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The Twelve-Day War: Initial Lessons for Golden Dome

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Introduction

The existing rudimentary U.S. homeland missile defense system was initiated by the George W. Bush Administration in 2002. It is intended and largely designed to protect the United States against a limited intercontinental missile threat from North Korea. Since 1976, no Republican or Democratic administration has deployed missile defenses to reduce U.S. homeland vulnerability to Russian or Chinese strategic missiles.

Signaling a new initiative, President Trump's January 27, 2025 Executive Order, *The Iron Dome for America*, calls for a versatile U.S. missile defense system to protect America's citizens, territory, infrastructure, and military forces against all opponents' "ballistic, hypersonic, and cruise missiles, and other advanced aerial attacks."¹ It also calls for the examination of cooperation with allies to protect their territories, populations and military forces. The Trump Administration has given the label "Golden Dome" to a new homeland defense system that moves progressively toward these new defensive goals.²

Lessons from the Twelve-Day War

There are several basic lessons from the 2025 Israel-Iran Twelve-Day War regarding the likely value of missile defenses, particularly for, but not limited to, missile threats to U.S. allies.



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During the war, Israel's layered missile defenses reportedly intercepted some 90 percent of the 500-550 missiles Iran launched at Israel.³ Apparently 36 of the Iranian missiles that penetrated Israeli defenses detonated in population centers, killing 28 persons, inflicting thousands of injuries, and displacing over 13,000 Israelis.⁴

While Iran pursued diverse offensive missile systems for decades, Israel focused on fielding multiple layers of missile defenses, including different defensive systems optimized to intercept incoming missiles at different altitudes, thereby increasing the odds of successful intercepts. In particular, a multi-layered defensive system can enable "shoot-look-shoot," in which an initial defensive intercept, if unsuccessful, is followed by a second intercept shot that is aided by improved information regarding the location and likely destination of the attacking missile. Israel's considerable defensive success during the Twelve-Day War may have benefited from Israel's multiple layers of missile defenses and corresponding "shoot-look-shoot" opportunities.⁵

The effectiveness of Israel's layered defenses demonstrates their potential value for the deterrence of aggression by decisively denying aggressors the expectation that their missiles will be of reliable military or coercive effect. This value of layered defenses is applicable to regional missile threats to allies and to intercontinental nuclear missile threats to the U.S. homeland. Russia, China and North Korea appear to anticipate that limited missile threats to the United States will enable them to coerce Washington away from coming to the aid of U.S. allies—thereby enabling their expansionist plans against U.S. allies.⁶ Layered U.S. missile defenses provided by Golden Dome could usefully deny opponents' confidence in such coercive threats to the United States and restore the effectiveness of U.S. extended deterrence for allies; they could also undercut their confidence in the potential military effects of even large-scale nuclear attacks—thereby helping to deter such attacks.

The war also demonstrated the unparalleled value of defenses in the event deterrence fails. The outcome of the Twelve-Day War would have been far more destructive of lives, property and infrastructure in the absence of Israel's layered missile defense capabilities—particularly because Iran targeted civilian centers for destruction. The up to 470 Iranian missiles that were intercepted over Israel almost certainly would have inflicted thousands of additional casualties and billions of dollars in additional civilian and military destruction.⁷

This point again applies to regional missile threats to allies and to intercontinental nuclear missile threats to the U.S. homeland. There are, of course, considerable differences in protecting against Iran's hundreds of conventionally armed missiles and defending against thousands of nuclear warheads on intercontinental missiles. Even Israel's remarkably successful 90 percent defensive success rate against hundreds of Iran's conventionally armed missiles could lead to intolerable destruction if an attack against the United States involved thousands of Russian and Chinese nuclear missile warheads. Critics of Golden Dome seem to emphasize this type of scenario in their effort to cast doubt on the potential value of missile defense.⁸ However, that scenario is only one of many possible nuclear attack scenarios confronting Washington, and perhaps the most likely to be deterred by the U.S. potential to defeat adversaries' offensive military goals and respond with a massive nuclear reply. In other



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very plausible conflict scenarios, missile defense protection of society and infrastructure could prove extremely valuable in limiting damage. For example, Golden Dome could help not only to deter Russian, Chinese, or North Korean coercive nuclear threats but, if deterrence failed to prevent Putin's coercive threats of limited nuclear attack, layered defenses could greatly reduce the consequent U.S. civilian casualties and damage to infrastructure and society.

"Cost Effective at the Margin"

The war also readily demonstrated that the past U.S. self-imposed requirement, that missile defenses be "cost effective at the margin,"⁹ is an absurd standard—worthy of peacetime accounting, not wartime realities. That accounting standard mandates that defensive interceptors must not cost more to produce and deploy than do the offensive missiles to be intercepted. However, the likelihood that Iranian missiles cost considerably less to produce and deploy than the Israeli interceptors that defended against them was hardly the priority concern for Israel as its missile defenses prevented the destruction of hundreds of civilian and military infrastructure targets. A more useful comparison is of the effectiveness of alternative approaches to defeating offensive missiles in varying contexts, e.g., offensive strikes against opponents' missile systems prior to their launch, and ground-based, sea-based, and space-based missile defenses.

Limiting Escalation

In addition, in the absence of Israel's layered defenses, the repeated barrages of attacking Iranian missiles would certainly have led to a much greater escalation of the war. In that case, Israel would have been compelled to engage in much more extensive offensive operations against Iran to destroy Iranian missiles, launchers, and storage sites on the ground prior to their launch. During the war, even with near-absolute air superiority over Iran, discriminate Israeli air strikes apparently destroyed approximately 50 percent of Iran's launchers, and Iranian missile launches continued until the very end of the fighting.¹⁰ In effect, while Israeli air attacks against Iranian missile capabilities on the ground were of great importance, these so-called "left-of-launch" operations to destroy Iranian missile capabilities on the ground were inadequate. The effectiveness of Israeli missile defenses was a necessary complement to and enabled a critical limit on Israel's escalation of the war. This potential value of missile defenses as a means of limiting war escalation again applies to regional conflicts and threats to allies and to intercontinental nuclear missile threats to the U.S. homeland.

Defense Production and Inventories

Finally, the Twelve-Day War demonstrated conclusively the importance of readily available interceptor quantities. The multiple waves of Iranian missile attacks apparently stressed the available inventory of U.S. interceptors, particularly had they been needed elsewhere



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simultaneously.¹¹ For example, given the rate of use in the Middle East, the U.S. Patriot missile defense system reportedly was reduced to only 25 percent of the number of interceptors needed to support broader Pentagon plans.¹² Prior to the war, Iran reportedly possessed approximately 2,500 ballistic missiles and was producing 50 additional missiles per month.¹³ Had the war occurred months or years later, it could have been a contest between the greater number of Iranian offensive missiles and readily available defensive interceptors. Given the Iranian rate of missile production, this competition may have been disastrous for Israel given the limited production rate of interceptor missiles in Israel and the United States. The question of Iran's nuclear potential, of course, likely was critical with regard to the timing of Israel's attack. However, this question of competing inventories of Iranian missiles vs. available interceptors must also have driven Israeli considerations. This is an important lesson from the Twelve-Day War to be learned for the defense of the United States. The total number of deployed U.S. interceptor launchers for homeland defense now stands at 44 – an absurdly low inventory given the much greater missile threats now facing the United States.

In short, the sufficient production and fielding of missile defense capabilities must be shaped by the number and character of the missile threats to be deterred and defeated. The United States and allies now confront the large and growing missile arsenals of Russia, China and North Korea. NATO Secretary General Mark Rutte recently emphasized the chilling potential of Russia and China launching a simultaneous attack against the West, initiating World War III.¹⁴ Unfortunately, this reality underscores the urgency of the bipartisan Commission on the National Defense Strategy conclusion in its 2024 report: "The commission found that U.S. industrial production is grossly inadequate to provide the equipment, technology and munitions needed today, let alone given the demands of great power conflict. A protracted conflict, especially in multiple theaters, would require much greater capacity to produce, maintain and replenish weapons and munitions."¹⁵

Conclusion

In conclusion, the Twelve-Day War's dramatic duel between Iran's offensive missiles and the defensive interceptors protecting Israel provides lessons regarding the prospective value of Golden Dome's missile defenses for allies and the U.S. homeland. In the absence of Israel's layered missile defenses, Iran's missile attacks would have inflicted much greater devastation. The success of layered missile defenses illustrates their potential effectiveness for denying the coercive effects of Russian, Chinese, and North Korean limited offensive missile threats, i.e., deterring their coercion, and helping to undercut the potential military effects of even large-scale nuclear attacks – thereby helping to deter such strategies. The Twelve-Day War also demonstrated that missile defenses can contribute critically to saving lives and limiting escalation. It also demonstrated: 1) the great value of missile defense as an essential complement to offensive air operations intended to destroy enemy missile capabilities; 2) that "cost-effective at the margin" must not be a decisive criterion for fielding missile defense; and finally, 3) that the United States and allies must move urgently to produce, stockpile, and field



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layered missile defense capabilities in a timely way and in quantities potentially sufficient for multiple, and possibly simultaneous, great power missile threats and attacks.

¹ The White House, Presidential Actions, *The Iron Dome for America*, January 27, 2025, available at <https://www.whitehouse.gov/presidential-actions/2025/01/the-iron-dome-for-america/>.

² Secretary of Defense Pete Hegseth Statement on Golden Dome for America, May 20, 2025, available at <https://www.defense.gov/News/Releases/Release/Article/4193417/secretary-of-defense-pete-hegseth-statement-on-golden-dome-for-america/>.

³ Sebastien Roblin, "How Did Israel's Air Defense Fare Against Iran's Ballistic Missiles?" *Forbes*, July 2, 2025, available at <https://www.forbes.com/sites/sebastienroblin/2025/06/30/how-did-israels-air-defenses-fare-against-irans-ballistic-missiles/>.

⁴ Amy Spiro, "These are the 28 victims killed in Iranian missile attacks during the 12-day conflict," *Times of Israel*, June 29, 2025, available at <https://www.timesofisrael.com/these-are-the-28-victims-killed-in-iranian-missile-attacks-during-the-12-day-conflict/#:~:text=Twenty%2Deight%20people%20were%20killed,at%20home%20with%20his%20family>. See also, Emanuel Fabian, "The Israel-Iran war by the numbers after 12 days of fighting," *Times of Israel*, June 24, 2025, available at <https://www.timesofisrael.com/the-israel-iran-war-by-the-numbers-after-12-days-of-fighting/#:~:text=Iran's%20remaining%20capabilities,launchers%2C%20according%20to%20IDF%20estimates.&text=In%20terms%20of%20Iran's%20defenses,IAF%20fighter%20jets%20and%20drones>.

⁵ Roblin, "How Did Israel's Air Defense Fare Against Iran's Ballistic Missiles?", op. cit.

⁶ See Brad Roberts, *The Case for U.S. Nuclear Weapons in The 21st Century* (Stanford, CA: Stanford University Press, 2016), pp. 35, 99, 103-104, 192-194, 260-262, 268-271.

⁷ Roblin, "How Did Israel's Air Defense Fare Against Iran's Ballistic Missiles?", op. cit.

⁸ See for example, "Trump 'Golden Dome' plan tricky and expensive: experts," *Le Bourget* (France), June 20, 2025, available at <https://www.france24.com/en/live-news/20250619-trump-golden-dome-plan-tricky-and-expensive-experts>.

⁹ See the discussion in Matthew R. Costlow, "A Curious Criterion: Cost Effectiveness at the Margin for Missile Defense," *Information Series*, No. 537, October 21, 2022, available at https://nipp.org/information_series/matthew-r-costlow-a-curious-criterion-cost-effective-at-the-margin-for-missile-defense-no-537-october-21-2022/.

¹⁰ Roblin, "How Did Israel's Air Defense Fare Against Iran's Ballistic Missiles?", op. cit.

¹¹ See Amira El-Fekki, "US Missile Defenses Heavily Depleted in Shielding Israel: report," *Newsweek*, June 27, 2025, available at <https://www.newsweek.com/us-missile-defenses-heavily-depleted-shielding-israel-report-2091465>.

¹² Hugo Lowell, "US has 25% of all Patriot missile interceptors needed for Pentagon's military plans," *The Guardian*, July 8, 2025, available at <https://www.theguardian.com/us-news/2025/jul/08/us-pentagon-military-plans-patriot-missile-interceptor>.

¹³ Fabian Hinz, "Israel's attack and the limits of Iran's missile strategy," *Online Analysis*, International Institute for Strategic Studies, June 18, 2025, available at <https://www.iiss.org/online-analysis/online-analysis/2025/06/israels-attack-and-the-limits-of-irans-missile-strategy/>.

¹⁴ See Taryn Pedler and Will Stewart, "World War III will start with simultaneous Xi and Putin invasions," *Daily Mail.com*, July 6, 2025, available at <https://www.dailymail.co.uk/news/article-14879371/World-War-III-start-simultaneous-Xi-Putin-invasions-taking-globe-brink-Armageddon-warns-NATO-chief-Mark-Rutte.html>.

¹⁵ As reported in, Tom Jurkowski, "National Defense Strategy Commission: We Are Not Prepared," *RealClearDefense*, October 21, 2024, available at



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https://www.realcleardefense.com/articles/2024/10/21/national_defense_strategy_commission_we_are_not_prepared_1066457.html?utm_campaign=dfn-ebb&utm_medium=email&utm_source=sailthru.

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