

Gen. Kevin P. Chilton, Commander, Air Force Space Command

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Thank you very much. Good morning everyone. Elliot, thank you for that kind introduction, but I've got to correct one thing you said. Don't call me if you have a question about space, call Air Force Space Command. The pros from Dover in space are at Air Force Space Command. We know the answers and we can find the answers if we don't know the answers to your questions immediately. That's where your expertise is in your United States Air Force when it comes to space. That's where the expertise is in the Department of Defense when it comes to space--Air Force Space Command.

Elliot, I'd like to start out by thanking the foundation, your leadership, everybody that's been involved in the organization bringing this great event together this week. This is so important for our community, so important for our Air Force, so important for America which you all do to make this all possible, so thank you very much, Elliot.

Chief [Gen. Buzz Moseley, Air Force Chief of Staff], you add so much by being here. Your leadership is so appreciated by every man and woman in the United States Air Force; your focus on our mission in space--our Airman's mission in space--is so important to us and so much appreciated by the men and women of Air Force Space Command. Thank you for being here, for speaking yesterday and thanks for bringing your civic leaders out here. We've had some fun this week. We've been up to F.E. Warren, out here at the symposium, we're going to head out to Schriever later today and these men and women are leaders; civilian leaders in America. They volunteer their time, they paid their own way to be here to educate themselves so they can carry the message, influence other folks to help them understand what we do in our United States Air Force and to have you all here and participating in these events this week and the thirst I've seen from you to get educated on what we do in the space business; this is just huge. And we are going to benefit greatly from the investments that you're making. Thank you so much for being here this week and spending this time with us.

So many distinguished visitors here, I hesitate to start naming names because I would insult somebody for sure, but I'm so pleased to see so many former commanders of Air Force Space Command here; so many former leaders of our United States Air Force--thank you for being here with us today. You have been great leaders for our Air Force and each and every one of you [have been] great mentors for me and I'm very thankful for that, personally thankful for that.

Chief, you never fail to introduce me by saying, "Chili is the right guy for this job, I mean after all--he's been to space." Every time you talk about me, you say that. Chief, we've got to talk about this. Now, I hesitate to remind you that the first living creature we sent into space was a chimpanzee. You know, before the first human flew, we already well established that a monkey can do this job. So, be careful with that introduction, Chief. And if you've seen pictures of Ham, he had a great smile, had a helluva lot more hair than I do and I'm told he was pretty low maintenance, so....

It's nice to be here in Colorado Springs for this great gathering. I think it's fitting that we're here in Colorado, because I think it was, I know it was, 25 years ago when the first commander of Air Force Space Command stood up the flag here, General James Hartinger. He said Colorado Springs would become the nation's military space capital and indeed it has. So it is most appropriate and fitting that we're here having this convocation, if you will, with folks who are interested and focused on the space business.

We have a lot to celebrate this year: 23rd symposium, 60th anniversary of the greatest Air Force ever known to mankind, and the 25th, the Silver Anniversary, of Air Force Space Command, all in the same year. What a tremendous year to celebrate. It's great for our Air Force, great for the command.

You know, as the Chief said, we have been in the space business in the Air Force since World War II. We have great heritage, great lineage in our Air Force. We benefit from former leaders and visionaries like Bennie Schriever, who were the Douhet's...just as Douhet was for air, he was the Douhet for space. The visionary who could see before we even had the technical competence or capability to achieve the future, he could see what was possible. And we have achieved what he envisioned and so much more. And it's thanks to the courage, the conviction and the dedication of those leaders and visionaries that came before us that we can say today that Air Force Space Command is the nation's number one provider of space capabilities for the Department of Defense; for the United States of America. We are number one. We're the best. And it's amazing for me as we reflect back historically, to reflect on how quickly this has all happened. How it has come to this culminating point where we are today where we have become so integrated; space has become so integrated into the fight the way we conduct operations and indeed into our economy and into America.

In my career, we have gone from space being those folks in the vault behind the green door, doing something for mostly somebody else to: "Where is that space guy? I need him right now to execute this combat operation. In fact I not only need him right now, I need more of him. I need more of that capability. Get him on the phone. How do I get him? Connect me up." In my career, that has been the perception and the integration of space.

The 1990's, I would argue, were just a pivotal decade for us. Think about Desert Storm. 1991. We started to see GPS being used for the first time. Schwarzkopf's left hook in the waste lands of southern Iraq and into Kuwait; those are areas you could not say I'm going to meet at this point, these coordinates, and map read to get there. There was nothing to navigate off of except GPS. It was a key enabler in that left hook in making things happen.

The weather capabilities of forecasting helped us stay ahead of the adversary. We used weather to our advantage because of space capabilities. But, in spite of that, at the end of that conflict we heard General Horner, the CFACC complain bitterly about what he said was the lack of adequate space and air integration. And that cranked up the heat. What did we say? Ok, smart guy, you're the four-star now and you're in charge of Air Force Space Command. And that was the early part of the 1990's.

Look at the later part of the 1990's and where we got to. Look at Kosovo: night, bad weather, single pass, B-2 bomber. An entire airfield is taken out with precision delivered GPS guided munitions. Hits at every intersection of every runway and every taxiway on that field. One pass; takes it out.

U2's are flying along the border of Bosnia and Kosovo. In real-time their sensors are being adjusted as they pick up signals. Their radar imaging sensors are being adjusted in real-time by people in California because of satellite communication links back there. A bad guy turns on his SA-6 radar. Forty minutes later, a GBU-15, 2,000-pound guided bomb goes through the front door of his radar band. That happened because of space integration with air. Being able to move information through the [communication] satellites; being able to target; being able to GEO-locate; being able to sense and detect. Put the information into guided munitions that are invulnerable to weather, day or night, and deliver effects.

It was a dramatic change in the 1990's. And we went from, "who are those space guys?" to "give me more of that space capability" in a ten year period. And that's where we are today.

Today, in modern warfare, space has become integral to virtually every combat operation whether it's on land, sea, under the sea, or in the air. And oh, by the way, it's critical to every combat support operation. You know [President] Eisenhower said you don't win wars with forces, you win it with logistics. Our logistics infrastructure requires space support. It has become a part of the fiber of the way we operate. It has become indeed a part of the fiber of American society.

Now to maintain this unmatched advantage that Air Force Space Command enjoys today and our Department of Defense enjoys today with our space capabilities, we in the command have set four guiding principles to chart our path as we move forward, to keep us focused. And Chief, you'll hear them, they're right in line with your focus and your principles of winning, recapitalizing and taking care of our people.

Here are our four priorities in Space Command: First, preserve and expand our ability to deliver space effects to the joint fight. Second, provide a safe and secure nuclear deterrent for this nation. Third, develop, field, sustain, dominant space capabilities on time and on cost. And fourth, attract, develop, retain the expertise that we will need to make sure we're dominant in the future. Win the fight; recapitalize; take care, recruit and take care, of our people. These are four guiding principles that keep us focused and I want to talk about each one of these a little bit this morning.

I'm a believer that words matter. And so when we picked the words for these statements, we were very conscious of it. We did it as a team. We thought about what these words meant. To preserve and expand our ability to deliver effects to the joint fight. Preserve: that is an important word. That's an important responsibility, in fact. Before you go off preserving what you have, you need to understand what it is you need to preserve.

Well first of all, when we look at space systems, the tendency is to think satellites. It's more than satellites. We've got to think about the ground infrastructure that supports those systems. We've got to think about the RF [radio frequency] spectrum and the links that connect our ground infrastructure to the satellites that are on orbit. And then you've got to think about the satellites on orbit. And you are at peril to over focus on any one of those three at the

expense of the other two.

Next, you need to start thinking about what could threaten these things that you need to have to bring capabilities to the fight. It can be as simple as a system malfunction, software code, a burned out amplifier, a broken wire. It could be blue-on-blue jamming of that signal that is important to us. Someone "stepping on" my GPS frequency, not on purpose, not intentionally, but denying it when I need it most. It could be weather. I'm on one of my space shuttle flights at the single most important time, our crew needed to be talking to the ground, we couldn't because of a thunderstorm over the ground station. That was the longest five minutes...until that thing moved off...in my life at that point.

But it's not just terrestrial weather we have to worry about in space. We've got to worry about solar flares; solar interruptions of our satellites; orbital debris--another thing that clearly threatens our satellites on orbit.

And finally, nefarious operations, I like to say. Somebody messing with your system; could be jamming it, going after that RF link. Could be lazing it, could be going after the systems on the satellite. It could be a cyber attack against the computer network systems that support our ground infrastructure. And obviously it could be a direct ascent anti-satellite weapon with a kinetic intent and a kinetic effect on the satellite. Before you can start to address any of these threats and the sustainment of any of these capabilities, a commander in this domain must have the same tools that a commander in every other domain has and needs. Whether it's on land, sea or air. You need situational awareness.

We call it space situational awareness. It's the same thing that an air component commander who's worried about air, land, or sea needs. You need to be able to discern the cause of the problem that is interrupting the effect you are trying to deliver. Is it a system malfunction? Is it space weather? Is someone messing with my system? You need to be able to answer that question. The commander needs to know that. The commander needs to know who's in that environment. Good, friendly, neutral? Needs to know what they're doing. Are they maneuvering in that environment and if they are, where are they headed? What is the capability of the systems in that environment? Is it what they told me they put up there or is it something more? What is their intent? We need to be able to discern these things first and foremost before we can take care of any problems. And probably most important, we must be able to, if the last thing I mentioned is happening to our systems, if it is nefarious operations against our systems; we need to be able to attribute them. The President calls and says something's not working. You need to be able to tell him why it's not working and, if someone's messing with it, you need to be able to tell him who.

Look at the recent Chinese anti-satellite test. What if all of a sudden a bunch of debris had appeared in orbit and we didn't know who did it. Look at the results, because we do know who did it. All elements of national power are at the fingertips of the President to employ. Look at the international outrage that has developed over that act by the Chinese. Of creating a more dangerous environment for commercial satellites to operate in, for our astronauts to operate in, for their astronauts to operate in, for international astronauts to operate in. Because we could attribute it, you're seeing tremendous international pressure being brought to bear for them to stop it; to knock it off; to divert from that course. Attribution, the ability to attribute, is very, very key.

What is our vision for preserving space situational awareness? I want to be able to detect everything that comes off this planet. I want to track it through burn out. I want to track it through insertion. I want to track it in its GEO transfer orbit or its transfer orbit, when it gets along the way...if anything caves off it along the way...I want to see it. When it gets to its orbit I want to track it on its orbit. If it maneuvers, I want to know.

And I'll back it up one step before that. I want to be predictive in this area. I want to have focused intelligence invested in our space operations to the point that I'm getting tips and cue's; that I know before they launch--what's coming. That's the kind of focused intelligence every commander demands in the domain they operate in. That's what they want. They want to be a step ahead of the enemy; they don't want to be playing catch up as they move along. Predictive intelligence. Appropriate weather systems so I can answer the question: is it weather or a system malfunction? Insight into my systems.

These are the things we need to provide to General Willie Shelton, our 14th Air Force Commander, the commander of JFCC-Space, who is the warfighter for space, the joint warfighter for space, for General James Cartwright at STRATCOM [U.S. Strategic Command].

So what are we doing today in this area? We have a lot of sensors looking up into the sky--radar sensors, electro-optical sensors. We have a command and control facility at Vandenberg Air Force Base, at 14th Air Force, that is commanded by General Shelton. He's got a lot of data coming in. Unfortunately, the fusion engine for that data today

is his brain. We can do better than that. We can do better than Power Point charts for fusing data. We can invest in the tools that he needs to have a state of the art command and control center for the future and we're doing that.

Make no mistake. The JSPOC [Joint Space Operations Command], the heart of the JSPOC, is the 14th Air Force AOC [Air Operations Center]. Commanders previous to me invested in that AOC. They took it from 1998 when it was an empty room to where it is today and they did it on a shoestring.

I was in the room when we made a very tough decision in our Air Force. And it was the right decision. It was to upgrade our AOC's around the world and we had finite resources to do that. And the decision was made to stop the county option approach, set a baseline for our AOC's and regional combatant commands, and get them fixed and get them right. And because of limited resources they were given the priority, but the commitment was made that the next step after that to get our functional AOC's right. And our functional AOC's are at 14th Air Force in space, they're at Scott [AFB] at TRANSCOM [U.S. Transportation Command], and they're at 8th Air Force at Shreveport, Louisiana, for the global strike mission. And our Chief, you heard him say it yesterday; he's committed to make that happen and we're going to bring them up to the level they need to be at to not only support General Cartwright, because General Shelton doesn't just support General Cartwright, he supports every regional combatant commander, every day, 24-by-7, providing them space effects.

We are committed to those investments. We're committing to those improvements for the 14th Air Force AOC and for the JSPOC.

What else can we do to preserve our situational awareness? Preserve our forces. We need to sustain the sensors that we have in the field today. Now, those sensors were put in place in the Cold War time period. They are the same ones put out there when we were only worried about one nation, the Soviet Union.

I've asked our team to take a "clean sheet" look at what we need for the future, not what we need for the past. Looking to the future, what do we need from a sensor perspective to achieve that vision I just described to you a moment ago for developing space situational awareness.

Another key element that we're investing in and is in the program that we're going to see fly here in a couple of years, our Space Based Space Surveillance capability. We kind of stumbled onto this in the end of the 90's when we discovered an experiment that was on orbit that had some excess capability that provided some marvelous data with regard to tracking things in space and so, we set on a program. And [Lieutenant] General Hamel's team at SMC [Space and Missile Systems Center] is going to deliver us that satellite and we're going to put it up on orbit and improve that architecture that we have, that cold war architecture, that we have in space today.

I can't say it often enough. Providing the warfighter space situational awareness is fundamental; fundamental, to preserving the vital comm, weather, warning and PNT [precision, navigation and timing] that Air Force Space Command delivers to the fight. As well as the other capabilities that other agencies and other services deliver from space. That's a lot of talking for just the first word of our priorities, but it's important.

Preserve and expand. Expand is important to me too, because that's talking about recapitalization, it's talking about investments. And we are recapitalizing in this command, every constellation that we own on orbit and our entire ICBM fleet. And I'm happy to say that we're on track in every capability area. Look at the comm satellite capability, delivering global communications. Wideband global is going to fly this year; AEHF's going to fly next year. Oh, by the way, we're sustaining and operating the DSCS constellation and the MILSTAR constellation for many, many years to come at the same time and right on the tails of all that is TSAT where we're actually going to have the capability to have the internet in space and increased bandwidth 100 times over what we have today in our DSCS constellation.

In the weather area, the DMSP satellites, we're investing in the satellites that we still have in the barn today to make sure they're going to last longer to bridge any gap, and in fact eliminate any gap, between the fielding the NPOESS system.

In the warning area, we still have one more DSP satellite to launch. Can you believe that? That workhorse has been out there for decades, transformed from a strategic warning system to a tactical, in-the-fight, everyday system. And we've got one more of those to launch and we've already launched the next generation SBIRS HEO. SBIRS GEO is coming up next.

At the same time we're continuing to look to the future, when we look at the AIRSS program and look at new technologies that will perhaps be cheaper, more flexible, and more dominant in this particular mission area.

PNT, GPS IIRM is going up. IIF's getting developed and GPS III is absolutely critical that we move forward in this area to we make sure provide the counter-jam capability, the assuredness that our warfighters need for the future.

We cannot envision in this society--we cannot envision in the fight--living without GPS anymore. We don't even question this. And the tension the Chief has--the thing that keeps him tensed up at night--is no one is questioning that we need these space capabilities, but they're questioning whether or not we need a new tanker. Drives him nuts, it drives us all nuts. You know why? There's no depot for our satellites. We put them up there and we know they're going to die. They keep fixing and patching those 135's and it's time to stop doing it. But no one argues about our need to recapitalize space. It's become so much a part of our fiber.

The last thing I'll talk about is launch. Look at our EELV program and I'll knock on Plexiglas [the lectern]...fifty in a row. Unprecedented launch performance. And upgrades with the EELV program are going to keep us heading in the right direction.

New areas also include investment in, as I said, in the AOC. [The] 1st Space Control Squadron, we're going to move that out. It's moving out to Vandenberg Air Force Base and moving in, so we can better integrate that space situational awareness picture with the combatant commander while they're out there. They're the folks [1st SPCS] that tell us about all the debris up there, but they do so much more than that. They are the folks that are going to fulfill the vision of space situational awareness I described earlier. And by moving them out to Vandenberg, we're finally breaking the ITWAA chains so that we can do things like upgrade the SPADOC mainframe computer that was fielded in 1991. Imagine having to do your job today with a 1991 machine in your office. We are going to move the ball forward in that area and bring the appropriate level of technology into the 14th Air Force AOC.

The important word in our first priority is joint fight. Preserve and expand the capabilities the effects we bring to the joint fight. There is nothing we do in Air Force Space Command that is solely for the United States Air Force. What we do is for every joint warfighter, and every joint warfighter understands that and appreciates it. It's about delivering effects. It's not about flying satellites. Maybe in days gone by, you might have gone by one of our satellite squadrons in the past and asked one of them what do you do. And the answer you might have gotten was, well, I do telemetry on this satellite.

Let me give you a quote; let me give you a little vignette, of what happened just the other day. It just makes me want to bust every button out of this coat [with pride]. A flag officer from another service, a joint command, was visiting out at Schriever Air Force Base, at our GPS squadron out there. He got the tour of the squadron and all the folks that were there were standing at attention and he walked up to one of our Senior Airman, this is a maybe 20, 21-year-old young man and asked him, as general flag officers often do, "What's your job young man?" He said, "Sir," and I'm going to read this: "I deliver combat effect to forces around the world from 30 GPS satellites that I command from right here." That's an attitude that I like. I'll tell you this flag officer took a step back and said, "Those are pretty big words son." He says, "I don't know about that sir, but that's what I do."

Senior Airman Justin Froehlich...Senior Airman Justin Froehlich. That attitude is what we're about in Air Force Space Command. When the phones rings and someone says, "I'm not getting a GPS signal and I need it to conduct my operations" The answer from this command is not, "well the signal looks good on the satellite." The answer from this command is, "we're going to make sure we get the effect to you and that capability and we're going to run it to the ground until we deliver that effect." And that's what we're about. And I'm proud of that. I'm proud of our people.

Ok, let me shift to our next priority. Number two, you've probably forgotten it, I've talked so long. Provide a safe and secure nuclear deterrent for this nation. We juggle a lot of balls in this command, as every command does. But I tell my folks, most of those balls are rubber. If you drop them, they'll bounce. Don't worry, we'll re-attack. We'll refocus. We'll make it happen. Well, one of those balls is a crystal ball and if we drop that one, it's not going to bounce. And that's our mission in the nuclear business. That's how seriously we take this nuclear business. It's important that we look at it that way.

Our Chief tells us--he said it many times--our folks in our ICBM field provide the backstop for America. They are the last line of defense, and in many ways the first line of defense, absolutely the first line of defense, when it comes to deterring many of our adversaries. The good news is when it comes to preserving this capability is we are recapitalizing our ICBM force from nose cone to nozzle right now. We're replacing the reentry vehicle, we're replacing

all three, I'm sorry, all four stages, three solid rocket motor propellant stages and we're upgrading the fourth liquid stage, we're upgrading the guidance system on those systems, we're pulling every one of those missiles out of the ground and we're upgrading them and putting them back in the hole and we're resetting that force for the future.

It's a marvelous investment. The investment was made by previous leaders. We're executing that investment right now and we're going to field those new Minuteman III's, because they're essentially brand new, and we're fielding them right now and complete that in the next couple of years.

Now, we have 500 of those missiles deployed around the Northern tier of our United States; in Montana...from Malmstrom Air Force Base; Minot Air Force Base in North Dakota, and out of F.E. Warren in Cheyenne, Wyoming.

A couple years ago, we had a Quadrennial Defense Review and we looked at the requirements for this nation and the strategic deterrence arena. And that group, and the Secretary of Defense, with the advice from the combatant commander who's in charge of deterring adversaries around the world, up to the President, decided that we only needed 450, not 500.

Well we are on a path to not upgrade those remaining 50 missiles--just the 450. That's where we were last year. [It] didn't make sense to upgrade something that you didn't need anymore and then we realized with some great studies and some great teamwork at Air Force Space Command, that the upgrades we're making today, we will only be comfortable with them lasting until about 2020. I said, "why?" They said, "because we won't have the test assets available for us to continue to test, which we do every year...we fire three of these things off every year to make sure they're ready and going to work...we will not have the test assets available beyond 2020 to make sure they'll still work." I said, "you mean we think we've invested in something that's going to last beyond that and the reason we can't certify beyond that is because we don't have enough test assets." "Yes, that's the answer." Well, "what about those 50 we don't need anymore?"

First, we don't need them. Second, we have invested in upgrading every one of those, so as we pull them out of the ground, we're going to send them to Hill Air Force Base and we're going to have a supply of test assets that will allow us to keep the Minuteman III ready, active to do its mission, to 2030 and we can buy a decade worth of readiness and deterrence for this small investment. It's a good investment. It's the right thing to do. And we're prepared when Congress finishes reviewing this plan to step out this summer and begin that program.

You know, our Minuteman missile--our strategic deterrence--I would argue, is what allows us to deploy 20,000 of our people forward in the Expeditionary Air Force because we have confidence of that backstop that the Chief talks about. We know they're ready; 24-7 they're on alert. There's a thousand-- about a thousand folks, out in the missile fields of America right now providing that backstop every day. They are deployed to some pretty remote locations in the United States of America. I think our civic leaders had a great opportunity to visit some of those locations. If you doubt it, if you haven't been there, talk to them. And they [the Airmen] do it with a smile on their face because they know how important that mission is to the United States Air Force. Those thousand enable the thousand other men and woman from Air Force Space Command to deploy forward to OIF and OEF.

Those thousand enable--along with the 500 other men and woman of Air Force Space Command who right now are making sure the JSPOC is in operation and will do it all night and through tomorrow, who are sitting at satellite consoles, who are sitting at radar sites around the world, who are sitting at electrical optical sites around the world, 24-7, in the fight, not training, doing the mission--they're enabling us to support the AEF rotations that we support globally.

Our third priority...and this is a priority that's a little unique to Air Force Space Command, because unlike AMC and ACC, our acquisition arm is within Air Force Space Command; [at the] Space and Missile Systems Center out at Los Angeles under [Lieutenant] General Hamel's command...for this command is to develop, field and sustain dominant space capabilities on time, on cost. And I can't emphasize that last part of that enough.

It's so important for us to be on the leading edge, but it doesn't do you any good to be on the leading edge if you're late. It doesn't do you any good to be on the leading edge if you can't afford to field because you've broken the bank on the way to developing that leading edge technology. And under the leadership of [Lt. Gen.] Mike Hamel out at SMC, we're on the right track. We are back on track to do just that, teaming with our corporate partners that are so essential for us to develop and field the technologies of the future.

The block approach is the right way to go. "Back-to-basics" is not only talking about how you develop a system, its

how you lead a program office, it's how you manage a program office. It's the blocking and tackling of program management that we ransomed over the last decade in an experiment that failed. And it was not just a space experiment. It was across the DoD in acquisition, across our Air Force in every way that we did acquisition. We stepped away from the fundamentals of blocking and tackling. We're back. It's the Vince Lombardi School of program management. You've got to do it right. You've got to be teaming with the contractor. You've got to be working with the contractor, you've got to have insight into what they're doing and you've got to pay attention to cost and schedule while you're delivering.

SMC has made some great commitments and they've met them here recently. General Hamel has laid a charter out and commitments for 07 and they're on track. He'll do that next year for 08. General Lord challenged him before he left his command; he said, "I want SMC to be the standard bearer for acquisition in the Department of Defense." We're on our way. In fact, we're pretty darn close. I'm very proud of what we're doing out there. It requires leadership. It requires organizational adjustment and focus and it requires partnership with industry. We cannot do this alone. But we are stepping up and we're going to make it happen.

Priority number four: And this under-pins...and when I say number four, I don't mean last. This under pins everything we do and we all know that. If we do not attract, develop and retain the expertise necessary for the future, we will fail. That is so important to us in this Air Force. People are the heart and soul of what we do. Whether it's to operate, acquire...it doesn't matter. They are what make it happen. And just look at what we're developing for the future in this command.

SBIRS--a satellite that doesn't just sit up there and spin and send down data, but is taskable by the ground operator. So you've got to be thinking about how you're going to employ that system. Where are you going to task it to look? AIRSS behind that.

TSAT--moving the internet to the sky. Who are the experts in the internet, in our Air Force today? They're our 33XX [Air Force specialty code] communications folks. They are important to us. That talent is important to us in Air Force Space Command.

Space Radars--when they get on orbit. No matter who acquires it, we're going to be involved in it. It's going to support the joint commander on the ground. They're taskable systems. It's a sophistication level that's a little higher than where we are today. We're going to need America's best and brightest as we go forward and we cannot rely on the fact that we have the coolest job in the United States to attract people. We know that. We've got to get the word out.

I tell people the only thing that's more exciting than launching rockets is being on top of them when they launch. How cool is it to be able to go home at night and tell your kids that you fly satellites at geosynchronous orbit? That is great stuff! How cool is it to know that you operate the most powerful radars in the planet and surveil the heavens, that you operate telescopes that are critical to National Defense? How cool is it to tell people that you are responsible for maintaining nuclear missiles on alert for the defense of this country? This is a cool business that we're in. We've got to get out and tell people about it, tell the youth about it, tell the college kids about it, because we are competing.

We are competing for this talent, ladies and gentlemen. And some of the people we're competing with are sitting in the audience, and I understand it. And that's good. Let's compete together. Let's get people interested in joining this business and bring them into the space business because it's cool. Let's tell that story. We can't sit back and expect them to just come.

And once we get them, Air Force Space Command is committed to developing them. We're committed to teaming with the training and leadership in our Air Force to make sure that they get trained properly and developed. We will not rely on chance to develop future program managers for our key satellites systems. We're going to do that with malice and forethought. We will not rely on chance to develop the [intelligence] expertise that we need to achieve the vision I talked about earlier this morning; about having that predictive intelligence capability.

We're going to raise intelligence leaders who can be General Shelton's aide too, that have at least had one tour in space...maybe more. Understand what it means--understand the vulnerabilities; be able to provide that predictive analysis. We are going to raise and identify the communication leaders that we need in this business for the future. We're going to grow them. So that when [Lieutenant] General Hamel brings on the next line of advanced communication satellites, we've got [communications] officers in there who know the requirements for making global communications work.

They're going to be integral into the JSPOC because that's an effect we have to deliver and we need that expertise in the JSPOC. And of course we're going to continue to groom and develop them as we're doing, and have done so well in the past, [with] our 13S space operators. But, it's more than that. It's intel, it's comm, it's acquirers. We're going to be demanding customers of our Air Force institutions that train and produce these people because we need them. Our Air Force needs them and we have the expertise in our Air Force to make this happen.

Another area I would like to see further development in and I'm proud...I think we're heading on the right track...is the ability for our people to get advanced technical degrees. I was blessed, when I graduated from the Air Force Academy, to have the opportunity; I was an engineering major; to go to Columbia University several months after graduation and spend nine months there and get a Masters' degree in mechanical engineering. That was my job: 2nd Lieutenant Chilton, get a degree, get smart and then go learn how to fly jets.

That was such a springboard for me. It was such a great advantage. I didn't have to do it at night school. What I found out from my other engineering colleagues from the Academy who didn't have that advantage, who went right to flight school, they couldn't even get an advanced engineering degree at night school. You could get a degree in public administration, management, business administration, safety--great programs. But if you studied engineering undergraduate, most of them wanted to study engineering [at the] graduate [level], and you couldn't do it. It's still hard to do it in our Air Force today--we need to fix that.

I am so proud of what's going on here in Colorado Springs and the partnerships we're having with University of Colorado, Colorado Springs, UCCS. They are starting to build teams with other universities around the country so if a kid is assigned here to Colorado Springs, they can start working on a Masters program at UCCS and those credits will be transferable when they go out to southern California to work for General Hamel in one of the SPOs and they decide they want to go to school at USC and pick up some night courses there. We need to get that stuff on line, so they don't have to go to night courses all the time to make it happen.

Once we get it online, our folks up in the Minuteman missile sites, who just got internet in the silos, deployed this year, can start working on their advanced Masters' degree. They've always had opportunities in the past to get those other degrees. I want them to have the opportunity to get technical degrees if they want them.

We need those people. We need more of that talent as we look to the future as I've talked about before. And we can't have these courses that they invest their time in non-transferable. They've got to count. If I can't complete my degree while I'm in Colorado and I move someplace else and I do a few more courses, that's got to count toward my degree. If the Air Force says I'm going to go to AFIT, I don't need to go for 18 months if I've already done a year of it. Send me for six months. Give me my degree. Get me back in the business, back in ops, get me back in acquisition. That's developing talent. We've got to keep moving the ball forward in this area. We've made some great strides.

When it comes to retention, if we keep our eye focused on the issues the Chief talked about the other day, quality of life for our Air Force families. You've got the best job on the planet and your family's happy, retention's easy. We'll be able to pull this off without a lot of sweat.

Folks, I would argue there is no better time than today, as we celebrate the Air Force 60th anniversary and Air Force Space Command's 25th anniversary, for us all to commit to a future of excellence and leadership fueled by the next generation of our Airmen. The developments we have made in space for the past quarter century are without a doubt remarkable and our investments, not only in materiel, but in human capital, are paying off today not only on the battle fields of the world, but in the board rooms of America.

But the success of the last 25 years requires us to renew today our sense of commitment and our dedication. We cannot take for granted the advantages that we enjoy in this domain today. It is no longer a sanctuary. We must expect those advantages, those capabilities, to be challenged.

Freedom to operate in this domain is not a birth right of the United States of America. And that's why in Air Force Space Command, we remain focused on these four priorities: Preserve and expand our ability to deliver effects to the joint fight; safe and secure nuclear deterrent; develop, field and sustain the best capabilities on cost and on time; recruit, develop and retain the people we need for the future.

Every Soldier, Sailor, Airman and Marine, benefits from the capabilities provided by this command. They are counting on the men and women of Air Force Space Command to continually deliver the combat effects that we do today with the same focus and attention. Not only today, that Senior Airman Froehlich shows at Schriever Air Force Base, but

for tomorrow.

Ladies and gentlemen, we're ready today, with our great industry partners and this continued focus on our command. With you at our side we'll be ready for tomorrow. God bless you and thank you very much.