# Department of the Air Force Posture Statement

Fiscal Year 2023

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## **DEPARTMENT OF THE AIR FORCE INTRODUCTION**

The Department of the Air Force, in line with the Department of Defense, recognizes the rapidly evolving, global environment and the complex challenges it presents. The Department of the Air Force provides unique competencies and capabilities to achieve our national security priorities to defend the homeland, deter any strategic attacks, deter aggression and be prepared to prevail in conflict, and build a resilient joint force. We will advance these priorities through integrated deterrence, campaigning, and building enduring advantages. Among those priorities, the greatest challenge to the Department of the Air Force's ability to perform its missions is the People's Republic of China's (PRC) long-standing and extensive military modernization program. While the PRC remains the Department's pacing challenge, recent events in Eastern Europe highlight that Russia also remains an acute threat. Additionally, the Democratic People's Republic of Korea, Iran, and violent extremist organizations are persistent threats that will continue to exploit opportunities to further their interests. Beyond state and non-state actors, transboundary challenges, such as climate change, also demand attention as they transform the strategic context in which we operate.

The Department of the Air Force organizes, trains, and equips as part of a joint and combined team. While focused on the PRC—our pacing challenge—the Department provides forces that enable our country to meet the challenges associated with the full range of national security threats. "One Team, One Fight" is more than our mantra; it is a guiding principle. The Department of the Air Force encompasses two Services, united with shared infrastructure, complementary skills, resources, competencies, and goals. Our capabilities underwrite the design of the joint force, support every combatant command, enable every instrument of national power, strengthen our allies and partners, and enhance the security and prosperity of every American.

Meeting our obligations to the Nation and the joint force demands we accelerate the transformation from the force we have today to the one needed to meet our pacing challenge. The risks we must address are increasing over time, in both strategic and conventional defense. This evolving strategic landscape requires us to balance risk by investing in the more capable and lethal future force the Nation needs to more effectively counter current and emerging threats. This transition is just beginning; achieving it will require trade-offs between maintaining capabilities to address combatant commands' current needs while accelerating vital modernization efforts for success in high-end conflicts. These investments have been prioritized to focus on key contributors to military advantage. Fiscal Year 2023 marks the next step of a much larger journey. Continuing progress is essential but will become increasingly challenging over time. Change is hard. It is hard politically, culturally, technologically, and institutionally. Still, we must make the needed transition; we must make tough choices; we must accept prudent risk; and we must get it right, or we will lose.

One challenging step we are taking in the Fiscal Year 2023 budget is to make relatively modest short-term changes to the mix of capabilities and capacity of our air and space assets; this will drive limited divestments in Fiscal Year 2023. The aircraft we seek to retire are respected platforms that have served us well and whose capabilities were invaluable on yesterday's battlefields. However, they are not well-suited for today's contested environments or tomorrow's high-end conflicts. They do not give our competitors cause for concern, are aging and increasingly costly to maintain, and do not provide our joint force the capabilities to deter—and if called upon—to fight and win against pressing threats. Any budget is finite, and forced resourcing of outdated systems jeopardizes our ability to guarantee air and space superiority in the future. We must balance the risk associated with retiring older platforms in order to

onboard new, necessary technologies and capabilities. This will allow us to ensure the United States maintains sufficient military advantage to secure our vital national interests and support our allies and partners. In addition to eliminating the expense of maintaining outdated platforms, these divestments allow our most valuable resource—our people—to transition to capabilities that provide an enduring advantage. Providing our Airmen and Guardians with the tools they need to prevail is our most sacred obligation.

Last year, Congressional support enabled us to initiate this transition to better confront our pacing challenge. Congressional approval to begin retiring outdated fighter, tanker, cargo, and command and control aircraft, and to begin updating our space architecture, allows us to start investing in the necessary capabilities we require to win future conflicts. While the Department of the Air Force remains grateful for past and future Congressional support, we continue to face burdensome restrictions on structural changes year after year, impeding the development of a more modern, operationally relevant force that the Nation requires. We need continued Congressional collaboration and support to ensure deterrence and, if needed, victory.

This year, the Department of the Air Force, powered by approximately 700,000 Airmen and Guardians, celebrates 75 years of air and space dominance. This milestone was achieved through the dedication and sacrifice of generations of Total Force members who served our Department throughout its rich history. Their legacy is foundational to this incredible Department and continues to be honored by those who serve today. Our team of military and civilian Active, Guard, and Reservist Airmen and Guardians all contribute to our Nation's air and space security. These brave, inspiring Americans provide great hope for the future of our Department and our Nation by ensuring the high ground always belongs to the United States.

Airmen and Guardians are our competitive advantage, and the Department of the Air Force is creating a future force with the human-capital capabilities and competencies required to win. We must continue to maximize opportunities for all members to serve to their fullest potential. We remain committed to building a culture of respect, where sexual assault and harassment are not tolerated in any form. We will do this by supporting victims and prosecuting offenders through the Uniform Code of Military Justice and reinforcing the Department of Defense's implementation roadmap to employ the recommendations of the Independent Review Commission on Sexual Assault and Sexual Harassment. Additionally, the Department will continue to confront racial, ethnic, and gender disparity, interpersonal violence, and suicide, all of which erode morale, hinder our Airmen and Guardians' ability to achieve their full potential, and degrade our ability to execute our missions. Furthermore, we will continue to highlight successful diversity and inclusion initiatives, ensuring all of our personnel understand and contribute fully to our collective strength. Dedicated, talented, and selfless Airmen and Guardians enable our success, and they must all be valued, supported, and empowered to reach their full potential so they can make the maximum possible contribution to the Department's readiness.

While Fiscal Year 2023 fully budgets for the strategic deterrent recapitalization as well as homeland defense-oriented systems, the Department of the Air Force has evaluated the threat landscape and determined that additional modernization efforts are required to address seven conventional warfare operational imperatives. The former AF/A9 element of the Air Staff has been transferred to the Office of the Secretary of the Air Force and redesignated as the Department of the Air Force Studies and Analysis Office (DAFSA). DAFSA will provide analytical support to each of seven imperatives. These seven imperatives focus our efforts and lay the framework for this and subsequent budgetary requests. They also reflect the conventional warfare priorities of the Department of Defense and the Department of the

Air Force. Our current capabilities in each of these areas will not be adequate to address emerging threats, and hard choices in future budgets will almost certainly be necessary.

First, the Department of the Air Force must define and resource a resilient, effective space order of battle that ensures our terrestrial forces have the support from space on which they depend. At the same time, we must deny any potential adversary the operational services they expect to receive from space, especially the ability to target key elements of the joint force. Space is a warfighting domain and contested environment today, and it will only become more so in the future. In the Fiscal Year 2023 budget, we begin the transition to more resilient communications and missile warning architectures. The Department of the Air Force is also currently working with the Intelligence Community and others to define joint solutions to our intelligence, operational surveillance, and reconnaissance needs.

Second, we must achieve an operationally-optimized Advanced Battle Management System (ABMS) as the Department's primary contribution to Joint All-Domain Command and Control (JADC2). The Fiscal Year 2023 budget continues funding for early increments of ABMS. Ongoing work will define additional future investments that are needed to most cost-effectively modernize the Air and Space Forces Command, Control, and Communications Battle Management networks and to integrate those networks with the joint and combined force.

Third, achieving Moving Target Indication (MTI) and tracking of surface and air threats at scale in a challenging operational environment is a necessary step in any JADC2 or ABMS system. Existing systems, principally Airborne Warning and Control System (AWACS) and Joint Surveillance Target Attack Radar System (JSTARS), are aging and increasingly vulnerable to advanced threats, as are uncrewed systems designed for permissive environments. The Fiscal Year 2023 budget provides funding to acquire an interim AWACS replacement while ongoing analysis will define the optimal mix of air-based and space-based ground and aerial MTI systems and architectures. These systems must be able to find and track high-priority mobile targets in the air, on the sea surface, and on the ground in contested environments. The ability to hold larger numbers of targets at risk in a time-compressed scenario is essential to conventional deterrence and defeating aggression.

Fourth, both threat developments and affordability concerns dictate that the Air Force proceed to develop and field a Next Generation Air Dominance (NGAD) family-of-systems. This family-of-systems will include a sixth-generation crewed platform, as well as uncrewed combat aircraft and a cost-effective mix of sensors, weapons, and communications systems. Several years of technology maturation have led the Department of the Air Force to conclude that crewed-uncrewed teaming for air dominance and other tactical missions is within reach. The NGAD core crewed platform is funded for development in the Fiscal Year 2023 budget, and the work to define other elements of this family-of-systems has been initiated.

Fifth, we must define and resource cost-effective, resilient forward basing for our tactical aircraft. The last decades of conflict saw our airfields operating with comparably little interruption or threat, but the PRC has invested extensively in precise long-range ballistic and cruise missiles that threaten our forward air bases. Their investments into hypersonic weapons, which are much harder to defend against, further threaten our forward bases. This budget continues funding for Agile Combat Employment (ACE) in both the Indo-Pacific and European regions while work is ongoing to define the most cost-effective mix of hardening, active defense, deception, and dispersion activities. This includes necessary mobile logistics or prepositioned assets required to sustain operations. All our investments in tactical airpower depend on our success at achieving resilient forward basing.

Sixth, our global conventional strike capabilities will be built around the B-21 Raider and associated familyof-systems. The Fiscal Year 2023 budget fully funds the B-21 for continued development and the initiation of production. The Department of the Air Force is working to determine an affordable family-of-systems that will be associated with the B-21 and include uncrewed combat aircraft with comparable range. Like NGAD, the B-21 is envisioned to operate as part of a more extensive set of systems with significantly more operational performance than the B-21 alone.

Seventh, to provide effective integrated deterrence, the Department of the Air Force must be fully ready to expeditiously transition to a wartime posture. We must be ready to mobilize against a peer competitor who has spent decades researching and developing the means to attack the systems and infrastructure we depend on to go to war through cyber and non-cyber means. This budget includes resources to modernize and harden our existing information systems. Ongoing work will define additional steps that should be taken to deter and defeat cyber and other attacks on our information systems and logistical infrastructure.

In summary, the Air Force and Space Force Fiscal Year 2023 budgets balance the risks of maintaining current readiness to support combatant commands today with the need to develop and deliver the force needed for tomorrow. In the following sections, we discuss how the Space Force and Air Force will balance these risks from the perspectives associated with the goals of integrated deterrence, campaigning, and building enduring advantages. This budget and our ongoing efforts lay the groundwork for the tough choices we expect to face next fiscal year and beyond. The Department of the Air Force has undergone historic transitions through our rich, 75-year history, and we are in the infancy of another historic change now. This change will ensure we maintain our ability to deter and, when necessary, defeat those who seek to prevent our Nation and our allies and partners from being secure, prosperous, and free. Change is hard—losing is unacceptable. "One Team, One Fight."

### UNITED STATES SPACE FORCE

The United States Space Force and its capabilities underwrite all instruments of national power and enable the joint force to operate effectively. The joint force cannot succeed without space capabilities. Spacepower is a source of our Nation's strength both at home and abroad and provides socioeconomic benefit to all Americans, an expanding network of allies and partners, and the global community. Access to and use of space are vital national interests, and space capabilities provide critical data, products, and services that drive innovation in the United States and around the world. Our pacing challenge, the PRC, understands the importance of space and is acquiring the space systems and counter-space systems to hold our interests at risk and defeat us in conflict.

Uninterrupted use of space and protection from adversary counter-space operations are foundational to the design and function of the joint force. Historically, precise missile warning and the ability to attribute the source of the threat helped deter missile strikes on the homeland; high-resolution satellite imagery allowed the joint force to revolutionize the speed and sophistication of target development; precision navigation, enabled by the Global Positioning System (GPS), revolutionized weapons accuracy and the efficiency of munitions; and satellite communications (SATCOM) enabled over-the-horizon power projection, which is essential to deterring aggression. It is not hyperbole to say the joint force cannot prevail without space. The United States also cannot allow potential adversaries to gain an unchallenged ability to conduct space-enabled attacks on our joint forces and terrestrial interests.

The United States is the world's premier space power, and our military capabilities enable the joint force to succeed, but this position is being challenged as never before. The PRC and Russia understand the unique advantages that spacepower provides and have demonstrated the willingness and ability to attack space capabilities and endanger peaceful use of the domain. The November 2021 Russian anti-satellite missile test, whose debris continues to threaten all nations' space assets, is just the latest of many irresponsible counter-space weapon demonstrations by both the PRC and Russia. Both competitors are researching, developing, and fielding the space and counter-space systems needed to defeat the joint force. In addition to developing the ability to attack in space, the PRC has integrated space capabilities into its military operations in order to target maritime, air, and land forces and project power through space. The PRC's 2021 test of an orbital hypersonic glide vehicle constitutes a new challenge to strategic deterrence and stability. Further, in its invasion of Ukraine, Russia maintains the ability to deploy and employ a wide range of ground-based electronic warfare capabilities to counter GPS, tactical communications, SATCOM, and radars.

The Space Force must take urgent action to meet growing threats to vital national interests and to strengthen deterrence. This budget represents the beginning of an unprecedented transformation from a few exquisite space systems to more capable, resilient, and defendable architectures comprised of a diverse and distributed mix of capabilities.

#### SPACE FORCE'S ROLE IN INTEGRATED DETERRENCE

Integrated deterrence starts with space. The Space Force provides the joint force and our allies and partners critical services that are essential to integrated deterrence and effective defense. Unique services such as missile warning, positioning, navigation and timing, communications, and space-enabled intelligence, make the United States a valued security partner. Deterrence has long depended on assured missile warning and the ability to communicate with strategic forces in all circumstances. The Space Force delivers unmatched capability in these missions today and is developing the next generation of capabilities to meet mission requirements in the future.

Next Generation Overhead Persistent Infrared provides critical tactical and strategic ballistic missile warning and acts as a bridge from legacy detection and warning to the more robust missile tracking needed to counter modern, maneuverable threats. The transition towards resilient, proliferated architectures will extend to other mission areas, including battlespace awareness and space-based intelligence. In addition to our ability to provide warning and tracking of modern threats, the Evolved Strategic Satellite Communication system will ensure the ability to command and control strategic forces despite attack.

Space provides an asymmetric advantage in military operations. The joint and combined force cannot succeed in conflict against a space-capable adversary without the ability to gain and maintain space superiority. Potential adversaries are actively developing and fielding systems intended to deny the use of space in conflict. By denying the potential for a sudden decisive attack in space, the Space Force bolsters integrated deterrence across all domains. Beginning in Fiscal Year 2023, the Space Force's transformation to resilient architectures is purpose-built to deny an adversary's ability to acquire an advantage through an attack on a few fragile, high-value space assets. This new design approach enhances capability and resiliency through distributed systems proliferated across multiple orbits. Taken together, these features measurably increase deterrence of the full spectrum of advanced threats.

The first mission area to undergo this transformation is the Missile Warning/Missile Tracking architecture. The Fiscal Year 2023 investment in this transformation implements a force design developed by the Space Warfighting Analysis Center (SWAC). Supported by a multi-agency collaboration, the Space Force is building upon the *Overhead Persistent Infrared Enterprise Architecture Strategy* to deliver architecture capabilities that can be protected, survive attack, degrade gracefully under attack, and be rapidly reconstituted. In conjunction with our network of allies and partners, the transformation to resilient architectures communicates to the world that our joint combat credible forces, in space and terrestrially, will continue to sustain operational advantages through all domains and phases of conflict.

Space Domain Awareness (SDA) is essential to attributing bad behavior in space as well as tracking objects in orbit, launch attempts worldwide, and active payload deliveries, and, if necessary, controlling space assets during a conflict. Fiscal Year 2023 investments, such as the Deep Space Advanced Radar Capability, will deliver continuous, all-weather radar capabilities for deep-space object tracking. Additionally, Deep Space Advanced Radar Capability will enhance the Space Force's ability to track foreign launches, from liftoff to final destination, and improve the ability to observe the behavior of existing and emerging threats. In addition to supporting the transfer of the space traffic management mission to the Department of Commerce, the Space Force increasingly uses SDA data, provided by allies and commercial companies, to improve awareness of the domain and distribute vital data to the joint force, interagency, allies and partners. By providing continuous assessments of potential adversary behaviors in space, the Space Force contributes to the range of measures available under the integrated deterrence concept.

Space can become a conflict zone at any stage of the possible transition from peace to unconstrained conventional or even nuclear warfare. Integrated deterrence spans this spectrum. The Space Force is in the process of transforming to a suite of capabilities that can deter across that spectrum, help to assure the security and support of our allies and partners, and, if necessary, transition to wartime operations. The Fiscal Year 2023 budget begins that transformation.

### SPACE FORCE'S ROLE IN CAMPAIGNING

The Space Force strengthens and amplifies campaigning initiatives for the joint force, combatant commands, and allies and partners by delivering global services and effects that enable and enhance all joint and combined functions. The unique characteristics of the space domain provide a range of options for military operations, response to gray zone challenges, and peacetime influence operations. Furthermore, space leverages its inherently global coverage to support all combatant commands as well as our allies and partners. The Space Force also supports the campaign to ensure the peaceful use of space, supports appropriate international behaviors in space, and works closely with the National Space Council to further interests in security as well as peaceful commercial and scientific uses of space.

Last year, the Secretary of Defense issued *Tenets of Responsible Behavior in Space* to establish foundational criteria under which the application of military spacepower complements, rather than competes with, the growing civil and commercial use of space. New capabilities, including those intended to protect national interests in space, must strengthen American leadership as well as foster a secure, stable, and sustainable space domain open to all responsible actors.

Our ability to use space effectively at all times starts with assured access. The Space Force's National Security Space Launch (NSSL) program has delivered an unprecedented record of 90 successful launches stretching back to 2002. The NSSL program has achieved commercial-like pricing for routine missions and

reduced overall launch costs by half. This budget ensures our NSSL launch capacity requirement to place new capabilities in orbit. While there are fewer NSSL missions than last year, our investment is right-sized to manifest requirements, and it does not reflect a drop in capacity or space operations. Additionally, the Space Force is utilizing the four remaining Atlas V launch vehicles, effectively eliminating dependency on the Russian RD-180 engine moving forward. The Space Force's launch infrastructure is another critical element of our transformation. The *Range of the Future* vision enables us to keep pace with the accelerating United States space launch market and maintain safe and assured launch for commercial, civil, and Department of Defense users.

As a member of the Intelligence Community, the Space Force collects, analyzes, and delivers intelligence on threat systems, foreign intentions, and activities in the space domain in support of national leaders, the acquisition community, and joint warfighters, before and during all phases of conflict. The National Space Intelligence Center (NSIC) will focus this effort, provide the scientific and technical intelligence necessary to support threat-based requirements development, future space acquisition decisions, campaigning in support of deterrence, and defense of space systems from anti-satellite weapons, such as those being developed and demonstrated by the PRC and Russia. The Space Force will leverage NSIC to coordinate with the rest of the Intelligence Community, and our investments in full functionality of the NSIC will better inform threat-based requirements development and future acquisition decisions.

To ensure data transport in support of ABMS and JADC2, the Space Force, through the Space Development Agency, will deliver an initial space data transport layer that will enhance secure and resilient data access for joint force and allied users across the globe at all times. This data transport layer, based on a force design led by the SWAC, will be an integral element of JADC2, delivering assured, low-latency connectivity to the full range of warfighting platforms. This initiative supports another operational imperative driving ABMS towards an operationally optimized solution. At full strength, the space transport layer will consist of a constellation of satellites to provide seamless, assured global connectivity to warfighters.

GPS is the gold standard for positioning, navigation, and timing, used daily by billions of people around the globe. Navigation and timing systems depend on accurate, reliable, and highly-precise geolocation services in support of commercial and military activity. These capabilities are mission-essential for virtually every modern weapon system and critical for public safety and government services. This year's budget continues procurement of advanced GPS III follow-on satellites and emphasizes specific modernization efforts to improve the resiliency of GPS services. This includes anti-jamming, upgrades to military user equipment, and advanced cyber protection for the ground operating systems.

SATCOM enables global voice and data connectivity for Presidential support, Command and Control (C2), Intelligence, Surveillance, and Reconnaissance (ISR), and Nuclear Command, Control, and Communications (NC3). The Space Force is ensuring joint force SATCOM availability by operating a suite of mobile, wideband, and secure systems, and by investing in programs such as Protected Tactical SATCOM and the Protected Tactical Enterprise Service to deliver reliable joint force communications. Space Force also continues to enhance SATCOM effectiveness, efficiency, and resilience through the use of international partnerships, commercial SATCOM, various acquisition pathways, and the transfer of Army and Navy capabilities and programs.

The Space Force is also responsible for the continuous operation of over 50 legacy platforms. Even as Space Force embarks on a transformation, many legacy platforms must operate for years into the future. To ensure capabilities that were designed and delivered before space was recognized as a warfighting domain remain credible and viable, the Space Force is investing in additional cyber protection, evaluating

select legacy systems for resiliency upgrades, and integrating space capabilities from a number of allies and partners. These investments ensure today's space capabilities are ready to support day-to-day campaigning in the near-term as the Space Force's modernization efforts pave the way to deliver new architectures that are resilient by design.

The services that Space Force provides enable the joint force and combined force to contribute to campaigning efforts that reinforce deterrence. The Space Force also directly supports campaigning by contributing some of those same services to allies and partners and by increasing the attractiveness of cooperating with, and operating in conjunction with, the United States. Equally important, the Space Force can support campaigning by providing increased levels of security to allies and partners through the potential to negate and, therefore, deter threatening space systems.

#### SPACE FORCE'S ROLE IN BUILDING ENDURING ADVANTAGES

Building the future Space Force also hinges on investment in diverse and highly talented Guardians—the core of the Space Force's enduring advantages. With this budget, the Space Force assumes responsibility for its own Military Personnel account from the United States Air Force, enabling it to more fully and effectively develop and manage the incredible talent resident in the Space Force. The *Guardian Ideal* is the Space Force's foundational document outlining the Service's boundary-pushing, innovative approaches to talent management. This inclusive, modern, and holistic talent management approach incorporates work-life balance, resiliency, training, education, and individualized development. The Space Force also needs a force structure and resourcing approach capable of adapting to changing circumstances, quickly and effectively scaling on-demand to meet mission requirements. With Congressional support, creating a Space Component with full- to part-time fluidity for all uniformed members will give the Space Force the unique opportunity to achieve those objectives.

Space Force is advancing space education by embedding space curriculum into the Department of the Air Force's Basic Military Training, Non-Commissioned Officer academies, the United States Air Force Academy, Officer Training School, and Reserve Officer Training Corps. This ensures both Guardians and Airmen have a foundational understanding of the space domain and its importance. Additionally, dedicated, space-centered education within officer and civilian intermediate- and senior-level professional military education programs drives long-term strategic thought and builds the technical leaders of tomorrow.

To address the operational imperative on transitioning to a wartime posture against a peer competitor, the Space Force must ensure readiness for that contingency. Currently, the Space Force is inadequately equipped to train for a high-end fight. Readiness requires education and training to equip Guardians with the knowledge, skills, and tools necessary to operate and prevail against a determined adversary with a diverse array of threat systems. To meet this need, this budget begins the transformation of the legacy Operational Test and Training Infrastructure and expands the National Space Test and Training Complex as the premier venue to develop warfighting space capabilities. This will include developing live, virtual, and constructive environments where Guardians can train against a professional, doctrinally sound, and threat-representative aggressor force. This training will be applied, tested, and validated by Space Flag, Red Flag, and various joint, allied, and partner exercises.

To further improve the joint force's enduring advantage, the Space Force, together with the Intelligence Community, is analyzing the Department of Defense's ISR requirements and examining national,

commercial, allied, and partner ISR integration opportunities. By exploiting new technologies, commercial services, and distributed architectures, the space domain offers opportunities to provide greater capability to meet warfighter requirements while reducing operational risk. Under the operational imperatives, Space Force, in partnership with the National Reconnaissance Office, is also exploring options and opportunities to apply these solutions to the problem of moving target indication and tracking from space at scale.

Space Force needs a digital workforce with the skills to rapidly turn data into valuable insights. Digital fluency is foundational to being a Guardian, and, to improve that literacy, the Space Force provides Digital University access to every Guardian. The Space Force continues to build a cadre of organic software coders (known as "Supra Coders") with a plan to train 90 in 2023 and achieve a target inventory of over 200. These initial efforts will prepare Guardians to embrace the digital processes and technology required to innovate and increase effectiveness and efficiency against space operations threats.

A key aspect of digital transformation is digital engineering. The Space Force has made initial investments into an ecosystem where digital engineering will be conducted to manage the complexities of force design, requirements validation, weapon system acquisition, test and evaluation, training, and operations. These investments will accelerate and modernize the entire capability development lifecycle—from conception to deployment to operations. Further, data management is foundational to advancing capabilities. The goal of becoming the world's first fully digital Service is to deliver a force capable of winning a data-centric conflict and protecting the vital interests of the Nation, allies, and partners.

The Space Force is surging to address the first operational imperative of defining a resilient space order of battle that encompasses offensive and defensive capabilities by implementing a cost-conscious, threatinformed, data-driven force design process to define space architectures that will replace legacy, singleplatform solutions built for a benign domain. The SWAC, working with DAFSA, is leading this transformational shift by analyzing thousands of possible architectures for each mission area and evaluating the performance, cost, and resilience of each to clearly define the threat, inform requirements, and increase transparency with potential solution-providers to expedite the delivery of capabilities. Space Force is adopting this approach across all elements of force design to ensure it can accelerate concept development, access the most cutting-edge science and technology, use digital engineering, and integrate acquisition efforts, turning designs into fielded systems at the speed of need. This method also increases access to a more diverse base of satellite vendors and launch providers.

Through a unity of effort approach to acquisition of enduring advantages, the Assistant Secretary of the Air Force for Space Acquisition and Integration leverages the Program Integration Council to communicate and align efforts among senior leaders from the Space Systems Command, Space Rapid Capabilities Office, Department of the Air Force Rapid Capabilities Office, Space Development Agency, National Reconnaissance Office, Missile Defense Agency, United States Space Command, Space Operations Center, and the Air Force Research Laboratory. In conjunction with this process, the formal transfer of the Space Force at the beginning of Fiscal Year 2023 will enhance the Space Force's ability to integrate innovative acquisition approaches and deliver new satellites and ground system prototypes into the operational baseline.

Technology and pacing threats are evolving at an ever-increasing rate, and achieving enduring advantages means the Space Force must undergo a transformation from current legacy systems to the architectures needed to be competitive. The Space Force is leveraging technology to deliver game-changing space capabilities and solidify an ecosystem through our University Research Consortium. Quantum

technologies, counter-hypersonics, artificial intelligence/machine learning, and directed energy are several of the emerging technologies that are necessary to integrate into the Space Force architectures to stay ahead of potential adversaries.

### UNITED STATES AIR FORCE

The United States Air Force remains integral to the Nation's defense and continues to lead the joint team by developing and deploying critical capabilities in support of Defense priorities. The Air Force does so through the execution of its mission statement: "Fly, Fight, and Win . . . Airpower Anytime, Anywhere." The Air Force brings unparalleled speed, agility, survivability, mobility, and strike to the joint fight while simultaneously providing command and control, reconnaissance, and deterrence capabilities. Simply put, no one else can do what the Air Force does, and without its capabilities, the joint force loses.

As the Air Force celebrates its 75th anniversary as an independent service this year, our Airmen can look back and honor three-quarters of a century of pioneering. Since 1947, Airmen have dutifully executed their mission successfully in the same way the Airmen of today are called to do: "Innovate, Accelerate, and Thrive." Innovation, fueled by Airmen, is the Air Force heritage. Airmen continue to push technological and cultural boundaries, making the Air Force the leader in airpower. For 75 years, the Air Force has kept pace with rapid changes in technology, modernizing platforms, and accelerating advancements in tactics with unprecedented success. Our Nation's Airmen thrive as the world's greatest Air Force because of those who have gone before us—particularly those who weren't afraid to break barriers. This success was hard-fought to achieve, and it must be fiercely maintained into the future.

Maintaining the Air Force's role as the global leader in airpower requires us to Accelerate Change or Lose. In an environment of aggressive global competitors and technology development and diffusion, the Air Force must accelerate change to control and exploit the air domain while also underwriting national security through nuclear deterrence to the standard the Nation expects and requires. The necessity to Accelerate Change or Lose is the impetus behind the Department of the Air Force's operational imperatives, which are identifying the changes and investments needed to be successful. To best address these necessary changes, the Air Force must balance risk over time. The Air Force will develop and field new capabilities expeditiously while selectively divesting older platforms that are no longer relevant to our pacing challenge—all while maintaining readiness. The Air Force must ensure its path continuously drives toward readiness to be best prepared when called upon by the Nation. Accelerating change means both getting the direction right and moving as fast as possible.

In last year's budget submission, the Air Force began the process of making hard decisions to modernize the force. Last year's budget highlighted the Air Force the Nation needs for 2030 and beyond, and the message has not changed: the need to modernize is critical to counter strategic competitors. The Air Force is taking measured risks in the near-term while simultaneously prioritizing an affordable, defensible force structure that grows readiness over time and accelerates investment in critical capabilities to deter and defeat an advancing threat. Continued collaboration with Congress enables us to best execute the resources that protect the Nation and, in turn, secure vital national interests and backstop the security of allies and partners. This process will not end with the Fiscal Year 2023 budget; additional difficult decisions will be required in the future.

The character of war continues to change. Advances in technology produce a combat environment that rewards speed, tempo, agility, lethality, and resilience. These have been hallmarks of the Air Force since

its inception, and it takes the solemn task of building upon those attributes as part of the joint team very seriously. The Nation deserves and demands nothing less.

### AIR FORCE'S ROLE IN INTEGRATED DETERRENCE

The Air Force plays a unique role in integrated deterrence as the Nation's leading and most agile choice for executing seamlessly across warfighting domains, theaters, and spectrums of conflict. The Air Force provides a range of combat-credible capabilities backed by a safe, secure, and reliable nuclear deterrent. As stewards of two-thirds of the nuclear triad and three-fourths of the Nation's NC3, the Air Force foundationally enables the Nation's nuclear deterrence for a stable international order. Relationships and connections with the interagency and allies and partners—whether in the Indo-Pacific with Japan, Australia, and the Republic of Korea or as demonstrated by current deployments in support of the North Atlantic Treaty Organization—are critical elements of integrated deterrence. Across the joint force, combatant commands, and allies and partners, Air Force airpower capabilities prove invaluable as demand consistently exceed supply. Through focused efforts to balance near-term risk, the Air Force is able to continue supporting these demands while accelerating investments in future capabilities.

Nuclear deterrence is a significant part of integrated deterrence. The United States' strategic deterrent provides the joint force, allies and partners, and the Nation security guarantees while deterring other nations' use of nuclear weapons. The nuclear deterrent can also serve as a deterrent to other strategic attacks on American and allied vital interests in general and provides critical reassurance to strategic allies. As the Service responsible for the majority of the Nation's nuclear capabilities, the Air Force's Fiscal Year 2023 budget continues investments and improvements to sustain and reinforce strategic deterrence.

Capable of providing prompt, overwhelming response, the ground-based leg of the nuclear triad is a critical capability for deterring peer adversaries and is fully funded in the Fiscal Year 2023 budget. To ensure this capability remains ready, the Air Force is modernizing with the Sentinel system, our Ground Based Strategic Deterrent (GBSD). Its on-time delivery is critical as the existing Minuteman III fleet ages and our pacing challenge is investing heavily to grow and modernize its nuclear arsenal. The PRC recently built more than 100 new intercontinental ballistic missile silos in its western desert. At the same time, Russia's nuclear modernization efforts are more than 80% complete, and Russian leaders publicly stated the nuclear forces were recently placed on high alert. The United States has delayed nuclear recapitalization as long as possible, and consistent investment in the Sentinel comprehensive weapon system is an absolute necessity.

The Air Force's nuclear-capable bomber force provides the second leg of the Nation's nuclear triad. The B-21 Raider represents the future of our bomber force. As the most flexible leg of the nuclear triad, the B-21 is a unique national security capability. This budget includes additions to continue Engineering and Manufacturing Development and support to nuclear certification. In support of the operational imperative, as the B-21 family-of-systems is defined, the Air Force will develop, test, and field the B-21 while pursuing the potential to introduce a lower-cost, complementary, uncrewed aircraft to provide an enhanced level of conventional capability. As the Air Force modernizes, it will continue the transition to a two-bomber fleet capable of nuclear and conventional weapons delivery through the B-21 and B-52. These modernized capabilities will provide global nuclear and conventional global strike options for decades to come.

The Air Force must continue its investment in researching, developing, testing, and fielding cost-effective long-range traditional and hypersonic weapons. The Joint Air-to-Surface Standoff Missile-Extended Range is funded at maximum production capacity, and the Long-Range Standoff Weapon continues in development, providing future nuclear long-range strike options. The hypersonic Air-Launched Rapid Response Weapon system is funded for completion of development; however, production funding is deferred until successful flight tests occur. The Joint Advanced Tactical Missile (JATM) continues in full-scale development, while the Hypersonic Attack Cruise Missile ramps up its development. The Air Force must develop these revolutionary capabilities and other advanced weapons to maintain a competitive advantage over the pacing challenge.

The Air Force's pursuit of the NGAD family-of-systems ensures air superiority in the future through cutting-edge concepts and technology. Adversaries are investing in capabilities that erode the Air Force's advantage, and NGAD investments continue development efforts for advanced sensors, resilient communications, and air vehicle technologies. NGAD's family-of-systems will provide survivable, persistent, and lethal options through a mix of crewed and uncrewed aircraft equipped with a flexible combination of weapons, sensors, electronic warfare, and other mission systems as it links with current and future targeting systems through ABMS.

In support of integrated deterrence, the Air Force will be working with our allies and partners around the world to ensure that our collective, joint, and combined capabilities are used in the most effective way possible. ABMS will provide the connectivity and collaborative decision-making needed to make this possible. The budget funds a mix of foundational infrastructure, early increment capabilities, and advanced battle management tools as the Air Force component of JADC2.

As the Air Force contributes to integrated deterrence, it will do so with the joint force, and allies and partners. The Air Force is working broadly to ensure that current capabilities and future weapons systems maximize interoperability with allies and partners alike. The Air Force is consistently engaged across borders to build, repeat, and reinforce a simple message to strategic competitors—the benefits of a stable international order far outweigh aggression and instability.

### AIR FORCE'S ROLE IN CAMPAIGNING

The Air Force will play a role in a full range of major military activities designed to achieve strategy-aligned objectives through campaigning. The Air Force will support both permanent and rotational deployments, exercises, forward presence, and other activities that contribute to maintaining deterrence and support other long-term strategic objectives. The Air Force's fielded forces are in constant global demand, providing direct military advantage to combatant commands, the joint force, and allies and partners while supporting diplomatic and whole-of-government efforts. The Fiscal Year 2023 budget investments in ABMS, ACE, readiness and sustainment of fielded forces, and continued support to allies and partners highlight some of the key roles the Air Force plays in ongoing campaigns to strengthen deterrence.

The Air Force's readiness hinges on the ability to operate, maintain, and sustain an aging fleet of aircraft while funding the flying hour program to the maximum executable level. Operations and maintenance, the largest of Air Force appropriations, funds day-to-day operations critical to sustaining readiness, building resiliency, and enhancing wartime posture. Weapons system sustainment requirements—funded at 85%—continue to grow due to aging platforms and the acquisition of new, highly technical, and complex weapons systems.

Air Force rapid global mobility platforms enable power projection, extend range and persistence, and ensure air superiority and joint force capabilities are in the right place, at the right time. In order to maintain our air refueling edge for the joint force, this budget continues the fielding of the KC-46 Pegasus aircraft. Recapitalizing the Air Force tanker fleet with the KC-46 increases the likelihood of mission success while lowering risk in a peer conflict.

Tactical and strategic airlift underpin the Nation's rapid global mobility capability. This budget submission maintains the long-term viability of the C-130 fleet and invests in communication and avionics capabilities for the C-17. This ensures the Air Force has the right mix of platforms to fulfill the joint force demand.

ISR underpins all military actions, and the Air Force continues to balance maintaining and fielding systems that provide combatant commands with this critical capability. The ability to win future high-end conflicts requires accelerating change across the ISR force structure to be more connected, persistent, and survivable while divesting legacy assets that lack these characteristics. In this budget, the Air Force modernizes existing ISR platforms with new sensors, cyber, and other classified capabilities while improving the ability to fuse data in a resilient network.

The ability to prosecute targets in advance of our adversaries is pivotal to the C2 advantages the Air Force currently holds. The current Air Force C2 architecture, including the AWACS and JSTARS platforms, is aging, analog, and vulnerable to failure or attack through kinetic or non-kinetic means. The Fiscal Year 2023 budget divests a significant portion of both the AWACS and JSTARS fleets while pursuing and funding a replacement to close the Air MTI gap while a resilient long-term solution is identified.

Detecting, tracking, monitoring, and striking moving targets at scale is a requirement in modern warfare. The Air Force's legacy Airborne Moving Target Indicator and Ground Moving Target Indicator (AMTI/GMTI) capabilities will be neither effective nor survivable in highly-contested environments. The Air Force must be able to operate in radar-jamming environments, detect low-observable and hypersonic threats, and survive. This operational imperative must integrate with ABMS in order to share and take advantage of information at operationally-required speeds across all domains. The Fiscal Year 2023 budget supports this imperative through investments in future air and space capabilities as well as upgrades to existing ones. The Air Force will also leverage key allies' capabilities and systems to engage multiple mobile targets in the air, on the sea surface, and on the ground.

A modernized C2 architecture will include ABMS, the Air Force's contribution to the JADC2 concept, and will accelerate communication, enhance decision-making, and shorten the kill chain. ABMS must be operationally optimized to leverage unprecedented sensing, provide processing, and integrate data across multiple domains to warfighters when and where needed. Fiscal Year 2023 increases the investment into this critical capability to connect joint and allied and partner teams enabling domain awareness, faster decision-making, and execution than our adversaries.

Exercising across the joint force and with allies and partners helps ensure the Air Force's readiness while reinforcing cooperation nationally and internationally. Continued investment in operational test and training infrastructure and exercises sends the clear message of the Nation's unified goals and collective capabilities. These exercises, budgeted to continue this year, enable the Air Force to be the partner of choice while also increasing interoperability and combined-force planning. These initiatives are especially important with those allies and partners who are more susceptible to military coercion or aggression.

### AIR FORCE'S ROLE IN BUILDING ENDURING ADVANTAGES

To build enduring advantages, the Air Force is undertaking a series of initiatives to apply current and emerging technologies to solve operational challenges while simultaneously building the workforce needed for the future. Research and development accounts are increased substantially in the Fiscal Year 2023 budget. These investments are focused on placing meaningful military capability into the hands of Airmen as quickly as possible. Programs like NGAD, B-21, and JATM are moving into and through development toward fielding.

The Air Force will continue to modernize to ensure a more lethal, resilient, sustainable, survivable, agile, and responsive force. As such, the Air Force must have a mix of multi-role air superiority capabilities and capacity to defend the homeland, project airpower globally, and operate as a joint and allied and partner force. The Air Force remains committed to the F-35 Lightning II with full Block 4 capability as the long-term cornerstone of the United States' future fighter force. This year's budget submission temporarily reduces F-35 procurement to invest in the overall tactical aircraft portfolio. This includes F-35 fleet modernization and advanced weapons, specifically advanced propulsion, the Stand-In Attack Weapon, Block 4 retrofits, and enterprise infrastructure. Accelerated F-15EX procurement provides expanded weapons carriage capacity and enables a rapid recapitalization of the F-15C over the next two years before returning to larger F-35 procurement numbers. Funding of F-22 advanced sensors provides capabilities to bridge until replaced by the NGAD family-of-systems. The NGAD crewed platform has increased funding in this budget submission for continued development, and funds are provided to initiate development of an uncrewed combat aircraft. Additionally, funding for F-16 modernization supports lethality and survivability over the remaining service life by adding capacity to Air Force air superiority capabilities.

Artificial intelligence (AI)-enabled technologies and advanced collaborative weapons are critical enablers that will transform the future joint force and fulfill a crucial role across the Air Force and joint force. In order to maintain a competitive edge and build enduring advantages, the Air Force will rely on crewed, uncrewed, and cooperative teaming platforms. The Air Force is investing to accelerate the development of advanced collaborative weapons systems to leverage AI and increase lethality in highly-contested environments. Human-machine teaming will enable Airmen to process massive amounts of data and arrive at sound operational decisions more rapidly and with confidence.

Securing enduring advantages depends upon understanding and acting in anticipation of long-term challenges such as the transboundary threat of climate change. The Fiscal Year 2023 budget includes funding for the Adaptive Engine Transition Program to provide operational improvements and reduce energy use. The Air Force is also increasing Facilities, Sustainment, Restoration, and Modernization (FSRM) funding in Fiscal Year 2023 for both climate-related and operational resiliency. As the Air Force updates and repairs facilities, it is able to incorporate new climate mitigation techniques and improve energy efficiency, quality of life, and mission readiness. Additionally, the increased FSRM funding allows us to address the operational imperative of ensuring resilient basing, sustainment, and communications in contested environments. Facility updates and repairs can be affordably executed to reduce climate risk and enhance combat capability and mission execution.

Airmen across the Total Force remain the Air Force's most significant enduring advantage. In the Fiscal Year 2023 budget, the Air Force provides funding to address sexual assault prevention and response reform, suicide prevention, diversity, equity, and inclusion initiatives, quality of life issues, and economic insecurity. The budget provides a \$15 minimum wage for all civilian employees and includes investments

to provide affordable childcare for the Total Force. The Fiscal Year 2023 budget also provides funding to cover increased costs of living for our military and civilian personnel to ensure they receive the pay they deserve and need.

### DEPARTMENT OF THE AIR FORCE CONCLUSION

The Department of the Air Force Fiscal Year 2023 budget balances risk between maintaining current readiness in support of combatant commanders today while developing, building, and fielding the force needed for the future. The seven operational imperatives help guide this transformation, which is just beginning. Throughout the last 75 years, the Department has shown its resolve and capability to execute the missions demanded by our Nation while constantly advancing to remain the world's premier air and space forces. This transformation will not be easy, but there is no alternative.

While our Department remains incredibly capable, it cannot make these necessary changes alone. Instead, we must operate as "One Team," working together within the Department, across the joint force, in the interagency, and in concert with our allies and partners. Our "One Fight" unites us all around a common purpose. Russia may pose a very visible and acute threat, but the PRC remains our pacing challenge. The PRC's military modernization program is well resourced, strategic, and sophisticated. The risks to operational and technological superiority that we face are grave and increasing over time.

Congressional support enabled the start of this transition to the future force the Nation needs, and Congressional support remains critical to our success. The necessity of Congressional backing to invest in the future while we continue divesting outdated assets and building modernized air and space capabilities will only increase as the Department continues its modernization efforts to deter, and, if called upon, to win the Nation's future conflicts. The defense of the Nation demands a transformation to the future air and space capabilities that will replace the obsolete platforms of today, and this can only be achieved with Congress' support for the difficult decisions to come.

Today, America's Airmen and Guardians deliver innovative solutions to some of our Nation's most challenging problems while projecting airpower and spacepower around the globe. They remain our competitive advantage, and we will ensure they are all provided the opportunity to serve to their fullest potential. Every combatant command, ally, partner, and American benefits from their selfless dedication. We have an immense responsibility to provide our Airmen and Guardians the tools, training, platforms, and support they need to safely and effectively defend our great Nation, and we will. Change is hard; losing is unacceptable. "One Team, One Fight."