### March 2021 PF Evidence Packet

#### Resolved: On balance, the benefits of creating the United States Space Force outweigh the harms.



https://militarybenefits.info/space-force/

#### Produced by the Bluegrass Debate Coalition at the University of Kentucky

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### Background Info

#### What is the Space Force?

Military.com 19, Military news organization, 12-20-2019, "United States Space Force," https://www.military.com/space-force

The U.S. Space Force is the 6th independent U.S. military service branch, tasked with missions and operations in the rapidly evolving space domain. As of June 2020, its headquarters has yet to be announced.

Space Force was signed into law Dec. 20, 2019 as part of the 2020 National Defense Authorization Act. SpaceForce.mil went live shortly thereafter.

On June 18, 2018, President Donald Trump directed the Pentagon to begin planning for a Space Force. The U.S. Space Force would be the first new military service in more than 70 years, following the establishment of the U.S. Air Force in 1947.

Vice President Mike Pence and the Department of Defense released more details about the planned force on Aug. 9, 2018, citing plans to create a separate combatant command, U.S. Space Command, in addition to an independent service overseen by a civilian secretary, all by 2020.

The Department of Defense forwarded a Space Force proposal to Congress, on March 1, 2019, calling for a service that would fall under the Air Force in the same way the Marine Corps falls under the Department of the Navy. The proposal also included the designation of a new position: undersecretary of the Air Force for space, a civilian position that would answer to the secretary of the Air Force and oversee U.S. Space Force. Officials estimated the creation of a new service would cost $2 billion over five years, and require 15,000 personnel.

On Aug. 29, 2019, the Pentagon activated U.S. Space Command, a new U.S. combatant command led by Air Force Gen. John "Jay" Raymond, intended to serve as a precursor to U.S. Space Force. The Pentagon had a U.S. Space Command from 1985 to 2002, but it had a far more limited scope and was not a geographic combatant command.

#### Basics of the start of the Space Force

Robert Farley 20, Senior Lecturer at the University of Kentucky, 12-1-2020, "Space Force: Ahead of Its Time, or Dreadfully Premature?," Cato Institute, https://www.cato.org/policy-analysis/space-force-ahead-its-time-or-dreadfully-premature

The U.S. Space Force is an independent uniformed service under the authority of the Department of the Air Force. It was established on December 20, 2019, and was expected to be fully operational by 2021. Like the other services, the Space Force is headed by a four‐​star general (the chief of Space Operations) who is a member of the Joint Chiefs of Staff, and thus a contributor to the National Military Strategy. The official mission of the Space Force is to “organize, train, and equip space forces to protect U.S. and allied interests in space and to provide space capabilities to the joint force. Space Force responsibilities include developing military space professionals, acquiring military space systems, maturing the military doctrine for space power, and organizing space forces to present to our Combatant Commands.”34

The Space Force is projected to grow to 16,000 military personnel, with 2,500 active‐​duty personnel transferred from Air Force Space Command by the beginning of fiscal year 2021. The official headquarters of the Space Force remains undecided. The service will initially include three primary field commands: one responsible for training, one for acquisition, and one for support of combatant commanders. The projected budget for the Space Force in fiscal year 2021 is some $15 billion, transferred from the Air Force Space Command allocation.35

What does it mean to say that the Space Force is a “service?” A service is a largely autonomous military organization that designs its own doctrine, manages its own systems of recruitment and promotion, and (in the U.S. system) has its own place on the Joint Chiefs of Staff. Services are distinct from subservice designators such as Army “branches” (artillery, armor, or infantry, for example) or Navy “communities” (surface, submarine, aviation).

The Space Force is notably different from the other services. It is much smaller than any other service; the next smallest is the U.S. Marine Corps, at some 220,000 active and reserve personnel. It does not yet have its own uniforms, rank structure, bases, or substantial equipment pool. Unlike the Air Force, Navy, or Army, the Space Force does not have distinct representation as a military department within the Department of Defense. The Space Force shares this last attribute with the Marine Corps, an independent service under the authority of the Department of the Navy, a handicap that has not prevented the Marine Corps from developing its own doctrine, civilian support network, and organizational identity.

Much will depend on the eventual configuration of the Space Development Agency (SDA), an agency historically tasked with procurement. Congress has mandated the shift of the SDA into the Space Force by 2022. The SDA, however, has multiple clients within the Department of Defense, and the centralization of space procurement within the Space Force remains controversial.36 For its part, the Department of the Air Force has argued that the SDA should be moved to the Space Force sooner rather than later, thus bringing the previously independent agency into the Air Force orbit.37

#### Space is crucial to the military, economy, and every day activities

Robert Farley 20, Senior Lecturer at the University of Kentucky, 12-1-2020, "Space Force: Ahead of Its Time, or Dreadfully Premature?," Cato Institute, https://www.cato.org/policy-analysis/space-force-ahead-its-time-or-dreadfully-premature

The complexity and importance of military operations in space have changed considerably since the 1950s, often in unpredictable ways. While the military value of ballistic missiles was immediately apparent, the implications of space‐​based satellites for military reconnaissance and communication dawned slowly. The first spy satellites entered service in 1960. Though they took lower‐​quality photographs compared to existing reconnaissance aircraft, they also could not be intercepted. Prior to the establishment of sufficiently high‐​bandwidth communications, satellites would drop physical film for ships and aircraft to recover. The United States launched the first dedicated military communications satellite in 1966, significantly easing problems of military signal transfer.6

Space quickly became central to maintaining Cold War nuclear deterrence, as both the Soviet Union and United States used satellites to detect any launch or other first‐​strike activity by the other side.7 This linked space directly to nuclear warfighting, with the consequence that antisatellite activity carried a high risk of nuclear response. Both the United States and Soviet Union had experimented with anti­satellite weapons in the late 1950s and early 1960s without appreciable success but with considerable lessons learned.8

In the 1970s and 1980s the number and sophistication of satellites expanded rapidly. The U.S. military achieved new operational capabilities in space, delivering intelligence, communications, and navigational systems to soldiers. As demonstrated in the Gulf War, the U.S. military could use space to fight more effectively in conventional conflicts, essentially making the battlefield transparent.9 In short order, nearly the entirety of modern U.S. military operations, by all services and at all levels of intensity, required the use of space. Satellites identify targets, track their movement, transfer data to shooters, and monitor the results of the attack. Satellites enable commanders to have a full understanding of the battlefield, allowing them to communicate with their forces and offering information about the size and movements of enemy forces.

Civilian use of space also increased alongside changes in the military use of space. Communications satellites now dominate the international telecommunications industry, providing connectivity to firms and individuals around the world. Businesses, universities, and governments have built this ready connectivity into the basic structure of their daily operations. This has enabled what Richard Baldwin refers to as the second “Great Acceleration” of globalization.10 If space went away, so to speak, many people would struggle to find their way to the local grocery store due to a lack of the Global Positioning System. The way knowledge moves between nations, firms, and individuals depends on easy access to space. Preventing such access could cause massive social and economic disruption.

But the military and civilian advantages created by greater use of space have also created new vulnerabilities. The U.S. military has become dependent on space to conduct its basic operations, just as the U.S. civilian economy’s dependence on space has increased. Competitors have access to space and increasingly the technologies necessary to attack U.S. satellites. Consequently, competitors can threaten damage against both the U.S. military and civilian economy by attacking space infrastructure. Moreover, the United States can no longer assume that satellites’ role in the nuclear enterprise will deter foes from attacking satellites tasked with conventional military missions.11

### Pro

#### The Space Force is necessary to develop a doctrine in space, deciding what actions we should take to best protect it

Dean Cheng 18, senior research fellow in the Heritage Institute for National Security and Foreign Policy, 7-27-2018, "Does the United States Need a Space Force?," Heritage Foundation, <https://www.heritage.org/space-policy/heritage-explains/does-the-united-states-need-space-force>

Michelle Cordero: It was the announcement that every Star Wars super fan dreamed about and its news generated more memes than can be counted.

And liberals on late night television got a good laugh from the announcement.

But the truth is, Trump's Space Force is no laughing matter. Did you know that our most powerful adversaries already have a Space Force?

In 2015, Russia actually combined their Space Force that manages their satellites and associated tracking and control networks with their Air Force and aerospace and missile defense force to create what they now call their Russian Aerospace Forces. That same year China engaged in a massive reorganization of their military which saw the creation of the PLA Strategic Support Force bringing their electronic network, cyber and space warfare forces together into a single service. Shockingly they both also have some basic abilities that we do not.

Dean Cheng: One of the things that the Chinese and Russians at this point can do that the United States can't, is that it can also put an astronaut into space. At this point, ever since we retired the space shuttles we have been hitching rides on Russian rockets in Russian capsules, even up to the International Space Station.

Cordero: Dean Cheng is a senior research fellow in Heritage's Davis Institute for National Security and Foreign Policy. Dean also sits on NASA's National Space Council Users' Advisory Group.

Dean explained to me why the abilities of our adversaries in space affect us in both wartime and peace. Right now there are thousands of U.S. satellites orbiting the Earth. In a time of war, if an enemy was able to interfere with our communication to any of these satellites they could severely affect missile defense and guidance.

Cheng: In peacetime, believe it or not, there's an even bigger set of issues that are involved. If you order something from Amazon and you want to track your package, that's GPS. If you use your credit card at the gas station pump, that's communication satellites and also GPS. So you have the ability, if you can interfere with satellites systems in peacetime, to affect almost every part of your daily life and a huge part of this country's economic system.

Cordero: I asked Dean if he believes that the next big conflict will be in outer space. And if the United States really needs a Space Force.

Cheng: In the next conflict, if it involves a major power or even a mid-size power increasing, it will have operations in space. And by the way, those operations in space while we tend to focus on the really cool images of a kinetic anti-satellite weapon just colliding with and blowing up into fragments, could also include cyber attacks where the satellite turns itself off for example. And a lot of countries are developing that set of capabilities.

So because a lot of people will have the ability to operate in space, because of the importance of space to us, we need to be thinking about that set of capabilities that is encompassed by our space systems. For better or worse, the only way you're going to do that at this point it seems is to have a service, a Space Force if you will, whose job is to be thinking about this. Living, eating, breathing, sleeping space. And thinking about what kinds of systems to acquire and part of that of course is how to pay for it.

Cheng: The other piece to this, the man behind the curtain if you will for services is, a lot of them develop doctrine. That's part of their responsibility as well. To think about not just what am I going to buy, but how do I use it. What are the weaknesses, what are the strengths, how do I compensate for the weaknesses and how do I really exploit the strength.

So we need a Space Force to be thinking about those much harder issues. Not just how do I hit such and such satellite, but why am I doing that.

Cordero: So my next question to you is what should a Space Force do? And I think that answers that question, we don't know yet so until we know what it is we should do, we shouldn't necessarily go and create that.

Cheng: Absolutely. Space, even though the space age began 51 years ago in 1957, in many ways its development has been very slow, much slower than air power. Even in the early days of aircraft, people were already starting to think what do I want airplanes to do. And of course World War I and then World War II really saw the development of things like strategic bombing and fighter sweeps and all sorts of various approaches on how to use air power as part of the bigger military picture.

Space hasn't gone down that path, for a variety of reasons. Partly it was just us and the Soviets for a lot of the Cold War. Part of it is we really would prefer not to foul the nest if you will by creating lots of debris, stuff in orbit tends to stay in orbit for a while. And also there just hasn't been that urgency. But that's rapidly changing. And so we do need a force to be thinking about these doctrine issues, these how to use issues, these strategic objective issues. And that in turn should help us figure out what kinds of things to buy.

#### The space force is good. The militarization of space happened a long time ago, the Space Force just coordinates our response to be more effective.

Douglas Loverro 18, president of Loverro Consulting, LLC, is the former deputy assistant secretary of defense for space policy, He also served in the Air Force and the National Reconnaissance Office, 6-25-2018, "Why the United States needs a Space Force," SpaceNews, https://spacenews.com/why-the-united-states-needs-a-space-force/

The president got it right. We need a Space Force. Space is too critical for the nation’s defense not to have an organization that speaks for its importance, defends it against all comers, and jealously advocates for new missions and new responsibilities. Space is too crucial to national security to be stalled by a lack of focus and an unwillingness to respond until pushed.

President Trump on June 18 ordered the Pentagon to create a separate military service to focus on national security space. Outside a cohort of people who have worked this issue for many years, the announcement was met with a different mixture of reactions — Star Wars humor, political derision and interservice sarcasm. The reactions reveal a broad misunderstanding of what a Space Force would do or what it would look like.

The most common critique was that the president had suddenly militarized space. He hadn’t. That process began decades ago under President Eisenhower.

In the National Aeronautics and Space Act of 1958, President Eisenhower and the Congress created NASA to control all U.S. space activities except those “peculiar to or primarily associated with the development of weapons, military space operations, or the defense of the United States.” That military job was handed to the Department of Defense. That same year, DoD created the Advanced Research Projects Agency (ARPA then, Defense ARPA or DARPA now) specifically to prevent the kind of technological surprise that Sputnik represented. ARPA quickly became the lead for all military space activities. While work actually took place in the Army, Navy, and Air Force, ARPA guided it; and over the next decade, just about every military mission we do today in space was birthed and tested.

While in a classic sense many of those missions did not appear to be military weapons, they quickly became an integral part of the way the U.S. planned to execute war, specifically nuclear war. And in the nation’s first space policy, National Security Council Planning Board memo 5814, Eisenhower envisioned that “The effective use of outer space…will enhance [our] military capabilities.

Military uses of outer space would include anti-ballistic missiles; communications, weather and navigation; defensive outer space vehicles; and even bombardment from space. Space has been militarized from the very beginning. And that’s a good thing. Over the decades, those military space missions have saved tens of thousands of American, allied, and non-combatant lives, led to dramatic decreases in collateral damage, and allowed the U.S. and others to provide swift and timely responses to humanitarian needs and security crises worldwide.

Many of the president’s detractors pointed out, incorrectly, that the Outer Space Treaty reserves space for only peaceful purposes, but that’s just not true. It is true that the treaty specifically restricts the Moon or other celestial bodies for peaceful purposes, but it was intentionally silent with regards to outer space — simply because the two major signatories, the United States and the Soviet Union, were already using space for military applications and planned to continue to do so into the future.

But these points don’t really answer the questions on the minds of most Americans, “Why do we need a Space Force? Doesn’t the Air Force already do this job? Isn’t this just more, new unnecessary bureaucracy?”

In a word, no.

What the president proclaimed was not the beginning of the militarization of space, nor the start of a space arms race, but rather that military professionals who concentrate on space needed their own organization to truly focus their efforts on a singular task — to protect and defend U.S. and allied interests in space and to assure their other service brethren never find themselves lacking the space support they need. To do that would require a career of training, experiences, motivations, and insights, and a mixture of skills and specialties with a focus on space, that can’t be developed within the constraints of the current military branches. To develop the proper culture of space professionals who marry their personal and organizational identity to this domain, and jealously advocate for its advancement, takes more than a loose assemblage of individuals from different career fields who dabble in space during their career, but all too often view space as an assignment rather than as a home.

#### Having an independent organization is necessary to spur organizational ‘jealousy’, where the organization will advocate for its necessary materials and innovate in that arena

Douglas Loverro 18, president of Loverro Consulting, LLC, is the former deputy assistant secretary of defense for space policy;He also served in the Air Force and the National Reconnaissance Office, 6-25-2018, "Why the United States needs a Space Force," SpaceNews, <https://spacenews.com/why-the-united-states-needs-a-space-force/>

Organizational identity pushes organizations to defend and define the rationale for their own existence, anytime that existence is threatened or questioned. In the 1860s, when the first U.S. naval vessel was sunk by a new machine called a submarine, the Navy did not retreat from the water; rather it developed a whole new school of undersea warfare. Similarly, when naval relevance was called into question at the end of the Cold War, the Navy discovered that there was an entirely new mission for it to execute — littoral operations.

Jealous advocacy works in a similar fashion to shape and strengthen an institution. Institutions that understand their domain and can see future changes and potential threats, jealously advocate for changes to their mission to stay in the lead. They do so in a bureaucratic struggle for resources and importance. As the role of unmanned aerial vehicles began to grow during operations in Afghanistan and Iraq, and services other than the Air Force began to fly them, Air Force leadership made the argument that only they should fly UAVs.

At the end of the day, they lost that fight and other services retained their own UAVs. But the point is the Air Force saw UAV operations as its mission and jealously advocated that position. Just as generations before, early air leaders had jealously advocated for an air service, which became the Air Force. It’s a dynamic at play in every bureaucratic structure and that competition keeps every piece strong.

But these fundamental forces have thus far been absent from space. When the Chinese shot down their own satellite in 2007, both Air Force and non-Air Force leaders throughout the Pentagon could be heard saying that there was no way to defend space, and that we should move to non-space alternatives. The Air Force, in fact, famously initiated a series of exercises labeled “a day without space” so they could figure out how to conduct air operations without space capabilities. How different from the Navy’s submarine experience where the threat was met not by retreat, but by boldly pioneering a new means of warfare.

#### The Space Force is crucial to cooperate with allies in space and win a potential conflict

C. Todd Lopez 20, Department of Defense based reporter citing General John W. Raymond, 9-15-2020, "Space Force Chief: U.S. Doesn’t Want War in Space, Must be Prepared for it," U.S. DEPARTMENT OF DEFENSE, https://www.defense.gov/Explore/News/Article/Article/2348614/space-force-chief-us-doesnt-want-war-in-space-must-be-prepared-for-it/

The United States doesn't want to engage in warfare in space, but like in all domains, the U.S. military must be prepared for such a conflict, and that'll take a lot of preparation and change, Chief of Space Operations Gen. John W. Raymond, said.

He said the U.S. does not want to get into a conflict that begins or extends into space.

"We want to deter that from happening. However, if deterrence fails, a war that begins or extends into space will be fought over great distances at tremendous speeds," Raymond said.

The chief of the newly-created Space Force spoke during a presentation that was part of the 2020 Air Force Association Air, Space and Cyber Conference, held this year virtually as a result of the COVID-19 pandemic.

To plan for warfare at the speeds and distances required to operate in space, the Space Force must be lean, agile and fast. The new military service has been working on all of those things since it stood up in December, Raymond said.

A big part of the leaning effort, he said, is the reduction of bureaucracy.

"Since establishment, we've been in the business of slashing bureaucracy, delegating authority and enhancing accountability at every crossroad," Raymond said. "My opinion: big organizations are slow. We must move at speed to outpace the threats that we face."

The general said the Space Force, in an effort to reduce bureaucracy, implemented a large-scale reorganization that involved removing two echelons of command, including a numbered Air Force and an O-6-level command.

"We've also reduced the size of our planned staff at the Pentagon," Raymond said. "Back when we started, the Pentagon staff was going to be over 1,000 people. That was the initial plan. We've slashed that by 40%. We're shortening the distance between decision makers and you, the experts, conducting our mission."

Also part of eliminating bureaucracy, Raymond said, is a hard look at the agencies that exist now that are involved in acquisition for the space enterprise. He said Congress has identified some 65 different organizations involved in space-related acquisition.

The Space Force chief said there is a mandate for change, adding that we must bring unity of effort across the department, reduce duplication of effort, all while slashing costs, and increasing our speed.

"If we get this right, we will be the envy of the other services, because we are not tied to business of the past," Raymond said.

The Space Force is also proposing a new acquisition system for space, something Raymond said Congress agrees with.

"We've already begun implementing that," he said. "We've already delegated the head of contracting authority down from the Pentagon staff to the acquisition experts in the field. We know from experience this kind of delegation speeds up acquisition decisions, and makes us better partners for the industry."

Partnership is also key, both inside the Defense Department and outside. Partnerships with the intelligence community, sister services, the total force and space allies are all being looked at for development, Raymond said.

As part of partnership development, he said the Space Force established a chief partnership office at the Space and Missile System Center, and that team is working to expand space partnerships with nations such as Australia, Canada, Japan, New Zealand, the United Kingdom, France and Germany.

Right now, he said, Space Force is working with Norway, for instance, to host American payloads on Norwegian space launches. That combined effort, he said, will save the U.S. about $900 million and also put those capabilities into space sooner. The U.S. is also working with the Japanese to put U.S. capabilities into Japanese satellites.

"These efforts improve our capabilities, and they strengthen our partnerships between our great nations," he said.

Raymond also drew attention to verbiage on a display at the World War II memorial in Washington, D.C. On the floors of both the north and south pavilions are etched the words "Victory on Land, Victory at Sea, Victory in the Air." Now, he said, those three domains are no longer enough to ensure victory. Today's security environment, he said, requires even more of American warfighters.

"I am not confident that we can achieve victory or even compete in a modern conflict, without space power," he said. "I am not willing to lose in order to learn. Today the Space Force in answering that call to compete, forging a warfighting service that is always above."

#### A Space Force is necessary to stop fragmentation in our space operations, to create experts in space, and to adequately fund space warfighting capabilities

Todd Harrison 18, director of the Aerospace Security Project at the Center for Strategic and International Studies, a policy think tank, 10-3-2018, "Why We Need a Space Force," CSIS, <https://www.csis.org/analysis/why-we-need-space-force>

Other common misconceptions are that we’re rushing into this debate without enough time to study the issue or that the Space Force is a solution in search of a problem. Neither is true. Numerous studies over the past twenty years have examined the issue in detail, and different organizational constructs have been proposed , analyzed, and debated. Some ideas have been tried in practice, and many of these have been discarded as ineffective or insufficient. As the Office of Management and Budget (OMB) surmised in a recent report to Congress, nearly all the studies and congressional commissions that have analyzed this issue agree that there are three central problems with how U.S. national security space is organized today.

First, authority and responsibility for space is fragmented. A 2016 Government Accountability Office (GAO) study found that there are more than 60 different organizations strewn across the Department of Defense (DoD) and the intelligence community with responsibility for space acquisitions. While more than 80 percent of DoD’s unclassified space funding in a typical year is in the Air Force, key components of the space architecture, such as user terminals, ground control systems, some satellites, and many of the personnel that operate these systems, reside in the Army and Navy. Moreover, classified space funding for the National Reconnaissance Office and other intelligence agencies in the Military Intelligence Program budget may rival the Air Force’s unclassified space funding in magnitude.

Real authority in the Pentagon is budget authority. When the budget for national security space is fragmented across so many different organizations, it means that no one has the authority to make enterprise-wide decisions and tradeoffs. As GAO has noted, “there is no single individual, office, or entity in place that provides oversight for the overall space program acquisition structure.” The Air Force cannot force the Army to speed up the fielding of next-generation GPS receivers and satellite communications terminals any more than the Army can compel the Air Force to delay launching its next-generation constellation of satellites. This lack of centralized leadership leads to slow decision making, disunity of effort in building new space capabilities, and a lack of accountability when space programs go over budget or fall far behind schedule. As OMB has noted, the net effect of this is “delayed and diminished capabilities for combatant commanders, warfighters, and others.”

The second problem is that the space workforce (both space operators and space acquisition personnel) is scattered across the Services and intelligence agencies, with too few people in each organization to create a viable and attractive career path. Moreover, personnel are moved in and out of space assignments every few years, limiting their ability to develop deep domain expertise. The 2008 Allard Commission, which was charged with studying the organization and management of national security space, found that “it is exceptional for an Air Force Officer to remain in [a space] assignment for more than two years without an adverse impact on his or her career.”

One of the jobs of the Military Services is to organize personnel into domain-centric clusters to develop domain-centric strategy, doctrine, and policy. This works well for the air, maritime, and land domains because we have a cadre of professionals in each of the Military Services organized around their respective domains. But under our current space organizational construct, we do not have a unified, stable cadre of space-centric personnel that focus on developing space-centric strategy, doctrine, and policy.

The third core problem is that the Services have inherent conflicts of interest when it comes to space. Because the Services are organized around their primary domain of responsibility, space is viewed as a secondary or supporting function. The Air Force has long bemoaned the fact that it funds the vast majority of unclassified space systems and that the other Services place requirements on space systems that the Air Force is expected to fund. Former Air Force Chief of Staff General Michael Ryan summed up the Air Force’s institutional view of space aptly, noting in an interview that the Air Force “can’t afford to be the bank for all space systems,” and that “space is not a welfare system.” The Air Force would never say the same thing about its aviation programs.

When the Services must choose between space and their native domain, one should expect that they will choose what they are organized to do. For example, in the most recent defense budget downturn, Air Force funding for aircraft procurement and space procurement declined by roughly one-third each (adjusting for inflation) from FY 2010 to FY 2014. But once the overall budget started growing again, Air Force aircraft procurement funding rebounded by more than 50 percent while space procurement funding declined by another 17 percent. The Air Force should not be faulted when it chooses air over space—that’s what our domain-centric Services are designed to do. As Carl Builder noted in the Masks of War, “the most powerful institutions in the American national security arena are the military services,” and the problem is there is no military Service that consistently advocates for space.

#### The Space Force is not too costly

Todd Harrison 18, director of the Aerospace Security Project at the Center for Strategic and International Studies, a policy think tank, 10-3-2018, "Why We Need a Space Force," CSIS, <https://www.csis.org/analysis/why-we-need-space-force>

The cost of creating the Space Force is also a legitimate concern. In a leaked memo, the Air Force estimates it would cost nearly $13 billion over five years to stand up both the Space Force and Space Command. To arrive at such a lofty figure, the Air Force assumed the broadest possible scope for the Space Force, even encompassing parts of NASA and the Department of Commerce. It also threw in a billion-dollar new headquarters building and assumed 13,000 new personnel would be needed. A Space Force that encompasses all of the space-related organizations in DoD and the intel community at the size they are today would likely be similar in headcount to the Coast Guard (roughly 50,000 active duty and civilian personnel). It therefore stands to reason that the new personnel needed to staff the Space Force’s headquarters would be similar in size to the Coast Guard’s headquarters staff (roughly 2,600 personnel, or about 5 percent of the total workforce), and all other Space Force personnel would be drawn from the existing space workforce spread across the Services and intel community. Using the same cost assumptions as the Air Force’s estimate, the additional cost of standing up the Space Force would be less than $3 billion over five years. This is a small price to pay for the many problems a Space Force would help address.

#### We need a Space Force now, as conflict with China and Russia in space is becoming increasingly likely.

Todd Harrison 18, director of the Aerospace Security Project at the Center for Strategic and International Studies, a policy think tank, 10-3-2018, "Why We Need a Space Force," CSIS, <https://www.csis.org/analysis/why-we-need-space-force>

Space capabilities are already an indispensable component of U.S. military power, and the threats posed to U.S. space systems by China, Russia, and others are growing by the day. While reorganizing will certainly be disruptive in the short-term, it will be even more disruptive the longer we wait. If you believe that the threat environment is becoming more complex and challenging, then it’s better to take the risk of disruption now rather than later. Much like aviation during the interwar period, space and counterspace technologies are rapidly evolving, and these capabilities are likely to play a decisive role in the next major war. I am convinced that the time for a separate military department for space is upon us, and we should not wait for another Pearl Harbor to prove it.

#### The Space Force is good – it ensures peaceful and free use of space and the ability to counter China and Russia’s space weapons

Joe Moye 20, military fellow in the Center for Strategic and International Studies International Security Program. He is a Lieutenant Colonel in the Marine Corps, 12-11-2020, "Bad Idea: Disestablishing the Space Force," Defense360, <https://defense360.csis.org/bad-idea-disestablishing-the-space-force/>

This month marks the one-year anniversary of the United States Space Force’s creation as the sixth independent uniformed military branch of the Armed Forces. The Space Force plays a critical role in national defense, as it performs the key functions of organizing, training, and equipping forces capable of protecting U.S. interests in space; deterring aggression in, from, and to space; and conducting space operations. The Space Force remains within the Department of the Air Force — just as the U.S. Marine Corps falls under the Department of the Navy — and will continue to rely on the U.S. Air Force for some support functions.

However, the creation of the Space Force has been criticized by some, who describe the new service as wasteful, premature, and even irresponsible. These criticisms have persisted, with some calling upon the incoming administration of President-elect Joseph Biden to disestablish the new service. But rolling the Space Force back into the Air Force is counterproductive and would be a bad idea.

Simply, competition in the space domain is too important to be a secondary mission focus spread across multiple military services. No one seriously questions the need for a strong Navy to protect access and freedom of navigation for maritime commerce. Most Americans innately understood why the Air Force was created as a separate service to hone our nation’s air power. Space should be no different.

We should judge the Space Force by what it can and will likely do as the service matures and the demand for military focus and presence in space increases — not merely for what it is and does today. General Jay Raymond, the first chief of space operations, says that he is building a Space Force not just for today, but for the 22nd century. The possibilities are significant. Silicon Valley brings in over $2 trillion to the world economy today: it is expected that commercial activity will generate two to three times that in the space economy in coming decades. Commercial activity in low earth orbit, cislunar, and beyond will create a demand signal for a military presence to “patrol” that space to look out for and address potential threats. The Space Force’s mission will evolve beyond today’s terrestrial focus — such as operating GPS and early warning missile detection satellites — to an emphasis on freedom of space navigation, exploration, and commerce. That tomorrow will be here before we know it.

Yet we do not need to wait for tomorrow: threats exist today. Even now, our lives are unquestionably dependent on our unfettered ability to use space. General Raymond recently said that the Space Force was created due to “the compelling case our competitors have created for us.” Chinese and Russian space capabilities and counterspace threats are well-documented. China’s rapidly maturing space program is increasingly becoming the pace setter in this domain. Dr. Mir Sadat, a former policy director for the U.S. National Security Council, has argued that we are in “a race for dominance over cislunar access, operations, and resources.” Stagnating the Space Force, or rolling it back into the Air Force, would send mixed signals to our partners and allies on the priority of space — especially those following our lead to bolster their own space forces.

#### The Space Force is good for STEM – it creates a beacon to get more young students interested in the disciplines

Joe Moye 20, military fellow in the Center for Strategic and International Studies International Security Program. He is a Lieutenant Colonel in the Marine Corps, 12-11-2020, "Bad Idea: Disestablishing the Space Force," Defense360, <https://defense360.csis.org/bad-idea-disestablishing-the-space-force/>

The new service provides continuity and focus for developing and managing talented space professionals. The Space Force has become a beacon for young people interested in the Science, Technology, Engineering, and Mathematics (STEM) world. The Space Force also provides a more direct and certain pathway to a career in space for STEM personnel who otherwise might be less likely to pursue military service in another branch, and greatly expands the opportunity for a different population of citizens to serve while creating a deeper expertise and interest in space. Likewise, an independent space military service unifies and elevates space capabilities to compete for resources on par with the other services. A single service specifically focused on developing military space capabilities reduces duplication and costs, increases speed of acquisition, and creates overall unity of effort. It also allows the other services to focus their organic space programs toward being better consumers of space.

Finally, the creation of the Space Force added a seat at the table of the Joint Chiefs of Staff. This ensures that space advocacy and military advice is included in every subject in which the Joint Chiefs are involved. Absent the chief of space operations, space advocacy and advice are once again left to the chief of staff of the Air Force, who understandably might have competing interests and priorities. Space requires an independent voice at the table.

The Defense Department has yet to finish realigning the remaining appropriate military space programs to the Space Force. General Raymond is correctly taking a deliberate pace in establishing this new service. It does not appear that new service “growing pains” have degraded current operations thus far, so we should give leadership the time they need to do this right. At this point, premature plateauing of progress or reversal would hinder the positive momentum generated by centralizing military capability, competence, and advocacy in the space domain. Returning space components to the Air Force, Army, and Navy would diminish advocacy and relegate space capabilities to lower priorities behind each service’s native domain(s).

#### The Space Force is key to defense on Earth – it allows for commercial investment in Defense Weather programs

Sarah Mineiro 21, Adjunct Senior Fellow in the Defense Program at the Center for a New American Security, Senior Director for Space Strategy at Anduril Industriess, 3-1-2021, "Op-ed," SpaceNews, https://spacenews.com/op-ed-dod-weather-capabilities-have-lagged-space-force-can-turn-that-around/

Access to weather information is an enduring component of successful military operational planning, and similar episodes are well known in the annals of American military history, from the Battle of Long Island to D-Day to the infamous dust storms in the first Iraq War.

For much of that history, America’s warfighters had to do without the highly advanced technological tools that forecast weather systems. These tools are now readily available, but today U.S. service members are at risk of losing the most up-to-date knowledge of weather conditions.

A gap in weather capabilities has been widening. The Defense Meteorological Satellite Program (DMSP) is at the end of its service life and follow-on programs have ranked low in the Air Force’s priority list. All of this could — and should — change with the Biden administration’s revitalized emphasis on climate change as an “essential element of our national security.”

Since the early 1960s, DMSP has provided assured global weather to support Defense Department operations and pioneered some of the most advanced weather predicting capabilities in the world alongside a broad industrial base.

In 2015, Congress terminated the DMSP program and chose not to fund the launch of its last satellite because lawmakers had “lost confidence in the Air Force’s management of DMSP and its articulation of requirements.” Decisions made over the years by DoD, the National Oceanic and Atmospheric Administration (NOAA), and NASA have led to the very real possibility of significant gaps in cloud characterization and theater weather imagery, specifically over portions of the Middle East and Southeast Asia.

To address these gaps, the Air Force funded Operationally Responsive Space 8, or ORS-8, a free flier satellite partnership with NASA that was cancelled following industry protests in 2019. The Space Force has inherited the challenges of this broken architecture and has developed a multi-pronged strategy to address the gaps and advance the technology, including reactivating a previously decommissioned NOAA satellite to temporarily fill the most pressing defense weather gaps.

While such issues may not be dinner table conversation for a vast majority of Americans, they nevertheless carry huge consequences for their safety. Absent a replacement for the DMSP, America’s warfighters will be as in the dark about weather as Washington’s Continentals that day in 1776.

The Space Force is trying to leverage nontraditional acquisition authorities and industry innovations in smaller satellite buses for DoD missions. The Space and Missile Systems Center recently awarded three Other Transaction Authority agreements, totaling $309 million to develop prototypes for the Electro Optical/Infrared (EO/IR) Weather System (EWS) program.

This is a smart approach that should help allay concerns over the troubled defense weather program.

#### The Space Force is necessary to counter emerging threats to national security in space

Tom “Tav” Taverney 18, retired Air Force major general and former vice commander of Air Force Space Command. He has served on SMC and Space Command advisory boards, and has supported acquisition and launch system reviews., 10-1-2018, "The Space Review: Space Force: it’s time to act," The Space Review, <https://www.thespacereview.com/article/3578/1>

Space capabilities are a critical part of everything we do in the Defense Department. We could not effectively conduct military operations without space. Additionally, the commercial and civil world depends on capabilities from space; from navigation and timing to communications.

Our commander-in-chief, President Trump, recently said, “The time has come to establish the United States Space Force. It is not enough to have an American presence in Space, we must have dominance.” He set a target of 2020 to establish it. Secretary of Defense James Mattis recently said, “A US Space Force is necessary to protect American satellites from being targeted by attack weapons in the hands of China and Russia.”

Congressmen Mike Rogers, Jim Cooper, and Mac Thornberry have been advocates of creating a Space Corps for two years. “The Final Report on Organizational and Management Structure for the National Security Space Components of the Department of Defense” responds to the 2018 National Defense Authorization Act, tasking the Defense Department with assessing a path forward for a Space Corps, and has come with some initial steps toward these goals and objectives. Now that the president and the secretary of defense announced agreement to create a Space Force by 2020, the horse has left the barn. Recently the Secretary of the Air Force, Heather Wilson, has put forth a plan, with funding estimates, and Deputy Secretary of Defense Shanahan continues to work his plan.

We do not have the focus, force structure, force posture, operating practices, or warfighting strategy to counter the current or emerging threats to our national interests in space. Today we do not have an organization with the authority, responsibility, budget, or even direction to assess solutions to these issues with then necessary singular focus. There is clearly momentum toward establishing a dedicated military space organization, whether it is a true Space Force (the equivalent of the Army, Navy, or Air Force), a Space Corps (equivalent to the Marine Corps), or a Space Guard (the equivalent of the Coast Guard). All of these constructs meet the president’s goal of having a Space Force equal to the other four services.

A lot has been said in national media about establishing the Space Force. The commentary is well meaning, but much has come from non-space professionals, and doesn’t get to the real issues or rationale.

#### The Space Force didn’t militarize space – China and Russia did. We need a strong posture to counter them.

Tom “Tav” Taverney 18, retired Air Force major general and former vice commander of Air Force Space Command. He has served on SMC and Space Command advisory boards, and has supported acquisition and launch system reviews., 10-1-2018, "The Space Review: Space Force: it’s time to act," The Space Review, <https://www.thespacereview.com/article/3578/1>

The reality is, as with other domains, space has already been militarized because we have used space to support our land, sea, and air forces. What we are doing in space is really no different from what we have done in the other domains. When we put a communications satellite in orbit and gave our soldiers, sailors, marines, airmen, and guardsmen radios, space was militarized. When we got the GPS constellation on orbit and gave a soldier a GPS receiver, space was militarized. So, the question is, did these actions cause space to become weaponized? And if it is weaponized, will it cause a war? We have proven over many years, that the best way to avoid military conflict is to have a strong military with powerful capabilities. It is called “deterrence.” This makes staring a war not a good decision for our adversaries and therefore keeps the peace. As President Reagan said, “Peace through strength.”

While some may wish weaponizing space never occurred, the fact is that our adversaries get a vote, and have already voted to weaponize space. Russia and China both have demonstrated offensive space capabilities, along with the stated and demonstrated intent to use those capabilities. Additionally, they are both building hypersonic weapons systems to put our nation and our people at risk. The truth is that now our adversaries pose a clear and present threat to our national security. If anything, the case for a strong defensive posture in space has strengthened.

#### A specific Space Force is necessary to properly value space operations. Unified command alone is insufficient to solve.

Tom “Tav” Taverney 18, retired Air Force major general and former vice commander of Air Force Space Command. He has served on SMC and Space Command advisory boards, and has supported acquisition and launch system reviews., 10-1-2018, "The Space Review: Space Force: it’s time to act," The Space Review, <https://www.thespacereview.com/article/3578/1>

Some non-space experts view creation of a Space Force through the lens of creation of the Air Force over 70 years ago: that is, we have no need for a space force until we deliver offensive effects from space. The problem with this view is that it looks at the value and utility of the space medium through the lens of the air medium. All four mediums that we operate in (air, sea, land, and space) have their own utility, strengths, weaknesses, and challenges. Viewing the value of any of them through the perspective of any of the others does not do a service to the medium in regards to its value or challenges. We wouldn’t want to assess the Air Force’s value against its ability to occupy ground or separate combatants from non-combatants. As a nation, the Defense Department has done very well when our services have looked at the medium they operate in a focused fashion and with world-class experts and leaders in that medium. Space is unique and brings capabilities none of the other domains can contribute. Thus, the use of space systems should be addressed by space professionals steeped in the missions accomplished through, to, and from space.

Another issue raised is that a different military service would complicate interaction and communication within the Air Force between space and air elements. The real truth is that the majority of support from space is to the Army, Navy, Marines, and Special Operations; all are bigger users than the Air Force itself. We already assure space is fully integrated into the operations of the other services (Army, Marines, Navy, and Coast Guard) in addition to the Air Force. Space is a domain that transcends regions, and can provide global reach. Also, an on-orbit asset can support different warfighting regions at different times and even multiple regions at the same time. Its domain is one that transcends the boundaries of the current services.

Some have said re-constituting US Space Command as the unified command for space is one, if not the answer, to the problem. While I don’t think it would hurt, I don’t believe having Strategic Command (STRATCOM) as the warfighting command has caused any of our current challenges. In fact, STRATCOM has been a good steward of the space mission. However, there are advantages if a dedicated US Space Command is done correctly.

#### Establishing a Space Force is defensive in nature since it’s in response to Chinese and Russian aggression

Dr. Beyza Unal 19. Senior research fellow with the International Security Department at Chatham House in London. Formerly worked in the Strategic Analysis Branch at NATO Allied Command and Transformation. 07-16-2019. “US military satellites are vulnerable to hacking — but Trump's 'Space Force' could help fix that.” The Hill. https://thehill.com/opinion/cybersecurity/453216-us-military-satellites-are-vulnerable-to-hacking-trumps-space-force

There are fears that this would lead to the establishment of an offensive military capability in space, but a space force or corps doesn't necessarily mean space warfare. So much of the security architecture and infrastructure of the U.S. and NATO already relies on space assets. These initiatives are not so much moving conflict into space as prudently acknowledging that forces are already dependent on space assets, and these need to be protected. Countries such as Russia and China are increasing cyberattacks and electronic warfare upon critical infrastructure, including space. This puts not only defense systems at risk, but also the networks increasingly essential for NATO operations such as disaster relief, counterterrorism and conflict prevention, a new Chatham House report finds.

#### A space war won’t happen – we have five reasons.

Luke Penn-Hall 15, Analyst at The Cipher Brief, M.A. from the Johns Hopkins School for Advanced International Studies, B.A. in International Relations and Religious Studies from Claremont McKenna College, “5 Reasons “Space War” Isn’t As Scary As It Sounds”, The Cipher Brief, 8/18/2015, https://www.thecipherbrief.com/article/5-reasons-%E2%80%9Cspace-war%E2%80%9D-isn%E2%80%99t-scary-it-sounds

The U.S. depends heavily on military and commercial satellites. If a less satellite-dependent opponent launched an anti-satellite (ASAT) attack, it would have far greater impact on the U.S. than the attacker. However, it’s not as simple as that – for the following reasons:

1. An ASAT attack would likely be part of a larger, terrestrial attack. An attack on space assets would be no different than an attack on territory or other assets on earth. This means that no space war would stay limited to space. An ASAT campaign would be part of a larger conventional military conflict that would play out on earth.

2. Every country with ASAT capabilities also needs satellites. While the United States is the most dependent on military satellites, most other countries need satellites to participate in the global economy. All countries that have the technical ability to play in this space – the U.S., Russia, China and India - also have a vested interest in preventing the militarization of space and protecting their own satellites. If any of those countries were to attack U.S. satellites, it would likely hurt them far more than it would hurt the United States.

3. Destruction of satellites could create a damaging chain reaction. Scientists warn that the violent destruction of satellites could result in an effect called an ablation cascade. High-velocity debris from a destroyed satellite could crash into other satellites and create more high-velocity debris. If an ablation cascade were to occur, it could render certain orbital levels completely unusable for centuries.

4. Any country that threatened access to space would threaten the global economy. Even if a full-blown ablation cascade didn’t occur, an ASAT campaign would cause debris, making operating in space more hazardous. The global economy relies on satellites and any disruption of operations would be met with worldwide disapproval and severe economic ramifications.

5. International Prohibits the Use of ASAT Weapons. Several international treaties expressly prohibit signatory nations from attacking other countries’ space assets. It is generally accepted that space should be treated as a global common area, rather than a military domain.

While it remains necessary for military planners to create contingency plans for a, space war it is a highly unlikely scenario. All involved parties are incentivized against attacking. However, if a space war did occur, it would be part of a larger conflict on Earth. Those concerned about the potential for war in space should be more concerned about the potential for war, period.

### Con

#### Space Force causes war in space

Gbenga Oduntan 18, Associate Professor in Law at the University of Kent, Distinguished Visiting Professor of Public and Private International Law at Crescent University, Abeokuta Nigeria, 6-25-2018, "​Donald Trump’s space force: the dangerous militarisation of outer space," Conversation, <https://theconversation.com/donald-trumps-space-force-the-dangerous-militarisation-of-outer-space-98588>

In a recent speech, President Donald Trump announced a new policy for the American space programme. It is time, he argued, for America to create a “Space Force”. As ever, the policy announcement was full of glittering ideas but short on detail, largely unspecific and even inaccurate. What we do know is that this would be a new and separate military command, “equal” to the American Airforce. But like much of Trumpian vision, superlative expressions shroud reality and do great injustice to the serious issues at stake.

We should all be concerned by the prospect of the nuclearisation and militarisation of outer space. It is crucial for world, and perhaps even intergalactic, peace that the legality of his plans are subject to the fiercest domestic and international scrutiny. At the moment it is unclear how they could possible fit in with existing international legal frameworks.

Militarised space

America has hardly ever disguised its view of space as an extension of military power. The US already has an Air Force Space Command, created by Ronald Reagan in 1982, which is dedicated to using space-based assets to aid its flights, fights, and to win in air, space and cyberspace. Reagan also introduced the “Star Wars” programme and George W. Bush unsuccessfully tried to resurrect it through the Son of Star Wars project. Both were touted as futuristic space-based ballistic missile interceptor programmes. But aside from the fact that they were technically impossible at the time, they also constituted a frontal assault on a previous anti-ballistic missile treaty between the US and the Soviet Union.

Trump’s most recent vision is actually a rehash of existing programmes. The idea of creating a new branch of the military called the “Space Corp” was already in the 2017 National Defence Authorisation Act, which emerged from discussions long predating the current administration. But in the end the plans were dropped because congressional negotiators refused to fund them.

And America is not alone in the quest for a military presence in space. All modern armies rely on space-based applications, such as satellites, and jostle for military advantages in space. Although, military uses of technologies in space may be more useful for domestic conflicts where large swathes of territory fall under terrorist control, such as the Sambisa forest in northern Nigeria, where Boko Haram operates.

China and Russia have space militarisation programmes of their own, much of which take place out of sight. Recently, China attracted suspicion by shooting down one of its own satellites.

But certain aspects of Trump’s recent policy announcement should raise serious alarm. Trump said: “It is not enough to have American presence in space we must have American dominance.” This deviates dangerously from the historical and legal norm. To ensure America’s security interests is one thing. To dominate outer space is another. The former is a legitimate aspiration of any independent state. The latter has already elicited the promise of a “tough response” from Russia.

The risk of contagion

The world accepts the military use of outer space. But it does not accept the unbridled militarisation of space. The moon and other celestial bodies, according to the 1967 UN Space Treaty, must be used exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies including asteroids is forbidden. The UN demands that the exploration and use of outer space should be carried out for the benefit and in the interest of all countries.

There is a complete ban on placing nuclear weapons and weapons of mass destruction in outer space or around the atmosphere of the earth. Other leading space treaties ban the placement of alternative weapons of mass destruction in space. But there is a loophole in that they do not specifically prevent placement of other types of weapons in space.

Right now, a new treaty has been proposed to prevent an arms race in space. But the US, with its large missile defence programme and the technical advantages in potential space weaponry, has refused to enter into discussion over this new treaty. If a space arms race can’t be prevented, there could be a total disruption of the agreed law that outer space is the common heritage of all humankind.

Alternative futures

Past stories of mankind’s endeavours in outer space are centred on the theme of scientific brotherhood. In 1959, the UN General Assembly established the Committee on the Peaceful Uses of Outer Space. By 1975, American and Soviet spacecraft docked together in orbit as part of the Apollo–Soyuz Test Project (ASTP), the world’s first international crewed space mission. Since 2005 there has been a well-respected agreement of cooperation between China and the UK. China’s technological co-operation with Europe puts “science and technology diplomacy” over traditional “economic diplomacy”. China owns up to 5% investment in the European Galileo observation satellite network project. And Britain and African states such as Nigeria also cooperate in space.

We should try our utmost to make sure the future carries on this tradition. The cooperation of humankind in space exploration, which exists in every aspect of space science, space law, space economics and policy must not be sacrificed because of Trump’s dangerous ideas.

#### Space warfighting causes conflict on Earth

Lee **Billings 15**. Science journalist. 08-10-15. “War in Space May Be Closer Than Ever.” <http://www.scientificamerican.com/article/war-in-space-may-be-closer-than-ever/>

The world’s most worrisome military flashpoint is arguably not in the Strait of Taiwan, the Korean Peninsula, Iran, Israel, Kashmir or Ukraine. In fact, it cannot be located on any map of Earth, even though it is very easy to find. To see it, just look up into a clear sky, to the no-man’s-land of Earth orbit, where a conflict is unfolding that is an arms race in all but name.

The emptiness of outer space might be the last place you’d expect militaries to vie over contested territory, except that outer space isn’t so empty anymore. About 1,300 active satellites wreathe the globe in a crowded nest of orbits, providing worldwide communications, GPS navigation, weather forecasting and planetary surveillance. For militaries that rely on some of those satellites for modern warfare, space has become the ultimate high ground, with the U.S. as the undisputed king of the hill. Now, as China and Russia aggressively seek to challenge U.S. superiority in space with ambitious military space programs of their own, the power struggle risks sparking a conflict that could cripple the entire planet’s space-based infrastructure. And though it might begin in space, such a conflict could easily ignite full-blown war on Earth.

The long-simmering tensions are now approaching a boiling point due to several events, including recent and ongoing tests of possible anti-satellite weapons by China and Russia, as well as last month’s failure of tension-easing talks at the United Nations.

Testifying before Congress earlier this year, Director of National Intelligence James Clapper echoed the concerns held by many senior government officials about the growing threat to U.S. satellites, saying that China and Russia are both “developing capabilities to deny access in a conflict,” such as those that might erupt over China’s military activities in the South China Sea or Russia’s in Ukraine. China in particular, Clapper said, has demonstrated “the need to interfere with, damage and destroy” U.S. satellites, referring to a series of Chinese anti-satellite missile tests that began in 2007.

There are many ways to disable or destroy satellites beyond provocatively blowing them up with missiles. A spacecraft could simply approach a satellite and spray paint over its optics, or manually snap off its communications antennas, or destabilize its orbit. Lasers can be used to temporarily disable or permanently damage a satellite’s components, particularly its delicate sensors, and radio or microwaves can jam or hijack transmissions to or from ground controllers.

In response to these possible threats, the Obama administration has budgeted at least $5 billion to be spent over the next five years to enhance both the defensive and offensive capabilities of the U.S. military space program. The U.S. is also attempting to tackle the problem through diplomacy, although with minimal success; in late July at the United Nations, long-awaited discussions stalled on a European Union-drafted code of conduct for spacefaring nations due to opposition from Russia, China and several other countries including Brazil, India, South Africa and Iran. The failure has placed diplomatic solutions for the growing threat in limbo, likely leading to years of further debate within the UN’s General Assembly.

“The bottom line is the United States does not want conflict in outer space,” says Frank Rose, assistant secretary of state for arms control, verification and compliance, who has led American diplomatic efforts to prevent a space arms race. The U.S., he says, is willing to work with Russia and China to keep space secure. “But let me make it very clear: we will defend our space assets if attacked.”

Offensive space weapons tested

The prospect of war in space is not new. Fearing Soviet nuclear weapons launched from orbit, the U.S. began testing anti-satellite weaponry in the late 1950s. It even tested nuclear bombs in space before orbital weapons of mass destruction were banned through the United Nations’ Outer Space Treaty of 1967. After the ban, space-based surveillance became a crucial component of the Cold War, with satellites serving as one part of elaborate early-warning systems on alert for the deployment or launch of ground-based nuclear weapons. Throughout most of the Cold War, the U.S.S.R. developed and tested “space mines,” self-detonating spacecraft that could seek and destroy U.S. spy satellites by peppering them with shrapnel. In the 1980s, the militarization of space peaked with the Reagan administration’s multibillion-dollar Strategic Defense Initiative, dubbed Star Wars, to develop orbital countermeasures against Soviet intercontinental ballistic missiles. And in 1985, the U.S. Air Force staged a clear demonstration of its formidable capabilities, when an F-15 fighter jet launched a missile that took out a failing U.S. satellite in low-Earth orbit.

Through it all, no full-blown arms race or direct conflicts erupted. According to Michael Krepon, an arms-control expert and co-founder of the Stimson Center think tank in Washington, D.C., that was because both the U.S. and U.S.S.R. realized how vulnerable their satellites were—particularly the ones in “geosynchronous” orbits of about 35,000 kilometers or more. Such satellites effectively hover over one spot on the planet, making them sitting ducks. But because any hostile action against those satellites could easily escalate to a full nuclear exchange on Earth, both superpowers backed down. “Neither one of us signed a treaty about this,” Krepon says. “We just independently came to the conclusion that our security would be worse off if we went after those satellites, because if one of us did it, then the other guy would, too.”

Today, the situation is much more complicated. Low- and high-Earth orbits have become hotbeds of scientific and commercial activity, filled with hundreds upon hundreds of satellites from about 60 different nations. Despite their largely peaceful purposes, each and every satellite is at risk, in part because not all members of the growing club of military space powers are willing to play by the same rules—and they don’t have to, because the rules remain as yet unwritten.

 Space junk is the greatest threat. Satellites race through space at very high velocities, so the quickest, dirtiest way to kill one is to simply launch something into space to get in its way. Even the impact of an object as small and low-tech as a marble can disable or entirely destroy a billion-dollar satellite. And if a nation uses such a “kinetic” method to destroy an adversary’s satellite, it can easily create even more dangerous debris, potentially cascading into a chain reaction that transforms Earth orbit into a demolition derby.

Linda Billings 2018, PhD, does communication research for NASA’s astrobiology and planetary defense program. She has engaged in space policy analysis since she joined the aerospace community in 1983, 10-26-2018, “A US Space Force? A Very Bad Idea!”, Theology and Science, <https://www.tandfonline.com/doi/pdf/10.1080/14746700.2018.1522732?needAccess=true>

While Trump administration officials have been insistent that this is the case, the claim that space is a warfighting domain is a construct, not a fact. It also should be noted that the United States already has an Air Force Space Command (AFSC) in place, activated in 1982 and currently employing 30,000 people worldwide. AFSC says it “provides military focused space capabilities with a global perspective to the joint warfighting team.” Most citizens currently know little to nothing about what AFSC does or about classified U.S. space activities and capabilities such as spy satellite systems and the X-37, a reusable, uncrewed, military spaceplane first launched into Earth orbit in 2010 (as of 2017 the U.S. Air Force had launched five X-37 missions).

Linda Billings 2018, PhD, does communication research for NASA’s astrobiology and planetary defense program. She has engaged in space policy analysis since she joined the aerospace community in 1983, 10-26-2018, “A US Space Force? A Very Bad Idea!”, Theology and Science, https://www.tandfonline.com/doi/pdf/10.1080/14746700.2018.1522732?needAccess=true

The 1967 United Nations Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, known as the 1967 Outer Space Treaty, is the foundation of international, and presumably U.S., space law. The United States ratified the treaty in 1967. According to the supremacy clause of the U.S. Constitution, a ratified treaty is “the supreme law of the land.” More than 100 nations are party to the treaty. For 50 years, the treaty has served as an international legal framework for maintaining outer space as a commons to be used, and protected, for peaceful purposes.

What U.S. citizens—and others—should be most concerned about is not the possible creation of a new, large and costly bureaucracy but the Trump administration’s belligerent stance toward other space-capable nations.

The current U.S. administration’s bent toward war-mongering is good for business and bad for national security. Preparing for war in space will be expensive, and the aerospace industry will profit greatly from it if the initiative goes forward.

According to Defense News, the top five U.S. Department of Defense contractors in 2018 are (in order from #1) Lockheed Martin, Raytheon, BAE Systems, Northrop Grumman, and Boeing. These corporations may not be the leading DOD contractors for space-related assets, but their financials provide some indication of their positions in the military-industrial complex. For example, Lockheed Martin took in $48 billion in defense revenues in 2017; revenue from defense = 94 percent of total revenues. In its 2017 annual report, the company reported a $6 billion profit on sales of $51 billion. Raytheon took in $23.6 billion in defense revenue in 2017; revenue from defense = 93 percent of total revenues. In its 2017 annual report, the company reported a $2 billion profit on $25.3 billion in net sales.

Citizens of my country—to which I am devoted—can, and should, press their elected officials to abide by the central tenet of the Outer Space Treaty and preserve space for peaceful purposes. Instead of preparing for “warfighting” in space, the United States.

Namrata Goswami 2019, independent analyst and author of “Outer Space and Great Powers.”, 8-30-2019, “The Space Force’s rocky start is bad news for America”, Washington Post, https://www.washingtonpost.com/opinions/the-space-forces-rocky-start-is-bad-news-for-america/2019/08/30/569f74ca-cb50-11e9-a4f3-c081a126de70\_story.html

After a long and confusing bureaucratic process, the U.S. Space Command finally launched this week. Though a “Space Command” may sound sleek and futuristic, the difficulty the administration is having in establishing the related Space Force does not bode well for America’s future in the new space race. Policy incoherence regarding space will have serious consequences. A wrong vision could be detrimental to the future of the United States and the entire planet.

President Trump has appeared enthusiastic about military space strategy since assuming office. He floated the idea of a Space Force in March 2018 and directed the Pentagon to establish one in June that year. But unlike immigration or crime, issues he returns to repeatedly, Trump has ceded the establishment of a separate Space Force as a new branch of the armed services to a raucous public debate.

That’s a shame, because the new space service has a vital role to play. Thinking of space as air, just higher up, is a mistake. In the future, as styles of warfare emerge in this realm, the United States will need a distinct culture and expertise focused on this domain to maintain its military preeminence, guard itself against new kinds of attacks and develop the skills that will make possible future exploration.

An independent space service is essential to maintain U.S. primacy in space. A separate service will gather space professionals from their parent services to start a unique culture focused on the frontier, empowering them to think of space — including recruitment, training and subsequent promotions — on its own terms. Such a service is critical given the growing importance of space, not just from a national security perspective, but also to secure the growing industry of space commerce.

But the administration’s quest to establish this service has been plagued by bureaucratic meddling and policy confusion — and it hasn’t been confined to the White House. Back in May, the Senate Armed Services Committee approved legislation that would establish a separate military service for space standing alongside established services such as the Army and Navy. But in July, the House Armed Services Committee passed a decidedly more limited vision, establishing a Space Corps within the Department of the Air Force. That leaves both houses of Congress far apart on their sense of what the military’s approach to space should be.

But if Congress is confused, lawmakers are at least trying to get something done. The Pentagon, tasked by Trump to work on a separate space service proposal, was against the establishment of a separate service from the beginning. Top leadership stifled a serious policy debate within the Air Force on how the service should be constituted, issuing a “gag order” on advocacy for a space order. The directive, which came in the form of an anodyne-sounding “restrictive public affairs guidance,” prevented those within its ranks with the necessary military space expertise from weighing in publicly.

The result? Discussion of a subject with historical consequences was ceded to those, including late-night comedians, who neither understood how military space thinkers conceptualize space power nor possessed a historical sense of what a separate service would mean for space policy in the long run. Those Air Force officers who chose to speak up publicly about space were forced to retire.

Without healthy democratic debate, we are left with strategic incoherence regarding U.S. space strategy. This is an unfortunate reversal at a critical moment, muddying bipartisan legislation that President Barack Obama signed in 2015, which gave the Defense Department a vital role in securing the public’s interest in space and protecting national security space assets.

Laura Grego 19, senior scientist in the Global Security Program at the Union of Concerned Scientists, 12-10-2019, "Creating a Space Force Would Trigger a Space Arms Race and Threaten US Satellite Security, Science Group Says," Union of Concerned Scientists, <https://www.ucsusa.org/about/news/space-force-would-trigger-arms-race>

A congressional conference committee has agreed to include the creation of a space force in a must-pass defense bill in exchange for paid parental leave benefits for federal workers. What is missing from the debate over the horse trade, according to the Union of Concerned Scientists (UCS), is the fact that a space force is a very bad idea.

Below is a statement by Laura Grego, a physicist and senior scientist in the Global Security Program at UCS.

“At best a space force is a distraction from what is necessary to ensure space security in the face of rapid technological and geopolitical changes. At worst, it would prompt a space arms race that would threaten U.S. military and civilian satellites, not protect them. Diplomacy, not bureaucratic reorganization is urgently needed.

“The Pentagon insists that keeping space predictable and safe is the core purpose of whatever reorganization they do. To be sure, that mission is important and stabilizing, but it doesn’t need a new military service. Creating a new military service focused on space will create bureaucratic incentives to hype the space weapons threat and build new weapons. Pentagon officials emphasize that Russia and China are developing anti-satellite technology, but they leave out the fact that the United States is far ahead in sophistication as well as capacity of such technology.

“In fact, having anti-satellite weapons will do very little to keep one’s own satellites safe from attack. And unconstrained space weapons development will lead to a competition that makes space more dangerous, costly and unpredictable to use.

“In the absence of any international agreements about protecting satellites and the outer space environment, more countries are developing weapons that can destroy satellites in orbit. Earlier this year, for example, India successfully tested its anti-satellite system, obliterating its own satellite. It proudly proclaimed that it had joined the ‘elite club of space powers.’

“Testing anti-satellite technology, much less engaging in an actual conflict in space, can have profound ripple effects. The destruction of a single large satellite in low Earth orbit could more than double the amount of dangerous debris in the orbits most often used for weather observations, earth imaging and space-based internet service.

“We all would be better off with international agreements that constrain conduct and particularly dangerous technologies in space. The international community has struggled to overcome ideological divisions to reach agreements, but the benefits of continuing to try are obvious. Despite the United States having the most investment in space—nearly half of all satellites—it has put very little time into diplomatic efforts to keep space safe.

“Keeping space safe is critical, not just for military purposes, but for the billions of civilians who rely on the nearly 2,000 satellites circling the planet, the vast majority of which are non-military, which provide critical communications and economic services.”

#### The space force will cost a ton of money AND won’t be able to do its job.

Robert Farley 20, Senior Lecturer at the University of Kentucky, 12-1-2020, "Space Force: Ahead of Its Time, or Dreadfully Premature?," Cato Institute, https://www.cato.org/policy-analysis/space-force-ahead-its-time-or-dreadfully-premature

Budgets

We have little sense thus far of the size or significance of the Space Force budget. As noted, the initial budget for the Space Force runs at $15 billion, which is by far the smallest of any independent service; the Marine Corps, the closest analogue to the Space Force, will have a budget of $46 billion in 2021.52 The Department of Defense projected new costs for establishing the Space Force at roughly $500 million per year for the first five years. The Congressional Budget Office, by contrast, estimated one‐​time costs at between $1 billion and $3 billion, with annual cost increases between $840 million and $1.3 billion.53 Another estimate, developed for Air Force Secretary Heather Wilson in 2018, projected a $13 billion five‐​year price tag for establishing and operating the Space Force.54 Because of the size of the force, personnel costs occupy a relatively small part of the budget; although, this could grow rapidly due to the need for maintaining technical expertise.

Beyond these estimates, we have little concrete information to go on. The establishment of a service without its own department gives the Space Force less bureaucratic leverage than any of the other services apart from the Marine Corps. The Marine Corps enjoys an established tradition, a large community of veterans, and a strong relationship with Congress, all of which the Space Force lacks. Nevertheless, the Marine Corps budget as a percentage of the overall Department of the Navy allotment has tended to vary considerably, with percentages of the overall Navy budget varying from as low as 13 percent to as high as 23 percent.55 This variance stands in contrast to the relatively stable allotments across the three established military departments.56 The Space Force, without any of the advantages of the Marine Corps, will likely struggle to protect its slice of the budgetary pie, which means it could struggle to protect the very capabilities it was established to field.

#### The Space Force won’t develop an independent command, it is too premature and will endanger peaceful use of space.

Robert Farley 20, Senior Lecturer at the University of Kentucky, 12-1-2020, "Space Force: Ahead of Its Time, or Dreadfully Premature?," Cato Institute, <https://www.cato.org/policy-analysis/space-force-ahead-its-time-or-dreadfully-premature>

Provisionally, many aspects of the Space Force seem problematic. Space is, if anything, a more intractable domain than air in terms of interservice conflict in that space assets are the sinews of the day‐​to‐​day activities of the services on land, at sea, in the air, and in cyberspace. The inclusion of the Space Force within the Department of the Air Force raises questions about how independent the Space Force will really be, and thus whether it will realize any of the promised gains. Finally, the lurking problem of the development of an independent space doctrine, which has in some historical cases resolved in favor of doctrines that favor independent, offensive operations, remains a long‐​term concern insofar as it would threaten to endanger peaceful use of the “space commons.”

Space Force’s establishment as an independent service is premature. Even for an institutional system in which services have domain‐​specific responsibilities (rather than a system that asks services to think holistically about how to accomplish missions across multiple domains), the Space Force is immature. Creating the Space Force at this point does not necessarily create the conditions under which the service can mature in a healthy fashion. Rather, it introduces the Space Force into a political arena where it lacks the resources and the political heft to effectively establish its prerogatives among the other services. In effect, it is a service in name only; in reality, it remains Air Force Space Command, and there is little in its birth that suggests it will grow beyond this any time soon.

#### The Space Force cannot solve, it costs too much money and doesn’t do anything.

Michael E. O'Hanlon 19, Foreign Policy Co-Director - Center for Security, Strategy, and Technology, Africa Security Initiative Senior Fellow - Foreign Policy, Center for Security, Strategy, and Technology, The Sydney Stein, Jr. Chair all at the Brookings Institute, an independent research organization on policy, 4-20-2019, "The Space Force is a misguided idea. Congress should turn it down.," Brookings, https://www.brookings.edu/blog/order-from-chaos/2019/04/20/the-space-force-is-a-misguided-idea-congress-should-turn-it-down/

With the Trump administration and thus the Pentagon now firmly behind it, and with Americans naturally predisposed to new high-tech frontiers, the proposal to create a Space Force within the U.S. military now has lots of momentum. But Congress, which must approve the plan before the new military service is created, should say no to this alluring, misguided idea.

Some of the arguments against a Space Force, which would be bureaucratically positioned within the Department of the Air Force, just as the Marine Corps is technically part of the Department of the Navy, are mundane and largely about economics and efficiency. Others are more conceptual and strategic. Together, they add up to a strong case for skepticism.

First, the Space Force would be not just small relative to any other service but tiny. It would consist of perhaps 15,000 to 20,000 personnel, including civilians. By contrast, the Marine Corps, far and away the smallest of military services, has about 185,000 active-duty Marines. Even the Coast Guard, within the Department of Homeland Security, has more than 40,000 active-duty personnel and a grand total of nearly 90,000 employees.

Because a stand-alone military service, even if within the Air Force, will need its own hierarchy, doctrine, schools, uniforms and everything else under the sun that goes with a stand-alone organization — including, perhaps, marching bands — we will spend lots of time in the early years simply building it, at a cost the Pentagon estimates at $2 billion over five years (which seems a lowball estimate).

The experience of building other new governmental organizations should make us wary of bureaucratically reorganizing our way to a new national priority. Yes, space is a priority for the armed forces, and yes, space is a dynamic theater where adversaries are increasingly active. But after 9/11, we similarly agreed to create a Department of Homeland Security. Nearly two decades later, the verdict is still out about the wisdom of that move.

Already, the nation’s top military advisory body, the Joint Chiefs of Staff, has seven members — the chairman, vice chairman, head of each of the four Defense Department services and head of the National Guard Bureau. This group does not need an eighth member and eighth separate military advisory voice.

Proponents of the Space Force argue that such a branch would be necessary to promote space-related defense projects and technology. While the Air Force does tend to be run by fighter pilots who often emphasize jet technology, it also has an institutional proclivity to play down the importance of bomber forces, unmanned systems and other technologies. The Navy might similarly overemphasize aircraft carriers while underemphasizing unmanned systems. But we cannot create a new service for each partially neglected area of the armed forces.

The best solution is for civilians, and the chairman and vice chairman, to take more of a role in promoting officers within the existing services who have a variety of specialties, and for Congress to properly fund the full range of military priorities. We have seen this approach work in the past, even with less sexy areas of technology such as long-range transport aircraft. It can work for space, too.

#### The Space Force won’t unify command – it will cause stovepiping, or the incentive for each military branch to keep space intelligence to themselves.

Michael E. O'Hanlon 19, Foreign Policy Co-Director - Center for Security, Strategy, and Technology, Africa Security Initiative Senior Fellow - Foreign Policy, Center for Security, Strategy, and Technology, The Sydney Stein, Jr. Chair all at the Brookings Institute, an independent research organization on policy, 4-20-2019, "The Space Force is a misguided idea. Congress should turn it down.," Brookings, https://www.brookings.edu/blog/order-from-chaos/2019/04/20/the-space-force-is-a-misguided-idea-congress-should-turn-it-down/

The Trump administration is right to create a new space command — that is, a unified headquarters of perhaps 500 to 1,000 people from across the military services who will specialize in space operations, which have in fact become much more important over the years. But Space Command will likely work best if its personnel also have strong ties to the military services, since each service ultimately depends upon the sensors, communications systems and networks operating in and through space. Integration should be the watchword.

Space systems are increasingly vulnerable today, and while we can mitigate this trend by dispersing more capabilities across large numbers of smaller satellites, space will never again be a military sanctuary. As such, most space systems today need backups of one type or another that would operate in the air or another medium closer to Earth. Again, integration of space capabilities with other assets should be the watchword. Creating a new bureaucracy might run counter to this by increasing stovepiping rather than teamwork.

#### Military culture is wrong for space – we should make every attempt to slow down militarization.

Michael E. O'Hanlon 19, Foreign Policy Co-Director - Center for Security, Strategy, and Technology, Africa Security Initiative Senior Fellow - Foreign Policy, Center for Security, Strategy, and Technology, The Sydney Stein, Jr. Chair all at the Brookings Institute, an independent research organization on policy, 4-20-2019, "The Space Force is a misguided idea. Congress should turn it down.," Brookings, https://www.brookings.edu/blog/order-from-chaos/2019/04/20/the-space-force-is-a-misguided-idea-congress-should-turn-it-down/

U.S. military services all have strong warrior cultures that emphasize offensive weapons and decisive lethal operations. This is as it should be. But it is not clear that the same attitude is optimal for space operations. While we should assume that adversaries will target our satellites in war — and while we need ways to counter theirs, too — we should attempt restraint wherever possible in weaponizing space, which is still humanity’s last great frontier and serves the U.S. military best as a region for creating and transmitting data rather than fighting. Creating a Space Force might run counter to this goal.

Yes, there is lots of military work to do in space, and yes, we need to devote more military attention and resources to this region. But a Space Force is not the best solution to this problem.

#### The Space Force will cost a ton of money and cause more bureaucracy for space missions.

Kaitlyn Johnson 18, research associate with the Aerospace Security Project at the Center for Strategic and International Studies, a policy think tank, 10-3-2018, "Why a Space Force Can Wait," CSIS, https://www.csis.org/analysis/why-space-force-can-wait

A significant issue with developing a Space Force by 2020 is the cost needed to establish a new military department. Statements from the administration describing the Space Force as “budget-neutral” are misleading. Deputy Secretary of Defense Patrick Shanahan even noted that standing up the new Service could cost “billions,” though DoD has not completed a formal cost evaluation as of yet. It is widely understood that standing up organizations in DoD is expensive. Some things are fairly certain to cost DoD: overhead costs, development of doctrine, consolidation of facilities, movement of people and families, a service academy or war college, recruiting pipelines, and of course, new uniforms. This year, DoD plans to spend about $12.7 billion on unclassified space programs. Air Force Secretary Heather Wilson recently estimated that an additional $13 billion would be needed to establish both the new Department of the Space Force and the new U.S. Space Command (SPACECOM), and to keep both operating over the next five years.

For supporters of the Space Force, it is easy to claim a low or neutral budget with the Space Force just using existing personnel and facilities to continue current operations plus a small overhead staff. However, this also assumes that the Space Force will be able to acquire all space personnel from the other Services. If asked to join the Space Force, some service members may choose not to jump ship, per say, out of loyalty to their Service, causing the Space Force to have to recruit elsewhere. With the rushed timeframe of 2020, identifying, incentivizing, and building a relationship with key space personnel in all the departments—not just the Air Force—will take time and trust. Service members will be hard-pressed to leave their Service for a new department without sufficient trust in the leaders and mission of the Space Force. Furthermore, given that the majority of space personnel are civilians or contractors, the composition of a Space Force would be unlike any other military department. If a military department is mostly staffed by non-military personnel, is that necessarily the best fit for reorganization?

Despite DoD leaders now considering space a warfighting domain, space operations mainly provide critical support to operations in all other domains. Funding for space capabilities and operations is mixed between not only the different military departments and Services, but also intelligence agencies both within and outside of DoD. Sieving the right “pieces” out of DoD—and possibly the Intelligence Community—may add further bureaucracy to these programs. More worryingly, it may not even be possible to suss out the right programs or people due to classification levels and diversification of space capabilities. A new military department would almost inevitably result in extra bureaucracy and complications amongst the Services when conducting joint operations, which would likely account for almost all of the Space Force’s operations.

#### The current Space Force is rushing into a solution without proper democratic, public consideration.

Kaitlyn Johnson 18, research associate with the Aerospace Security Project at the Center for Strategic and International Studies, a policy think tank, 10-3-2018, "Why a Space Force Can Wait," CSIS, https://www.csis.org/analysis/why-space-force-can-wait

Establishing a Department of the Space Force by 2020 is rushing into an end solution without proper consideration. Although there have been several space reorganization studies in the past two decades, a comprehensive public debate of our current space capabilities and their organization is just beginning. A complication to this discussion is, of course, that many space systems and operations are classified. If creating a Space Force is a matter of inevitability, as many believe, the process should be done thoughtfully and with intention. Other solutions presented—such as SPACECOM, a Space Development Agency, the Space Operations Force, and a Space Corps—are all viable options to remedy and make DoD space operations more efficient. Perhaps it is also time to consider that perhaps this reorganization is unique and therefore should not be limited to mimicking already-existing systems.

An incremental approach to developing a comprehensive organization for our national security space enterprise is a smarter decision. Our aim as a policy community should be to evaluate all options thoroughly, hold public discourse, and develop a solution that will best support our national security space enterprise.

#### Ten reasons that the Space Force is bad.

Loren Thompson 18, Chief Operating Officer of the non-profit Lexington Institute and Chief Executive Officer of Source Associates. Prior to holding my present positions, I was Deputy Director of the Security Studies Program at Georgetown University and taught graduate-level courses in strategy, technology and media affairs at Georgetown. I have also taught at Harvard University's Kennedy School of Government. I hold doctoral and master’s degrees in government from Georgetown University and a bachelor of science degree in political science from Northeastern University, 8-27-2018, "Ten Ways A Space Force Will Make America Weaker," Forbes, <https://www.forbes.com/sites/lorenthompson/2018/08/27/ten-ways-a-space-force-will-make-america-weaker/?sh=15521bb834b0>

Congress should reject that proposal. It is a poorly conceived, wasteful undertaking that will weaken the joint force. America's military needs in space would be far better served by retaining the existing organization of the joint force and making modest adjustments to assure space challenges are met in a timely fashion.

Most experts already know this. The president, who isn't an expert, does not. So for the benefit of those who have not been paying close attention and might be captivated by rhetoric untethered to reality, here are ten reasons why creating a Space Force would be a really bad idea.

1. It will disrupt vital military relationships. The joint force is heavily dependent on orbital systems. Our warships could not communicate without satellite links. Our smart bombs could not hit their targets without guidance from GPS spacecraft. Each armored brigade contains 2,500 pieces of equipment that depend on space to operate. The relationships supporting these functions have been laboriously worked out over many years. Creating a new military service will inevitably impede and confuse arrangements that generally work well today.
2. It will create new barriers to joint force integration. Organizations have boundaries that get in the way of cooperating with other organizations -- particularly when they are competing for missions and resources. One reason the 9-11 attacks succeeded was that intelligence and law enforcement agencies did not share information because they were protecting their bureaucratic turf. A great deal of effort has been invested in tearing down those walls. But standing up a Space Force would create new barriers to cooperation.
3. It will lack the resources to be a co-equal service. President Trump says he wants the Space Force to be "separate but equal" with the Air Force. But the entire space workforce in the defense department and intelligence community -- 27,500 people according to Sandra Erwin of Space News -- represents less than 1% of the personnel employed by the Pentagon. The budget for all national security space activities totals less than two days’ worth of federal spending per year. So a Space Force will not be "separate but equal" with other services.
4. It will be too dependent on industry. When an organization has a narrowly-defined charter and lacks the resources of larger entities with which it must compete, it often turns to outsiders for help. An independent Space Force would be heavily reliant on private industry for technical expertise, policy advice, and program oversight. However, private industry is not driven by the same priorities as public agencies, and thus reliance on its advice would tend to distort the judgment and objectivity of a Space Force.
5. It will drain resources from more productive pursuits. The Vice Chairman of the Joint Chiefs recently told an audience that anyone who thinks creating a Space Force will be revenue-neutral is "naive." A new military service will require its own warfighting doctrine, a dedicated secretariat and military staff, special support organizations, unique uniforms and other items that do not exist today. Deputy defense secretary Pat Shanahan says this will cost billions of dollars, and much of the money will likely come from more important activities.
6. It will replicate capabilities already resident elsewhere. A Space Force wouldn't just receive functions transferred from other military services. It would share responsibility for missions like joint networking and cybersecurity that would continue to exist in those other services. For instance, the Air Force isn't going to give up its cyber capabilities just because a new service is created. So the Space Force will have to stand up mirror organizations and compete for scarce technical talent, creating wasteful redundancy.
7. It will spawn yet another sprawling bureaucracy. You don't need to be a political scientist to understand that every time Washington creates a major new organization, it gives birth to a bureaucracy that assigns high priority to protecting its interests and growing its budget. That is what will happen with the Space Force. It won't just replicate what already exists in other places, it will find new functions to perform and new positions that need to be filled -- often by highly paid personnel who could be better deployed elsewhere.
8. It will reduce incentives for other services to support space. Once a Space Force is created, the other military services will have little incentive to invest in understanding the orbital domain. Having lost their organic space communities, they will shift focus to areas still considered within their core competencies. The perverse effect will be to reduce expertise in space across the joint force by concentrating it in one place that is isolated from other military organizations.
9. It will be defenseless without the help of other services. The United States does not build imperial battle cruisers like those seen in Star Wars. Its "warfighting" capabilities in space consist mainly of vulnerable satellites orbiting the Earth on well-known paths. The satellites can be hardened or proliferated, but they have no ability to shoot back at attackers and there is no battle management system. Any military response to attacks on U.S. space assets would likely require action within the atmosphere by other services. So calling space a warfighting domain is a stretch.
10. It will make the world's best air force less effective. The U.S. Air Force has pioneered the integration of air power and space capabilities with great success. In fact, other countries are combining their military air and space organizations in imitation of the US. model. If the U.S. proceeds to dis-integrate its military aerospace community, it will likely undermine its current dominance both in the air and in orbit. Its air force will be diminished by the loss of skills and capabilities directly related to winning wars.

You might say that the U.S. Air Force has helped bring on this danger by exaggerating the notion that space is becoming a warfighting domain. All that has really happened is that Russia and China have figured out how vital orbital assets are to our terrestrial warfighting capabilities. But that's an argument for keeping space expertise spread across the joint force, not creating a new federal bureaucracy that drains missions and money away from other military services. Creating a Space Force today is premature at best, and will likely make America weaker.

#### Space Force collapses multilateral arms control in space

Robert Farley 20, Senior Lecturer at the University of Kentucky, 12-1-2020, "Space Force: Ahead of Its Time, or Dreadfully Premature?," Cato Institute, https://www.cato.org/policy-analysis/space-force-ahead-its-time-or-dreadfully-premature

Given that services tend to pursue autonomy, the Space Force could pose some obstacle to future efforts for multilateral arms control in space. To be sure, neither the navies nor the air forces of the 20th century managed to prevent arms control. Nevertheless, if the Space Force manages to acquire the bureaucratic heft it needs to accomplish its core missions, it could act as an interest group within government to prevent the execution of strong multilateral arms control agreements. The record offers qualified reasons for concern about the role that the Space Force could play in future arms control negotiations. Services tend to resent the imposition of external limits on their procurement and force structure, although the extent of this resentment depends on organizational priorities. Still, the Space Force is unlikely to spearhead a drive for arms control within the U.S. government and probably will resist limitations imposed by such arms control on its core interests.