

**Remarks by the Commander, U.S. Space Command, Gen. Stephen Whiting  
at The Air & Space Power Association Defence Space Conference 2024,  
London. (As Delivered)**

**Sept. 25, 2024**

Good morning, ladies and gentlemen. Thank you, Professor Anu for that kind introduction. It's an honor to be here today and I'd like to extend my gratitude to Air Chief Marshal, Sir Rich Knighton for the invitation to speak and participate in this important conference. I also want to thank Air Commodore (Retired) Mark Roberts and the Air and Space Power Association for bringing together this group of senior military, government, and industry leaders. Additionally, I would like to recognize Major General Paul Tedman and the entire U.K. Space Command team for all they do protecting and defending British and Allied interests in, from, and to space.

Paul is a dear friend of U.S. Space Command, having recently served as our Deputy Director for Strategy, Plans, and Policy. I know he is happy to be back in the UK with his family and all of you. And while Paul surely has fond memories of his time at U.S. Space Command, I know, after talking with some of you yesterday, what he really misses is the extra 50-yards on his golf drive thanks to Colorado Spring's 6,500 feet of elevation. But in all seriousness, Major General Tedman played a vital role helping our Command achieve full operational capability in December of last year and we are grateful for his time with us, and for the outstanding work of his successor, Air Commodore Darren Whitely.

I would also like to acknowledge the presence of our Allied and partner military space leaders, as well as our commercial and academic partners. Your participation highlights the critical importance of our collective mission to safeguard our shared interests in space.

This marks my first visit to the United Kingdom as the Commander of U.S. Space Command. Last year, while serving in my previous position, I had the honor of attending the 60th anniversary ceremony of Royal Air Force Station Fylingdales. The event not only commemorated the station's six decades of service as a collaborative effort between the United Kingdom and the United States, highlighting its crucial roles in ballistic missile early warning and space domain awareness; but it also embodied what Sir Winston Churchill famously coined as our nations' "special relationship." And for me, it was my 6th visit to RAF Fylingdales since 1994 when I was part of a NATO TacEval team as a young Captain evaluating the station's readiness to conduct its vital mission.

Churchill introduced the idea of a special relationship between the United Kingdom and United States in 1946 during what came to be known as his Iron Curtain speech, given on the campus of Westminster College in Fulton, Missouri. Officially titled "The Sinews of Peace," Churchill aimed to alert the world to the emerging threat posed by the Soviet Union and to emphasize the need for a strong alliance between our nations, including the Commonwealth. Further, he noted in the speech that American military leaders always approach a serious situation by first developing what he called an "over-all strategic concept." He explained that after defining this concept, they always move to the next step: the method.

Taking inspiration from Sir Winston Churchill, and embracing his stereotype, my goal in the time we have together is to do just that: discuss the serious situation we face in space, communicate U.S. Space Command's overall strategic concept—by introducing our Elements of

Victory—and promote methods to preserve the space domain by ensuring we prevail if called upon to fight.

We now face concurrent and accelerating threats in, from, and to space. These threats, which we have discussed extensively, are no longer theoretical future possibilities. They are now operational realities.

The People's Republic of China, specifically, is fielding capabilities at a breathtaking speed, holding space systems in all orbital regimes at risk. Along with Russia, they are deploying counter-space capabilities ranging from reversible non-kinetic systems, such as SATCOM and GPS jammers, and cyber-attacks, to direct ascent and co-orbital anti-satellite weapons.

Our strategic competitors also clearly recognize the advantages space provides on the modern battlefield. Russia's aggression in Ukraine shows that forces on land, at sea, and in the air, can no longer move or conceal themselves without being tracked and targeted from space or by space-enabled systems.

Further, the PRC in particular has built a formidable space-enabled network to close an integrated kill chain in the Indo-Pacific Region focused primarily on keeping terrestrial forces, including our navies, from getting to that region.

The lack of established norms and responsible behaviors in space is also becoming increasingly evident. The PRC's recurring launch anomalies generating significant space debris are concerning. We all understand that space is a difficult business, but countries should proactively communicate critical information when a debris-generating event occurs. Delaying bad news only makes the problem worse, and phone calls or posted notifications on known sources of space-related information cost nothing. I urge that the next time China, or any nation, creates long-lived debris in space, they promptly share that information with the spacefaring community.

Even more concerning, Russia reportedly has plans to violate the Outer Space Treaty of 1967 by deploying a nuclear weapon in space. A nuclear weapon on-orbit represents wanton irresponsibility of a space-faring nation. Such a capability would have indiscriminate effects and poses a threat to all satellites operated by countries and companies around the globe—even though we have spent decades in the U.S. preparing our most vital national defense satellites for such a threat. The United States will continue to engage with likeminded nations like the United Kingdom and our other Allies and partners represented in this room, to ensure that Russia understands the global community cannot tolerate a nuclear weapon in space.

Given the complexity and scale of the threats now arrayed against us in space, and the ever-advancing pace of broader space developments, it is imperative to formulate strategic concepts that can effectively address these challenges.

Success in space starts with a capable, integrated team. Space is a team sport, and no single nation, department, service, agency, or company can succeed alone. The full potential of spacepower is realized through the integration and synchronization of Joint, Interagency, Allied, and commercial elements, creating a collective advantage that surpasses any competitor.

Our shared missions are the backbone of the integrated space enterprise. U.S. Space Command views them as three moral responsibilities, based on our assigned duties and directives. First, we must ensure delivery of space capabilities to our Joint Force, our Nation, and our Allies and Partners across all levels of conflict. Modern military forces and our way of life depend on assured access to space. And, for the last 35 years, our military Services have been sized around the assumption they will have access to space and space-enabled effects—and frankly they don't have the force structure to fight without space capabilities.

Because these space capabilities are so vital to our militaries and societies, our second moral responsibility is to protect and defend our current constellations against the threats we now see fielded against us. And our third moral responsibility is to safeguard our military and homeland from space-enabled attacks of our strategic competitors, who are leveraging space to make their terrestrial forces, their army, their navy, their air force, their Marines, more precise, more lethal, and more far-ranging. The Space Commands of all our nations must help our Joint and Combined forces be protected from these threats.

As we execute these missions and fulfill our moral responsibilities, we recognize that our greatest advantage from our strategic competitors is trust. Major General Tedman emphasized this during his visit to U.S. Space Command last month, when he said, “trust is the secret sauce of our Alliance.” Yes, the PRC and Russia are active in the international arena. But they can’t begin to replicate what we have, relationships forged over the decades in wartime and in peace, built on a foundation of shared principles and values. In the chaos of conflict, we must be able to look to the person beside you and know they have your back, regardless of the patch or flag they wear. That’s why I value our team.

This raises the question: what space warfighting concepts must the integrated space enterprise adopt to execute our missions, honor our principles, and succeed in conflict?

While war in space is not inevitable, U.S. Space Command and the Allied space commands must be prepared if deterrence fails. For my Command, our unique responsibility lies in leading space operations during conflict, a role of all U.S. Combatant Commands fill. To help guide our thinking about what we need to be successful in conflict, we have identified five Elements of Victory, based on decades of Joint and Combined Force thinking and doctrine. These elements compliment and bolster the Chief of Space Operations, Gen Saltzman’s theory of Competitive Endurance by thinking about how our efforts to try to stay in competition in space extend to how we will be successful in conflict if needed.

Number one, we must be prepared to operate through a first strike. Our ability to quickly anticipate, defend against, recover from, and respond to a wide range of scenarios, conditions, and threats will be possible because of the overall resilience and defensive capabilities of our integrated space enterprise. We will enhance the scope, depth, and effectiveness of our resilient options through aggressive campaigning which will set conditions and shape the environment and lower risk.

Second, we must leverage second mover legitimacy to marshal a capable team across our integrated space enterprise and develop the intelligence understanding needed to counter threats during conflict. Additionally, this legitimacy rests on a commitment for continued leadership through responsible behavior in space and capitalizes on lessons learned during ongoing crises. This approach provides greater flexibility to national leadership and strengthens support from traditional Allies and partners while creating emerging opportunities for cooperation with non-traditional partners.

Third, if we truly believe no single entity can do it all in space, we must be able to integrate and synchronize combined, joint, interagency, and commercial effects. Our ability to lead teams across organizational and national boundaries is enhanced by our command-and-control concepts and relationships, to include mission command; integrated campaign and operations plans; tactics, techniques, and procedures; and timely, secure, and resilient communications across the integrated space enterprise. We achieve integration and synchronization with our Allies and Partners principally through Operation Olympic Defender, so I’m happy to acknowledge that New Zealand has recently agreed to join OOD, and we look

forward to France and Germany responding officially\_in the near future to our invitation for them to join OOD as well. We are truly stronger together.

Fourth, our ability to rapidly deploy, regenerate, and reconstitute space forces at scale is crucial for enabling maneuver and sustaining the fight. We must operate until missions are complete, not until the fuel we launched with is depleted. The ability to sustain a fight over the duration of the conflict requires dynamic space operations, sustained space maneuver, launch on-demand, and in-domain logistics. Just like on the land, at sea, and in the air, we need maneuver and mobility, and sustainment, in space. A space conflict is likely to be prolonged, and we must be prepared to see it through to the end.

Finally, the ability to gain and maintain space superiority is foundational to our combined success. The complexity and expanse of space challenges the notion of having superiority everywhere and all the time. However, space superiority can be achieved at a time and place of our choosing to close friendly kill chains and disrupt adversary kill webs. Integrated space enterprise fires and lethality ensure we gain and maintain space superiority when and where we need, across a wide range of scenarios, conditions, and threats, and as part of a campaign building on the other four elements of victory.

To reiterate, we do not seek conflict in space; however, our potential adversaries must understand that any attempt to turn space into a battlefield will fail. Our strategic concept is to form an integrated space enterprise capable of operating through a first strike; leverage second-mover legitimacy; integrate and synchronize effects across our multi-stakeholder team; rapidly deploy, regenerate, and reconstitute our space forces; and ultimately achieve space superiority when and where we need it.

Discussing what needs to be done is one thing; fully realizing these elements through concrete actions is another. In the five years since U.S. Space Command was reestablished, we have made notable progress developing and maturing the operational concepts and capabilities necessary to prevail in conflict.

Foremost among our successes are the strengthened relationships with like-minded and responsible space-faring nations. These bonds are cemented through the Multi-National Force--Operation OLYMPIC DEFENDER. Every day, we collaborate in space across our operations centers and units with Australia, Canada, and Great Britain. Despite this great success, we must continue to operationalize OOD against today's and tomorrow's threats while incorporating new member nations. Our strategic competitors should note that the threats we now see in space are only bringing freedom-loving nations closer together and fortifying our alliances.

As a testament to the U.S. military's commitment to strengthen joint and combined space operations here in Europe, both U.S. Space Command and U.S. European Command have installed cadres of space experts to bolster the continent's defense. U.S. Space Command's Joint, Integrated Space Team serves as an essential liaison function between our command and U.S. European Command, aligning our global space responsibilities with their regional plans and operations. Last year, U.S. Space Force, U.S. European Command and U.S. African Command established U.S. Space Forces-Europe and Africa, to ensure they have the necessary expertise to support the AOR's growing demand for space capabilities and effects. General Cavoli and I are working closely to ensure that us, the U.S. Joint Force, and our allies and partners in Europe, receive the space support needed across the spectrum of conflict,

We have also made progress incorporating commercial capabilities and partners into our respective architectures, plans, and operations. Our commercial aerospace industries are a

tremendous strategic advantage for our space and terrestrial forces; and this advantage has been growing over the past several years.

At U.S. Space Command, we see our Commercial Mission Partners and those of our Allies as a significant force multiplier. Their integrated capabilities enhance our operational effectiveness, expand our capacity, and increase our understanding of the space operational environment.

To expand our Allied and commercial advantages, we must effectively share critical information for Joint and Combined space operations. The U.S. Department of Defense has supported this by issuing guidance to reduce classification levels for certain space-related programs and future system acquisitions. This change will enhance Joint and Combined operational integration and reduce the 20 percent “tax” in time and funding associated with over-classified programs. However, this is just one step. We are also prioritizing enhancing integration with our Allies and partners at the collateral level, incorporating this focus into updates for Operation Olympic Defender and our revised Commercial Integration Strategy.

So, what are some of the new capabilities we need to successfully implement our elements of victory? U.S. Space Command recognizes that enhanced battlespace awareness for space operations is crucial for successfully operating against the threats we now see in space. Our current capabilities for cataloging and tracking objects are insufficient to maintain our advantage over strategic competitors by 2027 and beyond. For example, we must develop the ability to dynamically track spacecraft in nonstandard orbits. Our collective success relies on accurately identifying and attributing hostile actions and intent in space, providing decision-makers with greater context and understanding of what’s happening in the domain, and providing the tactically relevant SDA information needed to close friendly kill chains and interdict red kill chains.

Likewise, we need advanced capabilities to conduct sustained space maneuver so we can avoid threats and investigate suspicious activity. I’ve seen promising developments in on-orbit refueling and alternative propulsion methods, but we need these systems delivered on accelerated timelines at scale. As my longtime friend and colleague Lt. Gen. John Shaw has publicly stated, “We drive our satellites today as if we’re going to church. Our adversaries drive their satellites as if they’re going to combat.” This mindset must change to realize the Elements of Victory and protect our multi-national interests in space.

Of course, we are in regular conversations with a host of stakeholders to address our requirements for enhanced battlespace awareness and sustained space maneuver as well as integrated space fires and the requisite command and control we need. Now is the time for all of us to work together, across our nations and organizations, to identify solutions that deliver additional capability by 2027.

Why am I advocating for these capabilities by 2027? We are at a pivotal moment in history. The ongoing conflict in Ukraine starkly reminds us of the unpredictable nature of the global security environment. While the devastation is evident, Russia’s ultimate ambitions remain unclear. Additionally, President Xi Jinping of China has declared that by 2027, the People’s Liberation Army should be prepared to militarily take Taiwan. Although this is not a predicted date for action, he has issued the directive to his forces: “Be ready.”

Just as Churchill felt compelled to highlight the looming threats of the post war era in 1946, we must heed the clear signals from our strategic competitors. When someone tells you what they are preparing to do, believe them. We must prepare accordingly to safeguard our collective interests in space.

Although many challenges continue to confront us, there is also an incredibly bright future ahead for all our nations in space if we proactively create it. Soon, NASA's Artemis program will take mankind back to the moon, with a permanent base on the lunar surface not too far after that. In my lifetime, I think we will see the first humans walk on Mars and we will see commercial industry leveraging the resources of the moon and the asteroids to make our lives better here on Earth. And in my grandson's lifetime, I think he will see a permanent colony on Mars and mankind wandering further throughout the solar system. But this is a future we must actively and thoughtfully bring to fruition—and I'm proud to stand beside all of you to not only protect our nations today in space, but to also protect that future which is coming.

Thank you once again for the opportunity to be here today. I look forward to joining my fellow military space leaders in the Combined Force panel discussion to follow.