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**National Defense University Breakfast Seminar**  
**NUCLEAR DETERRENCE**  
**LIEUTENANT GENERAL JAMES M. KOWALSKI**  
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## Introduction

Good morning everyone. Thanks Peter for the kind introduction, and for the invitation to speak at this breakfast seminar series. I am honored to be with you today as the second Commander of Air Force Global Strike Command.

As you know Air Force Global Strike Command reached full operational capability just nine months ago. Our first year was a parallel effort to stand up a Lead MAJCOM HQ while overseeing current operations and putting the steps in-place to reinvigorate the nuclear enterprise. My predecessor, Lieutenant General Klotz, was a regular visitor on the Hill and he would give many of you updates on how the command was progressing. It is humbling to try to fill his shoes—he spoke several languages, I barely speak English....he served on the National Security Council and is a member of the Council of Foreign Relations...I'm a member of AMVETS Post 1983 in Hamilton Ohio....but I do have his phone number and, more importantly, the great team assembled during his tenure.



That great team continues to focus on the SecAF and CSAF's #1 priority, strengthening the nuclear enterprise to ensure a safe, secure, and effective nuclear arsenal. Today I would like to update you on our organization, Air Force Global Strike Command, and talk a little about training, then give you the status of some of our major weapons systems and touch on future systems.

First a little background, Air force Global Strike Command is the newest of the eight Major Commands in the Air Force. We were organized and activated in 2009 to provide a single, accountable operational commander for Air Force nuclear forces. The command has a \$4.7B annual budget, almost 24,000 personnel at six wings, and operates our nation's B-2, B-52, and ICBM forces in support of US Strategic Command and the regional combatant commanders.

### **Global Strike Command Update**

Since activating the command in August of 2009, we have put into place an organization and associated battle rhythms, metrics, reviews, and



HQ visit schedules to drive and reward behaviors at the unit level.

Behaviors consistent with our values of responsibility, critical self-assessment, compliance, discipline and pride in our nuclear heritage.

We've made progress...but we recognize we're not going to change a culture over the span of two years...culture is a product of behavior over time...from the top down we have to demonstrate and demand the values we expect...and stay focused on actions and results.

The Defense Science Board recently released their final independent assessment of the Air Force nuclear enterprise, and recognized our progress, stating that "Air Force Global Strike Command has produced a nearly universally positive response in the nuclear operating forces," and although there is always room for improvement, the Chief of Staff of the Air Force, General Schwartz, recently described our command as a "mature" organization.

That "maturity" can be seen in the command. The headquarters is manned at about 85% of authorized strength and is fully engaged on our core organize, train, and equip responsibilities. On any given day



we have 1100 Airmen deployed to the missile fields or on standby for US Strategic Command, and another 1200 Airmen deployed in support of the regional Combatant Commanders. We also stand ready with our conventional long range strike forces-- up to 16 B-2s and 44 B-52s ready to employ or deploy to support national taskings. The B-2 strikes for ODYSSEY DAWN reflect the unique capability that only our nation has...the ability to rapidly bring sustained combat power to virtually any point on the globe.

The last major organizational piece to fall into place is the realignment of munitions squadrons from Materiel Command to Global Strike command, and we expect that transition to be complete by next summer.

A core function of any headquarters is guidance and oversight. For our airmen to do the right things, the right way, they need two things from us—clear direction on what they should do, and the assurance that what they do is important. To help our unit commanders provide that clarity, we executed a year-long review of the unit mission statement of every unit in the command. We made sure that what our units do, and



what we measure, are linked to the combat power or combat support the Joint warfighter wants from us. We're also ensuring clear and simple performance metrics so that over any given period of time, our airmen know how they're doing and we can engage quickly to fix problems.

Nuclear Force Development efforts identified shortfalls in formal education and training for the nuclear enterprise, ultimately resulting in a series of advanced nuclear education programs and an Air Force Institute of Technology graduate level certificate to ensure the right training and education reaches Airmen designated for nuclear career tracks at the right time in their career development.

We've also got to give our Airmen the right training. Big Air Force is good at the basics, but each Major Command has a need for tailored training. We've put together a number of programs to provide that next level of training to include a mandatory Intelligence Formal Training Unit to help our unit intel teams support the nuclear and global strike mission. For our security forces and convoy drivers we conduct graduate level training at Camp Guernsey in Wyoming and expect to expand our investment there over the next few years.



## **Status of AFGSC Weapon Systems**

While we have made improvements in organization and training, we also are focused on ensuring the right equipment for the future. Air Force Global Strike Command has lead command responsibilities for the Minuteman III ICBM, the B-52, the B-2, and the UH-1N helicopter weapons systems. Our four major weapon systems, however, are on average, over 40 years old, and as Secretary Gates noted, we have to meet the challenge of sustaining and modernizing these forces while preparing for the challenges of the future.

### **Equip: ICBMs**

We will be moving to single-warhead ICBMs and, operating them from hardened silos with redundant command and control, expect the ICBM leg of the TRIAD to continue to contribute to strategic stability. The Minuteman III is planned to be in service until 2030. We are in a modernization program that will take us beyond 2020, and we're exploring what will be required to take us to 2030. While there are numerous on-going sustainment and modernization efforts, one significant upgrade recently completed is the Propulsion Replacement Program, which marks the full deployment of new solid fuel stage



motors and refurbished flight controls across the entire force to extend booster service life through the end of this decade. We have also taken a number of steps to provide our Security Forces with the equipment and technology they need to protect and defend our nation's nuclear deterrent. As part of this initiative, we are in the process of retrofitting the Remote Visual Assessment equipment to provide improved situational awareness to Security Forces monitoring and responding to threats in the ICBM missile complexes.

**Equip: B-52s**

As noted in the Nuclear Posture Review, "Bombers can be visibly deployed forward, as a signal in crisis to strengthen deterrence of potential adversaries and assurance of allies and our partners." Our bombers are capable across the spectrum of conflict and their value in conventional operations has been demonstrated in every major conflict since WWII. The B-52 delivers the widest variety of stand-off, direct-attack, nuclear and conventional weapons in the Air Force and we have been investing in multiple improvements such as the Combat Network Communications Technology program. This is the most significant B-52 modernization program since the 1980's and will add 21st century



capability to the aircraft, and will go to full-rate production in 2013.

We recently tested a bomber flight control software block upgrade to significantly improve Advanced Targeting Pod capabilities and employ Miniature Air-Launched Decoys; and we've started the Internal Weapons Bay upgrade program which will increase the B-52 payload by two thirds.

### **Equip: B-2s**

Our B-2s are our nation's only stealthy, long-range, anti-access penetrating strike platform capable of delivering nuclear and heavy conventional payloads. We made significant progress with the B-2 Radar Modernization Program during the past year, completing four aircraft and bringing the fleet total to twelve upgraded aircraft. We've increased maintainability of the upgraded radar system and have also completed integration of the Massive Ordnance Penetrator with the B-2 aircraft, giving the warfighter increased conventional capability against hardened and deeply buried targets. We are also upgrading the B-2 Defensive Management System which will allow it to operate in anti-access and area denial environments well into the future.

### **Equip: UH-1Ns and CVLSP**



Bombers are not the only aircraft vital to our mission in Air Force Global Strike Command. Our UH-1 Helicopters provide an agile missile field security capability. The Air Force currently operates 62 UH-1N aircraft but the UH-1 does not meet our requirements for speed, payload and range, nor does it meet the mission requirement for the Military District of Washington. The UH-1's advanced age is shown in groundings due cracks in the rotor hubs, lift beam area and tail boom assembly. We continue to deal with the challenge of keeping a forty-year-old aircraft mission ready while working through the issue of parts availability and obsolescence. We need the UH-1 replacement, the Common Vertical Lift Support Platform, to ensure the safety and security of our missile field operations and to meet the continuity of operations and government mission for the National Capital Region. In April, the Air Force announced its plan to move ahead with full and open competition for a new helicopter, and in FY12 \$58.9 million has been requested towards this effort.



## **Future:**

As we look toward a future in a complex and dynamic security environment we want to ensure resiliency and flexibility in our long range strike forces—both conventional and nuclear. To meet our nation’s enduring need to globally project power and ensure no enemy can enjoy safe haven, we are planning for a new bomber. Current bombers will be increasingly at risk to rapidly modernizing air defenses while anti-access weapons complicate our ability to project short range airpower from aircraft carriers and regional bases.

The importance of a new bomber is consistent with the 2010 National Security Strategy: “As we face multiple threats—from nations, non-state actors, and failed states—we will maintain the military superiority that has secured our country, and underpinned global security, for decades.”

Guided by the National Security Strategy and National Military Strategy, the 2011 Air Force Posture Statement details a Long-Range Strike Family of Systems to provide a broad range of conventional and nuclear options. The Air Force strategy consists of three precision-



strike pillars: a Long Range Strike Bomber, a Long Range Stand-off Missile, and a Conventional Prompt Global Strike capability. This overarching family of systems recognizes the need for a new bomber and also the value of a complementary, survivable cruise missile arsenal as well as continued exploration of conventional prompt global strike.

The President's Budget for fiscal year 2012 includes \$197 million for the Long Range Strike bomber as part of the \$3.7 billion programmed in fiscal years 2012 through 2016 to develop the long-range penetrating bomber that will be designed for manned or unmanned operations.

The B-52 currently carries the Air Launched Cruise Missile, a combat proven and legacy missile that came on line in the early 1980s.

Originally designed for just a 10-year service life, two life extension programs could extend the life of the weapon to 2030, however, a follow-on ALCM will be necessary to continue that penetrating cruise-missile capability. The new Long Range Stand-Off Missile is intended to replace our aging ALCMs, with low-rate initial production to begin in approximately 2025. We currently have \$884 million funded through



FYDP and we will begin an Analysis of Alternatives in August.

As the United States pursues long-range strike capabilities, there is interest in an ability to conventionally strike anywhere on the earth in as little as one hour. This Conventional Prompt Global Strike Capability was recently supported by our next Defense Secretary nominee Leon Panetta; in recent testimony to the U.S. Senate Armed Services Committee he said that these weapons “...weapons would provide the nation a unique conventional capability to strike time-sensitive targets, so that distant, hard-to-reach places will no longer provide sanctuary to adversaries.” An Analysis of Alternatives was completed in 2008 and OSD had backed this initiative with \$1.8 billion through the FYDP.

Additionally, the Air Force recently funded \$2.37 million towards the first of several studies to determine the best option for maintaining or replacing our ICBM force. The 2010 Nuclear Posture Review recognized the need for studies for a ground-based strategic deterrent past 2030, and we are beginning to work with headquarters Air Force on a capabilities-based assessment to identify the gaps and shortfalls in deterrence operations and baseline the characteristics necessary to



ensure a safe, secure, and effective deterrent force. The analysis phase was completed in May, and we are now in the process of drafting the Initial Capabilities Document. These assessments will inform the discussion on a follow-on to the current ICBM, providing alternatives that will range from continued sustainment of Minuteman III beyond 2030 to a full replacement. The Analysis of Alternatives will determine the most cost-effective alternative to ensure a viable nuclear deterrent force, one that is able to meet the challenges of the future and change with the times.

### **Strategic Stability**

In the two decades since the end of the Cold War, we have dramatically reduced our nuclear and dual-capable forces--weapon systems, people, and funding. As our nuclear and dual-capable forces have gotten smaller, we have retained the classic TRIAD, and the 2010 Nuclear Posture Review supports that force structure mix, noting that “Each leg of the Triad has advantages that warrant retaining all three legs at this stage of reductions”. As these legs are mutually supporting rather than redundant, I suggest the value of the TRIAD becomes more important as the number of deployed warheads declines. A force with



complementary characteristics provides more options and flexibility against an uncertain future while giving us an opportunity to reassess the size of the overall stockpile we retain as a hedge against international political change or technological vulnerabilities. A second advantage to the TRIAD is that it complicates the offensive and defensive plans, and resource decisions, of potential adversaries. A third advantage is how a TRIAD can provide national leadership options for escalation control in a crisis, especially by providing clear signals of intent.

## CONCLUSION

In December of 2008, Secretary Gates visited the airmen at Minot Air Force Base and he told them “Handling nuclear weapons, the most powerful and destructive instruments in the arsenal of freedom, is a tremendous responsibility. We owe you the attention, the people and the resources you need to do the job right. Yours is the most sensitive mission in the entire United States military.”

We are aware of the unique nature and role of these weapons, and we embrace the special trust and responsibility that comes with the nuclear mission. As a command, we have been singularly focused on



giving our units the attention, people and resources they need. They have made great strides and I think *they* have restored confidence in the Air Force's execution of this mission.

Once again, many thanks for inviting me to be with you today. It has been a privilege to be here and to represent the airmen and civilians of Global Strike Command.