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The Mitchell Forum

# Keynote Remarks at the Commemoration of the 100th Anniversary of Brigadier General Billy Mitchell's Sinking of the Battleship Ostfriesland

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## About the Forum

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**Langley AFB, VA | July 21, 2021**

Ladies and gentlemen, to say "I'm delighted and honored to be with you today" is the epitome of understatement. Thanks so much for inviting me to share some thoughts with you on the 100th anniversary of Brigadier General William "Billy" Mitchell and the U.S. Army Air Service's First Provisional Air Brigade sinking the captured German battleship Ostfriesland. General Mitchell is the namesake of the Mitchell Institute for Aerospace Studies, so, as the leader of that organization, this is like a religious experience for me.

While the sinking of the Ostfriesland is incredibly significant unto itself, it's also crucial to highlight the broader context of its meaning.

In the wake of World War I—one of the bloodiest conflicts ever seen on the face of the planet—a small group of airmen was confident they had a better way to secure our nation's interests—one that would take less time, place fewer lives at risk, and achieve decisive results. Their courage, conviction, and dedication are what paved the way for the Air Force the nation enjoys today.

More importantly, their vision fundamentally changed what it meant to effectively project military power. The results we achieved with airpower in World War II, and aerospace power in the Cold War, Desert Storm, and beyond are inextricably tied to this vision.

The Ostfriesland event epitomizes one of their most significant achievements, but the story is far broader. It's history every Airman and Guardian should know by heart, look toward for inspiration, and strive to emulate.

Figure 1: Gen Billy Mitchell

Source: U.S. Air Force / U.S. Government Photo


What these airmen did was far from easy. In fact, they laid their careers and individual wellbeing on the line for a simple belief: that airpower could make this country more secure and win wars with far less sacrifice. Their vision was so far reaching that it took decades for their pioneering concepts to be matched by the technological art of the possible—namely, stealth, speed, range, and precision. And in many ways, we are still pursuing the vision they defined a century ago, with the fundamentals of JADC2 and ABMS amplifying many of their original thoughts. So enough of the background, let's dig into the details.

First and foremost, the sinking of the Ostfriesland was about offensive airpower—striking key enemy targets whose destruction would yield outsized warfighting benefits.

Pioneering aviators flying over the battlefield carnage of World War I realized that the air domain afforded an alternate path to secure victory. Instead of fighting yard-by-yard to capture enemy territory in a linear fashion, airmen could fly over the opposing forces and strike directly at critical war industries. Deprived of the tools to fight, an adversary would face defeat as the means of war dried up. As one British airman explained:

> *The soldier recognizes in order to achieve the national objective of overcoming the opponent's will, it is normally necessary for him to ultimately undertake—or at least to threaten—the occupation of the enemy's country or the interruption of his vital lines of communication and supply. The airman strikes directly at those objectives.*

Aviators on both sides of the conflict experimented with this new concept, launching various bombing missions far past the trench lines. While these missions did not substantively impact the outcome of that war, airmen were quick to note the potential that lay within this new avenue of attack. According to a 1917 British report:

> *The day may not be far off when aerial operations with their destruction of enemy lands and destruction of industrial and population centers on a vast scale may become the principal operations of war, to which older forms of military operations may become secondary and subordinate.*

American airmen concurred with this sentiment. Given the extreme loss of life, overwhelming destruction and dubious battlefield results of World War I, military aviators highlighted the need for more effective and efficient combat methods. Achieving strategic effects by direct attack of an adversary's centers of gravity comprised a key facet of their vision, a concept later branded, "Victory through Airpower."

While the impact of airpower in WWI was minor, I do want to highlight just how much American airmen achieved. They started at the bottom rung of the ladder wholly unprepared for war. According to General John Pershing, commander of the American Expeditionary Forces:

> *Out of the sixty-five officers and one thousand men in the Air Service Section of the Signal Corps, there were about thirty-five officers who could fly. With the exception of five or six officers, none of them could have met the requirements of modern battle conditions and none had any technical experience with aircraft guns, bombs or bombing devices. We could boast some fifty-five training planes in various conditions of usefulness, all entirely without war equipment and valueless for service at the front. Of these fifty-five planes, it is amusing now to recall that the National Advisory Committee for Aeronautics… advised that fifty-one were obsolete and four were obsolescent.*

Future Air Force Commanding General Henry "Hap" Arnold concurred with this pessimistic assessment:

> *At this time we were ranked 11th among the nations of the world in terms of aviation. Actually, it was worse than that, statistics aside, we had no airpower at all.*

Military officials had to come to grips with this new domain amidst the strain of combat. According to Colonel Thomas Milling, Chief of the Air Service for the First Army:

> *At the time we declared war on Germany, few people in the United States knew anything about the Air Service or had any real knowledge about airplanes, types that should be employed, or the use that could be made of them—either from a command standpoint or from a standpoint of war.*

With the air domain offering a range of new combat capabilities, commanders had to consider how to best harness this new realm. Airmen defined core missions that we still execute today. Flying missions in direct support of the soldiers on the ground is now close air support. Airmen bombing hostile forces is now interdiction. Airmen shooting down enemy aircraft is now air superiority. They also provided rudimentary forms of airborne intelligence, surveillance, and reconnaissance (ISR).

But it was the notion of strategic strike that would truly prove revolutionary. As leading air advocate, General Mitchell explained, "The advent of airpower which can go straight to the vital centers and entirely neutralize or destroy them has put a completely new complexion on the old system of making war." Opposing armies would be hard pressed to continue the conflict without the tools required to fight.

Colonel Edgar Gorrell of the Air Service's planning staff emphasized this in a November 1917 memorandum, explaining

that it was "of paramount importance that we adopt at once a bombing project...at the quickest possible moment, in order that we may not only wreck Germany's manufacturing centers but wreck them more completely than she will wreck ours next year." Colonel Gorrell's appreciation for strategic attack dated back to May 25, 1917, when long-range German bombers struck targets in southeast England. Subsequent raids throughout 1917 and 1918 killed 1,400 British citizens and destroyed a number of buildings throughout London and surrounding towns. The attacking crews were supposed to restrict their strikes to military installations, but nascent targeting technology and the fact that most of the missions occurred at night precluded accurate aiming.

Even though the raids netted haphazard results, the British Royal Flying Corps had to withdraw fighter units from the front in France and redeploy them in England for homeland defense purposes. Political leaders in England recognized the power afforded through the air domain and formed an autonomous air arm—the Royal Air Force—in 1918.

Things were different when it came to the Americans. Senior U.S. Army leaders did not share airmen's enthusiasm for strategic strike or independent airpower in general. As far as they were concerned, wars were fought and won by soldiers on the ground. Any positive potential afforded by aviation should be focused on the battlefield.

And if you listen to current Army leaders, you will recognize their perspective today hasn't evolved far past this same kind of thinking. The debates from a century ago are still alive and well. It's up to you to keep fighting them and trust me, we need you in there pitching. If you don't stand up for what you bring to the fight, no one else will.

A year after the war ended, an Army review board headed by Major General Joseph Dickman in 1919 declared, "Nothing so far brought out in this war shows that aerial activities can be carried on independently of ground troops to such an extent as to materially affect the conduct of the war as a whole."

Figure 2: Gen Billy Mitchell possibly discussing the future importance of airpower with Gen Pershing, with Maj George Patton standing to the right, in 1921

Source: U.S. Air Force / U.S. Government Photo

Airmen fervently disagreed and spent the next two decades advocating for direct attack of vital centers as a means to achieve strategic effects. They departed France with a redefined notion of the battlespace. It was no longer just about the last tactical mile.

While rudimentary World War I strategic bombing missions yielded limited results, airpower advocates were confident they could develop the mission into a robust, war-winning endeavor.

Past these ideological debates, airpower advocates faced a major obstacle constructing a modern Air Force. No matter the potential promised by their strategic strike theories, airmen's plans were of little tangible value without the equipment required to fly the proposed missions. Airmen spent most of the 1920s making do with World War I-era bi-planes. The real focus of their efforts was on refining emerging operational concepts and strategies identified in the war, while experimenting on how to turn their theories into viable possibilities.

Let me just put things in context regarding how rudimentary things were for airmen in this era. When it came to bombing, crews had a difficult time locating and accurately striking specific targets like factories and transportation lines. RAF pilot John Slessor and later RAF air chief, explained the problem: "Our material and technique, even at the end of the war, were really primitive; in the early days…there was not even such thing as a bomb sight, and bombing was done by the 'chuck and chance it' method." Marshall of the Royal Air Force Hugh Trenchard concurred, "The accuracy is not great at present and the pilots drop their eggs well in the middle of town generally." To put it mildly, there was some room for improvement.

Airmen knew they had to get better and achieve these results fast. Bombs on target was an imperative. As one airmen of the time explained, "The decision to 'bomb something up there' might have appealed to one's sporting blood, [but] it did not work with greatest efficiency against the German fighting machine." Bombs would only net an impact if they were directed against relevant targets.

And that's what brings us to the subject of today's commemoration: General Mitchell, his airmen, and the Ostfriesland.

The sinking the captured German battleship was part of a larger exercise that ran from May through July of 1921, with both Army and Navy planes taking part. Targets included several captured German vessels—a submarine, a light cruiser, a destroyer, and the famed Ostfriesland. The Navy set various rules for the strikes, which were aligned in favor of the target ships. Strike intensity, munition size, and altitude were all restricted.

When it came to the sinking of the Ostfriesland, Mitchell adjusted some of the rules he knew were established to restrict him, such as using larger bombs and executing a more intense set of multi-aircraft strikes than the rules dictated him. Senior military officials from both the Army and Navy were onboard an adjacent vessel watching the operation. In fact—the exercise included approximately 300 VIPs, including the service secretaries, 18 Members of Congress, numerous foreign diplomats, and a number of reporters.

While Naval officials protested the means of Mitchell's successful attack, nothing could deny the reality that he and his men accomplished what many had previously stated was impossible: using an aircraft to sink a heavily armored warship. And they did this flying aircraft that were basically powered kites. And remember—this was a battleship that had survived the Battle of the Jutland.

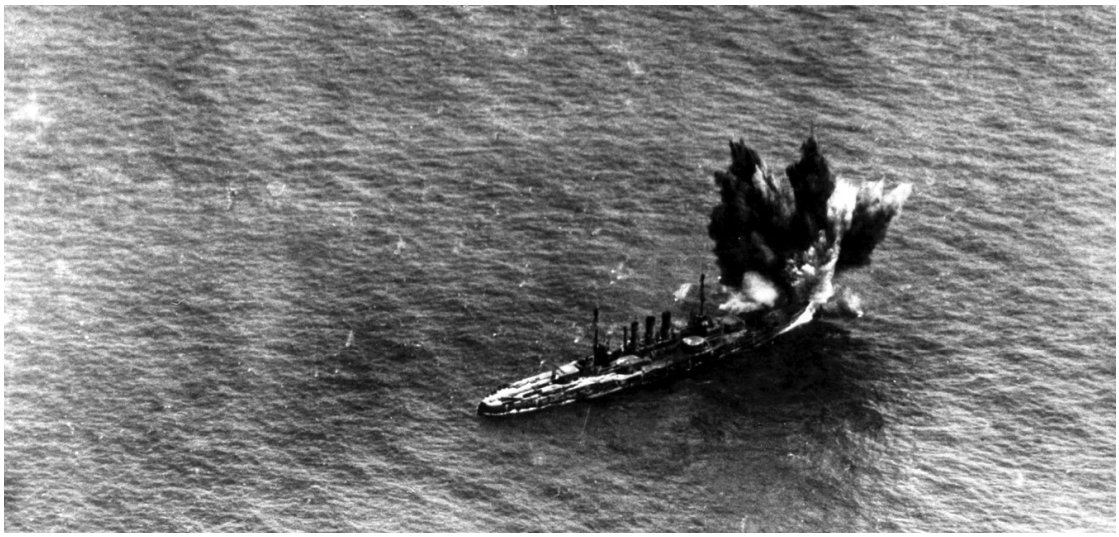

Figure 3: A bomb landing in front of the Ostfriesland on July 21, 1921, contributing to its sinking

Source: U.S. Air Force / U.S. Government Photo

The sinking of the Ostfriesland was a crucial turning point when it came to perceptions regarding airpower. Mitchell's reward for this achievement was to be assaulted by senior Army and Navy leaders who were upset their suppositions about surface warfare were under attack. He knew these risks and he kept pressing forward. His was a true example of service before self—one you should all keep in mind as you face tough decisions and when the chips are down.

The fact that Mitchell was the leader of these strikes surprised few. A late comer to military aviation, he earned his wings in the middle of his career after time in the infantry and the signal corps. He was an aggressive advocate for airpower from the time he earned his wings. He also had the credentials to back up his assertions, having led air operations for the famed St. Mihiel offensive in 1918—the largest air operation of the war.

After the war's conclusion, he returned home to the United States and pressed hard on all fronts on behalf of military aviation—and this included strategy, operational concepts, bureaucratic maneuvering, and public advocacy. This latter point—his public relations blitzes—is largely why he became such a household name in America. He was a celebrity on a scale few military officers today can even begin to imagine. His three books on airpower still stand as foundational volumes regarding the subject.

It's also important to recognize that Mitchell did not execute the attack against the Ostfriesland alone. The First Provisional Air Bridge include a number of highly accomplished airmen, including Jimmy Doolittle. These men worked tirelessly to deliver the results Mitchell demanded. The missions he was asking them to fly took their aircraft right up to the edge of their rudimentary performance envelopes. The skill of the pilots, maintainers, and associated crews are what made these missions possible.

Past the men of the First Provisional Air Brigade, I would be remiss if I didn't highlight the outsized influence Mitchell had on airmen throughout the service. The top air commanders of World War II—General Henry "Hap" Arnold, General Carl Spaatz, and General Ira Eaker—were all Mitchell protégés. According to Arnold, "The officer most responsible for the progress of the Air Service, for maintaining interest and morale of its personnel in those lean years, was General Billy Mitchell." You cannot understand the Air Force unless you understand Mitchell.

It's also important to understand that aggressive airpower advocacy was fraught with

tremendous professional risk. Mitchell learned this in 1925, when the War Department tried him before a court martial on the charge of insubordination. The Air Service's top advocate had crossed the line in challenging the Army's official doctrinal precepts regarding the nature of war. He would never wear an Army uniform again and died in 1936. However even without Billy Mitchell in their official ranks, airmen remained committed to their airpower convictions. The air strategy we saw unfold in World War II and the early Cold War has direct connection to Mitchell's vision. In fact, this air-minded thinking had an influence in my designs of the daily attack plans during the Desert Storm air campaign.

So, this raises a very basic question: why would Mitchell and his allies push so hard at such great personal risk for theories about airpower? The Ostfriesland stands as a prime example where these airmen laid a lot on the line to make a point. They knew the military leaders in both the Army and Navy were less than enthused with their efforts. In fact, many were furious with the outcome of the mission.

To answer this, you must recognize that airmen returning home from World War I had seen horrors few of us can imagine. The cost of the conflict, whether measured in terms of lives lost of resources expended, was truly staggering. Armies locked in a bloody stalemate struggled in vain to secure any appreciable gains for nearly half a decade.

Airmen believed airpower offered a new alternative to help secure victory in a far more effective and efficient fashion. They also had no patience for ground leaders who simply wanted more of the same when it came to linear campaigns and head-long charges into the enemy guns. This was a moral crusade.

To understand this thinking, let me use Mitchell's own words:

> *Armies proved conclusively in the last war that they could not gain victory. For four years they faced each other across a lot of ditches in northern France and went backward and forward only a few miles... All that happened only went to prove that the armies, following an entirely worn-out theory that they could advance and capture the vital centers of the enemy against an opposing army, had not taken a proper count of modern means of defense, such as the machine gun, the rapid-fire cannon and toxic gasses. By their ignorance of modern methods and devices, they brought the world to the verge of ruin.*

Resolute in their beliefs, airmen pressed ahead with their airpower vision. They were determined build a viable, robust operational force to empower the nation in a prudent, decisive fashion. "Victory through Airpower" defined their cause. And speaking quite honestly, that idiom needs to be resuscitated to guide our airmen today.

That might sound a bit too parochial today, following years of indoctrination on the virtues of joint warfare. Well, let me tell you why it's not.

Jointness means that among the DOD's five services, a specialized array of capabilities is provided through service or functional components to a joint force commander whose responsibility is to assemble a plan from this "menu" of available inputs, applying the most appropriate ones for the contingency at hand. It does not mean five separate services deploy for an operational contingency and simply align under a single commander.

Nor does jointness mean everybody necessarily gets an equal share of the action. Jointness is not homogeneity—it's not "going

along to get along." It's not complying with the majority view for the sake of collegiality. "Jointness" is using the right force at the right place at the right time.

It is recognizing that to be joint we require separate services, and that it's an imperative that service members understand how to best exploit the advantages of operating in their respective domains.

It takes 25 years to hone the expertise to be a great division commander on the ground, a battle group commander at sea, or a joint force air and space force component commander. Our construct of joint operations requires that we have the strongest Army, Navy, Marine Corps, Space Force and Air Force in the world, and strongly articulating the virtues and values of your service is absolutely critical to that objective.

Air Force members strongly advocating for the options that the Air Force can provide to combatant commanders' war plans is being joint, and fundamental to jointness. If you don't do that, nobody from another service will, and the joint force commander will be disadvantaged as a result. These same precepts apply to our brothers and sisters in the new U.S. Space Force as well. Gen Mitchell stands as a role model for our Guardians because without applying the tenacity, drive, and vision he demonstrated, the full potential of the Space Force may not be realized.

Back in the early 2000's, as the director of operations for the Pacific Air Forces I did a couple of things that I'm sure were influenced by the heritage infused on me by my study of Mitchell over the years. The first was initiating a continuous rotational bomber presence in Guam. To conquer the often-cited tyranny of distance of the Indo-Pacific Command, bombers operating at 600 miles per hour able to cover the theater in hours are much more effective and efficient than ships going 20 miles per hour requiring weeks to cover the same distance.

My rationale was similar to Mitchell's—flying at several hundred miles an hour, with tremendous agility, extensive range, and the ability to evade enemy defenses makes aircraft much more cost-effective power projection tools versus ships—some the size of city blocks—moving slowly in easily observable fashion on the surface of the ocean.

Speaking of power projection and the increasing resource constraints that we are facing; in some real-world situations a B-1 can deliver the same ordnance as an aircraft carrier air wing from long ranges. So why are we retiring 14 carrier air wing-equivalents of power projection capability this year, when the retirement of one carrier could pay for their repair and sustainment? The answer is that the Department of Defense still stovepipes budgeting by service with little if any cross-service cost-effectiveness assessment, and no focus at all on cost-per-effect comparison of various weapon systems across service lines.

We need both strong naval and air components for our combatant commands, but in appropriate proportions. When money is tight, resource allocation should favor capabilities optimal to delivering effects in the best fashion possible—not simply based on tradition.

Speaking of tradition, the U.S. Navy's singular and enduring grip on the Indo-Pacific Command is legendary. Never once in the over 70-year history of that combatant command has an officer from the Air Force held the lead position, even though it has increasingly relied on aerospace power over time. The same is true of Central Command, where today and for the foreseeable future airpower will be the predominant force application option. My Navy friends claim the reason for their grip on Indo-Pacific Command is because 70 percent of it is covered by water; I like to remind them that 100 percent is covered by air and space.

The problem with such service-centric

Figure 4: **Top** Gen Billy Mitchell's "RESULTANT FURY"—the sinking of the Ostfriesland Battleship on July 21, 1921.
**Bottom** Director of PACAF Air and Space Operations Maj Gen Dave Deptula's "RESULTANT FURY"—the sinking of the retired Navy LST USS Schenectady on November 23, 2004

Source: U.S. Air Force and U.S. Government Photos

locks on supposedly joint command positions—which in fact they are not—is that they favor a particular domain view for all broader strategic and operational considerations. This too often results in a particular set of strategies dominating over, and at times even ruling out, alternate courses of action that may yield more effective and efficient ways of warfighting.

The second endeavor that I championed in the Pacific was much more directly related to sinking of the Ostfriesland. It was a test known as Resultant Fury. The premise of Resultant Fury was to use DARPA's Affordable Moving Surface Target Engagement (AMSTE) system that substituted a JSTARS return of moving ships for the GPS signal that normally guided Joint Direct Attack Munitions (JDAM) to rapidly bring precision force to bear on enemy ships, regardless of weather conditions, day or night, across vast distances.

This experiment proved that U.S. bombers could engage enemy surface vessels to provide maritime interdiction to a joint task force commander with the fastest and most far-reaching option to attack sea-borne threats. B-52s flying from Andersen AFB, Guam and Barksdale AFB in Louisiana and a B-1 flying from Dyess AFB, Texas met over the Pacific, and—along with the E-8, F-15E Strike Eagles, and AWACS aircraft from Elmendorf and a unit of F-18 Hornets from Lemoore, California—we sank a series of moving ocean-going vessels.

In a precursor to JADC2, we proved dynamic command and control fusion throughout the kill chain with assets that don't normally work together to provide a rapid response against naval targets. The success of RESULTANT FURY provided a glimpse into possibilities that network-centric joint operations can provide.

So where does that leave us as we reflect upon this heritage and consider our future? I've got a very direct set of thoughts on that.

First and foremost, the imperative for robust American airpower stands as strong as ever. Whether looking at threats against China and Russia at the top end of the spectrum, middle tier threats with Iran and North Korea, or non-state actors like al Qaeda and ISIS, the demand for aerospace power is unrelenting.

Nor is airpower a supporting element whose contribution is discretionary in nature. Quite the contrary—we either secure the sky, deliver strategic effects through airstrikes, empower global mobility, and provide tremendous ISR capabilities, or we lose. It's that simple. Modern war is simply unwinnable without the contributions of men and women in this hanger and beyond.

Airmen matter now more than ever and it's okay to say that. In fact, it's your obligation to stand up and highlight when options delivered through the aerospace domains afford more effective, prudent warfighting options. As I said earlier, strongly advocating for your service is the essence of jointness as the strength of joint operations is the synergy that occurs when force elements from all domains are applied to meet the demands of a particular contingency—and each one will be different. However, one thing remains a constant—today, aerospace forces are indispensable—no joint force operation can be conducted without the capabilities provided by the Department of the Air Force. That cannot be said about any other military department.

The potential of the Air Force to project power without exposing vulnerability is enormous, along with the potential to save dollar and manpower resources relative to any other force projection option. For example, the Army today is developing new surface to surface hypersonic missiles at $40 to $50 million a pop—one-way weapons that are not reusable. They are searching for relevancy in a combat environment far different than that of the past 20 years of counter-insurgency operations.

But just like they wanted to own everything in the 1920's, they are designing their own air- and space-based ISR system, and command and control systems, and commanders—to control their new weapons—evidently forgetting that all those systems and commanders already exist in the Department of the Air Force.

In Desert Storm the Army would have the public believe that it was a 100-hour war when in fact it was a 1000-hour war where the Air Force played a decisive role throughout all of it and where the Army fought in the final 10 percent—consolidating the victory achieved by airpower.

We are just emerging from two decades of conflict that was dominated by land-centric thinking—wars of occupation and attrition. The results were far from positive. While we honor individual and unit level actions of bravery, it is critical to remember that we can and must do better in providing strategies and concepts that will deliver far more decisive options, without putting so many of America's sons and daughters in harm's way. That's not a parochial pro-Air Force way of thinking, it's common sense. Why would we put people at risk when better ways of achieving our fundamental goals exist?

If the last 20 years taught us anything, that should be a core lesson. And make no mistake, China or Russia will not allow us the kind of latitude we enjoyed over the past two decades. Future wars will push us to the brink, and we had better be ready.

That's why I am exceedingly worried that we are facing such a broad array of serious threats—the level of which hasn't existed since the Cold War—with the oldest, smallest Air Force aircraft inventory in service history. On top of that, we see continued pilot and maintainer shortfalls. Almost every mission area is high demand-low density. This is not sustainable. So

yes, the Department of the Air Force has to submit a balanced budget relative to the money it is issued, but it's also the Air Force's responsibility to clearly state what it requires to meet the demands of the current national defense strategy.

It's time for us to ask ourselves, are we living up to the example General Mitchell and his airmen set? I'd suggest it's time for us to collectively articulate the risks we face, the opportunities we can provide, and the costs of failing to harness the advantages afforded by airpower.

I hope some of these perspectives in some sense motivate you—motivate you to do what General Hoyt Vandenburg, our second Chief of Staff, urged during one of his last appearances when he said:

> *You should understand airpower, and you must preach the doctrine. You will be places where you are going to meet people who do not understand air power, and you are going to have to educate. You have got to go out and preach the doctrine of airpower and never give an inch on it.*

When I look out across this vista of remarkable men and women, I am awestruck by the patriotic spirit that presses you forward to accomplish so much. When I think of our Airmen and Guardians today, I recall the words of the prophet Isaiah. When the Lord asked, "Whom shall we send and who will go for us?" Isaiah answered, "Here I am, send me."

Every day, you answer the call of our country in similar fashion.

I conclude these remarks as I began - by saying how much you have honored me with this invitation. I am proud to know you, and to marvel at what you have done in the past, and what I know you will do in the future.

As General Mitchell explained in his book *Our Air Force*, "We must not prepare for what happened yesterday, but what is going to happen tomorrow, and the day after."

Together, let's salute what General Mitchell and his team accomplished 100 years ago. We stand on their shoulders. We owe it to them to continue the fight.

Thank you, very much, and happy anniversary. Now let's go toast "victory through airpower!"

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## About the Author

**Lt Gen David A. Deptula, USAF (Ret.)** is the dean of the Mitchell Institute for Aerospace Studies. He has commanded multiple aerospace operations ranging from humanitarian relief efforts, to small-scale contingencies, to major theater war. Deptula served as the principal attack planner for the Operation Desert Storm air campaign where he introduced the effects-based approach as the basis of those combat operations; he was commander of the Combined Task Force for Operation Northern Watch which executed no-fly zone enforcement operations; he directed the air campaign over Afghanistan as part of the initial wave of combat operations in Operation Enduring Freedom; and he served as the air commander for Operation Unified Assistance, the South Asia tsunami relief effort. He was twice a joint task force commander. He has also served on two congressional commissions charged with outlining America's future defense posture. Deptula has piloted more than 3,000 flying hours (400 in combat) to include multiple command assignments in the F-15. In his last assignment on active duty, as the Air Force's first chief for intelligence, surveillance, and reconnaissance (ISR), he transformed the U.S. military's ISR and remotely piloted aircraft (RPA) enterprises. Deptula holds a B.A. in astronomy and an M.S. in systems engineering—both from the University of Virginia. He also holds an M.S. in national security strategy from the National War College.