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SHOOTING DOWN THEATER MISSILES: USCINCCENT'S PERSPECTIVE ON THEATER MISSILE DEFENSE AND SPACE-BASED SYSTEMS

by

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The following remarks were delivered by General Peay on November 17, 1994, before AUSA's Symposium on Missile Defense and Space Requirements for the 21st Century.

INTRODUCTION

U.S. Central Command has grappled with repetitive crises over the last three years: support of United Nations relief operations in Somalia; enforcement of maritime and aerial restrictions against Iraq; and, most recently, the deployment of U.S. and allied air, ground and sea forces to deter war along the Kuwaiti border.

From the first hours of crisis during Operation Vigilant Warrior this past October, our forward-based fighter aircraft, naval forces, Patriot battalion and coalition partners in the Gulf stood ready to blunt Iraqi incursions. And with each passing hour additional forces arrived in theater: the carrier *USS George Washington*, the Air Force's 23d Composite Wing, two brigades of the 24th Infantry Division from Forts Stewart and Benning, and two reinforcing Patriot batteries from Fort Polk. Other forces alerted and stood ready for deployment orders: Marines of the First Marine Expeditionary Force, troops from the 101st Airborne and 1st Cavalry Divisions and III Corps, and the Air Force's B-52s

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and F-117s. Our resolve, our demonstration of strategic power projection, and our marshalling of forces to mount punishing blows against attackers sent a message to regional friends and Iraq: The United States will not permit Iraq to intimidate its neighbors and the world. War was averted. America's servicemen and women prevented a new wave of bloodshed in the region.

This evening, nearly 24,000 servicemen and women are piloting some 265 aircraft, operating 26 naval vessels, manning a Patriot battalion, soldiering in two brigades of the 24th Infantry Division, establishing a brigade set of equipment in Kuwait, and advising regional militaries. These servicemen and women are the tip of the American spear in Southwest Asia that deters conflict, implements the maritime blockage of Iraq, enforces the 32nd parallel no-fly zone and ground demarcation line in Iraq, insures access, and secures America's vital interests in the region.

Amidst this kaleidoscope of military activity, I believe that theater missile defense is the most pressing long-term regional military dilemma in our theater. Consequently, space-based capabilities and theater missile defense systems are essential to our ability to deter, to fight, and to win future conflicts.

THE THREAT

Since the end of the Cold War, our military services have been struggling with daunting requirements emanating from global instability and uncertainty that defy easy resolution. Our nation is vigilant and our military forces ever ready in an era of unprecedented contradictory changes and challenges.

This is very evident in the 19 nations of the Middle East and Africa comprising Central Command's area of responsibility: **a vast geographic area larger than the continental United States**, stretching from Egypt and East Africa to Pakistan and which includes the waters and maritime choke points of the Red Sea, Gulf of Aden, Gulf of Oman and Arabian Gulf.

It is a region rich in culture and history, the birthplace of civilization, the home to 427 million people comprising 17 different ethnic groups, 420 major tribal groupings, six major languages and hundreds of dialects, and three major religions;

a region that has experienced more than its fair share of death, destruction, war, poverty and pestilence, where on any given day, there are over 14 conflicts;

a region that, owing to its abundance of oil and control of key maritime routes, is of vital interest to our nation and to the international community — where 72 percent of the world's proven oil reserves are located and from where 68 percent of Japanese, 27 percent of Western European and 10 percent of American oil is imported;

a region where disputes over control of resources, particularly water and oil, can explode suddenly in bloody conflict;

a region where radical hostile religious fundamentalism exacerbates tensions among nations;

a region where ongoing Arab-Israeli peace negotiations are at a sensitive stage and require quiet U.S. involvement and reassurance;

a region where instability and war in the Central Asian Republics threaten to spill over into the Middle East;

a region where American military strategies are made complex by lines of communication stretching over 7,000 miles between the continental United States and the Gulf; by the capability of Iraqi attackers to advance to Kuwait City in only five hours; by the existence of only rudimentary formal basing agreements; by the dearth of formal alliances; by the need to constantly balance military requirements with internal cultural sensitivities of regional states; and by the challenges of having to fight, maintain, and communicate in rugged terrain and the harshest of climates;

a region where an accelerating arms race in weapons of mass destruction and in an assortment of different types of ballistic missiles intensifies old rivalries and fear and hostilities among neighboring states; an arms race that could threaten U.S. and allied military forces; that could undermine regional resolve to confront belligerents; that could unhinge U.S. regional strategies; and that could paralyze political decisionmakers at home and abroad.

These challenges are magnified by the relative ease with which potential adversaries can enhance armaments through purchases of "off-the-shelf" technology. One can purchase commercial inertial navigation systems for \$30,000 to \$50,000; global positioning systems for \$4,500; air platforms and propulsion systems for \$300,000 to \$500,000; a cruise missile for less than \$500,000. And we should expect to see tactical missile threats to double by the year 2000. Such trends become even more alarming when we consider ongoing efforts of various nations to develop or purchase chemical, nuclear and biological warheads.

MODERN WARFARE IN SOUTHWEST ASIA: THE CENTCOM PERSPECTIVE

These threat dynamics underscore that forces assigned to Central Command to handle future crises must be able to defeat a full range of potential military forces, from insurgents to infantry and mechanized based armies, who may purchase advanced information-age weapons and equipment, to adversaries possessing naval and air forces capable of threatening maritime choke points and waterways.

They must be able to react to environmental disasters, health epidemics, famine and other outbreaks of human misery, and to political, racial, religious, cultural and ethnic violence.

They must be prepared to act against criminal organizations and terrorists and others operating without regard to the authority of the traditional nation-state.

They must be able to contend with threats posed by ideological movements, purveyors of weapons of mass destruction, and internal security forces of developing nations.

And they must be able to rapidly mobilize and deploy highly trained and versatile units, weapon systems, sustainment resources and service personnel to austere, bare-base locations, fight, return home, and prepare to go again.

In Southwest Asia, we reduce risks and friendly casualties by leveraging our advantages in technology, weaponry, leadership and quality personnel. Our style of warfighting capitalizes on **the often maligned “redundant and complimentary capabilities” found within each of our services** — capabilities that embolden us to avoid enemy strengths and blitz his weaknesses; advance across great distances; launch unrelenting precision deep strikes against the enemy’s military, industry and information infrastructure; conduct continuous, all-weather operations; and assail **simultaneously** strategic, operational and tactical objectives.

In Southwest Asia, the speed, precision, simultaneity and flexibility of our operations defy those who advocate structuring the battlefield in accordance with convenient blocks, with each service getting its own “sandbox” in which to fight. Such efforts are contrary to the principles of war, precepts of U.S. joint doctrine, and lessons learned from battle over the last half-century. Warfighting theater commanders must have the flexibility to organize their command in a manner that will maximize the strengths of each service. In spite of our most valiant efforts, our forces will probably not arrive in theater as depicted in contingency plans. Carriers may not be available, Marines may be operating elsewhere, specific types of aircraft may be unready for a period of time, designated U.S. Army mechanized units may be committed to another mission. It is through the collective strength of all of our services that the theater commander derives his freedom of action and achieves decisive victory with minimal risk to our own forces.

In Southwest Asia, our style of warfighting will call for innovative and imaginative forms of maneuver, battle command, intelligence, fire support, and sustainment — on the ground, sea, air and space — where systems are linked electronically to achieve unprecedented synergism.

In Southwest Asia, military leaders at all levels will have to assimilate more information, devise courses of actions, and make decisions at unprecedented rates. They will have to be experts at orchestrating combat functions across the theater and maintaining cohesion among widely dispersed units — all under the constant scrutiny of the international media. And they must fight throughout the depth of the theater of operations with maneuver and fires of all services to minimize casualties.

More so than in the past, a theater commander and the theater level staff will have to be experts at directing globally based military resources to specific points in time and space to achieve desired battlefield effects.

Still, changes in military organizations, processes and weapons will not transform the nature of war. Conflicts will not be remote, bloodless, sterile or risk-free. War will remain an act of force to compel our adversary to do our will. War, in the words of Clausewitz, will continue to reflect human passions, it will remain an affair of chance and uncertainty, and it will be an instrument of government policy. War will remain the realm of danger, physical exertion and suffering.

In Southwest Asia, our leaders will have to continue to struggle to overcome the **friction and fog** of war. They will continue to have to risk death and injury to themselves and the men and women under their charge to achieve victory.

These are the realities of modern warfare in Southwest Asia.

U.S. WARFIGHTING, THREAT, AND SPACE-BASED SYSTEMS

The style of warfighting that I have outlined is designed to contend with the introduction onto the future battlefield of short- and medium-range and cruise missiles and weapons of mass destruction. And it is the emergence of these potentially devastating weapons that calls for adopting theater missile defenses and space-based system capabilities that will support our style of fighting.

Imagine a future conflict in Southwest Asia with an opponent possessing these weapons. Imagine our forces armed with the types of weapons and space-based equipment currently envisioned. Our space-based and theater missile defense systems will support passive and active defensive measures and attack operations. And our space-based systems will provide the surveillance, detection, tracking and early warning needed for our advanced forms of battle command, control, communications and intelligence.

Prior to hostilities and during crisis response and entry operations, we will count on satellite and airborne-based imagery and on satellites comprising the Defense Support Program (DSP) to monitor continuously enemy military activities and to provide warning of activation of enemy theater missile systems. As we did in Operation Vigilant Warrior, we will use intelligence derived from these assets to orchestrate political and diplomatic initiatives and to refine war plans.

We will enhance our battlefield operations and reduce risk to friendly forces by exercising the capabilities of our space-based systems. Through the Tactical Exploitation of National Capabilities Program (TENCAP) and Joint Tactical Ground Stations, we will ensure rapid, in-theater flow of satellite-derived data. Through the Defense Support Program, we will detect enemy ballistic missile launches. And through the communication links offered by the Tactical Related Applications (TRAP) and Tactical Information Broadcast Service (TIBS) networks and the Defense Satellite Communications System, we will pass on intelligence to theater units and will provide warning of ballistic missile attacks in just over one minute or less.

We will counter enemy ballistic and cruise missiles using multilayered ballistic missile defenses on land and sea. On land, the Patriot Advanced Capability-3, with its Extended Range Interceptor (ERINT) round, will provide lower-tier point defense. Meanwhile, the Theater High Altitude Area

Defense {THAAD} missile, with its hit-to-kill lethality, multiple shot opportunities, and associated Ground Based Radar, will provide upper-tier area defense.

At sea, a lower-tier, point defense missile system similar to Patriot Advanced Capability-3, positioned on Aegis-class destroyers and cruisers, will offer naval forces and ground units operating in littoral areas protection against ballistic and cruise missiles.

We will exploit data derived from satellites and airborne systems throughout the course of our military operations to find the enemy's missile launchers, command and control facilities, missile storage sites, maintenance activities, and other key nodes. Armed with this information, we will unleash punishing attacks using fighters, cruise missiles, ATACMS [Army Tactical Missile System], Apaches, and Special Forces to destroy, neutralize and degrade his theater ballistic missile and unconventional warhead capabilities. And even as the first of our attacking aircraft are returning to base, we will assess battle damage using data derived from our space-based systems and conduct follow-on attacks as necessary.

We will conduct these joint attacks while concurrently advancing with ground forces throughout the depth of the theater of operations — the complementary nature of such attacks serving to immobilize the enemy, paralyze his decisionmaking, demoralize his soldiers, and precipitate a full-scale disintegration of the enemy's forces. Our ground forces will use satellite-based data provided by Small Lightweight Global Positioning Receivers and Gun Laying Positioning Systems to support rapid movement and adjustment of fires and will rely on mobile satellite communications to acquire long-range, secure, jam-resistant communications.

And we will offer our hard-driving maneuver forces continuous missile protection through the Corps Surface-to-Air Missile — a weapon designed to keep pace with our mechanized units. In combination with our lower- and upper-tier missile defenses, we will attain near leakproof theater defense against ballistic and cruise missiles and unmanned aerial vehicles.

Taken together, these battlefield activities are what I call PhD-level warfare, a style of fighting requiring superbly trained and led servicemen and women and the unique capabilities that only advanced technology systems can provide. Lacking these systems, we will experience protracted conflict, greater battlefield risks, and correspondingly higher casualties.

Yet, my broad-brush depiction of future war conveniently glosses over some very real impediments to erecting a comprehensive space and theater missile defense array.

The first of these is the unavailability of necessary research, development and acquisition funds. Ideally, all of the services would obtain the funds required to enhance their capabilities to provide theater commands the combat systems needed for future conflicts. But this is not the case, and tough decisions must be made.

From my perspective as theater commander for Southwest Asia, the priority over the next ten years must be to establish a multilayered missile defense founded on the lower-tier Patriot Advanced Capability-3, with a variant for naval defense; upper-tier Theater High Altitude Area Defense; and a

highly mobile point defense Corps Surface-to-Air Missile to protect ground forces maneuvering rapidly over extended distances.

This priority is founded on warfighting needs that **must be dealt with in the short and mid terms.**

While the Navy must have a lower-tier defensive missile, the sea-based upper tier is not a substitute for land-based THAAD. While a sea-based lower-tier system offers security for ships and littoral-based forces, particularly in the initial stages of deployment and force buildup, the effectiveness of a seabased upper-tier system **dramatically decreases** as ground forces strike deep beyond the shore.

In a similar vain, the Air Force's kinetic energy boost phase intercept concept has **seductive** appeal, for it is supposed to destroy enemy missiles and warheads before they reach apogee — where their lethal effects would conceivably crash on enemy soil. In fog of war, vast, rugged land area to be covered, and punishing climate, however, this approach may not offer the coverage so desperately needed. What's more, its highly experimental status would expose forces assigned to Central Command to a dangerous window of vulnerability over the next 15 years. Under the circumstances, the diversion of resources to produce the boost phase intercept system would cut deeply into procuring the other weapon systems that we urgently require now.

The bottom line is that theater military forces require a layered missile defense array supportive of service "autonomous operations": operations that will ensure the protection of our air, ground and naval units.

Given all of the factors beyond our ability to control on the battlefield — blinding sandstorms, communication failures, equipment breakdowns, soldier fatigue — we need a missile defense array that accounts for the **friction** of war, that will mitigate the threat of missile leakage. The missile defense structure that I have detailed represents a move toward realizing this imperative.

Looking beyond the defensive missiles themselves, we must devote resources to other elements of our defensive structures that can provide improved battle command, control, communications and intelligence.

Enhancements are needed in detecting unmanned aerial vehicles and cruise and short-range missiles; in enriching the missile tracking capability in our satellite program to provide rapid, highly accurate flight data on enemy missile launches; in expanding our acquisition of theater-based capabilities to direct downlink satellite data for intelligence and in rapidly transmitting it to subordinate units; in broadening our satellite communications architecture to ensure that it meets the demands of one or more major regional contingencies; and, finally, in fielding systems that support joint and combined operations, systems that permit the services to operate most effectively in the milieu in which they fight — air, ground and sea — and link organizations, units and major weapon systems that are dispersed and maneuvering over great distances.

CONCLUSION: SPACE-BASED SYSTEMS AND THEATER MISSILE DEFENSE — CRITICAL COMPONENTS OF FUTURE BATTLEFIELD VICTORY

As we ponder these complex dynamics — the changing character of war and warfighting, the constancy of the nature of war, the criticality of achieving the right mix of space capabilities and theater missile defense systems — we can see that our military forces will be grappling with very weighty technological challenges over the next few years. Proliferation of theater ballistic and cruise missiles and weapons of mass destruction poses grave strategic, operational and tactical dilemmas for our nation and all of our military services.

Pundits might contend that the overall superiority of the U.S. military mitigates our vulnerability; that the threat of eventual massive conventional retaliation would deter an adversary from employing ballistic missiles and weapons of mass destruction.

But, as the experts in this room understand, we do not deter conflict and use of such weapons with empty threats and thinly disguised bluffs.

The potential danger to our military forces was made clear on 17 January 1991, when Iraq fired seven SCUDs at Israel and one at Daharan. While militarily ineffective, the missiles terrorized the Saudis, infuriated the Israelis, and threatened to rupture the coalition. General Schwarzkopf was forced to divert fully one-third of the more than 2,000 combat and combat support missions scheduled each day to search for SCUDs.

We risked the lives of hundreds of pilots and Special Forces troops to neutralize these weapons and diverted critical air resources away from senior tactical commanders, adversely affecting the fight operationally and tactically. Expected qualitative improvements in enemy missile systems will leave us far more vulnerable the next time.

That great American patriot and soldier, former chairman of the Joint Chiefs General John Vessey, once noted that our strategy is one of preventing war by making it self-evident to our enemies that they're going to get their "clocks cleaned" if they start one.

It is in this spirit that we must "get on" with the development and fielding of space-based systems that provide information directly and swiftly to theater commanders and in building our theater missile defenses. We must buy the hardware, continue the training, and maintain the mix of forces that will demonstrate to our adversaries that the use of theater missiles and weapons of mass destruction will lead to their crushing defeat in battle ... that they will get their "clocks cleaned."

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