

THE NATIONAL SPACEPOWER CENTER · SPACE FORCE ASSOCIATION

THE NATIONAL
Spacepower
REVIEW

VOL. I · NO. 1 · AUTUMN 2026



THE ISSUE

The Guardian Generation

*From a force that supports to a force that fights –
in the words of the Guardians living the change.*

The Guardian Generation: Builders in the Arena

FOREWORD · GEN. SALTZMAN (RET.)

The Next Guardians – Growing the Space Force of the Future

CMSSF · CMSGT BENTIVEGNA

Securing the Space Advantage: The Space Force's Third Act

CHIEF OF SPACE OPERATIONS · GEN. SCHIESS



About this Review

The National Spacepower Review is a journal of spacepower policy and strategy — a deliberate middle ground between the immediacy of journalism and the rigor of the academy. It is written for the professional who must think seriously about space and act on it, not only study it.

This inaugural issue, **The Guardian Generation**, gathers reflections from senior Guardians alongside analysis from leading thinkers in the national security space.

PROPOSED EDITORIAL RHYTHM Semi-Annually to start, beginning with this inaugural issue.

Autumn 2026

Inaugural · The Guardian Generation

Spring 2027

No. 2

Autumn 2027

No. 3

Spring 2028

No. 4

PUBLISHED BY

The National Spacepower Center
Space Force Association

EDITORIAL

Dr. Michael Martindale, NSpR Editor-in-Chief
National Spacepower Review Editorial Board

COMPANION

The National Spacepower Review: Beyond the Page
Extended interviews with this issue's authors

Contents

Voices from the Guardian generation – and the thinkers charting its course.

FRONT MATTER

—	Editorial Leadership & Fellows	4
	EDITOR-IN-CHIEF · EDITORIAL BOARD · FELLOWS	
—	Why the Association Is Standing Up This Review	5
	PUBLISHER'S LETTER · DAMON FELTMAN , CEO, SPACE FORCE ASSOCIATION	
—	The Guardian Generation: Builders in the Arena	6
	FOREWORD · GENERAL B. CHANCE SALTZMAN · 2ND CHIEF OF SPACE OPERATIONS, U.S. SPACE FORCE, RETIRED	

+ I · SENIOR GUARDIAN VOICES

01	The Next Guardians – Growing the Space Force of the Future	12
	CMSSF JOHN BENTIVEGNA · CHIEF MASTER SERGEANT OF THE SPACE FORCE	
02	The Fight for Connectivity Is Here	16
	GEN STEPHEN N. WHITING · COMMANDER, U.S. SPACE COMMAND	
03	The Generative Generation & the Next Gen G.I.	19
	CMSGT SIMMONS · COMMAND SENIOR ENLISTED LEADER, U.S. SPACE COMMAND	
04	Guardians in Combat	24
	CMSGT GRACEY · SENIOR ENLISTED LEADER, U.S. SPACE FORCES – CENTRAL	

+ II · ORIGINS & THE INSTITUTION

—	American Spacepower · Inaugural Series	28
	ISSUE I · ORIGINAL COMMISSIONED PAINTING	
05	Move, Shoot, Communicate – At Speed: Advancing Dynamic Space Operations	30
	LT GEN JOHN E. SHAW · UNITED STATES SPACE FORCE, RETIRED	
06	Beyond Legacy Models	33
	CMSGT ABI SCOTT · UNITED STATES SPACE FORCE, RETIRED	
07	How the Guardian Generation Was Forged	39
	DR. PETER GARRETSON · UNITED STATES AIR FORCE, RETIRED	

+ III · THE VISION AHEAD

08	Securing the Space Advantage: The Space Force's Third Act	44
	GEN. DOUGLAS A. SCHIESS · 3RD CHIEF OF SPACE OPERATIONS	

Editorial Leadership



Dr. Michael Martindale

EDITOR-IN-CHIEF · THE NATIONAL SPACEPOWER REVIEW

NATIONAL SPACEPOWER REVIEW EDITORIAL BOARD



Dillon Cox
MANAGING EDITOR



Alana Cox
DESIGN EDITOR



William Liquori, Lt Gen, USSF, Ret.
SENIOR EDITOR



Bharath Gopalswamy
SENIOR EDITOR



Daniel Dant, Col, USAF, Ret.
SENIOR EDITOR



Timothy Cox, Lt Col, USAF, Ret.
SENIOR EDITOR

FELLOWS



John E. Shaw, Lt Gen,
USSF, Ret.

DISTINGUISHED FELLOW



Daniel Dant, Col,
USAF, Ret.

SENIOR FELLOW



Bharath Gopalswamy

SENIOR FELLOW

Why Space Force Association Is Standing Up This Review

Every service deserves a serious forum to discuss their profession of arms. This is our forum, built for the Guardian who has to think and act.

THE SPACE FORCE ASSOCIATION exists for a simple reason: to make sure that the men and women of the United States Space Force, and the nation that depends on them, never want for advocacy, education, or an honest place to think out loud about spacepower.

To that end, SFA is establishing the National Spacepower Center to research and critically discuss spacepower. This publication, *The National Spacepower Review*, is intended as the publication of record where spacepower leaders, advocates, and serious thinkers set their arguments down in full to be read, cited, and debated.

We chose to launch it now, deliberately, around this generation of Guardians. The Service is crossing a threshold – from a force that historically supported the joint fight to one leading the first strikes. That transition deserves to be documented by the people living it.

The National Spacepower Center's role is to steward this forum and to keep it independent, rigorous, and useful. The ideas belong to the authors. On behalf of every member and supporter of SFA, thank you for reading, and for taking the profession of spacepower as seriously as its Guardians do. Welcome to *The National Spacepower Review*.



Damon S. Feltman

Brig Gen, USAF Ret. · Chief Executive Officer · Space Force Association

The Guardian Generation: Builders in the Arena

As we face sophisticated challengers and thinking adversaries, we need builders more than assessors — Guardians willing to dare, even when the solution isn't perfect.



GENERAL B. CHANCE SALTZMAN

2nd Chief of Space Operations, U.S. Space Force, Retired

Less than seven years ago, the United States Space Force was little more than an idea on paper. Today, it is a battle-tested combat force.

When our Service was established in late 2019, we were charged with creating a military branch purpose-built to secure our Nation's interests in, from, and to space. Since then, the men and women who answered that call — the first Guardian Generation — have transformed our branch from a collection of space services into global, integrated combat formations. Their daily commitment and ingenuity guarantee the Joint Force can execute space-enabled missions and assure our society's space-enabled way of life.

I spent much of my early days as CSO educating various audiences about our mission and working hard to prove that Guardians are warfighters capable of contesting the domain. But today? That debate is over. We are a fully realized, combat-credible warfighting service. Not because we've declared it, but because our Guardians prove it to the world every day.

✦ *We need builders
more than assessors.*

ON THE INVISIBLE FRONT LINE

They stand watch on the Invisible Front Line against ever-increasing threats as a vital component of the Joint Force. During Operation ABSOLUTE RESOLVE, the Space Force illuminated the battlefield with space-based surveillance and provided vital satellite communications and navigation capabilities, ensuring the success of the mission in Venezuela and the safe return of the U.S. Special Operations forces.

But these operational successes don't simply materialize when called upon. They are a direct result of hard work across the core functions that each Service must perform: Force Design, Force Development, Force

Generation, and Force Employment. We execute each of these functions daily, and our maturity as a warfighting Service is reflected in how we apply them to the real-world challenges of Joint Force operations.

Operation EPIC FURY saw Guardians employing Electromagnetic Warfare systems across U.S. Central Command, planning and executing high-tempo fires to decisively meet the President's military objectives. At the same time, forward-deployed Guardians were standing watch in harm's way to identify, track, and warn of missile attacks on our forces, saving lives and defending U.S. interests in the region. Even when they came under direct attack, those Guardians kept their cool and stayed in the fight.



The four core functions. Force Design, Force Development, Force Generation, and Force Employment — executed daily, and the measure of the service's maturity as a warfighting force. Source: U.S. Space Force.

When U.S. Pacific Command deployed warships across vast distances to patrol strategic sea lanes, the Space Force delivered secure communications, intelligence, and over-the-horizon targeting to safeguard the fleet and ensure maritime superiority across increasingly contested waters.

Through every Joint Force operation, Guardians not only hold the line – they make a crucial difference.

FORCE DESIGN

Force Design is the service-level activity by which the Service determines the force that's needed to secure the nation's interests in space. It requires forecasting the operational environment of the future to inform new requirements and architectures. To guide investments, we recently introduced our Future Operating Environment for 2040 – not an intelligence assessment, but a conceptual view of a future where we must contend with new technologies and new ways of war. This vision shapes the Space Force's Objective Force 2040, a framework that defines the idealized capabilities, capacity, and force structure required for Guardians to accomplish their missions and defeat a thinking adversary. This architecture is integrated by design, incorporating allied, partner, and commercial capabilities to maintain our dominance in the domain. It is also an ongoing effort, designed to spark debate so we can continuously iterate and update the architecture as we learn.

Every Guardian who develops, delivers, or employs a new capability is in the arena.

But, like the origin story of the Space Force itself, designing a force on paper is only the first step. We must then field it at relevant speeds and meaningful scale. Over the last year, a generational opportunity to redefine our acquisition and fielding approaches has shifted our way of thinking – and it's already paying dividends. We've realigned acquisition efforts under Portfolio Acquisition Executives to consolidate authorities and significantly speed program decision-making. We are providing deeper insight and more stability to our space industrial base through more collaborative relationships with industry partners. We're implementing these new approaches through the lens of tightly coupled System Deltas and Mission Deltas, focusing relentlessly on delivering minimum viable capabilities as soon as they can provide a warfighting advantage and upgrading them as we learn operational lessons.

Yet to succeed – and be relevant on the battlefield – these fielded systems must also come with expert space warfighters.

FORCE DEVELOPMENT

Force Development is our means to enhance the Guardians we have today and build the Guardians we will need in the future. This includes the talent management, education, and training required to adapt our thinking to new ways of war. We need space-minded warfighters with the intellectual curiosity to explore the domain's hardest problems. Through our new Officer Training Course, we are preparing our junior officers to lead combat formations across all operational disciplines. Basic Military Training now provides space-specific foundations for our enlisted corps. We are equipping our acquisitions workforce with space-specific acquisitions skills and then deploying them to industry to leverage the most advanced technology and practices. We have also partnered with leading academic institutions to educate our Guardians in leadership, strategy, and joint warfighting.

We must also prepare our people for the fight ahead.

We need space-minded warfighters with the intellectual curiosity to explore the domain's hardest problems.

FORCE GENERATION

Force Generation is the service-level activity that builds, sustains, and reconstitutes force elements to conduct

prompt and sustained operations. Historically, space forces were fully committed to day-to-day operations, which hindered the ability to prepare for sustained conflict. The Space Force Generation (SPAFORGEN) model addressed this by cycling our crews through Prepare, Ready, and Commit phases to ensure Guardians dedicate time for advanced training, tactics validation, and administration. As SPAFORGEN has rolled out across the force, we present combat space forces to Combatant Commanders – integrated, reliable, and resilient to the demands of high-intensity multi-domain fight.

FORCE EMPLOYMENT

Finally, Force Employment encapsulates the planning, force management, and decision-making required to fulfill military objectives with our fielded forces.

A critical tenet of this activity is normalizing spacepower for effective integration into the Joint Force. We achieve this by establishing Space Force Service Components supporting all Combatant Commands. Through these components, our Combat Squadrons operate as distinct units of action, integrating intelligence, cyber, space, and engineering to deliver timely and relevant effects worldwide. As of early 2026, we have established Service Components supporting every Combatant Command Area of Responsibility.

With these core functions in place, we now turn to enhancing them. The modern space warfighting environment is unforgiving and growing more contested every day. The most dangerous thing we can do is rest on the status quo.

We must expand our planning processes to include all the necessary support – from doctrine and personnel to facilities and policy – to ensure technological advances have the necessary support structures to thrive.

To meet these expanding mission requirements in a dynamic threat environment, the Space Force must grow significantly over the next five to ten years by increasing the size of our ranks, pursuing new mission sets as they are assigned to us, and expanding our vital partnership with like-minded nations to share the burden of securing the domain.

THE GUARDIAN DNA

Yet, for all our focus on future planning and advanced technology, one truth is clear: none of this happens without Guardians – skilled men and women, grounded in their Character, Connection, Commitment, and Courage – who underpin every success.

We will not realize technological advantage without our unique Guardian DNA – that enduring foundation that drives us to ask hard questions, tackle challenges head-on, learn quickly from our failures, and innovate with a bias for action over perfection.

There's no doubt, navigating these challenges from the confines of government service can be frustrating at times. Government, by its nature, is designed to be slow, and the bureaucracy can feel stifling. But that friction must not drive us to inaction. We must singularly

pursue the missions that only Guardians are trained and equipped to accomplish, and constantly challenge the bureaucracy to move faster.

As Chief of Space Operations, I have been intensely focused on enhancing combat readiness, developing our Guardians, and strengthening our partnerships. We are an agile, learning organization, but as we face sophisticated challengers and thinking adversaries, we need "builders" more than "assessors." We must dare to try, even when the solution isn't perfect. As framed by President Teddy Roosevelt, "it is not the critic who counts, nor the one who points out how others stumble; the credit belongs to those who do the work, striving valiantly, and who do the deeds." Every Guardian who develops, delivers, or employs a new capability is in the arena – the Guardian Generation.

As I prepare to hand over the watch, I reflect on what we have built together. It has been the honor of my career to lead the Space Force and count myself among the ranks of Guardians. I am immensely proud of the combat-credible warfighting service we have forged. I have no doubt that wherever American interests extend in space, the United States Space Force will be there to secure them.

Semper Supra!

The views expressed are those of the author and do not reflect the official guidance or position of the United States Government, the Department of War, the Department of the Air Force, or the United States Space Force.

PART I



Senior Guardian Voices

*Four leaders on building, integrating, and employing the
force – in their own words.*

01	The Next Guardians – Growing the Space Force of the Future	CMSSF BENTIVEGNA
02	The Fight for Connectivity Is Here	GEN WHITING
03	The Generative Generation & the Next Gen G.I.	CMSGT SIMMONS
04	Guardians in Combat	CMSGT GRACEY

The Next Guardians – Growing the Space Force of the Future

Scout the sharpest minds. Develop them in a threat-informed crucible. Retain them as the elite professionals they are.



CHIEF MASTER SERGEANT OF THE SPACE FORCE JOHN BENTIVEGNA

U.S. Space Force

Step onto the operations floor of any Combat Squadron, Combat Detachment or Theater Space Operations Center at two o'clock in the morning, and the reality of modern warfighting becomes instantly clear. You won't find senior leaders debating strategic doctrine or analysts drafting organizational charts. Instead, you will see a young Specialist and new Lieutenant, eyes locked onto a console, making rapid tactical decisions that directly shield our Joint Force from threats half a world away. This is where the true power of the United States Space Force lives – not in the halls of the Pentagon, but in the hands of the young men and women pulling the watch on the invisible front line.

We have moved past the initial phase of justifying our existence. Today, Guardians operate in a highly contested domain where strategic competitors like China are rapidly fielding assets designed to deny our space-dependent way of life... and our way of war. The threat is not an abstract problem for the future; it is on the operations floors right now as Guardians execute critical, combat-credible missions in real-time.

But the hard truth of the next decade is that we cannot meet this threat by running on legacy systems or relying on mass-scale solutions. In this complex and unforgiving domain, our margin for error is shrinking rapidly. To maintain our advantage, we must grow — not just in raw numbers and infrastructure, but in our technical capability and our warfighting mindset.

However, growing the Space Force of the future is not a simple matter of increasing our enlistment quotas or acquiring more equipment. To build a force capable of out-thinking and out-maneuvering a sophisticated adversary, we must revolutionize how we Scout, Develop, and Retain the next generation of Guardians.

We are scouting for the capacity to learn, adapt, and problem-solve under pressure.

SCOUTING: SEEKING THE DNA

Military recruiting has historically been an exercise in mass marketing — a strategy designed to fill thousands of seats every month. But as a highly specialized service of roughly 11,000 active-duty Guardians, the Space Force does not have the luxury, or the need, to

rely on traditional recruiting models. Instead, we are pioneering a highly targeted "scouting" model.

Think of how an elite college sports program or a specialized technology firm builds its roster. They do not wait for candidates to wander into an office; they hunt for specific talent. This is the shift we're executing. We are looking beyond standardized, multiple-choice aptitude tests to identify applicants who possess the "Guardian DNA" — a unique blend of grit, cognitive flexibility, ethical character, and an insatiable intellectual curiosity.

In the space domain, technical skills are highly perishable; the processes and tactics of today could be rendered obsolete tomorrow. Therefore, we are not just scouting for existing technical expertise, though that is valuable. We are scouting for the capacity to learn, adapt, and problem-solve under pressure. We want the candidate who looks at a highly complex, flawed system and feels an overwhelming urge to figure out how to fix it. If an individual possesses the right character, cognitive agility, and collaborative spirit, the Space Force can teach them the physics of orbital mechanics.

By shifting to a scouting mindset, we are ensuring that every single Guardian who enters our ranks is a deliberate fit for our specialized mission sets. This selective approach allows us to ensure our applicants can be cultivated to meet the demands of cyber, intelligence, and space operations.

DEVELOPING: FORGING SPACE WARFIGHTERS

Scouting the right talent is only the first step. Once we bring these highly capable individuals into our ranks, we must develop them through a continuous, purposeful pipeline that prepares them for high-intensity, multi-domain conflict. We cannot subject our uniquely scouted talent to legacy training pipelines that focus on rote memorization. We must build space-minded warfighters, instilling this mindset from their very first day and reinforcing it continuously throughout every stage of their professional journey.

The journey begins at Initial Entry, where we build the foundations of Guardian culture and military discipline. For our enlisted corps, this starts at Basic Military Training (BMT). We have completely overhauled our BMT program to establish space-specific foundations from the first week. We are not training our enlisted corps for land warfare or maritime operations; we are immersing them in the culture, heritage, and realities of the space domain. Our BMT builds a warfighter who understands the value of military service, embraces our Guardian Commitment as a Team Member and a Team Leader, and has earned the title of Guardian.

For the next generation of Guardians, our subsequent technical training must evolve from a static checklist into a continuous, threat-informed crucible. Future conflict will not allow us the luxury of on-the-job learning; we must build a pipeline that exposes our warfighters to the "worst day" in space before they

ever step onto an active operations floor, and learn that even as a Specialist, their actions have strategic consequences. To succeed against sophisticated, thinking adversaries, our Initial Skills and Advanced Training must leverage advanced Live-Virtual-Constructive (LVC) environments. We're transitioning away from outdated training systems, aiming to put our Guardians behind next-generation emulators that model the chaotic physics of orbital mechanics, complex electromagnetic warfare, and aggressive, multi-vector cyber-attacks in real time.

RETAINING: EMPOWERING CAREER PROGRESSION AND FLEXIBILITY

Perhaps the most critical element of growing our future force is the ability to retain those with a sustained, high-level of performance and a proven commitment to the mission. Given the concentration of highly technical, commercially coveted talent the Space Force is developing, retention is always going to be a focus area for the service. However, we cannot compete with the commercial sector on salary. Instead, our focus must be on the Guardian Experience, to reward operational competence with progression, and empower career flexibility with talent management.

We cannot compete
with the commercial
sector on salary.

I regularly visit operations floors and witness young Specialists pulling difficult shifts, making critical operational decisions, and securing multi-million-dollar space systems on behalf of our national defense. When a Guardian demonstrates that level of capability, maturity, and is asked to carry that much responsibility, they should be rewarded with a commensurate rank.

This is why we have modernized our E-1 to E-4 promotion path and expanded our fully qualified promotion system up to the rank of Sergeant (E-5), with 100% opportunity to promote. If a Specialist meets the rigorous standards, earns their combat mission certifications, and receives the endorsement of their leadership, they earn their promotion. It is no longer about competing against their peers for a limited number of stripes; it is about competing against the standard of excellence. We trust our tactical commanders to look at their formations and elevate the leaders who are prepared for the next stage of their career.

But true retention also requires structural flexibility, as enabled by the Personnel Management Act (PMA). The PMA is perhaps the most revolutionary talent management tool our new service has adopted. For the first time, the Space Force is breaking down the legal and cultural barriers between Active Duty and Reserve forces. Under the PMA, we are unifying all Guardians into a sustained (active duty) and non-sustained (reserve) single-component service.

This means we no longer need to force Guardians to choose between a full-time military career and civilian life. The PMA offers members the opportunity to transition between full-time and part-time service based on their personal needs, family situations, professional goals, and service needs. If a highly trained cyber operator wants to step away to work in commercial industry or pursue a degree, they can transition to

a part-time role without breaking service or losing their connection to the Space Force. When they are ready to return to full-time service, a clear pathway is available. This flexibility ensures that we do not lose decades of technical expertise to rigid bureaucracy. We keep our talent in our ecosystem, benefiting from their outside experiences while continuing to leverage their skills for national defense.

THE NEXT GENERATION

The Space Force has successfully established its credible foundation; now, we must sharpen our combat edge. The next generation of Guardians will be operating in a domain defined by rapid proliferation, kinetic and non-kinetic counter-space weapons, orbital interference, and highly contested networks. This is the fight of the future, and it is a fight we must win.

We will not win it with
technology alone.

But we will not win it with technology alone. We will win it because we have the foresight to scout the sharpest minds, develop them through continuous and rigorous training, and retain them by treating them as the elite professionals they are. The nation's ability to achieve space superiority depends entirely on the men and women who stand on the invisible front line today and those who will answer the call tomorrow. By building a lifecycle that truly supports our people, we are securing the ultimate high ground for generations to come.

Semper Supra.

The Fight for Connectivity Is Here

The electronic warfare grinding across Ukraine is a preview, not an exception. To win the next war, America's national security space architecture must be responsive, adaptive – and, above all, survivable.



GEN STEPHEN N. WHITING
Commander, United States Space Command

What I call the "fight for connectivity" isn't just coming. It's here.

For one potent example, look at the persistent, grinding electronic warfare (EW) happening right now in Ukraine. The action-reaction dynamic to stay connected on the battlefield is moving at lightning speed.

About an hour before Russian forces launched their attack on Ukraine – on February 24, 2022 – Russia used a cyber weapon to attack a commercial SATCOM company, Viasat. Their goal was to wipe out Ukrainian Command and Control (C2) at the most critical moment.

While the Russians knocked out about 45,000 Viasat modems, they also took down 6,000 wind turbines in Germany and tens of thousands of civilian customers across Europe. Users as far as the Middle East and North Africa experienced terminal failures as well – an impact felt across three continents.

Four days later, the first (commercial) Starlink terminals were rushed into Ukraine. Starlink provided a rapidly deployable, survivable C2 system that allowed Ukrainian forces to stay in the fight. In early March, 2,000 more arrived; by April, roughly 5,000 terminals were online in Ukraine.

Since then, EW jamming has progressed significantly on both sides. We have seen incredible counter-EW adaptations, like combat drones flying with spools of fiber-optic wire trailing behind them – some up to 30 miles – just to maintain a physical connection that cannot be jammed.

If this is what the fight for connectivity looks like today – just imagine the scale of the fight tomorrow when two great powers might be on the field. The war in Ukraine has put a giant exclamation point on something we've known for some time – space is a warfighting domain – and we're going to have to fight for connectivity.

At U.S. Space Command, our staff relentlessly focuses on what we can do to win this fight for connectivity. We've seen our future playing out in small towns all across eastern Ukraine and we know we need to change.

Not long ago at our command's annual leadership offsite, we talked about how this problem isn't limited to the battlefield. Other examples help us understand the challenge. Over in the business world they've seen a similar scenario so many times they've got a name for it.

The "innovator's dilemma."

At that event, we talked about Harvard Business School Professor Clayton Christensen's writing on the subject. The late Professor Christensen pointed out that sometimes market-leading companies choose to sustain successful, previously innovative products while neglecting "disruptive innovations" on the rise. Market leaders can become satisfied because their customers are happy and they're at the top (so, why worry?). They're so satisfied that they don't value (or feel threatened by) the rising competitor's innovative approach so that over time, the rising competitor overtakes the market. Think of film cameras losing out to digital cameras, and then digital cameras losing out to smartphones with cameras. Think of horse carriages overwhelmed by Henry Ford's mass automobile production. Or, back to Ukraine – it may be that GEO-based SATCOM has been upended by proliferated LEO?

To us the "innovator's dilemma" sounded a little like U.S. legacy military space platforms – purpose-built for success in the Cold War and part of the world's greatest military space enterprise built for that era – yet not well suited to a new era of space competition. We've never had a day without space, so it can feel a little like "if it ain't broke, don't fix it." But we know that's misleading because our current opponents have actively fielded capabilities to disrupt, degrade, deny, and defeat our ability to use space.

One potential escape from the innovator's dilemma comes from Amazon. CEO Jeff Bezos's 2016 letter to shareholders was, in a word, remarkable. Here was a corporate giant doubling down on what he called the "Day 1 mentality." He counseled that the entire company should act like every day is Amazon's first in business – to experiment, to accept failure, to prioritize customer needs and wants, and above all, to outwit and outfight disruptive innovations coming up in the market. And it seems that mentality's borne fruit – Amazon's still quite a company a decade on.

If you don't disrupt yourself to meet the moment, your opponents will.

The lesson is that market leaders must be prepared to adjust to a changing competitive landscape. If you don't disrupt yourself to meet the moment, your opponents will. Even when there is no obvious or loud demand for change – sometimes the biggest risk can be to play it safe and stick with the status quo.

At U.S. Space Command, we know the status quo isn't good enough, and that's why we were enthusiastic to see President Trump's Executive Order 14369, Ensuring American Space Superiority. This Executive Order calls on the United States to, among other things, ensure we can detect, characterize, and counter the threats now arrayed against our space systems from very low-Earth orbit through cislunar space, including the placement of nuclear weapons in space. Additionally, it directs the creation of a new responsive and adaptive national security space architecture, including an associated implementation plan.

It's time to deliver this new responsive and adaptive national security space architecture, attuned to the realities of today's space domain. A domain in which our opponents have built a suite of counterspace capabilities to hold our satellites at risk in all orbital regimes. A domain in which a non-maneuvering satellite is a static and predictable target. A domain in which agility and resilience — spatially, spectrally, and cognitively — are essential to survival and successful mission accomplishment.

At U.S. Space Command, we've come to the firm conclusion that we need to be able to execute all seven Joint Functions (command and control, intelligence, movement and maneuver, fires, protection, sustainment, and information) in space if we are going to be successful. Our space assets need to shoot, move, and communicate just like the rest of the Joint Force — so our space assets can enable the Joint Force to shoot, move, and communicate and prevent our adversaries from doing so. Space needs to fight like the Joint Force to empower the Joint Force's ability to fight and undermine our adversaries' ability to do so.

Let's consider sustained space maneuver. Space assets are typically limited by fuel and other consumables they launch with. Because we cannot replenish our fuel once on orbit, figuring out how to husband our fuel becomes an overriding consideration in how we operate our satellites — more important than warfighting considerations like selecting the proper movement and maneuver for mission

success. In the modern space environment we find ourselves in, however, we know we need the ability to actively avoid threats and maneuver to gain a position of advantage on our adversaries. Space superiority capabilities will mean little if our own assets cannot evade threats.

Space needs to fight like the Joint Force to empower the Joint Force's ability to fight and undermine our adversaries' ability to do so.

A hallmark of why our Joint Force is so successful is the maneuver and sustainment advantage we enjoy over our adversaries in all other domains. We must also instill these same advantages into the responsive and adaptive national security space architecture we must now deliver if we are to remain the world's best space military force.

And maybe the most critical characteristic in this new responsive and adaptive national security space architecture is that survivability matters at least as much as performance. In space, there is no safe harbor. We can't dig a trench or build a shield — our satellites are persistently in or orbiting through an opponent's weapons engagement zone. And we can build the most high-performing, exquisite satellites in human history, but if they depend on fragile supporting infrastructure, their performance will drop to zero on the first day of the next war. Space survivability isn't just good-to-have or nice-to-have — it's need-to-have.

Especially if we want to win the next war — for connectivity.



The Generative Generation

And the Next Gen G.I. ... the Guardian at the Nexus. The generation that built the interstate will architect the interstellar. This is the cohort that will generate the future.

CMSGT SIMMONS

Command Senior Enlisted Leader, US Space Command

Every age appoints its own archetype of advancement. Every era elevates its own example of grittiness and greatness. And every generation ... when summoned by cause and circumstance ... must decide whether it will simply inherit history ... or intentionally herald it. With our eyes and arms wide open, we welcome the wayfinding workforce and warrior. Welcome a way of life. Welcome a way of warfare. Welcome a world that will not wait.

The course has continued to curve: from Cold War to Computer Age, from counterterrorism to competition. It is time to bend the baton to a new breed, born between 2001 and 2027: the sons and daughters of the digital dawn. They are the Generative Generation ... and among them ... the Next Gen G.I. ... the Guardian at the Nexus.

THE GREATEST

Looking at lineage, today's Generative Generation and Next-Gen G.I. are the 100-year legacy of the Greatest Generation; and the original Government Issue G.I. Born between 1901 and 1927, they were shaped not by comfort, but by calamity. They came of age in the crucible of the Great Depression, where scarcity and sacrifice sculpted society. Hardship honed humility, and responsibility was not rhetoric ... it was routine.

Their adolescence unfolded under economic eclipse. Their adulthood arrived amid Axis Power aggression. They were the young men who braved the beaches of Normandy. The women who riveted the wings of warfare. The families who rationed, recycled, and relentlessly resolved to rebuild rules-based order from the wreckage. Duty defined them. Discipline directed them. Determination delivered them. They did not merely fight a war. They won a world.

When the stakes were secured, they did not sit still ... they set the stage for a century of sendoffs. They built highways and homes that shaped suburbia. Their ingenuity engineered an industrial engine that transformed peacetime production into wartime supremacy. They gave rise to radio ... and radar, arrived in the automobile ... and then the airplane, and tied us together with the telephone and television. And, it was the direct descendants of that greatest generation ... raised by their resilience ... who ran and won the first Space Race. More than moving into the modern world. They manufactured it ... for all mankind.

THE GENERATIVES

History-making will not be hampered or halted in honor of the hubris of our heroics: semiconductors and software, supersonics and stealth, satellites, shuttles, and stations. The course has continued to curve; from Cold War to Computer Age, and then from counterterrorism to competition. It is time to take a bow, and bend the baton to a new breed; to a new brigade born between 2001 and 2027. These are the sons and daughters of the digital dawn. They are the Generative Generation, and among them, the Next Gen G.I.: the Guardian at the Nexus.

As we move into another meaningful moment of our measure and of our mettle, the question that may matter most is: will we mature and muster with the mandate to meet it?

Just as the Greatest Generation came of age amid depression and war, the rising generation was born under the shadow of September 11th and grew up during the Global War on Terror; then gained resilience and resourcefulness through the Great Recession and survived the social sepa-

ration and societal strangle of the COVID-19 strain. Struggle, it seems, is still a stubborn sculptor of strength and character.

While the gone-by generation mastered the mechanical age, a contemporary collective has come; not to contemplate but to command the cognitive age. The Greatest Generation were industrial initiators. The Generative Generation will be digital domestics, network natives, and A.I. architects. Likewise ... As the Greatest Generation mechanized the military, the Next Gen G.I. will operationalize on-orbit. Those that are next are not terrorized by tech. They take hold of it. They are adapters and early adopters. They were born, bred, and branded by a bespoke BattleSpace.

Mankind is moving from machining muscle to mapping machine minds. The industrial achievements of the 20th century were monumental. Factories flourished. Assembly lines accelerated. Mass production powered prosperity. During World War II, the United States transformed its entire manufacturing might from civilian convenience to combat capacity. Ships steamed out of shipyards. Bolt-on bombers burst from assembly bays. Tons of tanks thundered from factory floors. It was the greatest industrial mobilization in human history.

But now we find ourselves at the door of a different revolution entirely; redefined by an aggregation of automation and augmentation. Not the mass-production age ... a machine-learning age.

The internet of things is indigenous to our interns. Interfaces have always been in their faces. Digital agility defines them. They are glad the A.I. genie is getting out of its glass. Perhaps it is a new Pangea, but they know it is not a panacea. To them, A.I. is a prescription ... not the pandemic. They are not panicked by the pandemonium of Pandora's box. They accept that AI is not the all-solving silver bullet or the shortcut to all-sorrows. They are not cogs, they are cognitive; comfortable connecting in cyber cafes, creating in code, and constructing in the cloud. The genius of this generation is that they are generators.

“

They did not merely fight a war. They won a world.

CMSGT SIMMONS · THE GENERATIVE GENERATION

Over the next three to five decades, within the course of the Generative Generation's career, technological titans will collide. As they compound and cascade, we will reconceptualize the road ahead as the route of civilization is recalculated and reconstructed by the rise, regularity, and renaissance of robotic replicators, remoted replacements, rapid reasoning, and regimented routines. We are hurling toward high-capacity and hyper-connectivity. But with great capability comes equally great complexity. And nowhere will that be more consequential than in the character of war.

The genius of this generation is that they are generators.

AN AGENTIC AGE

By the year 2040, warfare ... when and where it wakes ... will have a wildly wider WEZ. Intelligent systems could dominate tipping, targeting, tracking, and terminating. Independent sentinels may constitute the overwhelming majority of interrogator sensors and interceptor shooters. With droves of domestic, defense, and dual-duty drones arriving ... atmospheric and astrographic ... armed conflicts could be completely autonomous or agentic-controlled. Battlefields may stretch across space, cyberspace, and the infospace. Warfare will occur at the speed of software and might increasingly resemble a strategic contest of control rather than combat. Control of data. Control of networks. Control of perception. Artificial intelligence will shape more than conditions, but decisions ... bullying behaviors before bullets or bombs are brought to bear. In this emerging era, supply chains must be safeguarded. Our kill chain will have to have a "Keep-alive chain." The decisive terrain will be the durability of the digital dais, the dependability of data, and defensibility of the domain.

So what does this all mean for the Next Gen G.I.? It means our rationale of what resembles war and the warfighter of tomorrow must be refashioned ... remade ... by its reality. The weapons of the modern warrior will be designed for decision advantage ... as technology transforms the tools, techniques, tactics, timing, and tempo. Still, the computer cannot replace character. In conflict, courage still counts. Integrity still matters. Service still stands supreme. Even in an automated age, in the Art of War, values will (must) remain the vital variable for victory.

So, how will they get from here to there? From today to tomorrow. Over the next decades, we will witness a gradual ... but undeniable ... transposition of today's workforce into the space sector. Not metaphorically. But materially. Logisticians who once tracked trucks will orchestrate orbital supply chains. Medical professionals may one day monitor and maintain human health in microgravity environments. Even legal experts will be required to navigate the emerging frameworks of space law, resource rights, and orbital governance. In tandem, the totality of trades we know will transfer. And warfighting formations will follow suit. The exosphere will not just expand; it will elevate with everyone: evoking engineers and educators, entrepreneurs and entertainers.

CULTURAL CATALYST

Perhaps the most profound transformation from today to tomorrow will not be technical, but cultural. Just as the last generation moved society from basic computer awareness to digital dependency ... the Generative Generation and the Next Gen G.I. will lift humanity from space literacy ... to space fluency. There is a new call to space. Answering this call starts with a culture shift from classrooms to command centers; factory floors to forward formations.

Today, most people understand space in simple terms. Rockets launch. Satellites orbit. Astronauts explore. That is literacy ... it is the lexicon. But fluency is far more advanced. It is the form and function.

Fluency means instinctively understanding how orbital mechanics impact operations. Fluency means intuitively recognizing how space-based systems enable everyday life. Fluency means interdependently designing, defending, and directing capabilities in space as naturally as previous generations did on land, sea, and air. Fluency means intrinsically transcending space from something we study ... into something we strategically shape, as a society.

And the Generative Generation and the Next Gen G.I. will be the translators of that transformation. They will teach society how to think in three dimensions ... and then in dynamic trajectories beyond them. They will normalize space operations the same way previous generations normalized air travel and internet access. They will ensure that space is not an abstract concept reserved for specialists ... but a shared domain understood by citizens, commanded by professionals, and secured by web-based warriors.

WORD TO THE WISE

The Generative Generation and the Next Gen G.I.: the Guardian at the Nexus is already in our ranks. The representatives who will reach forward are sitting in classrooms today, signing contracts today, standing in formation today. Those we are raising and recruiting as our replacements will be the CEOs, commanders, and command senior enlisted leaders ... the decision-makers in the decade of determination. They will be the architects of action when competition crescendos. We are not only preparing a workforce. We are pre-positioning Guarantors of the Global Commons.

To be clear ... this is not a call for conflict. To the contrary, it is a call for clarity ... for competence ... for credibility. The future fight ... if it comes ... will begin with bandwidth not bullets. With contested communications. With challenged supply chains. With strained alliances and stressed assumptions. It will be waged in the gray zones before the red lines. And it will test not only technology ... but tenacity.

The Generative Generation and the Next Gen G.I. are not preparing for a virtual reality but for a real victory. Which means our charge ... right here, right now ... is unmistakable. We must educate them. Equip them. And empower them. But before we fully fasten faith to the future force, it

is worth pausing to ponder our present progress and the lessons learned on the last lap. Our major triumphs ... and our teachable moments. The twentieth century delivered dazzling discoveries and dramatic developments. It also taught us timeless truths that the Generative Generation and Next Gen G.I. should think through.

First, speed without stewardship breeds vulnerability. The digital revolution moved mountains ... but sometimes it moved faster than our safeguards. We connected the world before we completely secured it. We digitized dependence before we fully fortified defense. The lesson? Innovation must be accompanied by intentional integrity.

Second, efficiency without endurance invites exposure. Globalization delivered prosperity, but it also stretched supply chains across continents and concentrated critical capabilities in precarious places. When pandemics paused production and geopolitical pressures pinched pipelines, we discovered that counting on convenience had quietly compromised continuity. The lesson? Resilience must reinforce readiness.

Third, technology without trust fractures teamwork. In an era of algorithms and automation, organizations sometimes became enamored with systems and skeptical of people. But every conflict ... from counterinsurgency campaigns to cyber competitions ... reminded us that technology may accelerate action, yet trust still determines triumph. The lesson? Humanity must remain the heartbeat of high technology.

And finally, perhaps the most important lesson: Control is not the same as command. For decades we often attempted to manage talent with the tight grip of traditional hierarchy ... holding the reins, tightening the tether, and sometimes unknowingly holding back the very horsepower we hoped to harness.

Control is not the
same as command.

The ground-based truth is, a Generative Generation ... a Next Gen G.I., will not thrive under constant constraint, but under inspired intent. Not under micromanagement, but unleashed in mission command. If the twentieth century taught us how to build powerful organizations, the twenty-first century must teach us how to empower powerful individuals within them. That is the leap. That is the lesson. And that is the leadership we must now learn to let loose.

ASCENSION OF ASTROCITIZENSHIP

The Generative Generation and the Next Gen G.I. stand at a remarkable ramp in the road ... as the Guardian at the Nexus. They inherit the legacy of those who liberated continents and launched astronauts. Yet they also inherit the responsibility of institutionalizing artificial intelligence.

And that's only their beginning!

Many of them ... perhaps most of them ... will serve in 2049 and see the year 2100. They will witness both the opening and the closing chapters of the twenty-first century. They will live through technological transformations that many of us in this room will only begin to glimpse. They will see space expand and science stretch the boundaries of what humanity can become. In many ways, they will be the composers of this century and the next. Inventors of an interstellar industry. Designers of digital democracies. Builders of birthplaces beyond.

However, hypersonics will be habit, not happenstance. One-way swarms will one day be the norm. Quantum will be in quantity. Launching from LaGrange ranges will be logistically routine; rendezvousing and revisiting for reconnaissance ... or to rain down responses to redlines.

Echoing the Greatest Generation that built the interstate infrastructure of the twentieth century, the Generative Generation will architect the interstellar infrastructure of the twenty-first. Where the formers raced for bootprints,

the futures will return with blueprints. Where the present will build a Moon base, our pursuers will make their mark on Mars, and map multiple worlds. "Moonbound" will be a meme for more than a monopoly mogul. It may mean a mechanic, a manager, a medic, a musician, a mathematician, a magistrate, a military member and their minors, a missionary, a mayor. They will transition their talents into off-world opportunities and traverse onward with out-of-the-box tech and tools as their ordinary occupation. They will paint with progress that we have yet to perceive. They will cut the cutting-edge. Their grind will be groundbreaking. And they will reveal the revolutionary.

MEETING THE MANDATE

This is the new now ... this is the now next ... this is the nexus ... this is the next us.

Each generation is marked by its moment of mandate. The Greatest Generation answered theirs with factories, flight, and fierce fortitude. The Generative Generation will answer theirs with code, counterspace, and collaborative creativity. From the trenches of the Western Front to the tranches on the world's fringe ... our advantage has always been attributed to our advancement.

The Generative Generation will be gamechangers! They will be the workforce and the wayfinder. For the Next Gen G.I. ... the business of their BattleSpace will be blurrier and broader. The threats ... more complex. Their decisions ... faster and farther-reaching. But their fight will be fundamentally familiar: to fight for freedom and to forge the future. The Guardian at the Nexus is already among us. And if we prepare them properly ... mentor them meaningfully ... and trust them tremendously ... they will not merely inherit the future. – They will generate it.

NOTES

1. CMSgt Simmons, *Generative Generation and the Next Gen G.I.: The Guardian at the Nexus*, Space Force Association (2026).
2. Clayton M. Christensen, *The Innovator's Dilemma* (Harvard Business Review Press, 1997), on disruptive innovation.



Guardians in Combat

Operation EPIC FURY was the first time the Space Force employed combat forces at the service level in a major combat operation. This is the beginning of their story.

CMSGT GRACEY

Command Senior Enlisted Leader, U.S. Space Forces – Central

Operation EPIC FURY marks the first time the United States Space Force has employed combat forces at the service level in a major combat operation. Like any first, it has generated hard-won lessons and valuable experience for the nation's space warfighters. At the operational level of war, Guardians coordinated the first space campaign to dismantle an adversary's space capabilities as a part of the integrated joint campaign against Iranian forces. Success in the space campaign required Guardians at the tactical level to execute missions under fire alongside their peers from the other Services. This is the beginning of their story.

During Operation EPIC FURY, Guardians applied timeless military principles, such as: amassing overwhelming force, conducting fire and maneuver to achieve tactical advantage, and recognizing the vital role of logistics. Through the application of these principles, Guardians proved their ability to sustain combat operations while under fire. The lessons learned during the execution of the space campaign are similar to those learned by other services in other domains. For Guardians, however, the experiences which led to these lessons provide unequivocal proof that space is fully in the fight. A fight made winnable not by all the technological advances since space systems first supported combat operations in Desert Shield and Desert Storm in 1991, but by our Guardians and the Guardian warfighter mindset. Today's combat operations make one truth clear: America's space edge does not begin with hardware. It begins with people. Guardian warfighters are our most important operational advantage.

Operation EPIC FURY triggered a revolution in the Space Force's sense of self, a true paradigm shift in what it means to be a Guardian and a space warfighter. Guardians operating Global Positioning System, missile warning, satellite communications, and intelligence, surveillance, and reconnaissance capabilities from stateside bases must understand that the joint force fails without these vital Space Force contributions. The units that provide them must be ready every shift, twenty-four hours a day, seven days a week, because in modern warfare, the first moves occur in the space and cyber domains, often before terrestrial hostilities begin. Guardians are the first to the fight and frequently, that fight will arrive without warning.

For many military operators and planners, these realities have been obvious for as long as space systems have supported military operations, but what fewer people know is that Guardians are now deployed on the front lines, truly expeditionary and fully in the fight. For the first time, expeditionary Guardians faced the full force of an adversary's arsenal. Iranian ballistic missiles and one-way attack drones placed every Guardian serving in the U.S. Central Command area of responsibility under constant threat and frequent attack. Every space unit in theater experienced strikes from both ballistic missiles and drones; several Space Force fighting positions endured more than one hundred such attacks. This represents a marked departure from past conflicts, in which space operators often served tens, hundreds, or even thousands of miles outside adversary threat rings.

Yet throughout EPIC FURY, Space Force held the line. When bases dispersed under incoming missile and drone attacks, Guardians stood fast and delivered critical joint fires and offensive and defensive space effects through the heaviest bombardments Americans have endured since Vietnam. Guardians repeatedly remained on console until

the last possible moment before sprinting to bunkers — because the mission demanded it.

One expeditionary Guardian was so focused on a target package and the mission of protecting U.S. forces that ALARM RED sirens and the thunder of intercepted indirect fire overhead registered only when a fellow Guardian physically pulled them from the system barely in time to reach the bunkers.

Another Guardian, part of a forward-element advance party preparing logistics for an incoming team at a new site, emerged from a bunker after a particularly close attack to the smell of jet fuel and vomit. Sleeping quarters lay destroyed and fellow service members suffering traumatic injuries. Moments later, the same Guardian watched as an Iranian drone was intercepted directly overhead while they raced once more for cover. Ensuring logistics, weapons system employment site, sleeping quarters, BOS-I support, T-Walls, and bunker locations ensured the incoming unit could arrive while under fire and rapidly get into the fight.

Another expeditionary team conducted maneuvers to rapidly relocate 125 tons of mission critical material to a safer location, completing the move in half the time allotted by their training standard. Although the task forms part of final mission-readiness training, for assigned Guardians, executing it during EPIC FURY meant doing so in full combat gear, in the stifling heat of the Middle East, and under persistent missile and drone fire. Later, one Guardian described the stark difference between training and combat: "We practiced this, but we had a longer period of time to execute. We had lunch breaks, cold water, and we went home partway through to return and finish the next day. I thought it was miserable. But now I want to go back and punch that version of myself in the face. This was much harder."

Statements like this appear throughout combat-veteran narratives from every war. The Space Force is young, yet its expeditionary Guardians are earning combat credibility that is understood and respected across the joint force. One Marine Space Support Team (MSST) member shared, “This is a historic moment for the Space Force. You guys are in the fight, taking fire and fighting through it all. EPIC FURY is proving the Space Force is a credible war fighting service.” A General Officer from the Army stated firmly, “We [other service components] look at your mission statistics and the aggressiveness of your space campaign and are impressed at the combat effects your Guardians are bringing to the fight. It makes all of us want to provide the firepower you need to accomplish your goals. Your warfighting mindset is impressive.”

Guardians are the first
to the fight — and
frequently, that fight
will arrive without
warning.

These experiences highlight the Space Force's growth in the tactical warfighting realm. Of equal importance is the shift to a warfighter mindset at the operational and strategic levels of warfare. Guardians, and the entire joint force, must move beyond viewing space solely as a traditional support function to other domains. They must begin integrating other services' capabilities to support space campaign objectives. That integration must extend beyond simply employing other services' space units presented to Space Force components.

U.S. Space Forces Central (SPACECENT), the Space Force component field command to U.S. Central Command, led the nation's first-ever campaign to systematically dismantle an enemy's entire portfolio of space capabilities during EPIC FURY. The campaign was executed with support from traditional domains, leveraging naval power, airpower, and land attack. This marks a notable shift from past operations in which space effects were merely “sprinkled into” other services' campaign plans. With the Space Force component fully integrated into the U.S. Central Command planning cycle, space effects formed an integral part of EPIC FURY from the outset. Cross-component integration and relationships produced enthusiastic support from the other service components for SPACECENT's space campaign. AFCENT, ARCENT and NAVCENT assets supported this campaign by destroying Iranian satellite ground control stations, space command facilities and satellite launch towers.

EPIC FURY and the continuing operations against Iran represent the first instance of any nation's military deliberately conducting a space campaign to dismantle an adversary's space capabilities. That campaign was manifested in joint planning in which land, air, and maritime components conducted supporting operations for space objectives at the operational level of war.

In light of this new reality, the stories above belong to the Space Force's most junior members — specialists, sergeants, and technical sergeants; junior enlisted Guardians and junior noncommissioned officers led by lieutenants and captains. As these experiences and lessons become enshrined in training and tradition, they will influence future space campaigns and the joint force's understanding of the criticality of space warfighting to mission success for the military and the nation. These are the Guardians who will cement the service's warfighting culture as the Space Force, the joint force, and the nation adapt to the challenges and opportunities of space warfighting.

PART II —



Origins & the Institution

*How the Space Force came to be — and how it must
develop the Guardians who will define what it becomes.*

05 Move, Shoot, Communicate — At Speed

LT GEN (RET.) JOHN E. SHAW

06 Beyond Legacy Models

CMSGT (RET.) SCOTT

07 How the Guardian Generation Was Forged

PETE GARRETSON





American Spacepower

FIRST OF THE INAUGURAL SERIES

A limited collection of original paintings marking the first generation of American spacepower.

Launching a Service

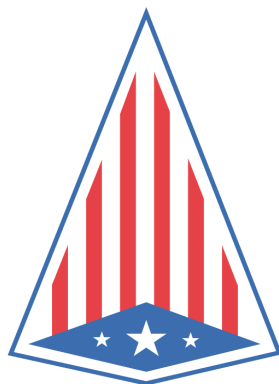
by Debbie Dekeuster

Launching a Service records the first United States Space Force launch from Vandenberg, seen from the water off the California coast. The vehicle is already through the cloud deck, a single bright plume against open sky, while the pad below remains buried in the exhaust cloud it left behind. The launch complex itself is almost incidental in the composition: a few low white structures on a green coastal ridge, the same bluffs and surf that have framed West Coast launches since the first Thor rose from these hills in 1959.

The mission was commanded by then-Col Anthony Mastalir, Commander of Space Launch Delta 30, Vandenberg Space Force Base, Calif. It was an ordinary day of work for a range that had supported national security space for six decades, and also the moment a new service counted down to zero for the first time.

The painting holds both facts at once. There is no ceremony in it, no crowd, no insignia — only the coastline, the weather, and a vehicle doing what the Delta was built to send. What the canvas preserves is the quiet fact of this momentous event: a service launching, for the first time, propelling the beginnings of the **Guardian Generation**.

This painting, the first in series of original pieces commissioned by the Washington D.C. Chapter of the Space Force Association, was presented to the Space Force for permanent display in Space House, the official residence of the Chief of Space Operations.



AMERICAN SPACEPOWER
Inaugural Series

Move, Shoot, Communicate

Advancing Dynamic Space Operations – and why the enduring warfighting mandate must now be executed at speed.

F inland, winter, 1940. Finnish defense forces find themselves vastly outnumbered by invading Soviet armies. One of the invasion routes is along a 20-kilometer forested roadway near the Finnish border village of Raate, along which an entire Soviet rifle division pushes, threatening to drive deep into Finland's interior. The outlook is bleak.

The battle does not go well for the invaders – the entire Red Army division of 25,000 troops is destroyed as an effective fighting force when trapped, continually outflanked, and destroyed piecemeal on the forest road by the much smaller force of approximately 6,000 Finns, which suffers minimal casualties. The Battle of Raate Road is a remarkable case study of how a smaller force can defeat a larger one when it has superior ability to do those three fundamental things well: move, shoot, and communicate.

The Finnish forces prevail by doing three things better than their adversary: moving, shooting, and communicating. They have superior maneuver ability, moving through deep snow and forest as well as roads, on skis rather than on foot, and close on the enemy from multiple directions.

The Soviets, however, are limited to predictable, tedious progress on a single fixed road with very heavy vehicles (which quickly become fat, juicy targets), and more often than not, are stationary, as they wait for fuel and supplies from the rear that often never comes. The Finns also have superior weapons effects using equipment fashioned for the environment: rifles and machine guns greased with low-viscosity gasoline or kerosene which work well in the cold.



BY THE AUTHOR

Lt Gen
John E. Shaw

UNITED STATES SPACE FORCE,
RETIRED

A former deputy commander of U.S. Space Command writing on space maneuver warfare and the concepts behind Dynamic Space Operations.

The Soviets are ill-prepared for the environment, and their weapons perform poorly: the much heavier oil in their weapons often freezes, causing guns and artillery to jam, preventing them from delivering focused and sustained weapons effects. And perhaps most importantly, the Finnish forces employ resilient and redundant communications, using tactical radios (with effective cold-weather batteries), flares, whistles, and even messengers on skis. Moreover, the Finns combine these effective communications with a mission command doctrine, encouraging communications among tactical commanders and empowering them to make decisions at their level. Worst of all is the Soviet communication doctrine: a rigid, stove piped approach that is one-dimensionally top-down, resulting in slow flow of information and orders, rare tactical initiative, and which often halts action altogether if any link in the linear communications chain is cut.

This battle (and others like it in military history) can deliver relevant lessons for the evolution of Space Maneuver Warfare. The traditional approach to space operations, when the domain was largely benign and devoid of threat, is described as Positional Space Operations – satellites operating in fixed energy orbits, largely vulnerable to threats to their mission or themselves, and not connected or networked beyond their own system architecture and mission set. But while this approach was efficient, it is not combat effective in the face of an enemy. The advancing concepts behind Dynamic Space Operations point toward a different model, to use an integrated combination of sustained physical and spectral maneuver, mission effects agility, and unbounded, resilient networked communications to maintain initiative against a potential adversary in space.

The advancing concepts behind Dynamic Space Operations point toward a different model.

MOVE

On Raate Road, the Soviet inability to maneuver beyond – or even move quickly along – the fixed, linear roadway bears many similarities to Positional Space Operations, where spacecraft

stay in their fixed, predictable Keplerian orbits, rarely conducting anything but the smallest of maneuvers, and are more easily targetable.

The Finns maneuvered far more dynamically, moving in nonlinear fashion, maintaining the initiative, and proving extremely difficult for the Soviets to find, fix, track, target, and engage them, allowing them to strike at times and places of their choosing. Most of the Finnish maneuver to engage was not along the road itself, but from the forest and deep snow on the sides. Similarly, truly effective space maneuver against a target (or in avoidance of a threat) will most likely not be in-track or in-plane (as if confined to the linear road), but rather out-of-track and out-of-plane.

SHOOT

In this essay, ‘shoot’ means the full range of effects space forces can deliver to defend friendly space capabilities, to attack enemy space capabilities, and to enable the Joint Force in the terrestrial domains. These effects can be kinetic, electromagnetic, data or information-centric (e.g. imagery from space, or Positioning, Navigation, and Timing signals), and other mission effects. The challenge is designing for and sustaining those effects in a much more dynamic and hostile environment, including physical threats, electromagnetic hazards, and cyber attacks. A system or force unprepared for such an environment is similar to the Soviet forces in Finland in the Winter of 1940 – unable to focus and sustain the ability to shoot.

Most traditional space mission architectures are designed to deliver their effects only if they are operating in a positional manner, in energy static, fixed orbits and through singular communications pathways – and any disruption due to attack or maneuver might result in a “mission kill” or the loss of a satellite’s ability to conduct its mission. As an example: a simple data link providing information to terrestrial forces but without a redundant pathway can be ‘frozen’ by electromagnetic jamming, much as Soviet weapons were rendered ineffective on Raate Road. Future Dynamic Space Operations architectures and capabilities need to design around these limitations, to be able to “shoot on the move,” delivering an agility that anticipates enemy engagement.

COMMUNICATE

In many ways, the more traditional approach to communications in, from, and to space resembles the top-down, linear approach the Soviets used in the Battle of Raate Road. Telemetry and sensor data flow linearly to command centers on Earth, and any commands to satellites flow up in similar fashion, and usually only to satellites of the same mission set. Such an approach is vulnerable to Finnish-style “cutting the wire,” whether at physical nodes, jamming of the electromagnetic spectrum, or in cyberspace. Effective Dynamic Space Operations will require unbounded, integrated transorbital communication among dissimilar platforms and missions in networked fashion. Again, this is similar to the Finnish approach in 1940: they, unlike the Soviets, not only had redundant forms of communication adapted to the harsh environment, but also employed those comms in networked fashion up, down and across mission sets, echelons, and platforms.

AT SPEED!

To ensure victory, it is not enough simply to move, shoot, and communicate effectively. One needs to be able to do all of these more quickly than an adversary. A dynamic spacecraft may have good maneuverability compared to a traditional positional platform, but if it can't escape the tracking, targeting and engagement of an even more maneuverable enemy, it operates at tactical disadvantage. Similarly, if an enemy target, when pursued by a maneuverable friendly spacecraft, can evade being tracked and escape being engaged, the battle tilts in the adversary's

favor. The same is true for “shooting” effects, and communicating – all must operate at a tempo that imposes dilemmas faster than the adversary can resolve them.

For this necessity of speed, Artificial Intelligence in all of its evolving forms is destined to play a role in future space combat operations. It is not too difficult to imagine a near future where a Space Force Guardian at the tactical level will oversee AI agents operating spacecraft autonomously in coordinated fashion, acting and delivering on that Guardian's directed intent. Victory or defeat may come down to whether the friendly or the enemy AI agents are the faster combatants.

Victory or defeat may come down to whether the friendly or the enemy AI agents are the faster combatants.

The early airpower theorist Italian Air Marshal Giulio Douhet famously said, “Victory smiles upon those who anticipate the change in the character of war, not upon those who wait to adapt themselves after the changes occur.” The enduring warfighting mandate of “Move, Shoot, Communicate” does not and will not end with warfare in solely the terrestrial domains. It will prove decisive in the character of future space warfare as well. How well future space combat concepts of operations and force designs can embrace these integrated actions, and at speed, will advance Dynamic Space Operations and better position space forces for success.

Beyond Legacy Models

Building the enlisted Guardian for modern spacepower — a force born from inheritance that cannot let inheritance become its final design.

The United States Space Force was born from inheritance. It inherited people, missions, installations, authorities, training pipelines, promotion systems, and cultural assumptions from services built for different eras and different domains. That inheritance was necessary. No new military service begins with a blank sheet of paper.

But inheritance cannot become destiny.

Nowhere is this more important than in the development of the enlisted Guardian. Americans depend on space every day, often without realizing it. GPS, missile warning, satellite communications, weather data, financial timing, disaster response, and military operations all depend on space capabilities that must be protected, operated, and defended by people. A junior Guardian supporting missile warning or satellite communications may sit far from the battlefield, but the information moving through that console can shape decisions for combatant commanders, aircraft crews, ships at sea, and national leaders.

The Space Force cannot afford to educate, train, and retain enlisted Guardians exactly like every other enlisted member in every other service. This is not because Guardians are better than Soldiers, Sailors, Airmen, Marines, or Coast Guardsmen. They are not. It is because the conditions of space operations are different. The mission is different. The scale is smaller. The talent market is more competitive. The consequences are often larger than the size of the force suggests.

The Space Force has already recognized this reality. The Guardian Ideal is the service's foundational talent management document and outlines an innovative approach to talent management from accession through development. It emphasizes work-life balance, resiliency, training, education, and individualized development as part of a more holistic model for building the force.¹



BY THE AUTHOR

CMSgt
Abi R. Scott

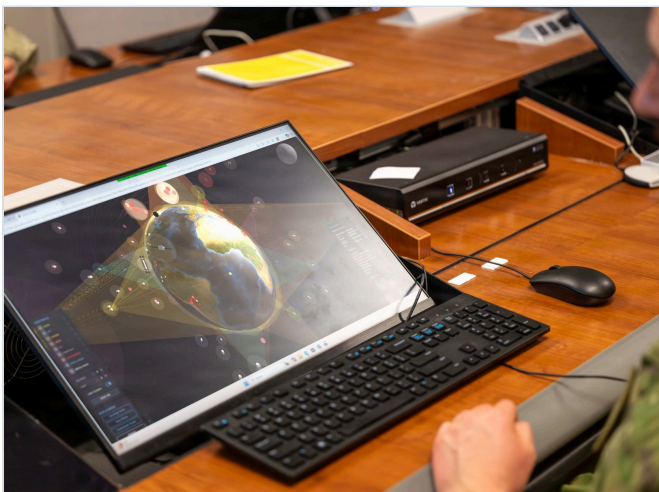
UNITED STATES SPACE FORCE,
RETIRED

A retired command senior enlisted leader writing on how the Space Force should educate, train, and retain its enlisted Guardians.

Space Force doctrine also points in this direction. Space Doctrine Publication 1-0, Personnel, states that the Chief Human Capital Officer develops policies and programs for recruitment, employment, professional development, and retention, while the Talent Management Office engages Guardians to develop and employ their talents from recruitment to retirement or separation. It also states that there is no single pathway or definition of career success for a Guardian, and that the service combines training, education, and experiential learning to produce the balance of expertise and competence required for operational needs.²

That doctrine matters. It means the argument for a different enlisted model is not a rejection of Space Force direction. It is an extension of it. The service has already established the intellectual foundation for a more deliberate approach to Guardian development. The question is whether the enlisted model is changing far enough and fast enough to match the realities of the domain.

The Guardian Generation — the first cohort of enlisted professionals raised inside the Space Force rather than inherited from another service — requires more than adjusted legacy models. It requires a purpose-built enlisted development architecture.



A coalition space professional monitors data during the Space Tactics Analysis Team working group at Vandenberg Space Force Base, Calif., June 29, 2026. The event helped provide the tactical foundation for the annual Weapons and Tactics Conference, equipping Guardians and coalition partners to counter current threats.

*In space, context is not a luxury.
Context is part of combat readiness.*

EDUCATED DIFFERENTLY

Training teaches a Guardian how to perform a task. Education teaches a Guardian why the task matters, how it connects to the larger mission, and what is at risk when conditions change.

That distinction matters in every service, but it matters uniquely in the Space Force. Enlisted Guardians often operate capabilities tied directly to missile warning, satellite communications, orbital warfare, intelligence support, command and control, cyber defense, deterrence, and joint operations. Even when a Guardian is executing a specific crew position or technical function, that work can carry operational and strategic consequences.

For that reason, the Space Force cannot wait until the senior noncommissioned officer ranks to expose Guardians to broader mission context.

Enlisted Guardians need earlier education in spacepower, joint operations, adversary threats, cyber and electromagnetic warfare, data, artificial intelligence, ethics, escalation risk, and strategic communication. They do not need this education to sound more sophisticated in professional military education. They need it because the mission demands it.

This view is consistent with the service's own developmental approach. SDP 1-0 describes force development as beginning with recruiting and continuing through robust training, education, and experience to produce a skilled, resilient, and solution-oriented workforce. It also highlights spacepower discipline courses designed to teach initial competencies and critical thinking skills, deepen expertise, and help Guardians understand the link between their discipline and the joint fight.²

Recent initiatives show the service moving in the right direction. The Space Component Staff Course, established by Space Training and Readiness Command, brings students from all Space Force career fields together to prepare them for combatant command and joint operations. STARCOM plans six course iterations in 2026 to train approximately 170 Guardians, with expected growth as operational demand increases.³

That is the right instinct. The next step is ensuring this kind of context reaches enlisted Guardians earlier, more deliberately, and more consistently across the force. A Guardian who understands only the procedure may be qualified. A Guardian who understands the context can better adapt under pressure, recognize risk, and make sound recommendations when the operating environment changes.

Education should therefore be treated as a continuous layer of enlisted development, not merely a promotion requirement or periodic PME event. It should be embedded across accessions, initial skills training, mission qualification, upgrade training, supervisor development, and senior enlisted preparation.



Capt. Meagan Zering, Space Component Staff Course director, instructs the inaugural Space Component Staff Course at Vandenberg Space Force Base, Calif., May 21, 2026. The course equips Guardians with operational planning skills and exposure to joint and space-focused command-and-control processes designed to support integrated all-domain operations.

The question is whether that Guardian can recognize when conditions are no longer normal.

TRAINED DIFFERENTLY

If education gives Guardians context, training gives them the repetitions to act with confidence when that context becomes real.

The Space Force cannot rely on a training model that treats qualification as the finish line. Qualification matters. Standards matter. Checklists matter. But in contested space operations, the question is not only whether a Guardian can perform a task under normal conditions. The question is whether that Guardian can recognize when conditions are no longer normal, communicate risk, adapt under pressure, and still support the mission.

The service's doctrine already creates space for this kind of training. SDP 1-0 assigns STARCOM responsibility for preparing every Guardian to prevail in competition and conflict by developing and conducting education, training, doctrine, wargaming, lessons learned, test, and evaluation. It also recognizes mission qualification training, hands-on instruction, simulator or weapon system evaluations, and advanced training such as exercises and wargames as part of building warfighting capability and weapon system mastery.²

The challenge is translating that doctrinal intent into enough realistic repetitions for enlisted Guardians at every stage of development. Guardians need scenario-based training earlier in their careers. They need exposure to degraded systems, ambiguous information, adversary deception, cyber effects, electromagnetic interference, and joint-force consequences. They need to practice not only what to do, but how to think, communicate, and decide when the situation does not match the expected script.

This should begin as early as basic training. The Space Force does not need basic military training to become technical school, but it should use that first experience to introduce Guardians to the character of the domain they are entering: contested, technical, joint, and consequential. New Guardians should leave basic training understanding that space is not a distant support function. It is a warfighting domain tied directly to national power and joint operations.

From there, training should build in complexity. Initial skills training, mission qualification, upgrade training, supervisor development, and advanced courses should include more realistic decision points, cross-mission exposure, writing and briefing under pressure, and feedback tied to judgment – not just task completion.

The goal is not to make every training event harder for its own sake. The goal is to make training more representative of the environment Guardians will actually face.

A Guardian who can complete a checklist is useful. A Guardian who can recognize when the checklist is insufficient, explain the risk, and recommend a sound course of action is far more valuable.

For the Space Force, training must build more than proficiency. It must build operational judgment.



U.S. Space Force Tech. Sgt. Tyler J. Strauser, a military training instructor assigned to Delta 1, Detachment 3, poses in front of trainees participating in an exercise for U.S. Air Force and U.S. Space Force Basic Military Training at Joint Base San Antonio-Lackland, Texas, July 24, 2026.

RETAINED DIFFERENTLY

The Space Force cannot retain enlisted Guardians the same way larger services retain broader enlisted populations. The skills it builds are too technical, too marketable, and too central to national security spacepower.

The service has an enviable recruiting position. In April 2026, the Department of the Air Force announced that the Air Force and Space Force achieved annual recruiting goals five months ahead of schedule. The same announcement reported that the Space Force had exceeded its fiscal year 2026 recruiting goal, had met recruiting goals every year since its inception, continued to attract highly skilled and educated candidates, and enlisted 730 active-duty Guardians.⁴

That is not an ordinary talent pool. It is an operational advantage. But attracting talent is not the same as preserving it.

A Guardian trained in satellite operations, missile warning, cyber defense, data systems, command and control, intelligence support, electromagnetic warfare, or orbital operations does not serve in a closed military labor market. That Guardian develops experience directly valuable to the intelligence community, defense industry, commercial space companies, technology firms, and national security startups. In many cases, the private sector does not need to retrain that talent from scratch. It only needs to recruit it.

That reality does not make Guardians disloyal when they consider leaving. It makes them rational actors in a competitive talent environment.

Air Force Times reported in 2024 that Space Force leaders were considering voluntary eight-year active-duty enlistment options for new recruits, tied to potential incentives, as one way to build a more stable and technically experienced workforce. The same reporting noted that enlisted Guardian recruits averaged 22 years old, that 40 percent had already earned an associate's, bachelor's, or master's degree before enlisting, that the enlisted force numbered more than 4,000 people, and that all enlisted Guardians required screening for Top Secret/Sensitive Compartmented Information eligibility.⁵

That discussion should not be dismissed as simply a longer contract. It reflects a deeper problem: the Space Force invests significant time, money, and mission capacity into clearing, training, qualifying, and maturing Guardians in technical fields. If the service loses too many fully qualified operators at the point when their experience becomes most valuable, readiness suffers.

Three retention levers deserve particular attention.

First, the service should continue exploring longer initial enlistments for select technical specialties where the training investment, clearance timeline, and operational qualification process make short active-duty commitments inefficient. This should not become a blanket model. It should remain voluntary, targeted, incentive-based, and tied to specialties where the return on investment justifies the commitment. It should also be studied carefully so the service does not unintentionally discourage the very candidates it most wants to attract.

Second, retention bonuses should be more targeted and more clearly connected to mission-critical skills. Bonuses should not compensate for poor career design, but they can help preserve expertise in areas where the external market is strong and the cost of replacement is high. The measure of success should not simply be how many Guardians accept a bonus. It should be whether the service retains qualified operators, instructors, evaluators, and technical experts through the points where their experience delivers the greatest operational value.

Third, the Space Force should build visible technical mastery pathways. A small, technical service cannot afford to send the message that the reward for becoming an exceptional operator is to leave the mission as quickly as possible. Promotion and leadership matter, but technical depth must also carry status, opportunity, and progression. The enlisted force needs pathways that allow Guardians to grow as mission experts, instructors, evaluators, planners, data-literate operators, cyber-space integrators, and trusted advisors without forcing every high performer into the same supervisory mold.

These levers should be measured. The service should track time from accession to mission qualification, retention after first operational assignment, retention of fully qualified operators through second enlistment, instructor and evaluator depth, and vacancies in mission-critical crew positions. Two or three clear measures would do more for enlisted talent management than another broad statement about valuing people.

The goal is not to retain every Guardian forever. No service can or should promise that. The goal is to retain the right talent at the right time for the right mission – and to ensure that Guardians who stay can see a future worthy of their ability.

In a small service, retention is not simply an end-strength issue. It is a readiness issue. Losing one experienced Guardian may mean losing years of mission knowledge, technical credibility, and operational judgment that cannot be quickly replaced.

For the Space Force, retaining enlisted talent differently is not about special treatment. It is about protecting a warfighting advantage.

In a small service, retention is not an end-strength issue. It is a readiness issue.

JOINTNESS WITHOUT SAMENESS

There is a fair counterargument. If the Space Force diverges too far from familiar enlisted models, it could complicate joint assignments, promotion comparability, or perceptions of fairness across the force. A service-specific model should not become an excuse to ignore joint standards or create confusion about enlisted professionalism.

That concern deserves to be taken seriously.

But jointness does not require sameness. The services already organize, train, equip, and develop people differently because their domains demand it. Infantry, aviation, nuclear operations, cyber, submarines, special operations, and intelligence all require specialized approaches to training and talent management. The key is not to make every service look the same. The key is to make each service credible, interoperable, and useful to the joint force.

SDP 1-0 itself makes this balance clear. The Space Force is responsible for organizing, training, and equipping its personnel while ensuring they are ready and qualified to integrate with the joint force. That is the right standard: distinctive enough to meet the demands of the space domain, but integrated enough to serve the joint force effectively.²

The Space Force should remain fully integrated with joint doctrine, joint planning, and joint operations. But integration cannot mean forcing enlisted Guardians into a model built for a different scale, labor market, and operational environment. The joint force does not need the Space Force to be a smaller version of another service. It needs the Space Force to produce Guardians who understand the domain, operate with judgment, and deliver spacepower when the nation needs it.

IN CLOSING

The Space Force cannot build the Guardian Generation with inherited assumptions alone. Legacy models may provide a foundation, but they cannot be the final design for a service whose enlisted force is small, technical, operationally consequential, and highly attractive to the civilian market.

The question is not whether Guardians deserve special treatment. The question is whether the mission demands a

different approach. It does.

Educating Guardians differently gives them context. Training them differently builds judgment. Retaining them differently protects mission expertise. Together, these are not personnel initiatives. They are warfighting requirements.

The joint force does not need the Space Force to be a smaller version of another service.

The Space Force now has a choice. It can keep adapting inherited enlisted models around the edges, or it can build a talent model worthy of the domain it was created to defend. The future of spacepower will not depend on satellites, sensors, launch systems, and data alone. It will depend on the Guardians trusted to understand them, operate them, protect them, and make sound judgments when the nation needs them most.

SOURCES

1. Secretary of the Air Force Public Affairs, "CSO unveils Guardian Ideal, Space Force values at AFA," U.S. Space Force, Sept. 21, 2021.
2. U.S. Space Force, *Space Doctrine Publication 1-0, Personnel*, Sept. 7, 2022.
3. Space Training and Readiness Command, "Space Training and Readiness Command stands up command and control course to prepare Guardians for joint operations," May 29, 2026.
4. Secretary of the Air Force Public Affairs, "Air Force, Space Force meet recruiting goals 5 months ahead of schedule," U.S. Air Force, Apr. 16, 2026.
5. Rachel S. Cohen, "Space Force mulls 8-year active duty enlistments for new recruits," *Air Force Times*, Feb. 14, 2024, updated Feb. 21, 2024.

How the Guardian Generation Was Forged

A short history of the people and ideas that made the Guardian Generation possible.

T oday's Space Force Guardians deserve to know their history. While the ideation for the Space Force has deep roots, its proximate creation had to do with the elevated importance of great-power competition, the space and counterspace challenges posed by China, and the perception by both the Congress and the Administration that the existing structure was inadequate beginning around 2013. Individuals were important. Earlier generations of advocates had developed the concept of a separate Space Force and kept the flame alive: developing concepts, working to articulate the threat, and actively engaging politicians.

Guardians are the inheritors of a much older vision of spacepower, but the Space Force was born only after decades of institutional delay, when the acceleration of the threat combined with prior intellectual preparation and political entrepreneurship. In fact, the USSF is the product of more than a century of imagination, decades of military spacepower thought, and a final political struggle to align our institutions with a new security environment.

I provide a narrative that reflects insider interviews compiled for my PhD dissertation, as well as from my personal involvement as an advocate, and someone who had an early role in shaping the content of Space Force professional military education.



BY THE AUTHOR

Dr. Peter
Garretson

SPACEPOWER STRATEGIST &
HISTORIAN

A retired Air Force Officer, and longtime advocate for national spacepower, writing on the strategy, history, and institutions that shaped the U.S. Space Force.

DEEP ROOTS

The ideas that underpin the U.S. Space Force have deep roots in time. Military combat in space was first imagined in 1898 by an American author, even before powered flight and the First World War. American inventor Robert Goddard would prove rocket flight possible, inspiring the German Rocket Society and ultimately giving rise to the V-2. Immediately following the Second World War – and a decade before Sputnik – RAND laid the mathematical underpinnings for an artificial satellite. The implications were enormous. Even before the creation of the U.S. Air Force, in 1947, two naval lieutenants laid out the rationale for a dedicated space service.

In the post-World War II years there was an explosion of experimentation in rocketry among the Army, Navy, and Air Force, with each competing for control. When the Soviet Union shocked everyday Americans by orbiting the first satellite, Sputnik 1, the nation created DARPA, NASA, and the NRO, making every effort to catch up in space.

Early Cold War space visions were very grand, involving Moon bases, spaceplane bombers, manned reconnaissance stations, and nuclear-powered blocking fleets and strategic orbital bases armed with nuclear weapons. But fear of nuclear warfare, and policy choices to de-emphasize military spacepower in favor of the covert (NRO) and the outwardly peaceful (NASA), and to pursue arms-control agreements, narrowed, constrained, and deferred military space ambitions.

KEEPING THE FLAME

The beginnings of advocacy for a dedicated military organization began in the early '80s with the U.S. Air Force Academy Space Doctrine Symposium in 1981 and the High Frontier grand-strategy proposal in 1982. With the

beginning of Reagan's Strategic Defense Initiative (SDI), and the stand-up of the first USSPACECOM, there was a strong organizational advocate for spacepower thought, producing a stunning Long Range Plan, a command magazine, and encouraging spacepower thought at Air University.

The collapse of the Soviet Union and end of the Cold War reduced the perceived need for a missile-defense shield, military space plane, and anti-satellite weapons. America appeared unchallenged in space. The Strategic Air Command – till then the most powerful advocate – was disestablished, as was the National Space Council.

However, the new post-Cold War security environment invited grand thinking about the future of spacepower, and led visionary Chief of Staff of the Air Force Ron Fogleman to articulate that the Air Force was transitioning to be a Space and Air Force. By the early 2000s, the Air University School of Advanced Air and Spacepower Studies (SAASS) became a sort of seminary for spacepower, with Air University generating foundational works. The fundamental argument was that space was not just a function but a domain with unique characteristics and way of war that demanded a service focused on mastering the domain. They believed only a service had the necessary political power to develop the necessary expertise, doctrine, and to secure the resources to protect the nation.

The USSF is the product of more than a century of imagination, decades of spacepower thought, and a final political struggle.

A FALSE START

These influenced Senator Bob Smith to call for a separate Space Force, and to establish the Space Commission. Though controversial, the Space Commission report ruminated about a trajectory towards a Space Corps and Space Force but stopped short of recommending an immediate Space Corps. Following the commission, significant reforms were enacted, and in early 2001 it looked like we were heading towards a Space Force with the establishment of a Space Corps. On September 11, 2001, terrorists attacked the World Trade Center. The subsequent ground-based forever wars of the Global War on Terror and long occupations in Iraq and Afghanistan distracted America and deferred again the development of military spacepower. USSPACECOM was disestablished, and Air Force Space Command would face repeated reorganizations – adding and subtracting the culturally distinct nuclear intercontinental ballistic missiles and cyber.

Things began to change as China began to grow in overall economic and military power to display its space competence, launching reconnaissance and communications satellites, launching astronauts (taikonauts), accomplishing robotic landing on the Lunar far side, and building a space station. Especially concerning were the anti-satellite tests of 2007 in LEO, and in 2013 ranging close to GEO, and then its demonstration of co-orbital capabilities.

THE ADVOCATES REGROUP

China's rapid progress juxtaposed against the relative malaise in military space – the slow doctrine development, slow (and over budget) systems development and acquisition, the lack of a dedicated and educated cadre with a clear career and promotion path – convinced spacepower advocates in the Obama White House and House Armed Services Strategic Forces Subcommittee that the fix needed to be a major change in organization and management.

With the change of Administration, former government advocates like Doug Loverro were now in a private capacity and could advocate more forcefully. A DC cell of advocates and policy entrepreneurs emerged. At the same time, a concentration of spacepower advocates, led by Lieutenant General Steve Kwast, serendipitously came together at Air University with strong ideational background and strong informal networks. Both groups of advocates began an organized push for an organizational upgrade to spacepower, shopping for sympathetic venues.

They found one in the House Armed Services Strategic Forces Subcommittee. There a bipartisan group of lawmakers (Chairman Rogers, Chairman Cooper, Rep. Bridenstine) would take the initiative and push for a Space Corps. The Air Force leadership strongly opposed the proposal, and worked hard to defeat it. Ultimately the HASC advocates were defeated in Conference, unable to convince the Senate, and unwilling to accept a compromise on a Senate proposal for a radical reform of the U.S. cyber enterprise.

THE BREAKTHROUGH

A major breakthrough occurred when advisors alerted President Trump to what the House had almost accomplished and its strategic and legacy implications. President Trump would override the slow interagency process that had stymied President Obama, first audience-testing, and then directly ordering the Pentagon to begin planning on live television. The Pentagon resisted, preferring to establish a combatant command rather than a service. But the pressure from Vice President Pence and National Space Council Secretary Dr. Scott Pace made it clear that there would be a new military service and directed the Department of Defense author a legislative proposal. There was significant politicking as organizations attempted to protect their budget, people and turf.

The publishing of Space Policy Directive 4 settled the matter, and the Air Force fell into line, creating a Space Force Planning Task Force which proved pivotal to convincing the White House and Congress it could be rapidly established.

The legislative proposal was anything but a sure thing. The House ignored the proposal and re-submitted its Space Corps proposal. The Senate ignored the proposal, starting from scratch with its own legislation. The form would have to be negotiated in conference. The Administration was firm on just a few points — it had to be an armed service, in Title X, and had to be called “Space Force.”

Finding the necessary votes was no easy task and drove the lead Senate staffer J.R. Riordan to walking pneumonia. Ultimately, it was the threat that sold it, with both classified and unclassified threat assessments proving key. Even so, the Space Force was the last part of the National Defense Authorization Act to be negotiated, quid pro quo with paid family leave.

President Trump would sign the Space Force into law on December 20, 2019, establishing the first new military service in 70 years. It would fall to Secretary of the Air Force Barbara Barrett, Chief of Staff of the Air Force General David Goldfein, and the first Guardian and Chief of Space Operations Jay Raymond to do the initial stand-up of the service in what was reported to be a very focused and collegial manner.

A COALITION VICTORY

The Space Force was not created in a single moment or by a single individual. Over time, the multiple waves of advocacy finally summed to success, with the final creation being a coalition victory between advocates in the

White House, Congress, DoD bureaucrats and entrepreneurial Space Force advocates selling the idea.

The defenders of the status quo argued for the importance of air and space integration, the overhead costs of a small service, the promotion pathologies of a narrow force, the friction that would result from shared resources. These were persuasive enough to convince multiple administrations not to pursue more radical reform. They remain precisely the problems the new service now manages.

The advocates of the Space Force believed that America wanted to be a spacefaring civilization; that America desired to extend and defend its interests in, from, and to space, and that once there was a trustworthy organization with a vision, more resources would be forthcoming. The record shows that before the creation of the Space Force, military space faced a stagnant or retreating space budget, and a stagnant doctrine. After the creation of the dedicated service, the Space Force would publish a slew of doctrine documents, and set up its own Space War College. The nation rewarded the new service with increased resources, with the Space Force budget rapidly expanding from \$11B in 2019 to \$15B in 2021, to \$30B in 2024, to an expected \$71B for 2027.

THE FUTURE IS YET TO BE WRITTEN

Those generations of prior advocates succeeded in vesting the Space Force and its Guardians with political power and standing.

Now it falls to the Guardians to use that political power and standing to deliver the spacepower vision the advocates sought: a dual mandate to look down and look out — to ensure freedom of action and navigation across the Earth-Moon system, protect shared lifelines, and deter aggression with overwhelming, lethal combat power.

PART III —



The Vision Ahead

Where the force is headed — objectives set today for the domain we intend to hold tomorrow.

08

Securing the Space Advantage: The Space Force's Third Act

GEN. SCHIESS



FROM THE 3RD CHIEF OF SPACE OPERATIONS

Securing the Space Advantage: The Leadership Eras That Set the Stage for the Space Force's **Third Act**

Raymond laid the foundation. Saltzman built the warfighting structures. What comes next is the fight at scale.



Gen. Douglas A. Schiess

3RD CHIEF OF SPACE OPERATIONS
U.S. SPACE FORCE

I have spent my career working in teams operating systems that we don't talk about very often — certainly not in any great detail — while executing missions that rarely make headlines. That anonymity was, for a long time, the point. Space was considered a support function — the quiet enabler operating in the background to ensure ground, naval, and air forces had advantage to provide decisive combat power. Anyone who's tracking world events today knows that this has changed, and that space itself is now a warfighting domain. From the very first days of the establishment of the Space Force, we've been blessed with a leadership team that has not only understood this paradigm shift but has embraced the potential inherent in establishing superiority in this newest military domain to enhance our national security and protect the American way of life.

But the Space Force established in 2019 to meet these challenges was born into a threat environment that demanded it arrive combat ready from day one. Guardians stepped up to the challenge, but we've been in a race against time ever since. Today, we need to grow and grow quickly. The first two Service Chiefs did the heavy lift of placing the Space Force at the center of the nation's combat operations — and set the stage for our third act.

I

GENESIS & ARCHITECTURE

The Raymond era — founding a service rather than replicating one.

II

OPERATIONALIZING THE DOMAIN

The Saltzman era — components in theater, space effects in the plan.

III

THE STAGE IS SET

Growth done right, and integration as deep as we are integral.

I GENESIS & ARCHITECTURE: THE RAYMOND ERA

Gen. Jay Raymond had an almost impossible job. He was handed a legislative mandate, a mixed collection of space professionals scattered across the Air Force, Army, Navy, and Marine Corps, and a brand-new military service that didn't yet know what it was supposed to be. Standing up the first new military branch in 72 years meant making foundational decisions about structure, culture, identity, and purpose while simultaneously managing the daily demands and mission requirements of a globally engaged force.

Among the many things that Gen. Raymond got right, and the one I believe history will credit him for most, was resisting the temptation to simply replicate the structures and operations of the Air Force. That would have been the path of least resistance. The personnel systems, the acquisition pipelines, the doctrinal frameworks all pointed toward repeating what already existed. Instead, Gen. Raymond forged a new path: every Service is responsible for meeting the requirements of its unique domain and thus must have a unique Service approach. To assure the Space Force was the warfighting service best equipped to contest and win in the space domain required persistent attention to ensure it was not simply a collection of support services and activities. It needed to organize, train, and equip our Guardians with the highest level of military effectiveness, focused specifically on the cold, hard realities of operating in the space domain.

By law, the Space Force has a seat at the Joint Chiefs' table. Gen. Raymond ensured that the Space Force was a credible institution that was not simply tolerated, but everyone at the table understood that Guardians are necessary and needed for Joint Force success.

In many ways Gen. Raymond had to build the rocket at the same time he was launching it for the Joint Force. That is the work of a founder, and he deserves to be recognized as such.

II OPERATIONALIZING THE DOMAIN: THE SALTZMAN ERA

Gen. Chance Saltzman inherited an institution with an established direction and an urgent imperative: make it a warfighting organization. He understood that the transition from a "collection of services and activities" mindset to a genuine warfighting mentality doesn't happen through policy memos. It happens when Guardians are embedded in theater-level commands, when Combatant Commanders request space effects the way they request other effects and fires, and when the Joint Force stops treating space as an enabling function and treats it as a part of the minimum force needed for decisive actions.

Gen. Chance Saltzman inherited an institution with an established direction and an urgent imperative: make it a warfighting organization.

Gen. Saltzman made that transition a priority. His stand-up of service components to the Combatant Commands pulled space operators out of centralized support roles and placed them directly into the operational planning process and with presented forces, integrating Guardians with the Combatant Commands who needed to understand what space capabilities could and could not do for them in a contested environment.

The results were not theoretical. Recent combat operations have proven that the decentralized, theater-integrated space capabilities our Guardians bring to the fight are combat effective, responsive, and indispensable to modern joint warfare.

That shift and perception took years of deliberate institutional work to earn, and Gen. Saltzman deserves full credit for driving that success.

III ACT THREE: THE STAGE IS SET

Today, thanks to the Space Force leaders who've come before us, our path is clear — but it is not easy.

The Space Force is scaling faster than most of us could have predicted, and that kind of rapid growth will create its own challenges. The question for the next Chief of Space Operations is not whether the institution is ready to fight, but how it can fight at scale, sustain that fight over time, and do so while absorbing the organizational growth required to meet an expanding threat environment.

Two important areas will define the next act of Space Force.

The question for the next Chief of Space Operations is not whether the institution is ready to fight, but how it can fight at scale.

The first is force growth done right. The Space Force was stood up small by design, as a lean and agile professional force built around specific space expertise and capabilities. That model worked to get started — but now it is time for us to grow to bring on the capabilities and forces our nation demands.

The fact of the matter is that the mission set and demand from the Joint Force is expanding faster than our current force structure can support. Growing the number of Guardians in the service cannot mean diluting the talent pool or abandoning the culture of technical rigor that distinguishes this service. It means building a development pipeline that identifies the right people earlier, trains them deliberately, and retains them for maintaining space superiority, through the Guardians who will both acquire and operate our weapon systems. It means being transparent with Congress about what a credible space warfighting

force requires in end strength to meet the mission requirements of the space domain.

The second area is deepening Joint Force integration. Our Space Force has already shown Guardians are indispensable to the Joint Force — we must be sure that we are as integrated as we are integral. That means training Guardians who can fluently speak the language of the Joint Force, not just the language of orbital mechanics and waveform management. It means ensuring that space operations are integrated into wargames, exercises, and operational planning at every echelon, not bolted on as an afterthought, and Guardians are present at every level of the Joint Force. And it means building the partner capacity that extends our competitive advantage beyond U.S. formations because our adversaries are not waiting for us to sort out our integration challenges before they develop their own space capabilities.

None of this is the work of a single leader or a single term. It is the work of an institution that has internalized what it is fighting for and why. Raymond laid the foundation. Saltzman built on warfighting structures. We must now expand efforts to ensure we can fight and win through an increasingly contested strategic environment — all with the confidence that comes from knowing our Guardians understand exactly what this service was built to do.

The Space Force does not have the luxury of time. We do not have the luxury of slow, steady, incremental growth. The space domain is being contested every day. Future potential adversaries are actively designing, testing, and fielding capabilities to erode our advantage in space. The third act of Space Force begins now, and the stakes are not abstract. They are imperative to operational, strategic, and national security. Our service is ready and our Guardians are ready. I am grateful for everything our first two Service Chiefs did to prepare us for our future success, and now we must take on the mantle and drive the Space Force to be the decisive service in the space domain for the Joint Force and for our nation. This is our mandate, our North Star, and we will not waver from its path.

Semper Supra!



True Anomaly

**FOUNDED BY PEOPLE
WHO WORE THE UNIFORM.**

**BUILDING
FOR
THOSE
WHO
WEAR
THE
UNIFORM
NOW.**



True Anomaly



**THE DOCTRINE
OF SPACE
IS WRITTEN
ONCE.**



**BE THE
AUTHOR.**