

STATE OF THE AIR FORCE SPEECH
Air Force Secretary Heather Wilson
18 September 2017

SECRETARY WILSON: Well, good morning. This is like church, everyone answers back. Thank you. It's wonderful to be with you here this morning. After four months on the job and visiting bases in the United States and downrange I can tell you the thing that makes me most proud to have rejoined the formation and that is the competent and capable airmen who are serving our country. It is really a pleasure to be back with all of you.

It's also an honor to be with you here as we celebrate the 70th birthday of our United States Air Force. Now, the Army and the Navy and the Marines are a heck of a lot older than we are so please be kind to them. I guess when they say they walked uphill both ways to Philadelphia and Boston they mean it.

Whit, thank you for your introduction this morning and thank you for your service to the Air Force Association. You bring a wealth of experience to that position which is tremendously helpful to me and to all of our airmen. I'd also like to welcome some of our former secretaries who are here. Deborah James is here with us this morning, Mike Donnelly I believe is here with us for the conference, Michael Wynne is here, Whit Peters of course, and Hans Mark. I think I had to memorize Hans Mark's name at one time.

I also wanted to welcome our Major Commanders and civilian leaders, our 12 outstanding airmen, our NATO chiefs, our civic leaders, and our industry partners who are with us here today.

And to my wingman, our 21st Chief of Staff of the United States Air Force, Dave Goldfein and his wife Dawn. Fingers and I started the Air Force Academy together and I could

not ask for a better chief of staff and partner in this effort. Thank you, sir, for your service.

While he understands the strategic landscape and the capabilities that we bring to the fight, he also really cares very deeply about our airmen, and I've seen that up close and personal and we really are blessed to have you here as the head of our air service.

With Seve Wilson as Vice, taking care of all the stuff that General Goldfein doesn't want to do, and Matt Donovan as Under, we've got a four ship. A four ship with confidence. And it makes it a real blessing and a joy to come to work every day.

I want to recognize our 18th Chief Master Sergeant in the Air Force, Kaleth Wright and his wife Tanya who are here with us this morning. Chief, thank you for being a real leading advocate for our 400,000 enlisted airmen, active Guard, and Reserve. We rely on you to give us advice and to pull us up short. I think probably the best advice that General Goldfein and I got as lieutenants is to find a sergeant to keep you out of trouble and that holds true today. So, thank you, Chief.

The President of the Air Force Association, General Larry Spencer, thank you so much for being here and for all of your work. We're very honored to give out the Larry Spencer Innovation Award, an award he began as the Vice Chief of Staff of the Air Force. And next February we will be adding an innovation award under the AFWORKS banner so there will be a new innovative tool called the Air Force Spark Tank -- I think that has something to do with intellectual property associated with Shark Tank -- where airmen can compete and pitch their ideas to increase the lethality of the Force and to reduce the cost of bringing power to the fight. We will put that forward, the Chief and I.

To all of the members of the Air Force Association here today, thank you for everything that you do for our service and for our families.

The Air Force Association is now 71 years old. It's been an advocate for air power since before we were established as a separate force. But let's go back even further, 96 years, about this same week. In 1921 Brigadier General Billy Mitchell wrote a report advocating for a department of national defense with a separate branch for aviation. He was a visionary, an enlightened crusader, he wasn't afraid to speak his mind.

His military career came to an end when he was court martialed for insubordination in defense of airmen. He spent the rest of his life advocating for air power and earning the title The Father of the United States Air Force. His portrait hangs on my office wall at my request, next to Clarence Kelly Johnson who designed the SR-71.

Now while General Mitchell didn't live to see the establishment of the United States Air Force I think he'd be proud. In the early 1920s Billy Mitchell flew a Martin MB-2 Bomber with a top speed of 99 miles per hour. I kind of like to think that he'd enjoy feeling that soul-shattering power of a B-1 Bomber with its wings swept back and full afterburner passing low off the deck. I had the privilege of seeing that at Oshkosh about two months ago and it made you proud to be an American and proud to be an airman.

While Billy Mitchell was leading the U.S. air campaign in France during World War I my grandfather was flying for the British Royal Flying Corps, the predecessor of the RAF. Like many of you in this room, aviation is kind of a family business for me. My grandfather helped to synchronize propeller arcs with machine guns which seemed like a really good idea to me. He was a barnstormer when he came to America, fixed-based operator opening airports in the early days of innovation in aviation. My dad was a crew chief on the F-84 Thunderjet, the hottest jet in the world at the time. And then he was a commercial pilot and mechanic, an experimental aircraft builder.

Well, now that I've been here in this seat for four months, in a seat that my father and my grandfather probably never could have imagined me being in, there are some things we've done to drive forward the United States Air Force. I think we're on our way.

We put forward a budget that begins to restore the readiness of the Force so that we can win any fight any time. We're moving forward with the modernization of our strategic nuclear deterrent, with the KC-46 Tanker, the B-21 Bomber, the F-35 Fighter so that we can increase the lethality of the Force. And we established a new Deputy Chief of Staff for Space.

We held a live fly experiment with four light attack aircraft, and I guess we couldn't find anyone qualified so the Chief had to fly one of them. And we've started to simplify Air Force instructions and policies so that we stop telling airmen how to do everything and tell them what to do. [Applause] Let's try telling them what to do and letting them surprise us with their ingenuity.

We've hosted a workforce summit to chart the course for developing exceptional leaders who will lead the world's most powerful teams. And we've raised incentive pay for officers and enlisted aircrew and expanded the aviation bonus program.

So, we're off to a good start but there's much more to do. Anybody in this audience who is 26 years old? I don't mean this is your birthday. That would be kind of cool though. Anybody here who is 26 years old at the moment? This is one of those things nobody who is 26 wants to raise their hand in this crowd. But there are 26-year olds in this audience who were born the year that Desert Storm began. The United States Air Force has been flying non-stop combat operations for their entire lives. That comes at a cost to our personnel and equipment, and that demand for airpower is not going to abate any time in the near future.

We are really good at what we do. Our nation, our joint team, and our allies

depend upon us to control the skies, to provide intelligence, surveillance, reconnaissance, to protect our networks, to put precision weapons right where they need to be.

But here's the stark reality. The United States Air Force is too small to do all that the Nation expects of it. And our potential adversaries have not been waiting around. They've been studying us. They're innovating and modernizing faster than we are, putting at risk our technological advantage in air and space. Air and space superiority are not America's birthright. We earned it the hard way and we are not going to give it up without a fight.

We've established five priorities driven by the needs of the nation. First, we will restore readiness to win any fight any time. Readiness is first and foremost about people. We've got to be bigger in order to meet the demands of the missions we've been given. The Chief and I will work on steadily increasing our end strength in order to defend our nation.

But readiness is also about training. And we have to plan and prepare for the high-end fight. I am concerned that we have become too accustomed to the current battle rhythm where surge is the new normal. Six months in the desert, six months at home for a tanker pilot. And we all know that when you're home you're not really home. You're doing all the things that we expect you to do and more. 365-day TDYs rotating year after year after year. We have been doing too much for too long with too few and that has to change.

The Chief and I recently returned from a tour of the Central Command Area of Responsibility and at one of our locations there we saw some B-52s from Minot Air Force Base in North Dakota lined up on the ramp. Anybody here from Minot? So, how come you're here and not preparing for the Nuclear Surety Inspection?

Those B-52s had gone for 572 straight missions without being down for maintenance once, and they were really proud of it and they deserved to be. We were standing

on the ramp in about 120-degree heat underneath a wing of a B-52 and one of them lumbered down at the end of the runway and throttles forward and took off and the crew chief standing next to the Chief of Staff of the Air Force looks over and says 573. And during that time they have recorded over 700 danger-close employments of weapons against targets. Danger-close from a B-52 never designed for that mission.

But here's the thing. When those B-52s and crews get back to Minot they have a nuclear surety inspection ten days from their arrival back at home base. Ten days. And they hadn't trained for that nuclear mission in over four months. When I looked at the commander of that aircraft and I said, wow, do you think you can do that? He said with confidence, we got this ma'am; we got this.

It is not fair for this nation to ask our commanders to keep saying we got this right up to the point of failure because we don't get this. And that has to change. Our crews are not getting the time they need for the training in contested environments and for the high-end fights and the nuclear deterrence missions that we're going to be testing them on. Our training and exercises have to continue to challenge our men and women across the range of operations which means we have to get larger in order for them to be ready for that fight.

Our readiness levels for those high-end fights are not what they need to be. Americans need to understand low readiness for a crisis doesn't mean we won't go; we will go. What it means is that fewer will come back. We have an obligation as a nation to make sure that our airmen are ready when the Nation calls.

Readiness also includes munitions. And while the precision of our weapons is unparalleled we are using critical munitions faster than we are producing them. The Air Force has expended more than 54,000 precision munitions against ISIS since 2014, more than 54,000

precision weapons. Precision weapons has changed the way we fight and we're not going back. The world will not tolerate imprecise weapons. Precision weapons and exquisite intelligence allow us to destroy our enemies while minimizing casualties. We will continue to work closely with our industry partners to manage production but readiness of old equipment isn't enough.

The second thing our Air Force must do for the Nation is to cost-effectively modernize, to increase the lethality of the Force that we lead. You know, when color TV was still relatively new, before the Russians had launched Sputnik, the Air Force was already flying the first B-52, the first C-130, the first U-2, the first KC-135. We're still flying them, still upgrading them. Perhaps it's a testament to the quality of their design and to the men and women who built them. But the average age of our aircraft is 28 years old. We have to be able to evolve faster, to respond faster than our potential adversaries. We have got a bow wave of modernization coming across the board for the Air Force over the next 10 years. It's bombers, it's fighters, it's tankers, it's satellites, it's helicopters, and it's our nuclear deterrent.

Now, this has to start with getting acquisition right, being a good buyer for what the warfighters need. The first squadron of fully capable F-35s is activating this month at Hill Air Force Base. Anybody here from Hill? You were afraid to say that because of what I did to Minot, right? That squadron has the full range of weapons and sensors and it's ready to go when the Nation calls.

Next year the 157th Air National Guard Unit at Pease Air National Guard Base in New Hampshire will be the first unit to get the new KC-46 Tanker. We got anybody from New Hampshire here? From Pease? New Hampshireites? Now, that just breaks my heart. I grew up in New Hampshire and nobody came. We will have that new tanker.

The long-range B-21 Bomber is another step forward. It's named after the

Doolittle Raiders, supports the nuclear triad, it's designed to penetrate enemy air defenses in a high-end fight, and it has an open architecture to support new technologies long term. It has completed its preliminary design review and is developing on track.

We are also focused on space and nuclear modernization. Since 1954 the United States Air Force has been the lead service for space. Up to about ten years ago space was a benign environment. Our potential adversaries know how much we depend upon it, they understand the advantages that we gain in space. We must expect space to be a contested domain in any future high-end conflict. We must seek to deter attacks on our satellites, and if deterrence fails our space systems must be resilient so we can take a punch and fight back. We must also be able for deterrence to work to be able to fight back if required.

As the principle Defense Department Advisor with respect to space I will continue to advocate for space capability for all of our services and in particular the Air Force. This year the Air Force established this new three-star deputy chief of staff for space operations. That will bring a voice to the space warfighter in every conversation in Headquarters Air Force. The Chief and I expect this position to quickly identify requirements, to streamline operations, and to meet the demands of space as a warfighting domain. More broadly, space is rapidly becoming a common domain for human endeavor in ways that it just hasn't been in the past. I look forward to supporting Vice President Mike Pence and Secretary Mattis on the newly reestablished Space Council to help shape American space policy.

What's changing? Why is this happening? Well, it's really two things. The cost of launch into space is plummeting from \$10,000 a pound to \$1,000 a pound and pretty soon to \$100 a pound. At the same time, information technology advances and miniaturization is reducing the size of payloads. Those two things together mean that there are going to be more

countries, more companies, and even individuals in space. Some of those missions will be peaceful and some will not. Spacefaring nations like the United States must seek to ensure that space capabilities are protected. The 2018 President's budget proposes a 20 percent increase to Air Force space systems. We will continue to accelerate space capabilities so that America will continue to own the high ground.

We're also going to have to shake up the way in which we buy systems. Now in the 1960s Secretary of Defense McNamara hired an economist, a guy named Charles Hitch, to be the defense comptroller and they established policies and regulations built on Industrial era efficiencies to ring out cost. Those systems are not well-tuned to the demands of the information age and the acceleration of innovation.

The father of the intercontinental ballistic missile, General Bernie Schriever, recognized that problem instantaneously. He wrote in a letter to General LeMay at the time that with these new policies on procurement, "The timid would replace the bold." We wouldn't be able to provide the advanced weapons the future of our nation demands. He said that in 1962.

We must move faster and smarter when it comes to building and buying things. We have to accept appropriate risk and drive down costs in order to get capability from the lab bench to the flight line faster. But just cost-effective modernization isn't enough. The United States Air Force has to drive innovation in order to secure our future.

You know, my grandfather flew just after the Wright Brothers took off at Kitty Hawk and he lived to see a man walk on the moon. Innovation is the hallmark of the United States Air Force. It's kind of in our DNA. We're all bicycle mechanics at heart.

Near the end of World War II General Hap Arnold realized that the future of U.S. National Security depended on our military supremacy and that supremacy depended on

scientific research and development. In 1944 Hap Arnold met with Theodore von Kármán, one of the greatest aeronautical engineers of the 20th Century. He was the father of supersonic flight. They sat in General Arnold's staff car at LaGuardia Field in New York and Hap asked von Kármán to form a group of scientists who would determine how jet propulsion and atomic energy among other things would affect air power. That meeting would turn the United States into the world's dominant air power.

Von Kármán established what we now call the U.S. Air Force Scientific Advisory Board. The resulting analysis by von Kármán and his team of 25 leading scientists and engineers was overwhelming. It was 13 volumes. It foretold supersonic jets and nuclear capable intercontinental ballistic missiles and surface to air missiles.

Earlier this week in our office when we were moving some desks and offices around one of my military aids found a copy of a memo in his desk, down in the back of the bottom drawer, that was probably left as a reminder from one of his predecessors. It was a memo from Hap Arnold dated December 6, 1945. It was to his successor Tooev Spatz and it had a lot of great advice in it including, "Weeding out the misfits, unfits, and partially fits." But a large part of Hap Arnold's memo had to do with research and science and innovation. And he wrote, "We must get more power behind our development and research programs if we're ever going to put them across."

From time to time it is important to refresh our science and technology strategy, to step back from the programs and problems of today and project 10 or 20 years into the future to see what kind of Air Force we might have at that time. Today I am announcing a 12-month effort to conduct a broad review and revision of our science and technology strategy. The Air Force Research Lab will lead this effort but they will not be alone. The Air Force Scientific

Advisory Board will take a look at the same question and the National Academies of Science and Engineering will participate as well.

We will listen broadly and engage those who are on the cutting edge of science so that we can focus our research efforts on the pathways that are vital to our future as a service. This strategy will guide both what we prioritize for research and how we conduct our research. It will define our highest research priorities to be sure, but it will also help us strengthen new relationships between our Air Force and the science community, our universities, and our industry partners.

As you might expect of a former university president, I am particularly interested in how the Air Force can strengthen and deepen our ties with American universities on basic and applied research. At a time when federal research funding may be uncertain we want the United States Air Force to be the sponsor of choice for research scientists. We want to use methods and organizational structures that best support university-based research so that we simultaneously benefit from the work that is done and develop the next generation of American engineers and scientists that we will need as a service to take us forward into the next frontier. When I was a kid, I used to play chess with my grandfather after school. And after finishing a game of chess one day, when I was a senior in high school, I took out a piece of paper and I drew a curve on a piece of paper. My grandfather could use any tool I had ever seen and he only had a grade school education. I asked him, grandpa, how would you find the area under this curve? He said, in his soft, Scottish accent, well I would probably trace it on a piece of graph paper and count the squares. That was the first time in my life that I realized I had a tool that my grandfather didn't have and I showed it to him. It was called calculus. What was good enough for the innovators among our fathers and our grandfathers, is not good enough for our children and our

grandchildren if we are to drive this service forward.

Driving innovation, isn't just about science and technology policy. It is also practical. And it comes from the people who are out on the flight line doing the job. The chief and I recently met a sergeant from Loudon, New Hampshire on the flight line at Bagram Air Force Base Afghanistan and he had developed a cable. It was a cable and a hoist system to be able to connect the targeting pod from an F-16 onto the jet without actually having to take the pod on and off to do so, so he could do his testing and save about two hours for every aircraft that they had to check out. He had used some free design software that he got off of Google and he spent about \$170 in parts and it saved him a couple of hours for every airplane. It is amazing what innovation will happen when you don't want to be on a hot flight line. The chief and I asked him, well what did your commander say about this. I think the chief and I were fully expecting the airmen to look at his shoes and say, well you know, the regulations say such and such, but he didn't. And to the credit of his commanders, they told him, be safe, focus on the mission and see what you can do. That is exactly the right answer.

Hap Arnold's vision for this Air Force still rings true. The United States will develop technologies to secure air dominance. We will underwrite our nation's military supremacy. We will remain sentry and avenger for our nation. We will also develop exceptional leaders to lead the world's most powerful teams. The Air Force needs healthy squadrons, that's where the life of the Air Force is. If you've got a great first sergeant and a fantastic squadron commander, what the chief and I do doesn't matter very much. The culture of the Air Force is set at the squadron, not in the headquarters of the Air Force. As the chief and I saw throughout the central command area of responsibility, we need leaders who can thrive in joint teams. Leaders who have the courage to speak up even when it may go a little bit against the grain. Now, I am not suggesting

that you follow Billy Mitchell's example and get court martialed. But you do have a responsibility to make your voice heard when necessary.

The chief and I are trying to put in place, processes that are going to push authorities down to the lowest appropriate level so that you don't have to ask God and everybody for permission to do something. That will entail some risk, we know that. People are going to make mistakes. This is not a one mistake Air Force. We expect excellence but we don't expect perfection. I don't expect perfection on this side of Jerusalem. Those risks are worth taking because the risk of central control is greater. It is also going to require developing leaders who will listen to our airmen, particularly those airmen who have joint experience. Tooey Spatz who was the first chief of staff of the Air Force was fond of saying, I never learned anything while talking. General Spatz was an unpretentious man of few words who simply got things done.

You can expect the leaders of your Air Force to be values-driven, missioned-focused and people-oriented. You can also expect us to strengthen our alliances because we are stronger together. When the chief and I returned from our trip to the AOR, we had a chance to reflect on some of the things that we had seen there. In Qatar, we saw all of the nation's working together in the fight against ISIS. Very often, the coalition comes together first in the air. We know how to work with each other in the air. Some of the things that discourage the United States from getting engaged too early on the ground discourage our allies too. So, the coalition forms first in the air. No one service wins on its own. It was very clear that was the case in the fight against ISIS. Our allies and our partners are friendly centers of gravity.

In Iraq, we're not even fighting with the United States in the lead. We are enabling Iraq to fight for its own country and its own security needs. I have to say, one of the nicest remarks that

I heard on that trip that we made was from General Pat White. He's the combined forces land component commander. This guy is a two star Army armor officer. This guy is a tank driver. He said in his entire career, he has never seen anything like what he is seeing today in the fight against ISIS. I wrote this down in my notebook because it just was so stunning to me. He said, air power has turned the tide for the Iraqis. If it wasn't for what you airmen are doing, we would be here for another four years. We would not even be in Mosul right now. He said those words with gratitude and a little bit of awe. Precision strike combined with exquisite intelligence is changing the game. We plan, exercise and operate against the threats faced by our nation and our allies and we face risks here at home.

Honestly, the greatest risk we're facing right now here at home is not hurricanes in the Atlantic it is the risk of not having a budget. Congress has enacted 31 continuing resolutions in the nine of the last ten years. Operating under a continuing resolution means we can't start any new programs. We can't fund new innovation. We can't fund new investments in modernization. It means we lose the flexibility to enhance readiness and lethality. Little by little, over 31 continuing resolutions our adversaries outpace us. This year, we face another threat. The threat of a return to the Budget Control Act funding levels. Possible sequestration. As Secretary Mattis says, no enemy in the field has done more to harm the combat readiness of our military than sequestration. A return to Budget Control Act funding levels would destroy the small gains we've made in readiness over the last three years. It would degrade infrastructure and throw contract negotiations into turmoil.

Our potential adversaries are not facing these kinds of obstacles from their own government. They are continuing to execute their modernization plans. This is how we lose the war fighting advantage for the citizens we seek to protect. The United States must get beyond

the Budget Control Act in order to protect the country.

Men like Jimmy Doolittle and Billy Mitchell and Hap Arnold set the direction for our service some 70 years ago. Jimmy Doolittle understood the need to drive forward in unconventional ways. He had a PhD in aeronautical engineering from MIT. His interests were finding out just how much stress an airplane could take before it disintegrated. Previous tests were done on the ground. Jimmy Doolittle chose to find out from the cockpit. Throughout his career, he drove airplanes and tactics beyond their known limits. He was the airman our nation turned to following the attack on Pearl Harbor. After the attack on Pearl Harbor, President Roosevelt turned to Hap Arnold and the other chiefs and said we have to find a way to strike back at mainland Japan. Hap Arnold turned to Jimmy Doolittle.

Doolittle came up with a plan. And this year we are not only celebrating the 70th anniversary of the United States Air Force, we're celebrating the 75th anniversary of the Doolittle raid. Jimmy Doolittle's idea was to get a group of volunteers and take the B-25 bomber, the only bomber we had that could take off in 500 feet or less and to put them on the USS Hornet, to train American pilots to take off from a carrier and strike the heart of Japan. He got 80 volunteers. And they set off from San Francisco not knowing what their target would be until they were two days out at sea. The operation depended upon surprise but that surprise was not to be. They needed to get within 400 miles of Japan in order to be able to carry out their missions and be able to have enough fuel to fly on to free China. But 800 miles off the coast of Japan, they were found by Japanese picket ships. While they sunk the picket ship they didn't sink it before it got off a radio call to Japan. They had to make a decision. And Jimmy Doolittle and his crews decided they would launch on a one way mission. The weather reports at the time said that they weren't going to make it even to occupied China after delivering their ordinance and he gave all

of the crews the opportunity to opt out. None of them did. They stripped those aircraft of anything they could strip it of and filled it with gasoline up to the gunnels and launched off the decks of the USS Hornet and flew without autopilots, 800 miles about 300 feet off of the roiling ocean below. They hit their targets, caught a bit of luck and tailwinds in order to bail out over occupied China. Three years later, the B-29s would follow suit and end the war with strategic bombardment by airplanes and weapons that did not even exist at the time the USS Arizona was sunk in Pearl Harbor.

American airmen were innovators. They were courageous, they were committed, they were driven and they were slightly unconventional. That is our heritage and it guides us toward our bright future. God bless you all and God bless the nation that we serve.

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