## Air Force Association Air, Space & Cyber Conference

Remarks by Gen. David L. Goldfein Air Force Chief of Staff 18 Sep 2018

Thank you Secretary Peters, General Spencer, and Lieutenant General Deptula for that kind introduction, and for hosting this premier professional development event of the year.

Under your leadership, it continues to expand and improve, and we, the Airmen in this conference hall, are the beneficiaries.

I am especially pleased to see so many of our younger Airmen in the audience. You put the power in airpower.

First, a shout-out to the over 1,500 Total Force Airmen from across the country who are postured to support U.S. Northern Command and the FEMA response to Hurricane Florence, answering the call once again in our nation's hour of need.

A special welcome to our wing commanders from across the active, guard, and reserves who are here for our annual commanders' conference. Secretary Wilson and I look forward to spending time with you throughout the week as we reconnect, re-blue, and recharge for the important work ahead.

The gathering this year is the most widely attended in decades, approaching the time in 1948 when the AFA convention was held in Madison Square Garden and hosted by none other than Jimmy Stewart, Ed Sullivan, and Bob Hope.

Personally, I think Whit Peters, Larry Spencer, and Dave Deptula would give them a run for their money. For sure after last night's speech, I know my wingman, our phenomenal Chief Master Sergeant of the Air Force, could match them toe to toe.

How about our chief -- is he something or what?

Among the many blessings of serving in this position, the best part of the job is having the opportunity to serve with my best friend, my high school sweetheart, who I met in my third year of Spanish 1. She represents all of our spouses who adjust their dreams so we can follow ours. It is my honor to introduce my bride of 35 years, Dawn.

What a difference a year makes. It's been a busy and productive 12 months since we met a year ago in this very conference center.

I asked our incredible public affairs team, led by Brig. Gen. Ed Thomas, to reach out to commanders around the world for images of the amazing work our Airmen accomplished.

This is what they found...

[Video plays]

I want to share just a couple stories of this past year of incredible Airmen who represent the very best in all of us.

Last month, the president awarded the Medal of Honor to Master Sgt. John Chapman. Accepting on his behalf was his wonderful wife, Valerie, and his family.

What an incredible Air Force moment to celebrate the life and service of this courageous and humble Airman.

The story of John Chapman will be told and retold for generations as he joins the ranks of John Levitow, William Pitsenbarger, and Bud Day, who we promoted posthumously to brigadier general this year.

What impresses and inspires me as much as his courage on that mountaintop in 2002, was the story of John Chapman the man -- the husband, the father, the son, and the fearless warrior.

This is a photo of John and a young Afghan girl, who was the same age as his daughters at the time, on his final mission before he fought to his death protecting his teammates.

The picture is on loan from my former exec, and his commander at the time, Brig. Gen. "Wolfe" Davidson. It hangs in my office facing a painting of Gen. "Hap" Arnold.

For me, it is a daily reminder of the true gift of leadership and the obligation we all have to work every day to be worthy of the honor of leading men and women like Chappie.

That picture will remain in my office until I hand the reigns over to Chief 22, because I can't imagine a day as Chief without John Chapman watching over me -- just as he did for his teammates on that mountaintop in Afghanistan so many years ago. John and I still have important work to do.

I'm privileged to introduce his mother, Terry; sister, Lori; and brother, Kevin who are here with us today. Thank you for joining us. The long blue line in this room represents your Air Force family for life.

Would you and any other Gold Star family members in attendance please stand so we can honor your courage and your sacrifice?

There is one more story among so many this past year I'd like to highlight.

You no doubt heard of this year's rescue of a boys' soccer team trapped 2,000 meters deep in a cave in Thailand.

What you may not know is the team that led the rescue were Airmen.

With rain threatening to fill the cave, oxygen running low, and options slim, an international coalition of civilians and military members from China, Australia, Britain, the United States and Thailand came together to plan and execute a daring rescue attempt.

Here's a short video to help tell the story...

## [Video plays]

Success depended on complex problem-solving through multinational collaboration. Our Airmen brought their particular expertise to help solve this challenge. Expertise like cave diving. Now, who has a hobby like cave diving? Well, it turns out one of our Airmen, Staff Sgt. James Brisbin, did.

Flexibility -- the key to airpower.

Maj. Charlie Hodges, Master Sgt. Derek Anderson, Tech. Sgt. Jolisa Keju, and their team worked hand-in-hand with their Thai Navy SEAL counterparts to develop the plan that was executed to save the 12 boys and their coach.

An incredible story we all watched play out. American Airmen leading a coalition -- getting the job done.

Major Hodges, would you and your team who performed the rescue please stand so we can thank you for your courage and for representing all that we stand for as a profession of arms?

While I'm incredibly proud of what our Air Force has accomplished over the past year, I am even more excited about our future.

Yesterday, Secretary Wilson laid out the Air Force we need to execute our missions as described in the National Defense Strategy in a world not as we wish it to be -- but as it is. A clear-eyed assessment of a world that has returned to an era of great power competition. A world where we have a role to play and a responsibility as a global leader and a force for good.

Just last month we lost a great patriot, Senator John McCain. In his recent book, *The Restless Wave*, he wrote "our founding ideals and our fidelity to them at home and in our conduct in the world make us exceptional...facing threats with confidence that our values make us stronger than...we will meet threats with great confidence."

So, my intent today is to build on Secretary Wilson's presentation and offer some thoughts on how we must prepare the Air Force we need and present it to combatant commanders to compete, deter, and, if deterrence fails, to fight and win.

One of the most important statements in the National Defense Strategy is the acknowledgement that "America's military has no preordained right to victory on the battlefield."

As our predecessors did before us, victory must be planned for, properly resourced, trained for aggressively, fought for, and eventually won in the unforgiving crucible of combat.

Because we were involved in the development of the National Defense Strategy, Secretary Wilson and I were able to ensure alignment of our five Air Force priorities to synchronize and drive our efforts across the MAJCOMs and Air Staff.

And by design, the three focus areas I laid out two years ago on this stage fit perfectly under these priorities. We have tilled the soil, planted seeds, and are growing deep roots in each line of effort.

We are revitalizing squadrons to be lethal and ready organizations, restoring decision authority where the mission gets done, and pushing resources to squadron commanders and their teams to get after their readiness challenges by unleashing the brilliance of Airmen who know what they need.

We've made significant progress on our journey to develop exceptional leaders who can rapidly integrate into and lead joint teams, and we are within weeks of certifying 9th Air Force as a core joint task force headquarters and will offer it to the chairman and secretary of defense as part of their new dynamic force employment model.

We are tying together concepts and technology to improve the quality and speed of decision making with more options for commanders through our work in multi-domain command and control.

Along the way, we've benefited from a robust discussion with our industry teammates, maturing our dialogue from wars of attrition to wars of cognition based on a new framework of connecting, sharing, and learning.

The work in each of these foundational efforts over the past year is coupled with the significant work Secretary Wilson initiated to restore readiness, speed acquisition, accelerate defendable space, and remove bureaucratic impediments.

Ma'am, its' an honor to serve with you. Our Airmen have no better friend than our Secretary of the Air Force! Thank you for leading this team.

And building on the work of the former vice chief, Larry Spencer, and his Airman powered by innovation efforts, Gen. "Seve wilson has been leading the charge to unleash the brilliance and innovative spirit of our Airmen.

When it comes to innovation, we need to think big, start small, and scale fast.

Later this week, Gen. "Seve" Wilson will announce his Vice Chief's Challenge to our force, academia, and industry intended to incentivize those who step forward to help us with solutions the nation needs to address the complex security challenges ahead.

Together, we have set the conditions for the next phase of our work, preparing the Air Force we need for multi-domain operations -- the convergence of military capabilities in any or all domains to achieve military objectives on a global scale.

Let me use a familiar piece of U.S. history to explain what I mean by multi-domain operations.

We all know the story of the famous "midnight ride" of Paul Revere and many of us memorized the famous poem growing up.

"Listen my children and you shall hear of the midnight ride of Paul Revere. On the eighteenth of April in Seventy-Five: Hardly a man is now alive who remembers that famous day and year."

No offense, of course, to Air Vice Marshal "Squid" Duguid and our RAF teammates.

By the way, congratulations on your centennial year. It should come as no surprise that it was the Royal Flying Corps that created the very first aero squadron in May of 1912. The rest of the world has been following your lead ever since.

But let's go back to 1775, when colonists became aware of British plans to seize the store of weapons in Concord and needed a way to warn their fellow town folk.

The military dilemma for the colonists was the defense of Concord. You see, there were two avenues of approach from Boston—by land and by sea, for the red coats could either march across the land bridge or row across the Charles River.

Without enough military forces to cover both avenues of approach, the colonists devised a crude but effective intelligence and command and control architecture described in the poem:

"Meanwhile his friend through alley and street, wanders and watches with eager ears..."

In order to signal whether the British forces advanced by land or sea, one or two lanterns would be hung in the old North Church tower.

"One if by land, two if by sea."

That night two lanterns were hung and the American colonists were able to mass their forces in defense.

So, imagine if the British had been able to split their forces and attack from both domains. What a dilemma for the colonists. Do they split their defenses to cover both axes of attack? Do they cede one avenue because they can't C2 or field a split force?

Even a harder challenge, imagine preparing for an enemy offensive across multiple domains, at different locations and times.

One if by land, two if by sea...three if by air, four if by space, five if by cyber...six...eight... ten...when we converge our joint capabilities at the time and place of our choosing.

Using dominance in one domain or many, blending a few capabilities or many -- even if only for a fixed period of time and location -- to produce multiple dilemmas for our adversaries.

One if by land, two if by sea? No. We want our adversaries in the lantern buying business!

This summer, I was privileged to visit our Airmen stationed in Italy at Aviano and Ghedi air bases.

As you might imagine with a country surrounded by water on three sides, there's a great seafaring lineage in Italy -- and part of that history is something called the "regatta."

While we know regatta is a term used for boat races, in Italian, the word "regatta" literally means "to compete for mastery."

And in boat racing, the major factor in winning is aligning all the rowers in the same direction and giving max coordinated effort.

To win, individuals grab an oar, align themselves with the team, and row hard.

And every once in a while, when all the rowers are aligned in perfect unison, the boat actually rises up and almost flies across the water. When it happens, it is a beautiful thing to watch -- mastery.

That's a serene image for what Secretary Mattis and I pursued when he was CENTCOM commander and I was his CFACC.

Vicious harmony.

Going forward, this is what Secretary Wilson and I are asking of this Air Force and industry team.

It is time to build on the foundational work accomplished over the past year to prepare ourselves for the fight that is coming.

One if by land, two if by sea, three if by air, four if by space, five if by cyber, more when we converge effects from multiple domains to achieve military objectives. We all need to grab an oar, align to our piece in achieving this vision, and row.

Vicious harmony.

Now, let me take this idea a little further, into how we organize and present ready and lethal forces to compete, deter, and win.

Building on the foundational work I described, we must strengthen each echelon of command to contribute to and lead multi-domain operations against a peer adversary.

What do I mean by echelon of command?

Well, of all the services, it is the Air Force that is often the most flexible and the fastest in how we respond to contingencies from humanitarian disasters to major combat operations.

Because of the domains in which we operate, we are expected to arrive within days and rapidly begin projecting combat power.

Sometimes the answer is a single WC-130 from the 53rd Weather Reconnaissance Squadron out of Keesler Air Force Base who flies into the eye of a deadly hurricane descending on the east coast.

Sometimes the answer is the rapid buildup of new bases across Eastern Europe to execute expeditionary combat operations to halt enemy activity in support of and in combination with our NATO allies.

Most often, the answer is somewhere in between, offering a combination of tailored forces that go forward, with forces that fight from the homeland or provide reach-back capabilities that support the fight.

The Air Force has the unique capability to conduct effective military operations with very small forces -- a single aircraft, satellite constellation, or cyber team -- or by rapidly deploying larger formations involving thousands of personnel and aircraft.

Agility and scalability. It is what we have delivered throughout our history, what we are known for, and what we must embrace and now strengthen as central to how we organize, train, equip, and present fighting formations to conduct multi-domain operations.

Flexibility truly is the key to airpower, because we also go over and not through.

This is a way of thinking, an ethos of the American Airman, and defines who we are. It takes us back to our lineage when soldiers locked in trench warfare looked to the skies and saw opportunity in a new technology called the airplane.

Today, we see incredible advances in space, in cyber, in information technology and the ability to understand complex operating environments -- all while our joint and coalition teammates continue to advance their capabilities.

Yesterday, Secretary Wilson talked about Gen. Billy Mitchell and his advocacy to pull together coalition airpower and focus it at the Salient near San Miel.

Today, we must continue to advocate to pull together joint and coalition capabilities to leverage our asymmetric advantages and produce multiple dilemmas for our adversaries.

One if by land, two if by sea, ten if we converge our capabilities at the time and place of our choosing. Over not through.

The model we need to advance our thinking in the business of multi-domain operations already exists, but it needs to be updated and refined to support wars of cognition.

In 1995, following the first Gulf War and years of rotational deployments supporting Operations Northern and Southern Watch, Chief of Staff #16 and a mentor of mine, Gen. Mike Ryan, tasked the Air Staff to develop an expeditionary force construct to align forces to ongoing demands.

After three years of experiment and refinement, these concepts were codified in the expeditionary Air Force framework announced by Secretary Whit Peters and General Ryan in August of 1998 - 20 years ago last month. [To Secretary Peters] Sir, you are aging well!

It was a brilliant vision that served us through continued operations in Iraq and two wars in Bosnia and Kosovo and remained in-tact until we were attacked in 2001, which began the most recent 17-year journey in our fight against violent extremism across the middle east.

Over time, we migrated away from the original design of the expeditionary Air Force, from a force organized to deploy forward, establish new bases, defend these bases, receive follow-on forces, establish C2, fight the base, and operate while under attack to a force that cannabalizes itself to send forward often individual Airmen from every wing in the air force to join a mature campaign with established leadership, basing, and C2 infrastructure.

From Bagram to Al Udeid to Kunsan and Osan, we know how to defend an established base, receive follow-on forces, and take the fight to the enemy. That muscle is regularly exercised and is in excellent condition.

However, the next fight, the one we must prepare for as laid out in the National Defense Strategy, may not have fixed bases, infrastructure, and established command and control, with leaders already forward ready to receive follow-on forces.

So, it is time to return to our expeditionary roots. The expeditionary Air Force framework that Secretary Peters and General Ryan laid out remains valid today, but it must be adapted and updated to support multi-domain operations.

This is our task in the months ahead.

And it will be led by our MAJCOM commanders, the finest team of combat proven leaders ever assembled.

By the way, tonight I am honored to participate in the retirement of Gen. Ellen Pawlikowski. She has been an inspiration to so many of us and it is fitting to recognize her on her last day in uniform.

As Secretary Wilson laid out yesterday, our 312 operational squadrons form the boxer's fist -- they remain the fundamental fighting formation of the Air Force -- and they belong to these commanders.

But in addition to preparing portions of their squadron to deploy forward into a mature base, our operational squadron commanders must be prepared to take their entire organization and the required supporting element -- the body behind the fist -- forward to establish and lead expeditionary operations at a new base, and they must be trained and ready to reach back to supporting organizations who enable their operations, and we must be prepared to execute on combatant commander timelines as the service expected to arrive in days versus weeks or months.

Flexibility and scalability. This is going to drive our leader development, our talent management processes, our exercises, and our inspection regimen.

And we must measure and report our readiness in accordance with this model in a way that builds and sustains the unit cohesion that is essential to combat effectiveness.

For every echelon, our ongoing effort to overhaul the current officer promotion system that identifies, develops, promotes, and selects for leadership positions officers required to thrive in this environment is central to our success.

We know, however, that squadrons rarely operate independently in larger contingencies. Our operational lead squadrons must be prepared to roll in under the next echelon of command, which is the expeditionary group and wing.

It is at this echelon where commanders and senior NCO leadership must be prepared to deploy forward, establish a base, defend the base, receive follow-on forces, establish C2, fight the base, and continue to operate while under attack.

We must therefore strengthen how we develop our wing commander and senior NCO teams to be ready to perform these critical functions within days of being tasked by the Chairman and Secretary of Defense to deploy forward.

Many of the forces they will receive at their deployed base will be joint and coalition, and may be different from what they are used to at home station. All elements of the air expeditionary wing must be optimized to contribute to multi-domain operations.

This means home station training, exercises, and inspections must mirror deployed operations so we rehearse the daily battle rhythms needed to quickly assimilate into and lead a joint and combined team. It means the key elements of multi-domain operations must become part of our wing operations at home.

And it is at wing command where we must strengthen all elements of establishing and defending a base as a central component of the flexibility and agility of airpower.

Rapidly deploying tailored and cohesive fighting formations depends on access to a global network of bases from which we project combat power. We must therefore be the best in the world at defending these bases.

Our elite defenders, the wearers of the coveted defender beret bearing the words "defensor fortis," meaning "defenders of the force," are the warriors we depend on to protect our national treasure.

In 1921, Italian Gen. Giulio Douhet said, "it is easier and more effective to destroy the enemy's aerial power by destroying his nests and eggs on the ground than to hunt his birds flying in the air."

We must take integrated and layered base defense to a new level by increasing investment in our defenders with new equipment, new training, new tactics, techniques, and procedures, and renewed focus at every echelon of command.

This is the year of the defender, because we don't project power without the network of bases and infrastructure needed to execute multi-domain operations.

Our goal is to deliver echelons of command that form together to present trained and ready air and space forces to combatant commanders who combine these echelons with joint and allied teammates to compete, deter, and win.

What is different going forward is we must strengthen how we organize, train, and equip these echelons. We must be more than force providers who send portions of our organization to a mature fight with robust and established bases and C2 infrastructure.

Instead, we must return to our expeditionary roots to build squadrons and groups that can fall in on an expeditionary wing structure with the leadership, supporting organizations, and C2 architecture needed to rapidly plug into an air and space expeditionary task force or joint task force to perform multi-domain combat operations on the timelines expected in our operational war plans.

One of by land, two if by sea, ten or more by convergence. Over and not through.

Fellow Airmen, ladies and gentlemen, we have been setting the conditions for this moment over the past two years, and are poised now to truly advance joint warfighting excellence.

The National Defense Strategy has set the Department and services on a path to increase our lethality and readiness.

Under Secretary Wilson's leadership, we are moving out according to our stated priorities, and have articulated the Air Force we need to properly execute the missions laid out in the NDS.

The joint team is aligning on common terminology -- multi-domain operations -- and we are advancing our understanding of the operational concept.

The Air Force has always been at the leading edge of seminal shifts. We've done this before.

World War I, World War II, the golden age of aviation, the nuclear age, the space age, and now the information age. All of these watershed moments required innovation, risk-taking, and persistence to find solutions.

We are in a new national security environment -- one in which we are all required to go "over not through," to not only think outside the box, but throw the box away. Perhaps take a lesson from Space-X and Gwenn Shotwell's presentation yesterday.

The last major great power conflict ended over seventy years ago. And it is only fitting that one of its most innovative missions had meaning well beyond the action itself.

The Doolittle Raid was no accident. Jimmy Doolittle prepared for it his whole life.

He had a broad joint background -- instructor pilot, operational and flight test experience, a PhD in aeronautical engineering from MIT -- he developed a vision for employing airpower in World War I, and in the next war, partnered with his Navy teammates to literally launch a similar bold plan into action.

Jimmy Doolittle's team decided to go "over not through."

And there was no Air Force instruction for launching B-25's from an aircraft carrier. There was just audacity.

On April 18, 1942, the Doolittle Raid struck at the heart of Japan. It was a defining moment for the Army Air Corps' ability to innovate under the most difficult circumstances.

Bear in mind that the leader of the raid, Jimmy Doolittle, was a lieutenant colonel -- a squadron commander -- who inspired his Airmen to push the boundaries of what was possible.

A couple weeks ago I had the honor of calling Jimmy Doolittle's co-pilot, Ret. Lt Col. Dick Cole to wish him a happy 103rd birthday. He agreed to join us by video today and offer a few thoughts from the long blue line. Let's roll the tape.

[Video plays]

Ladies and gentlemen, powerful words from one of America's heroes from our greatest generation.

I'll leave you with one closing thought on the significance of the date -- 18 April -- the day the Doolittle Raiders bombed Japan.

Can anyone make the connection? Remember the verse I cited earlier "18 April in Seventy-Five ...?" These seminal events in our history occurred on the very same day.

One if by land, two if by sea. Over not through.

Coincidence, or destiny?

I said before that I am excited and optimistic about our future. Why? Because I am confident that the American people will hear the alarm as articulated in the National Defense Strategy. That when made aware of the rising threat, we will once again choose to defend our great nation, just as we have throughout our history since that fateful night in 1775.

"...for, borne on the night-wind of the past...through all our history to the last...in the hour of darkness and peril and need...the people will waken and listen to hear ... of the midnight message of Paul Revere..."

They are coming. And we have from this moment forward to get ready -- fight's on!