, similar to Israel's Talpiot program. This accelerated program could enhance the Academy's ability to recruit top-tier talent by offering a more efficient and focused educational experience.

Thirdly, the eligibility requirements for admission to the Academy include graduation from high school or equivalent academic qualifications, age limits of 17 to 21 years (with exceptions under the Military Personnel Support Act), and meeting specific physical standards set by the Academy's regulations. Additionally, candidates must not be disqualified under the Military Service Act. For graduate program admissions, the eligibility criteria are defined under the Higher Education Act (Article 5). Notably, for those entering the undergraduate program under the Military Personnel Support Act, the age limit is extended to 24. However, the broad criteria for graduate admissions may require further refinement to ensure alignment with the program's objectives. Without a more structured approach, the graduate program could devolve into a conventional path for obtaining advanced degrees, thereby straying from its intended purpose of cultivating experts in defense-related research and development. Thus, eligibility for graduate admissions should be restricted to those who have completed the Academy's undergraduate program or cadets from military academies who

transfer to the Academy and graduate from the Academy.

Fourthly, the Academy's undergraduate curriculum is divided into military studies and general academic courses. While the military studies curriculum will be determined solely by the MND, the general academic curriculum will be developed in consultation with the Minister of Education (Article 6). Although this collaboration is required by law, the inherent information asymmetry between the defense and education sectors could limit meaningful input from the Ministry of Education. It is likely that the MND, upon developing a curriculum that aligns with the Higher Education Act, would seek approval from the Minister of Education, who would likely consent if no significant issues arise. However, a more pressing concern is the provision allowing for the joint operation of general academic courses with KAIST. This raises the risk that the Academy may overly depend on KAIST for curriculum development, potentially compromising the Academy's autonomy and undermining its distinct identity as a specialized institution dedicated to defense science and technology.

Fifthly, to enhance the training of personnel in advanced defense science and technology, the Act provides for the joint operation of the curriculum with KAIST under the Korea Advanced Institute of Science and Technology Act. Graduates may receive joint degrees from both the Academy and KAIST (Article 9). Moreover, those who complete the undergraduate program will be commissioned as second lieutenants, while those who complete the master's program will be commissioned as first lieutenants (Article 10). Despite the stipulated minimum duration for master's and doctoral programs (two years each), there is no specific provision regarding the rank of those who complete the doctoral program. This oversight may need to be rectified, as the doctoral program graduates should logically be commissioned at a higher rank, such as captain, to reflect their advanced training. Furthermore, the establishment of integrated master's and doctoral programs should be considered, given the trend in other academic institutions to offer such combined degrees to streamline the education process and attract top talent.

Sixthly, the Act allows for the appointment of faculty members, including the superintendent and professors, as well as other necessary administrative staff. The appointment and staffing levels are to be determined by presidential decree (Article 12). In contrast to the laws governing military academies and the Korea National Defense University, which stipulate that the superintendent must be a general officer, this Act allows for the possibility of appointing a civilian superintendent. This departure from traditional military academy governance indicates a deliberate move to bring in broader academic leadership expertise, potentially enhancing the Academy's educational capabilities by leveraging civilian expertise in science and technology education.

Lastly, the Act stipulates that the state may provide support for the

employment and career development of individuals who have completed their mandatory service and retired from the military. This support includes job placement assistance, career counseling, job fairs, and entrepreneurship support (Article 13). Despite the emphasis in Article 3 on the need for long-term service policies, the Act also underscores the importance of post-service employment support. For the Academy to succeed—contrary to the Science and Technology Specialist Officer system—it will be essential to develop robust long-term service incentives and comprehensive support for retirees. This should be similar to the Talpiot model in Israel, which offers substantial benefits for long-term service and post-retirement career development.

In conclusion, while the Act presents a solid framework for advancing scientific and technological expertise in the defense sector, several issues must be carefully addressed to ensure the Academy fulfills its intended role in fostering highly specialized personnel for national defense. These issues include curriculum design, graduate program admissions, and long-term service incentives.

#### Limitations of the Establishment Act and General Alternatives

The recently enacted Act on the Establishment of the Academy, which is set to be implemented soon, faces several limitations. These challenges can be categorized into three main areas: governance structure (involving the MND, the MSIT, and KAIST); overlap or duplication of functions; and personnel management.

First, the Academy is closely connected to multiple governmental bodies, necessitating a clear defininition of the main controlling authority responsible for its governance. Since the Academy's primary purpose is to cultivate specialized personnel in defense-related science and technology, it would be reasonable to formalize the MND's functions and roles. Specifically, the roles and functions of the Force Policy Bureau, which oversees mid- and long-term policy development for defense science and technology, should be strengthened within the Ministry. Additionally, specific responsibilities could be delegated to the Army or Air Force, or functions could be assigned to each military academy based on their respective weapons systems.

Second, there is a notable overlap or duplication of functions between the existing defense science talent cultivation systems and the proposed Academy. The roles of the existing Science and Technology Specialist Officer and Cyber Specialist Officer programs overlap with those of the Academy, and these issues need to be addressed incrementally. Given the current system's limitations in securing necessary talent in defense science and technology, a parallel operation of both systems, with the Academy at the center, could offer a more coherent

solution. The consolidation or integrated management of these systems under the Academy would be a logical approach. This is particularly relevant as the Science and Technology Specialist Officer system selects students from universities, making it distinct from the Academy, while the Cyber Specialist Officer program operates similarly to a contractual academic program. Thus, if the Academy aligns with its intended purpose and operates efficiently, it would be important to evaluate the practical benefits of the existing talent development systems and consider merging or streamlining them to ensure a more systematic approach to defense science and technology talent management.

Third, as previously discussed, the Act mandates the joint awarding of degrees with KAIST, making it a realistic option to strategically outsource the general education curriculum to KAIST. However, an alternative approach would be to establish the Academy's undergraduate program within the Korea National Defense University or the existing military academies. The National Defense University, located within the Defense Belt (Kyeryong-Nonsan-Daedeok Complex), is geographically close to KAIST. However, a key issue is whether the faculty at the National Defense University, consisting of both active military personnel and civilians, has the capacity to effectively operate the Academy, particularly in delivering science and technology education. The selection and designation of institutions to operate the Academy will depend heavily on this factor. Even if KAIST is tasked with overseeing the general academic curriculum due to practical considerations, the military education curriculum should be handled by the Korea National Defense University or military academies to maintain the Academy's identity and align with the legislative intent. This arrangement should be explicitly outlined in the relevant enforcement decrees.

Fourth, the Act provides for support for long-term service, but to avoid the perception of the Academy as merely an alternative form of mandatory military service, a range of attractive incentive options must be actively explored. Without a well-structured approach, the Academy risks replicating the shortcomings of the existing science and technology talent development systems. The Talpiot model, for example, offers a comprehensive career management framework that considers individuals' majors, assigned units, and post-military career paths. A similar system should be introduced to provide substantial long-term service incentives and support for Academy graduates both during and after their military service. The state must present a clear vision that encourages outstanding candidates to apply to the Academy, ensuring that they remain committed to extended service and develop into key personnel in defense science and technology after completing their mandatory service. In conclusion, the Academy's success hinges on addressing key limitations in governance, consolidating talent programs, and creating a comprehensive long-term service plan.

#### 81

# Discourse for the Effective Operation of the National Defense Advanced Science and Technology Academy

Given the domestic and international security environment, enhancing the military's scientific and technological capabilities and cultivating outstanding talent in these fields are essential. While the government has introduced various systems to develop personnel in defense science, these efforts have often fallen short of creating a robust military capable of leveraging advanced science and technology. In response, the Academy has been introduced, modeled after Israel's Talpiot program but adapted to fit the South Korean context. With the enactment of the legislation establishing the Academy, it is crucial to foster discourse on how to ensure its effective operation, particularly as it aims to overcome the limitations of current talent cultivation systems.

#### Governance (Roles of the MND, Establishment, and Overlapping Functions)

A key consideration in the establishment and operation of any organization is its governance structure. According to the current legislation, the role of the MND is somewhat limited. Specifically, the law states that "KAIST will jointly award degrees," and that "KAIST will be responsible for the general academic curriculum, while the Ministry of National Defense will handle the military science curriculum (12 weeks of basic military training)." This governance structure inevitably places KAIST in a dominant position regarding curriculum development. If this is the case, there may be no need to establish a separate Academy; instead, the program could simply be entrusted to KAIST. Without careful planning, the Academy could fail to surpass the limitations of the existing Science and Technology Specialist Officer system, which also relies heavily on KAIST. In such a scenario, the MND might end up relying excessively on KAIST, effectively ceding much of the operational control to the institution.

To prevent this, the Ministry's functions and roles must be more clearly defined in the implementation decrees. Furthermore, a dedicated department within the Ministry should serve as the control tower overseeing the Academy's operation. Israel's Ministry of Defense, for instance, manages the Talpiot program directly through its Directorate of Defense Research and Development (MAFAT), which could serve as a model for South Korea. The Defense Innovation 4.0 initiative calls for the establishment of an organization within the MND to lead defense innovation through science and technology policy. This new organization should be responsible for developing and executing strategies related to the Academy, as well as broader initiatives for personnel development in defense science and technology and research and development (R&D) strategies.

The Force Policy Bureau, currently composed of seven teams, could be

82 Building Tomorrow's Defense: The Role and Challenges of the National Defense Advanced Science and Technology Academy

designated as the strategic department leading these efforts. The Force Policy Bureau could collaborate with the Air Force or Army by assigning roles based on specific weapons systems and establishing a cooperative governance structure with partners such as Korea Aerospace Industries (KAI) or Leading Innovation Group Ltd (LIG). Another significant consideration is the location of the Academy. Although the current legislation envisions designating an existing institution, such as KAIST, to operate the Academy, the physical and operational requirements of the Academy, including buildings and faculty, must be addressed. While establishing a new, independent institution is one option, leveraging the facilities of the Korea National Defense University, located within the Defense Belt region (Kyeryong, Nonsan, and the Defense Research Complex), is another viable alternative. The Korea National Defense University is geographically close to both KAIST and the Agency for Defense Development, offering potential synergies. Alternatively, existing military academies could also serve as operational bases for the Academy. By assigning the military science curriculum to the Korea National Defense University or military academies while KAIST handles the general academic curriculum, the Academy could be run in line with the legislative intent.

There is also the potential for overlap or duplication of functions with existing systems for cultivating defense science talent. The Academy was not initially advocated by the MND or the MSIT; rather, it was proposed and passed by the National Assembly. Both ministries raised concerns about redundancy, with the MND pointing out functional overlap and the MSIT expressing support for the Academy only if it did not interfere with KAIST's original mission. As mentioned earlier, existing programs such as the Science and Technology Specialist Officer and Cyber Specialist Officer systems have limitations. Even if the Academy is successfully established, it will take considerable time to cultivate talent in these fields. Therefore, during the initial stages, it would be prudent to operate existing programs alongside the Academy, eventually consolidating or integrating these systems into the Academy's framework. In the mid- to long-term, a comprehensive plan should be developed to outline the scale, fields, curriculum, and methods for defense science personnel, with a focus on cooperation and integration across various systems.

### Organizational Management (Science and Technology Specialist Officers, Graduate Programs, Joint Degrees with KAIST)

Once the Academy is established, current programs for Science and Technology Specialist Officers and Cyber Specialist Officers could continue operating alongside the Academy until its operations stabilize, at which point consolidation should be considered. The Science and Technology Specialist Officer program is often viewed as an alternative form of military service, making it less aligned with the government's goal of cultivating top-tier scientific talent for defense purposes. Moreover, since the program only requires short-term mandatory service, there is little incentive for officers to remain in the military long-term. Therefore, as the Academy becomes fully operational, it will be necessary to evaluate the effectiveness of these existing programs and gradually phase them out or integrate them into the Academy's system.

A Defense Security Science and Technology Graduate School has already been established and is operating at KAIST as of the first half of 2024, in collaboration with the MND. The legislation establishing the Academy also accounts for the operation of graduate programs. Given the similarities between the graduate programs envisioned for the Academy and those already offered at KAIST, it would be logical for both institutions to collaborate on the graduate curriculum. Unlike undergraduate programs, which emphasize military training, graduate programs require an environment that allows students to focus on specialized research and development. Given practical constraints like faculty and facilities, a joint operation of the graduate programs between the Academy and KAIST would be a rational solution.

#### Personnel Management (Career Paths, Cadet Treatment)

The current system for cultivating defense science talent has achieved some success, but it faces challenges in attracting a sufficient number of highly qualified students from Science, Technology, Engineering, and Mathematics (STEM) fields. Moreover, the lack of long-term service incentives has resulted in many of these individuals not continuing their careers in defense science. To address these issues, the Academy must offer more attractive career prospects, with clear pathways for advancement and post-service opportunities.

When compared to Israel's Talpiot program, the South Korean system lacks a well-defined career path that considers factors such as post-service placement and career development. Talpiot alumni have held key positions in Israel's Ministry of Defense and IDF, with some rising to lead major defense R&D initiatives and retiring as generals. Therefore, it is crucial for the Academy to establish a system for managing the career paths of its graduates. The program must ensure that graduates are placed in key military and defense industry positions, where they can gain practical experience and contribute to solving critical defense challenges.

Another consideration is whether to offer cadets the same conditions as those in existing military academies, particularly regarding promotions and career progression. In Israel, male soldiers serve three years (females two years), while Talpiot graduates serve for six years. Talpiot cadets complete their degree in three years, followed by six years of service, totaling nine years—six more years than regular soldiers but with significant benefits in terms of reputation and networking. In contrast, regular soldiers in South Korea serve 1.5 years, and university students typically spend four years in college, totaling 5.5 years. The current system for Science and Technology Specialist Officers requires seven years, including four years of university and three years of service. However, finding post-service employment in relevant research institutions remains challenging (Kim, 2023). Adjustments to mandatory service periods may be necessary to enhance the attractiveness of the program.

Officers in the Science and Technology Specialist Officer program are commissioned as second lieutenants. They serve three years at the Agency for Defense Development (ADD) and have the opportunity for promotion to captain if they opt for long-term service. In contrast, Talpiot cadets gain diverse field experience during their education and are assigned to defense companies or research departments after graduation. This allows them to accumulate hands-on experience while addressing real-world defense challenges. The Academy must adopt a similar approach, ensuring that its graduates are not limited to serving at ADD but can also be assigned to various military institutions and defense research roles (Kim, 2023).

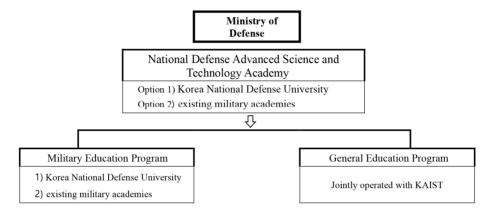
#### Conclusion

The Academy may overlap with the existing Science and Technology Specialist Officer program and the KAIST Defense and Security Graduate School, which requires careful consideration and coordination. A detailed assessment of the demand for specialized personnel is essential, along with an evaluation of the availability of human and material resources needed for the establishment of the Academy. While collaboration with KAIST for certain parts of the curriculum may be beneficial, the joint operation of the Academy risks undermining KAIST's original mission. Therefore, alternative solutions in terms of governance, organizational structure, and personnel management must be explored. This study proposes recommendations based on the premise of establishing the Academy as a new institution.

First, the Academy's governance structure must be clearly defined for effective operation. A thorough review is needed to determine where the Academy should be established and managed in alignment with its original intent. The most logical placement would be within the Korea National Defense University (Option 1) or at one of the existing military academies (Option 2). While both options warrant careful consideration, Option 1, placing the Academy within the Korea National Defense University, appears to be the most practical. However, curriculum management should be divided: military education courses could be handled by the National Defense University or the military academies, while general academic courses could be jointly managed with KAIST. Based on policy considerations, it seems most reasonable to assign the Academy's military education curriculum to

the Korea National Defense University, with potential collaboration from the military academies, and to partner with KAIST for the general education courses.

<Figure 1> Proposed Establishment of the Academy



Second, it is vital to establish an organizational framework that will oversee the development of defense science and technology personnel, while also identifying strategies for the efficient operation of existing programs. A key question arises regarding how the MND will structure the organization responsible for cultivating defense science and technology talent. Additionally, consideration must be given to whether the existing Science and Technology Specialist Officer and Cyber Specialist Officer programs should be phased out after the establishment of the Academy, and how relationships with existing military academies and KAIST will be structured. Addressing the issue of overlap and redundancy between existing programs is crucial for enhancing operational efficiency. Initially, it may be necessary to run the existing programs concurrently with the Academy in order to maintain continuity and trust in government policies while ensuring a steady supply of scientific talent. However, in the long term, consolidating these programs under the Academy will be important to streamline the overall system and avoid unnecessary duplication.

Third, a comprehensive framework for the systematic development and management of specialized personnel must be devised. As noted earlier, a major limitation of the current legislation is the absence of a clear career trajectory for graduates, encompassing career assignments, post-service opportunities, and long-term planning. In contrast, Israel's Talpiot program provides a robust career management system, with many graduates assuming key positions within the Ministry of Defense and the Directorate of Defense Research and Development (MAFAT), some even reaching the rank of general. Consideration must be given to whether the treatment of cadets from the Academy, including their promotion and career progression, will follow a similar model to that of cadets from existing military academies.

To conclude, this study has analyzed the Establishment Act and explored potential alternatives for future legislation. The primary focus has been on identifying appropriate governance structures, organizational frameworks, and personnel management strategies to ensure the effective operation of the Academy. As the legislation moves toward implementation, the recommendations outlined in this study are intended to inform the development of detailed enforcement decrees and regulations that will guide the Academy's establishment and function. The aim is to ensure that the Academy fulfills its intended role in advancing national defense through the development of specialized scientific and technological expert.

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# References

- Douthat, R. Is South Korea Disappearing? The New York Times (December 2023).
- Kim, D.-H. "Implications of Israel's Talpiot Program," Foreign Legislative and Policy Analysis, Vol 38(2023).
- Kim, Y.-H., Han, B.-G., Cha, Y.-H., Yang, H.-W., Yoon, W.-S., & Ha, T.-G. "A Study on the Necessity and Organization and Operation Plan of the Army's Science and Technology Staff Function," *Journal of the Korean Defense Management Analysis Society*, Vol. 45, No. 2(2019), pp.1-20.
- Korea Ministry of Government Legislation. Act on the Establishment of the National Defense Advanced Science and Technology Academy (2024.1.16). National Law Information Center.
- Lee, J.-K. The 'Korean Talpiot' Fails to Live Up to Its Purpose: The Science and Technology Specialist Officer Program. Digital Times (October 2021).
- Ministry of National Defense. Defense Innovation 4.0, 2023.
- Ministry of National Defense. Defense Reform 2.0, 2018.
- Nam, S.-S., Jeong, D.-D., & Song, J.-M. "A Study on the Introduction of the Korean Version of the Talpiot Program." Proceeding of the Academic Conference of the Korea Technology Innovation Society (2013). pp.318-331.
- Powell, W. W., & DiMaggio, P. J. The New Institutionalism in Organizational Analysis. (Chicago: University of Chicago Press, 1991).
- Presidential Committee on Aging Society and Population Policy. *The 4th Basic Plan for Low Fertility and Aging Society* (2020).
- Shim, W.-S., & Jang, W.-J. "The Current Status and Future Tasks of the Defense Cybersecurity Market in the Era of the Fourth Industrial Revolution," *KIET Monthly Industrial Economy*, 236(2018).
- Statistics Korea. *KOSIS: Projected Total Fertility Rate and Population Estimates* (2024), Accessed on: March 26, 2024.

# The Journal of East Asian Affairs Call for Papers

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- Include an abstract of 150-200 words and 3-5 keywords
- Be double-spaced, written in 12-point Times New Roman font, and submitted as two Word documents (no PDF or HWP files), one of which is formatted for anonymous review
- Follow the Chicago Manual of Style for all citations:
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# KJSA Submission Guide

#### 1) Basic Requirements

Submitted articles must be unpublished, and original work. In principle, the KJSA does not reproduce previously published material

#### 2) Format

The length of the MS-word text, including footnotes, normally should not exceed 7, 000 words. Authors are requested to enclose a 6-10 line biography and a 15-20 line abstract. Footnotes must closely follow the KJSA format as outlined below. Articles submitted for consideration must be submitted before the relevant submission deadlines, and sent to the editor at rinsa.jams.or.kr

#### 3) Honorarium

Honorarium will be remitted to one representative author of an article

#### KJSA Footnotes Format

The authors are requested to follow the footnotes and other editorial format of the KJSA.

1) Books

Partha Bose, *Alexander the Great's Art of Strategy* (New York : Gotham Books, 2003), p. 98.

2) Dissertations

Joseph S. Nye, "Redefining the National Interest," *Foreign Affairs*, Vol. 8, No. 4 (Winter 1999), p. 21.

3) Magazine or Newspaper articles

Oona A. Hathaway, "Why do Countries Commit to Human Rights Treaties?," *The Journal of Conflict Resolution*, August 2007, p. 588.

Lucy Hornby, "China moves further into Africa," *International Herald Tribune*, Jan. 9, 2012. p. A9.

4) Use of ibid. and op. cit.

Ibid. can be used only when indicating the source immediately before the concerned footnote.

Op. cit. is not used. To indicate sources already mentioned, use an abbreviated form: Nye, "Redefining the National Interest," pp. 45-55.

5) Internet

Example: available at http://www.dic.mil/jcs/core/nms.html (accessed on Dec. 1. 2007).



