

# "The Future of Integrated Air and Missile Defense (IAMD) Against China"<sup>1</sup>

by

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## Introduction

Over the last two decades, the People's Republic of China's (PRC) People's Liberation Army Rocket Force (PLARF) and other People's Liberation Army (PLA) entities have provided the Chinese Communist Party (CCP) with a complex array of offensive capabilities, focused primarily on the U.S., its allies, and partners in the Pacific. There has been explosive growth in Chinese ballistic missiles, cruise missiles, supersonic cruise missiles, hypersonic weapons, hypersonic glide vehicles (HGVs), and other threats. China's growing numbers and capabilities have paced much faster than predicted a few years ago. However, until recently, the U.S. Missile Defense Reviews (MDRs) focused on rogue threats, not threats like PLA salvo attacks. These salvo attacks are explicitly designed to attack theater air bases, seaports, and other facilities critical to U.S. military operations. These PLA weapon systems undermine U.S. security assurances with its allies and partners. Importantly, they could incentivize China to strike first in a crisis with a surprise attack or *fait accompli*.<sup>2</sup> The CCP's malevolence and USINDOPACOM warnings regarding China's possible actions against Taiwan and other scenarios now demand prompt and decisive actions by the U.S., Allies, and partners—especially but not exclusively in the area of IAMD.

This paper will briefly explore the threats posed by China in the Pacific, discuss the importance of effective IAMD that needs to be more holistic, and focus on its three broad categories: 1) Counterstrike, 2) Active defenses, and 3) Passive defenses. This paper will concentrate on emerging Japanese counterstrike, active defense, and integration with U.S. capabilities which could significantly and cost-effectively boost IAMD for the U.S.-Japan Alliance.

Notably, there will be an exploration and examination of CCP and PLA strategies against the U.S.-Japan Alliance, the apparently ignored strategies, and the needed response at the strategic levels. In addition, there will be an exploration of how effective IAMD can mitigate many of the PLA's strategies and plans. Finally, the implications of the U.S. strategies, the new Japanese *National Defense Strategy* (NDS), and the new *Defense Buildup Plan* (DBP) from December 2022 could provide a bulwark of capabilities for the U.S.-Japan Alliance with counterstrike capabilities and a holistic IAMD (including counterstrike for IAMD) in the top tier

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<sup>1</sup> Portions of this paper were adapted from Carl Rehberg, Christopher Bassler, Herbert Kemp, and Jan van Tol. *Strengthen the Phalanx: Layered, Comprehensive, and Distributed IAMD in the Indo-Pacific* (Washington, DC: CSBA, 2023 [unpublished]) and Carl Rehberg, Christopher Basler, and Herbert Kemp, "Strengthening Integrated Air & Missile Defense (IAMD) for the U.S.-Japan Alliance." *The Diplomat*, September 23, 2022, <https://thediplomat.com/2022/09/strengthening-integrated-air-and-missile-defense-for-the-japan-us-alliance/>.

**This Liberty paper reflects the views of author alone and does not necessarily reflect the views of other individuals or organizations.**

<sup>2</sup> Elbridge Colby. *The Strategy of Denial: American Defense: In An Age of Great Power Conflict* (New Haven, CT: Yale University Press, 2021). See also Elbridge Colby and Walter Slocombe, "State of [Deterrence By] Denial," *War on the Rocks*, March 22, 2021, <https://warontherocks.com/2021/03/the-state-of-deterrence-by-denial/>.

of Japan's priorities, which could be foundational for improved conventional deterrence linked to a strategy of denial.<sup>3</sup>

### Emerging Salvo Threats

The Department of Defense (DoD) has invested hundreds of billions of dollars over the last almost forty years (since 1985) to defend against ballistic missile attacks on the United States and its bases and forces overseas.<sup>4</sup> Despite these investments, the United States still lacks the ability to defeat large numbers of ballistic missiles, cruise missiles, unmanned aerial systems (UAS), UAS swarms, and other emerging threats. Indeed, tangible progress toward fielding and deploying high-capacity air and missile defenses have been, to date, mostly limited.

The United States faces a very challenging operating environment in which U.S. and allied military forces will have to operate in future conflicts and a variety of conflict scenarios. This will require significant attention to solving critical military operational problems and challenges those forces will confront. One of the most critical challenges is the threat from massed air and missile attacks, employing large salvos of precision-guided weapons (PGWs) conducted by great power adversaries such as China and Russia and even possibly by lesser powers such as North Korea.<sup>5</sup> However, this article will focus on China, the pacing threat for most U.S. IAMD capabilities and capacity, and the U.S.-Japan Alliance.

Over the past two decades, the widespread proliferation of PGWs and delivery systems – including ballistic missiles, cruise missiles, and advanced unmanned aerial systems (UAS) – have undermined the longstanding U.S. approach to expeditionary warfare. Specifically, the costs of traditional kinetic defenses against precision air and missile attacks now vastly exceed those of offensive weapons and their supporting command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems. Furthermore, some adversaries and potential adversaries can overwhelm traditional defenses with large salvos of PGWs.

As the Defense Intelligence Agency (DIA) has noted:

China, Iran, and North Korea [and Russia]...exercise near simultaneous salvo firings from multiple locations to saturate missile defenses. Countries are designing missiles to launch from multiple transporters against a broad array of targets, enhancing their mobility and effectiveness on the battlefield. Shorter launch-preparation times and smaller footprints are making new systems more survivable, and many have measures to defeat missile defenses.<sup>6</sup>

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<sup>3</sup> Note: Both the MoD 2022 NSS and the 2022 MDR link missile defense to a strategy of denial. Strategy of denial is a deterrence strategy defined in the context of this article "...denial of China's ability to fulfill the crucial victory conditions required to make its best strategy work." Colby, E. *The Strategy of Denial*. p. 150.

<sup>4</sup> Center for Strategic and International Studies (CSIS), "MDA and the Color of Money: Graphs," n.d., <https://www.csis.org/programs/mda-and-color-money-graphs>; From 1985 through 2021, the SDIO, BMDO and MDA had approximately \$270B (CY2017\$) in budget authority (BA) for their programs.

<sup>5</sup> Iran is certainly considered a threat of concern, but the focus of this monograph is Asia-Pacific.

<sup>6</sup> Quoted in Mark Gunzinger and Bryan Clark, *Winning the Salvo Competition: Rebalancing America's Air and Missile Defense* (Washington, DC: Center for Strategic and Budgetary Assessments, 2016), p.1, <https://csbaonline.org/research/publications/winning-the-salvo-competition-rebalancing-americas-air-and-missile-defenses#:~:text=Senior%20Fellows%20Mark%20Gunzinger%20and,future%20ability%20to%20project%20power>

## China's Air and Missile Threats

China has developed a sophisticated mix of more than 1,100 ground launchers (many mobile, underground, and almost all protected with passive defense measures) and over 1,950 surface-launched and air-launched ballistic and cruise missiles capable of striking military and civilian targets in the First Island Chain and some as far as Guam.<sup>7</sup> China's offensive missile inventory currently comprises four Short-Range Ballistic Missile (SRBM) types, one Medium-Range Ballistic Missile (MRBM) type, two Intermediate-Range Ballistic Missile (IRBM) types, three Intercontinental Ballistic Missile (ICBM) types, as well as three different Land Attack Cruise Missile (LACM) types and one Hypersonic Glide Vehicle (HGV).<sup>8</sup>

In addition to the land-based systems, China has built six *Jin*-class ballistic missile submarines which are all operational. The first four *Jin*-class submarines can launch up to 12 JL-2 class nuclear-armed Submarine-Launched Ballistic Missiles (SLBM) with intercontinental range.<sup>9</sup> China has since taken delivery of the last two *Jin*-class SSBNs. According to one report, the two new *Jin*-class submarines are classified as *Jin*-class Type-94A and a next-generation Type 096 SSBN, likely beginning in the 2020s.<sup>10</sup> The new class SSBN reportedly carries 16 nuclear-armed missiles compared to the 12 missiles on the original Type-94 *Jin*-class.<sup>11</sup>

China's principal platform for employing long-range air-launched missiles is the venerable H-6 bomber aircraft that carries cruise missiles and a nuclear-armed air-launched ballistic missile (ALBM) which gives the PRC an official nuclear triad.<sup>12</sup> China is also developing a new long-range stealth bomber—its first dedicated strategic bomber -- likely designated the H-20. The Xian H-20 is estimated to have an unrefueled range of 8,500/4600 km/nm, a munitions payload of over 20,000 lbs. and to be nuclear-capable.<sup>13</sup> These bombers

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<sup>7</sup> Department of Defense, *Military and Security Developments Involving the People's Republic of China* (Washington, DC: DoD, November 2022) p. 167.

<sup>8</sup> Center for Strategic and International Studies, "Missile Defense Project," <https://www.csis.org/programs/international-security-program/missile-defense-project>; SRBMs are ballistic missiles with ranges between 300 and 1,000 km, MRBMs between 1,000 and 3,000 km, IRBMs between 3,000 and 5,000 km, and ICBMs typically have ranges over 5,500 km. For more information on ballistic missile classifications, see Defense Intelligence Ballistic Missile Analysis Committee, *2020 Ballistic and Cruise Missile Threat* (Wright-Patterson AFB, OH: National Air and Space Intelligence Center, 2020), p. 8, <https://www.nasic.af.mil/News/Article-Display/Article/2468163/nasic-dibmac-release-unclassified-missile-assessment/>.

<sup>9</sup> Military Today, "Type 094 [Jin Class, Nuclear Ballistic Missile Submarine]", n.d., [http://www.military-today.com/navy/jin\\_class.htm](http://www.military-today.com/navy/jin_class.htm).

<sup>10</sup> Minnie Chan, "China's new nuclear submarine missiles expand range in US: analysts," *South China Morning Post*, May 2, 2021, <https://www.scmp.com/news/china/military/article/3131873/chinas-new-nuclear-submarine-missiles-expand-range-us-analysts>; Department of Defense, *Military and Security Developments Involving the People's Republic of China*. Washington, DC: DOD, November 2021, p. 49.

<sup>11</sup> Julia Masterson, "China Deploys New Missile Submarines," *The Arms Control Association*, July/August 2020, <https://www.armscontrol.org/act/2020-07/news-briefs/china-deploys-new-missile-submarines>.

<sup>12</sup> China Aerospace Studies Institute (CASI), *PLA Aerospace Power: A Primer on Trends in China's Military Air, Space and Rocket Forces* (3<sup>rd</sup> ed). Maxwell AFB: Air University, 2022, p. 20. "More recently, the PLAAF has created a brigade of midair refuelable H-6 variants, the H-6N, to serve as a platform for an air launched, nuclear armed ballistic missile", 20.

<sup>13</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China* (Washington, DC: Department of Defense, 2020), available at <https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DODCHINA-MILITARY-POWER-REPORT-FINAL.PDF>.

provide the third leg of a PLA nuclear triad while delivering significant conventional power projection capabilities beyond the 2nd Island Chain. The PLA Air Force (PLAAF) bombers and PLARF forces are critical to China's counter-intervention campaign to prevent the U.S. from using its longstanding modus operandi of flowing forces into a theater to avoid a significant forward posture.<sup>14</sup>

The PLA not only has one of the most formidable ballistic missile weapons programs in the world; it also has the industrial capacity and economic horsepower to continue its unprecedented buildup of ballistic and cruise missiles for the PLARF and other PLA forces well into the future.<sup>15</sup> "China continues to have the most active and diverse ballistic missile development program in the world. It is developing and testing offensive missiles, forming additional missile units, qualitatively upgrading missile systems, and developing methods to counter ballistic missile defenses."<sup>16</sup> Notably, China continues "to launch more ballistic missiles for testing and training than the rest of the world combined."<sup>17</sup> This allows China to gain more operational, reliability, and technological experience with their main offensive systems.

More concerning is China's very likely significant nuclear buildup ("breakout") in the next 10-15 years. Several high-level U.S. government officials have raised these concerns, including the Director of the Defense Intelligence Agency (DIA), who stated, "Over the next decade, China is likely to at least double the size of its nuclear stockpile in the course of implementing the most rapid expansion and diversification of its nuclear arsenal in China's history."<sup>18</sup> In July 2020, Admiral Charles A. Richard, Commander U.S. Strategic Command, stated, "China is on a trajectory to be a strategic [nuclear] peer to us by the end of the decade... For the first time, the [United States] is going to face two [nuclear] peer competitors ... who you have to deter differently."<sup>19</sup> The recently released *2022 Nuclear Posture Review* (October 2022) states: "The PRC has embarked on an ambitious expansion, modernization, and diversification of its nuclear forces and established a nascent nuclear triad. The PRC likely intends to possess at least 1,000 deliverable warheads by the end of the decade."<sup>20</sup>

The implications for PLARF conventional missile forces are unknown. However, conceivably, this would likely significantly impact China's ballistic missile production.

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<sup>14</sup> China Aerospace Studies Institute (CASI), *PLA Aerospace Power*, 2022, 19.

<sup>15</sup> For more details on China Missile Defense industrial base, see Peter Wood and Alex Stone, *China's Ballistic Missile Industry* (Montgomery, AL: China Aerospace Studies Institute, 2021), <https://www.airuniversity.af.edu/CASI/Display/Article/2599627/chinas-ballistic-missile-industry/>.

<sup>16</sup> National Air and Space Intelligence Center, 2017 Ballistic and Cruise Missile Threat. 2017, p. 3, [https://www.nasic.af.mil/Portals/19/images/Fact%20Sheet%20Images/2017%20Ballistic%20and%20Cruise%20Missile%20Threat\\_Final\\_small.pdf?ver=2017-07-21-083234-343](https://www.nasic.af.mil/Portals/19/images/Fact%20Sheet%20Images/2017%20Ballistic%20and%20Cruise%20Missile%20Threat_Final_small.pdf?ver=2017-07-21-083234-343).

<sup>17</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China*, (Washington, DC: Department of Defense, 2020), pp. 55, <https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/2020-DODCHINA-MILITARY-POWER-REPORT-FINAL.PDF>.

<sup>18</sup> Robert P. Ashley, Jr., "Russian and Chinese Nuclear Modernization Trends," Defense Intelligence Agency, May 29, 2019, <https://www.dia.mil/News/Speeches-and-Testimonies/Article-View/Article/1859890/russian-and-chinese-nuclear-modernization-trends/>.

<sup>19</sup> Yasmin Tadjdeh, "Just In: China Nuclear Advancements Stoke Pentagon Fears of New Peer Threat," *USNI Magazine*, July 30, 2020, <https://www.nationaldefensemagazine.org/articles/2020/7/30/chinese-nuclear-advancements-stoke-pentagon-anxiety>.

<sup>20</sup> Department of Defense, *2022 Nuclear Posture Review*. Washington, DC: DoD, 2022, p. 4, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>

Nevertheless, the mix of these ballistic missiles--conventional or nuclear-armed—is unknown and difficult to predict since the PLARF's ballistic missiles are mostly considered dual-use. China's "nuclear breakout" has the potential to accelerate a timetable for action against Taiwan, the South China Sea, or the Senkaku Islands while increasing tensions with its key regional rivals—Japan and India.<sup>21</sup>

Finally, the PLA will likely increase its use of gray zone methods and other non-military activities (e.g., “Three Warfares”)<sup>22</sup> that cannot be ignored, which will directly or indirectly impact IAMD. The 2022 NDS defines gray zone methods as "coercive approaches that may fall below perceived thresholds for U.S. military action and across areas of responsibility of parts of the U.S. Government."<sup>23</sup> For example, the PLA is developing and fielding more and more capabilities to launch complex salvo attacks consisting of ballistic missiles, cruise missiles, and hypersonic weapons while very likely adding unmanned aerial systems (UAS), including swarms of small UAS (sUAS). Analysts are also starting to see the use of UAS and sUAS for new gray zone activities that could impact Taiwan and the U.S.-Japan Alliance. As seen in the Russia-Ukrainian War, sUAS (and loitering munitions) have capabilities to take out key capabilities not thought possible just a few years ago. These sUAS can destroy unprotected aircraft, munitions, port facilities, and IAMD assets (e.g., radars, TELs) or render them unusable or significantly degraded.

## **U.S. and Japanese Response to Air and Missile Salvo Threats**

### **U.S. Response**

Since the end of the Cold War, the U.S. military has not been challenged by an enemy capable of launching large salvos of guided weapons against our forces and bases until the last decade by China and Russia. This reality formed DoD's rationale for allocating most of its missile defense resources to defeat a small number of ballistic weapons that North Korea (or other rogue states) could launch. In 2010, DoD conducted its first-ever *Ballistic Missile Defense Review* (BMDR) to evaluate if it should change this focus among other issues. The review concluded that DoD should continue to emphasize protecting the U.S. homeland against limited ballistic missile attacks and defeating ballistic missile threats to its forward-deployed forces while emphasizing regional missile defense cooperation.<sup>24</sup> In 2019, the Missile Defense Review (MDR) continued the focus on homeland missile defense by rogue powers. However, it also had a robust approach to regional missile threats by addressing the need for a defense strategy that advocated strong regional missile defense (beyond BMD) and offensive strikes to destroy

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<sup>21</sup> Brahma Chellaney, “Xi’s Nuclear Frenzy Aimed at Shielding China’s Expansionism,” *Nikkei Asia*, December 9, 2021, <https://asia.nikkei.com/Opinion/Xi-s-nuclear-frenzy-aimed-at-shielding-China-s-expansionism>.

<sup>22</sup> Peter Mattis, “China’s ‘Three Warfares’ In Perspective,” *War on the Rocks*, January 30, 2018, <https://warontherocks.com/2018/01/chinas-three-warfares-perspective/>.

<sup>23</sup> Department of Defense, *2022 National Defense Strategy*. Washington, DC: DoD, 2022, p. 5. <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>

<sup>24</sup> Department of Defense, *Ballistic Missile Defense Review Report* (Washington, DC: DoD, February 2010), p. iii. [https://dod.defense.gov/Portals/1/features/defenseReviews/BMDR/BMDR\\_as\\_of\\_26JAN10\\_0630\\_for\\_web.pdf](https://dod.defense.gov/Portals/1/features/defenseReviews/BMDR/BMDR_as_of_26JAN10_0630_for_web.pdf).

missiles (and not just ballistic missiles) or their ability to launch them (counterstrike and left of launch) with a focus on great power adversaries with those capabilities.<sup>25</sup>

This bias towards defeating a small number of ballistic weapons has finally changed (based on the language of the last two MDRs), given DoD's strategic shift toward planning for great power adversaries.<sup>26</sup> However, IAMD force structure, forward posture, and posture resiliency have not changed based on the MDR language changes (*de jure* vs. *de facto*).<sup>27</sup> Improving defenses against salvos that include not only ballistic missiles but also cruise missiles, hypersonic glide vehicles (HGVs), supersonic cruise missiles, and UASs armed with warheads is a critical imperative now and in the future with more capable adversaries.<sup>28</sup> Over the last two decades, China and Russia have invested heavily in advanced military systems to offset the superior conventional capabilities of the United States and its allies. Their anti-access and area-denial (A2/AD—not a PLA term—our term) complexes of integrated air defense systems (IADS), long-range precision strike platforms, and other advanced weaponry are designed to raise the cost to the United States and other countries attempting to project military power into their respective regions. Many of China's and Russia's long-range strike systems were designed to attack theater airbases, seaports, and other facilities critical to U.S. military operations.<sup>29</sup> These weapon systems undermine security assurances made by the United States to its allies and partners and could incentivize a great power aggressor to strike first in a crisis with a surprise attack or *fait accompli*.

Aside from the U.S. Navy (USN), which has the world's best IAMD to defend its ships (but not its ports et al.), there have been minimal changes to U.S. IAMD effectiveness (capability and capacity) against China writ large. That includes minimal changes in counterstrike,<sup>30</sup> active defenses, and passive defenses.<sup>31</sup> In addition, there appear to be no significant initiatives for U.S.-Japan Alliance IAMD integration. Nevertheless, INDOPACOM's defense of Guam provides an example for the U.S.-Japan Alliance to adapt as a possible course of action.

The defense of Guam (mentioned explicitly in the 2022 MDR) is developing a layered, comprehensive, and distributed IAMD system crucial to U.S. military operations in the Indo-

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<sup>25</sup> Department of Defense, 2019 Missile Defense Review (Washington DC: 2019), <https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF>; Also Henry Obering III and Rebeccah L. Heinrichs, "Missile Defense for Great Power Competition: Outmaneuvering the China Threat," *Strategic Studies Quarterly* (Winter 2019), [https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-13\\_Issue-4/Heinrichs.pdf](https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-13_Issue-4/Heinrichs.pdf). The 2010 Ballistic Missile Defense Review had a strong focus on regional missile defense, but it did not include the need for offensive strikes (or counterstrike) as part of that regional defense nor did it go beyond platitudes regarding the integration of IAMD among allies and partners.

<sup>26</sup> Ibid.

<sup>27</sup> Carl Rehberg and Josh Chang, *Moving Pieces: Near-Term Changes to Pacific Air Posture*. Washington, DC: CSBA, 2022, <https://csbaonline.org/research/publications/moving-pieces-near-term-changes-to-pacific-air-posture>.

<sup>28</sup> Paul Sonne, "Pentagon looks to adjust missile defense policy to include threats from Russia, China," *Washington Post*, March 2, 2018, [https://www.washingtonpost.com/world/national-security/pentagon-looks-to-adjust-missile-defense-policy-to-include-threats-from-russia-china/2018/03/01/2358ae22-1be5-11e8-8a2c-1a6665f59e95\\_story.html](https://www.washingtonpost.com/world/national-security/pentagon-looks-to-adjust-missile-defense-policy-to-include-threats-from-russia-china/2018/03/01/2358ae22-1be5-11e8-8a2c-1a6665f59e95_story.html).

<sup>29</sup> Mark Gunzinger, Bryan Clark, David Johnson, and Jesse Sloman, *Force Planning for the Era of Great Power Competition*. Washington, DC: CSBA, 2017, p. 32-35, 70-80. Also see David A. Shlapak and Michael Johnson, "Reinforcing Deterrence on NATO's Eastern Flank Wargaming the Defense of the Baltics." Santa Monica, CA: RAND, 2016.

<sup>30</sup> Rehberg and Chang, *Moving Pieces*, 2022.

<sup>31</sup> Ibid.

Pacific. Lessons from developing and implementing the IAMD architecture for the defense of Guam could provide important experience and learning to apply to efforts to enhance IAMD for Okinawa, the Japanese main islands, and other critical locations in the First and Second Island chains of the Indo-Pacific.

### Japanese Response

Japan's geography means it cannot avoid confronting the growing array of PLA threats. Japan is near China's doorstep, with thousands of PLA missiles at the ready. However, Japan has made significant progress with its air and missile defense (IAMD) capabilities more than any other U.S. ally in the Indo-Pacific region.<sup>32</sup> Japan's IAMD systems comprise capabilities from all three of Japan's armed forces, including sea-based long-range missile defenses, airborne interceptor aircraft, and ground-based missile defenses, all of which are integrated into a single command and control battle management and communications (C2BMC) architecture coordinated by the Japan Air Self Defense Force (JASDF).

The current ballistic missile defense (BMD) consists of two layers – the outer layer comprises Japan Maritime Self Defense Force's (JMSDF) Aegis-equipped destroyers, while the inner layer comprises some 28 fire units of JASDF Patriot PAC-3MSE.<sup>33</sup> In addition, the Japan Ground Self Defense Force (JGSDF) has cruise missile defense with Chu-SAMs (Type 03) and advanced (modified) Chu-SAMs and some point defense with Tan-SAMs (Type 81).<sup>34</sup> The JASDF also has the new Kichi-Bouku or Type 11 SAMs for point defense.<sup>35</sup> In addition to its land-based surveillance and interceptor capabilities, Japan can extend its radar detection ranges and missile intercept capabilities westward over the East China Sea. Beyond JMSDF ships, Japan also has airborne capabilities to extend surveillance outward from Japanese airspace. Japan's E-767 AWACS and E-2C/D aircraft are available to extend airborne surveillance forward to detect hostile aircraft and missiles. Further, surface surveillance will be enhanced by adding three RQ-4B aircraft and other aircraft that will complement the radar surveillance of their E-767 aircraft.<sup>36</sup>

Even with these sophisticated capabilities against air and ballistic missile threats, the U.S.-Japan Alliance needs to develop layered, comprehensive and distributed IAMD concepts, especially focused on non-ballistic missile threats, including UAS, small UAS (sUAS) or swarms of sUAS, and cruise missiles. Advances in critical technologies, especially high-energy lasers (HELs) and high-powered microwaves (HPMs), guided hyper-velocity projectiles (HVPs), and other non-kinetic capabilities (e.g., EW) across all the layers, could provide vastly enhanced

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<sup>32</sup> Japan's IAMD incorporates some counterstrike capabilities—it will have much more later. Ministry of Defense (MoD), Government of Japan, *National Defense Strategy*, Tokyo: MoD, December 2022, p. 24, [https://www.mod.go.jp/j/approach/agenda/guideline/strategy/pdf/strategy\\_en.pdf](https://www.mod.go.jp/j/approach/agenda/guideline/strategy/pdf/strategy_en.pdf).

<sup>33</sup> Ministry of Defense (MoD), Government of Japan (GoJ), "Missile Defense", n.d., [https://www.mod.go.jp/en/d\\_architecture/missile\\_defense/index.html](https://www.mod.go.jp/en/d_architecture/missile_defense/index.html)

<sup>34</sup> Missile Defense Advocacy Alliance (MDAA), "Type 03 [Chu-SAM]", June 5, 2018, <https://missiledefenseadvocacy.org/defense-systems/type-03/> and Ministry of Defense, "Defense Programs and Budget of Japan Overview of FY2022 Budget (Including FY2021 Supplementary Budget)." April 20, 2022, pp. 15, 17, [https://www.mod.go.jp/en/d\\_act/d\\_budget/pdf/20220420.pdf](https://www.mod.go.jp/en/d_act/d_budget/pdf/20220420.pdf).

<sup>35</sup> *Ibid.*, Ministry of Defense, p. 17.

<sup>36</sup> Akhil Kadidal, "Japan receives first RQ-4B Global Hawk," *Janes Defense News*, 14 March 2022, <https://www.janes.com/defence-news/news-detail/japan-receives-first-rq-4b-global-hawk>.

magazine depth to engage and defeat salvo threats.<sup>37</sup> These technologies could be fielded from Japanese advancements, but likely more quickly through deploying these systems and capabilities with U.S. forces based in Japan.

## Effective IAMD

Effective IAMD needs to defend against complex salvo attacks and be more holistic by focusing on its three broad categories: 1) Counterstrike, 2) Active defenses, and 3) Passive defenses.<sup>38</sup> The active defense portion of IAMD is the usual focus, but it is not sufficient by itself. IAMD needs to be thought of more holistically with its broad categories and the needed mix of those categories. Counterstrike is intended to prevent attacks or follow-on attacks by eliminating and mitigating the "archers." The "archers" include aircraft, ships, subs, or ground missile bases of the air and missile threats.<sup>39</sup> Active defenses defeat an adversary's aircraft or missiles after launching an attack, which predominates most IAMD thinking. The last category is passive defense, which limits (or minimizes) the impact of threats on the operations of friendly forces and facilitates their recovery and reconstitution. Passive defense(s) is often the most neglected category.<sup>40</sup> Nevertheless, all three categories must be addressed in an optimum mix, but none can be neglected.

For the active defense portion of IAMD, three key areas or attributes of focus are needed: 1) Layered IAMD, 2) Comprehensive IAMD, and 3) Distributed IAMD.<sup>41</sup> In addition, the "I" (integrated) in IAMD must become a reality. Again, these areas or attributes will vary depending on what is defended and its priority on a defended asset list (DAL). A layered defense is similar to a defense-in-depth. It means that multiple layers (or rings) are critical to a salvo defense. When it comes to complex salvo threats—avoiding or significantly mitigating single points of failure is *sine quo non* to effectiveness. A comprehensive IAMD would include multiple effectors (e.g., kinetic, High-Energy Laser [HEL], High Powered Microwave [HPM] et al.). It also consists of protecting some IAMD systems from threats they do not or should not engage (e.g., PAC-3MSE versus a small drone or cruise missile). A distributed IAMD means all the parts of one's active defense systems should not be close together but rather dispersed. To solve

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<sup>37</sup> Rehberg, Carl, and Gunzinger, Mark. *Air and Missile Defense at a Crossroads: New Concepts and Technologies to Defend America's Overseas Bases*. Washington, DC: Center for Strategic and Budgetary Assessments (CSBA), 2018, <https://csbaonline.org/research/publications/air-and-missile-defense-at-a-crossroads-new-concepts-and-technologies-to-de>

<sup>38</sup> Rehberg et al. *Strengthen the Phalanx*. 2023 [unpublished-forthcoming].

<sup>39</sup> Joint Publication (JP) 3-01 defines this slightly differently. See Joint Chiefs of Staff, "Joint Publication 3-01: Countering Air and Missile Threats," April 21, 2017, Chapter IV, [https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3\\_01.pdf](https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_01.pdf).

<sup>40</sup> Koichi Arie and Naohiko Yamaguchi, "U.S. Initiative for Integrated Air and Missile Defense (IAMD)," *NIDS Security Studies*, vol. 20:1, December 2017, [http://www.nids.mod.go.jp/english/publication/kiyo/pdf/2018/bulletin\\_e2018\\_3.pdf](http://www.nids.mod.go.jp/english/publication/kiyo/pdf/2018/bulletin_e2018_3.pdf).

<sup>41</sup> Counterstrike can be defined as operations to eliminate both an opponent's offensive capabilities and the infrastructure supporting those forces following an adversary's first strike. This concept is rooted in the context of Japan's Self-Defense Forces (JSDF) as Tokyo considers the capabilities it would need and relevant rules of engagement to be able to attack targets such as missile launch sites, airbases, and command centers following a Chinese or North Korean strike on Japanese territory. For more information see Masuda Tsuyoshi, "Japan's LDP Calls for Stronger 'Counterstrike Capabilities,'" NHK World-Japan, May 11, 2022, <https://www3.nhk.or.jp/nhkworld/en/news/backstories/1986/>



that problem, a combination of material solutions should enable dispersal and operational concepts like an "any sensor, best shooter" empowered by battle management command and control (BMC2).<sup>42</sup> A distributed IAMD enables and facilitates a variety of passive defense concepts (e.g., IAMD shelters, Camouflage, Concealment & Deception [CCD]) for IAMD to include the dispersal of critical IAMD system assets, which would have analogs to the Air Force's Agile Combat Employment (ACE) and USMC's Expeditionary Air Base Operations (EABO). Finally, when there is real IAMD integration, the broad categories of IAMD (i.e., counterstrike, active and passive defenses) and active defense's key areas or attributes are addressed (layered, comprehensive, and distributed) with credible passive defenses, there can be effective IAMD that is not cost self-imposing but cost-effective.<sup>43</sup>

### **CCP and PLA Strategies Impacting the U.S.-Japan Alliance**

Since the CCP's establishment of the People's Republic of China (PRC) in 1949, there has been intense study and debate over the years on China's strategies. That has reached fever-pitch levels in recent years with a plethora of China books--many of them focused on Chinese grand strategy (大战略). The CCP and PLA have multiple strategies at various levels using constructs similar to the U.S. and the West but with essential differences. Therefore, analysts should be very cautious about mirror imaging. The analysis of China's grand strategy is complex because no NSS equivalent in China delineates its grand strategy.<sup>44</sup>

China's leaders—including President Xi Jinping—have characterized the initial two decades of the 21st century as a "period of strategic opportunity." They assess that during this time, international conditions will facilitate domestic development and the expansion of China's "comprehensive national power," which outside observers believe will serve what they assess to be the CCP's overriding strategic objectives.<sup>45</sup>

The CCP is keenly aware that economic growth grants it legitimacy by the citizens of the PRC to continue its plan to achieve its goals vis-à-vis other challengers. The CCP is determined to return the PRC to its rightful place as the center of the modern world. This struggle has many challenges that must be simultaneously balanced. The first is legitimacy. Nevertheless, legitimacy is directly tied to the most critical center of gravity of all—the survival of the CCP.<sup>46</sup>

President Xi's "China Dream" of national rejuvenation (the concept) was first articulated shortly after his 2012 leadership transition. The "China Dream" encapsulates a longstanding national aspiration to establish a powerful and prosperous China. President Xi and other leaders also link the China Dream to two high-profile centenary goals: achieving a "moderately prosperous society" by the 100th anniversary of the founding of the CCP in 2021 and building a

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<sup>42</sup> Tom Karako and Wes Rumbaugh, *Distributed Defense: New Operational Concepts for Integrated Air and Missile Defense*. Washington, DC: Center for Strategic and International Studies, January 25, 2018, <https://www.csis.org/analysis/distributed-defense-0>.

<sup>43</sup> There are other critical aspects of effective IAMD, this paper does not cover them all.

<sup>44</sup> Mastro, Oriana Skylar. "Chinese Grand Strategy" (Chapter 18) in Baylis, John, Wirtz, James J., and Johnson, Jeannie L. *Strategy In the Contemporary World* (7th ed). Oxford: Oxford University Press, 2022.

<sup>45</sup> Ibid.

<sup>46</sup> Ibid., Mosher, Steven. *Bully of Asia: Why China's Dream is the New Threat to World Order*. Washington, DC: Regnery, 2017, and Lianchao Han, and Bradley Thayer. *Understanding the China Threat*. NY: Routledge, 2023.

"modern socialist country that is prosperous, strong, democratic, culturally advanced and harmonious" by the 100th anniversary of the establishment of the PRC in 2049.<sup>47</sup>

The last several years have seen an acceleration and greater confidence by Xi as he has projected "China's authoritarian system, coercive foreign policy, and military presence well beyond his country's own borders to the world at large."<sup>48</sup> Xi now poses a significant threat—not just to the U.S., but to the whole democratic world. Nevertheless, Xi knows that his path to the world goes through the U.S. That is why it is critical to understand that Xi's strategy is much more comprehensive and malevolent in areas most national security experts fail to grasp—like how the CCP exploits “open borders” and holes in our homeland defenses (e.g., high-altitude balloons). It is the Chinese malevolent activities that appear unrestrained and seemingly ignored that authors Easton (2022), Spalding (2022), Han & Thayer (2023), and Newsham (2023) et al. expose that should not be dismissed.<sup>49</sup> However, Baughman (2022) and others have pushed back on the simplistic notions of a "master plan" truly espoused.

Nevertheless, Spalding, Easton, Han, Thayer, Newsham, et al. have done a great service pointing out gaping holes in most U.S. assessments of the many apparent CCP strategies primarily ignored. In addition, the latest open-source U.S. national security documents continue to either ignore or barely acknowledge these aspects and myopically focus on the military and diplomatic instruments of power. Even with the recent Joint Chiefs of Staff publication, *Joint Concept for Competing*, there is only a fledgling attempt to get at any of the issues highlighted by Easton, Spalding, Han & Thayer, et al.<sup>50</sup> In addition, much of this document is mainly unimplementable by the Pentagon since most of the issues require a whole-of-government approach.

That is why, by all appearances, China has had a strategy(ies) with a laser-like focus on the U.S.—to make sure the U.S. and its key allies are not in the way or out of the way. The hypothesis is that this/this grand/global CCP strategy (ies) goes/go well beyond looking at the BRI, China White Papers from the Ministry of National Defense, *Science of Military Strategy* publications, dissecting China's foreign policy, and other published documents. These play a role, but, likely, Xi and some of his top advisors (and some of the more secretive organizations in China) may have developed a CCP version of the NSC-68 that is offensive in nature with the U.S. as the primary target—one that is classified at the highest levels in China and only fully known to a few—compartmentalized for others. Nevertheless, Colby (2022) may have given sage advice by encouraging strategists to focus on China's best military strategies. The overall deterrence and strategy of denial for military operations is still a very high priority, regardless of China's comprehensive strategy.

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<sup>47</sup> Mastro. "Chinese Grand Strategy." 2022, pp. 321-324.

<sup>48</sup> Anonymous, *The Longer Telegram: Toward A New American China Strategy*, Washington, DC: Atlantic Council, 2021, p. 6.

<sup>49</sup> Easton, Ian. *The Final Struggle: Inside China's Global Strategy*. Manchester, U.K.: Eastbridge Brooks, 2022. Spalding, Robert, Brig Gen, USAF-ret. *War Without Rules: China's Playbook for Global Domination*. Sentinel, 2022. Han, Lianchao and Thayer, Bradley. *Understanding the China Threat*. NY: Routledge, 2023. Col. Grant Newsham, *When China Attacks: A Warning to America*. Regnery, 2023.

<sup>50</sup> Joint Chiefs of Staff, *Joint Concept for Competing*, Washington, DC: Pentagon, 10 February 2023, <https://s3.documentcloud.org/documents/23698400/20230213-joint-concept-for-competing-signed.pdf>.

## U.S. and Japanese Strategies Countering China?

### U.S. Strategies

For the U.S., the highest level of strategy is the national security strategy (NSS) or grand strategy: "...[it] is the only whole-of-government national security document the U.S. Government publishes."<sup>51</sup> After almost a decade of experts calling for a change in the national security strategy—the *2017 National Security Strategy* (NSS) instituted a whole-of-government focus on great power competition—with China as the pacing threat. However, the consensus language was muted with "strategic competition." The *2017 NSS* was the first to put China front and center, breaking new ground. Still, as illuminated by Brig Gen (ret) Robert Spalding in *Stealth War* and Josh Rogin in *Chaos Under Heaven*, this was not without internecine conflict with key members inside the Trump Administration and the elite of Washington DC.<sup>52</sup> In addition, the implementation was spotty at best, according to many China Hawks, and the fall of Hong Kong with not more than a whimper with virtually no response was more than concerning.<sup>53</sup>

After the NSS—the national defense strategy (NDS) is likely the next most important document. The *2018 National Defense Strategy* (NDS) was lauded by a large consensus as outstanding—even as an open-source summary. By all appearances, those familiar with the classified contents believed it forged a good path. Nevertheless, the essential parts of these strategies are not the "ends" but the "ways" and what gets implemented (through the "means") into policy decisions, budgetary priorities, and specific funding of critical personnel, ideas, and capabilities that can mean the success or failure of a nation's grand strategy.

The *2022 National Security Strategy* (NSS) appears to have quietly adopted some of the themes in the *2017 NSS* concerning China.<sup>54</sup> So credit must be given when credit is due. For example, the NSS rightly points out China's "nuclear breakout" and the possible implications. Nevertheless, there are no recommendations or near-term actions to stay the course in the *2022 Nuclear Posture Review*.<sup>55</sup> By any measure—that is troubling.

Critically, the *2022 NSS* lost much of its focus with areas never seen before in an NSS (e.g., radical "woke" and "climate" initiatives"), which almost all detract from the central purposes of a nation's security.<sup>56</sup> The *2022 NSS* states, "The climate crisis is the existential challenge of our time...." However, clearly, the most prominent climate provocateur, China, gets a "free ride" while reaping profits off the "green agenda." Nevertheless, even a stellar NSS that is not followed or implemented is the real NSS. It's the NSS that the CCP, our adversary, clearly sees. By all appearances, the "woke" and "climate" portions appear to be winning in the

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<sup>51</sup> Alan G. Stolberg, *How Nation-States Craft National Security Strategy Documents* (enlarged ed.), Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, October 2021, xi.

<sup>52</sup> Brig Gen (USAF-ret) Robert Spalding, *Stealth War: How China Took Over While America's Elite Slept*. Penguin, 2019 and Josh Rogin. *Chaos Under Heaven: Trump, Xi, and the Battle for the Twenty-First Century*. Boston: Houghton Mifflin Harcourt, 2021.

<sup>53</sup> Josh Rogin (2021) and Anonymous (2021).

<sup>54</sup> Thomas G. Mahnken, "The National Security Strategy: Preparing for a Challenging World," in Michaela Dodge and Matthew Costlow (eds.), *Expert Commentary on the 2022 National Security Strategy*, Fairfax, Virginia: National Institute Press, 2023.

<sup>55</sup> Ibid.

<sup>56</sup> Michaela Dodge, "We Need Ammo, Not Green Policies: The Biden Administration's National Security Strategy Is a Triumph of Hope and Wishful Thinking over Reality and Evidence" in Michaela Dodge and Matthew Costlow (eds.), 2023.

implementation arena hands down.<sup>57</sup> Moreover, there is almost total silence on COVID-19's origins and the CCP's malicious behaviors.

By most accounts, the 2022 National Defense Strategy (NDS) had significant continuity with the 2018 NDS. One of the positive items in this document was the decision to call out what China is doing in the "gray zone" but with minimal recommendations on responding. Still, the 2022 NDS cautioned against overreacting to these threats by prioritizing and emphasizing the need to coordinate with our allies and partners. One of the central pieces to the current NDS is integrated deterrence which attempts to respond to the comprehensive nature of China's power. Most analysts would state "nothing new here," but few visible integrated deterrence initiatives exist. One would think several integrated deterrence initiatives with Japan would be front and center. Still, many would regard that this NDS falls short of essential specifics needed to significantly reduce the strategy-reality disconnect and deal with what strategists call Beijing's best strategy.<sup>58</sup>

In 2022, the *Missile Defense Review* (MDR) took another step forward and left behind the emphasis on rogue state ballistic missiles to focus primarily on the strategic competition with China and Russia.<sup>59</sup> But, aside from the defense of Guam, which was explicitly called out as a significant positive development (but it was ongoing already)--there were no specific recommendations for the missile defenses in the Pacific in this MDR, while other regions had new specifics.<sup>60</sup> It also appears that the MDR and NDS were not remarkably prescient on the seismic changes in Japan and how the U.S. could undoubtedly leverage what could benefit the U.S. and the U.S.-Japan Alliance tremendously.

### Japanese Strategies

The threat and strategic environment have changed dramatically over the last 30 years in Asia, but it did not just impact the U.S.—it had enormous implications for Japan.<sup>61</sup> This threat and strategic environment crossed some red lines as Japan's NSS described that "...Japan is finding itself in the midst of the most severe and complex security environment since the end of World War II."<sup>62</sup> More recently, the Russia-Ukraine Conflict helped convince many of the fence straddlers among Japan's leaders that Japan needed to act—that Tokyo must do much more for its defense.<sup>63</sup>

Under the trailblazing leadership of Prime Minister (PM) Abe, Japan became an advocate of a proactive foreign and security policy. PM Abe's leadership kept the peace in Japan in the face of increasing threats from China, North Korea, and Russia--his vision was to build a strong deterrence and response capability (e.g., counterstrike). Until PM Abe's unfortunate and untimely

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<sup>57</sup> Ibid.

<sup>58</sup> As per Colby, *Strategy of Denial*, 2022.

<sup>59</sup> Department of Defense, *2022 Missile Defense Review*, Washington DC: 2022, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>

<sup>60</sup> Ibid.

<sup>61</sup> Taniguchi Tomohiko, "Japan's New Security Posture Is Abe's Legacy," *Project Syndicate*, January 27, 2023, <https://www.project-syndicate.org/commentary/japan-rearmament-is-abe-shinzo-legacy-by-taniguchi-tomohiko-2023-01>.

<sup>62</sup> Ministry of Defense (MoD), Government of Japan, *National Security Strategy*, Tokyo: MoD, December 2022, p. 35, [https://www.mod.go.jp/j/approach/agenda/guideline/pdf/security\\_strategy\\_en.pdf](https://www.mod.go.jp/j/approach/agenda/guideline/pdf/security_strategy_en.pdf).

<sup>63</sup> Ibid., pp. 2, 6, 10, 18.

death in 2022—he was committed to his vision. Under PM Kishida's administration, they have followed PM Abe's lead and have been dedicated to making the most significant changes to Japan's defense capabilities since the end of WWII, with a doubling of the defense budget (from 1% to 2% of GDP).<sup>64</sup>

In 2021, Prime Minister Kishida committed to making the NSS and NDS a reality by the end of 2022, stating, "I have already given instructions to revise the National Security Strategy and other documents, and today I again made sure that all options would be considered, including the possession of so-called enemy-base strike capability. We remain committed to drastically strengthening Japan's defense capability."<sup>65</sup> In December 2022, the revised NSS and first-ever National Defense Strategy (NDS—formerly known as the National Defense Program Guidelines--NDPG) and the Defense Buildup Program (DBP—formerly known as the Medium Term Defense Program--MTDP) replaced the NDPG and MTDP to make the content more up-to-date but also extending the time horizon of the defense buildup from five to ten years.<sup>66</sup> This statement came with iron-clad promises and initial actions that would double Japan's defense budget and take Japan's defense spending to 2% of its GDP, which would be the third largest defense spending in the world after the U.S. and the PRC.<sup>67</sup>

A comprehensive assessment of the December 2022 historical actions by the Government of Japan is beyond the scope of this paper. Still, it is essential to do a cursory analysis. The 2022 NDS lists seven key capabilities or pillars: "1) Stand-off Defense Capabilities; 2) Integrated Air and Missile Defense Capabilities; 3) Unmanned Defense [UAS] Capabilities; 4) Cross-Domain Capabilities; 5) Command and Control and Intelligence related Functions; 6) Mobile Deployment Capabilities/Civil Protection; 7) Sustainability and Resiliency."<sup>68</sup> The top priority for its "Key Capabilities" are stand-off defense capabilities.<sup>69</sup> These capabilities will focus on disrupting and defeating "...vessels and landing forces invading Japan, including its remote islands..." with stand-off missiles (surface-launched, ship-launched, and air-launched).<sup>70</sup> Not surprisingly, the number two priority listed was IAMD capabilities and capacity, which includes counterstrike capabilities against air and missile threats.<sup>71</sup> These top two pillars (out of seven) have counterstrike capabilities central to both. If these planned actions are fully implemented --- that would likely have profound implications for China and U.S.-Japan Alliance. The MoD

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<sup>64</sup> Jack Detsch and Amy Mackinnon, "Abe's Legacy Will Outlive Him: Washington Mourns the Man Who Made Japan a Real Security Ally in the Indo-Pacific," *Foreign Policy*, July 8, 2022, <https://foreignpolicy.com/2022/07/08/shinzo-abe-assassination-japan-indo-pacific-security/>

<sup>65</sup> Press Conference by the Prime Minister Kishida on a Meeting of the National Security Council and Other Matters, October 16, 2021, Prime Minister of Japan and His Cabinet. [https://japan.kantei.go.jp/100\\_kishida/statement/202110/\\_00015.html](https://japan.kantei.go.jp/100_kishida/statement/202110/_00015.html)

<sup>66</sup> Ministry of Defense (MoD), Government of Japan, *Defense Buildup Program*, Tokyo: MoD, December 2022, p. 4, [https://www.mod.go.jp/j/approach/agenda/guideline/plan/pdf/program\\_en.pdf](https://www.mod.go.jp/j/approach/agenda/guideline/plan/pdf/program_en.pdf)

<sup>67</sup> Based on the Stockholm Index which uses US\$ for all countries—a doubling of Japan's defense budget would move its ranking to #3. See <https://www.sipri.org/research/armament-and-disarmament/arms-and-military-expenditure/military-expenditure>.

<sup>68</sup> Ministry of Defense (MoD), Government of Japan, *National Defense Strategy*, Tokyo: MoD, December 2022, p. 1, [https://www.mod.go.jp/j/approach/agenda/guideline/strategy/pdf/strategy\\_en.pdf](https://www.mod.go.jp/j/approach/agenda/guideline/strategy/pdf/strategy_en.pdf).

<sup>69</sup> *Ibid.*, p. 23. It is acknowledged that the other priorities/pillars are linked to other five.

<sup>70</sup> *Ibid.*, pp. 23-24.

<sup>71</sup> Jeffrey Hornung and Christopher Johnston, "Japan's Strategic Shift Is Significant, But Implementation Hurdles Await." *War on the Rocks*, January 27, 2023, <https://warontherocks.com/2023/01/japans-strategic-shift-is-significant-but-implementation-hurdles-await/>.

believes that the Japan Self Defense Forces (JSDF) can accomplish most of these capabilities in five to ten years but will need outside help.<sup>72</sup>

### **U.S.-Japan Alliance IAMD: A Critical Factor For Effective Deterrence**

Focusing on emerging Japanese counterstrike capabilities, active defenses and integrating these capabilities with the U.S. can significantly improve counterstrike and IAMD capabilities for the U.S.-Japan Alliance. Before the Japanese *NDS*, the U.S. would be responsible for almost all of the counterstrike missions for the U.S.-Japan Alliance in nearly every contingency. With these dramatic changes announced by the Japanese in December 2022, the power projection capability potentially increases dramatically through these counterstrike initiatives. Nevertheless, counterstrike capabilities will not become operational quickly unless the U.S. helps Japan in some critical areas. The same goes for active and passive defenses. However, the details are different—the U.S. could help Japan have more effective active and passive defenses much more quicker. The key to both of these significant mission areas (after help is given) is the integration of U.S. and Japanese forces, which will provide the Alliance with even more capabilities.

That raises the stakes for actions by the U.S.-Japan Alliance corporately, Japan, and the U.S. to increase capabilities and capacity of regional counterstrike and active defenses individually with prudent posture and posture resiliency changes. More importantly, it calls for synergistic operations between U.S. and JSDF. These actions will reach the needed synergy: "sum will be greater than the individual parts added together."

Yet, most of the needed U.S. counterstrike and active defense (or IAMD forces) must be mobilized and moved into the theater from the CONUS. Moving counterstrike and IAMD assets into forward areas was much less problematic in the past because of the diminished threats with no A2/AD—few contested environments and virtually no highly contested environments. Under the current threats, the present posture and posture resiliency of U.S. counterstrike and IAMD assets raise serious capacity issues and impact regional deterrence daily. IAMD assets are regarded as critical enablers to allow the introduction of follow-on or reinforcing forces, materiel, and supplies into the theater.<sup>73</sup> As Japan has realized—IAMD with just active and limited passive defenses is insufficient for deterrence or a strategy of denial—counterstrike capabilities are *sine quo non* for effectiveness.

JSDF has successfully fielded and maintained an integrated air and missile defense force capable of defending Japan against many of the external threats that Japan has faced in recent years. The threats that Japan faces today and into the next two decades, from China, Russia, and North Korea (lesser so), are expanding in numbers, capability, and complexity. North Korea's offensive capabilities are growing. Nevertheless, the larger and pacing threat is China. China can now conduct air and missile attacks against Japan from any direction and will be able to do so with increasingly more significant numbers of surface, air- and sea-launched ballistic and cruise missiles, along with UASs and sUAS swarms. In addition, novel PLA threats like the HGVs and supersonic cruise missiles are emerging. This trend is expected to continue.

It may no longer be sufficient to continue to field incremental upgrades to current systems; Japan requires an advanced IAMD capability resting on a new architecture that will

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<sup>72</sup> Ibid.

<sup>73</sup> Consequently, IAMD assets are generally among the first and highest priority assets to be deployed in the event of crisis or conflict. Part of the Chinese A2/AD plans are to prevent the deployment of IAMD and other assets into the Pacific. Those series of plans are called the PLA's Counter-Intervention Campaigns or Plans.

allow it to address the complex future threats it will increasingly face. To make it robust and effective, a combined command, with some similarities to the USFK, should be considered for comprehensive IAMD. In addition, the U.S. and Japan must seriously move forward to "truly" integrate their IAMD assets with a crawl, walk and run approach. That will require the battle management command and control (BMC2) to link JSDF IAMD assets with U.S. assets from all services. In addition, there should be an accelerated acquisition of advanced material solutions to mitigate capacity and capability gaps—some of those could come from Japan (e.g., Chu-SAMs for cruise missile defenses) and some from the U.S. (e.g., BMC2 and advanced DE systems).

## Conclusion and Recommendations

The mix of IAMD broad categories (i.e., counterstrike, active and passive defenses) and the need for layered, comprehensive, and distributed active defenses with an effective posture and posture resilience are critical elements.<sup>74</sup> These actions are consistent and in concert with the *2022 Missile Defense Review*, which states: "IAMD represents an effort to move beyond platform-specific missile defense toward a broader approach melding all missile defeat capabilities – defensive, passive, offensive [counterstrike], kinetic, non-kinetic – into a comprehensive joint and combined construct."<sup>75</sup> In addition, effective IAMD involves bringing in the best of each of the services, allies, and capable partners to link IAMD assets synergistically with the promise of new capabilities in the battle management command and control (BMC2) portfolio.<sup>76</sup>

Developing high-capacity and cost-effective active defenses to protect the U.S.-Japan Alliance forward bases against guided weapon salvos will be vital to deterring great power aggression and other threats to the security and stability of the Indo-Pacific region. Without these defenses, the U.S. military may be unable to quickly counter other A2/AD threats and project offensive power in future operations. The growing threats necessitate many options to prevent surprise attacks, pre-emption, and a *fait accompli*. New active defense concepts, technology, and roles and missions within the U.S. and our key allies and partners should be integrated with passive defenses, counterstrike, and other options that support a strategy of denial, conventional deterrence, and different complementary strategies.

In addition, the implications of the U.S. strategies and changes to Japanese strategy (e.g., National Defense Strategy) and their bold plans from December 2022 could provide the ways and means to an IAMD bulwark for the U.S.-Japan Alliance. However, as vitally important as the Japanese steps are to improving their defenses, the U.S. must take tangible and concrete steps to synergize and leverage what the Japanese are doing. Otherwise, this would be a wasted strategic opportunity of immense proportions—for both countries.

What is missing in all the U.S. and Japanese strategies is a comprehensive depiction of all the potpourri of CCP activities that do not constitute a Western view of conflict—usually non-kinetic and non-military. The CCP is waging "war" on the U.S., Japan, and its close allies—

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<sup>74</sup> The *2018 NDS* describes posture resiliency as "forces that can deploy, survive, operate, maneuver, and regenerate in all domains while under attack."<sup>74</sup>

<sup>75</sup> Department of Defense, *2022 Missile Defense Review* (Washington DC: 2022), p. 8, available at <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>

<sup>76</sup> This is not to be confused with the MDA's C2BMC program that is specific for the U.S. ballistic missile defense system.

mainly with impunity with little or no acknowledgment. By open-source appearances, virtually zero response, counters, or counter-strategies from the U.S. Some PRC activities come in the form of gray zone activities. However, focusing on the gray zone forms of non-kinetic warfare and the Belt and Road Initiative (BRI) does not fully convey what the PRC is doing. What is missing is what Ian Easton describes as "China's Global Strategy," what Lianchao Han and Bradley Thayer call for a laser-like focus needed on the CCP, what Grant Newsham posits that the CCP is already fighting (non-kinetic & kinetic) now with Taiwan as the upcoming flashpoint, and what Robert Spalding describes as "China's playbook for global domination." The U.S.-Japan Alliance should revisit and update their analysis and assessment of CCP's strategies—all their strategies--to fully understand the "parts to the whole" and the "whole to the parts."

The following comprise critical recommendations based on this article:

**A New Grand Strategy Focused on China Comprehensively—Not Selectively.**

The U.S.-Japan Alliance must not be pulled into only focusing on the military instrument of power. An effective U.S.-Japan Alliance against China must have strategies that are much more comprehensive in nature that include all the instruments and critical elements of national power. The U.S.-Japan Alliance should have an organization(s) attached to one or both of the recommended standing (permanent) Combined Joint Task Forces (CJTFs) that would coordinate many of the initiatives to counter and mitigate, et al. the other critical aspects of the CCP's global strategy (ies).<sup>77</sup> For the U.S. only, it should have a new section of the National Security Council (NSC) devoted to developing a strategy(ies) and needed courses of action (COAs) that would be a hybrid (with fundamental differences) with a new Solarium Project—focusing on all the instruments and critical elements of national power et al. not typically covered in U.S. national strategy documents.<sup>78</sup>

**U.S. Help Japan Accelerate Counterstrike, Active & Passive Defenses.** It appears that the two of the most significant changes in Japan's defense buildup are counterstrike capabilities and more capable active and passive defenses. It is in the best interests of the Alliance that the U.S. provide help and assistance in critical areas by helping to accelerate the acquisition of capability and capacity of each. In addition, beyond giving help and assistance—the U.S. and Japan should move as quickly as possible to integrate U.S. and Japan's counterstrike, active, and passive defense capabilities.

**Defend Tonight with an IAMD Standing CJTF.** The Alliance should develop a new "Defend Tonight" approach by establishing a new Japan-U.S. IAMD standing combined joint task force (CJTF) in Japan. Each of the military service branches for the U.S. and Japan should move from stove-piped peace-time command structures toward a specific Japan-U.S. combined command that comprises the units, organizations, and headquarters required for a standing, ready, and operational Japan-U.S. IAMD capability for the defense of Japan and U.S. forces in Japan. This new Japan-led standing CJTF could be based at Yokota AFB, where the 5<sup>th</sup> Air Force HQ and JASDF Air Defense Command HQ are co-located. This CJTF should focus on

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<sup>77</sup> Ian Easton, *The Final Struggle: Inside China's Global Strategy*. Manchester, UK: Eastbridge Books, 2022.

<sup>78</sup> James P. Farwell and Michale Miklaucic, "The US Needs a New Solarium for a New Grand Strategy," *The Diplomat*, June 18, 2022, <https://thediplomat.com/2022/06/the-us-needs-a-new-solarium-for-a-new-grand-strategy/>



IAMD, which includes active/passive defenses and counterstrike capabilities. This new "Defend Tonight" approach will also require a different mix of U.S. personnel (e.g., more counterstrike, space, and IAMD personnel) in the main islands of Japan and changes to posture and posture resiliency, accompanied by regular exercises of integrated Japan-U.S. IAMD systems and supporting capabilities (including counterstrike).

**Defense of Guam Hybrid for Defense of Japan.** DoD, USINDOPACOM, and others should develop a hybrid of the defense of Guam to defend the U.S.- Japan Alliance in the first island chain. The initiative's essence would be to link JSDF IAMD assets with U.S. IAMD assets by developing a common and interoperable battle management command and control (BMC2) for the U.S.-Japan alliance. This initiative should be an evolutionary process that provides some linkages ASAP, some more near-term, but works toward a robust, common, and interoperable BMC2 over the mid-term. This goal should closely follow the best practices and solutions in the defense of Guam Pacific Deterrence Initiative (PDI)—especially in the BMC2 measures that could serve as a pathfinder for the U.S.-Japan Alliance IAMD integration.

**Develop a Fight Tonight Approach.** The U.S.-Japan Alliance should develop a "Fight Tonight" approach for Okinawa, the Southern Islands, and U.S. forces in the First and Second Island Chain, including Guam. Central to this approach is establishing a new standing Combined Joint Task Force (CJTF) for Okinawa with the necessary new All Domain Operations Centers (ADOCs). The new operations centers would share data in real-time with the Combined Air Domain Operations Center (CADOC) at Yokota and other key command and control resources. This new U.S.-led Alliance CJTF model will require a different mix of personnel than are currently based in Okinawa and the Southern Islands, with changes to the current force structure, laydown, and posture resiliency of all forces.<sup>79</sup> This model could follow many critical principles and logic already seen in the U.S.-ROK Alliance's "Fight Tonight" construct with North Korea but applied to the U.S.-Japan Alliance. A primary focus would be active/passive defenses, counterstrike capabilities against China, and critical scenarios close to Japan (e.g., the Senkaku Islands, Taiwan).

The U.S.-Japan Alliance has made steady and incremental progress toward preparing for future crises and contingencies. Nevertheless, with the current and future threat advancement, going it alone with counterstrike and IAMD against China is not truly viable for the U.S. or Japan. Therefore, concrete actions, like the recommendations above, must be taken without delay, including substantive changes to the U.S.-Japan Alliance posture, posture resiliency, and other capabilities. These actions must focus on immediate steps to enhance comprehensive IAMD and other capabilities that can be integrated with Japan--America's most important and capable ally in the Indo-Pacific. The time for action is now and with all alacrity.

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<sup>79</sup> There are a variety of scenarios for this CJTF. It could be Japan-led, U.S.-led or some sort of hybrid.

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