

**Establishing a Space National Guard: Benefits, Challenges, and Modern Strategic
Considerations**

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Executive Summary

Background

There are currently two contrasting paths for the future of Air National Guard space missions: the pursuit of a Space National Guard or the divestment of space missions to the Space Force.

Policy Considerations

- Legislative Proposal 480, sponsored by former Air Force Secretary Kendall and included in the 2025 National Defense Authorization Act, directs the transfer of covered space functions and personnel of the National Guard to the Space Force without requiring the consent of state governors.
- The 2025 NDAA directs the transfer of 578 Air National Guard space personnel among the states of Alaska, California, Colorado, Florida, Hawaii, and Ohio.
- Space Force is actively pursuing transferring of all Air National Guard space missions and personnel by 1 October 2025 to comply with the 2025 NDAA. An accelerated timeline considering the law directs transfer to be complete in 8 years.
- Currently two parallel legislative bills have been introduced by the HASC and SASC titled “Space National Guard Establishment Act of 2025”, directs a one-star Brigadier General director and reports to the Director of the Air National Guard.
- This new bill would provide for an “as-is” transition approach whereby the space staff within the Air National Guard, and all space units specified shall be transferred to the Space National Guard to serve under the Director of the Space National Guard.

Wartime Readiness Considerations

- Establishing a Space National Guard ensures zero mission disruptions. This allows us to focus on readiness and operational effectiveness without any interruptions.
- A survey conducted as part of this research to determine how many Air National Guard space personnel would voluntarily transfer to the Space Force found that less than 20% of all surveyed personnel would consider transferring.
- Over 70% of Air Guardsmen conducting space missions are part-time surge-to-war members who voluntarily and purposefully enlisted and/or commissioned into the Air Guard for the flexibility of serving while maintaining their civilian job status and to continue residing in their home geographical location.
- The Space Force is generating policy that will allow Guardians to begin their service in a full-time capacity to establish fundamental skills. Once proficient and experienced, they can access part-time roles throughout their careers, aligned with service needs to develop or maintain specialized expertise.
- This Space Force policy does not coherently address how current Air Guard part-time surge-to-war personnel assigned to space missions will be paid or career managed in their part-time status.
- Air Guard part-time members performing space missions have stated that they will not transfer due to the lack of guidance and protection of their status which has direct Readiness implications to critical Space Force missions (eg. Missile Warning and Space Electromagnetic Warfare).

Cost

- This cost-effective approach (one-time cost of < \$300,000 for heraldry and uniforms) allows for efficient allocation of resources while retaining the necessary capabilities.
- To do a holistic transfer of missions and personnel to the Space Force: annual costs of upwards of \$156 million, to support these new units, combined with the \$885M to stand-up required infrastructure, is a bill of over \$1B to establish what is already paid for.

Conclusion

It is crucial that we carefully consider the long-term implications and strategic benefits of each path. A well-trained, well-equipped Space National Guard would serve as a powerful deterrent, reducing the likelihood of conflict and ensuring the peaceful use of space for generations to come.

Abstract

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The creation of a Space National Guard as the reserve component of the United States Space Force has become a contentious issue, raising important questions about national defense priorities, fiscal responsibility, and organizational efficiency. This paper evaluates the strategic merits and drawbacks of establishing a Space National Guard, analyzing arguments from both supporters and opponents. Through research and analysis, this study determined Army National Guard soldiers tend to have an institutional interest in retaining its space-related functions, resisting full consolidation under the United States Space Force on grounds of operational necessity. The Air National Guard personnel with space-related responsibilities have advocated for the establishment of a Space National Guard to better align their missions with the organizational structure of the United States Space Force. This paper highlights a path forward for the transition to a Space National Guard from the existing Air National Guard airmen who support the United States Space Force.

Introduction

The proposal to establish a Space National Guard as the central reserve component of the United States Space Force has sparked considerable debate, presenting a range of arguments both in favor of and against its creation. Key concerns include the financial implications, bureaucratic challenges, and the necessary resources to organize, train, and equip an additional component of the National Guard. This paper seeks to critically assess the strategic costs and benefits of a Space National Guard, aiming to determine whether the potential advantages outweigh the inherent risks, expenses, and administrative complexities involved.

For decades, the United States has been a pioneer in space exploration, innovation, and security. Our satellites provide critical capabilities: global positioning systems for navigation, early warnings for missile defense, and communications that link our forces globally. Yet, with this progress comes vulnerability. Space is no longer a sanctuary; it is a contested domain where adversaries develop capabilities to disrupt, degrade, or destroy our assets. From anti-satellite weapons to cyberattacks on space systems, the threats are real and growing.

This is not just a military problem. It is a national security problem. It affects our economy, our infrastructure, and our way of life. A disruption in space operations could cripple supply chains, hinder emergency response, and endanger lives. This is why the United States needs a resilient and prepared force to protect and defend our interests in space.

The United States needs to address a challenge that demands our urgent attention and decisive action—a challenge that lies beyond our atmosphere, in the vast and ever-evolving domain of space. As we witness the rapid growth of space activities and the increasing reliance on space-based systems for our security, economy, and daily lives, the time has come to build the

case for enhancing the Space Force's ability to deliver space effects by establishing a Space National Guard.

Background

For over 380 years, the National Guard has been America's first line of defense. It is the bridge between the federal and state governments, the military, and civilian communities. Space supporting guardsmen bring not only military expertise but also civilian skills that enhance innovation and adaptability. They are part of the communities they serve, ensuring a rapid and effective response to local, national, and international crises. The Air National Guard has 25 years' experience providing unit equipped space missions sets, including operational command and control, satellite operations, mobile, survivable and endurable operations, early warning radar, space intelligence and electromagnetic warfare missions. The Army National Guard provides support to the U.S. Space Force (USSF) through various units, primarily focusing on providing space-based intelligence, support, and technical operations. The 117th Space Battalion, based in Colorado Springs, is a key unit, fielding Army Space Support Teams that deploy globally to enhance intelligence and operations planning. Additionally, units like the 213 Space Warning Sq in Alaska, 148 Space Operations Sq in California, and others across the states contribute to space operations. (Colorado National Guard Official DOD Website, 2024)

When the Trump administration launched the Space Force in 2019, the Chief of the National Guard Bureau at that time tasked an operational planning team with exploring the establishment of a Space National Guard as a reserve component. Simultaneously, the Secretary of the Air Force initiated an Initial Planning Team within the Headquarters Air Force staff to investigate a progressive phased approach that would enable Guardians to transition between full-time and part-time roles. These two competing yet complementary strategies have ignited a

lively debate among lawmakers, as they consider the bureaucratic implications and actual costs associated with each option.

Since the creation of the Space Force in December 2019, Air National Guard Space units have become separated from the parent service, thus severing the operational, administration and culture of the Air National Guard units. When the Air Force was created in 1947 the Air National Guard was included as part of the establishment of the overall organization. The establishment of the Space Force did not include Air National Guard Space units which were part of the force structure of Air Force Space Command for the last 25 years. By inadvertently leaving the Air National Guard Space units out of the Space Force, this created a disjointed bureaucracy. This disjointedness goes against the principles of the Chief of Space Operations Planning Guidance, “Tight alignment of responsibility, accountability, and authority is key to speed and agility”. Air National Guard Space units are not properly aligned under the USSF, thus, in order for the Space Force to be able to activate, organize, train and equip the Air National Guard, Space units in the USSF will have to maneuver through USAF processes and procedures. This adds several additional layers of bureaucracy, which no other Service has in their organizations. In addition, the current grey area the Space Air National Guard units are placed under impacts the overall recruitment for the current force, because the new recruits are unclear if they are joining the Air Force or the Space Force. The ability to tell the new recruits where the Air National Guard Space units will fall has yet to be determined five years after the USSF creation. Therefore, the ability to recruit to the Air National Guard Space aligned units is starting to be impacted.

Opposition

Initial objections to the establishment of a Space National Guard centered around concerns regarding perceived exorbitant costs and the potential for increased bureaucracy. In June 2020, the Congressional Budget Office (CBO) estimated that the expenses associated with a Space National Guard could range from \$100 million for a smaller component to as much as \$500 million for a larger one. The higher estimate assumes that the Space National Guard would expand to mirror the same ratio of National Guard to Active Component forces of 32%. The CBO's report, *The Cost of Creating a Space National Guard*, was created at the request of the Chairman of the Joint Chiefs and ranking member of the Senate Armed Services Committee. In this study, they break down estimated costs for both a smaller and larger Space National Guard footprint and make estimates on associated required infrastructure. According to the CBO report of 2020:

If the space-related units in the National Guard today—which consist of 1,500 personnel—were transferred to the Space National Guard, this option would require another 3,400 to 4,300 personnel (to reach a total of 4,900 to 5,800 personnel). Those additional personnel would be a mix of full-time and part-time personnel, which reflects the current composition of the Air National Guard. (Approximately 25 percent are full-time personnel, costing an estimated \$268,000 each, and about 75 percent are part-time personnel, costing an estimated \$51,000 each.) Those personnel would result in additional operation and support costs of \$355 million to \$460 million per year. CBO also estimates that \$30 million per year would be needed to support national functions, resulting in total operational and support costs of \$385 million to \$490 million per year for this option.

In addition, CBO estimates that the larger Space National Guard would require \$400 million to \$900 million in one time costs to construct additional facilities (such as armories) and to equip the new units. The difference in one time costs between the low and high end of that range primarily reflects the number of construction projects a more geographically limited Space National Guard might require versus the much larger number of construction projects that might be needed for a Space National Guard that would be present in all states and territories that currently have Air and Army National Guards. At the lower end of the range, the Space National Guard would be present in fewer than half of the states and territories and thus would require relatively few construction projects. At the high end of the range, the Space National Guard would be present in all states and territories and thus would require more construction projects.

The Office of Management and Budget (OMB) and various National Defense Authorization Acts (NDAA) from the past, have also expressed opposition to the Space National Guard. The 2022 NDAA (House) opposed the Space National Guard, emphasizing the need to minimize administrative expenses and develop space capabilities without creating a new component. The 2022 NDAA (Senate) suggested renaming the Air and Space National Guard to avoid significant administrative expenses. However, the 2023 NDAA (Senate) acknowledged the proposal for the establishment of a Space National Guard, highlighting the benefits of a single component personnel management system for uninterrupted operational surge capacity and valuable tool for recruiting and retention. As part of the 2025 NDAA, Legislative Proposal 480 was introduced to divest the national guard space missions into the United States Space Force. Recently, other legislative proposals have reassessed the topic of creating the Space National Guard. On March 12, 2025, United States Senators John Hickenlooper and Mike Crapo

reintroduced the *Space Guard Establishment Act* to create a Space National Guard, incorporating current Air National Guard and Army National Guard members performing space-related duties within the Space Force command structure (Hickenlooper, Crapo, 2025). This is a significant stance of bipartisan support from the Senators of Idaho and Colorado.

Legislative Proposal 480

The 2024 NDAA Section 924 directed the Secretary of Defense to assess the feasibility and advisability of transferring the space components of the Air National Guard to the Space Force. This proposal identified 578 positions within nine units, in six states, and facilitated Legislative Proposal 480 (sponsored by the Secretary of the Air Force), which would allow the transfer of "covered space functions" and personnel of the Air National Guard to the United States Space Force *without requiring the consent of state governors*. The National Guard remains under the control of the state governor but receives federal funding. Under Title 32 of the U.S. Code, a state governor has significant authority over National Guard personnel when they are operating under state control but funded by the federal government. Here are some key aspects of a governor's authority over Title 32 Guardsmen (Cornell Law School, 2022):

- **Activation & Deployment:** Governors can mobilize National Guard troops for state emergencies, such as natural disasters, civil disturbances, and public health crises.
- **Law Enforcement Role:** Unlike Title 10 (which places Guardsmen under federal control), Title 32 allows them to act in a law enforcement capacity when directed by the governor.
- **Training & Readiness:** Governors oversee training programs to ensure Guardsmen are prepared for state and federal missions.

- Coordination with Federal Agencies: While under Title 32, Guardsmen remain under state control, but they can still support federal missions like border security and cybersecurity.
- Waiver Authority: Governors can authorize Active Guard and Reserve duty for Guardsmen, allowing them to perform training for regular military components.

The distinction between Title 32 and Title 10 is important—Title 10 places Guardsmen under federal control, while Title 32 keeps them under state authority with federal funding.

This division of authority ensures a balance between state and federal power, but it can sometimes lead to disputes or delays in situations where state and federal interests differ.

(national guard.mil) The proposal submitted by the Secretary of the Air Force has been met with formal challenges by 53 governors led by Gov Jared Polis of Colorado (Appendix 3). In a letter submitted by Gov Polis to the Secretary of Defense, Lloyd Austin, he stated: “This proposal’s enactment would not only have substantial negative effects to national security but would also have broader detrimental philosophical implications to the very role of the national guard, gubernatorial authority therein, and the continued existence of state-based citizen servicemembers.” (Polis, 2 Apr 2024) This letter was followed by another formal letter signed by 53 governors stating, "This legislation disregards gubernatorial authorities regarding the National Guard and undermines over 100 years of precedence as well as national security and military readiness. (Austin, 29 Apr 2024)

The Air National Guard has Guardsmen deployed overseas executing the space mission. Many Air National Guard units are deployed in place, meaning they’re doing their mission every single day, from home station. Enduring missions exist such as at the 148th Space Operations Squadron who operate the Space Force's protected Military Satellite Communication systems

which provide the warfighter with communications during peacetime, and throughout the full spectrum of conflict. In addition, we have Clear Air Force Station which serves as home to the 13th and 213th Space Warning Squadrons—composed of Arctic Airmen from the Alaska Air National Guard, and Space Force Guardians— which provide 24/7 missile warning, missile defense, and space domain awareness. The execution of LP 480, would be a huge risk to national security. (Knight, 13 Dec, Interview)

Next Steps

The United States Space Force requires surge capability to effectively engage in future conflicts, and the National Guard component is ideally positioned to provide this capability while minimizing costs. A Space National Guard would be instrumental in delivering the necessary surge capacity for the Space Force. As General Raymond, former Chief of Space Operations, stated, “We've been operating with the Guard for 25 years; it provides critical capability both in terms of personnel and equipment. We can't fulfill our mission today, nor can we succeed in the future, without them.” The active component of the Space Force enables a greater focus on day-to-day operations, while the establishment of a National Guard component allows for the development of a robust surge-to-war capability. For instance, the Air National Guard's Space Electronic Warfare units constitute approximately 60% of the overall operational capacity, effectively doubling or tripling the surge capability of the Space Force (National Guard Factsheet). This part-time service model offers a much-needed surge capacity for the Space Force at only one-third the cost of an active-duty counterpart. Moreover, the National Guard draws personnel with strong community ties, many of whom hold high-level security clearances and work in critical roles as civilian contractors, government agents, or in the private sector.

This unique pool of talent adds significant value to space operations, enhancing the overall effectiveness of the Space Force.

Concerns have arisen regarding the alignment of force management and training between Air National Guard (ANG) space units and the Space Force. ANG space units currently maintain Air Force Specialty Codes instead of Space Force Specialty Codes, creating challenges in training and personnel management. While the Air National Guard has established Space Force requirements ready for implementation, apprehension remains due to the 2024 National Defense Authorization Act (NDAA) directive to transition covered ANG space units. This uncertainty has hindered the execution of these requirements. For example, Space Electronic Warfare Combatant Command requirements cannot be fulfilled because the Space Force has not committed to tasking Air National Guard units to meet these needs. This has a significant impact on providing critical space warfighting capabilities to both the Indo-Pacific and European theaters under U.S. Space Command. Given the strategic context of Great Power Competition, the decision to establish a Space National Guard is increasingly urgent. Great Power Competition refers to the ongoing rivalry among global powers—particularly the U.S., China, and Russia—in areas such as military strength, economic influence, and technological advancement. The effects of this competition are profound, influencing global stability, alliances, and international norms. The issue for Congress is how U.S. defense planning and budgeting should respond to GPC and whether to approve, reject, or modify the Biden Administration's defense strategy and proposed funding levels, plans, and programs for addressing GPC. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements of U.S. defense industrial base. (Congressional Research Service, 2024)

To support the joint warfighter effectively, it is essential to maintain robust space capabilities, irrespective of organizational structure. Continuing to house these capabilities under the current organizational structure is unsustainable and complicates force generation and presentation. Re-establishing space missions from the Air National Guard to the Space Force, is not a wise option, as these missions must reside within the United States Space Force.

Establish a Space National Guard or Transfer of Air Guard Space Missions to the Space Force

The present status of Air National Guard space missions (Figure 1), are currently shared across seven states, including Hawaii, Alaska, California, Colorado, Ohio, New York, and Florida. There are two potential paths forward: the establishment of a Space National Guard or the transfer of existing space missions from ANG units to active-duty counterparts. Each option presents its own set of advantages and challenges, making it essential to carefully evaluate the implications of both paths.

There are advantages to continuing the *pursuit of a Space National Guard*. One of the primary concerns raised against the establishment of a Space National Guard are political barriers it may face. Legislative Proposal 480, sponsored by Secretary Kendall and approved in the 2025 National Defense Authorization Act, terminates the establishment of a Space National Guard and allows the transfer of "space functions" and personnel of the Air Guard to the Space Force without requiring the consent of state governors. This is an unprecedented attempt that will result in expertise loss as well as set a detrimental precedence.

Establishing a Space National Guard ensures zero mission disruptions. The Air Guard is already "on mission" with Air Guardsmen currently training and executing assigned space missions. By maintaining long-term stability for space missions, the Space Force can avoid the

lengthy process of rebuilding and reassigning missions. This allows Space Guardsmen to focus on readiness and operational effectiveness without any interruptions.

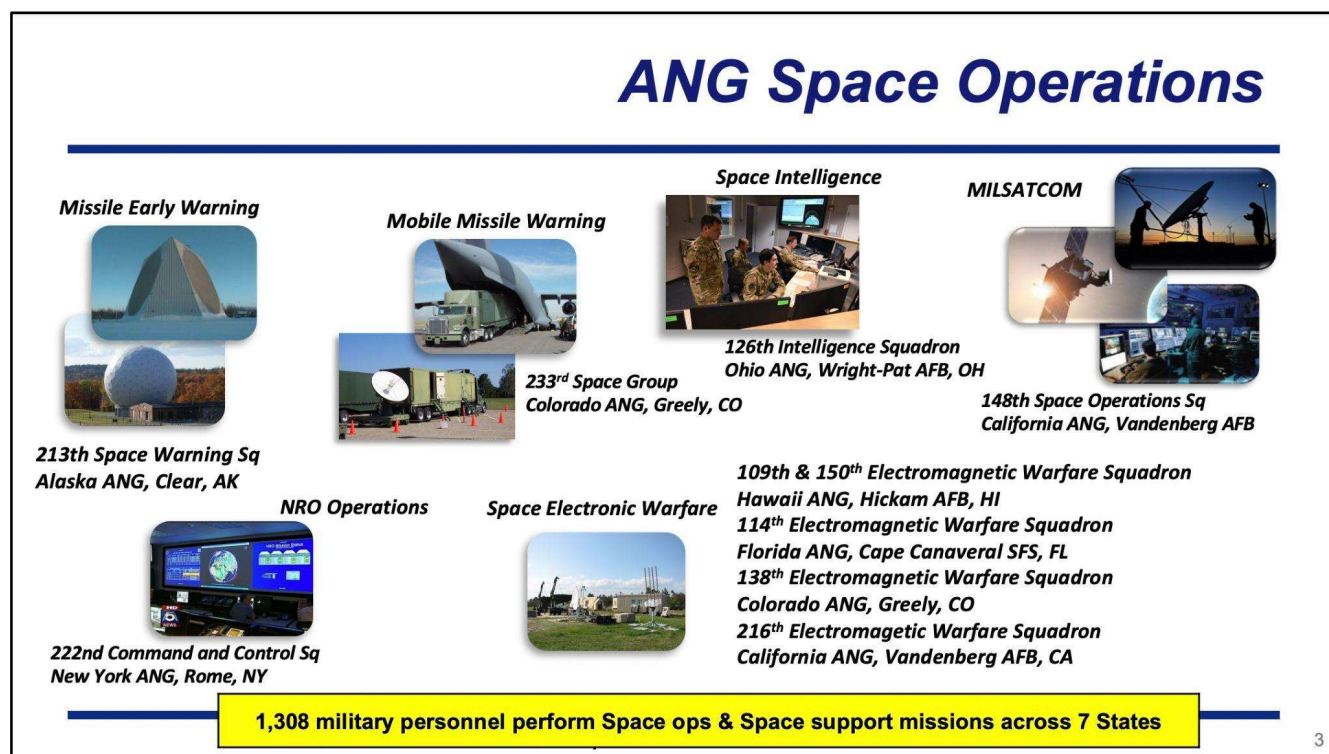


Figure 1: Air National Guard Space Operations

Turning our attention to the budget, pursuing a Space National Guard does not incur any additional costs. The one-time cost of \$234,000 (Appendix 1) for heraldry and uniforms, which represents around 0.000018% of the FY25 \$12.8 billion budget for the Air National Guard, is a small investment compared to the projected \$891M of military construction, military personnel, re-training and equipping for these already paid for missions. This cost-effective approach allows for the efficient allocation of resources while retaining the necessary mission capabilities.

When it comes to personnel, establishing a Space National Guard retains 100% of Citizen-Airmen doing the missions of Space Force guardians. This ensures that highly skilled and dedicated personnel remain part of the force. Moreover, the Space National Guard would allow for community-based service in diverse locations across the United States, strengthening

our ties with local governments and enhancing recruitment and retention efforts. The ability of drill status guardsmen to quickly mobilize for both domestic and international missions makes them an indispensable force for national security and disaster relief.

In terms of security, a Space National Guard ensures uninterrupted enduring missions like Space Electronic Warfare, Military Satellite Communications and Space-based Intelligence. It will also maintain expeditionary capabilities and access to the State Partnership Program (SPP) which is only executed by the National Guard and is crucial for collaboration and cooperation with our international partners. Through the State Partnership Program, Air National Guard space units are in an advantageous position to facilitate relationships across global regions of influence, in highly contested regions such as the Indo-Pacific theatre. Former President Biden was clear in his interim National Security Strategy which stated, “by bolstering and defending our unparalleled network of allies and partners, and making smart defense investments, we will also deter Chinese aggression and counter threats to our collective security, prosperity, and democratic way of life” (Biden, Interim National Security Strategic Guidance (2021)). The SPP program within the Air National Guard can be leveraged to meet this objective far better than most other initiatives and has been proven in building relationships in other areas of responsibility. One key example of how ANG Space units provide this partnership building was with the execution of the Vulcan Guard multinational exercise where approximately 50 Air Guardsmen and the Romanian and Polish Armed Forces focused on space as a warfighting domain at North Atlantic Treaty Organization’s Allied Air Command in March 2024. The sixth iteration of the series — which was led by the Guard — underscored mission planning with two of America's NATO partners. Poland and Romania are developing their own space capabilities

amid rising global threats in the domain. (National Guard Association of The United States, 2024)

The establishment of a Space National Guard would enable a seamless alignment with the Space Force, ensuring uniformity in culture, training standards, and mission support. Without this alignment, the Space Force risks creating unnecessary bureaucracy as it tries to integrate Air National Guard space units into the evolving cultural, administrative, and resource allocation shifts within the active component. The current organizational structure can be effectively adapted using existing resources. One potential approach for this formation is illustrated.

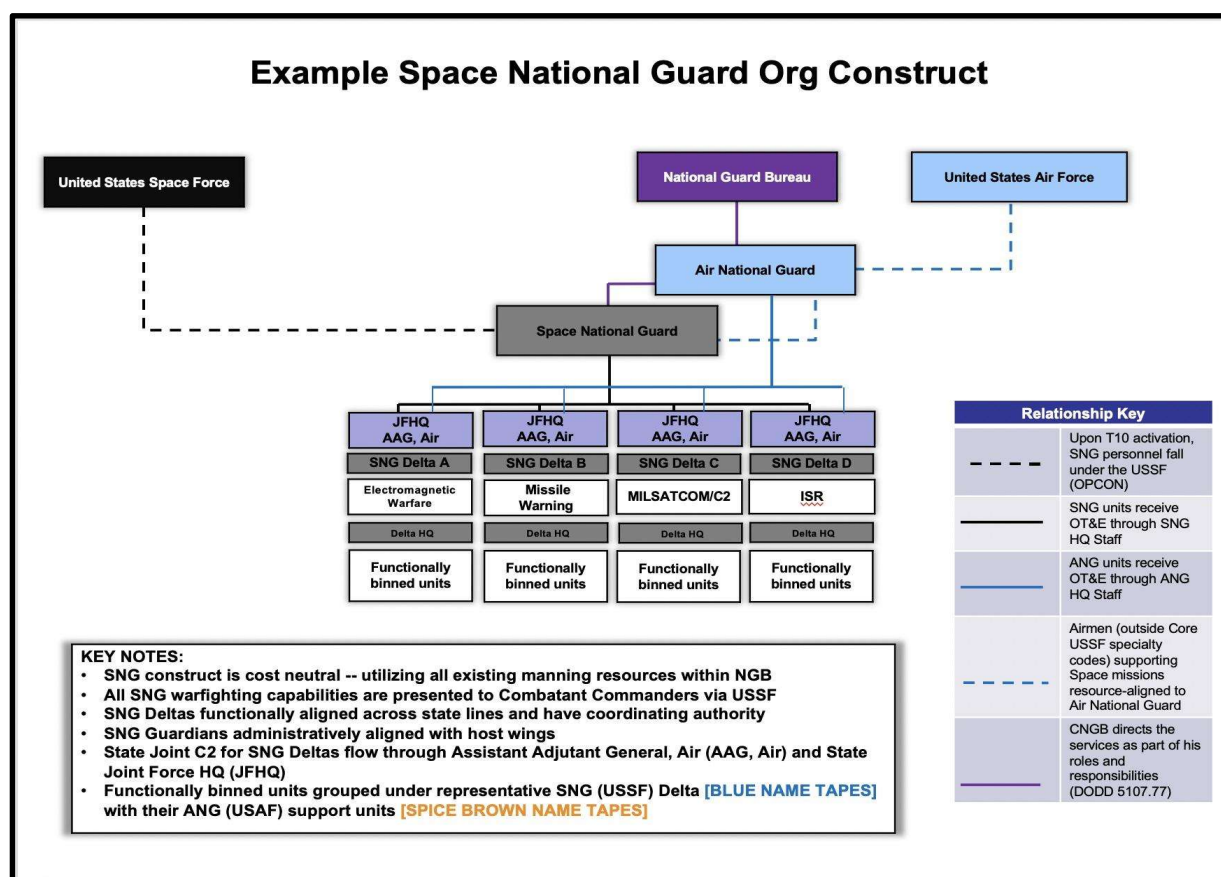


Figure 2: Example Space National Guard Organization Construct

This formation shall be aligned under the Air National Guard reporting to the Chief of the National Guard Bureau via the Director of the Air National Guard to ensure three and four-star advocacy at the highest levels. In addition, this will offer independent resourcing and allocation of manpower as a service retained force. Lastly, a Space National Guard is readiness focused, that ensures keenness and retention are maintained and supported. It also may preserve Air National Guard civilian expertise and knowledge in support of space missions, which is invaluable for the success of our national defense.

The option to divest all space missions currently supported by Air National Guard organizations raises serious concerns regarding national security. This route is fraught with significant obstacles and drawbacks. Firstly, it requires approval from state governors, and while the 2024 National Defense Authorization Act (NDAA) indicates a move towards divestment, it lacks a clear strategy for reallocating these missions (see Figure 3). This ambiguity poses risks to the future of our national security space capabilities.

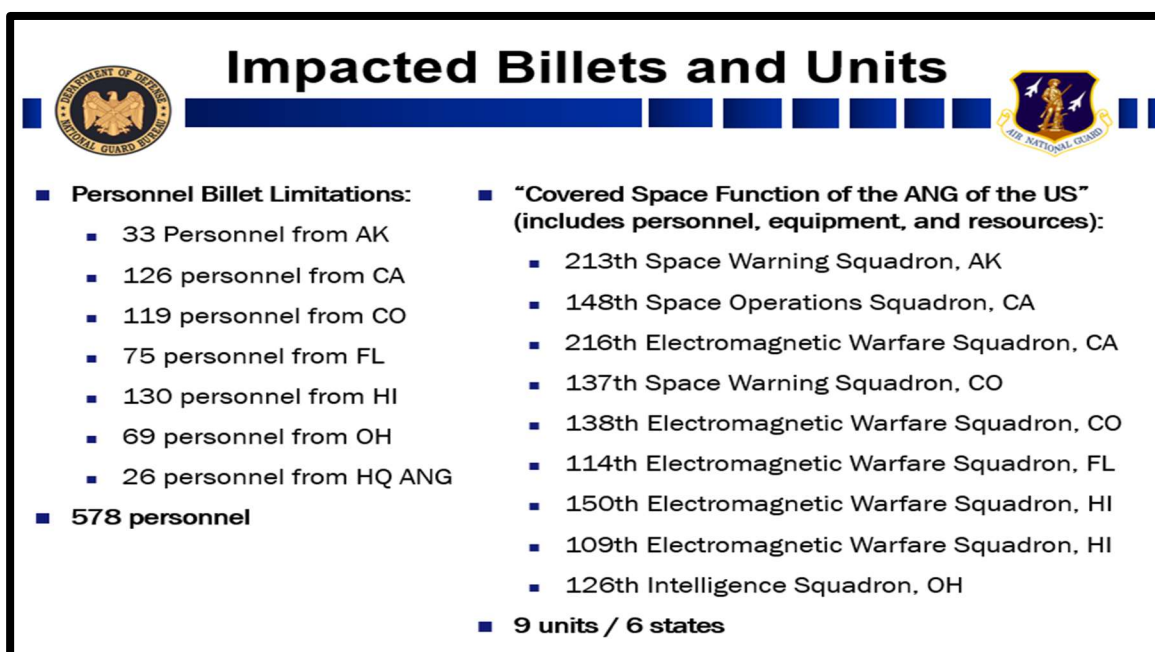


Figure 3: Air National Guard organizations affected by LP 480

In terms of timeline, the divestment process could take approximately 7 to 10 years to rebuild the necessary infrastructure and capabilities. Consequently, this delay would mean halting Air National Guard space deployments, which could severely impact the operational readiness of the Space Force. Additionally, transitioning these responsibilities would require the Space Force to increase its personnel, a move that would also necessitate further congressional approval. This scenario risks stretching our resources and could impede the healthy development of our services.

From a financial perspective, the annual cost of \$92 million for the support of these new units, when combined with the previous \$891 million stated, totals nearly \$1 billion—an amount that is already embedded and paid for in the Air National Guard annual budget. Such a substantial and new financial commitment warrants a careful examination of the practicality and long-term sustainability of divestment.

It's significant to point out that when the Space Force was established, the National Guard Bureau initially funded the National Guard Bureau Space Operations Directorate (NGB-SO) using existing resources, starting with a team of 34 guardsmen. However, by May 2024, NGB decided to dissolve the NGB-SO directorate to reallocate those personnel and provide better support for space missions within the ANG HQ staff. For effective management of the Space National Guard, additional essential staff roles will be needed, though their associated costs will be minimal compared to the complexities and expenses involved in managing Space Force personnel.

Maintaining the current structure is essentially cost-neutral, as the existing units and personnel are already funded within the current Air National Guard budget. The establishment of the Space National Guard would leverage existing Base Support Operations at each Wing

location—whether on Air Force or Air National Guard installations—without generating new demands on those facilities. While no Reserve Component is truly cost-free, in this case, all personnel and resources are currently paid for in today’s ANG budget. Establishing a Space National Guard would enable more accurate alignment of funds, allowing the Space Force to advocate for its true operational reserve component costs during the annual budgeting process. This would ensure the Space Force is accountable for its specific requirements, while enabling the Air Force to better allocate its budget toward its core missions.

If the Space Force continues in accordance with LP 480 and the design of a new part-time organization assigned to the Space Force, this will cause a reliance upon the Space Force Personnel Management Act (SFPMA). The SFPMA aims to enable unity of command over all Department of the Air Force space forces, maximize flexibility for organizing, training, and equipping, and ensure access to part-time forces for surge capacity. This legislation introduces a new personnel model for the United States Space Force (USSF), allowing Guardians to serve in both full-time and part-time capacities. This new system to pay and account for guardian careers, is not required as it already exists within the National Guard. The 2024 NDAA Section 924 identified costs associated with transferring Air National Guard space functions to the Space Force. However, an internal Air National Guard survey revealed that a high percentage of Air National Guard space professionals prefer to remain in the Air National Guard or retire rather than transfer to the Space Force (Appendix 2). This could lead to additional costs for recruiting and training new space professionals to the mission left uncovered by the Air National Guard.

The establishment of a Space National Guard could provide access to qualified space operational and space intelligence professionals within the civilian workforce who are currently serving in the National Guard. The National Guard has a proven system for managing full and

part-time personnel, which would tap into the talent of the space and intelligence communities enabling opportunities to develop future space capabilities for the Space Force. Additionally, state partnerships and operational exercises as previously mentioned, like Vulcan Guard, could enhance allied relationships. In contrast, the divestment of Air Guard space personnel would result in an estimated 90% separation (Appendix 2), impacting the lives and careers of thousands of dedicated individuals. The loss of airmen with 25+ years of experience would have a detrimental effect on operational effectiveness and readiness.

Furthermore, divestment would lead to the termination of Air National Guard deployment support and the end of National Guard Reserve Equipment Appropriation (NGREA) access for space missions, further diminishing our capabilities. The National Guard and Reserve Equipment Account is a Congressionally-added funding source designed to enhance the readiness and capabilities of the National Guard and Reserve forces. It helps bridge equipment gaps between the Active Duty military and the Reserve Components, ensuring that Guardsmen and Reservists have the necessary tools to perform their missions effectively. (National Guard and Reserve Equipment Account Funding Website, 2024) Modernized capabilities from Space NGREA projects have led to the adoption of new systems by the Space Force. Lastly, from a National Security standpoint, divestment would result in degradation to our country's Nuclear Command and Control and Strategic Missile Warning architectures, posing risks and vulnerabilities. The Air National Guard plays a vital role in the Nuclear Command and Control and Strategic Missile Warning architecture. One key unit involved is the Mobile Ground System, which processes data from Defense Support Program satellites to provide survivable and enduring missile warning capabilities (United States Air Force Historians, 2021)

As we move forward, it is crucial that we carefully consider the long-term implications and strategic benefits of each path. The decision we make will shape the future of our space missions and our national security. We need to choose wisely, ensuring that we maintain the capabilities and readiness necessary to protect our interests in the space domain.

The stand-up of a Space National Guard will be more efficient as we invest in drill status (part-time) guardsmen who maintain their skills and are ready at a moment's notice. These Honorable Lloyd J. Austin III (2024, April 29), *Formal Communication with Secretary Austin*

airmen can seamlessly integrate into the Space Force Generation Cycle, with predictable deployments and capability. Commander relationships will be purer as we are not administratively and operationally mixed. “For five years now, we have delayed the Space National Guard decision at the expense of the mission. Space electronic warfare (for example) could have helped with domestic and counter drug operations. In addition, we can supplement active duty, maintain talent and provide paths of leadership opportunity for our officer and enlisted corps.” (Knight, 13 Dec, Interview)

Conclusion

Establishing a Space National Guard is not just a matter of defense; it is a matter of deterrence. By demonstrating our commitment to protecting our space assets, The United States sends a clear message to potential adversaries: the United States will not stand idle while our interests are threatened. A well-trained, well-equipped Space National Guard would serve as a powerful deterrent, reducing the likelihood of conflict and ensuring the peaceful use of space for generations to come.

The Army maintains autonomy over its space operations and tends to take a more agnostic approach while acknowledging the importance of the space mission and multi-domain

operations. The Army National Guard is expected to play a role in supporting the Golden Dome, a proposed homeland missile defense system similar to Israel's Iron Dome. The Department of Defense is working with various agencies, including the Missile Defense Agency, to develop this system. While details on the National Guard's specific contributions are still emerging, potential areas of involvement could include Air Defense Operations, Cybersecurity Support, Logistics/Maintenance and Emergency Response. (Lopez, 2025)

There are current house and senate supported bills going forward to be established in the 2026 National Defense Authorization Act. Bipartisan legislation introduced in both chambers of Congress should create a Space National Guard. The Space National Guard Establishment Act would transform 14 Air National Guard units with space missions across seven states into a reserve component of the U.S. Space Force. The bill would allow Guard space units to continue supporting Space Force missions uninterrupted without any new personnel, units or facilities. It would also override Air Force Legislative Proposal 480, passed into law in the 2025 NDAA. (<https://www.ngaus.org/newsroom/space-guard-bill-launched-house-senate>)

The strategic costs and benefits of a Space National Guard must be carefully weighed. While there are significant costs and bureaucratic challenges associated with establishing a Space National Guard, the benefits of maintaining a dedicated and experienced space force component within the National Guard could outweigh these concerns. The existing funding for Air National Guard space programs, the potential for minimal additional costs, and the strategic advantages of a unified space force component justify the consideration of a Space National Guard. Ultimately, the decision should prioritize maintaining and enhancing space capabilities to meet the demands of the Great Power Competition.

References

- Congressional Research Service . (2024, August 28). *Great Power Competition: Implications for Defense—Issues for Congress* . Great Power Competition: Implications for Defense-issues for Congress.<https://www.dau.edu/cop/pm/documents/great-power-competition-implications-defense-issues-congress-0>
- Cornell Law School Legal Information Institute. (2022, December 22). 32 U.S. Code § 328 - Active Guard and Reserve Duty: Governor’s Authority. Legal Information Institute. <https://www.law.cornell.edu/uscode/text/32/328>
- Costs of creating a Space National Guard. Congressional Budget Office. (2020, June 2). <https://www.cbo.gov/publication/56384>
- Crapo, Hickenlooper lead bill to establish Space National Guard: U.S. senator Mike Crapo of Idaho. U.S. Senator Mike Crapo (2025, March 12). <https://www.crapo.senate.gov/media/newsreleases/crapo-hickenlooper-lead-bill-to-establish-space-national-guard>
- Department of Defense Air National Guard A3/10 Space Operations, March 2025, Impacted Billets {Space Operations Today and Tomorrow in the Air National Guard}
- Department of Defense (DOD). (n.d.). Fiscal Year 2024 Fact Sheet. National Guard and Reserve Equipment Account Funding. <https://www.ngaus.org/sites/default/files/2023-03/NGREA%20Fact%20Sheet%20FY24.pdf>
- Defense Media Activity / Department of Defense . (2024.). Colorado Army National Guard. CO National Guard. <https://co.ng.mil/Army/Space-Support-B>
- DOD’s acquisition community already working on Golden Dome, big team effort required. U.S. Department of Defense. (n.d.). <https://www.defense.gov/News/News->

Stories/Article/Article/4127682/dods-acquisition-community-already-working-on-golden-dome-big-team-effort-requi/

Governor Polis, J (2024, April 2), Formal Communication with The Honorable Lloyd J. Austin
Great Power Competition: Implications for Defense-issues for Congress. (n.d.).

<https://www.dau.edu/cop/pm/documents/great-power-competition-implications-defense-issues-congress>

Guard leads space exercise with NATO partners. National Guard Association of the United States. (2024, April 9). <https://www.ngaus.org/newsroom/guard-leads-space-exercise-nato-partners>

Hickenlooper, Crapo reintroduce bipartisan bill to establish Space National Guard. Senator John Hickenlooper. (n.d.). https://www.hickenlooper.senate.gov/press_releases/hickenlooper-crapo-reintroduce-bipartisan-bill-to-establish-space-national-guard/ fact sheet

Hearing On National Defense Authorization Act For Fiscal Year 2023, Department of the Air Force Fiscal Year 2023 Budget Request, 117th Cong. (2022) (Testimony of Gen John Raymond, Chief of Space Operations).

Honorable Lloyd J. Austin III (2024, April 29), Formal Communication with Secretary Austin
Legislative Proposals for National Defense Authorization Act for fiscal year 2025 (2024, March 29).https://ogc.osd.mil/Portals/99/OLC%20Proposals/FY%202025/29Mar2024Proposals.pdf?ver=1n2_LXCTde_yaLPbCbGm6w%3d%3d

Lopez, C. T. (2025, March 19). DOD's acquisition community already working on Golden Dome, big team effort required. U.S. Department of Defense.

<https://www.defense.gov/News/News-Stories/Article/Article/4127682/dods-acquisition-community-already-working-on-golden-dome-big-team-effort-requi/>

National Defense Authorization Act for fiscal year 2020 (2019, December 20).

<https://www.congress.gov/116/plaws/publ92/PLAW-116publ92.pdf>

National Guard Association of The United States. (2024, April 9). Guard leads space exercise with NATO partners. National Guard Association of the United States.

<https://www.ngaus.org/newsroom/guard-leads-space-exercise-nato-partners>

Office of Management and Budget (OMB) Statement of Administration Policy, 2022-2024 NDAA.

S.3697 - Space National Guard Establishment Act of 2024 <https://www.congress.gov/bill/118th-congress/senate-bill/3697>

Space Operations Today and Tomorrow in the Air National Guard, Powerpoint, Air National Guard A3/10 Space Operations, March 2025

U.S. Department of Defense (DOD). (n.d.). U.S. National Guard Space Operations Fact Sheet. National Guard. <https://www.nationalguard.mil/Resources/Fact-Sheets/Space-Operations>

USAF Unit Histories. (2021, February 19). 137 space warning squadron.

<https://usafunithistory.com/PDF/0100/125-149/137%20SPACE%20WARNING%20SQ.pdf>

Appendix 1

USSF COST TO TRANSFER THE Air National Guard SPACE MISSION

	Nonrecurring Costs	Recurring Annual Cost
USSF MILCON and IT infrastructure	\$ 112,000,000	
USSF to train new required Guardians	\$ 72,000,000	
USSF O&M		\$ 9,140,000
USSF MILPERS for USSF core AFSCs		\$ 53,300,000
USAF MILCON to relocate Air National Guard units from five USSF installations	\$ 460,000,000	
USAF support units – MILPERS, MERCH, O&M		\$ 30,250,000
Total	\$ 644,000,000	\$ 92,690,000

- One-time nonrecurring cost of \$644M
- 7-10 year gap to rebuild to the current career field qualification level of Air National Guard space professionals (impact to readiness)
- Un-programmed end strength increase to USSF to replace Air National Guard authorizations

**COST TO RE-MISSION Air National Guard SPACE OPERATORS THAT DO NOT
TRANSFER TO USSF**

APPN		Cost
3830 - MILCON Air National Guard	2 New Sites	\$ 71,000,000
3840 - O&M Air National Guard	Mission Specific Training & WSS	\$150,160,000
3850 - MILPERS	AFSC Training	\$ 26,679,027

Re-Mission Cost:	\$ 247,839,027
Transfer Cost (above):	\$ 644,000,000
Total Cost:	\$ 891,839,027

O&M COST TO TRANSITION Air National Guard TO Space National Guard

Patch Cost	\$ 9,385
Service Tape Cost	\$ 8,052
Name Tape Cost	\$ 8,198
Flag Cost	\$ 105,800
New Flag Drawing Cost	\$ 18,400
Scroll Replacement Cost	\$ 6,900
Guidon Cost	\$ 7,912
Sign Cost	\$ 69,000
Total Cost	\$ 233,647

SPACE MISSIONS NG CURRENTLY PERFORMS

- NG performed space missions for 27 years
 - NG space units in 7 states
 - Equivalent to 28% of DAF unit-equipped space operations squadrons (14 of 50)
- Only Survivable/Endurable Missile Warning
- 33% of the USSF Ground-based Radar Missile Warning systems on U.S. soil
- 60% of the DAF Offensive Space Electromagnetic Warfare capability
- 50% of the MILSTAR/AEHF ground station capability

Appendix 2

Survey:

Please forward to any current ANG Space Airmen for maximum distro*

ANG Space Airmen,

BLUF: We are conducting a survey to collect your thoughts on the way ahead for Air National Guardsmen supporting Space Force missions. Your names will not be tied to our research.

We are a team of three enrolled in the USC SHIELD (Space, History, Industry, Engineering, Leadership & Deterrence) Executive Program in Global Space and Deterrence. This is a joint program with the University of Southern California's Price School of Public Policy and Viterbi School of Engineering. Its creation benefited from an engagement with the Missile Defense Advocacy Alliance (MDAA). This 8-month program sets out to educate aspiring senior leaders from the military, government, and innovation communities about the intersection of public policy and engineering, which are too often separate within the complex and growing field of defense security. Teams within the program are provided key topics to research in the realm of SHIELD with the culmination of proposals that are presented to key Military leaders and Government lawmakers for legislative action.

Our topic is to investigate the strategic pros and cons of establishing a Space National Guard.

We need feedback from all 1,200 airmen supporting these missions. Can you please proliferate the questions below to your commands and ask they reply to

usc.shield.sng.research.team@gmail.com

1. If a Space National Guard is not established, will you transition to the Active Component US Space Force?

2. In accordance with the 2025 NDAA, ANG members will remain in place at your current unit for 3 years. Would you agree to PCS after the 3-year period?

3. Do you have any comments or concerns that you wish to share?

Col Tony Lujan, USC Shield Participant

Col Todd Hofford, USC Shield Participant

Ms. Mandy Johnson, USC Shield Participant

Results:

Question 1: If a Space National Guard is not established, will you transition to the Active Component US Space Force?

- 23/30 or 76% answered NO
- 2/30 or 6 % answered YES
- 5/30 or 18% answered MAYBE with a variety of factors considered including meeting retirement length of service

Question 2: In accordance with the 2025 NDAA, ANG members will remain in place at your current unit for 3 years. Would you agree to PCS after the 3-year period?

- 20/30 or 64% answered NO
- 5/30 or 18% answered YES
- 5/30 or 18% answered MAYBE

Appendix 3

JARED POLIS
GOVERNOR



136 STATE CAPITOL
DENVER, COLORADO 80203
TEL 303-866-2471
FAX 303-866-2003

April 2, 2024

The Honorable Lloyd J. Austin
Secretary
United States Department of Defense
1100 Defense Pentagon
Washington, D.C. 20301

To Secretary of Defense Austin,

In January 2024, I penned a letter expressing my significant concerns regarding Section 924 of the 2024 National Defense Authorization Act (NDAA) and the Department of Defense (DoD) recommended course of action of moving Air National Guard space missions, equipment, and personnel, into the Title 10 U.S. Space Force. Aside from negative national security implications, my chief concern was the precedent that such a course of action would set.

In accordance with 32 U.S.C. § 104(c) and 10 U.S.C. § 18238, I will continue to oppose any involuntary removals of Colorado Air National Guard space units and personnel as well as any reductions to the Colorado National Guard's force structure.

Legislative Proposal (LP) 480, authorized by the Secretary of the Air Force, would transfer all covered space functions of the Air National Guard to the United States Space Force. In addition, this legislative proposal stated that such transfer shall occur "without regard to section 32 U.S.C. § 104(c) or 10 U.S.C. § 18238".

This direct override of gubernatorial authority to exercise control over the units that are permanently based or removed from their respective states flies in the face of over 120 years of military tradition, organizational structure and efficacy, and precedent. This action would threaten the ability of the National Guard to serve as the operational combat reserve for national security missions as well as its ability to support domestic emergencies. Both of these outcomes are unacceptable.

In addition, this legislative proposal and the precedent it sets, threatens the very existence of the National Guard. If foundational portions of the US Code, such as Title 32, can be overwritten, and personnel can be removed from their states at any time, it puts both missions and people at risk. Each servicemember signed a contract to serve in the Colorado Air National Guard and swore an oath to serve both the United States of America, and the State of Colorado. As their

Appendix 4

National Governors Association Letter, 6 Pages



CHAIR
Spencer Cox
Governor of Utah

VICE CHAIR
Jared Polis
Governor of Colorado

April 29, 2024

The Honorable Lloyd J. Austin III
Secretary of Defense
U.S. Department of Defense
1000 Defense Pentagon
Washington, DC 20301-1000

Dear Secretary Austin:

As Governors representing 53 states, commonwealths and territories, we are writing to express our strong opposition to Legislative Proposal 480 (LP480) submitted by the Department of Defense (DOD) to the Senate Armed Services Committee. This legislation disregards gubernatorial authorities regarding the National Guard and undermines over 100 years of precedent as well as national security and military readiness.

Ensuring the National Guard is adequately equipped with resources and capabilities to serve as the operational combat reserve for national security missions and to support domestic emergencies is among the National Governors Association's highest priorities. It is imperative that Governors retain the authority laid out in United States Code (U.S.C.) Title 32, Section 104. LP480 undercuts this critical authority by allowing a transfer of covered space units from the National Guard to the United States Space Force without abiding by Title 32 or Title 10.

Specifically, section 18238 of Title 10 states that there should be no removal or withdrawal of a unit of the Air National Guard without consultation and approval from Governors. Additionally, section 104 of Title 32 states there is to be no change in the branch, organization or allotment of National Guard units within a state or territory without the approval of its Governor.

For over a century, Title 10 and Title 32 of U.S.C. have upheld gubernatorial authority over the National Guard. National Guard assets are critical components of states' and territories' responses to crises. Governors must maintain full authority as Commanders in Chief of these assets to protect operational readiness and America's communities.

Legislation that sidesteps, eliminates or otherwise reduces Governors' authority within their states and territories undermines longstanding partnerships, precedence, military readiness and operational efficacy. This action also negatively affects the important relationships between Governors and DOD at a time when we need to have full trust and confidence between the two to meet the growing threats posed by the era of strategic competition as well as natural disasters. LP480 also poses a threat to the careers of state-based service members who will be forced to choose between state service or continuing in their current field at a time when there are already significant recruitment challenges. An action like this will violate the trust of the brave women and men who have volunteered to serve our states and our nation.

Governors look forward to collaborating with congressional leaders and federal officials to ensure strong national security. Our top priority is the success of critical national security missions, both at home and abroad, which necessitates protecting Governors' rights to lead as Commanders in Chiefs. Any federal efforts or legislative actions intended to disregard or weaken these authorities will negatively impact our ability to serve the nation and deeply damage the relationship between states and the federal government.

For these reasons, we urge you to oppose LP480. Thank you, again, for your attention to this critical matter.

Sincerely,



Governor Spencer Cox
State of Utah
Chair, National Governors Association



Governor Jared Polis
State of Colorado
Vice Chair, National Governors Association



Governor Kay Ivey
State of Alabama



Governor Mike Dunleavy
State of Alaska



Governor Lemanu Peleti Mauga
American Samoa



Governor Katie Hobbs
State of Arizona



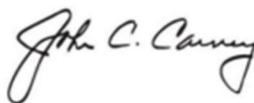
Governor Sarah Huckabee Sanders
State of Arkansas



Governor Gavin Newsom
State of California



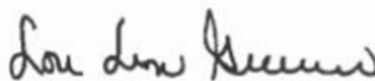
Governor Ned Lamont
State of Connecticut



Governor John Carney
State of Delaware



Governor Brian Kemp
State of Georgia



Governor Lou Leon Guerrero
Guam



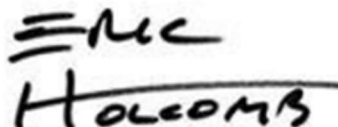
Governor Josh Green, M.D.
State of Hawaii



Governor Brad Little
State of Idaho



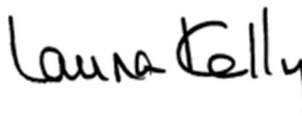
Governor JB Pritzker
State of Illinois



Governor Eric Holcomb
State of Indiana



Governor Kim Reynolds
State of Iowa



Governor Laura Kelly
State of Kansas



Governor Andy Beshear
State of Kentucky



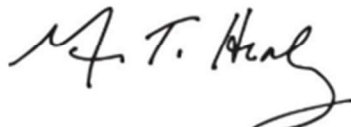
Governor Jeff Landry
State of Louisiana



Governor Janet Mills
State of Maine



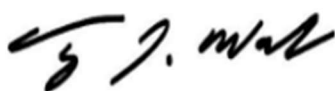
Governor Wes Moore
State of Maryland



Governor Maura Healey
State of Massachusetts



Governor Gretchen Whitmer
State of Michigan



Governor Tim Walz
State of Minnesota



Governor Tate Reeves
State of Mississippi



Governor Mike Parson
State of Missouri



Governor Greg Gianforte
State of Montana



Governor Jim Pillen
State of Nebraska



Governor Joe Lombardo
State of Nevada



Governor Chris Sununu
State of New Hampshire



Governor Phil Murphy
State of New Jersey



Governor Michelle Lujan Grisham
State of New Mexico



Governor Kathy Hochul
State of New York



Governor Roy Cooper
State of North Carolina



Governor Doug Burgum
State of North Dakota



Governor Arnold Palacios
Commonwealth of the Northern Mariana Islands




Governor Mike DeWine
State of Ohio




Governor Kevin Stitt
State of Oklahoma



Governor Tina Kotek
State of Oregon



Governor Josh Shapiro
State of Pennsylvania




Governor Pedro Pierluisi
Puerto Rico



Governor Dan McKee
State of Rhode Island



Governor Henry McMaster
State of South Carolina



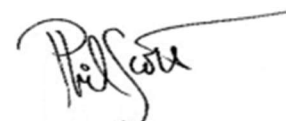
Governor Kristi Noem
State of South Dakota




Governor Bill Lee
State of Tennessee




Governor Albert Bryan
U.S. Virgin Islands



Governor Phil Scott
State of Vermont



Governor Glenn Youngkin
State of Virginia



Governor Jay Inslee
State of Washington



Governor Jim Justice
State of West Virginia



Governor Tony Evers
State of Wisconsin



Governor Mark Gordon
State of Wyoming

cc:

The Honorable Joseph R. Biden, Jr., President of the United States
 The Honorable Mike Johnson, Speaker, United State House of Representatives
 The Honorable Charles E. Schumer, Majority Leader, United States Senate
 The Honorable Mitch McConnell, Minority Leader, United States Senate
 The Honorable Hakeem Jeffries, Minority Leader, United States House of Representatives
 The Honorable Jack Reed, Chairman, Committee on Armed Services, United States Senate
 The Honorable Roger Wicker, Ranking Member, Committee on Armed Services, United States Senate
 The Honorable Mike Rogers, Chairman, Committee on Armed Services, United States House of Representatives
 The Honorable Adam Smith, Ranking Member, Committee on Armed Services, United States House of Representatives
 The Honorable Frank Kendall, Secretary of the United States Air Force
 The Honorable Alex Wagner, Assistant Secretary of the United States Air Force
 General CQ Brown, Chairman of the Joint Chiefs of Staff, United States
 General David Allvin, Chief of Staff, United States Air Force
 General Bradley Saltzman, Chief of Space Operations, United States Air Force
 General Dan Hokanson, Chief of the National Guard Bureau
 Lieutenant General Mike Loh, Director of the Air National Guard