

Let me just clarify a couple of things: The Army has more airplanes than the US Air Force only because we let you. That is the truth, if we do not create a place where you can fly you do not get to fly. So, that is what air power is all about. I am going to talk today just about a couple of topics: I am going to talk about perspectives and imperatives. As I came home and am fooling around Huntsville, moving things around and doing manual labor for the first time in I don't know how long, it actually feels good to do real work once in a while, you get something done and you look down and it's good. My son has said a million times, he has watched me since I became a general, he knows that I don't do any real work anymore. And it's true because I have people that do all the real work. My command is 162,000 people that do the work, I don't do anything. And they're remarkable, but as I was thinking about perspectives, and I stood up on this stage and other stages in Huntsville and I have told the amazing stories about growing up here, High School class of '77, amazing teachers, I told them all those stories about Huntsville. But the one person I have not told stories about is my grandmother. I thought I'd start today with a story about perspectives and start with my grandmother. So my grandmother, Noreen C Hyten, she lived out in a mobile home and somehow the post always found her when we mailed something out to her, she was just an amazing woman, toughest woman I have ever met in my life. The best shot I have ever seen, she had a .22 by the door. We would go there for Sunday dinner every Sunday night and whatever she shot that week, that was what we would be eating. I had no idea half of the time what we were eating, but it was always good and the .22 was always out there sitting by the door. I never saw her take more than one shot, no matter what she was shooting at. But she was about five feet tall, weighed 90 pounds but her son, my father, is 6'7" roughly 350. And so if you watch a little five foot 90 pound woman take care of a 6'7" 350 pound person, and dominate him, that does a number on you. So you heard it in my bio, I was lucky enough to get accepted into Harvard University and the Air Force paid my whole way, so when I went up to Harvard, the two people that took me up to Harvard were my mom and my grandmother. They drove me up to move me in and drop me off. They were in this giant Buick, you can imagine a 1970s Buick driving around Boston. That was pretty much an adventure; talk about perspective, that changed my mom's perspective on life and herself, she was called names she had never heard before. Pretty interesting, just driving around Boston. But we move in and Harvard at the time was a coeducational institution. Men and women all together, Radcliff had been included in Harvard long before, but so the room across from the room that I was moving into with my three roommates was for women. And they were moving in across the hall, and my grandmother looks up at me without blinking and goes "John, isn't it nice? Those girls helping their brothers move into Harvard." And I learned a long time ago, don't argue with my grandmother so I said, "Yes Grandma, that's really nice," but then so she is all proud that I am going to Harvard University, she is just so proud so she goes home and she starts putting together the care package of all care packages, so she is making me wild plum jam and bread and butter pickles, and all the cookies that I like. Everything that I love she is putting in this giant care package to send to me at school. And then she didn't drive at the time so she calls my dad and says, "Sherwin, get over here I need to go the post office," because we had to mail a package. Now the closest post office to where she lived was in Grant, and Grant in the 1970s had about 500 people. That was the big town, I looked it up last night and Grant now has about 900 people so it's booming. Grant had about 500 people so there was one post office and there was one postmaster and that was about all that was really there. My dad loves this story, so he goes and gets my grandma they have the big package and my dad walks into the post office, she is all dressed up to go the post office, the post master walks in and goes, "Ms. Hyten, how are you? What are you doing up in town today?" "I am here to mail a package off to my grandson, he is in college." The postmaster goes, "Oh that is awesome, where does he go?" My grandmother on the package had written Harvard University in about as big of letters as you can get, so she turns the package around and goes, "He is up at Harvard University." The postmaster "Harvard University, where is that?" My grandmother goes, "It's up in Massachusetts." "Massachusetts, really? Couldn't get him down to ..." Now that is perspective.

And so, when you think about perspective you have to think about where you sit and where you stand, and perspective is walking into Massachusetts for the first time and seeing a new world, perspective is walking into a post office in Grant, Alabama in 1977 and dealing with the perspective that person had. Perspective comes from where you sit, where you stand, and what you see and what you do and my perspective comes as the Commander of the U.S. Strategic Command. A job that I never aspired to, a job I never imagined but it is an amazing job and an amazing command. It is the most powerful command on the face of the planet and you know, my Chief, Chief McMahon, he points out that that is not any boasting point, that is not ego, that is just a fact. The US Strategic Command is the most powerful command on the planet, 162,000 people under that, coming to work everyday doing work by themselves, work with our allies, work with our partners, work with our friends, doing all the things they have to do. That is the perspective I have. And I can tell you the most important thing, about the command today, is that we are ready. We are ready, equipped, trained for any threat that anybody in the world can bring at us. From the most significant nuclear threat to the most minor nuclear threat, if there is such a thing, to a space threat to a missile threat to anything that you can imagine in my portfolio, the command is ready. I sleep well when I go to bed at night and you should too, because the 162,000 people under my command are doing their job everyday so that we can sleep well at night. That is so important to understand, and a lot of the things we see talk about challenges and we have challenges, and Dr. Griffin and we looked at each other earlier and went "Welcome home" it was kind of interesting, so "Welcome home Mike" and he said, "Welcome home!" it is good to be in Huntsville. We've got challenges, but the challenges I am not worried about today.

As the commander of STRATCOM, I have everything I need to do my job. But what I worry about is, will we have the capability to deal with the threats of the future and the threats that are coming. And all, by the way, all those threats have been moving for a long time. As I talk about imperatives, the imperatives will talk about the future. But here in the number one imperative. And it comes from my perspective that I was just talking about. The number one imperative is that the men and women that work in US STRATCOM below the ground, below the sea, in the air, operating in space, operating in cyberspace, missile defense, electronic warfare, analysis and targeting, wherever they are they should always have the best capabilities that the nation can provide. They should always be able to dominate a battlefield, I never want us to ever have a fair fight. I never want an adversary to look at us and say "Yeah, we are about even." If they ever look at us and say it's about even, there is a risk of this country going to war. I never want that to happen. And I can stand here and say because of the work of many of the people in this room, because of the work of the last 20, 30, 40 years, we are the dominant military power in the planet in every domain and everybody understands that. Do not worry about today but you need to worry about the future, you need to worry about the threat. And here is the threat, if you look at the threat today and you look at our strategic documents that have come out, whether that is the National Security Strategy, the National Defense Strategy, the NPR, National Space Strategy, each of those documents come out that have a lot of continuity from previous strategic documents from various administrations. It is really interesting, the continuity that is there. But there is a big difference, and the difference is that each of those documents, for the first time in almost twenty years, talk about the threat. Because somehow we are writing strategic documents that talk about what we need to do, but we never talk about the threat. In fact, we have document after document in all the administrations that told us that we actually didn't have a threat anymore and in the year 2000, which is an interesting year if you look back in history, in the year 2000 in the Quadrennial Defense Review, the US made a statement that said we no longer have an identifiable threat that we need to worry about. And because we don't we are going to move from a threat based approach for our strategies to a capabilities based approach to our strategies. And the capability based approach means, all I have to do is develop the capabilities I

think will be able to dominate the battlefield so I will be able to dominate the battlefield. And that has two fundamental flaws, flaw one is when you do that, you basically tell everyone the capabilities that you are going to build. And if God forbid you ever have a threat, they know exactly what you are going to do and they will start building capabilities to respond to that. The second issue is that there were threats that were still out there. The year 2000, the QDR said there were no more threats. However, Vladimir Putin is elected president of Russia in March of that year, and in April of that year he stands up and announces a new doctrine for the country of Russia, a new military doctrine and the military doctrine this is before 9/11, but it is based on watching the United States in the years from the Gulf War to the end of the decade and he saw the most powerful conventional Army, Air Force, Navy on the planet and so he said, "For the security of my country of Russia, we will have a doctrine that we will use nuclear weapons on a battlefield if we ever got into a conflict with one of our adversaries, we would use nuclear weapons on the battlefield to change the game." It was called in the popular press, "Escalate to deescalate." The actual translation was, when I look at it, "Escalate to win." And he made that speech in April of 2000 and he announced a 50% increase in the nuclear budget for Russia and then in 2006, he announces the modernization of all their nuclear capability to be done by 2020. And they have been on that track ever since.

China announced their strategy recently, the year was 1995. They watched us in the Gulf War, they watched exactly what we did and in 1995 they wrote down exactly what they were going to do. I wrote a paper in 1998 and I was at the University of Illinois at the time, the University wanted me to write on what China was doing. I did not really want to write on what China was doing but they made me, so the first half of the paper was what China was going to do in space, the second half of the paper was what the United States needed to do to be able to respond in space. And later, David Martin from CBS came up to me after reading that paper to prepare for an interview, and he looked at me and said "How are you so clairvoyant? How did you know exactly what the Chinese were going to do?" I wasn't clairvoyant, I did not want to write that paper so I just had Chinese students working with me translate Chinese papers on what they were going to do and I just copied it down. They said exactly what they were going to do and they have doing just that for the last 23 years, going down that path, adjusting as they have to, moving forward if you think about it. The Russians announced their strategy in 2000 on nuclear weapons, space weapons, missile capabilities, and China announced the same thing, nuclear weapons, space weapons, missile capabilities they are building, they are aggressively building all these things, they have happened, but when we looked at it, we said they are not occurring. Well I look back at history and say if they are not a threat, who are they building those weapons for? Why are they spending all that money? Because they were worried about the Chechen rebels? That is why they needed an entire new nuclear arsenal? They were worried about what was going on? That is why they needed a new one? No, they built up their capabilities because they were focused on the United States. And you know what, you cannot call them our friends if they are building weapons that can destroy the United States of America and therefore, we need to develop the capability to respond to that. We have the build the ability to respond on the nuclear side, on the space side, on the missile defense side all the way through. And I want to talk today about the nuclear, space and missile defense capabilities that we need that we have to have in order to move forward in the future and respond to any threats that are coming towards us. That is what our job is at US STRATCOM. It is not to create the conditions of war, it is to create the conditions for peace and the old STRATCOM motto that we brought back, and you will see it everywhere in my command, is that peace is our profession. That is exactly what we want, the world we want to live in, the world we need and in order to be able to do that, we need to be dominant in any situation. AN dos, there is one change that is made to that motto that you will see if you look carefully as you go around the command. The key is actually on that chart, if you go all the way to the bottom, even below my name, because the legend has it that General Curtis said, when he heard that motto all

the way back in the 1950s, he liked that motto and said, "That is who we are, that is what we do." But you know what, you need a '...' at the end. The ... at the end of peace is our profession, however, if you want to cross the line, we are coming. And we are coming in the most unbelievable, powerful way and we will change the game and you never want to cross that line, it is a strange business. But it is so important that we do it all together. So let's talk about the nuclear side.

Putin back in 2000 said 'Escalate to win', we are going to build low-yield nuclear weapons and they have been building low-yield nuclear weapons by large numbers. And so we have low-yield nuclear weapons in our inventory, they are on the air launched side. We have bombers and fighters carrying our nuclear weapons. We used to have low-yield nuclear weapons other places and we looked at the structure and we decided, in the Nuclear Posture Review we looked at the threat that was out there in Russia and we said "No we need a couple of small low-yield weapons to deploy on our submarine force, to make sure we can always give the President immediate response options and our adversaries a threat. That will deter our adversaries from ever walking over that line, because we can respond not only in 24 hours, but in 30 minutes. And if they know that, they will not knock down a plane or cross that line. We also said we need to look at sea-launched cruise missiles and why, because there is a threat out there that demands that capability. Everything that you see in the Nuclear Posture Review is just a simple statement of 'Here is the threat, here is the response.' Here is the response we need in order to deter our adversaries. And if you want to know what my command thinks, you can pick it up on the web. You can look at the STRACTOM website and you can find my commanding vision and intent on that website and you will see it, read it. You should know that 162,000 people in the US Strategic Command read that and they understand it. It is a mission, vision, it gives left and right-ness. It allows people to understand where they have to go and how fast they are able to move within those left and right limits, if you moved outside those left and right limits come see me, but in that document, there are three priorities. Priority one, above all else, is providing the strategic deterrence of the United States. Priority two, if deterrence fails we will provide a decisive response. Three, we will be a combat ready force, resilient, trained and equipped to do the job. And when people hear that they jump right to the nuclear mission in their mind, and that is okay, but that applies to missile defense, it applies to space, it applies to nukes, it applies to everything in STRATCOM. We have to be ready, we have to be combat ready and our adversaries need to know that, that is out deterrent. You look at the Nuclear Posture Review, it is unbelievably consistent from each administration about the need for a triad, unbelievably consistent- the only thing that really changes is because we have a threat out there, we need a couple of the supplemental orders and limits shifted from left to right. It is actually very simple, and in the NDAA that was just passed by Congress, Congress supported that from a bipartisan perspective. I appreciate that and what that tells me, is that when it comes to security of the country, that is a bipartisan issue as it should be. When you think about space, we have some significant challenges in space, huge challenges in space. We have two adversaries, Russia and China that are building capabilities to challenge us in space and have been for a long time, as well as fielding and testing those capabilities. China has nine kinetic and non-kinetic capabilities they are testing, Russia is doing the same thing, kinetic and non-kinetic, and not because of any internal problems but because of the threat the United States is bringing. We have created a space enterprise that has changed warfare, that brings precision to the battlefield that has allowed to communicate anywhere, anytime, any place we need to. Nobody has to wonder where help is coming from because help is coming in a hurry, just make a phone call. You can make a phone call on any system, and our adversaries see that and ask "Okay, how can we deny that?" They develop capabilities to take away our communications, to take away navigation and intelligence, to take away all those things they are developing those capabilities, so what do we have to do to respond to that? Well we have to basically be capable of defending ourselves. Build capabilities to bring the fight

to the adversary, it is the same as any other problem in the military and for some reason, we have had a hard time wrapping our arms around it is just a warfighting domain.

I will tell you a quick story about the Chairman of the JCS and how it is just a warfighting domain. The Air Force and the Joint Force, the Army has been moving fast in building capabilities to respond to this. Just in July 18<sup>th</sup> of last month, we stood up a coalition based operations center in California to make sure our coalition partners are close allies in the space race, that all have a place to come and work. Couple of years ago we stood up the National Space Defense Center in Colorado Springs to have a place to plan for being more extensive in space and how to deal with it. Most of these issues weren't in space but now are in space, and how do we deal with it? How do we deter it? How do we provide decisive response in the area if we have to? That is what we are having to walk in to. So, when we built that National Space Defense Center in Colorado Springs we called it this funky name, Joint Integrated Space Operations Command, basically every buzzword in defense. So we changed it a year ago when we asked, "What is space defense? Is it national?" "Oh, let's call it the National Space Defense Center," so we did and that's all it was. But when we built it everybody wanted to come, everybody wanted to come and see what that really looked like so you had the Secretary of Defense, the Deputy Secretary of Defense, the Secretary of the Air Force and the Chairman of the Joint Chiefs of Staff but the Chairman, General Dunford, he came up and at his core, he is the best leader in the DoD. That is why he is the Chairman, but he walks into that place and at his core he is really a Marine, he walks in and there are seventy people in this room and he looks around and sees two Marine captains standing against the wall, so what does a Marine general do? He bee-lined right for the two captains and he puts those two captains up against the wall and he says "Okay tell me how it's going tell me what is going on here." He is sitting there talking to them for five minutes and I am listening because I have been there multiple times, and the Marines are doing a great job of explaining what is going on, a really good job, excellent. And finally General Dunford realizes, "oops, I am the Chairman of the JCS, maybe I should talk to someone else," and he moves on starts talking to other people. So I walk up the two Marines captains and go, "So no BS now, you tell me. How is it really going?" And they look at me and they say "Well sir, there are seventy people in this room and when it comes to space, 68 of them are smarter than we are." But, I said "You know that is true, 68 people in this room when it comes to space are smarter than you. But let me ask you this, why do we maneuver?" "Well we maneuver to evade, or we maneuver to gain a position of advantage." I said, "That is exactly right, that is how a warfighter answers that question. Go ask any of these other 68 people why you maneuver, and they will say to maintain my orbital parameter to maintain my position, they will answer it in every single possible way without getting to the fundamental reason of why you maneuver, so if you just treat every problem as a warfighter problem that comes in here, you will be the two most valuable people in this room because these other 68 are going to look at it as space problems." It is a warfighter problem so when you look at the issues, and you have seen it in the press through this year, you have seen the Congress of the United States pass a law that says we have to look at developing a Space Corps within the United States Air Force and figure out how to do that, and we have reports from Congress that were due back this month talking about that. You see Congress talking about standing up a command for space now, you see the President of the United States calling for a Space Force, and we are working kinetics right now, we are working all these issues but the interesting thing is that if you look at the President's Space Force, Congress' Space Corps and Congress' sub-unified command and you take one step back and look at all the things leading up to that, it all says the following. We have a threat ins pace, space is a warfighting domain. That is it and that is exactly what we are doing. So as we do all this we are going to be in a much better position as a nation. The Air Force is moving fast, the National Space Defense Center has become operational, and the report to Congress will come out soon. Our nation will even step up to speed even more because that is what it is about. It is about speed, about dealing with the adversary, it is about assessing the

threat and responding in kind. That is what we are doing, all of us from the President on down, we see a threat, how are we going to respond to it? It is actually quite simple.

On the missile defense side, we developed capabilities, many of them here at the Missile Defense Agency and SMDCR STRAT, we have 300 soldiers defending 300 million people in Alaska right now, we have Vandenberg in South California sitting on missile defense interceptors, we changed the deterrent equation in North Korea. North Korea, when they look at the US, they look at our offense and defense. It is not just the offense of STRATCOM, but it is the missile defense capability they have to worry about as well. And that package creates a powerful deterrent message, it is all together. And it is remarkable how fast we have gone building those capabilities. But as you look across the world you see the world responding. The world is responding with hypersonic and cruise missile capabilities, different technologies. This is no different than looking at history over the last half century, modern history and what we have to do, so what do we have to do as the United States?

We have to look at it and assess the threat, and the most important thing is that if there is a threat out there, you have to be able to see it. And so, I have a lot of things I want to get done in missile defense business, I know Dr. Griffin does as well, I know Jim Dickinson does as well, but the most important thing to do in the missile defense business is make sure you can see and characterize a threat. If you cannot see and characterize a threat, I don't care what type of shooter you have, there is nothing you can do about it. So the most important thing is you look at all the new threats that are coming together, hypersonics etc, is that we have to be able to see that threat. If you think about a global threat, there are not enough islands in the world to build radars on, you cannot have enough to be able to see and characterize a threat so the only place where you can go to be able to do that is the place where the United States is actually strongest and the technology is there to do it, and that is into space. We have to move into space to be able to characterize the threats coming off of the Earth and the threats that will be coming through space in the midcourse, and the technology on the commercial side is becoming available now that we can do that in an affordable way. That is why I think Dr. Griffin came back to the government, God bless you sir for coming back in, to figure out how we can do that and how we can do that affordably. That is where we have to go in the future, we have to be able to see that threat and then we want to be able to drive the enemy as far as we can to the left side of the chain. If you can see it early, you can kill it early. That means boost phase interceptors, those are becoming a possibility. All of these things are becoming a possibility so we want to drive that equation to the left. Driving the equation to the left has huge operational advantages because actually, if you shoot down a missile that someone launched and it comes back down on their head, you think they are going to shoot another one? They stop shooting, isn't that the whole point? That is what we have to be able to get to but we have to be able to characterize it and then if you can drive it all the way to the left, the other thing that does for the United States is it starts imposing cost on our adversaries. Right now, if you just have the catcher's mitt at the end, it is a very expensive proposition for the United States. The farther you moved it to the left, the more cost-imposing it is on our adversaries. That is the change we want to make.

As you look at what we are doing in missile defense, we need robotic capabilities. I always put it in 3 categories, sensor first, shooter second, capacity third. We need all three, do not get me wrong, but if you do not have the sensors then the other parts do not matter. Missile defense is going that way. If you back up a second and just look at what we have been talking about for the last little while, we have been talking about our nuclear capabilities, why we are building and modernizing our nuclear capabilities. Why are we doing that? Because we have a threat that demands it. Why are we wielding space capabilities that are more resilient and robust, defendable and hopefully in the not too distant

future public systems? We need to de-classify those so in the future we are able to have a much more public conversation about the United States in space. Why are we doing that? Because there is a threat. On the missile defense side, why am I standing up over and over again with General Sam Greaves, Dr. Mike Griffin and saying we need a space-sensor layer to deal with that; it is not because I am a space guy and I think it is cool. It is because we have a threat and we need to respond to the threat. These are the imperatives that we are creating.

The Army is doing some pretty neat stuff, the Army is addressing some fundamental organizational issues. The Army is standing up a Futures command, I do not think the commander has been released publicly yet but it is going to be a four-star command looking at defining the future. Their goals are continuous experimentation and prototyping, getting inputs from soldiers about fulfilling requirements, assuring allied interoperability, acquisition reform and improved training. What a radical construct. It is brilliant because we stopped doing it and we need to put it back in, so General Milley looked down and said we need to have a command with a four-star who is looking at the future in order to get off on that thing, at the same time they are putting forward a cross-functional team for missile defense, looking at all areas of missile defense, looking across the missile defense problem all the way. Why? To drive a faster moving pipeline for innovation, experimentation and demonstration. Do you see a common thing? Faster. As I talked about last year, my big concern is somewhere along the line our country lost our ability to go fast. We have to regain that, and that is why every time I stand up somewhere in my remarks I say again, this country, this place, this town of Huntsville, Alabama built a rocket that went to the moon, from John Kennedy's speech to the end of the decade you actually built two rockets. From one rocket to another, Saturn V just two and a half years later. We can go fast, it just has not occurred to us. We need the perspective that speed is needed, and ladies and gentlemen, that is what we are doing. I watched the Army, Air Force and Navy push acquisitions down just so we can get them out into the field faster. I watched them bring people like Mike Griffin into the Pentagon to allow us to go fast. We are stepping up, but now I look out at the industry partners in this room and say, you need to step up too. We all need to step up and be part of this which means we have to take risks, we cannot get caught in bureaucratic mumbo-jumbo, that is a technical term, where we are just wasting time because we have an imperative now and the imperative comes back to the 162,000 men and women of US STRATCOM who will be sitting alert in the year 2030. The question we have to ask ourselves is, will they be as dominant as we are today? The answer has to be yes, which means we all have to step forward together and do that. That is where we are, at US STRATCOM, and that is where we are going. I ask you to get on this train, to build the capabilities that we need, because was anything I said really actually complicated? We have a threat, we love our country, we need to build capabilities to let the men and women that love to defend this country make sure they can do that all the time, do it on the nuclear side, so it in space, do it in missile defense, do it everywhere and if we do that, we will be able to sleep peacefully at night, put our head down and be happy as Americans that we do not have to worry about the world falling apart. Thank you very much.