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Global Strike

A Chronology of the Pentagon's New Offensive Strike Plan



"I've never met anyone in the Administration who would even consider nuclear preemption in connection with countering rogue state WMD threats."

Linton F. Brooks, Director, NNSA, May 2004

"This notion that the United States is getting ready to attack Iran is simply ridiculous. Having said that, all options are on the table."

President George W. Bush, February 2005

Hans M. Kristensen

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Introduction

During a speech to a Heritage Foundation conference in May 2004, National Nuclear Security Administration Director Ambassador Linton F. Brooks assured the audience: "I've never met anyone in the Administration who would even consider nuclear preemption in connection with countering rogue state WMD threats."¹ His assurance must have excluded the White House, STRATCOM, the Air Force, and the Navy, for during the past decade they have been busy planning for precisely such a scenario.

One year after the attacks on the World Trade Center and the Pentagon on September 11, 2001, the Bush administration published the *National Security Strategy of the United States of America*. Building on the events of 9/11 – and a decade of gradual expansion of nuclear doctrine focused on Russian and China to one aimed increasingly at regional aggressors armed with weapons of mass destruction – the new strategy wove together terrorism and weapons of mass destruction proliferation in a plan for a more offensive U.S. military posture.

"We must be prepared to stop rogue states and their terrorist clients before they are able to threaten or use weapons of mass destruction against the United States and our allies and friends....We must adapt the concept of imminent threat to the capabilities and objectives of today's adversaries....The greater the threat, the greater the risk of inaction – and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of our enemy's attack. To forestall or prevent such hostile acts by our adversaries, the United States will, if necessary, act preemptively....To support preemptive actions, we will...continue to transform our military forces to ensure our ability to conduct rapid and precise operations to achieve decisive results."²

Three and a half years later, the military product of that strategy is operational: Global Strike. The operational embodiment of the Global Strike mission is Contingency Plan (CONPLAN) 8022, a new strike plan developed by STRATCOM in coordination with the Air Force and Navy to provide a prompt global strike options to the President with nuclear, conventional, space, and information warfare capabilities.

It is important to understand that the Global Strike mission and CONPLAN 8022 are different than previous missions and plans both in their intent and capabilities. Although promoted as a way of increasing the President's options for deterring lesser adversaries, Global Strike is first and foremost offensive and preemptive in nature and deeply rooted in the expectation that deterrence *will* fail sooner or later. Rather than waiting for the mushroom cloud to appear, a

¹ Linton F. Brooks, Administrator, National Nuclear Security Administration, "U.S. Nuclear Weapons Policies and Programs," presented to the Heritage Foundation Conference *U.S. Strategic Command: Beyond the War on Terrorism*, May 12, 2004, p. 6.

² The White House, "National Security Strategy of the United States of America," September 2002, pp. 14, 15.

phrase used several times by the Bush administration, the Global Strike mission is focused on defeating the threat before it is unleashed. In its most extreme sense, Global Strike seeks to create near-invulnerability for the United States by forcing utter vulnerability upon any potential adversary. As a result, Global Strike is principally about warfighting rather than deterrence.

From Policy to Capability

Because of its unique duty to save America from damage inflicted by weapons of mass destruction, Global Strike is an important new focus for the Pentagon's offensive planning in the post-9/11 era: It is the basis for the implementation of the New Triad described in the 2001 Nuclear Posture Review (NPR); the core of the transformation of U.S. Strategic Command into the center of U.S. military planning; and the embodiment of the doctrinal and political shift in how the United States views the role of its military forces after 9/11. Global Strike has emerged in response to specific guidance issued by the White House and the Office of the Secretary of Defense (OSD) since 2001:

- Nuclear Posture Review (December 2001): Lays the foundation by articulating requirements for forces and planning tools that reemphasized operations against regional adversaries armed with weapons mass destruction.
- National Security Presidential Directive (NSPD) 14 (June 2002): Promulgates new Nuclear Weapons Planning Guidance in accordance with the Nuclear Posture Review.
- National Security Presidential Directive (NSPD) 17 (September 2002): Communicates a new National Strategy to Combat Weapons of Mass Destruction as a comprehensive approach to counter nuclear and other weapons of mass destruction. Reaffirms that United States will use nuclear weapons – even preemptively – against anyone using weapons of mass destruction against the United States, its forces abroad, and friends and allies. Calls for a mix of nuclear and conventional forces.
- National Security Strategy of the United States (September 2002): Publicly articulates a preemption doctrine against weapons of mass destruction that requires transformation of military forces to rapidly and precisely “stop rogue states and their terrorist clients before they are able to threaten or use weapons of mass destruction against the United States and our allies and friends.”
- Unified Command Plan, Change 2 (January 2003): Assigns four new missions to STRATCOM: Global Strike, missile defense, information operations, and global C4ISR. The directive defines global strike as "a capability to deliver rapid, extended range, precision kinetic (nuclear and conventional) and non-kinetic (elements of space and information operations) effects in support of theater and national objectives."
- Nuclear Posture Review Implementation Plan (March 2003): A 26-page list of specific items from the 2001 Nuclear Posture Review that the military Services are ordered to implement.
- Nuclear Weapons Employment Policy (NUWEP) (April 2004): A detailed outline of the countries that U.S. nuclear planning shall be directed against, including a breakdown of the individual strike options (plans) and their target categories and objectives. The

document states in part: "U.S. nuclear forces must be capable of, and be seen to be capable of, destroying those critical war-making and war-supporting assets and capabilities that a potential enemy leadership values most and that it would rely on to achieve its own objectives in a post-war world."

- Unified Command Plan 2004 (March 2005): Assigns to STRATCOM the mission of coordinating the Pentagon's efforts to combating Weapons of Mass Destruction.

In response to this (and probably other) guidance, STRATCOM planners went to work on a new strike plan that could be used to implement Global Strike if ordered to do so. Only four months after being assigned the Global Strike by Unified Command Plan (Change 2) in January 2003, a strategic concept for CONPLAN 8022 had been developed. A second concept was readied in June (CONPLAN 8022-02) and completed in November 2003.

As a concept plan, CONPLAN 8022 was not operational at this point but available for implementation if so ordered by the Secretary of Defense. That happened in June 2004, when Defense Secretary Donald Rumsfeld ordered the military to implement CONPLAN 8022 "which provides the President a prompt, global strike capability." In response, Joint Chiefs of Staff Chairman General Richard Myers signed the Global Strike Alert Order (ALERTORD) on June 30, 2004, which ordered STRATCOM to put CONPLAN 8022 into effect in coordination with the Air Force and Navy. Six weeks later, on August 17, STRATCOM published Global Strike Interim Capability Operations Order (OPORD) which changed the nature of CONPLAN 8022 from a concept plan to a contingency plan. In response, selected bombers, ICBMs, SSBNs, and information warfare units were tasked against specific high-value targets in adversary countries. Finally, on November 18, 2005, Joint Functional Component Command Space and Global Strike achieved Initial Operational capability after being thoroughly tested in the nuclear strike exercise Global Lightning 06.

The Nuclear Option

Although Global Strike is primarily a non-nuclear mission based on advanced conventional capabilities, space, and information warfare capabilities, this chronology illustrates that nuclear weapons are surprisingly prominent in both the planning and command structure of Global Strike.³

³ The nuclear option in CONPLAN 8022 was first described in William M. Arkin, "No Just a Last Resort? A Global Strike Plan With a Nuclear Option," *Washington Post*, May 14, 2005, p. B01, URL <http://www.washingtonpost.com/wp-dyn/content/article/2005/05/14/AR2005051400071.html>.

For descriptions of the evolution of U.S. nuclear strategy from the Soviet Union to the rogue states, see: Hans M. Kristensen, "Targets of Opportunity," *Bulletin of the Atomic Scientists*, September/October 1997, p. 22, URL <http://www.bullatombsci.org/issues/1997/so97/so97kristensen.html>; Hans M. Kristensen, "Nuclear Futures: Proliferation of Weapons of Mass Destruction and U.S. Nuclear Strategy," British American Security Information Council (BASIS), Washington, DC, March 1998, URL <http://www.nukestrat.com/pubs/nfuture2.pdf>.

What makes the nuclear option in CONPLAN 8022 particularly surprising is that Global Strike is one of the pillars of the Bush administration's vision of a "New Triad" where advanced conventional weapons were supposed to permit a *reduction* of the number and role of nuclear weapons. Instead, one of the first acts of the Pentagon appears to have been to include nuclear weapons in the very plan that was supposed to reduce the nuclear role. Overall, the number of nuclear weapons in the stockpile may be declining because there are simply too many of them. But the nuclear option in CONPLAN 8022 suggests that the planners simultaneously have created a new mission that reaffirms the importance and broadens the role of nuclear weapons further by changing or lowering the perceived threshold or timing for when nuclear weapons may be used in a conflict. That threshold must be different than in the past, otherwise why include a nuclear option in CONPLAN 8022?

In contrast with the Bush administration's claim to be reducing the role of nuclear weapons, consider these remarks by JCS Chairman Gen. Richard Myers at the July 2004 retirement ceremony of Adm. Ellis as STRATCOM commander in Omaha:

You reshaped "the roles and missions of that old command to better posture our military forces to defeat existing and future threats against our nation [after 9/11]....You did this by expanding the options available to the President, both from a strong nuclear deterrence standpoint and conventional and non-kinetic response options."⁴

The following year, General Myers repeated his description of the expansion of the options, this time in his testimony before Congress:

"Within DOD, the SecDef has tasked the US Strategic Command to synchronize our efforts to counter WMD and ensure the force structure and the resources are in place to help all combatant commands defeat WMD.... STRATCOM has revised our strategic deterrence and response plan that became effective in the fall of 2004. This revised, detailed plan provides more flexible options to assure allies, and dissuade, deter, and if necessary, defeat adversaries in a wider range of contingencies."⁵

The expansion of nuclear options to the President includes CONPLAN 8022. The new and different nature of that plan is further underscored by the fact that STRATCOM for more than a decade has maintained and modernized a robust nuclear posture directed against Russia and China and, increasingly, also regional adversaries armed with weapons of mass destruction.

⁴ General Richard B. Myers, Chairman, Joint Chiefs of Staff, Change of Command/Retirement Ceremony, Offutt AFB, Omaha, Nebraska, July 9, 2004, p. 1. Emphasis added.

⁵ General Richard E. Myers, Chairman, Joint Chiefs of Staff, Posture Statement before House Armed Services Committee, February 16, 2005, p. 32, URL <http://www.house.gov/hasc/testimony/109thcongress/CJCSPostureStatement2-16-05.pdf>. Emphasis added.

STRATCOM told the Clinton administration's Nuclear Posture Review in 1993: "Within the context of a regional single or few warhead detonation, classical deterrence already allows for adaptively planned missions to counter any use of WMD."⁶ If STRATCOM has had the capability to counter any use of weapons of mass destruction for more than a decade, then why include a nuclear option in CONPLAN 8022?

The "New Triad" is frequently portrayed as an alternative to the Cold War strategy of nuclear Mutual Assured Destruction (MAD). Yet CONPLAN 8022 is premised on the preservation and improvement of an assured destruction capability for nuclear weapons. The international nuclear situation may be less "mutual" today compared with the Cold War, but "assured destruction" very much continues to be a key requirement for U.S. nuclear planning. In CONPLAN 8022 this assured destruction capability is intended not just in retaliation but in preemption.

Before it was exposed in public in 2005⁷ and the Pentagon subsequently decided to cancel the Doctrine for Joint Nuclear Operations (Joint Pub 3-12),⁸ the edits of the revision revealed some of the thinking that underpins the offensive nature of CONPLAN 8022. The draft doctrine described four conditions where preemptive use of nuclear weapons might occur:

- An adversary intending to use WMD against U.S., multinational, or allies forces or civilian populations;
- Imminent attack from adversary biological weapons that only effects from nuclear weapons can safely destroy;
- Attacks on adversary installations including WMD, deep, hardened bunkers containing chemical or biological weapons or the command and control infrastructure required for the adversary to execute a WMD attack against United States or its friends and allies;
- To demonstrate U.S. intent and capability to use nuclear weapons to deter adversary use of WMD.

Preemption in and of itself is not a new phenomenon in U.S. nuclear strategy, which has relied extensively on preemptive strike options against Russia and China for decades. In contrast, the draft doctrine described preemptive scenarios that require a new mindset about the use of nuclear weapons. It is no longer appropriate, STRATCOM argued, to use the terminology "war" when describing the situations in which nuclear weapons might be used. Rather, "conflict" should be used because it "emphasizes the nature of most conflicts resulting in use of a nuclear weapon.

⁶ Listing, Group 5 – Relationship Between U.S. Nuclear Postures and Counterproliferation Policy, Formal STRATCOM Answers as of 22 November 1993, p. 13. Secret. Partially declassified and released under the Freedom of Information Act.

⁷ Hans M. Kristensen, "New Doctrine Falls Short of Bush Pledge," *Arms Control Today*, September 2005, p. 13, URL http://www.armscontrol.org/act/2005_09/Kristensen.asp.

⁸ Hans M. Kristensen, "Pentagon Cancels Controversial Nuclear Doctrine," *Strategic Security Project Blog*, Federation of American Scientists, February 2, 2006, URL http://www.fas.org/blog/ssp/2006/02/pentagon_cancels_controversial.php.

Nuclear war implies the mutual exchange of nuclear weapons between warring parties – not fully representative of the facts,”⁹ STRATCOM said.

The revision of the doctrine coincided with the Bush administration's efforts to convince Congress to authorize a Robust Nuclear Earth Penetrator (RNEP). European Command echoed STRATCOM's reading of the new situation by predicting that “the use of a bunker-buster ‘mini-nuke’ might not, in fact, be ‘provoked by some action, event, or perceived threat’ per se; rather, it may be used simply because it is the only weapon that will destroy the target!”¹⁰

Deterrence seems almost absent from such considerations, which instead appear to see nuclear weapons as simply another tool in the toolbox to destroy targets. Of course the official justification is very much deterrence, but in this case it seems to be a meaningless euphemism that has automatically been attached to the mission.

Global Strike also appears to reverse the lowering of the strategic alert level that followed the end of the Cold War. Long-range bombers are now “essentially on alert,” according to the Air Force, to execute CONPLAN 8022, reversing the decision in 1991 to remove bombers from alert status. To practice their skills, bomber wings now periodically practice launching their aircraft in response to an emergency order from the President. In 2004, for example, 13 B-52 bombers were launched simultaneously from Barksdale Air Force Base in a minimum-interval take-off with each bomber taking off within a minute or less of one another. Said the 8th Air Force commander at the base: 8th Air Force is now “essentially on alert...to plan and execute Global Strikes” on behalf of STRATCOM.

Global Strike incorporates not only strategic long-range weapons launched from the United States, but also – potentially nuclear bombs deployed in Europe or weapons that could be moved into a theater in case of a crisis. A preemptive strike could use a B61 nuclear bomb deployed in Turkey or a strategic warhead launched from a Trident submarine off Japan. “Global” refers to where the targets are, not the range of the weapons.

As it develops further in the years to come, Global Strike may even settle the decade-old battle between STRATCOM and the regional combatant commanders over who owns regional nuclear targeting. The objective of creating STRATCOM in 1992 was to create a single voice on nuclear planning and policy, and the command has several times tried to broaden that authority to theater nuclear planning. Up until now the regional combatant commanders have succeeded in defending their turf with STRATCOM getting only authority to act in a supporting role. But

⁹ U.S. Department of Defense, Joint Staff, “Doctrine for Joint Nuclear Operations (FC), JP 3-12 Comment Matrix Combined Sorted December 21, 2004,” as of December 16, 2004, p. 50, URL, http://www.nukestrat.com/us/jcs/JP%203-12_com121604.pdf.

¹⁰ U.S. Department of Defense, Joint Staff, “Doctrine for Joint Nuclear Operations (FC), JP 3-12 Comment Matrix Combined Sorted December 21, 2004,” as of December 16, 2004, p. 29, URL, http://www.nukestrat.com/us/jcs/JP%203-12_com121604.pdf.

after the withdrawal of tactical nuclear weapons from South Korea and warships and with the increasing irrelevance of the remaining nuclear deployment in Europe, both the planning, command, and execution of theater strikes could eventually become STRATCOM's domain.

Ultimately, because it is different than OPLAN 8044, the credibility of the nuclear option in CONPLAN 8022 will depend on the willingness of the National Command Authority to authorize use of nuclear weapons differently than envisioned under OPLAN 8044. Otherwise, why have a nuclear option in CONPLAN 8022?

Conventional Missions

In addition to the nuclear option, CONPLAN 8022 includes strike options with advanced conventional weapons and information warfare capabilities. Some of these capabilities already exist while others still need to be developed.

The Navy's budget request for FY 2007 includes funding to replace the nuclear warheads on 24 Trident II D5 missiles with conventional warheads. Unlike the nuclear option in CONPLAN 8022, the conventional Trident seems more in tune with the vision for the "New Triad." The plan is to deploy 96 conventional warheads on 24 Trident II D5 missiles with an Initial Operational Capability in December 2008 and Full Operational Capability in November 2010.

Converting 24 missiles to carry four conventional warheads each appears to cut 96 nuclear warheads from the deployed force. Yet it is still unclear whether the conventional warheads will *replace* the nuclear warheads or whether the nuclear warheads will simply be moved onto the other 20 missiles on each SSBN. In other words, will the conventional Trident warheads be targeted on the same targets or different targets? This is important for determining whether the conventional Trident is a replacement for nuclear warheads or to complement them.

A senior defense official told Inside Defense earlier this month that potential targets may include "an enemy nuclear weapons being prepared for launch or terrorist leaders in an underground facility" located "below the equator" or "in the large land masses of Asia [or] the Middle East [and] all the way up to the Baltics."¹¹ If the targets are different, then the conventional Trident must be seen as an *additional* capability rather than a reduction of nuclear targeting.

The SSBNs completed a download of warheads in 2005 in an interim step toward implementation of the Moscow Treaty warhead ceiling of 2,200 operationally deployed warheads by 2012. At that time, if required under OPLAN 8044 or CONPLAN 8022, the 20 nuclear missiles on each SSBN will have more than enough room to accommodate the warheads removed from the two missiles converted to a conventional mission.

¹¹ Elaine M. Grossman, "DoD Defends New Sub-Launched Missile," *InsideDefense.com* NewsStand, March 10, 2006.

The addition of conventional Trident adds to the mixed nuclear-conventional capability of the bomber force. Yet whereas the dual-capability of the bomber force dates back to the Vietnam War era, the conversion of ballistic missiles represent a significant new development. This development has important implications for the nature and function of STRATCOM, which was created to focus the nuclear mission in one command. Since 2003, however, STRATCOM has been assigned six other missions that are predominantly or entirely non-nuclear. Global Strike not only illustrates the increasing watering down of the nuclear-only function at STRATCOM, but also the increasing mixing in general of nuclear and conventional planning, capabilities, and operations. From a funding perspective this may make sense, but it also blurs the distinction between the nuclear and non-nuclear mission and makes the nuclear option appear less unique.

Mixing nuclear and conventional capabilities in relatively slow bombers that can be recalled if something goes wrong or if the situation changes is one thing. But how will STRATCOM solve the considerable Command and Control issue created by mixing nuclear and conventional warheads on highly offensive, forward deployed, first-strike-capable SSBNs where the missiles – once launched – with flight-times of 12-24 minutes cannot be recalled?

STRATCOM insists that it has a strong and reliable Command and Control capability on the SSBNs, and that submarines on Global Strike patrol will stand down the nuclear missiles when the conventional missiles are on alert. But that explanation sounds like the Navy simply has too many nuclear warheads deployed at sea. And since CONPLAN 8022 contains both nuclear and conventional options, the same SSBN might be required to have both options ready, especially if the Target Package includes both soft and deeply buried hardened targets.

Command and Control on the submarines is the kind of factor the U.S. – at least in theory – can control. How other countries will interpret and react to a Trident launch in a crisis is quite another matter. The scenario may not necessarily be the straightforward case of North Korea planning to do something bad. Supposed the U.S. and China got bogged down in a tense crisis or limited war over Taiwan and U.S. intelligence in the middle of it detects what appear to be North Korean preparations to launch a long-range missile. The White House orders STRATCOM to take out the missile preemptively with a conventional Trident, but the launch is detected by China which misinterprets it – because Trident is what concerns them the most – as the beginning of an attack on their nuclear forces and launches some or all of its nuclear missiles against the United States. This and other scenarios must be thought through carefully before mixing nuclear and conventional capabilities on offensive and forward-deployed platforms.

In the best of worlds, making consultation arrangements with Russia and China is good. But accidents and unforeseen events have a nasty habit of happening when they're least expected or least wanted. And if relations deteriorate, as they often do in a crisis, consultation arrangements may not be of much value. Besides, although the conventional Trident is promoted as a prompt weapon against proliferators of weapons of mass destruction, STRATCOM may chose to incorporate the weapon into its main strike plans against Russia and China as well.

Conclusion

When the Cold War began and the Single Integrated Operational Plan (SIOP) was designed in 1960 and started shaping U.S. nuclear policy and international relations, very little information was available in public to assist policy makers and the media in analyzing the benefits and dangers of the plan. Only much later, after the SIOP had been in operation for years, did information about some of its components and the assumptions it was based on gradually reach the public. It soon became clear that “prudent military planning” with little or no oversight had gotten out of hand and on several occasions almost started the nuclear war it was supposed to prevent.

The Global Strike mission is still in its early stages, but it too promises to fundamentally shape U.S. nuclear policy and international relations. Fortunately, as this chronology shows, a considerable amount of information is already available that enables the public to ask questions about Global Strike in a way they were never able to do with the SIOP. Yet because the plan includes a nuclear option, some of the same secrecy that kept the SIOP in the dark for so many years also threatens to impede a debate about the justifications used for incorporating nuclear weapons into Global Strike. While the Pentagon has decided not to classify its plan to deploy 96 conventional warheads on 24 Trident missiles, consider these recent answers from STRATCOM to questions about Global Strike:

Question: Is OPLAN 8044 included in the Global Strike mission?

Answer: As a matter of policy, we do not discuss the nature of any plans.

Question: Is CONPLAN 8022 included in the Global Strike mission?

Answer: As a matter of policy, we do not discuss the nature of any plans.

Question: What are the names and in-effect dates of the various OPLAN 8044 since 2002?

Answer: As a matter of policy, we do not discuss the nature of any plans.

Question: What are the names and in-effect dates of the various CONPLAN 8022 plans issued since 2002?

Answer: As a matter of policy, we do not discuss the nature of any plans.

Because the question of the scope of and assumptions about nuclear weapons use in the Global Strike mission has profound implications for U.S. military strategy and international affairs, it is vital that the Congress, the media, and the public in general get better answers. It is the hope and intention that this chronology will assist them in probing deep into the Global Strike mission.

Global Strike: A Chronology

November 2010: Full Operational Capability planned for the conventional Trident D5 missile.

November 2008: Initial Operational Capability planned for the conventional Trident D5 missile.

December 2006: The Department of Defense is scheduled to award a contract for the Integrated Strategic Planning and Analysis Network (ISPAN) which is used to develop, verify, and produce OPLAN 8044, CONPLAN 8022, and theater support plans.

24 October – 8 November 2006: STRATCOM sponsored Global Strike exercise Global Lightning 07 scheduled.

October 2006 (early FY 2007): The Enhanced Effectiveness (E2) Demonstration Program was scheduled to culminate in a Trident II flight test and provide final demonstration assessment report and recommended transition plan to the Navy and STRATCOM for increasing the accuracy of the W76/Mk4 to GPS-like accuracy. Congress cut funding for E2 in 2004, but the Navy and Lockheed Martin continued the program with other funding.

30 Sep 2006: Joint Functional Component Command for Space and Global Strike (JFCC S&GS) is scheduled to achieve Full Operational Capability (FOC).

April 2006: STRATCOM exercise Global Thunder is scheduled.

13 March 2006: The North Korean news agency (KCNA) says that Pyongyang's "possession and increase of [a] nuclear deterrent is an entirely just self-defensive measure" because of U.S. preemptive planning against North Korea and development of new nuclear weapons.

10 March 2006: Potential targets for the planned conventional Trident II D5 sea-launched ballistic missile might include "an enemy nuclear weapons being prepared for launch or terrorist leaders in an underground facility," a senior defense official told *Inside Defense*. The targets might be located "below the equator" or "in the large land masses of Asia [or] the Middle East [and] all the way up to the Baltics."

The weapon will carry either a concrete slab (nicknamed the slug) for destroying hardened and underground targets or a "flechette" warhead with rods for destroying area targets. The flight-time of the missile would be just 12-24 minutes and could hit targets up to 6,000 miles away with an accuracy of 30 feet.

9 March 2006: The Conventional Trident "can help deter state actors from sponsoring terrorism," a Pentagon spokesperson says. The weapon will be able to hold targets at risk

beyond the range of current conventional systems or those that are heavily defended, he explained, and will provide the capability to defeat threats on short notice without crossing the nuclear threshold. The Conventional Trident “gives the enemy little or no warning before a strike,” he says but adds that the DOD is developing confidence-building measures, such as advanced notification and shared early warning. In addition, DOD can borrow notification procedures from its long history of test launches of dual-role weapon systems.

6 March 2006: The Guardian reports that the U.S. Ambassador to the United Nations, John Bolton, the previous week told a delegation of British parliamentarians: Iran “must know that everything is on the table and they must understand what that means. We can hit different points along the line. You only have to take out one part of their nuclear operation to take the whole thing down.”

25 February 2006: An article in *Iran Daily* says that “the Iranian establishment is also fully aware of CONPLAN 8022-02....”

23 February, 2006: “The consequence of not having perfect intelligence with nuclear weapons is pretty significant,” STRATCOM commander General James Cartwright told *Inside Defense*, “so you don’t use them unless you are absolutely sure.” Yet “getting to absolutely sure is tough in the world that we live in,” especially when there is “minimal time” to make a top-level judgment call, he said. The President may therefore conclude, “Maybe I don’t have it exactly right. Maybe I don’t have perfect intelligence,” Cartwright explained, but the consequence of the President waiting for better intelligence “may be that the next time I locate [a terrorist’s weapon of mass destruction], it is in the United States. And I can’t get there quick enough” to prevent its use, he warned. That’s “not the only scenario,” Cartwright said, but “it shows you, at least, the choice that we’d like to offer to the nation and the National Command Authority is something [other] than just a nuclear response that is ready to go very quickly.”

4 February, 2006: “Nuclear deterrence is just as important today, with multi-national threats to us and our allies, as it ever was in the days of the Cold War,” says Col. Daniel Adams, commander of the 150 Minuteman III ICBMs of the 91st Space Wing at Minot Air Force Base in North Dakota. “It’s an essential ingredient to the calculus of halting the proliferation and possibility use of weapons of mass destruction.”

February 2006: In a briefing to Congress, the Navy states that Conventional Trident Modification “fills unique capability gaps,” “responds to the challenges of the most demanding Global Strike Target Requirements,” and “meets policy objectives with minimal risk.” The briefing shows targets to include mobile missile launchers, exposed ICBMs, airports (WMD shipments), ports (WMD shipments), and surface buildings. Of these, only two (launchers and ICBMs) are time critical targets.

February 2006: The Defense Threat Reduction Threat (DTRA) agency budget request for FY 2007 includes Tunnel Target Defeat Advanced Concept and Technology Demonstration(s) under the Counterforce Project to:

“develop a planning tool that will improve the warfighter’s confidence in selecting the smallest proper nuclear yield necessary to destroy underground facilities while minimizing collateral damage. The focus of the demonstration is to reduce the uncertainties in target characterization and weapon effect/target response. Target characterization uncertainties include those related to determining the target function, layout, operational status, and the geological and geotechnical features. Weapons effects/tunnel response uncertainties are associated with predicting ground shock and tunnel response in layered and jointed media.”

Under the Counterproliferation Warfighter Support Project, DTRA acknowledges that “while complete physical destruction may be desired, for some hard and deeply buried targets this effort isn’t practical with current weapons and employment techniques. It may be possible, however, to deny or disrupt the mission or function of a facility.”

The Counterforce Project also includes the Global Strike Integration Technologies project which “integrates capabilities to characterize, plan, execute and assess limited duration rapid response strikes, against any target, anywhere on the globe, with a variety of weapons.” The Global Strike program will integrate USSTRATCOM, DTRA, and Intelligence Community efforts to “reduce the time required to plan, execute and assess the results of a Global Strike mission.”

February 2006: The Navy’s budget request for FY 2007 includes \$503 million to develop 96 conventional warheads on 24 Trident II D5 missiles with deployment scheduled for 2008. Two conventional missiles will be deployed alongside nuclear armed Trident II D5 missiles on each of 12 operational SSBNs.

31 January 2006: STRATCOM opens the Global Operational Center, a \$35 million upgraded and redesigned underground facility to serve as the command center for STRATCOM’s expanded mission. The upgraded GOC is a central element in the implementation of STRATCOM’s expanded mission, which requires interaction between multiple agencies responsible for missions ranging from defending against computer hackers to executing the strategic nuclear war plans.

29 January 2006: The Air Force Space Command (AFSPC) issues a Prompt Global Strike (PGS) Capability Request For Information (RFI) to government agencies and industry. The RFI contains the following definition on PGS: “no warning - national security demands an immediate response; unambiguous warning – ‘occurs when the President decides, based on intelligence received, that a hostile government [entity] has decided to initiate hostilities.’”

The RFI states that the PGS capability will support the combatant commander's warfighting needs "throughout the conflict spectrum" and:

"...will allow the US to capitalize on advanced standoff systems to achieve desired effects while minimizing effects from adversary anti-access strategies. Additionally, PGS will give the President, Secretary of Defense, and Combatant Commanders the ability to rapidly deny, delay, deceive, disrupt, destroy, exploit or neutralize targets (e.g., command and control nodes; integrated air defenses; and chemical, biological, radiological, and nuclear production/storage/launch facilities) in a timeframe that is reduced from days/weeks to minutes/hours.

Through this PGS capability, which follows publication of the draft PGS Analysis of Alternatives (AoA) Study on 28 October 2005 (see below), the Air Force seeks to "deploy a first-generation, terrestrial based, white-world, non-directed energy, kinetic capability by 2020." The responses to RFI will support AFSPC's role as a leader of the joint (inter-Service) PGS Team established to investigating potential concepts to support the PGS Analysis of Alternatives (AoA) Study. The results of the study will be provided to key decision-makers in anticipation of a future acquisition, the RFI states, "but the government does not anticipate releasing the results." Responses to the RFI are due 14 March 2006.

9 January 2006: STRATCOM says in response to a FOIA request that "CONPLAN 8022-02 has not been completed. Consequently it has not been approved and remains as a 'draft' plan."

2006: Under the Tunnel Target Defeat Advanced Concept and Technology Demonstration(s) (ACTD) program, the Defense Threat Reduction Agency (DTRA) is scheduled to conduct a "full-scale tunnel defeat demonstration using high explosives to simulate a low yield nuclear weapon ground shock environment" at the Nevada Test Site. The Tunnel Target Defeat ACTD is intended to:

"develop a planning tool that will improve the warfighter's confidence in selecting the smallest proper nuclear yield necessary to destroy underground facilities while minimizing collateral damage. The focus of the demonstration is to reduce the uncertainties in target characterization and weapon effect/target response. Target characterization uncertainties include those related to determining the target function, layout, operational status, and the geological and geotechnical features. Weapons effects/tunnel response uncertainties are associated with predicting ground shock and tunnel response in layered and jointed media."

The Tunnel Target Defeat, according to the Pentagon, "provides the means to defeat underground facilities and the threatening assets they protect. To defeat these facilities and the assets they protect, the United States must have the capability to find, characterize, plan, and

attack these facilities and assess the results of such attacks.” Other elements of the Tunnel Target Defeat ACTD program for 2006 include:

- Deliver validated analysis and planning tools to conduct the end-to-end use of **nuclear planning tools** to characterize and "weaponeer" the full-scale Tunnel Target Defeat Advanced Concept and Technology Demonstration(s) (ACTD) event.
- Provide Military Utility Assessment on the overall performance of the Advanced Concept and Technology Demonstration(s) (ACTD) and transition the **updated planning capabilities to USSTRATCOM**.
- Begin transition of improved tunnel ground shock defeat planning tools to USSTRATCOM.

2006: The Defense Threat Reduction Agency (DTRA) is scheduled to provide U.S. Strategic Command with improved nuclear cloud modeling and the “ability to predict the **effects from multiple, simultaneous nuclear weapons detonations**.”

Chronology for 2005

9 December 2005: Nine B52-H bombers conducted a Global Strike alert exercise at Minot Air Force Base in North Dakota. The exercise involved “a rapid launch exercise testing the base’s ability to respond quickly to national directives.”

5 December 2005: Sixteen Senators and Representatives send President George W. Bush a letter in which they express their “strong concern” about the draft U.S. Doctrine for Joint Nuclear Operations. The lawmakers say that the draft doctrine “removes the ambiguity of the previous doctrine, and now suggests that your administration will use nuclear weapons to respond to non-nuclear WMD threats and suggests that this could include pre-emptive nuclear strikes thereby increasing the reliance on nuclear weapons.” The letter states that “this effort to broaden the range of scenarios in which nuclear weapons might be contemplated is unwise and provocative,” constitutes a “drastic shift in U.S. nuclear policy,” and undermine the credibility of U.S. Negative Security Insurances.

2-10 December 2005: The Joint Functional Component Command for Space and Global Strike (JFCC S&GS) participates in Terminal Fury, a PACOM high-level exercise held in Hawaii and onboard the USS Blue Ridge at Yokosuka Naval Base, Japan. The exercise tests the capabilities of PACOM and Joint Task Force 519, a unit created to respond quickly to emergencies in the PACOM AOR. According to a report in *Stars and Stripes*, the objective of the exercise is “to exercise, evaluate, and improve joint coordination, procedures, plans, and systems necessary for conducting contingency operations on little or no notice.”

1 December 2005: STRATCOM publicly declares that Joint Functional Component Command for Space and Global Strike (JFCC S&GS) achieved Initial Operational Capability (IOC) on 18 November 2005.

December 2005: The Department of Defense awards a contract for the Integrated Strategic Planning and Analysis Network (ISPAN) which is used to develop, verify, and produce OPLAN 8044, CONPLAN 8022, and theater support plans.

18 November 2005: The United States and Australia announce after their 2005 Ministerial Consultations (AUSMIN) that they have agreed to a program of United States strategic bombers practicing long-range strike in Australia. According to the Joint Communiqué from the meeting, the Strategic Bomber Training Program includes the following elements:

- The United States is rebalancing its force presence in the Asia-Pacific region, including through the rotation of US strategic bomber aircraft through Guam.

- There are opportunities for Australia-US training to be enhanced through a regular program of visits to Australia by US B-52, B-1 and B-2 aircraft and combined training with the Australian Defence Force.
- This training will be undertaken in northern Australia primarily at the Delamere Air Weapons Range in the Northern Territory and RAAF Base Darwin.

Although the Communique said the Program “continues a long-standing and mutually beneficial combined training and exercising program,” Australian Minister for Defence Robert Hill acknowledged that Australia has not provided support for training to U.S. strategic bombers “for some time.” Hill also added: “And obviously, if they’re coming down to use our bombing ranges, **they won’t be using nuclear weapons.**”

18 November 2005: Joint Functional Component Command for Space and Global Strike (JFCC S&GS) achieves Initial Operational Capability (IOC). According to STRATCOM, IOC was achieved “following a rigorous test of integrated planning and operational execution capabilities during Exercise Global Lightning.” JFCC SGS’s performance during Global Lightning, “demonstrated its preparedness to execute its mission of providing integrated space and global strike capabilities to deter and dissuade aggressors and when directed, defeat adversaries through decisive joint global effects in support of USSTRATCOM missions.”

1-10 November 2005: STRATCOM Exercise Global Lightning 06 is held, a **nuclear weapons exercise** that practices **operations during a trans-/post-attack nuclear environment, including reconstitution, redirection and targeting of STRATCOM forces.** Global Lightning 06 provides nuclear combat readiness, facilitates “USSTRATCOM / JFCC / TF Mission Integration,” and provides “a bridging exercise between nuclear and non-nuclear forces.” The Newly established Joint Functional Component Command for Space and Global Strike (JFCC S&GS) participated in the exercise, which simulated execution of both OPPLAN 8044 and CONPLAN 8022. Global Lightning 06 coincided with STRATCOM exercise Global Storm 06 and both formed part of CJCS Exercise Positive Response.

28 October 2005: The draft Prompt Global Strike (PGS) Analysis of Alternatives (AoA) Study Plan states that PGS “**supports the...Nuclear Response...CONOPS,**” but also that “PGS provides US decision makers a flexible strike capability with effects **short of nuclear destruction.**” The draft study states that PGS capabilities are “directly linked to USSTRATCOM’s **conventional strike capability gap**” and lists the following potential concept types described in the PGS Initial Capability Document (ICD):

- Baseline. The baseline force in the AoA is the President’s Budget FY 06-11. The analysis team references the QDR, DPG, and the Joint Strategic Capabilities Plan to provide insight on determining forces available in scenarios and the doctrine of deployed forces.

- High Speed Strike Systems. This approach requires development/adaptation of a piloted, remotely controlled, or autonomous subsonic/supersonic/hypersonic vehicle (aircraft, sea craft, or missile) to deliver precision standoff or direct attack subsonic/ supersonic/ hypersonic munitions.
- Operationally Responsive Space. An expendable and/or reusable launch vehicle that can deliver precision guided munitions.
- Military Space Plane. A reusable launch vehicle that could directly deliver precision guided munitions.
- Ground or Sea-based Expendable Launch Vehicle. This approach consists of either modification of current space launch vehicles, conversion of **deactivated intercontinental ballistic missiles** or sea-launched ballistic missiles, or building a new launch vehicle to deliver weapon payloads; such as small launch vehicle or **submarine launched intermediate range ballistic missiles**. An advanced reentry vehicle/body; such as, a common aero vehicle could be developed to accompany these missile systems.
- Air-Launched Global Strike System. This concept consists of an aircraft that air-launches Pegasus-like space launch vehicles configured with weapons and/or an aircraft delivering supersonic or hypersonic long-range cruise missiles.

The final set of concepts may be a combination of the concepts described above, or may include concepts not mentioned in the ICD. The final set of alternatives is documented in TDDs.

The draft study states that “PGS gives the President, the Secretary of Defense, and combatant commanders the capability to rapidly strike targets (e.g., command and control nodes; integrated air defenses; and chemical, biological, radiological, and nuclear [CBRN] production/storage/launch facilities) in a time frame that is reduced from days/weeks to minutes/hours regardless of whether there is limited or no warning at all.”

More specifically, PGS targets are selected from the **USSTRATCOM Representative Global Strike Target List, which consists of 115 real-world targets, categorized into seven focus areas.** From these targets, the SPS focuses on high-payoff, time-sensitive targets that may be either fixed or mobile (not moving, but can move) including:

- WMD (e.g., production storage, launch facility, delivery)
- Leadership Elements
- Critical infrastructure (e.g., command and control facilities, communications, power plants, POL storage)
- Counterspace capabilities
- Critical anti-access nodes (e.g., key ships, IADS, etc)
- Airfields, ports, and choke points (Lines of Communication)
- Global War On Terrorism (GWOT) targets, though not technically a target set in itself, may contain target types from various target sets, typically considered high-payoff.

GWOT targets may require time sensitive execution, special intelligence, or limited collateral damage compared to other target types.

- HDBTs (not technically a target set in itself, but typically considered high-payoff and likely hard and deeply buried). Attacking HDBTs present different challenges than surface targets and require a separate category.

In developing Measures of Effectiveness (MOEs), the planners decided to use “capabilities” instead of “mission tasks” because this was “more in line with the Joint and OSD supporting documentation for Global Strike.” The following seven key capabilities (CAPs) were identified to be applied to warfighter objectives in the actual scenarios:

- CAP-1 – Global reach
- CAP-2 – Prompt execution
- CAP-3 – Multi-theater execution (robustness)
- CAP-4 – Survivability and reliability (weapon and delivery system)
- CAP-5 – High-payoff target defeat
- CAP-6 – Interoperability (linkage to C4ISR, etc)
- CAP-7 – Precision effects

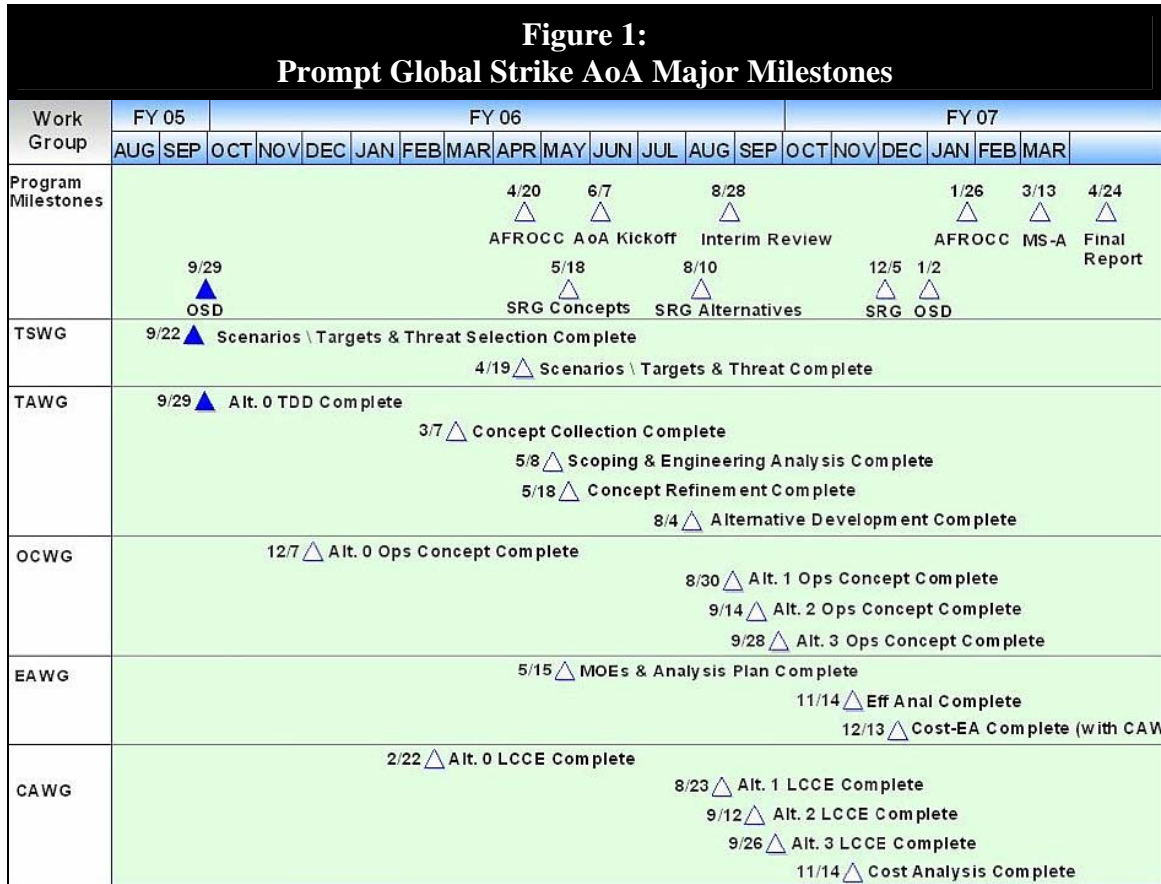
Global Reach is identified as “anywhere on the globe” and the Measure of Effectiveness (MOE) for this capability is defined as the “Percentage of identified targets ranged in each of the USSTRATCOM global strike mission focus areas. This MOE pertains to the number of targets that can be struck as a percentage of the target base in a given global strike mission focus area. The [measures of performance] for this area would include range, overflight, time of flight, and targets held at risk.”

The effectiveness of the Prompt Execution capability is determined by the “earliest time to engage,” the time “in minutes” from execution order to impact, and the ability to retarget the weapon after an initial decision has been made to execute an option. Moreover, the PGS system must be capable of being targeted and executed against multiple theaters simultaneously.

The PGA AoA study itself is developed by a Working-level Integrated Product Team (WIPT) headed by AFSPC and consists of five working groups: Threats and Scenarios Working Group (TSWG); Technology and Alternatives Working Group (TAWG); Operations Concepts Working Group (OCWG); Effectiveness Analysis Working Group (EAWG); and Cost Analysis Working Group (CAWG). The Effectiveness Analysis Working Group analyses broad system capability such as global range, promptness, and payload accuracy. For the milestone schedule of the working groups see Figure 1.

November 2005: The Joint Chiefs of Staff cancel revision of Doctrine for Joint Nuclear Operations (JP 3-12) in reaction to public exposure of the draft. The decision also canceled the existing version (published in December 1995) and Doctrine for Joint Theater Nuclear

Operations (JP 3-12.1) from February 1996). A Joint Staff official said that the “visibility led a lot of people to question why we have” the documents.



21 October 2005: The Joint Communiqué from the 37th Security Consultative Meeting between the United States and South Korea states that "Secretary Rumsfeld reaffirmed the U.S. commitment to...the continued provision of a nuclear umbrella for [South Korea], consistent with the Mutual Defense Treaty." In reaffirming the nuclear umbrella, the two countries notes "North Korea's continued development of WMD, and long-range missiles," and pledge that "a solid combined defense posture should be maintained in order to secure peace and stability on the Korean Peninsula and in Northeast Asia." The communiqué states that the ROK-U.S. combined force capability "remains at peak readiness."

19-25 September: The Joint Functional Component Command for Space and Global Strike (JFCC S&GS) participated in operation Able Warrior, a SOCOM global war on terrorism exercise.

19 September 2005: The United States affirms in the Joint Statement of the Fourth Round of the Six-Party Talks that “it has no nuclear weapons on the Korean Peninsula and **has no intention to attack...the DPRK with nuclear...weapons.**”

9 August 2005: STRATCOM formally activates the Joint Functional Component Command for Space and Global Strike (JFCC S&GS) at Offutt Air Force Base. JFCC S&GS is the first of four operational-level joint functional component commands (JFCC) tasked to execute the new missions assigned to STRATCOM by the Unified Command Plan Change 2 from 2003.

JFCC S&GS is tasked to provide “integrated space and global strike capabilities to deter and dissuade aggressors and when directed, defeat adversaries through decisive joint global effects in support of USSTRATCOM global missions.” The new command’s primary effort is to “integrate all USSTRATCOM global capabilities supporting the combatant commanders around the world with the full spectrum of military effects.” The mission tasks are:

- Global Strike Planning and Operations
 - Provide **deliberate and adaptive planning for kinetic (nuclear** and conventional) and non-kinetic (e.g. information warfare and space) capabilities
 - Provide rapid Course Of Action (COA) development capabilities
 - Execution capability only when directed
- Joint Space Operations
 - Plan and execute day—to-day military space operations
 - Exercise OPCON of DoD manned spaceflight support functions
 - Provide missile warning and NORAD support
- Mission Integration and Synchronization
 - Create a framework to share information, integrate effects, and synchronize ongoing operations among mission partners

According to STRATCOM, JFCC S&GS “optimizes operational-level planning, execution, and force management for the USSTRATCOM mission of deterring attacks against the United States.” JFCC S&GS “integrates all elements of military power in collaboration with all USSTRATCOM components, National Agencies, and other combatant commands to support or execute space and global strike operations.”

At the JFCC S&GS activation ceremony, STRATCOM commander general James Cartwright said that JFCC S&GS will help to shape the new forms of deterrence that emerged since the ending of the Cold War. This includes kinetic (nuclear and conventional) and non-kinetic (e.g. information warfare and space) capabilities, “and trying to bring all of those pieces together to what will become deterrence, those things that will keep our adversaries at bay **whether they are nation states, like the former Soviet Union was, or whether they are as simple as a terrorist,** and trying to deter a terrorist from coming to our soil, that is what Global Strike and Space is at the

heart of,” Cartwright said, “trying to bring that **new kind of deterrence** to the fore, trying to find the ways to keep this country safe.”

The first JFCC S&GS commander, Air Force Lt. Gen. Bruce Carlsen, explained: “We’re involved in ongoing operations, building OPORD’ers, and building capabilities to attack and defend against our enemies.”

The new JFCC S&GS commander, Air Force Lt. Gen. Kevin P. Chilton, explained that integration of capabilities was key to making the new deterrent credible. Through integration of capabilities, by making “them an invincible whole...we will be able to design a more integrated and powerful effect **across the spectrum of warfare.**”

According to STRATCOM, the formal activation of JFCC S&GS “marks an important step in the continued strengthening of the nation’s efforts to defeat global terrorism, prevent the proliferation of weapons of mass destruction and provide a continued nuclear deterrent.”

JFCC S&GS was established on 10 January 2005. At stand-up, the JFCC S&GS organization had 270 personnel but is projected to grow to more than 400 by the end of 2006. Unlike the other JFCCs, however, JFCC S&GS headquarters is co-located with USSTRATCOM headquarters at Offutt Air Force Base. The JFCC S&GS commander oversees the following military organizations around the nation:

- The Joint Space Operations Center at Vandenberg Air Force Base, Calif., to direct day-to-day planning and execution of assigned military space forces.
- The Air Operations Center at Barksdale Air Force Base, La., which supports JFCC-SGS with critical planning expertise to develop fully integrated global strike course-of-actions across the spectrum of joint operations for both deliberate and time sensitive planning tasks and assist in executing missions as directed.
- The Cruise Missile Support Activities, in Norfolk, Va., and Camp Smith, Hawaii, for Navy Tomahawk cruise missile planning capabilities.
- The Department of Defense Manned Space Flight Support Office, at Patrick Air Force Base, Fla., for coordination of military support for manned United States space flight operations.
- In addition, the Joint Information Operations Center in San Antonio, Texas, is available to deliver information operations expertise for planning and execution.

August 2005: STRATCOM exercise Global Storm 05.

17 June 2005: The *Pacific Daily News* reports that the Pentagon is considering basing a Global Strike force at Anderson Air Force Base. Air Force officials said they were preparing to put together an Environmental Impact Statement report for some 2,400 additional personnel and

three unmanned aerial surveillance and reconnaissance aircraft, refueling aircraft, and rotating fighter and bomber aircraft.

8 June 2005: South Korean Defense Minister Yoon Kwang-ung says it would be impossible for the United States to conduct a preemptive attack against North Korea without the consent of South Korea. According to South Korean media reports, Yoon stresses that any military action against the North will be conducted based on an agreement between the two allies. He expresses doubt about U.S. contingency plan (CONPLAN) 8022: “I haven’t been briefed on CONPLAN 8022 yet and I am not sure about the existence of the contingency plan.”

June 2005: A senior Navy official says that U.S. SSBNs are currently tasked under CONPLAN 8022. Although both nuclear and conventional reentry vehicles are flown on each SLBM test launch, the SSBNs do not deploy with a mixed payload and are only nuclear tasked under CONPLAN 8022.

25 May 2005: The North Korean News Agency (KCNA) quotes the *Rodong Sinmun* criticizing CONPLAN 8022:

“It is behind the smokescreen of the ‘diplomatic solution’ that the U.S. is rounding off its preparations to stage a preemptive attack and a nuclear war against the DPRK any moment. The U.S. bellicose forces’ ambition to stifle the DPRK through preemptive nuclear attacks is getting more serious and dangerous as the days go by. They are sadly mistaken if they calculate they can frighten the DPRK with the ‘OPLAN 8022-02’ to achieve their aggressive aim.”

20 May 2005: The draft Statement of Objectives for the Strategic War Planning System (SWPS) Nuclear Posture Review (NPR) Modernization contract outlines STRATCOM’s future objectives to provide the President with “an increasing set of options to support our national strategic objectives.” The 10-year modernization plan involves transforming the SWPS (aka the Integrated Strategic Planning and Analysis Network (ISPAN)) infrastructure to increase its flexibility, functionality and speed, and support new mission areas such as Global Strike, incorporating planning for conventional weapons. ISPAN is used to develop, verify, and produce OPLAN 8044, CONPLAN 8022, and theater support plans. When completed, the modernized SWPS will be used for deliberate, adaptive, and crisis planning for offensive nuclear, conventional, and information operations. Modernization will first address the nuclear options.

Elements of SWPS modernization to implement the 2001 NPR include:

- greater target complexity
- increase in the number of threat countries
- increase in the number of potential options

- greater flexibility in the number of nuclear weapons contemplated (options from one nuclear weapon to 2,500)

Modernization includes not only implementation of “a revolutionary new optimization function” to allow for **the rapid building of military options**, but also for new decision support capabilities to help the President and Secretary of Defense to choose from the increasing number of options being designed.

The modernized SWPS will be capable of maintaining both national (strategic) and theater (regional) strike plans. Planners will be able to produce more than one plan at a time, and produce a single plan comprising multiple nested sub-plans based on rule-sets and criteria selected by the planner. The SWPS will support the development of “pre-built” sub-plans (i.e., specific or generic scenarios), and then allow those options to be incorporated into larger war plans taking into account the effects of other plans (e.g., weapon reuse in “higher” nested plans). Planners will also be able to build a base plan “around” pre-built adaptive options or decide to develop entirely new adaptive plans (new contingencies). Nuclear and global strike planning will be possible from both fixed and mobile locations.

According Lockheed Martin, one of the two SWPS contractors:

“The system will assess a given situation and present DOD decision-makers with potential courses of action. For each option, the war planning system will determine the probability of success, potential collateral damage, timing and other details. Military officials can then execute one of the options, or change the planning parameters to see a new set of options based on different requirements.”

Because SWPS was developed as a “deliberate planning system,” its current capability cannot sufficiently handle the improved speed of available surveillance, intelligence collection, and analyses, the Statement of Objectives says. Nor is the current system capable of utilizing a range of other U.S. capabilities. The Statement of Work (SOW) for SWPS (ISPAN) modernization states:

“The new planning system will transform as USSTRATCOM’s missions are matured, new systems are developed, and the threat changes. The new planning system must be innovative in its openness, flexibility, scalability, and extensibility so it can incorporate and develop tools to support the production of assigned OPLANS, to include OPLAN 8044; Theater Planning and **Global Strike Support Documents**; new UCP [Unified Command Plan] tasking and related products. The new planning system must advance USSTRATCOM's adaptive and collaborative planning capabilities to support UCP missions including Strategic Deterrence (nuclear, conventional, and non-kinetic); **Global Strike**; Information Operations (IO); IMD [integrated missile defense]; Space Operations; global Intelligence, Surveillance, and Reconnaissance (ISR); and other advanced strategic

missions as they are defined. It must support the capability to interface USSTRATCOM with other parties (national leadership, other combatant commanders, intelligence and system acquisition) via the modernized DOD global C2 addressed in other parts of the SCM and via the C2 Modernization program at USSTRATCOM.”

Specific new planning and analysis system objectives for the SWPS (ISPAN) modernization are:

- “Support the evolving nuclear war-planning mission. The new planning system must continue to provide the national leadership with a national nuclear war plan that fully supports national objectives, as it has for the past 30 years. The system must continue to be updated to meet evolving national guidance and objectives, and modifications resulting from the new planning system must not adversely impact the command’s ability to create the national nuclear war plan.
- Continue the current theater-support planning mission. USSTRATCOM must meet its commitment to the Regional and Functional Combatant Commanders’ strategic and WMD planning needs.
- Transform ISPAN, as a subset of the overall evolving global command and control (C2) USSTRATCOM mission. This will be accomplished by changing the ISPAN architecture from a federated-systems concept to a system-of-systems concept. The objective is an innovative, open, flexible, scalable and extensible war planning architecture to support USSTRATCOM’s changing and increasing missions. As migration occurs, the software architecture shall achieve integrated Information Assurance and be designed with the goal of eventual full DOD Network-Centric Enterprise Services (NCES) and Global Information Grid Enterprise Services (GIG ES) compliance.
- Support new mission areas and incorporate the strategic planning of conventional and emerging non-kinetic strike systems. New capabilities must be added to the existing system to enable creation of integrated plans in the compressed timelines directed. These capabilities will be integrated into the new architecture. The initial capabilities identified include an executive/workflow management function, an optimization function, a decision support services function, and an effects-based planning function.
- Provide Systems Engineering, Architecture, and Integration (SEA&I) support to the government program office, through the Systems IPT, in order to effectively integrate newly developed software, the extant product line, the ISPAN legacy applications, and external software tools/programs, to include USSTRATCOM C2 software.
- Establish management processes that will allow USSTRATCOM to evaluate impacts to cost, schedule and performance in both the baseline and development environment resulting from evolving requirements. These management processes will link together cost, schedule and requirements so USSTRATCOM will be able to examine changes to priorities and analyze impacts of these changes with minimal contractor involvement, prior to initiating formal change processes.

- Ensure operators and maintainers obtain appropriate training to ensure the system can be utilized to its full capability.”

The modernization will take place in three phases: Phase I runs through FY 2007 (30 September 2007); Phase II begins 1 October 2006 and run through FY 2009 (30 September 2009); Phase III begins 1 October 2008 and runs through FY 2011 (30 September 2011).

19 May 2005: The North Korean Committee for the Peaceful Reunification of the Fatherland issues a statement condemning CONPLAN 8022 as provocative and showing that the United States “would invent a pretext of a certain ‘sign’ any moment to mount a preemptive nuclear attack on the DPRK....” The statement says that CONPLAN 8022 justifies North Korea’s nuclear deterrent:

“It is only too natural for the DPRK to increase its self-defensive nuclear deterrent to defend the dignity and security of the nation under the condition that the U.S. has worked out even a plan for a preemptive nuclear attack on the DPRK in top secrecy.”

17 May 2005: The Defense Information System Agency (DISA) briefing *GIG Enterprise Services Engineering – Industry Forecast* lists Global Strike Mission Planning as the task for the Global Information Grid (GIG). The capabilities of the GIG are listed as:

- A single secure Grid providing seamless end-to-end capabilities to all warfighting, national security and support users Supporting DOD and IC requirements from peacetime business support through all levels of conflict.
- Joint, high capacity netted operations fused with weapons systems.
- Supporting strategic, operational, tactical, and base/post/camp/station levels.
- “Plug and Play” interoperability,
 - Guaranteed for US and Allied.
 - Connectivity for Coalition users.
- Tactical and functional fusion a reality.
- Information/Bandwidth on demand.
- Defense-in-Depth against all threats.

15 May 2005: CONPLAN 8022 is described in public for the first time in the *Washington Post* article “Not Just a Last Resort?” by William M. Arkin:

“CONPLAN 8022 anticipates two different scenarios. The first is a response to a specific and imminent nuclear threat, say in North Korea. A quick-reaction, highly choreographed strike would combine pinpoint bombing with electronic warfare and cyberattacks to disable a North Korean response, with commandos operating deep in enemy territory, perhaps even to take possession of the nuclear device.

The second scenario involves a more generic attack on an adversary's WMD infrastructure. Assume, for argument's sake, that Iran announces it is mounting a crash program to build a nuclear weapon. A multidimensional bombing (kinetic) and cyberwarfare (non-kinetic) attack might seek to destroy Iran's program, and special forces would be deployed to disable or isolate underground facilities.

By employing all of the tricks in the U.S. arsenal to immobilize an enemy country – turning off the electricity, jamming and spoofing radars and communications, penetrating computer networks and garbling electronic commands – global strike magnifies the impact of bombing by eliminating the need to physically destroy targets that have been disabled by other means.

The inclusion, therefore, of a nuclear weapons option in CONPLAN 8022 – a specially configured earth-penetrating bomb to destroy deeply buried facilities, if any exist – is particularly disconcerting. The global strike plan holds the nuclear option in reserve if intelligence suggests an 'imminent' launch of an enemy nuclear strike on the United States or if there is a need to destroy hard-to-reach targets.”

6 May 2005: STRATCOM publishes Concept of Operations (CONOPS) to outline operational capabilities and requirements for Joint Functional Component Command Space and Global Strike (JFCC SGS). The document also outlines organization for space and global strike planning and execution, describes “how JFCC SGS leads integration of USSTRATCOM operational capabilities” and supports day-to-day activities within USSTRATCOM. Finally, the CONOPS describes the expertise required for preparation of companion CONOPS, standard operating procedures, space and global strike annexes, implementation plans, and tactics, techniques and procedures.

The JFCC SGS Commander's Intent document, which is embedded in the CONOPS, describes that the purpose of JFCC SGS is to:

- a) Gain and maintain both global and theater space superiority and deliver tailored, integrated, full-spectrum space support to the theater commander, while maintaining a robust defensive global counter-space posture.
- b) Lead day-to-day planning and integration efforts, and deliver joint global strike effects through deliberate, adaptive, and crisis planning, force integration, and robust command and control (C2) to support global deterrence, theater and national objectives.

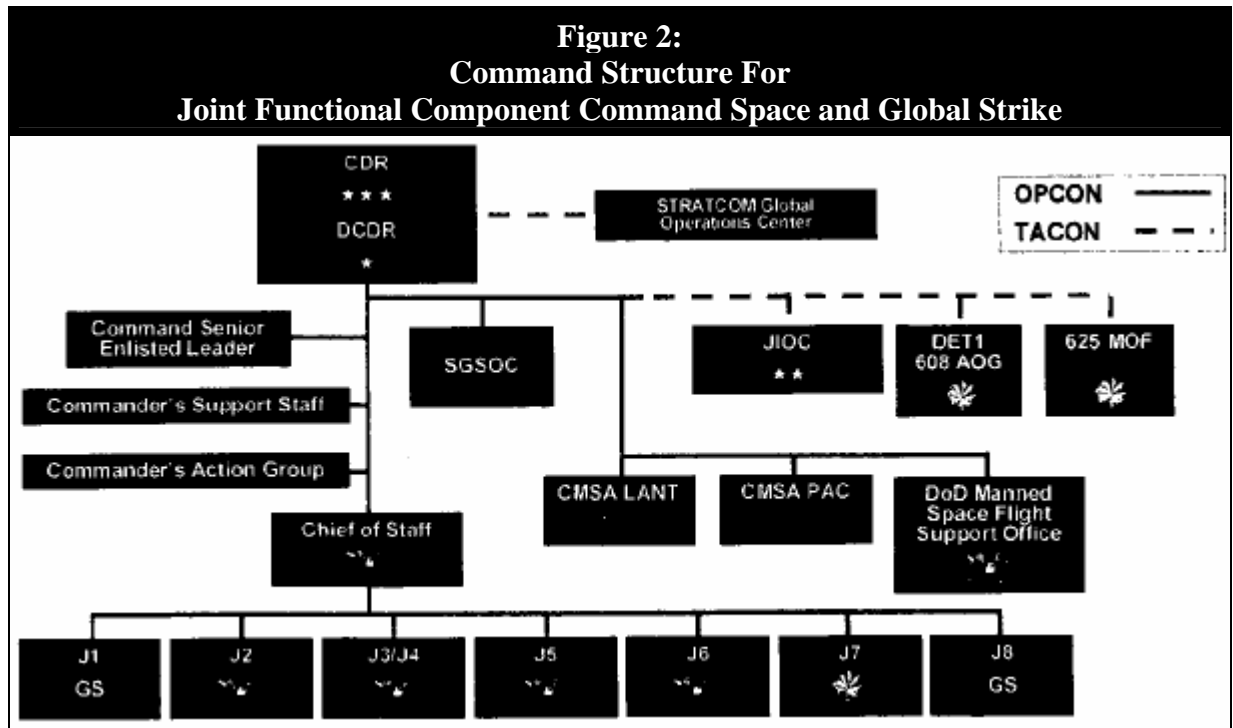
JFCC SGS tasks include providing “operational and tactical execution capability on short notice with the ability to operate 24/7 as defined in the Global Strike Interim Capability Operations Order and fulfill relevant execution responsibility under USSTRATCOM **OPLAN 8044**.” Specific tasks include:

- a) Support the coordination of operational logistical requirements of USSTRATCOM supported plans, to include operational logistic support to nuclear forces.
- b) Integrate capabilities, via the Global Operations Center, to support HQ USSTRATCOM responsibilities for nuclear force command and control and nuclear force execution.
- c) Support USSTRATCOM-led efforts to create and maintain strategic-level OPLANs. Support development and coordination of OPLANs, CONPLANs, FUNCPLANs, and SUPPLANs as directed by HQ USSTRATCOM. Support other combatant commands with space and global strike operational planning and execution, as directed by HQ USSTRATCOM.
- d) Assume OPCON (Operational Control) and TACON (Tactical Control) of global strike forces (kinetic and non-kinetic), as directed. This includes monitoring the status and readiness of nuclear forces through existing Service task forces via the Global Operations Center.
- e) Maintain coordination with geographic and functional combatant commanders to support ongoing and future operational requirements for USSTRATCOM Space and Global Strike capabilities.

The focus of JFCC SGS will be to provide operational to tactical level planning, produce fully integrated, approved COAs and plans, facilitate full spectrum operational integration, provide command and control for space and global strike missions and when directed, other USSTRATCOM assigned missions. For operational and execution matters, and for adaptive planning and time sensitive planning, the JFCC SGS will serve as the lead integrating JFCC for HQ USSTRATCOM. See Figure 2 for JFCC SGS command structure.

The J3/J4 Operations and Logistics Directorate maintains continuous global situation awareness, through the Global Operations Center, of space and global events and “day-to-day management of nuclear forces.” JFCC SGS J3/J4 also supports the coordination of operational logistic support to nuclear forces, provides Consequence of Execution (COE) analysis support to “pre-OPLAN 8044 activities,” and provides Consequence Management (CM) for “trans- and post-OPLAN 8044 activities.”

The J5 Plans and Integration Directorate delivers the 8044 Revision (formerly the SIOP) Plan. The Directorate consists of seven sub-divisions: Plans, Target Selection, Weaponing, Applications, Metrics & Assessments, Plans Support, and Plans Integration. Among these, the Target Selection Division (J52) develops operational and tactical targeting solutions for the OPLAN 8044 Revision (formerly SIOP) process. The Applications Division (J54) conducts “level 4 OPLAN 8044 Revision process and GS [Global Strike] planning and integration, producing and maintaining the 8044 Revision and GS targeting.” The Metrics and Assessments Division (J55) provides tactics and threat review for level 3 and 4 planning supporting kinetic and non-kinetic effects and analyses OPLAN 8044. The Plans Support Division (J56) provides systems management of the Integrated Strategic Planning Analysis Network (ISPAN, formerly

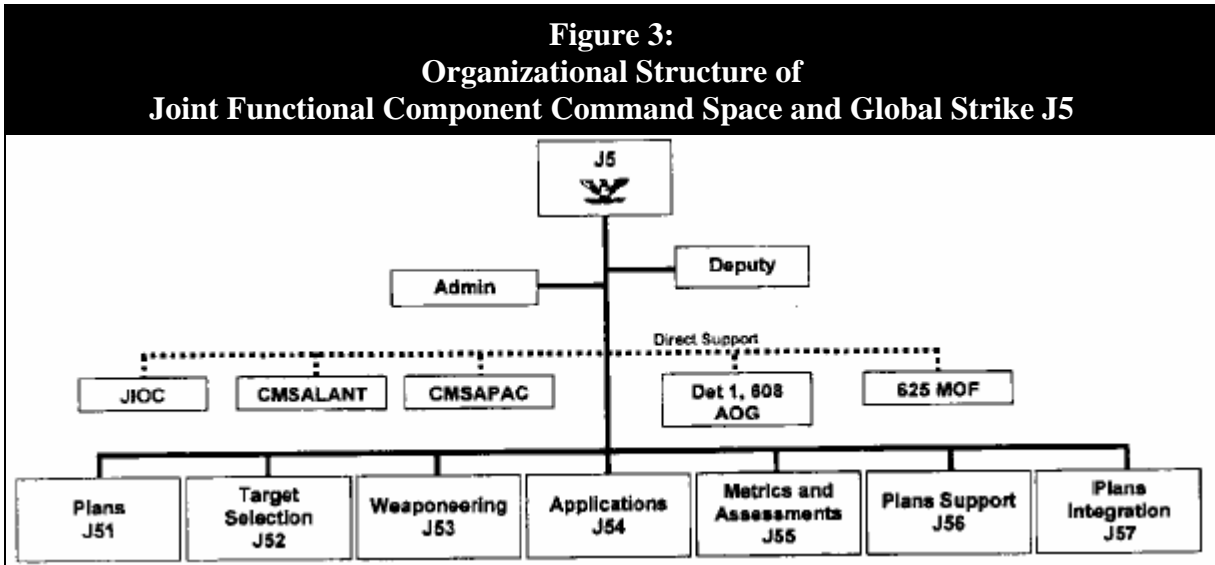


SWPS, Strategic War Planning System), the single planning network used to design OPLAN 8044 and CONPLAN 8022, and also produces and maintains the ISPAN Enterprise Data Base (EDB) which contains the targets for OPLAN 8044 and CONPLAN 8022

The central role and considerable scope of JFCC SGS in all nuclear strike planning – not just that supporting Global Strike and CONPLAN 8022 – is evident from the list of deliverables produced by J5 (see Figure 3 for organization structure of J5). This includes:

- a) The OPLAN 8044 Revision Plan and required updates in coordination with the Joint Staff, OSD, and HQ USSTRATCOM.
- b) Data updates to the Chairman of the Joint Chiefs of Staff Nuclear Decision Handbook for the President, in coordination with HQ USSTRATCOM J38.
- c) Global Strike target materials including Global Strike Support Documents (GSSDs), GS targeting databases, and target folders across the full spectrum of options based on politico-military environment. Develops intelligence indicators in coordination with JFCC SGS J2 and JFCC SGS J3/J4 to be monitored by the GOC to enhance crisis action responsibilities.
- d) The National Target Base, the repository for all global strike targets.
- e) Recommended target lists for OPLAN 8044, to HQ USSTRATCOM Joint Targeting Coordination Board for approval as directed.

- f) JFCC SGS integrated input to USSTRATCOM's Strategic Support Plan.
- g) Integrated planning annexes and materials, as required.



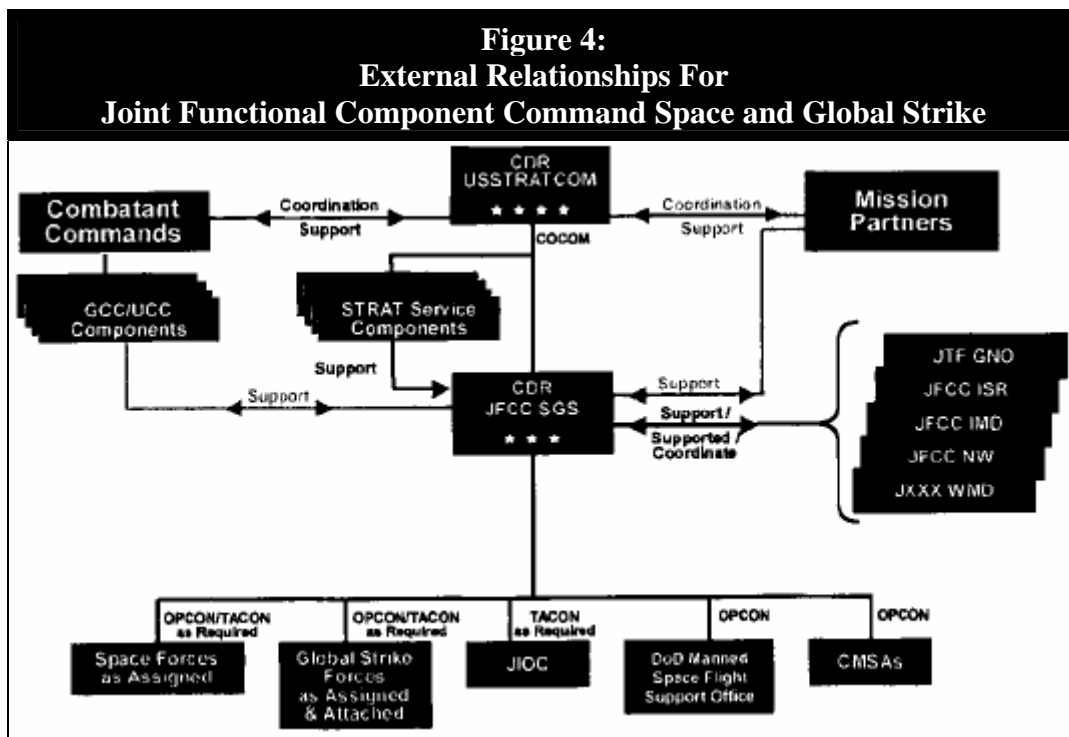
Despite the considerable nuclear tasks assigned to JFCC SGS, CDRUSSTRATCOM retains planning and force execution responsibility for the nuclear mission at STRATCOM Headquarters.

External units that directly support JFCC SGS include the Navy's Cruise Missile Support Agencies (CMSAs) in Virginia and Hawaii for Tomahawk land-attack mission planning, the Air Force's 625 MOF (Missile Operations Flight) at Offutt AFB for ICBM target analysis, and Detachment 1 of the Air Force's 608 AOG (Air Operations Group) at Offutt AFB. Other direct supporting units include the Joint Space Operations Center at Vandenberg Air Force Base, California for direct day-to-day planning and execution of assigned military space forces. Also, the Air Operations Center at Barksdale Air Force Base in Louisiana supports JFCC SGS with critical planning expertise to develop fully integrated global strike course-of-actions (COAs) across the spectrum of joint operations for both deliberate and time sensitive planning tasks and assist in executing missions as directed. Finally, J5 also coordinates directly with the operational units and United Kingdom Ministry of Defence. See Figure 4 for external relationships for JFCC SGS.

28 April 2005: STRATCOM commander Gen. James E. Cartwright says in an interview with *Inside the Pentagon* that strategic delivery vehicles can be made a lot more precise but that advanced accurate conventional strategic weapons will not eliminate the need for nuclear weapons. "It's more than just precision; I can't generate enough [conventional explosive] energy for some of these targets to destroy them. So I'm not leading you down a path that I can get rid of nuclear weapons." With reference to the debate over reducing the yield of warheads,

Cartwright stated: “My priority is not reduced yield. It’s to take the accuracy to the point where conventional can substitute for nuclear. That’s my first priority. My second point is: If I can’t get more precise or the energy is just not enough for the conventional explosion [to destroy targets in the nuclear war plan], then again we can go to the lower yield discussion.”

The *Inside the Pentagon* article cites an unidentified “industry source” saying that there “are a significant number of targets that are programmed to be struck with nuclear weapons that we believe can be killed with conventional weapons.” Cartwright says he has asked the Navy, Sandia National Laboratories, and Lockheed Martin to define the parameters of a study that will examine what percentage of targets in the nuclear war plans could be held at risk with less energy if precision delivery systems and warheads are improved.



27 April 2005: In his prepared statement for the Senate Appropriations Committee, CJCS Gen. Richard B. Myers states:

“Within DOD, the SecDef has tasked the US Strategic Command to synchronize our efforts to counter WMD and ensure the force structure and the resources are in place to help all combatant commands defeat WMD.... STRATCOM has revised our strategic deterrence and response plan that became effective in the fall of 2004. This revised, detailed plan provides more flexible options to assure allies, and dissuade, deter, and if necessary, defeat adversaries in a wider range of contingencies.”

18 April 2005: During a hearing before the Senate Armed Services Committee, STRATCOM commander General James E. Cartwright explains the purpose of Global Strike and the capabilities needed to implement the option.

Sen. Sessions: How do you share – how would you explain to us a Global Strike concept? How do you utilize that, what the president and secretary of Defense would like to see? And how are you getting along toward achieving it?

Cartwright: Global Strike is one of our mission areas. It provides to the nation the ability to rapidly plan and rapidly deliver effect to any place on the globe. It allows us to provide effect for a regional combatant commander, if that's appropriate. Say, in the case of Central Command, General Abizaid allows us to provide a strategic capability which, again, is not necessarily nuclear, for that regional combatant commander, to tailor it for his target and deliver it very quickly with very short timelines on the planning and delivery, any place on the face of the earth.

Sen. Sessions: Is that possible? Can we – do we have the technology that's available today that – if you had the money, that you could, within a short period of time, deliver a conventional weapon anywhere in the world?

Cartwright: Even with the money right now, we have technical challenges that we have to overcome in order to get this capability. If we're talking about non-kinetic, we can move pretty much anyplace on the earth at the speed of light in cyber type capabilities. But the conventional type capabilities and the nuclear type capabilities, nuclear right now is delivered in our missiles at very high speeds, at very long ranges. Our bombers have very long ranges, not quite the speeds.

But trying to pull those attributes together with both conventional and nuclear kinetic effects is a little bit of what we're trying to work at in the Global Strike arena. But it is much broader. It encompasses both the ability to plan rapidly, to apply the precision to the intelligence and gather that intelligence in a very rapid manner, and then to apply that intelligence to the target and understand the effect we want to create. All of those are part and parcel to then delivering the weapon, so we've got to get it all. One part of this is not enough.

Sen. Sessions: That's the joint strike capability you're working on?

Cartwright: The Global Strike? Yes, sir.

Sen. Sessions: And what about cost of that? Where are we on funding? Do you have adequate funding to achieve what you're seeking?

Cartwright: I believe that we do. I'm trying to make sure I can stay at the right classification level here. But I'm comfortable that the areas that we are looking at for feasibility, to ensure that we can deliver this capability, both on the intelligence side of the equation, the delivery side of the equation, and the weapons side of the equation, that we have sufficient latitude and resource to go investigate what is feasible, what gives you great leverage, and then if it is a new thing, the opportunity to come back and advocate for something new. If it is just a different use of a current capability, the ability to put the pieces together, connect the dots, so to speak, and provide that capability.

Sen. Sessions: But in terms of explosive power, a nuclear weapon on a missile, for example, would have far more explosive power than a conventional munition would?

Cartwright: yes, sir. But, again, if it –

Sen. Sessions: I would say it does, but the point is that a conventional munition might not be sufficient under certain circumstances.

Cartwright: Under certain circumstances. And there are circumstances in which that is the case.

Sen. Sessions: With regard to the hard and deeply buried targets, I know a number of our adversaries are proud of their tunneling ability and have worked hard to place deep in the ground and in mountains and other areas their strategic capability. Would you explain, General Cartwright, what your concerns are in that regard? What you feel like is -- we need to be capable of neutralizing that capability that our adversaries have. I would just note parenthetically that it's the history of warfare that if someone feels threatened in one capability, they figure out a way to make it not threatened, to eliminate that threat. And burrowing into the ground is a way to do that.

And also it would be historically -- so that if we want to be able to prevail in a conflict, that we would be able to confront that challenge. So are we there? Is a study of the capabilities of Deep Earth Penetrator, in your opinion, justified to see if something like that is feasible? And do you support it and why?

Cartwright: Yes, sir. First, I would say that **this target set of buried and deeply buried and hardened targets is a very real target set and that it is growing.**

And, as you say, if an enemy has a capability that they want to protect, they generally move towards some way to disguise, deceive us about its capability and its location to thwart our targeting and our weapons capabilities. Oftentimes they go to mobility, sometimes they go to cover, sometimes they bury deeply.

Clearly, the hardened, deeply buried targets that go very deep into the earth, using commercial capabilities, is a target set that we want to understand better, both what is it that they're trying to accomplish, what is it that they're trying to put in these bunkers, and then to what extent can we hold those capabilities at risk? We are exploring as many different avenues of approach to understanding this target set and holding it at risk as we can come up with. Again, it will probably not be solved by one weapon or one approach. We're going to have to understand the intelligence necessary to locate and understand what goes on in these bunkers. We're going to have to have multiple ways by which we can hold them at risk. We are working our way through that right now.

The Robust Nuclear Earth Penetrator is one of several capabilities that I think will be necessary. Whether it is a nuclear capability or whether we have other capabilities is the work that's being done in the study, but that study has implications far beyond just the nuclear solution to this. In characterizing the facilities, in characterizing the effect that can be brought by a weapon against those facilities, whether it be kinetic or non-kinetic, and in the different types of training for our forces to hold these facilities at risk. So it is a multi-faceted problem which we're trying to get our arms around. We have a reasonable base of experience for a large amount of this target set, but as it gets more sophisticated, we have to keep improving our capability.

Sen. Sessions: General Cartwright, the Common Aero Vehicle is a vehicle that, if developed, could lift in low orbit a munition or lift other items, UAVs or other things, into low orbit and back into the United States – back into the world. Is that – we prohibited funding on that, I believe, previously, the Congress did. Awaiting the – you're dealing with the concern that this might be mistaken as some sort of attack on, for example, Russia. In other words, they have the capability of identifying a launch. They might think it would be a launch against them of maybe a nuclear warhead. And we wanted to be sure that there could be no misunderstanding in that before we authorized going forward with this vehicle. What can you tell us about the status of Common Aero Vehicle?

Cartwright: First, let me go to the attributes that we're looking at in the system. And those are the attributes, as we talked about earlier in Global Strike, of being able to hold targets at risk at great distances and very short periods of time. Now, it could be hold at risk in the sensor standpoint, it could be hold at risk in a weapons standpoint. There's many uses, as you alluded to, for a platform that could go into low-Earth orbit and quickly get around the world. And associated with that is the responsive lift that would get there -- that would allow it to get there.

We are studying that.

I think I would turn to my Air Force -- General Burg back here as to the details of the resources associated with it since the moratorium was put on it. I'm not sure of where we are this year exactly in our request. What we're trying to understand is, in Global Strike, what are the options of **moving capability very quickly around the world**, both in the planning, the intelligence and the delivery, and how can we do that and what feasibility is there in using space, in moving through the air, in other methods of delivery, cyber, et cetera. And this is just one of several areas that we're investigating."

8 April 2005: DOD announces that the commander of the strategic nuclear submarine force in the Pacific, Rear Adm. (lower half) Melvin G. Williams, is appointed Deputy Commander, STRATCOM Joint Functional Component Command for Space and Global Strike.

4 April 2005: The Air Force states in a contracting request for information (RFI) that the new "F/A-22 is a critical component of the Global Strike Task Force that is designed to project air dominance, rapidly and at great distances, to counter and defeat threats that will attempt to deny access to [U.S.] forces."

1 April 2005: The Terms of Reference (TOR) for the Defense Science Board Task Force on Nuclear Capabilities states that although the Nuclear Posture Review (NPR) articulated a new multi-level Triad whereby conventional and defensive capabilities reduced reliance on nuclear weapons, "there are [with the exception of deploying a rudimentary missile defense program] few programs to convert the NPR vision to reality." The TOR tasks the DSB to assess progress of NPR implementation, examine manufacturing of simpler warheads that are also simpler to maintain, and tasks the Task Force to examine plans to "transform the nuclear weapons production complex to provide a capability to **respond promptly to changes in the threat environment with new designs or designs evolved with previously tested nuclear components.**"

April 2005: STRATCOM exercise Global Thunder 05 exercise.

28 March 2005: An Air Force briefing *The Space AOC And The Global War On Terror* defines the Concept of Operations for Prompt Global Strike as "Strike through, **from**, to, & **in** space" using ICBMs and the CAV (Common Arial Vehicle). The briefing states that on of the challenges of using the current force structure in Global Strike is that the "tactical relevance from strategic systems is difficult [because] some systems require detailed planning."

25 March 2005: The JCS Joint Capabilities Board (JCB) is briefed on the capability-based assessment for Global Strike.

18 March 2005: During a Pentagon press briefing regarding the new National Military Strategy, Under Secretary of Defense for Policy Douglas Feith stresses that "the term 'preventive' is not the same thing as preemption:

“Preventive measures are things like the security cooperation that we do, the forward presence that we maintain, stability operations, nonproliferation initiatives like the Proliferation Security Initiative. These are actions that are taken to prevent problems from becoming crises, as I said, and crises from becoming wars.”

18 March, 2005: Change 1 to the Joint Strategic Capabilities Plan (JSCP) FY05 Nuclear Supplement is published.

18 March 2005: The JCS Global Strike Joint Integrating Concept Version 1 is forwarded to the JCS Joint Requirements Oversight Council (JROC) for approval. The concept envisions the use of global strike operations during the “seize the initiative” phase of a conflict (“seconds to days”). Targets include weapons of mass destruction production, storage, and delivery capabilities, critical command and control facilities, anti-access capabilities (radars, surface-to-air missile sites, theater ballistic missile sites), and adversary leadership.

16 March 2005: Testifying before the Senate Armed Services Committee, Gen. James Cartwright, Commander, STRATCOM, says:

“With a **full spectrum of nuclear**, conventional and non-kinetic options available, regional combatant commanders will be enabled to achieve specific local effects against high value targets in the context of the strategic objective.”

“While we are confident in our ability to support effective global strike operations today, we must continue to evolve that capability to meet the demands of an uncertain tomorrow. For example, I intend to conduct experiments to better understand the value of weapon accuracy within a range of stressing environments. If modeling and testing confirm the value of such capability, this may lead to **new thoughts on the balance between nuclear and conventional strike alternatives**.

“The new responsibilities assigned to USSTRATCOM have required the command to broaden its Cold War focus from deterring nuclear or large-scale conventional aggression to becoming a major contributor to the much broader defense strategy. **Nuclear weapons; however, continue to be important, particularly for assuring allies and friends of US security commitments, dissuading arms competition, deterring hostile leaders who are willing to accept great risk and cost, and for holding at risk those targets that cannot be addressed by other means.**”

15 March 2005: The second final coordination draft of Doctrine for Joint Nuclear Operations (JP 3-12) is published by the Joint Chiefs of Staff. The document reaffirms a prominent role for nuclear weapons against regional adversaries armed with weapons of mass destruction. For the first time, JP 3-12 includes descriptions of preemptive use of nuclear weapons:

- An adversary intending to use WMD against U.S., multinational, or allies forces or civilian populations.
- Imminent attack from adversary biological weapons that only effects from nuclear weapons can safely destroy.
- Attacks on adversary installations including WMD, deep, hardened bunkers containing chemical or biological weapons or the command and control infrastructure required for the adversary to execute a WMD attack against United States or its friends and allies.
- To demonstrate U.S. intent and capability to use nuclear weapons to deter adversary use of WMD.

The preemption language in the draft is accompanied by replacing the word “war” with “conflict” in the war determination section. In proposing this change, STRATCOM argues that it better “emphasizes the nature of most conflicts resulting in use of a nuclear weapon. Nuclear war implies the mutual exchange of nuclear weapons between warring parties – not fully representative of the facts.” Echoing STRATCOM’s assessment, European Command (EUCOM) further explains that “the use of a bunker-buster ‘mini-nuke’ might not, in fact, be ‘provoked by some action, event, or perceived threat’ per se; rather, it may be used simply because it is the only weapon that will destroy the target!”

1 March 2005: Testifying before the Senate Armed Services Committee, Gen. John Abizaid, Commander, U.S. Central Command (CENTCOM), says:

“Guarding against strategic surprise is especially critical with respect to the proliferation of WMD. **Iran and Syria** both have longstanding chemical weapons programs, and Iran has obvious aspirations to develop nuclear weapons. In a region already debilitated with numerous threats to regional stability, a nuclear-armed Iran increases instability and encourages further nuclear proliferation in other states. The obvious problem of WMD technology falling into the hands of terrorist groups requires considerable effort to identify proliferation risks, deter proliferation opportunities, and retain the capabilities for prompt and decisive action. Simultaneously, local government measures to effectively control borders, conduct interdiction operations, and detect proliferation of WMD related materials and technology must be assisted and strengthened. Our ongoing maritime interdiction operations are key to protecting oil infrastructure and countering potential proliferation of WMD. These operations feature major contributions by many Coalition partners and are a critical ingredient to regional stability.

...While generally thought to be for defense, Iran continues to build a credible military capable of regional power projection. It has the largest military capability in the region and a record of aggressive military action in and around the Arabian Gulf. Iran’s military force has the capability to threaten the free flow of oil from the Gulf region. Iranian forces include a Navy of small attack boats carrying torpedoes and missiles that are well suited for the restricted confines of the Straits of Hormuz. A new generation of

indigenously produced anti-ship cruise missiles and tactical ballistic missiles threaten both oil infrastructure and shipping. It is important for us to maintain reconnaissance capabilities to monitor these forces. To counter this threat, our forward-based posture retains a Navy Expeditionary Strike Group (ESG) presence that demonstrates our commitment to unrestricted international access to the Gulf's resources. Iran's Revolutionary Guard Force (IRGC) and Intelligence Service (MOIS) are very active throughout the Arabian Gulf and the broader Middle East. Iranian sponsored groups, backed by their intelligence Services, could become a source of difficulties in Afghanistan, Iraq, or elsewhere in the region. Therefore, we stand with our regional partners to safeguard our mutual vital interests."

1 March 2005: Unified Command Plan 2004 is published, assigning to STRATCOM the mission of coordinating the Pentagon's efforts to combating Weapons of Mass Destruction.

March 2005: The USS Tennessee (SSBN-734) launches a Trident II D5 missile in a Global Strike mission simulation in the Atlantic Ocean off Florida. The 5,000-plus miles range missile

**Figure 5:
Trident II D5 Global Strike Launch March 2005**



The USS Tennessee (SSBN-734) launches a Trident II D5 missile in the Atlantic off Florida in March 2005. The missile flew the shortest distance ever for a Trident and carried a GPS-guided reentry vehicle for increased accuracy.

flies a heavily compressed trajectory with the shortest range ever for a Trident SLBM to a range of only 1,380 miles (1,200 nautical miles). Impact occurs only 12-13 minutes after launch.

The missile carries an Mk4 reentry vehicle equipped with the three axis flap system developed by Lockheed Martin for the W76/Mk4 under the Effectiveness Enhancement (E2) program. The E2 program, which was formally rejected by Congress in 2004 but continued by the Navy with Lockheed Martin money, developed the GPS-guided "Accuracy Adjunct" to increase the accuracy of the Mk-4 RV to less than 30 feet. Said one Admiral involved in the flight test: "I had GPS signal all the way down and could steer it."

22 February 2005: Traveling in Europe, President Bush says that it is "simply ridiculous" to assume that the United States has plans to attack Iran. "This notion that the United States is getting ready to attack Iran is simply ridiculous. Having said that, all options are on the table."

7 February 2005: Testifying before the Senate Armed Services Committee, Secretary Rumsfeld says it would be irresponsible not to finish the proposed Robust Nuclear Earth Penetrator (RNEP) research. "Proceeding with this study is eminently sensible. Anyone would look back five years from now, if we failed to take a responsible step like that and feel like we made a mistake. ... people are putting things underground in every rogue state, in countries that are engaged in activities that are not compatible with civilized societies." "We do not have a conventional capability to go underground to attack a target. The only option we currently have is to use a vastly overpowered non-conventional weapon," Rumsfeld said.

16 February 2005: Testifying before the House Armed Services Committee (and the Senate on 17 February), JCS chairman Gen. Myers, submits his annual report, excerpts of which say:

"We are particularly troubled about North Korea's and Iran's on-going nuclear weapons-related activities. The trend toward longer range, more capable missiles continues throughout the world. We believe that some chemical and biological warfare programs are becoming more sophisticated and self-reliant, and we fear that technological advances will enable the proliferation of new chemical and biological warfare capabilities.

Fighting the proliferation of WMD is a challenging worldwide problem and is one of my greatest concerns. Terrorists have stated their desire and intent to obtain WMD. While most of this proliferation in the past was state sponsored, proliferation by companies and individuals is growing. The revelations about the AQ Khan international and illicit nuclear proliferation network show how complex international networks of independent suppliers with expertise and access to the needed technology, middlemen, and front companies can successfully circumvent domestic and international controls and proliferate WMD and missile technology. Within DOD, the SecDef has tasked the US Strategic Command to synchronize our efforts to counter WMD and ensure the force structure and the resources are in place to help all combatant commands defeat WMD."

...DOD is in the midst of completing a Strategic Capabilities Assessment to review the progress in fielding the New Triad, which includes non-nuclear and nuclear strike capabilities, defenses, and responsive infrastructure. This assessment will help recommend the number and types of forces needed to meet the President's goal of reducing our reliance on nuclear weapons. We have begun to make significant reductions on our way to 1700 to 2200 operationally deployed strategic nuclear warheads by 2012. This reduction is possible only if Congress supports the other parts of the New Triad, our defenses and responsive infrastructure. STRATCOM has revised our strategic deterrence and response plan that became effective in the fall of 2004. This revised, detailed plan provides more flexible options to assure allies, and dissuade, deter, and if necessary, defeat adversaries in a wider range of contingencies.”

16 February 2005: House Armed Services Committee member Rep. Curt Weldon says during a hearing with Secretary Rumsfeld that he had just returned from a delegation trip to North Korea, and "the North Koreans were very intrigued by the notion that we were looking to pursue a deep-earth penetrator to get at their underground complexes ... We told them that we lost [the vote on keeping the study on RNEP going] by one vote."

7 February 2005: The DOE budget request for FY 2006 includes \$26 million for two years to finish a study for a Robust Nuclear Earth Penetrator (RNEP), a project to modify an existing nuclear warhead to destroy hardened and deeply buried targets. RNEP research was suspended when Congress rejected the FY 05 funding for the project.

February 2005: The DTRA budget request for FY 2006 includes the Tunnel Target Defeat Advanced Concept and Technology Demonstration(s) (ACTD) to “develop a planning tool that will improve the warfighter’s confidence in selecting the smallest nuclear yield necessary to destroy underground facilities while minimizing collateral damage.”

26 January 2005: In a briefing on the new National Military Strategy prepared for a Precision Strike Association Round Table, Navy Captain Jeff Hesterman, Chief of the Strategy Division and Deputy Director for Strategy and Policy (J-5) at the Joint Staff, describes the Global Strike mission as supporting the national military objective to “prevent conflict and surprise attack.” He says that the military missions and tasks included in this category include strategic deterrence, “preempt in self defense” (including Global Strike), Flexible Deterrent Options (FDOs), and a credible nuclear deterrent.

18 January 2005: The Commander of U.S. Strategic Command signs the Implementing Directive (SM# 014-05) for Joint Functional Component Command for Space and Global Strike (JFCC S&GS) which assigns JFCC S&GS Operational Control (OPCON) or Tactical Control (TACON) of designated space, missile warning, and global strike forces, as directed. The directive assigns 13 specific tasks to JFCC S&GS, including:

- Act as the lead integrating JFCC in direct support of the Commander, USSTRATCOM to develop crisis response COAs [Courses of Action], provide execution recommendations for supported and supporting mission tasks, and execute Global Strike missions when directed.
- Support the coordination of operational logistical requirements of USSTRATCOM supported plans, to **include operational logistics support to nuclear forces.**
- Integrate capabilities, via the Global Operations Center (GOC), to support the headquarters responsibilities for **nuclear force command and control and nuclear force execution.**
- Support USSTRATCOM-led efforts to create and maintain strategic-level OPLANs, support development and coordination of OPLANs, CONPLANs, FUNCPLANs, and SUPPLANs as directed by headquarters, and support other combatant commands with space and global strike operational planning and execution, as directed by headquarters.
- Maintain coordination with geographic and functional combatant commanders to support ongoing and future operational requirements for USSTRATCOM space and global strike.

According to the directive, Initial Operational Capability (IOC) is to be achieved no later than March 2005, with a goal of Full Operational Capability (FOC) by 30 September 2006.

10 January 2005: Secretary Rumsfeld writes a memo to the DOE reiterating his support for reviving the Robust Nuclear Earth Penetrator (RNEP) study in the FY 06 budget.

10 January 2005: The Global Strike draft joint integrating concept (JIC) Version 1.0 is published and discussed in the “tank” by the Joint Chiefs of Staff.

10 January 2005: STRATCOM formally establishes the Joint Functional Component Command for Space and Global Strike (JFCC S&GS). According to the establishment memo, JFCC S&GS is responsible for planning and conducting Space Operations and Integrated Global Strike, and will:

- Integrate all elements of military power as it conducts, plans and presents global strike efforts;
- Direct the continuous planning and execution of assigned space operation missions;
- Execute (when tasked) global strike operations in support of approved courses of action (COAs).
- In close coordination with the headquarters staff, the component command will conduct mission areas operational level planning, integration and coordination with other USSTRATCOM joint service components and, as directed other Combatant Commanders.

Despite the extensive authorities given to JFCC S&GS, the memo states that STRATCOM will “retain the responsibility for advocating the desired characteristics and capabilities for the S&GS missions, integrating S&GS into DoD strategic level planning, and via direct support from USSTRATCOM Joint Intelligence Center (JIC), providing intelligence support.”

January 2005: In a letter to STRATCOM, Secretary Rumsfeld tasks the command with spearheading DOD's efforts to combat weapons of mass destruction. STRATCOM is to become the "single DOD focal point to integrate and synchronize" all military means of dealing with weapons of mass destruction, according to the memo. The memo says STRATCOM will assess what the military needs and must do to “dissuade, deter and prevent the acquisition, development, transfer or use of WMD, their delivery systems and associated technology and materials.” Rumsfeld's memo directs all combatant commands, the military departments and defense agencies to support STRATCOM's efforts "to develop an integrated and comprehensive approach to counter the WMD threat.”

2005: During Fiscal Year 2005 (October 2004-September 2005), the Defense Threat Reduction Agency (DTRA) Weapons Effect Technology (formerly Nuclear Phenomenology) Project begins to convert its modeling and simulation (M&S) tools into “modern, net-centric nuclear weapon effects M&S capabilities supporting combatant commands and defense agencies in nuclear targeting, consequence assessment, predicting effects on key systems, critical military system survivability designs, and battle simulations.”

2005: The Defense Threat Reduction (DTRA) Counterforce Hard Target Defeat Program is scheduled to “complete Tunnel Target Defeat Advanced Concept and Technology Demonstration(s) (ACTD) high explosive, low yield, nuclear weapon simulation planning and design.”

Chronology for 2004

31 December 2004: The JCS issue a **new Top Secret Nuclear Supplement to the Joint Strategic Capabilities Plan** for FY 2005 (CJCSI 3110.04b), codifying new global strike and theater nuclear operations guidance and implementing the 2004 NUWEP.

28 December 2004: The Joint Requirements Oversight Council (JROC) approves the draft Global Strike joint integrating concept (JIC).

10 December 2004: *Aerospace Daily & Defense Report* reports that the Air Force Research Laboratory has issued a solicitation (December 9) asking for industry input on a concept for a **nuclear-armed Enhanced Cruise Missile** (ECM) that would meet requirements projected for beyond the year 2020. The ECM, according to the notice, should be more reliable than current cruise missiles; use advanced command and control concepts; carry a nuclear payload and support “global strike missions,” among other attributes.

9 December 2004: The Air Force Nuclear Weapons and Counterproliferation Agency (AFNWCA) Advanced Technology Division (AT) issues a Request For information (RFI) from industry to conduct an Enhanced Cruise Missile (ECM) concept study. According to the RFI, the concept will examine the ability of the ECM to:

- **Support global strike missions;**
- **Carry a nuclear payload** and meet nuclear certification requirements;
- Have increase reliability over current cruise missiles;
- Incorporate advanced command and control concepts;
- Offer improvements in safety and nuclear surety;
- Address a variety of targets;
- Address deep targets within future high threat anti-access environments;
- Reduce minimum and extended range of current cruise missiles;
- Improve accuracy compared to current cruise missiles; and
- Be carried on strategic bomber aircraft **as well as alternative launchers (ground, sea, missiles, etc.).**

The deadline for industry inputs is set for 7 January 2005. An Air Force-led Joint ECM Phase 6.1 Study was scheduled to begin in the last quarter of 2004 with completion in late 2005.

December 2004: The Department of Defense awards a contract for the Integrated Strategic Planning and Analysis Network (ISPAN) which is **used to develop, verify, and produce OPLAN 8044, CONPLAN 8022, and theater support plans.**

23 November 2004: Lockheed Martin announces that James O. Ellis, jr., has been elected as a member of the corporation's board of directors. Ellis retired as Commander of STRATCOM in July 2004. In August 2004, Lockheed Martin was awarded a \$213 million contract to modernize the Integrated Strategic Planning and Analysis Network (ISPAN); previously the Strategic War Planning System (SWPS) to incorporate STRATCOM's new missions including Global Strike.

23 November 2004: The final FY 2005 Omnibus Congressional appropriations conference report agrees to strike all funding for the Robust Nuclear Earth Penetrator (RNEP) and other advanced concept studies designed to examine new nuclear weapons.

16 November 2004: At the internal Air Force 2004 Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) **Attack Operations Workshop**, the Global Strike joint integrating concept (JIC) and new war plan are discussed, as is a counter-proliferation program called Pulsed Intense Neutron Source (PINS).

9 November 2004: In a speech to the ICBM Heritage Day Dinner at Peterson AFB, Colorado, Gen. Lance W. Lord, commander of Air Force Space Command (AFSPC), outlines his vision for the role of the current and future ICBM force:

“In addition to strategic deterrence, our ICBM forces provide a level of operational deterrence...Gen Jumper calls it ‘Top cover for the AEFs’. During Operation DESERT STORM, there was significant concern that Saddam Hussein would use chemical weapons against coalition forces. President George H. W. Bush had communicated to the Iraqi government that their use of chemical weapons would risk a severe retaliation. Many people speculated about what severe retaliation meant. I haven't had a chance to ask him what he meant, but the principle remains...even against nations which do not have ICBMs, our ICBMs provide a deterrence to unacceptable escalation of combat. The United States would not use ICBMs in a disproportionate manner, but they do provide an ‘incentive’ against regimes that may consider using weapons of mass destruction...such as chemical weapons...against US or allied forces. [To put a bumper sticker on it, ‘**our ICBMs make our potential adversaries think before they act.**’]”

We are aggressively exploring ways to apply our years of technical and operational ICBM experience into today's conventional requirements. We call it...Prompt Global Strike. With the help of current technology...**we can build a conventional ICBM that can strike anywhere in the world with great precision.** Instead of ICBMs being armed with nuclear warheads, they can be equipped with conventional munitions designed for surface or deeply buried targets. To help fill a growing capability gap...conventional missiles can hold hard and deeply buried targets at risk. With all the same attributes we have become familiar within the ICBM business...high reliability, nearly global response and amazing precision.

It is not inconceivable that future conflicts could see AFSPC missile crews turning keys and delivering precision, conventional strikes on critical targets in theater. We'll be able to offer our enemies the same delivery guarantee we've always had – 'Delivered hot in less than 30 minutes' -- but with a super-sized menu that includes 'conventional toppings.'”

8 November 2004: *Aerospace Daily & Defense Report* reports that the Air Force plans to ask companies to refine some of their concepts for interim global strike improvement until a next-generation platform becomes available. The Air Force received more than 20 responses in response to its request for information (RFI), including Lockheed Martin's proposal for a regional bomber version of the F/A-22 Raptor; Boeing's concept of a large aircraft carrying a bevy of missiles; and Northrop Grumman's ideas for capability and survivability upgrades to the B-2 bomber.

3 November 2004: *Aerospace Daily & Defense Report* reports that Air Combat Command and Air Force Space Command are planning to coordinate upcoming studies on future long-range strike systems to examine options for fast, conventional “Prompt Global Strike.” Both commands have laid out broad, long-term goals for new, long-range strike platforms. AFSPC's strategic master plan calls for developing and fielding non-nuclear, prompt global missile strike capabilities in the FY 2012-2017 timeframe.

November 2004: STRATCOM begins a headquarters reorganization to align staff functions with those of the joint staff and other unified combatant commands (e.g., a new organization puts a director of global operations (J3) in charge of intelligence, logistics, command and control, communications and computers.) As part of the reorganization, a number of standing Joint Functional Component Commands (JFCCs) are also to be created aligned with STRATCOM's four new missions: space and global strike; intelligence, surveillance and reconnaissance; information operations, and missile defense. Air Force Space Command is subsequently named the functional lead for the space and global strike component command.

3-11 November 2004: Pacific Command (PACOM) exercise Terminal Fury 05 is held at PACOM Headquarters at Camp Smith, Hawaii. The exercise has an embedded STRATCOM Global Strike Scenario.

28 October 2004: The JCS Global Strike Joint Integrating Concept (JIC) draft is published, defining global strike as “responsive joint operations that **strike enemy high value / payoff targets** (HVTs/HPTs), as an integral part of joint force operations conducted to gain and maintain battlespace access, achieve other desired effects and set conditions for follow-on decisive operations to achieve strategic and operational objectives.” The target set, according to the JIC, is “weapons of mass destruction and weapons of mass effect (WMD/WME) production, storage, and delivery capabilities, critical command and control facilities, anti-access capabilities (radars, surface-to-air missile sites, theater ballistic missile sites), adversary leadership, populace

perception, and key nodes.” Codifying the element of preemption and surprise, the JIC states that “Global Strike operations will normally be executed within compressed timelines (from seconds to days) while exerting persistent effects at potentially great distances from the continental United States and forward bases. These operations will include attacks against fleeting, “time-sensitive targets.” Global Strike operations must be executable without requiring establishment of a large logistical footprint.”

20 October 2004: STRATCOM exercise Global Lightning 05 begins, the first STRATCOM sponsored Global Strike exercise. Beyond exercising the nuclear strike options in the newly published CONPLAN 8022 and OPLAN 8044, Global Lightning 05 also coincides with STRATCOM exercise Global Archer 04 which for the first time practices execution of conventional options integrated into OPLAN 8044.

Thirteen B-52s bombers at Barksdale AFB, LA are launched simultaneously in a minimum-interval take-off, or MITO generation, in which each bomber takes off within a minute or less of one another. The 8th Air Force commander at the base told *The Shreveport Times*: “8th Air Force is now essentially on alert...to plan and execute Global Strikes” on behalf of STRATCOM.”

12 October 2004: The Pentagon announces that it is awarding a \$766.6 million contract to Boeing to continue the development and construction of three X-45C unmanned combat aircraft. “Our X-45 unmanned combat air system will locate and identify a threat autonomously and destroy it with precision weapons, and then stay in the area to improve battle space awareness as a key node in the network-centric environment,” said Darryl Davis, JUCAS X-45 vice president and program manager for Boeing. “It will dramatically increase the effectiveness of the global strike force.” Program officials want stealthy, unmanned aircraft that can be launched either from land or an aircraft carrier. The X-45C, slated to begin flying in 2007, will be 39 feet long with a 49-foot wingspan, cruise at 560 mph at an altitude of 40,000 feet, carry a 4,500-pound weapons payload, and fly a combat radius of more than 1,200 miles.

October 2004: The Air Force initiates a study of options to replace the Minuteman III nuclear intercontinental ballistic missile (ICBM). The Land Based Strategic Deterrent (LBSD) analysis of alternatives (AOA) is slated for completion by September 30, 2005. Air Force sources say that the service wants to begin fielding a replacement by 2018.

15 September 2004: The Department of Defense publishes a draft working paper of the Global Strike Joint Integrating Concept (Version 2.0).

10 September 2004: JCS Instruction CJCSI 3141.01B, Responsibilities for the Management and Review of Operation Plans, tasks the J3 Nuclear Operations Division of the JCS with the responsibility for: “Plans containing provisions for nuclear and conventional operations tasking [of] Global Strike-committed forces.”

8 September 2004: *The Times* (Shreveport, LA) carries an interview with departing 8th Air Force commander at Barksdale AFB, Air Force Lt. Gen. Bruce Carlson. Carlson says that 8th Air Force is now “essentially on alert ... to plan and execute Global Strikes” on behalf of STRATCOM. “In half a day or less, it has to come up with the means and methods to do that, with surveillance and intelligence before the mission and reconnaissance after to determine the success of the operation,” the *Times* says. “When I got here, we were essentially a bomber command, bomber-centric. We are now still the Air Force's bomber command, but we are so much more than that. We are STRATCOM's focal point for global strike.”

9 August 2004: *Air Force Times* that the new Army Tactical Missile System - Penetrator, or ATACMS-P, could be fitted with a nuclear warhead. “Adm. Thomas Fargo, the U.S. Pacific Command chief whose responsibility includes security on the Korean peninsula, penned a letter to the Joint Staff earlier this year supporting the need for such a capability,” the newspaper says. The article says:

“The Pentagon has a nuclear gravity bomb, the B61-11, which is designed to penetrate into the earth before detonating.

"It is very good in soil and not very good in rock," said Paul Robinson, director of the Sandia National Laboratory.

The North Korean targets of high value to the United States are "very hardened, below deep cliffs, in very high-strength rock," Robinson said.

... “The unique feature here was to get the penetrator to survive a much higher impact velocity than many of the currently fielded bomb-delivered penetrators," said David Keese, deputy director of aerospace systems at Sandia.”

8 September 2004: STRATCOM's Command Center issues planning guidelines for CONPLAN 8022 in response to the 30 June ALERTORD and 17 August OPOD. The guidelines say that CONPLAN 8022-02 is still in draft but is “undergoing JPEC [Joint Planning and Execution Community] approval process with expected approval date of [deleted].”

The heavily redacted declassified version of the document further explains that the Secretary of Defense in the ALERTORD “has directed CDUSSTRATCOM to conduct operational activities that support [deleted]. [Deleted] will remain in effect and will be used to provide [deleted] identified in CONPLAN 8022 until directed otherwise by CDUSSTRATCOM.” The guidelines state that operations under CONPLAN 8022 “will conform to the Law of Armed Conflict and ROE [Rules of Engagement] issued by competent authority prior to or during planning.”

September 2004: Air Force Magazine reports that the Air Force has decided to create Strategic Command Air Forces (STRATAF) as a single focal point for Global Strike capabilities and

operations developed for STRATCOM. The magazine says the new command will be located at 8th Air Force at Barksdale AFB, Louisiana and will provide bombers (strike), intelligence-surveillance-reconnaissance (ISR) systems, and information operations to STRATCOM. ICBM forces will continue to provide Global Strike support to STRATCOM through the 20th Air Force. The plan is actually later implemented by creating a Joint Functional Component Command for global strike, with the 8th Air Force commander as the component commander.

26 August 2004: DOD awards Lockheed Martin a \$213 million contract to modernize the Integrated Strategic Planning and Analysis Network (ISPAN); previously the Strategic War Planning System (SWPS). The work is scheduled for completion in 2014. ISPAN-M incorporates STRATCOM's new missions to implement the 2001 Nuclear Posture Review and the taskings of the Unified Command Plan, including full-spectrum global strike. According to the contract synopsis:

“ISPAN...is the nation's only strategic war planning system. However, it was developed and deployed for the Cold War and is not designed to handle the collaboration, information exchange, peacetime deliberate and crisis action planning, decision support, and complex strike options required of the modern strategic environment.

The new planning system will transform as USSTRATCOM's missions are matured, new systems are developed, and the threat changes. The new planning system must be innovative in its openness, flexibility, scalability, and extensibility so it can incorporate and develop tools to support the production of assigned OPLANS, to include OPLAN 8044; Theater Planning and **Global Strike Support Documents**; new UCP tasking and related products. The new planning system must advance USSTRATCOM's adaptive and collaborative planning capabilities to support UCP missions including Strategic Deterrence (nuclear, conventional, and non-kinetic); Global Strike; Information Operations (IO); IMD; Space Operations; global Intelligence, Surveillance, and Reconnaissance (ISR); and other advanced strategic missions as they are defined. It must support the capability to interface USSTRATCOM with other parties (national leadership, other combatant commanders, intelligence and system acquisition) via the modernized DoD global C2 addressed in other parts of the SCM and via the C2 Modernization program at USSTRATCOM.”

Specifically, the new planning and analysis objectives for the ISPAN Modernization include:

- Support the evolving nuclear war-planning mission. The new planning system must continue to provide the national leadership with a national nuclear war plan that fully supports national objectives, as it has for the past 30 years. The system must continue to be updated to meet evolving national guidance and objectives, and modifications resulting from the new planning system must not adversely impact the command's ability to create the national nuclear war plan.

- Continue the current theater-support planning mission. STRATCOM must meet its commitment to the Regional and Functional Combatant Commanders' strategic and WMD planning needs.
- Transform ISPAN, as a subset of the overall evolving global command and control (C2) STRATCOM mission. This will be accomplished by changing the ISPAN architecture from a federated-systems concept to a system-of-systems concept. The objective is an innovative, open, flexible, scalable and extensible war planning architecture to support STRATCOM's changing and increasing missions.
- Support new mission areas and incorporate the strategic planning of conventional and emerging non-kinetic strike systems. New capabilities must be added to the existing system to enable creation of integrated plans in the compressed timelines directed. These capabilities will be integrated into the new architecture. The initial capabilities identified include an executive/workflow management function, an optimization function, a decision support services function, and an effects-based planning function.

The timeline for the ISPAN Modernization program turns through 2014 and includes the following phases:

- Block I development will begin at contract award and continue through 30 September, 2007 (approximately 42 months). Block I also includes an initial O&S (Operating and support) baseline for Data Management System, Document Production System, and Theater Integrated Planning System maintenance, enhancement, and development functions expected to start 1 October, 2004 and separate options for O&S of several software products also starting NET 1 October, 2004, if exercised.
- Block II will begin on or about 1 October, 2006 (pending a milestone approval decision) and continue through 30 September 2009. Block II includes the continuation of O&S and separate options for O&S of several software products.
- Block III will begin on or about 1 October, 2008 (pending a milestone approval decision) and continue through 30 September, 2011. Block III includes the continuation of O&S, separate options for O&S of several software products, and transition into ISPAN O&S phase. Additional development work beyond Block III would be dependent on further government approvals.

O&S will begin with the extant and optional product lines, and increase incrementally as each development product is completed and receives government approval to enter the ISPAN Production environment. Upon entry into the Production environment, life cycle cost will be managed by the contractor to maximize best value to the government and demonstrate efficiencies. A formal government DT/OT test will occur at the conclusion of each block. The O&S phase of this contract will continue through 31 January 2014, unless otherwise extended.

August 2004: Gen. James Cartwright, the new STRATCOM commander, circulates a set of “think piece” questions about the future of the command:

- What will be the primary drivers (megatrends) of the strategic environment in the 2025 time frame (e.g., cultural, economic, demographic, ideological, globalization)? What global scenarios should we plan for?
- What capabilities do our adversaries possess in 2025? Do we have military peer competitors?
- What role will the military have in the 2025 National Security Strategy? Will there be a change in the relative use of military power compared to other forms of national power (e.g., diplomatic, information, or economic)?
- What areas of warfare will see the most change by 2025 (e.g., kinetic vs. non-kinetic attack, offensive or defensive dominance)? Which technologies seem to show the most promise for 2025?
- Will there be a change in U.S. global presence (overseas basing and commitments) in 2025? What will be the relationship between so-called “global” and “regional” combatant commands?
- How would a major domestic calamity (e.g., massive WMD event, declaration of martial law, secession of one or more states) affect the DOD and STRATCOM?
- We accept that there are a number of “battle mediums” (air, land, maritime, space, cyber). Can you conceive of others? How will war be waged in these other mediums?
- What will (should) STRATCOM’s relationship with the intelligence community look like in 2025 as both a producer and user?
- Fifteen years ago, a few individuals imagined a STRATCOM with many missions and tools, yet it now exists. In 2025, what will (should) this command look like?

August 2004: BAE Systems posts a job opening in Omaha, Nebraska:

“Global Strike Planners are needed on our program. The planners will support the construction of **Global Strike Support Documents (GSSD)**. These planning documents contain detailed analysis of potential attack options for given targets. The qualified candidate will develop and maintain attack options, strike package requirements, Course of Action (COA) and support system integration activities for USSTRATCOM's global strike mission. The position requires a close working relationship with government planning officers, and software engineers developing custom applications.”

17 August 2004: STRATCOM issues the Global Strike Interim Capabilities (GS IC) OPORD (Operations Order) which implements the Global Strike ALERTORD issued on 30 June 2004.

8 July 2004: Answering written questions from the Senate Armed Services Committee relating to his nomination to be commander of STRATCOM, Gen. James E. Cartwright reveals that:

“With close cooperation of the Air Force and Navy, SECDEF [Secretary of Defense Donald Rumsfeld] just signed the Interim Global Strike Alert Order, which provides the President a prompt, global strike capability. Today, we rely upon Navy Tomahawk missiles and Air Force bombers carrying conventional cruise missiles, Joint Direct Attack Munitions and other gravity released weapons to provide this kinetic-kill solution, and our global command and control reach. U.S. Strategic Command is responsible for the advocacy of kinetic and non-kinetic capabilities that could be adapted to the global strike mission. As the Services develop new, even more responsive kinetic and nonkinetic solutions, global strike capabilities will achieve the desired effects with far greater time responsiveness.”

Cartwright refers to STRATCOM's mission

“is to establish and provide full-spectrum global strike, coordinated space and information operations, integrate missile defense, global C4ISR, specialized planning expertise to joint warfighters as well as retaining the legacy missions for our nuclear forces. The intent is to meet both deterrent and decisive national security objectives globally. ... I understand that USSTRATCOM headquarters has realigned, refocused, and is energized across the full range of missions assigned. New concepts have been shaped, innovative relationships crafted, aggressive milestones established, and real progress is being made towards full operational capability in the missions assigned by the Unified Command Plan. If confirmed, I will continue to seek mechanisms, component relationships, and relationships with other combatant commanders that further develop the flexibility of pre-existing capabilities and expertise resident within the DoD and other agencies to support U.S. Strategic Command's missions. Additionally, we will continue coherent integration to advance efforts that provide new and innovative capabilities allowing the SECDEF and President more flexible options in support of our strategic interests.”

Cartwright states that:

“There are hard and deep buried targets in existence today that are difficult for us to place at risk. Deterrence requires we be able to hold these targets at risk - potential adversaries obviously value them highly or they would not go the trouble of deep location and hardened protection. If confirmed, I desire to comprehensively assess the full spectrum of capabilities necessary to place these targets at risk, both kinetically and non-kinetically. ... I wholeheartedly support identifying and analyzing the capabilities the Nation desires against such types of targets. The ultimate capability required will better direct particular development efforts across the broad spectrum of potential military solutions – kinetic and nonkinetic, nuclear and conventional. ... I believe we need to first determine the capability we desire against such targets and then evaluate all material and

non-material solutions to engage them. Nuclear weapons are only one of many potential arrows that we could carry in our quiver against hard and deep buried targets.”

9 July 2004: Speaking at the retirement ceremony of Adm. Ellis as STRATCOM commander in Omaha, JCS chairman Gen. Richard Myers credits Ellis with reshaping “the roles and missions of that old command to better posture our military forces to defeat existing and future threats against our nation” after 9/11. “You did this by **expanding the options available to the President**, both from a strong nuclear deterrence standpoint and conventional and non-kinetic response options. In this new asymmetric threat environment that also meant taking a fresh look at the strategic bounds of Strategic Command, or perhaps removing those bounds is a more accurate way to put it.” Speaking of the new missions assigned to STRATCOM including Global Strike, Gen. Myers says:

“Notice the word ‘global’ in three of the four missions. Today we live in a globalized world, obviously. We’re at war with terrorists that have global reach, and our military must have a global perspective.”

Gen. Myers continued:

“Jim, the President charged you to “**be ready to strike at any moment’s notice in any dark corner of the world.**” That’s exactly what you’ve done, and in superb fashion. Within months, you compressed the conventional planning process, and accelerated execution timelines from weeks to days, and **in some cases down to only hours.** Today we can recognize a threat, develop a plan of action, and execute a mission faster than ever before.”

30 June 2004: Joint Chiefs of Staff Chairman General B. Myers signs Global Strike ALERTORD (Alert Order) which orders the Air Force and Navy to activate CONPLAN 8022 to provide the President with a day-to-day preemptive strike option. The classified order contains in excess of 23 paragraphs. In response, preparation of a Global Strike OORDER (Operations Order) is begun to implement the Alert Order pending completion of the CONPLAN.

28 June 2004: *Aviation Week & Space Technology* reports that the Air Force is requesting a green light to embark on replacing its fleet of nuclear armed Minuteman III ICBMs, as well as embark on a concept to field a few enhanced Minuteman IIIs, called **Minuteman III "Elite" to support the global strike mission.** The replacement, under the Land-Based Strategic Deterrent (LBSD) program, would begin with an analysis-of-alternatives. LBSD would have a nuclear and conventional role, and the Minuteman III Elite would field some of the technologies on a small fleet of more capable weapons to use against particularly complex targets. The magazine reports that “Elite was once billed as a stand-alone program, to field enhanced Minuteman IIIs within five years. But the Air Force couldn't find the money, which prompted the shift to making Elite a stepping-stone for LBSD. Funding for both the near-term and long-term programs still needs

to be secured and is being considered as part of the Pentagon's Fiscal 2006 budget drafting process... when it comes to conventionally armed Minuteman IIIs, operational questions arise, [the program manager accepted]. Firing conventional weapons from silos that used to house nuclear-tipped missiles has procedural and treaty implications ...”

25 June 2004: By a 370-16 vote, the House of Representatives approved the FY 2005 DOE Energy and Water Appropriations bill cutting funding for new nuclear weapons. The House vote cuts:

- \$27.5 million the administration wanted for the Robust Nuclear Earth Penetrator (RNEP), a new nuclear bunker buster.
- \$9 million sought for work on a new generation of low-yield weapons, or "mini nukes."
- \$30 million to begin building a new factory to make the "pits" that are the heart of nuclear weapons.

23 June 2004: BAE Systems advertises new job opportunities for Military Systems Planners/**Global Strike Planners** in Omaha, NE. The positions involve developing and maintaining attack options, strike package requirements, Course of Action (COA) and support system integration activities for STRATCOM's global strike mission.

15 June 2004: The Senate votes to kill the Feinstein/Kennedy amendment that would have halted research on the Robust Nuclear Earth Penetrator (RNEP) and new mini nukes.

14 June 2004: The JCS discuss the Major Combat Operations Joint Operations Concept (JOC) in the “tank,” and accept earlier changes adding nuclear weapons to U.S. military taskings.

8 June 2004: The final JCS Major Combat Operations Joint Operations Concept Version 1.10 is published with all of the changes previously made adding nuclear weapons to U.S. military planning and doctrine.

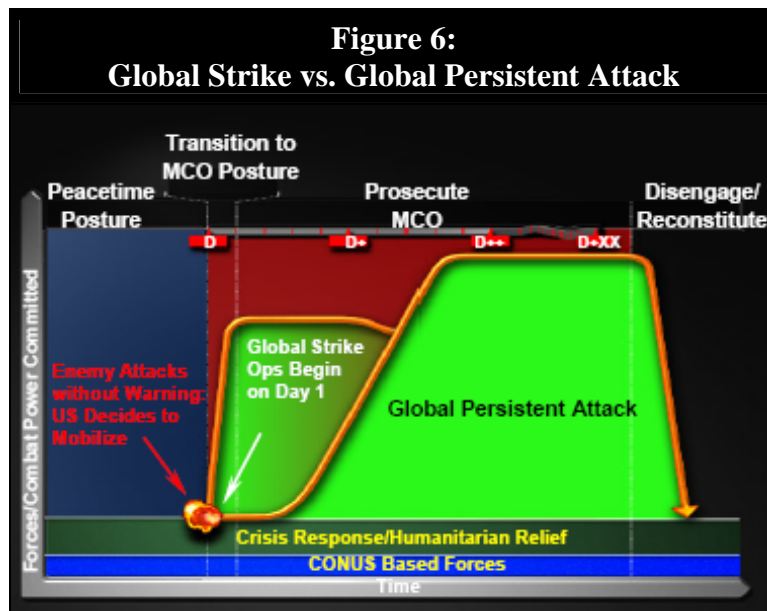
June 2004: Lockheed Martin is awarded a patent for the three-axis flap control system as part of effort to achieve "low-cost, highly maneuverable reentry vehicles for many different types of high priority precision strike military missions such as defeating hard and deeply buried targets." The flap system forms part of the Navy's Enhanced Effectiveness (E2) program to use GPS to increase the accuracy of the W76/Mk4 to less than 30 feet.

June 2004: Secretary of Defense Rumsfeld signs an “**Interim Global Strike Alert Order**,” the first step in providing the President with a day-to-day preemptive prompt, global strike capability. The Alert Order tasks Navy Tomahawk missiles onboard attack submarines (SSNs) and Air Force B-52 bombers carrying conventional cruise missiles, Joint Direct Attack Munitions (JDAMs) and other gravity released weapons to maintain a capability and alert posture.

24 May 2004: Air Combat Command publishes Global Persistent Attack CONOPS. The document states that Global Persistent Attack (GPA) “envisions future force capabilities from 2006-2025. The capabilities outlined in GPA are for persistent and sustained operations once access conditions are established (i.e. through Global Strike (GS)). GS and GPA may share many of the same capabilities and assets, but the conditions under which they are used will differ greatly.” The GPS CONOPS illustrates the intended immediate and robust initial Global Strike response with Global Persistent Attack follow-on in Major Combat Operations (MCO) scenario (see Figure 6).

The document describes the effect produced by the Global Strike CONOPS: gain and *maintain* battlespace access to attack at will and be free from attack. As the operational focus in the battle shifts from Global Strike to Global Persistent Attack, some degree of Global Strike anti-access producing capabilities will be employed to maintain superiority (air, space, etc). The objective of Global Strike and its role in a battle plan is described as follows:

“A primary effect of Global Strike is to gain battlespace access for follow-on persistent operations. When faced with a significant anti-access scenario, forces tailored to “knock down the door” will employ force application focused on gaining access for persistent operations. The Global Strike concept is to rapidly respond with long-range anti-access forces and create an opening for persistent forces to deploy to the theater.”



20 May 2004: An Air Force briefing on the Land Based Strategic Deterrent (LBSD) Mission Need Statement (MNS) states that “emerging threats place new requirements on strategic

deterrent systems.” The briefing lists the following “mission (targets)” as requirements for the LBSD, a follow-on ICBM:

- Fixed (soft and hard);
- Hard and deeply buried;
- Chemical and biological;
- Strategic relocatable;
- Heavily defended; and
- Emerging.

Strategic threats will endure, but their character will continue to change, the briefing states. Russia will remain a nuclear superpower, China will continue to improve its ICBM and SLBM forces, and other nuclear ballistic missile powers may emerge. The United States must be prepared to “deter increasing regional WMD threats,” including:

- A few emerging powers may develop a nuclear capability;
- CBW will continue to proliferate;
- Numbers of longer-range TBM and cruise missiles will increase.

12 May 2004: In a lunch time briefing on STRATCOM at the Heritage Foundation in Washington, Adm. Ellis states:

“The Global Strike mission (deliver rapid, extended range, precision kinetic and non-kinetic effects in support of theater and national objectives) **is evolving quickly**. Current kinetic and non-kinetic capabilities, while diverse and powerful, are time-intensive to both plan and execute. Moreover, command and control of these valuable assets is a challenge.

- All weapons must be incorporated into the picture, including conventional kinetic, non-kinetic, and SOF
- In the realm of kinetic options we currently are relegated to using CALCM, gravity weapons, and TLAM
- Non-kinetic there are some options available in the arena of information operations and SOF options
- However, the fundamental realities are that for kinetic strike options the concepts of time, distance and speed are inextricably woven. Current technologies for kinetic strike generated from CONUS require up to several days from execution to weapon impact.
- We are working aggressively to reduce these timelines but the substantive gains can only come about by changes in technology.”

Ellis says that that: “Anti Access defeat is afforded by retrofit of ICBM and SLBM with Conventional warheads.”

He describes the gamut of capabilities in STRATCOM:

KINETIC

- Nuclear: Low yield W87/W76, RNEP, E2RB [Enhanced Effectiveness Re-entry Body] (emphasis in original)
- Conventional: IC/SL, hypersonics, MOAB[mother of all bombs], Big BLU, SSGN [cruise missile submarine]
- Niche capabilities: Small amounts for specialized missions (Global Strike)
- SOF: SSGN deployment, Global Strike, persistent ISR
-

NON-KINETIC

- “we’ve got it backwards. Should be IO [information operations] plan with military annex.”
- Perception is reality. Can’t merely win; must be seen as winning. IO begins in Rose Garden. MILDEC [military deception] and OPSEC [operational security] can be huge players in deterrence
- ISR [intelligence, surveillance, and reconnaissance] has a deterrent value of its own, “when a potential adversary knows we’re watching and knows we have the capability to respond to any threat, it can be a great incentive to change behavior.”

ROBUST DEFENSIVE OPTIONS

- “why launch if it won’t be successful and will invite decisive retaliation?”

12 May 2004: Linton F. Brooks, administrator of the National Nuclear Security Administration, tells a Heritage Foundation conference that public misperceptions about the Nuclear Posture Review have developed because “we haven’t told a coherent overall nuclear policy story.” This problem was exacerbated, he says, by the National Security Strategy’s emphasis on preemption, the repeal of the prohibition on low-yield warhead development, and advanced concept work and the Robust Nuclear Earth Penetrator.

“From this set of circumstances, two perceptions developed. First, it became part of the conventional wisdom that there were Administration plans to develop new, low yield weapons. There are no such plans. Second, people saw these separate things as part of an overall strategy; that we were emphasizing ‘nuclear preemption’ in U.S. military doctrine. I have a Committee chairman tell me we were planning on developing low-yield weapons to use preemptively against terrorists in places like Afghanistan.

I assume you all understand this is nonsense. While no one wants to constrain a President’s options in advance, I’ve never met anyone in the Administration who would

even consider nuclear preemption in connection with countering rogue state WMD threats. But we've allowed this misconception by not being clear about our policy.

While nuclear preemption with non-existent new weapons was fanciful, there were some more responsible critics who raised issues. Two are important: whether our efforts lowered the nuclear threshold and whether they hurt nonproliferation.

We have pretty good answers. U.S. R&D programs are not blurring the line between conventional and nuclear weapons or making nuclear use more likely. This not simply an assertion, but is empirically based. You all know that from the 1950's and continuing through today, the U.S. nuclear stockpile has contained warheads capable of producing very low nuclear yields. At the height of the Cold War many thousands of these warheads were deployed, but never used – even in regional confrontations where their use would not necessarily have provoked a Soviet response. There is no evidence that the simple possession of these weapons made nuclear use by the United States more likely. No President would be inclined to employ any nuclear weapon, irrespective of its explosive power, in anything but the gravest of circumstances. Simply put, the nuclear threshold for the United States has been, is, and always will be very high.

On nonproliferation, the major U.S. objective is to prevent rogue states and terrorist groups from acquiring weapons of mass destruction and systems for their delivery. Neither advanced concepts efforts nor studies of an earth-penetrating weapon will increase incentives for *terrorists* to acquire such weapons – those incentives are already high and are unrelated to U.S. capabilities. Nor are they likely to have any impact on *rogue states*, whose proliferation activities march forward independently of the U.S. nuclear program.

Over the past decade we have seen very significant reductions in the numbers of U.S. (and Russian) nuclear weapons, reductions in the alert levels of nuclear forces, and the abandonment of U.S. nuclear testing. No new warheads have been deployed and there has been little U.S. nuclear modernization. There is absolutely no evidence that these developments have caused North Korea or Iran to slow down covert programs to acquire capabilities to produce nuclear weapons. Rather it is plausible that North Korea and Iran are seeking WMD, in part, to deter the United States. In this regard, they may be reacting more to U.S. advanced conventional weapons than to anything the United States has done, or is doing, in the nuclear weapons arena.”

May 2004: Congress votes to approve the FY 2005 Defense Authorization Act, which gives DOE authority to go ahead with research on a nuclear earth penetrating weapon and “mini nukes.” The authorization is later reversed in appropriations deliberations.

May 2004: President Bush signs National Security Presidential Directive (NSPD) 35, “Nuclear Weapons Deployment Authorization.”

May 2004: President Bush signs National Security Presidential Directive (NSPD) 34, “Fiscal Year 2004-2012 Nuclear Weapons Stockpile Plan,” which directs a force structure through 2012.

29 April 2004: The Air Force issues a Global Strike / Global Persistent Attack capability Request for Information (RFI) to explore the “full range of possible solutions to meet a stated operational challenge.” The background description described that the Air Force “is updating its requirements for GS/GPS capabilities” to “ensure that the Air Force can strike a variety of targets, including deeply buried targets (HDBTs)...until fielding of the next generation Long Range Strike capability.” The capabilities should provide the ability to operate at “extended distances from the theater or conflict” with an “effective and flexible payload (e.g., nuclear and conventional precision/non-precision munitions).” The RFI gives tentative milestones with development beginning in 2006, Initial Operational Capability (IOC) in 2015 and Full Operational Capability (FOC) in 2020.

29 April 2004: The Air Force issued a modification to a solicitation issued on 27 April 2004 for Engineering Services for Maintenance and Enhancement of National Target Base (NTB) and Desired Ground Zero (DGZ) List Integrated Development System Version II (NIDS II) Software. The modification described that NIDS II is a “sub-system to the Integrated Strategic Planning and Analysis Network (ISPAN) supporting assigned OPLANS, to include OPLAN 8044; Theater Planning and Global Strike Support Documents....”

19 April 2004: Secretary Rumsfeld signs the Nuclear Weapons Employment Policy (NUWEP), which states in part:

“U.S. nuclear forces must be capable of, and be seen to be capable of, destroying those critical war-making and war-supporting assets and capabilities that a potential enemy leadership values most and that it would rely on to achieve its own objectives in a post-war world.”

18 April 2004: The Air Force issues a pre-solicitation announcement for Missile Applications Software Support (MASS). Previously known as Ballistic Missile Strike Planning Software Support (BMSPSS), the work will include engineering services for maintenance, enhancement and development of STRATCOM's ballistic missile planning sub-system, a part of the Integrated Strategic Planning and Analysis Network (ISPAN), previously known as the Strategic War Planning System (SWPS). BMSPSS (or MASS) is designed for STRATCOM to rapidly allocate and assign intercontinental and sea-launched ballistic missiles in support of assigned OPLANS (including OPLAN 8044), Theater Planning and Global Strike Support Documents, and new UCP tasking and related products.

1 April 2004: Quoted in a United Press International story (Pamela Hess, “Pentagon Making Case For New Nukes,” April 1, 2004), DOE director of the National Nuclear Security Administration Linton Brooks speaks of the need to hold at risk underground facilities: “Underground facilities are proliferating throughout the world ... **Generic dictators are only deterred by (the United States) holding what they value at risk.** They tend not to value their population but their instruments of power.”

April 2004: The Air Force releases a request for information (RFI) to industry soliciting concepts for ideas to improve long-range “global strike” capabilities in the short term. The Air Force says it may seek to begin fielding the interim capabilities in 2015, at least a decade before a next-generation platform could enter service.

April 2004: The JCS tasks STRATCOM to develop a new joint doctrine for “strategic attack.” The previous draft (completed in 2001) had languished after 9/11. The directive says: “Strategic attack is described as offensive actions intended to directly affect an adversary’s strategic centers of gravity. It includes analysis, planning, targeting, command and control, execution and assessment in combination to support achievement of strategic objectives.” The outline of the prospective manual includes global strike and special operations.

31 March 2004: The State Department, DOD and DOE submit a required report to Congress stating that the development of low-yield nuclear weapons would have “no practical impact” on the administration's non-proliferation efforts. In repealing 1994 Congressional restrictions on research in 2003, Congress required that the government submit a formal report on the possible impact that repealing the ban might have on U.S. nonproliferation objectives. In a letter accompanying the report's submission, Linton Brooks, head of the National Nuclear Security Administration, says that the departments had concluded that the impact of the repeal would be negligible: “[The report] concludes that although repeal will slightly complicate U.S. nonproliferation diplomacy, we anticipate no significant impact on U.S. ability to achieve our objectives at the 2005 Nuclear Nonproliferation Treaty Review Conference.” The report states that U.S. restrictions on low-yield nukes likely would not prevent “rogue states,” such as North Korea, or terrorist organizations, from trying to develop or obtain nuclear weapons.

30 March 2004: Testifying before the House Armed Services Committee, Lt. Gen. James E. Cartwright, Director for Force Structure, Resources, and Assessment Directorate (J-8), Joint Staff (and future STRATCOM commander), says that “STRATCOM has reported significant progress in their new mission area of Global Strike, and they are on schedule to achieve full operational capability this year. **Global Strike will enable us to hold at risk emerging target sets not included in a deliberate plan, where timeliness is critical.**”

“In enhancing our conventional long range strike capability, we seek to increase our persistence over the battlefield and our ability to range key targets in denied territory.

Our enhanced capabilities will enable us to respond to the commander's needs in a timely fashion, achieving strategic and operational effects with lethal and non-lethal means.

In seeking these attributes, some of the future technologies we are pursuing with the services, NASA and DARPA include high-speed missile systems, hypersonics, high-speed turbines, advanced thermal protection systems for common aerial vehicles, SCRAM jet technologies and high temperature materials for low observables.

... In short, the conventional long-range strike capabilities of today's military forces have demonstrated speed, flexibility and precision in Iraq and the ongoing Global War on Terrorism. Maintaining our unchallenged military superiority requires investment to ensure the current readiness of deployed forces while continuing to transform military capabilities for the future."

26 March 2004: The Final Coordination Draft of the JCS Joint Doctrine for Homeland Security contains the following description of STRATCOM's new missions:

"Integrate global strike planning and support of theater and national objectives. USSTRATCOM will only conduct global strike mission in complete coordination with, and in support of, other combatant commanders **unless otherwise directed by the President.**"

The document defines global strike as:

"Global strikes are rapidly planed, limited-duration, extended-range precision attacks that are conducted to achieve strategic objectives. Global Strikes may be executed against highly valued adversary assets using both kinetic and non-kinetic methods. Global Strike targets include adversary centers of gravity, WMD, their delivery systems, production facilities, and storage sites, **key leadership**, and critical infrastructure. Other examples of HD offensive actions include, [special operations] direct action, space negation denial and computer network attacks."

25 March 2004: Ambassador Jackie W. Sanders, permanent representative of the U.S. delegation to the Conference on Disarmament and Special Representative of the President for the Non-Proliferation of Nuclear Weapons, says in a prepared statement to the Conference on Disarmament that the United States is "reducing dependence on nuclear weapons."

24 March 2004: Testifying before the Senate Armed Services Committee, DOE official Linton Brooks speaks of the budget request for the Robust Nuclear Earth Penetrator (RNEP):

"Perhaps the single most contentious issue in our budget request is continued funding for the Robust Nuclear Earth Penetrator study. This study is to determine whether existing

warheads – the B61 and the B83—could be adapted without nuclear testing to improve our ability to hold at risk hardened, deeply buried facilities that may be important to a future adversary. I want to correct several misconceptions about this effort:

- **There is a clear military utility to such a weapon**, which is why the Defense Department asked for it to be studied. A classified report was submitted to this committee last year on this subject and remains valid.
- Despite this utility, we will move beyond the study stage only if the President approves and funds are authorized and appropriated by the Congress. We included funds in our out-year projections only to preserve the President's options. No decision will be made until the study is completed. The law is clear that beginning development engineering requires Congressional approval.
- Even if deployed, this weapon does not represent a change from our policy goal of deterrence. Deterrence requires we be able to hold at risk that which an adversary values. Our efforts to determine the potential effectiveness of an earth penetrating weapon reflect a continued emphasis on enhancing deterrence. Once again I refer you to the classified report submitted last year.

24 March 2004: Testifying before the Senate Armed Services Committee, Adm. Ellis says that STRATCOM's achievements over the previous year included: "Developed a Global Strike Strategic Concept, validated it through a series of exercises and **gained final approval of a Global Strike plan.**" Organizational changes include realignment of Cruise Missile Support Activities previously assigned to the PACOM and JFCOM under STRATCOM to enhance Global Strike capabilities. Also on 1 October 2003, the Commandant of the Marine Corps directed the activation of a Marine Corps service component command called U.S. Marine Corps Forces, US Strategic Command (MARFORSTRAT) to support Global Strike.

"The Global Strike mission embodies US Strategic Command "capabilities-based" strategy and employs various assets to execute limited-duration, extended-range, and precision kinetic and/or non-kinetic strikes anywhere on the globe. Our adaptive planning process is being upgraded with the goal of **accelerating development of courses of action for rapid presentation to our national leadership.** When fully realized we will be able to **dramatically shrink response timelines.**

This new construct also provides the nation with a combatant command that effectively works across traditional regional boundaries and addresses potential threats with a global perspective. We are strengthening formal relationships through extensive coordination with RCCs, Services, the Joint Staff, and OSD."

Asked to address the Robust Nuclear Earth Penetrator (RNEP), Ellis says adversaries are responding to the United States' overwhelming ability to swiftly and precisely attack by hardening their high value facilities. These hard and deeply buried targets are **"very, very**

demanding," and, in some cases, they cannot be destroyed, Ellis says. He says that additional technologies are needed to destroy these "niche" targets.

15 March 2004: Secretary Rumsfeld signs the 2006-2001 Strategic Planning Guidance.

15 March 2004: In a letter published in *Defense News*, Keith Payne, a key contributor to the Nuclear Posture Review and a member of STRATCOM's Strategic Advisory Group (SAG), writes:

“...commentary on the NPR generally has missed or distorted beyond recognition important new directions it introduces in U.S. strategic policy....The new policy direction seeks to reduce reliance on nuclear weapons and place greater weight on non-nuclear threat options. Yet most NPR commentary has suggested just the reverse...

The NPR...prudently called for periodic assessments, in part to see if the promise of non-nuclear deterrent options is being realized. [And the NPR] recognized that the nuclear arsenal...needs to be modified or upgraded. When winning ‘hearts and minds’ and the postwar peace are priorities, deterrence threats based on the generally high nuclear yields of the Cold War arsenal may not appear credible, given the excessive civilian destruction likely to occur.

We do not know...whether the conditions necessary for deterrence are operating in North Korea or other rogue states sponsors of terror. Nor can we be confident that U.S. deterrent threats will be decisive in the decision-making of opposing leaders who might be willing martyrs, desperate gamblers, incommunicado, ignorant, self-destructive, self-absorbed or motivated by absolute, intangible goals.

Clearly some reasonable and much needed steps to better align U.S. deterrence policy to the realities of the new era include broadening U.S. deterrent threat options; ... questioning the credibility of the inherited Cold War nuclear arsenal for contemporary deterrence purposes; seeking an understanding of opponents’ intentions and the flexibility to tailor deterrence to specific requirements of foe, time and place....”

13 March 2004: The JCS issue the new National Military Strategy of the United States.

11 March 2004: The Army conducts a successful test of the new Army Tactical Missile System - Penetrator, or ATACMS-P, a short-range earth penetrating missile, at White Sand Missile Range, NM, against a mock North Korean underground target fabricated by the Defense Threat Reduction Agency.

11 March 2004: Testifying before the Senate Armed Services Committee, Adm. James O. Ellis says that “The United States can no longer know for certain which nation, combination of

nations, or non-state actors may pose threats to our vital interests. Many of the threats we face are global in nature, often operating in the seams between national boundaries, political systems, and ideologies.... Preparing for the future requires us to develop capabilities that can adapt quickly to new challenges and to unexpected circumstances.” Referring to the new missions assigned by President Bush in January 2003, Adm. Ellis says that “As is the case with the traditional missions of nuclear deterrence and space operations, this new portfolio of missions transcends geographical boundaries.” He continues:

“Missions that cross regional boundaries require a global approach. US Strategic Command is specifically tasked to integrate each of those missions in support of warfighters around the globe. We believe that integrating these capabilities can maximize our Nation’s ability to respond to a broad range of global threats and contribute significantly to our Nation’s security....The global focus and reach of US Strategic Command’s operations have raised significant interest among international friends and allies.”

Admiral Ellis also describes how STRATCOM is working to incorporate offensive forces with future defensive capabilities to enhance the effectiveness of US strike options:

“US Strategic Command, in coordination with US Northern Command and US Pacific Command, is refining the cross-command procedures for integrating offensive and defensive operations. Potential offense response options will include both kinetic and non-kinetic conventional weapon systems and information operations. An active missile defense provides a broader range of options to senior leadership decision-makers while adding additional strategic deterrent capability. Integrating these capabilities with responsive offensive actions further increases the probability of success in countering an adversary’s attack.”

9 March 2004: STRATCOM issues the Technical Direction Document (TDD) for updating the Document Production System (DPS) to support Strike Warfare Directorate’s Combat Plans Division (ST12) in providing OPLAN mission data reports to field components and outside agencies. In addition to supporting OPLAN 8044, DPS must be able to:

- Develop reports to support the dissemination of conventional and non-kinetic mission data.
- Develop reports to support the dissemination of Global Strike sorties and targets.
- Develop reports for Integrated Missile Defense planning data.
- Develop reports for Information Operations planning data.
- Migrate DPS from Power Builder to a TBD environment.
- Incorporate web-based technology into DPS, to include user input and mission output.

Funding for DPS began in 2002 and is scheduled to continue through 2013.

9 March 2004: The final Technical Direction Document (TDD) for the Theater Integrated Planning Subsystem (TIPS) is issued by STRATCOM. TIPS, which interfaces with Integrated Strategic Planning and Analysis Network (ISPAN), previously known as the Strategic War Planning System (SWPS), is required to support OPLAN-level requirements currently directed to the Global Strike Division at STRATCOM (ST11). TIPS will also support other mission areas as their CONOPS evolve and mature. TIPS will provide the capability to:

- produce Theater Planning Support Documents (TPSDs) in support of ST11.
- produce USSTRATCOM **Global Strike Planning Support Documents** (GSSDs) in support of ST11.
- produce Courses of Action (COA) from the source documents (TPSDs/GSSDs) in support of ST11.
- provide reachback capability for deployed team members as part of the Strategic Support Team (SST- formerly Theater Planning Response Cells (TPRCs)).

Funding for TIPS began in 2003 and is scheduled to continue through 2013. Major enhancements include:

- Support system refinement for conventional and nuclear 'platforms'.
- Integrate, where possible, collaboration.
- Integrate, where beneficial, the ability to interface with Theater Battle Management Core Systems (TBMCS).
- Incorporate any other new mission requirements that may be needed to support **Global Strike** and the other TRD evolving missions.
- Incorporate more import capabilities from the Intel and Analysis functions.
- Incorporate Conventional Air Launch Cruise Missile (CALCM) mission information.

5 March 2004: During a background briefing, a senior defense official explains STRATCOM's implementation of Global Strike:

Q: STRATCOM "has got a new responsibility for global strike, apparently. They're going to IOC, and it's a kind of interesting capability. But just take a name and a command and flesh it out a little bit. That would -- I think it would make it more understandable.

SR. DEFENSE OFFICIAL: Let's use Strategic Command and Admiral Ellis and the role of global strike. He would come in and say, what is the demand? He does his own analysis internally. He tries to create a supply-demand function. So let's just say that he comes in and he says, what I'd like to be able to do is field the capability to be able to deliver a discreet effect anyplace in the globe inside of 96 hours, okay? That's about as

detailed as it gets. Then the services start to look at what would it take. And it's not necessarily the bolt out of the blue that comes from the United States and goes -- some of it can be basing forward. Some of it can be rotational forces that are forward, PREPO. Some of it can be the long-range-type strike....

SR. DEFENSE OFFICIAL: But I would just say on the Admiral Ellis one here, too, the way he's coming up with that need is he's looking at the war plans that he's required to support and across the spectrum, and you know, for almost all of them it's more than one. So he's saying in order to be able to do my job that I'm tasked with, I'm going to have to have these capabilities. So it's not just something he's got an itch somewhere. He's taking that from the operational guidance.”

5 March 2004: The internal STRATCOM Theater Integrated Planning System (TIPS) Technical Direction Document (TDD) states that “TIPS is required to support OPLAN-level requirements currently directed to Global Strike Division/USSTRATCOM (ST11), which will also support other mission areas as their CONOPS evolve and mature. ... TIPS will provide the capability to produce Theater Planning Support Documents (TPSDs) in support of ST11.

- TIPS will provide the capability to produce USSTRATCOM Global Strike Planning Support Documents (GSSDs) in support of ST11.
- TIPS will provide the capability to produce Courses of Action (COA) from the source documents (TPSDs/GSSDs) in support of ST11.
- TIPS will provide reachback capability for deployed team members as part of the Strategic Support Team (SST- formerly Theater Planning Response Cells (TPRCs)).”

March 2004: NASA successfully launches its second X-43A hypersonic research vehicle, which flies for 11 seconds. The flight caps a seven-year development effort as part of the agency's Hyper-X program to study propulsion and related technologies for air-breathing hypersonic aircraft in flight. A flight test in 2001 failed when the Pegasus booster became unstable during its boost phase and the vehicle had to be destroyed. NASA's follow-on vehicle, the X-43C, was being designed by Boeing Phantom Works and Allied Aerospace, before NASA Administrator Sean O'Keefe announced the cancellation of the X-43C program earlier this year.

12 February 2004: Testifying before the Defense Subcommittee of the House Appropriations Committee, Secretary Rumsfeld says the DOD is only studying earth penetration weapons:

“What's been proposed is that some funds be used to study and determine the extent to which a deep earth penetrator conceivably could be developed, and what it would look like, and whether or not it makes sense to do it. There's no funds in here to -- to do it. There's no funds in here to deploy it since it doesn't exist.”

6 February 2004: The draft Joint Operations Concept (JOC) for Major Combat Operations

Version .962 prepared by Joint Forces Command (JFCOM) includes changes made by the office of the Secretary of Defense (OSD) to add nuclear weapons to conventional military planning in the future. (MCOs are defined as “large-scale operations conducted against a nation state(s) that possesses significant regional military capability.”)

“A US-led coalition may eventually conduct major combat operations against an adversary who possesses weapons of mass destruction (WMD). An adversary without the conventional forces necessary to battle a more capable US and coalition force may use this extreme form of warfighting violence. Myriad diplomatic, informational, economic, social, as well as military issues surround both adversary and friendly use of WMD. The US must remain vigilant and capable of dissuading, deterring, limiting, and denying adversary employment of such weapons. If and when WMD are employed against the US, an ally, or friend, the US strategic level response is a political decision, not a military decision. At the operational and tactical levels, US forces must be trained and ready to operate in a WMD environment with little or no degradation in posture.”

The OSD adds the sentence to the end of the paragraph: “Operating in a WMD environment may include potential use of US nuclear weapons, when directed by the appropriate authorities, to influence the outcome of operations.”

In two additional paragraphs, nuclear weapons are also added:

“While achieving military objectives alone will not necessarily lead to a decisive conclusion, it is a *sine qua non* of the desired end state. The strategic military objectives are achieved through operational and tactical level actions focused on achieving decisive outcomes and conclusions. These actions coherently apply all the capabilities of the joint, multinational and interagency forces, nuclear or conventional, lethal or nonlethal, to disintegrate, disorient, dislocate or destroy the opponent.

... Provide multidimensional precision engagement, including close fire support by exploiting high-endurance manned and unmanned launch platforms which combine ISR and engagement capabilities, deep-reach precise fire support including sea-based and long-range aerospace components to support forcible-entry operations, lethal and nonlethal (nuclear and conventional) fires, fires capable of type-target discrimination, time-sensitive targeting, and in-flight re-targeting of smart weapons.”

The draft states that “Since no current intelligence estimate forecasts a peer or near-peer competitor in the 2015 timeframe, this paper focuses on a high-end regional competitor with significant military capability.”

6 February 2004: A new Air Force Concept of Operations (CONOPS) for information operations is published, fully codifying the role of cyber warfare in global strike: “The Global

Strike CONOPS defines the capability to hold high-value targets at risk from the beginning of a conflict. IO will hold these same targets at risk. The full-range of IO capabilities will influence, disrupt, corrupt or usurp adversarial human and automated decision-making while protecting our own. Another key focus will be setting the conditions for successfully terminating hostilities.”

5 February 2004: The Defense Science Board Task Force on Future Strategic Strike Forces issues its final report, stating:

“The evolving nature of strategic strike operations (with increasing emphasis on attacking fleeting, relocatable, or mobile targets in a prompt and decisive engagement) will put greater demands on advanced strike, ISR/BDA, delivery, and payload systems. Strike systems will require near real-time, high-confidence information on target location and identification and then prompt response capability to seek out and engage targets.”

The DSB report recommends developing concepts for future strategic strike weapon delivery systems. The assessment “should encompass conventional and/or special nuclear weapon delivery concepts that provide for prompt engagement of targets from stand-off ranges. These concepts should be capable of fast response (high velocity over long ranges), precision tracking (slow speed or loitering in the terminal area with onboard seekers to locate and identify targets), and effective engagement (appropriate weapon payload matched to target objective).” Specific delivery system concepts which should be evaluated include:

- ICBM (e.g., PK) and/or SLBM (e.g., D-5) missile systems with UCAV-like payloads for long-range, prompt global strike;
- Shorter range ballistic missile systems compatible with submarine-, surface-, or air-launched platforms with UCAV-like payloads for prompt theater strikes;
- Supersonic and/or hypersonic cruise missile platforms;
- Unmanned ISR/strike, stealthy, subsonic, long-endurance aircraft; and
- Arsenal aircraft capable of long endurance, stand-off, operations.

The DSB report also concludes that STRATCOM, given its new global strike mission, “is the logical combatant command to identify and advocate the required size and mix of payloads for strategic strike. STRATCOM’s culture of continuous peacetime planning and operational exercises is key to identifying capability shortfalls for holding strategic targets at risk. We believe that STRATCOM should provide its recommendations on an annual basis to the SecDef to ensure high-level visibility in the programming and budgeting process. While important changes in the requirements and acquisition process appear to be underway, we are concerned that the current process continues to emphasize general purpose applications and devalues the niche capabilities needed for many strategic applications.”

On new nuclear weapons capabilities, the DBS report concludes:

“Nuclear weapons are needed that produce much lower collateral damage (great precision, deep penetration, greatly reduced radioactivity); have robust performance margins; are devised for ease of manufacture and maintenance; and produce special effects (e.g., enhanced EMP, enhanced neutron flux, reduced fission yield). The Task Force recommends that research be initiated on weapons that meet this new vision. Whether or not any new types of weapons require testing will depend on the results of the technical development work, as well as operational and policy considerations.”

The DSB advocates a follow-on nuclear cruise missile program, conversion of 50 Peacekeeper ICBMs to a conventional role and the development of a conventionally armed, submarine-launched intermediate range ballistic missile. The study said the Defense Department "should maintain and extend [ICBM], submarine-launched ballistic missile/submarine-launched cruise missile (SLBM/SLCM), bomber and air-launched cruise missile/advanced cruise missile (ALCM/ACM) nuclear delivery systems in accordance with current plans." It said "...these systems are adequate for handling major power adversaries through 2040." "A follow-on cruise missile program is anticipated to start in approximately 2015, to be able to have an initial operational capability prior to the 2030 end-of-service-life for the ALCM and ACM," the study said.

4 February 2004: The FY 2005 DOE budget request submitted to Congress includes \$27.6 million to continue work on a Robust Nuclear Earth Penetrator (RNEP) and \$9 million to support "advanced concept" studies on new nuclear weapons to "meet potential new or emerging Department of Defense requirements."

2 February 2004: The JCS operations deputies are briefing on the Major Combat Operations Joint Operating Concept (JOC) Version 0.925a dated 14 January 2004 in the "tank." There is no mention of nuclear weapons on the .925a version.

February 2004: A new draft JCS Strategic Deterrence Joint Operating Concept (JOC), prepared by STRATCOM, describes the role of nuclear weapons as follows:

“Nuclear weapons provide the President with the ultimate means to terminate conflict promptly on terms favorable to the United States. They cast a lengthy shadow over a rational adversary’s decision calculus when considering coercion, aggression, WMD employment, and escalatory courses of action. Nuclear weapons threaten destruction of an adversary’s most highly valued assets, including adversary WMD/E capabilities, critical industries, key resources, and means of political organization and control (including the adversary leadership itself). This includes destruction of targets otherwise invulnerable to conventional attack, e.g., hard and deeply buried facilities, “location uncertainty” targets, etc. Nuclear weapons reduce an adversary’s confidence in their ability to control wartime escalation.

... Although advances in conventional kinetic and non-kinetic means {e.g., computer network attack (CNA), High Energy Radio Frequency (HERF), directed energy (DE), etc.} by 2015 will undoubtedly supplement U.S. nuclear capabilities to achieve these effects, nuclear weapons that are reliable, accurate, and flexible will retain a qualitative advantage in their ability to demonstrate U.S. resolve on the world stage. These capabilities should be further enhanced by improving our capability to integrate nuclear and non-nuclear strike operations. Providing the President an enhanced range of options for both limiting collateral damage and denying adversaries sanctuary from attack will increase the credibility of U.S. nuclear threats, thus enhancing deterrence and making the actual use of nuclear weapons less likely. Additionally, nuclear weapons allow the U.S. to rapidly accomplish the wholesale disruption of an adversary nation-state with limited U.S. national resources. While the legacy force was well suited for successful deterrence throughout the Cold War, an enhanced nuclear arsenal will remain a vital component of strategic deterrence in the foreseeable security environment.”

Global strike, described for the first time as including conventional and nuclear attacks, as well as preemptive strikes, is defined as:

“the ability to rapidly plan and deliver limited-duration and extended-range attacks to achieve precision effects against highly valued adversary assets. Effects-based targeting, analysis, planning, and execution are combined to support attacks on high-payoff/high-value targets. These targets may include WMD production, storage, and delivery systems, adversary decision-makers, critical command and control facilities, and various adversary leadership power bases. U.S. leadership could use Global Strike capabilities both to impose costs and to deny benefits to an adversary in a highly customized manner appropriate to the future security environment. Global Strike capabilities must be capable of defeating anti-access strategies imposed by distance, physical hardening or active and passive defenses and be able to operate in an environment where friendly forces may not have battlefield dominance. Because of the potentially urgent employment timelines, Global Strike will primarily rely upon long-range, high-speed, kinetic (advanced conventional and nuclear) and non-kinetic aerospace delivery platforms, unmanned systems, cyber systems, and/or small numbers of special operations forces employed over extended distances. In-theater capabilities will supplement these forces if available and appropriate, but the defining characteristic of Global Strike will be its unique blend of “high-end” and “low-end” military capabilities without resort to large numbers of general purpose forces traditionally associated with major combat operations.

... Global Strike must allow for independent operations anywhere in the world with minimal, if any, support from overseas forces and facilities. In many cases, senior national leadership will want to delay a Global Strike execution decision until the last possible minute. Future Global Strike missions will use weapons possessing two-way secure communications that allow for real-time command, targeting, retargeting, disarm,

and disablement from the time of weapons release through impact/detonation. Since most Global Strike targets will be well protected, future forces must leverage stealth, speed, and low probability of intercept (e.g., ballistic) attack profiles to ensure arrival on target.

Threatened use of Global Strike will be more effective to the degree that both U.S. and adversary leaders are confident effects can be achieved without inflicting significant collateral damage. Our ability to create only intended strategic effects raises the credibility of strategic deterrence. Effects can be achieved through either kinetic or non-kinetic means, and may be massive or limited depending upon specific objectives, although the number of forces involved will be substantially less than those involved in major combat operations. In some cases, rapid execution against fleeting, "time-sensitive targets" will be needed to create desired effects against high-value targets such as mobile missile launchers or adversary decision-maker convoys.

Because many Global Strike scenarios involve threatened (or actual) preemptive attacks on very-high value targets that will only be exposed for brief periods, Global Strike capabilities must also be highly reliable. Single-string operations lacking the redundancy commonly associated with traditional military operations will be common. The Global Strike philosophy will be "one shot equals one kill." Simultaneous attacks against all the major targets in a given category, e.g., all division headquarters, all WMD facilities, may be required against more capable adversaries, although the total scope of operations will remain dramatically less than those associated with major combat.

Key elements of Global Strike capabilities should be periodically demonstrated openly on the world stage--to ensure adversaries fully comprehend the credible threats they face. However, in all scenarios, it will be highly desirable to conduct strike operations without alerting in advance the adversary, who, if warned, might employ certain capabilities (e.g., WMD) rather than lose them. A "black" or covert component within an otherwise highly visible Global Strike capability is highly desirable. This capability could assure allies without provoking an adversary. If subsequently revealed, this capability will serve to deter third parties by reminding them of their inability to fully characterize the United States' capability to wage war."

26 January 2004: Speaking at a Washington conference, Paul Robinson, director of the Sandia National Laboratory, says that nuclear weapons should be used to target four principle threats: weapons of mass destruction; the leadership of an aggressor; military forces "capable of exporting aggression;" and military infrastructure and related industry.

22 January 2004: The Air Force's 55th Wing at Offutt AFB, Nebraska announces a formal name change of the Strategic War Planning System (SWPS) to the Integrated Strategic Planning and Analysis Network (ISPAN).

11 January 2004: Adm. Ellis, STRATCOM commander, certifies the readiness of the command's new mission of global strike to the Secretary of Defense and the President.

8 January 2004: Speaking at the Paul C. Warnke Conference on the Past, Present & Future of Arms Control in Washington, Gen. Eugene Habiger, former Commander in Chief of U.S. Strategic Command (STRATCOM) says:

“The question was asked earlier about new weapons. I think that’s a terrible waste of money. To go out and spend upwards of \$10 billion for a weapon which has very, very little military utility does not make a lot of sense. In 1997 I accepted on behalf of the Department of Defense the first weapon to reach deeply buried targets. It was called the B-61, model 11. It was a B-61 bomb put in a case steel hardened container. It would go several meters under earth. It would not be a rock-buster, but in my view that’s all we need. To go out and spend big bucks for a weapon that has very little utility doesn’t make much sense . . . My point is God help us if we ever develop a nuclear weapon that looks attractive to use. That’s the path we’re going with this initiative to build a nuclear weapon that perhaps would be attractive to use.”

January 2004: Ambassador Linton Brooks, Administrator of the DOE National Nuclear Security Administration, writes in *Arms Control Today* (January/February 2004) that nuclear earth penetration weapon research is focusing on modifications to existing B-61 and B-83 nuclear bombs. The DOE study may cost \$10 million in FY 2003 and \$40-\$50 million over three years. Congress authorized the Administration’s request for \$15 million for the second year of this study in FY 2004, but it only appropriated 7.5 million. The Administration has requested \$27.5 million in its FY 2005 budget to begin developmental ground tests” on the “candidate weapons designs.” It also plans request sharply higher levels of funding in the next few years, including \$95 million in FY2006, \$145.3 million in FY2007, and \$128.4 million in FY2008.

2004: Congress rejects funding for the Effectiveness Enhancement (E2) Program which was intended to develop GPS-like accuracy for the W76/Mk4 ballistic missile reentry vehicle. The justification is that enhanced accuracy might lead to development of low-yield warheads.

Chronology for 2003

7 December 2003: An internal military C-CBRNE [Countering Chemical Biological Radiological Nuclear and High Explosive Conventional Weapons] Lessons Learned during Operation Iraqi Freedom (OIF) conference opens at Ramstein AB, Germany. Counter-proliferation Targeting is one of the issues discussed.

2 December 2003: Speaking before a conference sponsored by the Institute for Foreign Policy Analysis (IFPA) in Washington, STRATCOM commander Adm. James O. Ellis states that all legs of the traditional nuclear triad remain relevant today, but the missions, duties and tools have expanded. The definition of deterrence is still the prevention of aggression threatening the United States, its allies and friends and vital interests. "Strategic deterrence causes adversaries not to take radical courses of action by maintaining a decisive influence over their decision-making," he says

A new, broader range of capabilities is needed if the military is to provide leaders with basic deterrence, Ellis also says. These include worldwide situational awareness and the ability to quickly strike any adversary anywhere on the planet. According to Ellis:

"I do not subscribe to the theory that new threats cannot be deterred. They can be, and general concepts of deterrence still apply. It is our ability to fully define what new adversaries value, or more importantly, what outcome they wish to avoid at all costs, that needs attention. We must also arm ourselves with a complete set of tools more suited to the task of deterrence in the challenging world of this new millennium. It is fair to note that all traditional tools of deterrence may not work against a terrorist seeking martyrdom, whose avowed tactics are hatred, mass destruction of property, and the targeting of innocents. We are required to think of deterrence in new ways, to provide the president with a wider range of military deterrent options that bring to bear every element of national power, and transcend departmental or even governmental boundaries.

... We can ... deter state sponsors of terrorism, especially those who retain some rational beliefs. While our nuclear capability continues to serve as a valuable deterrent, we are also studying existing and evolving conventional weapons, as well as kinetic and non-kinetic capabilities for our global strike mission. We have recently been working closely with Special Operations Command (USSOCOM) to provide regional Combatant Commanders with a combined resource to strike any adversary, anywhere on the earth.

... Our prompt ability to strike will initially rely on bombers, TLAM, and evolving weapons systems such as SSGNs equipped with conventional cruise missiles. As new advanced conventional and IO tools develop, we will incorporate them into the mix.

As we are now two years into the NPR, a strategic capabilities assessment has been initiated by OSD to assess progress and provide midcourse guidance. In order to continue providing an effective deterrent, Congress recently provided funding to study elements of our nation's stockpile. These studies will help us determine the size and character of the future stockpile required to continue protecting our nation, our forces, and our allies in the years ahead. A weapon is only a deterrent if it retains credibility. That's why we're also examining the deterrent value of nuclear and conventional niche weapons, such as the robust nuclear earth penetrator and Big BLU.”

At the same conference, According to the *Global Security Newswire*, former assistant secretary of defense for international security policy J.D. Crouch also presented the results of the Nuclear Posture Review, predicting that the United States in the future may need to apply “reverse extended deterrence,” which could involve discouraging a country attacked by the United States from using weapons of mass destruction in response. “We are going to be in the position increasingly in the future where we are having [sic] to deter while we are defeating a country,” he says.

Crouch also says that the U.S. may need a broader range of nuclear capabilities to deter potential adversaries in the future. “We need to question whether or not the kinds of things we might need for nuclear capabilities to deter in the future are really dealt with, with the arsenal that we have today,” he says and adds that the Nuclear Posture review concluded that “deterrence is not the only goal.” Other purposes for strategic weapons – such as assuring strategic allies, dissuading potential competitors, defeating adversaries if deterrence fails – should more prominently drive the strategic force composition, Crouch says.

1 December 2003: The 40th Air Expeditionary Group commander in Diego Garcia issues a welcome pamphlet which states that the mission of the unit is to: “Provide global strike capability in support of CENTCOM combat operations.”

December 2003: As part of the Terminal Fury 04 exercise on the Korean peninsula, STRATCOM demonstrates new mission support (Global Strike, information operations, Space Operations, and ISR) to a regional component command (PACOM). Using reach-back to Omaha headquarters and Strategic Support Teams forward deployed in Hawaii, STRATCOM plans, executes, and recovers “global strike” missions against North Korea.

December 2003: The head of the Department of Energy’s nuclear weapons division reportedly sends a memo to the national weapons laboratories urging them to take full advantage of the 2003 Congressional repeal on the ban on research into low-yield nuclear weapons to further investigate earth penetrating nuclear weapons.

November 2003: The initial USSTRATCOM CONPLAN 8022-02, entitled Global Strike is completed, putting in place for the first time a preemptive and offensive strike capability. The

Concept Plan includes procedures for developing courses of action and decision-making, target selection, and the forces available.

November 2003: The Air Force Transformation Flight Plan describes the evolving concept of global strike to include thwarting of “asymmetric” measures by a potential adversary and destruction of high value targets. Earlier anti-access arguments oriented towards justifying the F-22 fighter are suppressed and the language is more compatible with JCS and STRATCOM articulations of global strike. But the Air Force institutionally continues to see global strike as entailing solely conventional weapons:

“Potential adversaries have become increasingly reluctant to oppose the US military using force-on-force. Instead, they seek new and asymmetric ways to counter American strength. For example, potential adversaries are acquiring advanced anti-access systems and developing and acquiring weapons of mass destruction to threaten America and discourage intervention, disrupt coalitions, or deny access.

The effects that Global Strike CONOPS capabilities generate are twofold: (1) gain and maintain battlespace access, and (2) High Value Target destruction.

... In the initial hours of conflict, the Global Strike capabilities will gain access into denied battlespace by rapidly degrading, and then defeating, the adversary's C4ISR, anti-access weapons, and CBRNE weapons and delivery systems. Systems engaged will most likely be low-observable, remote, and standoff supported by focused information operations and guided by flexible, responsive command and control systems.”

The document states that:

“A non-nuclear, prompt, global attack capability will provide the United States with a range of options for deterrence and flexible response when rapid response is absolutely critical, risks associated with other options are too high, or when no other courses of action are available. Such rapid global attack would likely be used against extremely high value targets such as hardened command and control facilities, terrorists, fixed and mobile integrated air defense system elements, theater ballistic missile launchers, and CBRNE production, storage, and delivery.”

Describing the Nuclear Response CONOPS prepared by the Air Force, the Plan also states:

“Now and in the coming decades, the United States is likely to face adversaries possessing a wide range of capabilities, to include CBRNE weapons, which threaten the survival of the United States and its allies. These adversaries include those who support terrorists, have active CBRNE programs, and are developing capabilities to reach forward-deployed US forces as well as US and allied population centers. The ability to

deter such adversaries, especially those with authoritarian, unconstrained, and unpredictable leaders, is uncertain. While CBRNE threats are not new, the nature of potential adversaries and the methods they may use have dramatically changed.

Therefore, the ways the United States addresses these threats must transform. The Congressionally mandated Nuclear Posture Review, completed in December 2001, put into motion a major change in DoD's approach to the role of nuclear offensive forces in its deterrent strategy and presents a transformational blueprint for a new strategic posture. The Nuclear Posture Review established a New Triad composed of offensive strike systems, both nuclear and non-nuclear; defenses, both active and passive; and a revitalized defense infrastructure—all bound together by enhanced command and control and intelligence systems. The addition of defenses and non-nuclear conventional capabilities, combined with information operations, will both reduce US dependence on nuclear weapons and improve the ability to deter attack in the face of proliferating CBRNE. The new capabilities, described in the Nuclear Posture Review, reduce the risk to the United States as it draws down its nuclear forces toward a goal of 1,700-2,200 operationally deployed strategic nuclear warheads. The Review also describes the shift from a threat-based planning construct to a capabilities-based planning construct, recognizing the new relationship between the United States and Russia following the collapse of the Soviet Union and the end of the Cold War.

A vital element of the New Triad, the Nuclear Response CONOPS fully supports this new concept by providing safe, reliable, and proficient nuclear forces. Capabilities within the Nuclear Response CONOPS act as the AEF top cover, providing the deterrent umbrella under which joint conventional forces operate. They help to deter nuclear attacks and dissuade any adversary from employing nuclear threats to coerce the United States, its forces, or its allies. They also contribute to deterring other CBRNE attacks, as well as major conventional aggression, that endanger US or allied vital interests. If deterrence fails, the Nuclear Response CONOPS links nuclear strike forces with command, control, information, and adaptive planning capabilities to jointly defeat the enemy, through a variety of nuclear attack options, and to reestablish deterrence upon conflict termination. The critical capabilities of the Nuclear Response CONOPS include joint ISR; joint nuclear command and control; joint nuclear strike forces, strategic and non-strategic; and joint support forces.”

November 2003: The DARPA Falcon Program Office awards four Phase I contracts to develop concepts for new global strike launch and attack vehicles.

November 2003: The FY 2004 Defense Authorization Bill passed by Congress agrees to repeal the 1994 ban on nuclear weapons research below five kilotons for so-called "mini-nukes." The bill requires the government to report by March 1, 2004, on the possible impact that repealing the ban could have on U.S. government non-proliferation efforts.

22 October 2003: The STRATCOM exercise Global Guardian 04 begins, the first joint major exercise to incorporate the new Global Strike and information operations missions. The exercise scenario centers on a Pacific war and third party involvement that tests and validates nuclear command and control procedures and also involves a WMD terrorist attack in the United States.

21 October 2003: An Air Force briefing on the progress of CONOPS states that the SECRET/NOFORN Nuclear Response CONOPS: “Provide nuclear response options to theater commanders across the entire spectrum of conflict.”

3 October 2003: An Air Force briefing on the Concept of Operations (CO) for the Land-Based Strategic Deterrent (LBSD) outlines the capabilities that a next generation ICBM (2020-2040) will provide: rapid response; response flexibility; long-range strike; nuclear response; positive command & control; an accurate, reliable and ready delivery system; and real-time and in-flight retargeting. The LBSD, the briefing states, will support STRATCOM warfighting requirements in support of OPLAN 8044 (formerly SIOP) and CONPLAN 8022 (Global Strike) against the following categories of targets:

- National/Non-state actors;
- Counter-force/emerging;
- Time-sensitive targets.

The time-sensitive (heavily defended) targets include mobile and fixed targets with the following overlapping sub-categories:

- *Mobile:* Weapons of Mass Destruction; chemical, biological, radiological, nuclear, and high-explosive weapons; command, control and communication facilities;
- *Fixed:* Hard and deploy buried targets; Weapons of Mass Destruction facilities; chemical, biological, radiological, nuclear, and high-explosive weapons; command, control and communication facilities.

1 October 2003: The Defense Advanced Research Projects Agency (DARPA) is placed in charge of the Joint Unmanned Combat Air Systems (J-UCAS) program, intended to develop a family of unmanned combat air vehicle (UCAV) systems for the Air Force and Navy. UCAV candidates include the Boeing X-45C and Northrop Grumman X-47C prototype air vehicles.

Fiscal Year 2004: The Navy's Enhanced Effectiveness (E2) Demonstration Program is scheduled to begin to demonstrate near-term capability to steer a SLBM warhead from a Trident II to Global Positioning Systems (GPS)-like accuracy.

23 September 2003: *Aerospace Daily* reports that the Navy is studying a new submarine-launched intermediate range ballistic missile. Conventional and nuclear payloads should be

considered, according to the Navy notice to industry. Lt. Amy Morrison, a Navy spokeswoman, said the purpose of the notice is to request data "to support preliminary conceptual work on missiles that support the Unified Command Plan, which assigns responsibility for global strike to STRATCOM."

15 September 2003: The Senate begins debate on an amendment to the FY 04 Energy and Water Appropriations bill, submitted by Sens. Dianne Feinstein and Edward Kennedy that would bar the Administration from spending any money to continue a study on the Robust Nuclear Earth Penetrator (RNEP) or to conduct research on other advanced nuclear weapons concepts, including low-yield nuclear weapons also known as mini-nukes.

5 September 2003: The Air Force issues a Request for Information (RFI) to industry for the next-generation Land-Based Strategic Deterrent (LBSD) Analysis of Alternatives (AoA). The RFI initiates a concept call for transformational delivery vehicles meeting the LBSD Mission Need Statement (MNS) and Concept of Operations (CONOPS). The AoA will study each concept's potential as a multiple-use platform and how it might satisfy, or partly satisfy, other Air Force Space Command mission needs such as **Prompt Global Strike** and Operationally Responsive Spacelift.

5 September 2003: The new JCS Strategic Deterrence Joint Operating Concept (JOC) draft version 0.2 identifies the following capabilities as augmenting "strategic deterrence":

- "Force projection capabilities, including the capability to decisively defeat regional aggression
- Kinetic and nonkinetic Global Strike capabilities, **including nuclear weapons**
- Active and passive defense measures, including WME mitigation and consequence management capabilities
- Strategic deterrence information operations capabilities
- Space control capabilities"

3 September 2003: A "final coordination draft" of the Doctrine for Joint Nuclear Operations is published by the JCS. The document describes the results of the Nuclear Posture Review and gives insights into the implementation of the Review, some of the military dimensions associated with nuclear use and brinksmanship:

"the use of nuclear weapons represents a significant escalation from conventional warfare and is provoked by some action, event, **or perceived threat**.

An increased risk of attack, prompted by adversary war readiness measures, may require US forces to maintain visibly increased states of alert. However, the danger also exists that the adversary may perceive either an exploitable vulnerability or the threat of

imminent use. If the crisis is successfully resolved without employment of nuclear weapons, reductions in the alert posture of nuclear forces can send a reinforcing message.

Geographic combatant commanders have **operational control** (emphasis in original) over nuclear capable forces employed for nuclear operations in support of theater conflicts.

Integration of conventional and nuclear forces is crucial to the overall strategy.... to maximize deterrence of WMD use, it is essential for US forces to prepare to use nuclear weapons effectively on the battlefield and against adversary WMD.”

The doctrine draft does not include articulation of the emerging STRATCOM global strike responsibilities. Instead it focuses on the traditional “theater nuclear” support paradigm controlled by the regional commander:

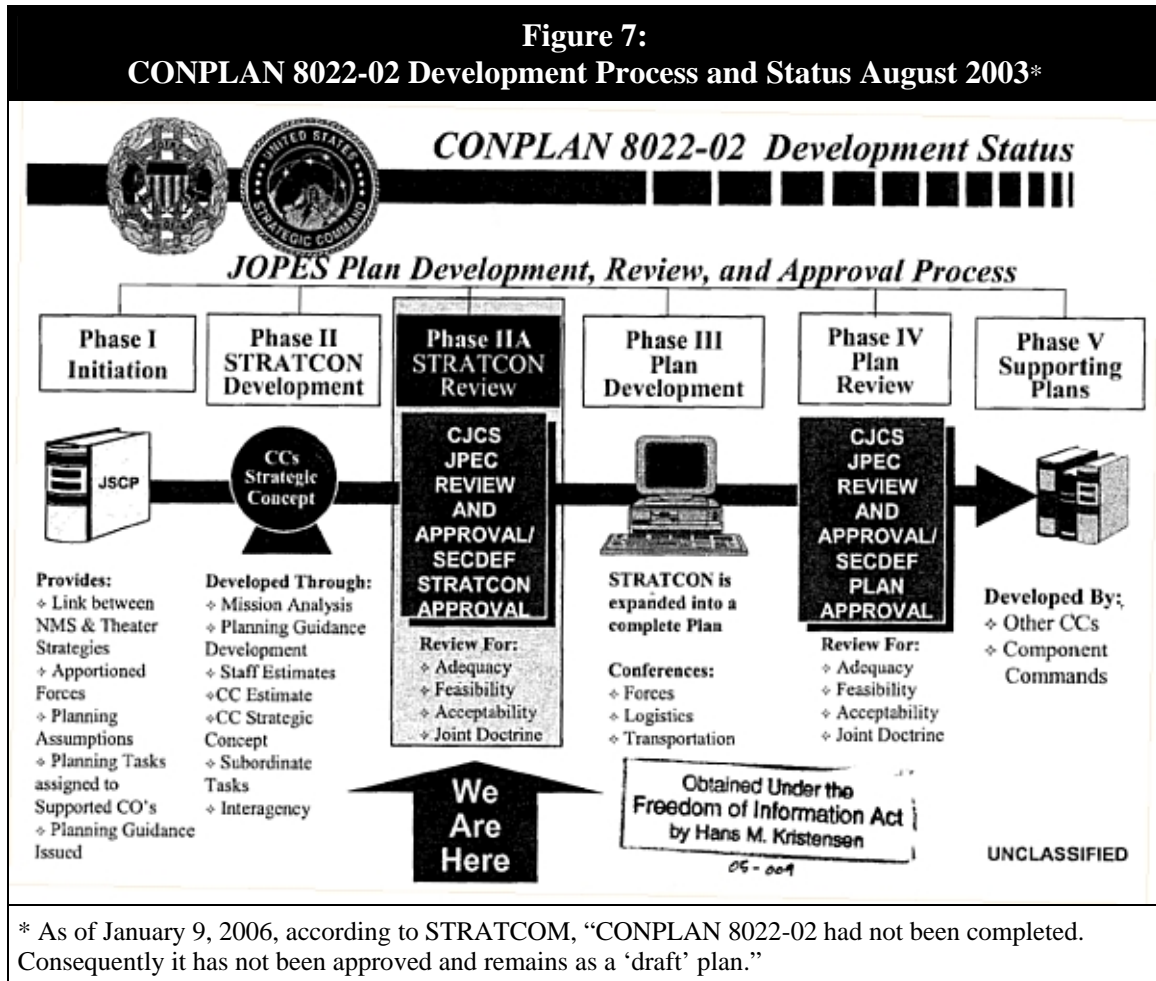
Geographic combatant commanders are responsible for defining theater objectives and developing nuclear plans required to support those objectives, including selecting targets. When tasked, CDRUSSTRATCOM, as the supporting combatant commander, provides detailed planning support to meet theater strategy during crisis action, adaptive, and deliberate planning.

14 August 2003: In a letter to Secretary Rumsfeld, Rep. Curt Weldon (R-Pa.), says he is "dismayed" that DOD did not consult him before publicly coming out against his proposal to form a Congressional commission to review the U.S. nuclear arsenal. On his own initiative, Weldon included the commission proposal in the House version of the FY 2004 Defense authorization bill. Under the proposal, Rumsfeld, in consultation with leaders of the House and Senate Armed Services Committees, would appoint a 12-member panel to make recommendations about national nuclear strategy, including force structure and the role of missile defense. DOD rejected the idea saying that the Nuclear Posture Review already examined all the issues.

7 August 2003: The Joint Staff Directorate for Operational Plans and Joint Force Development conducts a Joint Planning & Strategic Community Strategic Concept Review of STRATCOM CONPLAN 8022-02. The review shows that the plan is nearly half-way through the JOPES (Joint Operation Planning and Execution System) plan development, review, and approval process (see Figure 7).

6 August 2003: The Air Force issues a Sources Sought synopsis to identify contractors for Ballistic Missile Strike Planning Software Support (BMSPSS) in support of the STRATCOM Missile Strike Team to enhance the ballistic missile planning system. STRATCOM uses BMSPSS to rapidly allocating and assigning ICBMs and SLBMs to targets.

Figure 7:
CONPLAN 8022-02 Development Process and Status August 2003*



29 July 2003: DARPA issues its FALCON (Force Application and Launch from CONUS) solicitation:

“DARPA and the Air Force share a vision of a new transformational capability that would provide a means of delivering a substantial payload from within the continental United States (CONUS) to anywhere on Earth **in less than two hours**. This capability would free the U.S. military from reliance on forward basing to enable it to react promptly and decisively to destabilizing or threatening actions by hostile countries and terrorist organizations.

“The Government’s vision of an ultimate prompt global reach capability (circa 2025 and beyond) is engendered in a reusable Hypersonic Cruise Vehicle (HCV). It is envisioned that this autonomous aircraft would be capable of taking off from a conventional military runway and striking targets 9,000 nautical miles distant in less than two hours. It could

carry a 12,000-pound payload consisting of Common Aero Vehicles (CAVs), cruise missiles, Small Diameter Bombs (SDB) or other munitions.

... the government intends to develop a low-cost, responsive launch vehicle called the Small Launch Vehicle (SLV) under the FALCON program. The program envisions the SLV design being integrated and developed in parallel with the Enhanced CAV design. The SLV should serve a two-fold function in that it will also provide a low-cost, responsive launch capability for placing small satellites into low Earth orbit (LEO).”

24 July 2003: In a reply to written questions from Congress for his re-nomination hearing for the position of Chairman of the Joint Chiefs of Staff, General Richard B. Myers states:

“War Planning: We are revising the deliberate planning process to complete planning from initiation to approval in 10 months. In today’s uncertain environment we need to be able to develop war plans that are flexible, and adaptable to specific changes from the initial planning assumptions, and do it more quickly.

National Military Strategy: ...It builds on the new National Security Strategy and supporting strategies that have been released since September 11th and positions the Armed Forces to **conduct preventive and preemptive operations** in defense of the United States and its global interests.”

21 July 2003: *Aviation Week & Space Technology* reports that an upcoming August meeting at STRATCOM is to help draft a vision of the future nuclear stockpile. According to the magazine, “the participants expect to discuss what kinds of weapons are useful for dealing with a "new set of potential adversaries," said one senior official overseeing the nuclear stockpile. The Pentagon "needs to identify shortcomings of the stockpile in dealing with rogue nations, terrorists, or nations that harbor terrorists," he added.” Brig. Gen. Robert L. Smolen, the Air Force's director of nuclear projects and counterproliferation (AF/XON), is quoted as saying: "We don't want to stifle . . . an opportunity to do pure research."

June 20: The mission statement of U.S. Strategic Command states: “Establish and provide full-spectrum global strike, coordinated space and information operations capabilities to meet both deterrent and decisive national security objectives. Provide operational space support, integrated missile defense, global C4ISR and specialized planning expertise to the joint warfighter.”

16 June 2003: The Defense Advanced Research Projects Agency (DARPA) issues a special notice to industry regarding the joint DARPA-Air Force FALCON (Force Application and Launch from CONUS) project to “develop technologies and demonstrate capabilities that will enable transformational changes in global, time critical strike missions.” The notice describes the government’s vision of “an ultimate prompt global reach capability (circa 2025 and beyond)” based on a reusable Hypersonic Cruise Vehicle (HCV) capable of taking off from a conventional

military runway and striking targets 9,000 nautical miles away in less than two hours. A 12,000-pound payload would consist of Common Aero Vehicle (CAV), cruise missiles, small diameter bombs or other munitions. A much nearer term (2010) prompt, global strike capability is described as the CAV munitions delivery system integrated with a low-cost, operationally responsive, Small Launch Vehicle (SLV). CAV is described as “an unpowered, maneuverable, hypersonic glide vehicle capable of carrying approximately 1,000 pounds in munitions or other payload. SLV would also be able to place small satellites into Sun Synchronous Orbit.

9 June 2003: Dr. Drew Miller, a consultant with Institute for Defense Analyses (IDA) and a reserve officer in the STRATCOM Policy, Resources and Requirements Directorate, makes a presentation at the Military Operations Research Society (MORS), in which he says that “Global Strike at STRATCOM is a new mission defined as very rapid design and execution of short duration strikes, conventional **or nuclear**; not “kicking the door down” use of airpower.” He says that “STRATCOM Global Strike planning working towards a goal of plan/decision/action in a matter of hours.”

4 June 2003: The Secretary of Defense approves the “Strategic Concept” for a new global strike operations plan (CONPLAN 8022-02, then in draft form).

4 June 2003: Another draft Air Force Global Strike CONOPS is published, refining the threat associated with access denial and adding more language on high value target destruction beyond enemy air defenses:

“... The objectives of Global Strike (GS) CONOPS are to gain access to denied battlespace, engage anti-access **and high-value targets** (HVT), and then maintain access to the battlespace for all required follow-on operations.

... The anti-access problem has two dimensions: physical threat and political uncertainty. The physical threat consists of actual efforts taken by the enemy to deny basing in theater, or entry into their airspace, through use of various weapons systems including:

- Theater Ballistic Missiles (TBM)/Short-Range Ballistic Missiles (SRBM)/Intermediate-Range Ballistic Missiles (IRBM)/Cruise missile attack
- Offensive Air Power
- Unconventional Forces
- Advanced (traditional and non-traditional) air defenses, including Surface-to-Air Missiles (SAM), Airborne Interceptors and advanced anti-aircraft artillery (AAA)
- Directed Energy weapons
- Chemical, biological, radiological, nuclear and high yield explosives (CBRNE) weapons
- Subsurface threats (submarines, mines)
- Offensive Information Operations (IO) systems and techniques

The USAF must operate from CONUS, forward home based locations, or austere bases on short notice in order to allow operations near the adversary nation. Additionally, enemy propaganda can cause potential allies to deny basing of US forces within the AOR. Other reasons for political uncertainty include the absence of an easily defined enemy and uncertain composition of future coalitions.”

To facilitate the concept of preemption, the CONOPS states that:

“For GS CONOPS to work as envisioned, the battlefield must be adequately prepared before any conflict erupts. Information developed by combatant commanders and other National agencies for potential adversaries who possess enhanced anti-access capabilities would be available well prior to conflict.

... data will be used to create a database of potential targets, perform detailed threat and infrastructure mapping, and analyze operational patterns. Data fusion with information from joint, interagency and coalition sources could be used to augment the combatant commander's operational picture and to develop adversary-specific plans.

... In addition to anti-access targets, GS CONOPS requires the capability to attack a **limited range of heavily defended high value targets** with minimal risk to manned aircraft, and localize, identify, and attack some classes of high-value moving targets (i.e. TSTs) while they are still vulnerable. Thus, GS CONOPS will not only prepare the battlespace for follow-on forces, it will provide the opportunity to create war-winning effects early in the conflict.”

Referring to special operations, the CONOPS states:

“Special Operations Forces (SOF) often have the ability to operate deep in denied, politically sensitive areas and can provide the GSCONOPS capabilities to develop advance intelligence on critical targets such as air defense systems, space control and C2 facilities, **key leadership, and weapons of mass destruction facilities**. One of the GS CONOPS objectives is to gain access to the battlespace. This can be enabled by close coordination with joint operations and exploiting existing joint SOF capabilities to covertly infiltrate denied areas and to provide surveillance of adversary operations before, during and after conflict. SOF are designed for early entry, and provide commanders with a ready response to asymmetric threats. Long-range, adverse weather, covert/ clandestine infiltration and extraction of SOF teams and equipment and AFSOF Special Tactics capabilities can help defeat anti-access systems, preposition personnel recovery assets, and facilitate war-winning effects through synergy with GS CONOPS conventional operation.”

20 May 2003: JCS Chairman Gen. Myers addresses the Robust Nuclear Earth Penetrator (RNEP) program at a Pentagon press conference:

“Study is needed here because -- for a couple of things. **The threat, in many cases, is going deep underground.** I'm not going to just focus on the penetrator, but that's where the threat's going. The threat is also going to chemical, biological and -- weapons, and we know that. There's a greater and greater proliferation. And so we've got to study the effects of how you might deal with these weapons.... So this is exactly what the secretary [of Defense] said. It's a study. It seems like a very prudent thing to do. It has nothing to do with the development or the fielding or even the employment of these types of weapons. But the study seems like a prudent thing to do.”

5 May 2003: Secretary of State Colin Powell writes to Sen. John Warner, Chairman, Senate Armed Services Committee: “to express support for the President's FY2004 budget request to fund the feasibility and cost study for the Robust Nuclear Earth Penetrator (RNEP), and to repeal the FY1994 legislation that prohibits the United States from conducting research and development on low yield nuclear weapons.” Powell states that he does “not believe that these legislative steps will complicate our ongoing efforts with North Korea. Inasmuch as work on the RNEP was authorized and funded in last year's National Defense Authorization Act, I believe that North Korea already has factored the RNEP into its calculations and will not vary those calculations depending on how Congress acts on this element of the FY2004 budget request.”

2 May 2003: The Air Force Issues the Final Mission Need Statement for “Prompt Global Strike.”

May 2003: The Navy issues a Solicitation Notice for the W76-1/Mk4A Accuracy Adjunct. Also known as the three-axis flap control system, the Accuracy Adjunct uses GPS and remotely controlled flaps to maneuver the RV to an accuracy of less than 30 feet.

May 2003: Secretary of Defense Rumsfeld signs the classified Defense Planning Guidance (DPG). In the forward, he says:

“Experience has taught us that the best way to defend the United States, its interests abroad and its allies and friends is to defeat aggression at its source. As a result, a central element of our defense strategy is to:

- Rapidly transition from a posture of forward deterrence into a joint campaign aimed at swiftly defeating the efforts of adversaries who would seek to impose their will on us or our allies and friends, while preserving the option of decisively defeating any one adversary – to include changing its regime and occupying its territory.

The new defense strategy requires forces with strategic agility capable of bringing power to bear over long distances in a timely fashion while conducting an active defense of US territory.”

May 2003: A DOD and DOE “Phase 6.2/6.2A” **study of a Robust Nuclear Earth Penetrator (RNEP) begins** on behalf of the joint Nuclear Weapons Council. The study will look at modifications to convert existing B61 or B83 nuclear bombs to an earth penetrator configuration in the 5,000 lb. class.

30 April 2003: The “new” STRATCOM headquarters achieves “full operational capability,” integrating the responsibilities of the previous U.S. Space Command (SPACECOM), which has been deactivated.

28 April 2003: STRATCOM concludes in the Joint Staff Input to Doctrine for Joint Nuclear Operations (second draft) that “countervalue targeting violates” the Law of Armed Conflict:

“Many operational law attorneys do not believe ‘countervalue’ targeting (especially as defined in the JP) is a lawful justification for employment of force, much less nuclear force. Countervalue philosophy makes no distinction between purely civilian activities and military related activities, and could be used to justify attacks on civilians and non-military portions of a nation’s economy. It therefore cannot meet the ‘military necessity’ prong of the Law of Armed Conflict (LOAC).

Countervalue targeting also undermines one of the values that underlies LOAC – the reduction of civilian suffering and to foster the ability to maintain the peace after the conflict ends. For example, under the countervalue targeting philosophy, STRATCOM states, “the attack on the World Trade Center Towers on 9/11 could be justified.”

Rather than removing countervalue language from the doctrine, STRATCOM instead proposes renaming it “critical infrastructure targeting.”

15 April 2003: STRATCOM publishes an overarching operational concept to incorporate changes driven by the assignment of its new global missions, including global strike. Central to this document is the creation of the Global Operations Center (GOC). According to STRATCOM,

“The GOC and its supporting command elements will enable the US Strategic Command to provide responsive support to the President, Secretary of Defense, Combatant Commanders, and agencies. Additionally, the GOC, with support of our components, will develop and leverage global battlefield situational awareness and present decision makers with **full spectrum courses of action** that integrate all US Strategic Command’s missions and capabilities. Within the GOC, we will also perform space operations including space control, space support, and force enhancement. The GOC will enable US

Strategic Command to better execute our assigned missions by providing improved responsiveness and better command and control of our missions by placing the responsibility for mission support and execution under a single integrated operations center.”

8 April 2003: Testifying before the Senate Armed Services Committee, Adm. Ellis, commander of STRATCOM states:

“US Strategic Command's newly assigned global strike mission extends our long-standing and globally focused deterrent capabilities to the broader spectrum of conflict.

We will incorporate conventional, non-kinetic, and special operations capabilities into a full-spectrum contingency arsenal and into the nation's strategic war plan to further reduce our reliance on nuclear weapons. This innovative approach will enable the command to deliberately and adaptively plan and rapidly deliver limited-duration, non-nuclear combat power anywhere in the world. Our intent is to provide a wide range of advanced options to the President in responding to time-critical, high-threat, global challenges and, thereby, raise even higher the nuclear threshold.

As envisioned, global strike could be decisively conducted at the direction of our most senior civilian leaders. It also represents a powerful tool in support of the regional combatant commander, essentially increasing the forces and options he has available to deter and engage an adversary. In either case, global strike will provide the nation the ability to engage priority targets by moving rapidly from actionable intelligence, through adaptive planning, to senior-level decision-making and the delivery of kinetic or non-kinetic effects across thousands of miles. It can provide what may be the most critical element early in the fight - time. As a regional combatant commander assembles and moves forces into position or needs to strike into temporarily denied areas, US Strategic Command can provide early planning and tangible, long-range combat capability. We are initially building this capability around the bomber force, and are bringing the B-1 back into our force structure in its purely conventional role. This committee's continued support of advanced conventional weapons initiatives such as the SSGN will assist in our immediate efforts to improve joint war fighting effectiveness.

We continue to study concepts such as conventional ballistic missiles, Common Aerospace Vehicles, hypersonic aircraft, and unmanned combat aerial vehicles that could play a significant role in improving our global strike capabilities in the mid to long-term.”

April 2003: STRATCOM formally activates the “Global Strike” division (ST11) to take responsibility for “full spectrum” strike, theater support and crisis action.

April 2003: STRATCOM publishes a draft CONPLAN 8022-01, Strategic Concept.

April 2003: Secretary Rumsfeld signs the Transformation Planning Guidance (TPG), which calls for the JCS to develop new joint operating concepts (JOCs) and associated linking integrated architectures (joint integration concepts) that depict how the joint force of the future is to fight. Four JOCs are to address major joint force applications, which include major combat operations (MCO), stability operations, homeland security, and strategic deterrence. Strategic deterrence is defined as

“encompasses the range of DoD efforts and capabilities to discourage aggression or coercion by potential adversaries. Strategic deterrence provides the President with a range of military options and capabilities intended to deter aggressors while requiring only modest reinforcement of forward-deployed and stationed forces from outside the theater. Strategic deterrence includes joint counterproliferation, defense against weapons of mass destruction, overseas presence, peacetime military engagement and nuclear and non-nuclear strike capabilities enhanced by global intelligence.”

5 March 2003: In a briefing on “Transforming US Strategic Forces,” Assistant Secretary of Defense for International Security Policy J.D. Crouch describes the moves towards non-nuclear strike called for in the Nuclear Posture Review:

- Consolidation of missions under one command is consistent with need for highly-integrated capabilities of New Triad
- Improved capabilities against the most demanding target sets
- Conversion of four Trident submarines to cruise missile attack submarines (SSGNs)

4 March 2003: The proposed FY 2004 Defense Authorization bill contains a provision that would repeal a 10 year Congressional ban on research to develop low-yield nuclear weapons (lower than five kilotons). The repeal would pave the way for the nuclear weapons laboratories to begin investigating designs for new nuclear weapons with smaller yields.

March 2003: Secretary Rumsfeld signs the “Nuclear Posture Review Implementation Plan.”

24 February 2003: *The New York Times* reports (Eric Schmitt, “U.S. Considers Conventional Warhead on Nuclear Missiles,” *New York Times*, February 24, 2003) that some in the Air Force and defense community have begun to consider the possibility of deploying ICBMs with conventional, rather than nuclear warheads. They argue that this type weapon system would “improve the U.S. ability to swiftly react to targets around the globe,” contributing to the mission of “prompt global strike.”

13 February 2003: Speaking at the AFA National Symposium in Orlando, Adm. Ellis, commander, STRATCOM, says:

“There is, in all honesty, a growing number of threats that have a global character. There are things that transcend regional boundaries. There are global wars on terrorism. There are global cyber threats. There are threats to systems on space potentially. There are non-state actors that move from region to region. There are global threats out there and it is appropriate that many of them be addressed in a global character. It is important that we blend the seams between regions and that we have at least an overarching approach in some areas, not just to the threats themselves, but to the systems and capabilities that the nation has that are essential to countering those threats. Many of those capabilities are global in character. ... It is a dramatically changed international security environment and now we had the opportunity to form a command that for the first time combines all of these elements of space operations, integrated missile defense on a global scale, global strike capabilities—that transcends the classic role of SAC and the old United States Strategic Command and for the first time brings in advanced conventional information operations and, by direction in the Nuclear Posture Review, includes special operations forces in the nation's strategic war plans. And then, finally, we've got integrated information operations and I'll talk about all of those in a little bit of detail here in a moment.

...Everyone gets to write a mission statement and I rewrote ours. There are some key elements that I'd like to point out. It is full spectrum, global strike. That means just what it says, full spectrum. It is not just nuclear. It is not just conventional. And it includes all of the capabilities that are out there. Coordinated space and information operations capabilities to meet both deterrent and decisive national security objectives.

... The first of the previously unassigned missions is global strike, the capability to plan for and deliver rapid limited-duration extended range precision kinetic and non-kinetic effects half a world a way. A lot of discussions about sensitivities with the regional combatant commanders. It matters not whether there is an ED or an ING after the word "support." It is not about ownership. It is about capabilities. It is about the realization that there are issues and circumstances where speed counts and where you need to get to the target as quickly as you can. In those kinds of contexts, I could envision scenarios where support-ed might be the right and appropriate latch up.

And we need to have planning capabilities. We need to have pre-orchestrated options. We need to have the capability to bring that to bear, very very quickly and in an accelerated manner, much as Charlie Holland [commander of Special Operations Command] and many others are working in the war on terrorism to deal very quickly with emergent opportunities and threats. It is fully integrated with the regional combatant commander, even in the supported role, because clearly there are intelligence pieces and other resources that are going to be absolutely essential to pull this off. We also see a very legitimate supporting role. Again, not taking it away from the regional combatant commander or his regional components, but if alerting is a problem, if access is a

problem, if those kinds of things challenge us, as they have in the past, then we need to look at other options. John and I remember well some guy with a cell phone sitting outside the fence in Aviano calling Belgrade as airplanes went wheels in the well, giving them the weapons load, the approximate time on tanker and when we expected them over target. If we've got those kinds of issues, maybe it would be nice to bring in a capability that does not require the in-theater support, that does not pre-alert your adversary that you are coming, and still allows you to deal with the threat in a very real and capable fashion. **That is what we are looking for in global strike. It is not just nuclear, though clearly that is an element of that continuum.** We are focusing now on the advanced kinetic special operations and other non-kinetic capabilities that could be brought to bear.

... Through the generosity of Hal Hornburg [commander of Air Combat Command] and 8th Air Force we have already begun to work that piece, given the capabilities that are most readily at hand. I don't need to tell you what those are in terms of long-range, global, conventional capabilities. We also think it is appropriate to look to the future and consider other alternatives and systems that have not been created. Because, remember, when you talk about the Nuclear Posture Review, and they are talking advanced conventional capabilities, that is not the PGM capabilities of today. That is the next generation and beyond the next generation and what it is we'd like to be able to do, not because we just want to have that capability, but because it legitimately gives us the potential to deal with threats that are likely to confront us in the future. We need to think in different terms about that.

We also need to acknowledge that there is an IO element, there is a role for SOF, as we've seen Charlie Holland begin to expand that capability with Special Operations Command. And then clearly there is a need for an advanced kinetic capability as well that goes beyond that. And platforms like SSGN and certainly hypersonic air vehicles and other things that are just now beginning to come together as concept definitions and the like and the Air Force and the other services we think are going to have an important series of systems that need to be assessed for their potential contribution in that role. But we aren't content with what we have. We have to deal with what we have today and the bomber force has responded magnificently in doing that on short notice. But we need to move beyond that as the years unfold."

13 February 2003: During testimony before the Senate Armed Services Committee, Defense Secretary Donald Rumsfeld refuses to rule out a nuclear strike in a possible war with Iraq. "Our policy historically has been generally that we will not foreclose the possible use of nuclear weapons if attacked." But, he says, "We have every confidence that in the event force is to be used in Iraq that we can do what needs to be done using conventional capabilities."

In an exchange with Senator Kennedy, Rumsfeld says:

Kennedy: As you well understand, the nuclear weapon is not just another weapon in the arsenal. And until now we've always kept them in a class of their own for good reasons because of the enormous destructive power and our profound commitment to do all we can to see that they are never used again.

Rumsfeld: It seems to me that if one looks at our record, we went through the Korean War, we went through the Vietnam War, we've gone through the war on terror and we've not used nuclear weapons. That ought to say something about the threshold with respect to nuclear weapons."

11 February 2003: Testifying before the Senate Intelligence Committee, CIA Director George J. Tenet warns of an upsurge in the desire for nuclear weapons among small nations. Citing North Korea, Iraq, Iran and Libya as countries attempting to obtain nuclear weapons technology, Tenet states that "the 'domino theory' of the 21st century may well be nuclear."

5 February 2003: Testifying before the House Armed Services Committee, JCS chairman Gen. Myers states that recent changes to the UCP reflect "the U.S. military's increased emphasis on a global view." In written testimony, Myers states:

"With its global strike responsibilities, the Command will provide a core cadre to plan and execute **nuclear**, conventional and information operations anywhere in the world. STRATCOM serves as the DOD advocate for integrating the desired military effects of information operations. These initiatives represent a major step in transforming our military and in implementing the new strategic triad envisioned in the 2001 Nuclear Posture Review."

2 February 2003: General Lance W. Lord, commander of Air Force Space Command (AFSPC), tells a Military Aerospace Technology conference that "though the Cold War is over and the threat has changed, the deterrent and prompt global strike capabilities our ICBMs provide are still very important." Specifically:

"...out Directorate of Requirements is in the early stages to validate the **Prompt Global Strike (PGS)** Mission Need Statement (MNS). The PGS mission need is to strike globally and rapidly with joint forces against high-payoff targets in a single or multi-theater environment. We plan to begin an Analysis of Alternatives exploring concepts related to a non-nuclear global strike capability after the Joint Requirements Oversight Council Validates the MNS, currently scheduled for January 2003."

February 2003: Northrop Grumman successfully demonstrates an autonomous landing of its X-47A Pegasus unmanned combat air vehicle (UCAV) prototype, being developed for the Navy.

30 January 2003: In his written replies to advanced questions from Congress for his nomination hearing to be Deputy Undersecretary of Defense for Policy, Ryan Henry addresses the role nuclear weapons should play in U.S. national security policy in the future:

“Based on the reductions agreed to in the Moscow Treaty, I believe that nuclear weapons should continue to play a role in U.S. and allied security. They should: 1) continue to help deter attacks against the United States, its allies and friends; 2) dissuade competition from potential adversaries; and 3) continue to provide assurance to the public and to U.S. allies that have security agreements with the United States. That said, I believe the Department should continue [to] seek to reduce U.S. dependence on nuclear weapons.”

29 January 2003: The Defense Threat Reduction Agency (DTRA) publishes a Statement of Objectives (SOO) for the Hard, Deeply Buried Target Defeat ACTD (advanced concept technology demonstration). The ACTD seeks to provide STRATCOM with a computer-based, rapid analysis tool that will allow weapon's planners to compare and evaluate attack options against geologically hardened targets. According to the document:

“Specifically, the ACTD will expand existing planning tools, represented by the IMEA (Integrated Munitions Effects Assessment), to include **defeat analysis of targets that are subjected to nuclear weapons attack** and to compare the results with corresponding conventional attacks.”

The SOO explains that potential U.S. adversaries “have gone to great length to compromise US targeting capabilities by placing critical infrastructure and WMD in tunnels and other deeply-buried locations, or by structurally hardening some buried targets.” Because of this trend, the document states, “STRATCOM needs to consider and evaluate the option of using nuclear weapons against its most difficult targets, and to compare whether such weapons provide an enhanced targeting posture or alternately provide the exclusive means to eliminate some particularly difficult targets.”

22 January 2003: Speaking to the Defense Writers Group, JCS chairman Gen. Myers answers a question:

“Q: The next thing one sees, among others, confronting state-sponsored terrorism, other than Iraq -- like Iran or Syria. I wonder what you see in that regard. Can you envision military action these state-sponsored and other forms of actions?”

A: I think, you know, the way we deal with them is set out very early and it has to be. It has to be only if it is from a national power. It just has to be. In some cases, military situation. We did try some diplomacy in Afghanistan, gave the Taliban a chance to give up Al Qaeda. They elected to fight. So then it became a military operation. In terms of WMD and the nexus of terrorism in Iraq, diplomacy is operative right now. In terms of

Al Qaeda finances, there have been a lot of organizations that have worked that. There have been police organizations that have rounded up a lot of the Al Qaeda leadership, as well as the military. I would say it is a combination and it is also -- it can't be thought of as a US-only sort of operation. It has to involve the international community. I think we have over 90 partners in the overall war on terrorism that are contributing in various ways. With some countries, we've gotten unprecedented operational cooperation on this anti-terrorism fight. I think people realize that, you know, an attack on New York doesn't just affect the United States of America. It doesn't just affect the West. It affects everybody. It affects American airlines, it affects European airlines, it affects Middle Eastern airlines. Everybody, you know, has their confidence in flying safely has eroded a little bit. An attack in London, an attack in Bali all affect all of us. I think those 90 plus countries understand that. It is going to take all of that. There will be, I think, there will be time when military action will be required. If you asked me to be specific, I probably couldn't be very specific right now. But I think as a general case, there is going to be a requirement for military action and some of the steps that we are taking, that you see and that you report on, is that we are trying to shape ourselves to be better prepared to take that kind of action. Some of the things we've done with Special Operations Command, which you've seen, some of the things -- I just talked about the UCP change. Some of that was all meant to give us a perspective. If you think about Strategic Command for a minute, from their perspective, we want to be global so we gave them missions that might be global in scope. Clearly, their old mission of nuclear war planning tended to have a global nature about it, but then you go into **global strike, which is not necessarily nuclear**, but other types of ways to have an affect on the battlefield, information operations, C4ISR piece. Those are trying to posture us to be able to deal with a threat that is global and not a threat that is regional, as we've been organized in the past. I guess my answer to your question is, sure, I think the military instrument will be used in the future on this war on terrorism. There is no question in my mind. But I also think it is going to be, to be effective, it has got to be across an entire front of instruments of national power -- economic as well we haven't mentioned much about that, the old sanctions business, which comes up when you start talking about North Korea, for instance."

10 January 2003: A Stockpile Stewardship Conference Planning meeting at the Pentagon discusses an upcoming conference at STRATCOM headquarters. Minutes from the meeting, which were obtained by the Los Alamos Study Group, shows that the conference would include a "Future Arsenals Panel" that would examine "**requirement for low-yield weapons, [earth-penetrating weapons], enhanced radiation weapons, [and] agent defeat weapons.**"

Another topic for the Future Arsenals Panel concerns the nuclear testing strategy for "weapons more likely to be used in **small strikes**," and whether "a requirement for higher confidence in small strikes" would require more testing.

10 January 2003: President Bush signs Change 2 to the Unified Command Plan, assigning four emerging missions to STRATCOM: missile defense, global strike, information operations, and global C4ISR. USSTRATCOM is directed to establish and provide capabilities established in the Nuclear Posture Review, full-spectrum global strike, coordinated space and information operations capabilities to meet both deterrent and decisive national security objectives, provide operational space support, integrated missile defense, global C4ISR and specialized planning expertise to the joint warfighter. In the classified document, Global Strike is defined as:

“providing integrated global strike planning and command and control support to deliver rapid, extended range, precision kinetic (nuclear and conventional) and non-kinetic (elements of space and information operations) effects in support of theater and national objectives.”

With its global strike assignment, STRATCOM, like Special Operations Command (SOCOM), is now also approved to act as a “supported command” in specific situations relating to US preemptive attacks worldwide.

Chronology for 2002

11 December 2002: Secretary of Defense Donald Rumsfeld sends a memo to President Bush accompanying the proposed Change 2 of the Unified Command Plan and making a case for assigning additional missions and responsibilities to Strategic Command (STRATCOM), specifically: “Global Strike; Integrated Missile Defense; Information Operations; and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance.” “Given the complexity of these responsibilities, we expect USSTRATCOM to be able to fully accomplish these missions no later than 1 January 2004,” Rumsfeld wrote.

11 December 2002: *The Washington Post* reports that a Top Secret appendix to National Security Presidential Directive 17 (NSPD 17), the “National Strategy to Combat Weapons of Mass Destruction” that names Iran, Syria, North Korea and Libya among the countries that are the central focus of the new U.S. strategy. A senior administration official briefing reporters on the new strategy, says the options include nuclear weapons.

In justifying nuclear options, the official refers to the threat delivered to Iraq in letter in 1991:

“He [Hussein] didn’t cross the line of using chemical or biological weapons. The Iraqis have told us that they interpreted that letter as meaning that the United States would use nuclear weapons, and it was a powerful deterrent.”

The motivation for the new strategy, according to one participant in the interagency process that drafted it, was the conclusion that “traditional nonproliferation has failed, and now we’re going into active interdiction.”

10 December 2002: The White House publishes the “National Strategy to Combat Weapons of Mass Destruction,” an unclassified version of National Security Presidential Directive (NSPD) 17 issued on 14 September 2002. The wording in NSPD 17 of using “potentially nuclear weapons” against adversaries armed with Weapons of Mass Destruction is changed to “all of our options.” The unclassified version states:

“Today’s threats are far more diverse and less predictable than those of the past. States hostile to the United States and to our friends and allies have demonstrated their willingness to take high risks to achieve their goals, and are aggressively pursuing WMD and their means of delivery as critical tools in this effort. As a consequence, we require new methods of deterrence.

The United States will continue to make clear that it reserves the right to respond with overwhelming force – including through resort to all of our options – to the use of WMD against the United States, our forces abroad, and friends and allies.

4 December 2002: Adm. James O. Ellis Jr., commander of U.S. Strategic Command, briefs a group of 300 business and community leaders at the Doubletree Hotel in Omaha, describing what is in store for the new command - above and beyond the space missions it took over October 1. Adm. Ellis says the command has taken on a new Global Strike mission and was charged with developing the capability to strike anywhere in the world within minutes of detecting a target. "If you can find that time-critical, key terrorist target or that weapons-of-mass-destruction stockpile, and you have minutes rather than hours or days to deal with it, how do you reach out and negate that threat to our nation half a world away?" Ellis asks.

December 2002: Deputy Secretary of Defense Paul Wolfowitz directs the Air Force and Defense Advanced Research Projects Agency (DARPA) to establish a joint program office to accelerate development of the Common Aero Vehicle (CAV) to fulfill the requirement of the Air Force Space Command Prompt Global Strike (PGS) Mission Needs Statement (MNS), which calls for rapid conventional strike worldwide to counter the proliferation of weapons of mass destruction and provide a forward presence without forward deployment. The Common Aero Vehicle program is focused on the development and transition of more mature technologies into a future weapon system capable of delivering and deploying conventional payloads world wide from and through space.

5 November 2002: The Air Force Space Command's "Strategic Master Plan FY04 and Beyond" states that the "ICBMs underpin our deterrence posture – we are modernizing them to provide greater capabilities within the New Triad of non-nuclear and nuclear strike capabilities. ... We are exploring ways to transform our global strike capabilities through the use of new types of responsive launch systems and non-nuclear munitions." Specifically, the master plan explains:

"While the US does not expect to face a global military peer in the next several decades, the Nuclear Posture Review (NPR) postulates rogue states or 'states of concern' could provide a challenge to classical Cold-War deterrence. In addition, we must contend with non-state actors and terrorists who may acquire a 'loose nuke' or a so-called 'dirty bomb.' To deter aggression in this new security environment, the US must possess credible capabilities to project military power and conduct rapid combat operations with a high probability of success across the spectrum of conflict.

A viable prompt global strike capability, whether nuclear or non-nuclear, will allow the US to rapidly strike high-payoff, difficult-to-defeat targets from stand-off ranges and produce the desired effect. This capability provides the US with the flexibility to employ innovative strategies to counter adversary anti-access and area denial strategies. Such a capability will provide warfighting commanders the ability to rapidly deny, delay, deceive, disrupt, destroy, exploit and neutralize targets in hours/minutes rather than weeks/days even when US and allied forces have a limited forward presence. Thus, prompt global strike space capabilities will provide the President and warfighting

commanders with flexible options to deter or defeat most threats in a dynamic security environment.”

The master plan describes how the Nuclear Posture Review (NPR) “directs the Air Force to ‘extend the life of Minuteman (MM) III until 2020, while beginning the requirements process for the next-generation ICBM’. We are aggressively modernizing our existing nuclear forces while developing an advanced, flexible and responsive, global deterrent force.” The master plan states that nuclear deterrence “will continue to be a top priority for AFSPC through the far-term.”

Overall:

“A credible, viable nuclear deterrent force forms the cornerstone of the Nuclear Response Task Force. This plan provides for the sustainment and modernization required to ensure that deterrent force remains viable and credible. And the precision conventional prompt global strike capability we are planning for will provide critical support to the Global Strike and Air and Space Expeditionary Task Forces.

The NPR cautions that the ‘United States should prepare for deterrence failure even as it strives to deter.’ Thus, our deterrence capabilities should be responsive to and adaptable in a dynamic security environment. Therefore, we remain committed to ensuring our ICBM arsenal is modernized to maintain an effective force and deterrent posture while pursuing a new generation of responsive prompt global strike capabilities.”

The master plan also addresses the issue of weaponization of space. It states that “there are presently no formal US policies preventing development or deployment of Counterspace capabilities,” and that the President's National Space Policy, the DoD Space Policy, and the Secretary of Defense's policy on Counterspace “all require development of ‘negation’ capabilities and deployment as needed to ensure freedom of access and operations in space.” The master plan states that the “major question in fielding OCS systems is the political will to do so” and lays out the following vision:

“Our vision calls for prompt global strike space systems with the capability to directly apply force from or through space against terrestrial targets. International treaties and laws do not prohibit the use or presence of conventional weapons in space. Policy makers are working to create conditions for a New Triad that includes non-nuclear global strike weapons. Non-nuclear prompt global strike space capabilities are being studied. Our Nation will decide whether or not to pursue the development and deployment of conventional, space-based systems for global strike to fully exploit the advantages of space.”

4 November 2002: During a dinner presentation at the Brookings Institution, Chairman of the JCS Gen. Richard Myers speaks of the “new” STRATCOM and its missions:

“We did stand up a new U.S. Strategic Command in Omaha....we've always had a Strategic Command in Omaha. But what we did is really gave it a dramatically new mission by closing down what's known as U.S. Space Command in Colorado Springs and putting the two together with a brand-new command. We're also looking at giving the command new missions that weren't assigned before.

“These missions, I think, reflect the kind of global capabilities that we need, things like missile defense. There's a notion out there about global strike, information operations, and command and control, intelligence, surveillance, reconnaissance. There is a need to look at these on a global basis, not just regionally.”

22 October 2002: The USS Wyoming (SSBN-742) test launches a Trident II D5 sea-launched ballistic missile loaded with a fully instrumented unarmed W76/Mk4 reentry vehicle equipped with a prototype three-axis flap control system. The system uses small flaps that can be extended or retracted from the sides of the RV to create controlled drag that enables remotely controlled maneuvering of the RV during reentry through the atmosphere. The flap control system uses GPS to increase the CEP of the RV to less than 30 feet.

18 October 2002: The Air Force Director of Operations (AF/XO) approves a set of Task Force CONOPS. The Global Strike Task Force CONOPS (White Paper) is to “serve as the initial, leading edge "kick down the door" force in an intense anti-access environment. It will pave the way for joint air, space, land, and sea forces by rapidly rolling back adversary anti-access threats.”

1 October 2002: The president's budget for FY 2003 includes the Strategic Capability Modernization (SCM). This program involves the integration of an advanced network infrastructure that enables communications/intelligence/ surveillance, command decision support, and situational awareness to provide the necessary capabilities to support the New Triad missions. These missions may include, but are not limited to, holding at risk Hard and Deeply Buried Targets, special strike C2 systems, and countering Weapons of Mass Destruction (WMD). “A key capability necessary to meet these new critical missions is a robust planning and analysis system that is capable of both deliberate and adaptive planning, employing the full spectrum of kinetic and non-kinetic weapons in support of rapid execution.” SCM forms an element in the modernization of ISPAN (SWPS).

1 October 2002: The “new” U.S. Strategic Command (STRATCOM), incorporating the previous U.S. Space Command (SPACECOM), officially begins operations at Offutt AFB, Nebraska. The new command absorbs nearly all the missions previously held by the U.S. Space Command and continues its role of nuclear deterrence.

1 October 2002: The JCS issues the Joint Strategic Capabilities Plan for FY 2002 (CJCSI 3110.01E).

October 2002: The Air Force Directed Energy Master Plan revision touts a High Powered Microwave weapon, to be available by 2009, for “Instantaneous, airborne electronic kills of soft high-value targets (C2/comms, power grids, etc.)” and incorporation in the global strike task force (GSTF).”

25 September 2002: National Security Advisor Condoleezza Rice responds to questions from PBS News Hour's Margaret Warner about the Bush administration's new preemption doctrine:

Warner: ...as you know, there has been a lot of criticism particularly about the doctrine of pre-emption which you laid out in writing, and let me just – I'm going to read you just one – this one comes from the French president, and he actually spoke even before you rolled this out – the piece of paper – but he's called the whole doctrine extraordinarily dangerous – “As soon as one nation claims the right to take preemptive action, other countries will naturally do the same.” What do you say to that?

Rice: Well, I would say that the idea of preventive action is not a new concept. In fact, the idea that you have to wait to be attacked to deal with a threat seems to us simply to fly in the face of common sense.

The United States has always reserved the right to try and diminish or to try to eliminate a threat before it is attacked. It simply wouldn't make sense to sit and wait to be attacked if you thought that you could eliminate a threat....There are lots of ways to deal with threats; diplomacy is one, counter proliferation – that is taking active measures against an emerging threat.

But there may be in a small number of cases circumstances where you can only use military force. And in those cases the American president has to reserve the right to do it – and in this day and time when we know the cost, after September 11, of being attacked without warning and a case in which we were not able to react to the threat before they got us it simply would not be appropriate or the president would not be fulfilling his obligations if he is prepared to let threats materialize or until they have actually – until there's actually been an attack against American territory.

19 September 2002: Chairman of the JCS Gen. Richard B. Myers states in his written statement to the Senate Armed Services Committee:

“The Joint Air Component Commander in Operation ENDURING FREEDOM repeatedly demonstrated the ability to re-task all aircraft while airborne and strike emerging targets quickly, in some case in as little as two hours. Also, out Maritime

Component Commanders can now plan a Tomahawk Land Attack Missile mission in a matter of a few hours, when a decade ago it required at least two days.”

17 September 2002: President Bush, in his *National Security Strategy of the United States*, provides the first official articulation of a strategy of preemptive action against hostile states and terrorist groups developing weapons of mass destruction. The document states that:

We will disrupt and destroy terrorist organizations by:

- Direct and continuous action using all the elements of national and international power. Our immediate focus will be those terrorist organizations of global reach and any terrorist or state sponsor of terrorism which attempts to gain or use weapons of mass destruction (WMD) or their precursors;
- Defending the United States, the American people, and our interests at home and abroad by identifying and destroying the threat before it reaches our borders. While the United States will constantly strive to enlist the support of the international community, we will not hesitate to act alone, if necessary, to exercise our right of self-defense by acting preemptively against such terrorists, to prevent them from doing harm against our people and our country ...

... At the time of the Gulf War, we acquired irrefutable proof that Iraq's designs were not limited to the chemical weapons it had used against Iran and its own people, but also extended to the acquisition of nuclear weapons and biological agents. In the past decade North Korea has become the world's principal purveyor of ballistic missiles, and has tested increasingly capable missiles while developing its own WMD arsenal. Other rogue regimes seek nuclear, biological, and chemical weapons as well. These states' pursuit of, and global trade in, such weapons has become a looming threat to all nations.

We must be prepared to stop rogue states and their terrorist clients before they are able to threaten or use weapons of mass destruction against the United States and our allies and friends. Our response must take full advantage of strengthened alliances, the establishment of new partnerships with former adversaries, innovation in the use of military forces, modern technologies, including the development of an effective missile defense system, and increased emphasis on intelligence collection and analysis.

Our comprehensive strategy to combat WMD includes:

- Proactive counterproliferation efforts. We must deter and defend against the threat before it is unleashed. We must ensure that key capabilities -- detection, active and passive defenses, and counterforce capabilities -- are integrated into our defense transformation and our homeland security systems. Counterproliferation must also be

- integrated into the doctrine, training, and equipping of our forces and those of our allies to ensure that we can prevail in any conflict with WMD-armed adversaries.
- Strengthened nonproliferation efforts to prevent rogue states and terrorists from acquiring the materials, technologies and expertise necessary for weapons of mass destruction. ...
 - Effective consequence management to respond to the effects of WMD use, whether by terrorists or hostile states. Minimizing the effects of WMD use against our people will help deter those who possess such weapons and dissuade those who seek to acquire them by persuading enemies that they cannot attain their desired ends. The United States must also be prepared to respond to the effects of WMD use against our forces abroad, and to help friends and allies if they are attacked.

It has taken almost a decade for us to comprehend the true nature of this new threat. Given the goals of rogue states and terrorists, **the United States can no longer solely rely on a reactive posture as we have in the past.** The inability to deter a potential attacker, the immediacy of today's threats, and the magnitude of potential harm that could be caused by our adversaries' choice of weapons, do not permit that option. We cannot let our enemies strike first.

- In the Cold War, especially following the Cuban missile crisis, we faced a generally status quo, risk-averse adversary. Deterrence was an effective defense. But **deterrence based only upon the threat of retaliation is far less likely to work against leaders of rogue states** more willing to take risks, gambling with the lives of their people, and the wealth of their nations.
- In the Cold War, weapons of mass destruction **were considered weapons of last resort** whose use risked the destruction of those who used them. Today, our enemies see weapons of mass destruction as weapons of choice. For rogue states these weapons are tools of intimidation and military aggression against their neighbors. These weapons may also allow these states to attempt to blackmail the United States and our allies to prevent us from deterring or repelling the aggressive behavior of rogue states. Such states also see these weapons as their best means of overcoming the conventional superiority of the United States.
- Traditional concepts of deterrence will not work against a terrorist enemy whose avowed tactics are wanton destruction and the targeting of innocents; whose so-called soldiers seek martyrdom in death and whose most potent protection is statelessness. The overlap between states that sponsor terror and those that pursue WMD compels us to action.

The United States has long maintained the option of preemptive actions to counter a sufficient threat to our national security. The greater the threat, the greater the risk of inaction – and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of our enemy's attack. To forestall or prevent such hostile acts

by our adversaries, **the United States will, if necessary, act preemptively**....To support preemptive actions, we will...continue to transform our military forces to ensure our ability to conduct rapid and precise operations to achieve decisive results.”

14 September 2002: President Bush signs National Security Presidential Directive (NSPD) 17, “National Strategy to Combat Weapons of Mass Destruction.” According to the *Washington Times*, the document states in part:

“The United States will make clear that it reserves the right to respond with overwhelming force – **including potentially nuclear weapons** – to the use of [weapons of mass destruction] against the United States, our forces abroad, and friends and allies. Nuclear forces alone...cannot ensure deterrence against [weapons of mass destruction] and missiles. Complementing nuclear forces with an appropriate mix of conventional response and defense capabilities, coupled with effective intelligence, surveillance, interdiction and domestic law-enforcement capabilities, reinforces our overall deterrence posture against [weapons of mass destruction] threats.”

A top-secret appendix to NSPD 17 specifically names Iran, Syria, North Korea and Libya among the countries that are the central focus of the new U.S. strategy. A senior administration official briefing reporters on the new strategy, says **the options include nuclear weapons**. The motivation for the new strategy, according to one participant in the interagency process that drafted it, was the conclusion that “traditional nonproliferation has failed, and now we’re going into active interdiction.” The Joint Chiefs of Staff further explains that NSPD 17 “outlines a comprehensive approach to counter nuclear and other WMD. The strategy has three main pillars:

1. Counterproliferation to Combat WMD Use – recognizing that the possession and increased likelihood of WMD use by hostile states and terrorists are realities of the contemporary security environment.
2. Strengthened Nonproliferation to Combat WMD Proliferation – determined to undertake every effort to prevent states and terrorists from acquiring WMD and missiles.
3. Consequence Management to Respond to WMD Use – to reduce to the extent possible the potentially horrific consequences of WMD use at home and abroad.”

9 September 2002: Following lengthy study at the Joint Staff, **Admiral Ellis sets up a Global Strike division (ST11) at STRATCOM**. Although the mission remains unassigned until the pending Change 2 to the Unified Command Plan is approved by President Bush, establishment of the division permits finalization of the concept of operations for the initial national Global Strike capability. According to the STRATCOM official history,

“While only the broad outline of the emerging mission was present at initial operational capability, Ellis envisioned post-stand up mission expansion through incorporation of additional kinetic and non-kinetic capabilities spanning the entire spectrum of force

employment. He saw Global Strike as a mission of immediate and growing importance to the command and nation, a mission that would combine STRATCOM's unique, rigorous planning disciplines with a wide range of employment capabilities.”

6 September 2002: Iran successfully test fires the Fateh 110A, a new ballistic missile.

26 August 2002: In a speech to the Veterans of Foreign Affairs, Vice President Dick Cheney states:

“...wars are never won on the defensive. We must take the battle to the enemy....President Bush has often spoken of how America can keep the peace by redefining war on our terms. That means that our armed services must have every tool to answer any threat that forms against us. It means that any enemy conspiring to harm America or our friends must face a swift, a certain and devastating response....

...As we face [terrorists with weapons of mass destruction], old doctrines of security do not apply. In the days of the Cold War, we were able to manage the threat with strategies of deterrence and containment. But it's a lot tougher to deter enemies who have no country to defend. And containment is not possible when dictators obtain weapons of mass destruction, and are prepared to share them with terrorists who intend to inflict catastrophic casualties on the United States.

...America in the year 2002 must ask careful questions, not merely about the past, but also about the future. The elected leaders of this country have a responsibility to **consider all of the available options. And we are doing so.**”

August 2002: Boeing is awarded a contract to build two 25,000-lb. X-45B unmanned combat air vehicle (UCAV) prototypes, twice the size of the prototype X-45A.

26 July 2002: The Air Force Global Strike CONOPS draft document (version 2.0) continues the sole focus on conventional, cyber warfare, and special operations, with no mention of nuclear weapons. The CONOPS states that the objective of the GSTF is to:

“gain access to denied battlespace, engage anti-access and high-value targets (HVT), and then maintain access to the battlespace for all required follow-on operations.”

“... GSTF assets must have the capability to operate within anti-access environments and to find, fix, track, target, engage, and assess (F2T2EA) the full spectrum of an adversary's anti-access capabilities to include: long-range air and missile defenses; mobile ballistic and cruise missiles; adversary counter space capability; Information Warfare (IW) capabilities; and the full range of supporting command and control, intelligence and information architectures.”

About special operations, the CONOPS states:

“Special Operations Forces (SOF) often have the ability to operate deep in denied, politically sensitive areas and can provide the GSTF CONOPS capabilities to develop advance intelligence on critical targets such as air defense systems, space control and C2 facilities, key leadership, and weapons of mass destruction facilities. One of the GSTF CONOPS objectives is to gain access to the battlespace. This can be enabled by close coordination with joint operations and exploiting existing joint SOF capabilities to covertly infiltrate denied areas and to provide surveillance of adversary operations before, during and after conflict. SOF are designed for early entry, and provide commanders with a ready response to asymmetric threats. Long-range, adverse weather, covert/ clandestine infiltration and extraction of SOF teams and equipment and AFSOF Special Tactics capabilities can help defeat anti-access systems, preposition personnel recovery assets, and facilitate war-winning effects through synergy with GSTF CONOPS conventional operation.”

17 July 2002: During a Senate Foreign Relations hearing, Defense Secretary Donald Rumsfeld and Chairman of the JCS Gen. Richard Myers respond to questions about the Moscow Treaty force limit and the relationship between the nuclear strike plans and the sizing of the forces structure:

Senator Biden: Does it take into account the reduction of forces from 6,000 or so deployed to 1,700 to 2,200 for the Russians? Or does it assume the Russians possessing 6,000 deployed for up to the next 10 years?

Gen. Myers: The relationship, and I think it goes back to the Nuclear Posture Review, were instead of being threat-based, and having to cover certain countries, that we looked at the capabilities that want to have as the United States, and these capabilities we have, are they sufficient to deter and dissuade? And if it comes to conflict, can we prevail?...So in that respect, there is not a direct correlation between this number of 1,700 to 2,200 [sic]. As I understand your question, there is not a direct correlation between that and the – or any of our nuclear plans. They are much more capabilities-based than threat-based.

Rumsfeld: I think it would be a mistake to leave the impression, that I think your question could, that either the SIOP or the 1,700 to 2,200 is premised on Russia. I mean, the reality is that we live in the world. There is a security environment. Russia exists and has capabilities to be sure, but so does the People's Republic of China. And they are increasing their defense budget. And they are increasing their nuclear capabilities purposefully. There are other countries that have...

Senator Biden: (inaudible).

Rumsfeld: ...or are developing – parson me?

Senator Biden: Are...

Rumsfeld: Have or are developing...

Senator Biden: ...multiples of 10 right now, Mr. Secretary.

Rumsfeld: Very low, very low.

(Laughter)

Senator Biden: I mean, you know, 2,200...

Rumsfeld: I understand. We have – I'm coming to that.

Senator Biden: Ok.

Rumsfeld: And there is the deterrent aspect. To the extent you lower down so low that it looks like some country can, in fact, sprint and get up to a level, the deterrence effect of having your capability is probability less persuasive. The 1,700 to 2,200 down from many thousands clearly is a reflection of all those things and not a single country, I think it's fair to say. It is both recognition of capabilities that exist, of trends that are taking place, of uncertainties and, in addition, of a desire to have a deterrent effect.

There's no question in my mind but that weakness is provocative, and if we were to go down to some very low level, some country might decide that that is an area of weakness, and asymmetry that they can take advantage of. And we do not want to create the interest on anybody's part which is, we think as low as 1,700 to 2,200 sounds from where we've been, it is still, as you point out, a non-trivial number."

15 July 2002: The Defense Threat Reduction Agency (DTRA) publishes the study "Alternative Futures Approach to Nuclear Deterrence Planning." Under the logic of Capability-Based Planning, the study asserts, the U.S. needs to develop a broad portfolio of capabilities that would allow it to deal with a wide spectrum of potential adversarial challenges. "Stated in another way, Capability-Based Planning is designed to create requirements for a diverse, well-hedged, highly responsive and adaptable force." The time frame is 2020.

Although the 2001 Nuclear Posture Review describes Capability-Based Planning as an alternative to threat-based planning, the DTRA study sets up three world options for the 2020 time frame: Global Consensus with cooperation among U.S., Russia, and China; Great Power

Conflict with threat to U.S. coming from both emerging powers and their alliance with rogue states; and Global Disorder with multiple threats and from Russia, China, and rogue states. The study outlines four non-representative Operational Situations (OPSITs) with country-specific threats for each world situation:

- World I (Global Consensus):
 - OPSIT 1: Iraqi chemical attack on forward U.S. forces.
 - OPSIT 2: Sudan and non-state actor bio-attack on CONUS.
 - OPSIT 3: Libya imminent chem./bio-attack on European allies.
 - OPSIT 4: Pakistan coup and possible nuclear conflict with India.
- World II (Great Power Conflict):
 - OPSIT 1: Sino-Russian strategic attack on CONUS.
 - OPSIT 2: Imminent North Korean attack against U.S. forces.
 - OPSIT 3: Discovery of Chinese missiles in Argentina.
 - OPSIT 4: Imminent Iraqi WMD attack on CONUS.
- World III (Global Disorder):
 - OPSIT 1: Egypt radiological attack on forward U.S. forces.
 - OPSIT 2: Naval confrontation with Russia over Baltic States.
 - OPSIT 3: China Taiwan invasion goes nuclear against U.S. assets.
 - OPSIT 4: Iran territorial aggression against Saudi Arabia.

The study categorizes great powers as Russia and China, regional hegemon adversaries as Pakistan, North Korea, Libya, and Iran, and rogue states as Iraq, Sudan, and Egypt.

STRATCOM and the Defense Intelligence Agency (DIA) provided classified target data base and intelligence projections for a world target base that includes complete target sets for each possible adversary in that “world.” Individual targets were extracted from the world target data base for each of the OPSITs, and data for each OPSIT was “summarized in terms of each capability to facilitate the selection of a single-point objective for each.”

U.S. force response specified in each of the OPSITs explicitly indicated the broad target categories to be held at risk: WMD forces, conventional military capabilities, war supporting infrastructure, and leadership. A target package was developed for each of the OPSITs. Based on these scenarios the study developed requirements for the forces structure needed to execute the strike options and defeat the identified targets. An illustrative candidate force structure included a long-range, low-yield nuclear weapons that could avoid overflight of foreign territory.

The efficiency of a strike option was evaluated on its ability to deliver a weapon on target within 24 hours. In order to emphasize the ability to rapidly defeat an adversary, the study defined the following efficiency values for strike options:

- Outstanding: Can strike 90 percent or more of the required targets from a day-to-day posture.
- Good: Can strike 65 percent or more of the required targets.
- Sufficient: Can strike 90 percent or more of the required target set from an advanced posture (similar to that generated for nuclear forces)
- Marginal: Can strike 65 percent or more of the required target set from an advanced posture (similar to that generated for nuclear forces)
- Poor: If it must be operated in a Combat Air Patrol (CAP)-like posture to be able to strike within 24 hours.

Because of the NPR's focus on a need for rapid retargeting capabilities, the DTRA study defined the following values for the ability to accept and process requirements to hold any selected target at risk within a given period or time (e.g. hours):

- Outstanding: If retargeting takes less than 10 minutes.
- Good: Between 10 and 30 minutes.
- Sufficient: If between 30 and 90 minutes.
- Marginal: If between 90 minutes and 4 hours.
- Poor: If longer than 4 hours.

Finally, the study defined the following survivability values for the ability of the force element or option, when deployed (non-deployed forces has less chance of survival), to survive (percentage of likelihood) during counterforce attack on the United States or its forces and be available for a strategic response:

- Outstanding: If 95 percent can be expected to survive.
- Good: If 85 to 95 percent is expected to survive.
- Sufficient: If 75 to 85 percent will survive.
- Marginal: If 65 to 75 percent is expected to survive.
- Poor: If less than 65 percent will survive.

The study also found that no available operational or responsive force options were found for deep-underground target kill, agent defeat, and a prompt strike within 15 minutes of launch order (only two New Options were identified in this category). In terms of mobile target options, the study found that this mission was 'limited to tactical aircraft' (with only one long-range bomber system among New Options). Only one operational or responsive force option existed for Hard Point Target Kill with low collateral damage, and there were no operational or responsive force options for Hard Area Kill with low collateral damage (limited target set). In addition, the study concluded:

“It is important to note that during the research phase of building the Adaptive Options Database, only a handful of New Options were found that, when fielded, will fill the

gaps. Most of these were in the concept phase of development, and it is not likely that all will be successful. One could arguably conclude that some gaps will remain unless prompt attention is given to developing a set of conceptual options to start down an R&D path leading to acquisition of a successful set of options to fill the gaps with sufficient robustness to avoid single-point failure that could produce loss of capability.”

11 July 2002: Maj. Gen. Randall M. Schmidt, Assistant Deputy Chief of Staff for Air and Space Operations, describes in his written testimony to the House Armed Services Committee special panel on terrorism the purpose of the Global Strike and Nuclear Response Task Forces:

“Global Strike Task Force will serve as the initial, leading edge “kick down the door” force designed to conduct operations in an intense anti-access environment. It will pave the way for persistent air, space, land, and sea forces by rapidly rolling back adversary anti-access threats.

Nuclear Response Task Force, is the Air Force contribution to deterring the use of weapons of mass destruction against U.S. or allied forces and seeks to integrate conventional and nuclear capabilities, providing commanders a full spectrum of responses to counter aggression.”

July 2002: The ACC Global Strike CONOPS briefing firmly places **Iran** as the prospective nation for preemptive U.S. attack.

28 June 2002: Secretary of Defense Rumsfeld signs that 2002 Contingency Planning Guidance (CPG) document.

5 June 2002: The Air Force four star Global Strike Task Force Capabilities Review & Risk Assessment (CRRA) takes place, laying out the assumptions of global strike:

- Adversary is near-peer competitor projected beyond the FYDP: worse case possibility
 - Enemy Centers of Gravity include fixed, hard/deeply buried, as well as critical mobile targets
 - Low observable platforms are most survivable, etc.

The review states that “it is important to emphasize that the “near-peer” threat used for this analysis does not yet exist. The adversary is notional, a worst-case scenario not expected before the end of the FYDP [five year defense plan]. However, the assumption of a “near-peer” adversary has significant impact upon the relevancy of legacy systems in such a lethal anti-access environment. Joint/Interagency capabilities and their contributions to reducing risk were not assessed. Rather, they were assumed to exist and contribute. We made this assumption because of limited time available and because the Air Force has no control over other services’ programs.”

1 June 2002: Speaking at West Point, President Bush says:

“The gravest danger to freedom lies at the crossroads of radicalism and technology. When the spread of chemical and biological and nuclear weapons, along with ballistic missile technology -- when that occurs, even weak states and small groups could attain a catastrophic power to strike great nations. Our enemies have declared this very intention, and have been caught seeking these terrible weapons. They want the capability to blackmail us, or to harm us, or to harm our friends -- and **we will oppose them with all our power**....”

For much of the last century, America's defense relied on the Cold War doctrine of deterrence and containment. In some cases, those strategies will apply, but new threats also require new thinking. Deterrence, the promise of massive retaliation against nations, means nothing against shadowy, terrorist networks with no nation or citizens to defend. Containment is not possible when unbalanced dictators with weapons of mass destruction can deliver those weapons on missiles or secretly provide them to terrorists' allies.

We must take the battle to the enemy, disrupt his plans and confront the worst threats before they emerge. And our security will require all Americans to be forward-looking and resolute, to be ready for preemptive action when necessary to defend our liberty and to defend our lives.”

June 2002: President Bush signs National Security Presidential Directive (NSPD) 14, “Nuclear Weapons Planning Guidance,” based on the results of the Nuclear Posture Review. The new guidance makes explicit a previously ambiguous policy that the **U.S. may use nuclear weapons in response to the use of chemical or biological weapons of mass destruction against U.S. forces or its allies.**

30 May 2002: Speaking on The Lehrer Newshour, Secretary of State Colin Powell states that nuclear weapons are only useful as a deterrent:

“Nuclear weapons in this day and age may serve some deterrent effect, and so be it, but to think of using them as just another weapon in what might start out as a conventional conflict in this day and age seems to me to be something that no side should be contemplating.”

30 May 2002: The Defense Department and NASA conduct the first-ever ground test of a full-scale, fully integrated hypersonic engine using liquid hydrocarbon fuel.

22 May 2002: During a Pentagon press briefing on acquisition and logistics reform, Under Secretary of Defense Rudy de Leon described the “revolutionary warfare” used in the war against Yugoslavia:

“In the skies over Kosovo, Unmanned Aerial Vehicles hunted for Serbian forces. In space, satellites focused on Serbian targets no matter what the weather or the time of day. In their first combat missions, B-2s stunningly defined the term "global strike," flying non-stop to hit targets halfway around the world. We can look back on 38,000 sorties, not a single combat casualty, and the most precise campaign in the history of warfare.”

21 May 2002: In an op-ed published in *The Washington Post*, former STRATCOM commander Eugene Habiger, former Defense Secretary William Perry, and former Senator Sam Nunn warn:

“On the question of nuclear weapons policy, some in the Bush administration are considering and openly discussing steps that would take us in the opposite direction from the path pointed out by President Bush [in speeches delivered in 2001], including expanding options for nuclear attacks, widening the number of targeted nations and developing new nuclear weapons variants. While each of these ideas may have a plausible military rationale, their collective effect is to suggest that the nation with the world’s most powerful conventional forces is actually increasing its reliance on nuclear forces.”

17 May 2002: The Air Force issues a special notice to potential contractors to attend a Global Strike Task Force (GSTF) Industry Day at Wright-Patterson AFB on 26 June 2002. The meeting will be used to prepare a Request for Information (RFI) for technology, information, weapon system and/or other ideas for enhancing capabilities supporting Global Strike Task Force (GSTF). The notice gives the following background:

“Events on September, 2001 sparked a call for more rapidly responsive air forces. US military operations have traditionally relied on deploying superior power close to an adversary in a time-consuming build-up phase before beginning operations. However, potential adversaries are acquiring a wide variety of advanced anti-access systems that threaten to discourage US intervention, disrupt coalitions, or prevent coalition forces from operating from desired locations. To overcome these threats, the USAF is developing new concepts of operations (CONOPS) that leverage the many recent technological advances in survivability, target acquisition, precision munitions, and a breadth of information technologies. The US GSTF will leverage current and near term capabilities to overcome theater access threats and rapidly establish air dominance. The GSTF is based on 28 capabilities focused in 6 categories (Strike, Survivability, Force Protection, C3I, Logistics/Combat Support, and Strike Find-Fix-Track-and Target of F2T2). Established air dominance through GSTF further provides joint aerospace, land, and sea forces the freedom to attack and to be free from attack.”

9 May 2002: *The Christian Science Monitor* reports (Anne Scott Tyson, “New Push for Bunker-Buster Nuke,” *Christian Science Monitor*, May 9, 2002. p. 1) on administration plans to explore a “robust earth penetrator” nuclear warhead (RNEP) that would be designed to penetrate below the ground before exploding, so that could increase the probability of destroying hardened and deeply buried targets.

3 May 2002: Secretary of Defense Rumsfeld signs the classified Defense Program Guidance for 2004-2009. The DPG emphasizes priority investments in “countering asymmetric threats,” particularly terrorism and WMD, and presents a vision of a significantly enhanced global offensive capability for the United States, creating what the document calls an ability to undertake “unwarned strikes ... [to] swiftly defeat from a position of forward deterrence.” American forces are described as a military centered around “high-volume precision strike,” that is, lots of quick and easy attacks anywhere on the globe. In other words, the American military is to build a preemptive strike force operating from the sanctuary of the United States.

The DPG calls for a number of new capabilities: space power, cyber-warfare, special operations, and intelligence are all given high priority. New weapons such as armed unmanned fighters and a Mach 10 hypersonic missile are called for. The DPG calls for a squadron of 12 UCAV's to be deployed by 2012. A Mach 10 Hypersonic missile is called for by 2009.

The DPG calls for better American capability to strike “hardened and deeply buried targets” in three rogue nations simultaneously. This include building up special operations capabilities, cyber-warfare, as well as accelerating the development of a “survivable” earth penetrator fitted with an existing nuclear warhead. Laser and other “directed energy” weapons such as high-powered microwave weapons, are also called for to attack underground targets impervious to explosive attack, as well as individuals and troops, computer and communications networks. Both UCAV's and hypersonic weapons could be equipped with directed energy weapons.

The military is directed to make cyber warfare a “core competency” and resolve outstanding legal and interagency issues relating to offensive computer network attack. In space, the DPG directs the military to develop cyber, laser, and electronic warfare capabilities to deny any adversary use of space. Special operations, particularly covert capabilities, are stressed. Better intelligence is called for to provide “sufficient warning of an impending crisis” and “identify critical targets for an effects-based campaign.”

2 April 2002: Gen. John A. Gordon, head the DOE's National Nuclear Security Administration (NNSA) and Undersecretary of Energy for nuclear security says that despite a 1994 Congressional ban on developing new nuclear payloads, engineers in the DOE labs are working on conceptual studies to develop low-yield nuclear weapons. "I've asked the labs to form a small advanced concept group" consisting of "a few people" to study ways to design a low-yield nuclear system, Gordon told defense reporters. As of right now, Gordon said, "there is no

defined requirement for a low-yield system." However, the Department of Defense is looking at ways to repackage existing nuclear warheads on earth-penetrating weapons.

22 March 2002: The Air Force FY 2004 Annual Planning & Programming Guidance (APPG) states:

“The Air Force has defined two Critical Future Capabilities within the Global Attack core competency.

- GA1: Create desired effects within hours of tasking, anywhere on the globe including locations deep within an adversary's territory.
- GA2: Provide deterrence against weapons of mass destruction (WMD) attack and coercion by maintaining a credible, land-based **nuclear** and flexible conventional strike force.”

The APPG states that the Air Force should: “Program for development and production of an UCAV for the SEAD/Strike mission such that an operational UCAV squadron is fielded by FY08 and the Congressional goal of 30 air vehicles by FY10 is achieved.”

17 March 2002: An unidentified Clinton administration official tells *The Boston Globe* that there is little new in the Nuclear Posture Review identifying North Korea and other rogue states as potential nuclear targets: “What’s so interesting here? The big news would be if we didn’t have nuclear options against these guys.”

17 March 2002: A *New York Times* report says that foreign countries are asking if President Bush would ever consider a preemptive nuclear strike. Top officials in the Bush administration respond that despite the President’s aggressive language about Iraq and the “axis of evil,” he had never said that he would consider using specially designed nuclear weapons in a preemptive attack. “**We do not have a declared policy on pre-emption,**” a senior administration official says. “**We have a strategy of deterrence.**”

15 March 2002: In response to the debate over the Nuclear Posture Review, Secretary of State Colin Powell states that the United States would continue to abide by its pledge not to use nuclear weapons against non-nuclear NPT member states. “**We have not changed our policy,**” he says.

13 March 2002: Defense Secretary Donald Rumsfeld states during a joint press conference with Russian Defense Minister Sergei Ivanov:

“First, the Nuclear Posture Review is not an operational planning document. It sets out prudent requirements for deterrence in the 21st century. Without getting into the classified details of the report, I can say that the Review says nothing about targeting any

country with nuclear weapons. The United States targets no country on a day-to-day basis.”

13 March 2002: During a presidential press conference, President Bush states in response to questions about the Nuclear Posture Review debate:

Q: “Why a policy...that might go after a country like Libya or Syria?”

Bush: “First of all, **we’ve got all options on the table**, because we want to make it very clear to nations that you will not threaten the United States or use weapons of mass destruction against us, or our allies or friends.”

Q: “Mr. President, what do you make of the dust-up over the nuclear review? And have you made any decisions about its recommendations? In particular, what is your view about building smaller nuclear weapons, which some people believe would make them more likely to be used?”

Bush: “Well, first of all, I view our nuclear arsenal as a deterrent, as a way to say to people that would harm America, don’t do it. That’s a deterrent, that there’s a consequence. And **the President must have all options available to make that deterrent have meaning**. That’s how I view the review.”

Q: But what is your thinking, sir, on smaller nuclear weapons, which some analysts believe would be a major departure and would make them more likely...

Bush: My interest is – Jim, my interest is to reduce the threat of a nuclear war, is to reduce the number of nuclear weapons. I think we’ve got plenty of warheads to keep the peace. I’m interested in – and that’s what I’ve told President Putin and told the country. If need be, we’ll just reduce unilaterally to a level commiserate [sic] with keeping a deterrence and keeping the peace.

So I’m interested in having all – having an arsenal at my disposal, or at the military’s disposal, that will keep the peace. We’re a peaceful nation and moving along just right and just kind of having a time, and all of a sudden, we get attacked and now we’re at war, but we’re at war to keep the peace.

And so, therefore, the more firm we are and the more determined we are to take care of al Qaeda and deal with terrorism in all its forms, particularly that of global reach, that we have a good chance of solving some difficult problems – including in the Middle East, or the subcontinent. But it’s going to require a resolve and firmness from the United States of America.”

12 March 2002: Pentagon spokeswoman Victoria Clarke (ASD PA) says in response to questions about the Nuclear Posture Review:

“I think it’s important to say a couple of things about the Nuclear Posture Review; One, it’s a review. It is one of many reviews of nuclear weapons over many years....It is not an operational plan. It is not a plan of any kind.” It “reflects the world in which we find ourselves – that it’s changed. It’s changed significantly. It is hardly likely that we face an all-out nuclear attack by the Soviet Union. It is more likely that we have to face very real threats and growing and changing threats – weapons of mass destruction – from a variety of places. So the Nuclear Posture Review reflects that. It is not an operational document of any kind; it is not a targeting document of any kind....And what it does is, it raises the bar for broad deterrence strategies that reflects the world in which we find ourselves.”

11 March 2002: National Security Advisor Condoleezza Rice also responds to questions about the Nuclear Posture Review on PBS News Hour’s with Jim Lehrer:

Lehrer: Speaking of weapons of mass destruction, this weekend news about the US working on contingency plans for possibly using nuclear weapons against seven countries including Iraq. Has the president in fact lowered the threshold for using nuclear weapons?

Rice: If anything, this president has been a president who believes that a decreased reliance on nuclear weapons is warranted....What [the Nuclear Posture Review] does is what any military has to do, and that is, to review the contingencies, review the threats and look at the full range of options that the president needs to deter the use of weapons of mass destruction against the United States, its forces or its friends and allies.

Now it has long been American policy that the use of a weapon of mass destruction against the United States, its friends or its forces, would be met with a devastating response. And the president cannot take any options out of his arsenal in making very clear the pledge that a use of weapon of mass destruction against us would be met with a devastating response. That is how you deter the use of one of these weapons against you. But the idea that this somehow lowers the threshold for nuclear war couldn’t be further from the truth. No one wants to use nuclear weapons, and this president has gone a long way to encouraging and to pressing the case for things like missile defense, which might make it unnecessary to worry so much about these weapons of mass destruction.

10 March 2002: Secretary of State Colin Powell responds to the debate about the new Nuclear Posture Review on CBS “Face the Nation”:

“...this study took into account that there are nations out there developing weapons of mass destruction. And prudent planners have to give some consideration as to the range of options the president should make available to him to deal with these kinds of threats. Right now, today, not a single nation on the face of the Earth is being targeted by an American nuclear weapon on a day-to-day basis. We just don't do that.

Yes, the President has a full range of options available to him. But we're not looking for a war, and it seems most unlikely that, among all the options we have, this is an option we would have to exercise in any foreseeable way that I can understand it. But I think it is very useful for people to understand that there is a full range of options. This is not new to this administration. The previous administration made the same point in a declaratory statement that Secretary [of Defense] Bill Perry, during the Clinton Administration, put out and which still remains US policy.

But the headlines suggesting that somehow we are now targeting specific individual countries, whereas all that study said...is that this class of nations – Iran, Iraq, Syria, North Korea – are developing the kinds of weapons of mass destruction that should be troubling to all of us. And we have said this for many, many years – previous administrations and this administration – and it is prudent for the American President and for our Department of Defense to examine all the options that are going to be available to an American President as he deals with the threats that are out there in the world.

The United States has never said we would not strike first against some nation that possesses nuclear weapons. It's an important point because we think it is best for any potential adversary out there to have uncertainty in his calculus. But we have also said, as a declaratory statement – this gets a little tricky – but for those nations that are non-nuclear possessing nations, we would have no intention of fighting them with nuclear weapons unless a certain set of circumstances came into place where they aligned themselves with nations that might have nuclear weapons, or get into weapons of mass destruction.

So there is a theology associated with all of this, but you know we have a range of military options that can be used to defend the nation and defend our interests and our allies around the world, and we should not get all carried away with some sense that the United States is planning to use nuclear weapons in some contingency that is coming up in the near future. It is not the case. What the Pentagon has done with this study is sound, military, conceptual planning and the president will take that planning and he will give his directions on how to proceed.”

10 March 2002: Joint Chiefs chairman Gen. Richard B. Myers, tells CNN's Late Edition that the Nuclear Posture Review is “not a plan, it's not an operational plan. It's a policy document. And it simply states our deterrence posture, of which nuclear weapons are a part.” The policy, he

says, “preserves for the president all the options that a president would want to have in case this country or our friends and allies were attacked with weapons of mass destruction, be they nuclear, biological, chemical or, for that matter, high explosives.”

9 March 2002: The Pentagon issues a press statement after news articles appeared describing the contents of the Nuclear Posture Review. It says it would neither discuss classified details of military planning or contingencies nor comment on selective and misleading leaks. “The review of the U.S. nuclear posture is the latest in a long series of reviews since the development of nuclear weapons. **It does not provide operational guidance on nuclear targeting or planning.**”

9 March 2002: *The Los Angeles Times* and *The New York Times* publicly reveal for the first time the results of the classified Nuclear Posture Review (NPR), forwarded to Congress in January. The NPR calls for the development of contingency plans for using nuclear weapons against seven states: Iran, Iraq, Libya, Syria, North Korea, Russia and China. It also contains support to develop and deploy new “earth-penetrating” nuclear weapons and to accelerate the time it would take to resume full-scale nuclear testing.

6-7 March 2002: Speaking at an air and space conference, Air Force Major General Judd Blaisdell, Director, Nuclear & Counterproliferation, Headquarters, United States Air Force (AF/XON), publicly **uses the term “full spectrum deterrence” for the first time**, combining nuclear and non-nuclear, cyber and special operations.

6 March 2002: An Air Force Global Strike CONOPS briefing states that:

“In the initial hours of a developing conflict, the GSTF will employ a relatively small number of low-observable and stand-off systems, supported by focused electronic and information attack, to “kick down the door” into denied battlespace by rapidly degrading, and then defeating selected enemy anti-access capabilities and associated systems. GSTF will have a capability to strike high-value targets (CBRN, C4I) in the opening hours.”

The briefing states that “Prior to conflict, the GSTF will develop and update plans for countering adversary anti-access strategies and capabilities. The GSTF requires the capability to:”

“Continuously develop and refine adversary-specific plans or plans based on adversary anti-access capability to include CBRN target planning and collateral effects mitigation.”

“GSTF forces must be able to hold key high-value enemy targets at risk day or night in all weather, despite sophisticated air defenses. The GSTF requires the capability to:

- Attack a limited range of heavily defended targets with minimal risk to manned aircraft

- Attack ISR and warning, C4I, tactical ballistic missile (TBM) and cruise missile (CM) systems and infrastructure, naval weapons systems and infrastructure, and weapons of mass destruction, their delivery systems and infrastructure
- Conduct all-weather 24-hr precision strike against a full array of fixed targets from hardened bunkers to CBRN facilities
- Localize, identify, and attack some classes of high-value moving targets (TSTs) while they are still vulnerable
- Assess the effects of attacks on fixed and mobile targets in near-real time”

March 2002: At the annual Air Force Air Armaments Summit, a briefing by the “Threat Panel” states that: “September 11th and subsequent events have captured much of our interest. The ramifications of this event are still unfolding. On-going operations are forefront in our minds. However, we must keep this event in context as we continue to look forward 20 years to future threats, which may be more capable.”

The Panel looks at the three countries in the “Axis of Evil” and concludes that:

Our 20-year look at Iran assumes that religious conservatives stay in power ... that Iran continues to view Iraq as a regional military threat. This is the type of force Iran could build [By 2022: Expanded weapons of mass destruction and missiles, >7,000 ‘modern’ armored vehicles, >150 4th generation aircraft, improved anti-surface warfare capabilities]... probably less capable than that of either Russia or China ... but still a potent regional force ... and probably augmented with longer-range theater ballistic missiles (up to 3000 km range) ... WMD ... and a small force of inter-continental ballistic missiles.

“In terms of nuclear weapons ... we expect a slow increase in the number of nuclear capable states during the next two decades ... but those on the list – **most notably Iran** and Iraq – are nations we would prefer would not attain such capabilities.”

On weapons developments, the Summit reports that “AFSPACE [Air Force Space Command] is working on the common aero vehicle (CAV) global strike weapon delivery system. The common aero vehicle is a CONUS-based vehicle capable of deploying various conventional payloads to global targets within minutes of tasking. This will give decision makers true global reach against critical time sensitive targets. Potential launch platforms for the CAV include ground and air-launched expendable boosters and eventually the Military Space Plane (MSP). AFSPACE has made this a Fiscal Year (FY) 04 initiative, looking for an initial operational capability in 2011.”

March 2002: Air Force Gen. John Jumper and Secretary of the Air Force Jim Roche charter a Transformation Senior Steering Group (TSSG) to oversee the evolving Air Force transformation effort. The TSSG goal is to institutionalize advancements the Air Force has achieved in pursuit

of asymmetric advantages, and recognizes the Secretary of Defense's specific emphasis on transformation.

22 February 2002: Clarifying the Bush administration's policy on negative security assurances following Under Secretary Bolton's statement to *The Washington Times*, State Department spokesman Richard Boucher states that the U.S. would not use nuclear weapons against a non-nuclear state unless the state attacked the U.S. or its allies in conjunction with a nuclear state. He added that the U.S. reserves the right to make any kind of military response if it or its allies come under attack by weapons of mass destruction.

22 February 2002: In an interview with *The Washington Times*, Undersecretary of State for Arms Control and International Security John Bolton says with regard to the long-standing U.S. pledge not to use nuclear weapons against non-nuclear member states of the Non-Proliferation Treaty (the so-called negative security assurances):

“We are just not into theoretical assertions that other administrations have.” Such promises reflect “an unrealistic view of the international situation. The idea that fine theories of deterrence work against everybody, which is implicit in the negative security assurances, has just been disproven by September 11.” He added that Washington was “not looking for occasions to use” its nuclear weapons but “we would do whatever is necessary to defend America's innocent civilian population...and the classic formulation of that is we are not ruling anything in and we are not ruling anything out.”

14 February 2002: Gen. Jumper speaks at an Air Force Association conference in Florida:

“Many of you have heard me talk before about basing what we do on concepts of operation, about us being able to describe how we go to war and how we interface with the other services before we start talking about what we are going to buy to do it. This CONOPS-based way of doing business is one we are also trying to bring to our planning and programming system. And we do that by describing our capabilities in terms of task forces and we've created the task forces that do global response to deal with the anti-terrorism business: the Global Strike Task Force, which many of you have heard me talk about before, to deal with the anti-access threat; the space-ISR task force; the expeditionary task force to deal with what we do day-in and day-out in our business; the strategic task force to deal with our nuclear obligations, and so forth.”

Jumper states that the Global Strike Task Force “gets us away from the notion that the F-22 is merely a replacement for the F-15.” He says:

The Global Strike Task Force is the kick-down-the-door portion of it. The kick-down-the-door portion of this deal does not win the war. It allows the things in that are going to

win the war. So, in Global Strike Task Force, you are taking out those anti-access targets and creating the conditions for access. So the F-22s and the B-2s are going to come in there and take out the SA-10s, 12s and 20s, sweep anything from the skies. They are going to take out the shore batteries that can shoot at the ships over the horizon and they are going to do any sort of support of forces we might put in on the ground that are special forces. **They are going to take care of the weapons of mass destruction**, their storage, their transportation, and their launch points and then enable the persistence force to deploy forward.

Also at the AFA conference, General Hal M. Hornburg, the new Commander of Air Combat Command, describes integration of cyber warfare concepts into the GSTF:

“If we go to any of those places [in the “axis of evil”] we need to learn how to deal with this before we get totally stealthy with the JSF and the F-22. We need different solutions. As 9th Air Force and CENTAF commander, I talked to the Air Force XO and then commander of the U.S. Air Forces in Europe, John Jumper, and found that he had had the same problem when he was the CENTAF commander. I talked to Chuck Wald and Buzz Mosely and find that they have the same problems. And a lot of you in industry are trying to help us. But we don't just need jammers and we don't just need Block 50s. We don't just need one thing at the exclusion of all else. We need an array of capabilities to deal with this threat. I am looking for ground solutions and space solutions. I am looking for kinetic and non-kinetic solutions. I am looking, for example, from space to be able to get down into an SA-10 and convince it to launch all missiles right now or to deny it from launching their missiles right now. If you have an answer to this, if you want to work on this problem with us, have pencil and paper ready, call me at the number on this screen. Operators are standing by...”

14 February 2002: Testifying before the Senate Armed Services Committee, Admiral Ellis, STRATCOM commander, discusses the strategic direction enunciated in the Nuclear Posture Review. Ellis said that long-range conventional strike was vital to current and future strategic requirements. “Integrating non-nuclear capabilities into strategic forces strengthens our joint approach to developing and operating military forces. With technological advances,” he testifies, “we have the potential to seamlessly integrate existing or projected enhancements to non-nuclear capabilities such as precision strike to improve our strategic capabilities.”

11 February 2002: Undersecretary of State for Arms Control John Bolton states that a long-standing U.S. commitment not to use nuclear weapons against non-nuclear weapons states is “an **unrealistic view of the international situation**.” Bolton questions the value of the negative security assurances the U.S. has offered since 1978. He states, “We are not ruling anything in and we are not ruling anything out. We are just not into theoretical assertions that other administrations have made.”

9 February 2002: During a Pentagon press briefing on the results of the Nuclear Posture Review, Assistant Secretary of Defense for International Security Policy John D. Crouch, states:

“...in the nuclear planning context, we adopted the concept of a capability-based force. We underscored the need for greater flexibility for a range of contingencies that will be harder to know, and we also will be making changes in how we plan....”

“We also underscored the fact that the Cold War approach to deterrence, which was highly dependent upon offensive nuclear weapons, is no longer appropriate, which is not to say that we think that nuclear weapons don't continue to play a role in that. We think they play an important role, a fundamental role.

Now, in a capability-based approach we had to determine a way to size the nuclear component of the force. And we did that by essentially adopting a completely new approach to this problem. And what we posited is that there are some of immediate and potential contingencies that we have to deal with. In fact, there's a broad range of contingencies. Immediate things in that category may be rogue states that we would have to deal with, WMD, states with WMD, and the like.

And we will maintain an operationally deployed force for immediate and unexpected contingencies. Obviously, anything that is unexpected, you're going to have to deal with, with your operationally deployed systems. In addition to that, any sort of immediate threats that you would identify would also be dealt with these systems. And these essentially can be thought of as, at the nuclear level, bombers and missiles that would be available right now, in minutes, to days to a few weeks.

We also are going to maintain a responsive capability. Now, this is not a separate force, it's the ability to augment the operationally deployed force in a way where, over weeks, months and even years, that we could respond to changes. What kinds of changes? Potentially changes in the security environment that were more adverse than we thought...

Planning in all this continues to be a very important -- important idea. We will continue to do preplanning for our immediate and potential contingencies, but one of the important things that came out of the QDR is it's necessary to develop new tools for adaptively -- in a timely way adaptively creating plans for situations that may arise very quickly in an unexpected way. And again, that was not something we had to think about in the Cold War. We didn't think about adaptive planning in the kinds of short time-frames that we have to think about it now, because we knew who the opponent was going to be, we knew that it was going to be sort of a -- not very much time to make decisions and we would in fact have to execute very much preplanned kind of options.

Q: Sir, is there a doctrine of retaliation that is now replacing assured destruction, or is it just a doctrine of, you know, more options for the president?...It just seems to me -- if I can follow this -- this clear implication that the macabre business of massive retaliation is being gotten rid of. And yet, your answer just now seems to indicate that it's not, that it's still there; that you would still, in addition to intercepting the missile, retaliate massively against -- is there a doctrine that tells a president, a future president, what do to in circumstances like this?

Crouch: No, the president will have a -- one of the things that will come out of this is the president, hopefully, will have **a much wider range of options** that he can deal with. And that's why one of the initiatives here was not only to maintain a smaller nuclear force, but also to develop additional nonnuclear strike capabilities that would also be part of a -- sort of this **diverse portfolio of options that the president could draw from.**

We're certainly not -- there's nothing in the review that talks about what the president's options are or are not are. Those are really up to the president. The main idea was that we feel we need to give the president and future presidents a broader portfolio of responses and options to deal with the kinds of uncertainties. You know, we thought we knew fairly confidently how to deter the Soviet Union during the Cold War. I think one of the reflections here is that we're not as confident that we will be able or we will know how to deter the kinds of attacks that might be presented in the United States in the future. And if September 11th doesn't underscore that, since I don't -- most of us did not expect that, I think nothing else would.”

February 2002: STRATCOM establishes working groups to weigh the options associated with the merger of the Strategic and Space Command (SPACECOM) missions.

31 January 2002: Speaking at the National Defense University, Secretary of Defense Donald Rumsfeld says: To prepare for the future, we also decided to move away from the old "threat based" strategy that had dominated our country's defense planning for nearly half-a-century, and adopt a new "capabilities based" approach—one that focuses less on who might threaten us, or where, and more on how we might be threatened—and what we need to do to deter and defend against such threats.”

29 January 2002: In his State of the Union speech, President Bush says:

“Some governments will be timid in the face of terror. And make no mistake about it: If they do not act, America will.

Our second goal is to prevent regimes that sponsor terror from threatening America or our friends and allies with weapons of mass destruction. Some of these regimes have been pretty quiet since September the 11th. But we know their true nature. North Korea

is a regime arming with missiles and weapons of mass destruction, while starving its citizens.

Iran aggressively pursues these weapons and exports terror, while an unelected few repress the Iranian people's hope for freedom.

Iraq continues to flaunt its hostility toward America and to support terror. The Iraqi regime has plotted to develop anthrax, and nerve gas, and nuclear weapons for over a decade. This is a regime that has already used poison gas to murder thousands of its own citizens -- leaving the bodies of mothers huddled over their dead children. This is a regime that agreed to international inspections -- then kicked out the inspectors. This is a regime that has something to hide from the civilized world.

States like these, and their terrorist allies, constitute an **axis of evil**, arming to threaten the peace of the world. By seeking weapons of mass destruction, these regimes pose a grave and growing danger. They could provide these arms to terrorists, giving them the means to match their hatred. They could attack our allies or attempt to blackmail the United States. In any of these cases, the price of indifference would be catastrophic.

We will work closely with our coalition to deny terrorists and their state sponsors the materials, technology, and expertise to make and deliver weapons of mass destruction. We will develop and deploy effective missile defenses to protect America and our allies from sudden attack. And all nations should know: America will do what is necessary to ensure our nation's security.”

8 January 2002: The Nuclear Posture Review is formally completed.

4 January 2002: A briefing on The Air Force Transformation Flight Plan (FY 2003-2007) describes the Task Force concept of operations (CONOPS), which is driving USAF future planning. The post Cold War security environment is described as:

- greatly increased need for homeland defense. More states are acquiring longer range ballistic missiles, economic globalization (increased travel/trade) has created new vulnerabilities for hostile actors to exploit.
- more states can acquire weapons of mass destruction. Biotechnology revolution increases threat of biological warfare.
- new environment contains many more failed states. This has greatly increased demand for peace and humanitarian operations as well as the need to counter terrorists and drug traffickers who exploit failed states for their purposes. These require skills that are often quite different from traditional conventional military operations.

- conflicts and adversaries are often very unpredictable. This requires a major change in planning focus - from threat based planning against a specific adversary in a specific area (cold war: this was Soviet Union in Central Europe primarily) to capabilities-based planning. This requires a very flexible, rapid deployable, “jack-of-all-trades” military that can address a wide range of threats that various adversaries can bring to bear. We must plan against those capabilities.
- adversaries are able to afford rapidly evolving technologies whose costs continue to decrease - especially in areas of sensors, info processing, and precision. Our conventional superiority in these areas is rapidly diminishing.
- in addition to having the constantly improving capability to exploit space for their own purposes, most potential adversaries are pursuing means to deny US access to space via jamming, ground based lasers and proximity micro satellites. In addition, the fact that US society and military is so dependent on computer networks creates easily exploitable vulnerabilities for our adversaries. Info superiority is not achievable if our adversaries can disrupt and manipulate our C4ISR assets.
- the number of forward bases the Air Force has access to has shrunk 74% since the height of the Cold War. This means the Air Force must be able to project force across the world with little or no forward access.
- The new security environment is becoming increasingly urbanized. By 2025, 2/3 of the world's population is projected to live in urban areas. Migration to urban areas and increased interaction between ethnic/ religious/political groups in built-up areas will lead to greater friction. Enemies will move into cities to negate our technological advantage (and blend in with civilians).
- The politics of “limited objectives” drive low collateral damage, restrictive ROE, minimum casualties, sensitivity to the CNN effect, and an enemy who controls H-Hour
- Adversaries generally don't fight to win, they fight not to lose - which requires new strategy.

The briefing continues the emphasis on conventional weapons:

“The transformational effects of PGMs are obvious. They greatly reduce the number of sorties required to strike a target, the required forward footprint, and the number of aircrews in harm's way. PGMs are also essential during operations that are less than “total war,” such as those that prevail in the post-Cold War security environment, which usually require very precise strikes to compel an adversary as opposed to all-out assaults. In addition, PGMs, along with information superiority, are the key components of “parallel warfare,” i.e., the ability to mass effects rather than mass forces. Even if the U.S. can identify an adversary's key centers of gravity, rapidly report that to the necessary combat forces, and attack them simultaneously, it still must also have the ability to strike those targets very precisely.

The next steps of this ongoing Precision Engagement transformation involve the following two transformational capabilities:

- (1) The ability to conduct high volume attacks with significantly fewer platforms; and
- (2) The ability to achieve specific, tailored effects on a target, short of total destruction

The dramatic improvement in the number of targets that can be struck per sortie via the small diameter bomb and later with the WASAAMM will enable the U.S. to conduct high volume attacks against hundreds of critical targets in the early hours of conflict with a small number of platforms.

Achieving effects without destruction (via non-lethal weapons, directed energy weapons, and offensive IW) will help to minimize collateral damage. At present, the usual option to affect a target is to destroy it with a bomb. This would enable Effects-Based Operations that match precise capabilities to desired effects. These capabilities are critical in the post-Cold War operations that are short of traditional conventional warfare, such as urban and peace operations. Military operations in these environments often require unique weapon system solutions to operate effectively and deliver desired effects while minimizing collateral damage to infrastructure and people.”

The briefing states:

“The ability to attack any target, any place, at any time from anywhere rapidly, precisely, and persistently is key to achieving the Pentagon’s current transformational objective of denying sanctuary to our adversaries and is a key enabler of the Global Response Task Force CONOP’s mission of holding terrorist-related targets at risk over the entire planet. Global attack would also allow the United States to project power almost immediately in areas with little or no forward deployed forces or easy access. Indeed, our traditional method of deploying air and ground forces at or through ports and airfields will grow more problematic as national and commercial satellite services, missile, and weapons of mass destruction technology rapidly evolve. This capability would also buy valuable time should additional forces need to be deployed to the theater.”

The briefing also promotes continued development of the CAV, stating:

“In initial phases of conflict against an adversary armed with effective IADS, there will be some select high-risk, high priority time-critical targets whose destruction is essential to defeating the adversary’s anti-access strategy and to achieving the GSTF CONOPS’ tasks in heavily defended airspace. Currently, lives and very expensive platforms must be risked loitering to accomplish this task. The ability to destroy these high-risk, high priority, time-critical targets with minimal risk is a transformational capability.

Unmanned Combat Aerial Vehicles are the key to making this capability a reality. They put no aircrews in harm's way, are not restricted by human physical limitations and can loiter far longer over the battlefield and operate at greatly increased ranges, enabling time-critical targeting of moving targets. The Air Force gained valuable operational experience with baseline UCAV capabilities during Operation Enduring Freedom in Afghanistan.

The X-45 is the primary UCAV platform currently under development. The stealthy X-45 will be a highly survivable light attack aircraft with selected specific capabilities for lethal and non-lethal suppression of enemy air defenses as well as strike missions. The Air Force is also considering a limited near-term electronic attack capability for the X-45 and studying the longer-term potential to integrate directed energy and precision, all-weather capabilities.”

2 January 2002: The final draft of the 2001-2002 Nuclear Posture Review (NPR) is forwarded to Congress. In a letter to Congress announcing completion of the review, Secretary of Defense Rumsfeld states that “terrorists or rogue states armed with weapons of mass destruction will likely test America’s security commitments to its allies and friends. In response,” he noted, “we will need a range of capabilities to assure friend and foe alike of U.S. resolve.”

January 2002: The Air Force formally stands up its “task forces” on Global Strike and Nuclear Response.

Chronology for 2001

31 December 2001: The Nuclear Posture Review Report is delivered to Congress, outlining the foundation of the strategic posture for the 21st Century and establishing a “New Triad” composed of offensive strike systems (nuclear and non-nuclear), active and passive defenses, and a revitalized support infrastructure able to design, develop and produce new capabilities as needed. Quotes from the classified NPR:

“Greater flexibility is needed with respect to nuclear forces and planning than was the case during the Cold War.

Nuclear attack options that vary in scale, scope, and purpose will complement other military capabilities.

The planning process not only must produce a variety of flexible, pre-planned non-nuclear and nuclear options, but also incorporate sufficient adaptability to support the timely construction of additional options in a crisis or unexpected conflict.

... the strike element of the New Triad can provide greater flexibility in the design and conduct of military campaigns to defeat opponents decisively. Non-nuclear strike capabilities may be particularly useful to limit collateral damage and conflict escalation. Nuclear weapons could be employed against targets able to withstand non-nuclear attack (for example, deep underground bunkers or bio-weapon facilities).

Strike options will require intricate planning, flexibility, and interface with decision makers throughout the engagement process.

Immediate contingencies involve well-recognized current dangers...Current examples of immediate contingencies include an Iraqi attack on Israel or its neighbors, a North Korean attack on South Korea, or a military confrontation over the status of Taiwan.

Potential contingencies are plausible, but not immediate dangers. For example, the emergence of a new, hostile military coalition against the United States or its allies in which one or more members possesses WMD and the means of delivery is a potential contingency that could have major consequences for U.S. defense planning, including plans for nuclear forces.

Unexpected contingencies are sudden and unpredicted security challenges,” like the Cuban missile crisis. “Contemporary illustrations might include a sudden regime change by which an existing nuclear arsenal comes into the hands of a new, hostile leadership group, or an opponents surprise unveiling of WMD capabilities.

North Korea, Iraq, Iran, Syria, and Libya are among the countries that could be involved in immediate, potential, or unexpected contingencies. All have longstanding hostility toward the United States and its security partners; North Korea and Iraq in particular have been chronic military concerns. All sponsor or harbor terrorists, and all have active WMD and missile programs.

... the tools used to build and execute strike plans so that the national leadership can adapt pre-planned options, or construct new options, during highly dynamic crisis situations.

Significant capability shortfalls currently exist in: finding and tracking mobile and relocatable targets and WMD sites; locating, identifying, and characterizing hard and deeply buried targets (HDBTs); [and] providing intelligence support to Information Operations and federated intelligence operations.

In the future, as the nation moves beyond the concept of a large, Single Integrated Operational Plan (SIOP) and moves toward more flexibility, adaptive planning will play a much larger role.

Deliberate planning creates executable war plans, prepared in advance, for anticipated contingencies. Adaptive planning is used to generate war plans quickly in time-critical situations. Deliberate planning provides the foundation for adaptive planning by identifying individual weapon/target combinations that could be executed in crises.”

For contingencies for which no adaptive planning has been done, fully adaptive planning will be required. The desire to shorten the time between identifying a target and having an option available will place significant stress on the nuclear planning process as it currently exists. Presently 12-48 hours is required to develop a plan to attack a single new target, depending on the weapon system to be employed. A more flexible planning system is needed to address the requirements of adaptive planning.

To deny the enemy sanctuary in HDBTs requires timely identification and characterization of potential targets, realistic defeat alternatives, and accurate assessment of damage done by the attack. Achieving the desired level of capability requires the integration of Service and National systems into a robust, highly responsive system of systems capable of addressing the threat.

In general, current conventional weapons can only ‘deny’ or ‘disrupt’ the functioning of HDBTs [hard and deeply buried targets] and require highly accurate intelligence and precise weapon delivery – a degree of accuracy and precision frequently missing under

actual combat conditions. Similarly, current conventional weapons are not effective for the long-term physical destruction of deep, underground facilities.

The United States currently has a very limited ground penetration capability with its only earth-penetrating nuclear weapon, the B61 Mod 11 gravity bomb. This single-yield, non-precision weapon cannot survive penetration into many types of terrain in which hardened underground facilities are located. Given these limitations, the targeting of a number of hardened, underground facilities is limited to an attack against surface features, which does not provide a high probability of defeat of these important targets.

With a more effective earth penetrator, many buried targets could be attacked using a weapon with a much lower yield than would be required with a surface burst weapon.

This lower yield would achieve the same damage while producing less fallout (by a factor of ten to twenty) than would the much larger yield surface burst. For defeat of very deep or large underground facilities, penetrating weapons with large yields would be needed to collapse the facility.

To defeat HDBT it is necessary to improve significantly U.S. means to locate, identify, characterize, and target HDBTs. This objective also requires deliberate pre-planned and practiced missions and the development and procurement of several types of conventional earth penetrating munitions. A number of Special Operations Forces and information capabilities will need to be developed to support this goal. Investment and organization will yield a new level of capability for the stated objectives by 2007, with new technologies deployed by 2012. One effort to improve the U.S. capability against HDBTs is a joint DoD/DOE Phase 6.2/6.2A [Robust Nuclear Earth Penetrator] Study to be started in April 2002. This effort will identify whether an existing warhead in a 5,000-pound class penetrator would provide significantly enhanced earth penetration capabilities compared to the B61 Mod 11.”

On new weapons, the NPR specifically states:

“There are several nuclear weapons options that might provide important advantages for enhancing the nation’s deterrence posture: possible modifications to existing weapons to provide additional yield flexibility in the stockpile; improved earth penetrating weapons (EPWs) to counter the increased use by potential adversaries of hardened and deeply buried facilities; and warheads that reduce collateral damage.

New capabilities must be developed to defeat emerging threats such as hard and deeply buried targets (HDBT), to find and attack mobile and relocatable targets, to defeat chemical or biological agents, and to improve accuracy and limit collateral damage. Development of these capabilities, to include extensive research and timely fielding of

new systems to address these challenges, are imperative to make the New Triad a reality.”

To expand on the MNS and address alternatives for the follow-on ICBM, AFSPC plans to conduct an analysis of alternatives in FY04 and FY05 with an IOC by 2018. This work will ensure the requirements generation process and the acquisition process remain on track for the future ICBM force.

The Administration intends to convert four SSBNs from the current force of 18 submarines to carry special operations forces as well as conventional cruise missiles.

DOD will begin in FY03 to explore concepts for a new strike system that might arm the converted SSGNs. Desired capabilities for this new strike weapon include timely arrival on target, precision, and the ability to be retargeted rapidly.

The B-52 ... requires a highly reliable and accurate navigation system to conduct worldwide tasking and nuclear weapons deliveries.

... conventional cruise missile programs (such as the Extended Range Cruise Missile) are planned that could support an accelerated timetable if necessary, but would have to be modified to carry nuclear warheads.

DoD is considering options and their associated costs to either extend the life of the dual-capable F-16 C/Ds and F-15 Es or make a block upgrade to the Joint Strike Fighter (JSF) aircraft...The Operational Requirements Document for the JSF requires that initial design permit nuclear capability to be incorporated at a later date (after IOC, currently scheduled for 2012) at an affordable price.

DoD and DOE efforts are underway to counter the asymmetric use of chemical and biological weapons (referred to as agent defeat). Agent Defeat Weapon (ADW) concepts are being evaluated to deny access to, immobilize, neutralize, or destroy chemical and biological weapons. Overcoming uncertainties in intelligence regarding agent production and storage locations as well as physical geometries of known facilities and contents appear to be the largest challenges. A variety of ADW concepts are currently under study, including thermal, chemical, or radiological neutralization of chemical/biological materials in production or storage facilities, as well as several types of kinetic penetrators to immobilize or deny use of those materials.”

30 November 2001: Adm. James O. Ellis, Jr. assumes command of U.S. Strategic Command (STRATCOM).

15 November 2001: The joint communiqué issued after the U.S.-South Korean Security Consultative Meeting includes the statement: “The U.S. also reaffirmed its commitment to provide a nuclear umbrella for the ROK.” When asked about the policy, Secretary of Defense Donald Rumsfeld states: “There has been no change in U.S.-Republic of Korea policy in that regard.” A report in *The Korea Times* says that South Korea insisted on retaining the commitment but that the United States was reluctant to retain the sentence. “We are faced with a North Korea that highly likely has nuclear weapons, not to mention an arsenal of chemical and biological weapons as well as delivery systems,” a senior South Korean official said. Therefore, it was nearly unthinkable to give up the protection of having a “last resort,” he added.

13 November 2001: Even while the Afghanistan war is in full swing, an Air Force briefing on “Information Operations and the Global Strike Task Force” posits Iran as the potential adversary in the future.

10 November 2001: Brig. Gen. Anthony F. Przybylski, commander of B-2 force at Whiteman AFB, Mo, tells the *New York Times*: “Four simple words describe our mission: global strike, precision engagement. It’s exactly on the other side of the globe from Missouri [Afghanistan]. It’s a long way.”

7 November 2001: An “America at War” daily tracking poll conducted by Zogby International finds that a majority (54 percent) of Americans believe use of strategic nuclear weapons would be effective in the fight against terrorism. Thirty-nine percent say that strategic nuclear weapons would “not at all be effective.” Support for the nuclear option is greatest among Republicans (62 percent), respondents 50-64 years old (59 percent) and Catholics (64 percent).

November 2001: The Science and Technology Master Plan for Defeat of HDBTs [hardened and deeply buried targets] defines the S&T research program responsive to the January 2001 Capstone Requirements Document, the 2001 QDR, and the draft Nuclear Posture Review, including the development of a new nuclear earth penetrating weapon.

November 2001: The Nuclear Weapons Council (NWC) approves a request from the U.S. Strategic Command (STRATCOM) to conduct **Robust Nuclear Earth Penetrator (RNEP)** feasibility and cost studies.

31 October 2001: Rep. Steven Buyer (R-Indiana) calls for the use of nuclear weapons against Osama bin Laden in Afghanistan. In a television interview, Buyer says he doesn't just want to kill bin Laden and his cohorts but also send a message to the rest of the world that the US is willing to use nuclear weapons on the battlefield. He states, "I just want the [Bush] administration to know that I think the United States needs to send a message to the world that we are prepared to do that." On 18 October, following the mailing of letters with traces of anthrax to congressional members, Buyer says that if the United States could prove a causal link between the anthrax and Osama bin Laden's organization, “I would support the use of a limited

precision tactical nuclear device...I want you to know that if [Bush] has to make difficult decisions – like Truman did to save lives – that he'd have support here.”

29 October 2001: The draft Air Force FY 2004 Annual Planning & Programming Guidance (APPG) states:

“GSTF represents a tailored AEF designed to "kick down the door" when operating against emerging anti-access threats. It leverages stealth assets to target an enemy's integrated air defense system, WMD, and anti-access targets during the first few days of conflict using a mix of stealth assets, such as the F-22, B-2, and standoff platforms.

The F-22 air-to-ground capability is critical to GSTF. Once anti-access targets are negated, sustained AEF airpower to include the JSF and non-stealthy fighters with precision attack capability will engage as the threat diminishes and survivability increases. Predictive Battlespace Awareness (PBA) will underpin the GSTF concept, using a C2 and ISR constellation. A new multi-mission C2 aircraft and the Global Hawk are cornerstones of PBA. Such awareness includes a threat baseline of the battle space; focused surveillance; cataloged movement patterns; knowledge of enemy tactics, intentions and disposition; as well as course-of-action analysis. We are aiming for a forensic analysis of the battlespace. This combination of stealth, new technology and advanced C2ISR will concentrate our most potent fixed-target capabilities early in the conflict, clearing the way for follow-on persistence forces that provide continuous presence over the battlefield. (ACC FY02-03 Strategic Plan CONOPS)

ACC and AFSPC should work together to meet the requirements for a CONUS-based, conventional, prompt global strike. Both commands should work together in the exploration of next generation weapons, such as the Common Aero Vehicle (CAV). This concept needs to account for both delivery vehicle and any required infrastructure. A combined input will better identify a future concept benefiting both air and space operations.”

21 October 2001: During an interview with *CNN*, former Supreme Allied Commander Europe (SACEUR) said that he didn't think the United States would ever consider nuclear retaliation even if terrorist attacks caused 100,000 casualties in the United States. Use of nuclear weapons, he insisted, would only occur if a critical target could not be destroyed by other means:

"I don't think the United States would consider using tactical nuclear weapons unless there were targets that would require tactical nuclear weapons. The use of tactical nuclear weapons wouldn't be warranted just in response to American casualties. There would have to be an objective that required the – it might be, for example, there was a deeply buried-underground command center that we thought contained the stocks of these chemical weapons that Osama bin Laden may have or his bioweapons and it took a

tactical nuke, well, then under those circumstances we might well feel that the constraints were off, and we would use it. But it would be based on a target-by-target requirement, not on the basis of what would happen to us."

16 October 2001: In a presentation in Washington, Gen. Jumper described that Global Strike Task Force in new Rumsfeld "strategy to task" and transformation language:

"Now, we've put this thing all together in a concept we call the Global Strike Task Force, and it's a construct that we plan to pursue in our Air Force, this task-force construct -- a family of global- response task forces that do various tasks. And the way we try to articulate this is what we call operational concepts. It's a science that's been with us for some time, but you know, in the world of those of us in uniform, in our dealings with the Congress we often degenerate quickly to the program level. We like to speak in programs, and we start talking more about what we're going to buy before we decide how we're going to use what we buy. And often the popularity of the program overwhelms the operational concept that you would use to engage that program.

We're going to try to turn that around, and with the help of General Glenn Kent over here, who is sort of the godfather of strategy-to-task sort of thinking, we have come up with a construct for operational concepts that describe in a task-force format how we plan to go and fight, how we plan to put things together, and lash things up to create effects. And we hope to be able to use this, then, to guide us in the programs that are most worthy and that we need the most."

5 October 2001: In an interview with *The Washington Post*, William R. Van Cleave, who coauthored the January 2001 National Institute for Public Policy (NIPP) study "Rationale and Requirements for U.S. Nuclear Forces and Arms Control," says that some Bush administrators "believe we have marginalized nuclear weapons too much. We have removed them from extended deterrence too much." Another coauthor to the report, David Smith, adds that "September 11 really underscores the need to look at a full range of flexible options."

October 2001: A new unified command (NORTHCOM) responsible for defense of North America and up to 500 miles offshore, begins functioning at Colorado Springs, CO.

30 September 2001: The Pentagon publishes its Quadrennial Defense Review (QDR) report and declares that it has "developed a new strategic framework to defend the nation and secure a viable peace." According to the QDR, this framework is built around four defense goals:

- Assuring allies and friends;
- Dissuading future military competition;
- Deterring threats and coercion against U.S. interests; and
- If deterrence fails, decisively defeating any adversary.

Regarding the third goal, deterring threats and coercion against U.S. interests, the QDR concludes that a “multifaceted approach do deterrence is needed.” Specifically,

“Such an approach requires forces and capabilities that **provide the President with a wider range of military options** to discourage aggression or any form of coercion. In particular, it places emphasis on peacetime forward deterrence in critical areas of the world. It requires enhancing the future capability of forward deployed and stationed forces, couple with global intelligence, strike, and information assets, in order to deter aggression or coercion with only modest reinforcement from outside the theater...This new approach to deterrence also **requires non-nuclear forces that can strike with precision at fixed and mobile targets throughout the depth of an adversary's territory**; active and passive defenses; and rapidly deployable and sustainable forces that can decisively defeat any adversary. A final aspect of deterrence, addressed not in the QDR but in the Nuclear Posture Review, is related to the offensive nuclear response capability of the United States.”

The Defense Department also emphasizes that the QDR formally shifts “the basis of defense planning from a ‘threat-based’ model that has dominated thinking in the past to a ‘capability-based’ model for the future.” The report states that the new defense strategy is built around the concept of shifting to a “capability-based” approach to deterrence based on a theory of uncertainty about the future:

“That concept reflects the fact that the United States cannot know with confidence what nation, combination of nations, or non-state actor will pose threats to vital U.S. interests or those of U.S. allies and friends decades from now. It is possible, however, to anticipate the capabilities that an adversary might employ....A capability-based model – one that focuses more on how an adversary might fight than who the adversary might be and where the war might occur – broadens the strategic perspective. It requires identifying capabilities that U.S. military forces will need to deter and defeat adversaries....”

“Moving to a capability-based force also requires the United States to focus on emerging opportunities that certain capabilities, including advanced remote sensing, **long-range precision strike**, transformed maneuver and expeditionary forces and systems, to overcome anti-access and area denial threats, can confer on the U.S. military over time.”

“This capability-based model...recognizes that it is not enough to plan for large conventional wars in distant theaters. Instead, the United States must identify the capabilities required to deter and defeat adversaries who will rely on surprise, deception, and asymmetric warfare to achieve their objectives.”

The new strategic framework and capability-based planning, in turn, require a “paradigm shift” in force-size planning “to provide over time a richer set of military options across the operational spectrum than is available today,” according to the QDR. This new force-sizing construct specifically shapes forces to:

- Defend the United States;
- Deter aggression and coercion forward in critical regions;
- Swiftly defeat aggression in overlapping major conflicts while preserving for the President the option to call for decisive victory in one of those conflicts – including the possibility of regime change or occupation; and
- Conduct a limited number of smaller-scale contingency operations.

This approach shifts the focus of U.S. force planning from optimizing for conflict in two particular regions (Northeast and Southwest Asia) to “building a portfolio of capabilities that is robust across the spectrum of possible force requirements, both functional and geographical.” The intention is to focus planners on the “growing range of capabilities that adversaries might possess or could develop” and it “requires planners to define the military objectives associated with defeating aggression or coercion in a variety of potential scenarios in addition to conventional cross-border invasions.”

While continuing to meet its security commitments to allied countries, U.S. forces will increasingly be tailored to “maintain favorable regional balances in concert with U.S. allies and friends with the aim of swiftly defeating with only modest reinforcement.” U.S. security cooperation with allies and friends will seek to be “expanding the range of pre-conflict options available to counter coercive threats, deter aggression, or favorably prosecute war on U.S. terms.” Major combat operations will be focused on the “ability to act quickly when challenged and win decisively at a time and place and in the manner of the President’s choosing.” Specifically:

“Combat operations will be structured to eliminate enemy offensive capability across the depth of its territory, restore favorable conditions in the region, and create acceptable political conditions for the cessation of hostilities. In addition, U.S. forces will degrade an aggressor’s ability to coerce others through conventional or asymmetric means, including CBRNE weapons. U.S. forces will fight from a forward deterrent posture with immediately employable forces, including long-range precision strike capabilities from within and beyond the theater....”

To develop the operational concepts and capabilities needed to implement this strategy, the QDR advocated developing Standing Joint Task Forces (SJTFs) across the spectrum of warfare. Rather than a nuclear task force, the QDR described a conventional task force for quick defeat of fixed and mobile targets:

“One option will include a plan for a SJTF for unwarned, extended-range conventional attack against fixed and mobile targets at varying depths. Such a SJTF would address one of the critical operational challenges of the future – developing the capability to continuously locate and track mobile targets at any range and rapidly attack them with precision. Overcoming this challenge will require enhanced intelligence capabilities, including space-based systems, additional human intelligence, and airborne systems that can locate and track moving targets and transmit that information to strike assets. It will require the ability to strike without warning from the air, from the sea, on the ground, and through space and cyber space. It will also require that these forces be networked to maximize their combined effects.”

The QDR was largely completed before the 11 September attacks, Defense Secretary Rumsfeld writes in the foreword, but in “important ways, these attacks confirm the strategic direction and planning principles that resulted from this review” including “the need to develop new concepts of deterrence.” The QDR formally replaces the terminology of WMD (Weapons of Mass Destruction) with CBRNE (Chemical, Biological, Radiological, Nuclear and Enhanced High-Explosive) weapons.

21 September 2001: Secretary of State Colin Powell is asked during an interview with the BBC about the potential role of nuclear weapons against terrorist organizations:

Question: When the President says that all necessary weapons will be used, does that include possibly nuclear armament?

Secretary Powell: I don't think nuclear weapons would be necessary against a terrorist organization.

Question: Can you give a guarantee on that?

Secretary Powell: I think I've just answered the question rather adequately.

16 September 2001: During an interview with ABC News “This Week,” Secretary of Defense Rumsfeld is asked about the potential use of nuclear weapons:

Question: There are some people who are saying a tactical nuclear strike would be use. Can we rule out the use of nuclear weapons?

Rumsfeld: You know, that subject – we have an amazing accomplishment that has been achieved on the part of human beings. We have had this unbelievable powerful weapon, nuclear weapon, since, what? – 55 years now, plus – and it's not been fired in anger since 1945. That's an amazing accomplishment. I think it reflects a sensitivity on the part of successive presidents that they ought to find as many other ways to deal with problems as possible.”

Question: I'll have to think about your answer. I don't think the answer was no.

Rumsfeld: The answer was that we ought to be very proud of the record of humanity, that we have not used those weapons for 55 years. And we have to find as many ways as

possible to deal with this serious problem of terrorism. And if, Sam, you think of the loss of human life on Tuesday, and then put in your head the reality that a number of countries today have other so-called asymmetrical threat capabilities – ballistic missiles, cruise missiles, chemical weapons, biological weapons, cyber warfare – these are the kinds of things that are used in this area of the 21st century. And a germ warfare attack anywhere in the world would bring about losses of lives not in the thousands but in the millions.

14 September 2001: In an interview with *PBS Newshour*, U.S. Assistant Secretary of Defense Paul Wolfowitz forecasts the impact of 9/11 on U.S. military thinking:

“We think that when the numbers come in we’ll find that more Americans were killed on Tuesday than any single day in American history since the American Civil War, worse than any day of World War I, any single day of World War II. It’s massive. And I think that focuses the mind. It makes you think in a different way. It makes you think anew. And if it doesn’t do that, then people ought to think that given some of the weapons, kinds of weapons these terrorists are after, what we saw on September 11th could be just the beginning.”

13 September 2001: In response to advance questions for his nomination hearing for the position of Chairman of the Joint Chiefs of Staff, General Richard B. Myers informs the Senate Armed Services Committee:

“I support the President’s call for a reduction of nuclear forces to the lowest possible number of nuclear weapons consistent with the our national security needs. I also support revisions to U.S. nuclear strategy which accurately reflect the challenges and opportunities of the new international environment. Deterrence will continue to be the primary role of our nuclear forces particularly against potential adversaries what may consider the use, or threat of use, of nuclear weapons or other WMD.”

September 2001: With the intent of laying the foundation for the next step in the Air Force’s transformation to a capabilities-focused force, the new Chief of Staff Gen. Jumper tasks commands and staff to develop capabilities-based Task Force CONOPS. These Task Force CONOPS are force presentation concepts that describe how the warfighter can use Air and Space Power to counter the strategies and capabilities US forces may encounter in various future scenarios. They will extract the required forces from throughout the Air Force, to include the most ready Air and Space Expeditionary Forces (AEFs), to address scenarios requiring specific responses and capabilities. They will also help identify required capabilities across the entire AF spectrum and will assess which capabilities have shortfalls and, thus, require improvement, development, and transformation. Seven CONOPS include a Global Strike Task Force, the Global Response Task Force, the Nuclear Response Task Force, the Homeland Security Task Force, the Global Mobility Task Force, the Air and Space C2ISR Task Force, and the Air and Space Expeditionary Force Task Force. The three strike forces are described as:

- “Global Strike Task Force (GSTF): Rapidly responds to areas where an enemy could attempt to deny access. It combines Stealth, Standoff, Precision, Space and Information with the other services to create the conditions for access.
- Global Response Task Force (GRTF): Combines with special operations forces and other services to rapidly respond to incidents of Global Terrorism. Using actionable intelligence for fleeting targets, it combines alert strike platforms based in selected locations with the ability to launch and receive updates en-route to enable rapid response.
- Nuclear Response Task Force (NRTF): Acts as AEF topcover; providing safe, reliable and proficient nuclear forces—the deterrent umbrella under which conventional forces operate—and, if deterrence fails, will execute a variety of nuclear attack options.”

September 2001: Admiral Richard Mies, commander of STRATCOM, offers command intelligence and planning support to Central Command (CENTCOM) in preparing the Afghanistan campaign. The assistance draws on STRATCOM expertise in locating and targeting tunneling and underground complexes.

11 September 2001: World Trade Center and Pentagon bombings. Speaking later about the events, Air Force Maj. Gen. Timothy McMahan, who commands the U.S. ICBM force, says: “Since the 11th of September, the nation has a clearer understanding of [the nuclear] deterrentThe deterrent is there to indicate to the world that the United States has the strength to deal with this type of crisis from a position where our survival can’t be called into question, and we will be able to see this course of action through on our terms.”

28 August 2001: An internal Air Force background paper for the FY 2004 budget states that “GSTF is now widely accepted as an Air Force vehicle to help guide future CONOPS and acquisition:”

The ACC staff is identifying GSTF requirements; during the POM process, Directorates weigh a programs criticality to GSTF by evaluating its ability to achieve specific capabilities. To assist in future prioritization, GSTF enablers need to be specifically identified through executable CONOPS with an overall programming timeline identified in a Roadmap. Group and Council levels will weigh GSTF capabilities cost-benefit vs. other readiness and modernization requirements, prioritize accordingly, and identify required offsets and divestitures to remain within ACC’s Total Obligation Authority.

24 August 2001: Gen. Richard Myers is appointed the new chairman of the Joint Chiefs of Staff. Myers is a former head of the US Space Command (SPACECOM).

2 August 2001: Secretary of Defense Rumsfeld formally establishes the Deterrence Concepts Advisory Group to draft a Nuclear Posture Review (NPR) Report. The objective is to formulate “a capability-based and adaptive concept for deterrence” that “recognizes that America should advance its position as a strong, security and persuasive force for freedom and progress in the world, and to do so at the lowest nuclear force level consistent with security requirements.” The Charter tasks the group to:

1. Examine and elaborate a capability-based and adaptive concept for deterrence that is consistent with the lowest nuclear force level compatible with U.S. security requirements;
2. Identify the key characteristics of a capability-based and adaptive concept for deterrence;
3. Identify the roles for non-nuclear, nuclear, and defensive capabilities in a capability-based and adaptive concept of deterrence; and
4. Identify key outstanding issues that must be addressed in consideration of a capability-based and adaptive concept of deterrence.

1 August 2001: General John Jumper appears before the Senate Armed Services Committee for confirmation as Air Force Chief of Staff:

“... We've developed a concept at Air Combat Command called Global Strike Task Force, which is a concept that will try to integrate us with the other services. And as a matter of fact, I am working closely with the Navy, the Army, and the Marine Corps so that we can develop jointly this concept. Essentially what it does is it combines the attributes of stealth, as I've described before, the F-22 and the B-2 to bring the B-2 into the daytime. The second element of it is that it describes an architecture for the horizontal integration of manned platforms, unmanned platforms, and space platforms. And when I say manned, I don't just mean airplanes. I mean also eyes on the ground with our special operations force. When I say unmanned, I don't just mean UAVs, I mean unattended ground sensors and the technology that that brings, and, of course, combined with the high ground of space. When you combine the persistence of the airborne platforms with the high grounds of space, you have no place to hide. And we integrate -- we would integrate these at the machine level, at the digital level, so we don't have human beings that have to interpret the digits in order for us to get precise target location and precise identification. That's the second element.

The third element is that we re-engineer the way we do our intelligence so we refine and advance the art of prediction. Right now, our intelligence is based on a collection mentality. What we are trying to do is to advance the art of prediction so that we're using our ISR assets during combat more to confirm that which we predicted than for pure discovery.

And then finally, Senator, the concept provides for us to take the product of this information and provide what I call "precision quality data" to the commander on the ground, so that commander can take full advantage of these digital interfaces to get rapid decision quality data to decide whether you're going to strike the targets or make the next moves or not, sensitive to the rules of engagement and the other sensitivities that go along with modern warfare. We're trying to advance this notion as the second phase of our transformation in the United States Air Force and our contribution to joint transformation with the other services."

August 2001: STRATCOM hosts Dr. J. D. Crouch, Assistant Secretary of Defense for international security policy, to discuss its new adaptive planning capability and the adaptive strategy concept, as well as a "capabilities-based" force structure sizing that divorces nuclear weapons from the old Soviet threat.

25 July 2001: In testimony before the Senate Armed Services Committee, Secretary of the Air Force James Roche says:

"In the future, we expect adversaries with advanced technologies to try to deny the US military access to a region. The Air Force is carefully evaluating this possibility and proposing a concept of operations called the Global Strike Task Force to counter threats to access and to prepare the region for deployment and employment of joint forces. This scenario requires forces that capitalize on recent advances in speed, range, stealth, supercruise, and precision. We believe that, used in appropriate combination, our B-2 and F22 forces can quickly and decisively destroy the most threatening anti-access air, ballistic and cruise missile, and sea defense systems."

11 July 2001: Testifying before the Senate Armed Services Committee, Adm. Richard Mies, STRATCOM commander, says:

"... the issue may not be whether weapons of mass destruction will be used against the West by a rogue nation or transnational actor, but where and when. The post-Cold War world is a more chaotic place. Strategic deterrence, which worked well in the bipolar framework of the Cold War, may not work as well in a multi-polar world of unpredictable, asymmetric threats, and in some cases, it may fail. How do you deter a threat that has no return address?"

July 2001: DOD submits a required classified Report to Congress on the Defeat of Hard and Deeply Buried Targets. The report concludes that more than 70 countries use underground Facilities (UGFs) for military purposes. In June 1998, the Defense Science Board Task Force on Underground Facilities that there are over 10,000 UGFs worldwide. Approximately 1,100 UGFs were known or suspected strategic in purpose (WMD, ballistic missile basing, leadership or top echelon command and control). Updated estimates from DIA reveal this number has now grown

to over 1,400. A majority of the strategic facilities are assessed to be deep underground facilities. These facilities are generally the most difficult to defeat because of the depth of the facility and the uncertainty of the exact location. The report stresses that at present the United States lacks adequate means to deal with these strategic facilities.

25 June 2001: *Newsweek* reports that President Bush was stunned when he learned of the size of the US nuclear arsenal upon taking office. According to the report, Bush stated, "I had no idea we had so many weapons...What do we need them for?"

June 2001: Secretary of Defense Donald Rumsfeld visits STRATCOM and meets with Admiral Richard Mies and senior battle staff to discuss U.S. nuclear plans and the future of U.S. nuclear weapons as part of the Nuclear Posture Review.

June 2001: The Office of the Secretary of Defense core working group presents its draft terms of reference for the Nuclear Posture Review.

30 May 2001: An Air Force Space Command briefing entitled "Requirements for a **Conventional Prompt Global Strike (PGS)** Capability" says that the PGS Mission Need Statement (draft v.8) states:

"The PGS mission need is to globally strike and precisely apply force against specific targets swiftly to achieve desired weapons effects. The need includes the ability to strike high value, difficult-to-defeat targets when most vulnerable from beyond range of an adversary's ability to respond, thus minimizing effects of counter-access strategies."

The briefing emphasizes that the PGS timeline "must be as short as technology allows" because potential targets such as tactical ballistic missile, aircraft arming for strike, and submarine leaving port and vulnerable only for short times.

The briefing also lists a number of interpretations of (or loopholes in) existing treaties that can be pursued in developing Prompt Global Strike capabilities, including:

- Space-launched PGS would not violate Outer Space Treaty: Does not carry Weapons of Mass Destruction.
- Conventional Ballistic Missile legal if counted as ICBM under START.
- Air-Launched missiles (ballistic or cruise) legal if missile or payload uses aerodynamic lift over some portion of trajectory.
- Conventional SLBM not prohibited, some problems with verification.

23 May 2001: An article in *Jane's Defence Weekly* ("US Rethink Could Spawn 'Mini-Nukes'") says that the development of a new low-yield nuclear weapon for use against hard and deeply buried targets such as command posts and weapons of mass destruction (WMD) facilities is

being advocated by nuclear weapons designers and some Bush advisers as part of the Nuclear Posture Review.

11 May 2001: A draft Joint Doctrine for Strategic Attack prepared by the Air Force for the Joint Chiefs of Staff states:

“All weapons and platforms in the inventories of all services might be useful in JSA [Joint Strategic Attack]. This includes non-lethal weapons, since JSA can be used at the low end of the range of conflict, where there may be a desire to minimize opponent casualties. **It does not include nuclear weapons and platforms exclusively used for their delivery.** Nuclear weapon use is beyond the scope of JSA, and associated doctrine is discussed in the JP 3-12 series [the joint doctrine series associated with nuclear weapons].”

1 May 2001: Speaking at the National Defense University, President Bush outlines his views on nuclear weapons:

“Nuclear weapons still have a vital role to play in our security and that of our allies. We can, and will, change the size, the composition, the character of our nuclear forces in a way that reflects the reality that the Cold War is over. I am committed to achieving a credible deterrent with the lowest-possible number of nuclear weapons consistent with our national security needs, including our obligations to our allies. My goal is to move quickly to reduce nuclear forces. The United States will lead by example to achieve our interests and the interests for peace in the world.”

May 2001: Secretary of Defense Donald Rumsfeld completes his Strategic Defense Review (SDR).

18 April 2001: At the Global Engagement VI wargame concept development conference, the ACC presents an overview of the Global Strike Task Force (GSTF) concept. GSTF attempts to incorporate lessons learned from Desert Storm against a backdrop of a future and future adversaries that may little resemble the past. For instance, in the future we may have access challenges that are both physical and political and we may be fighting an adversary whose goal is not to “win,” but is simply not to “lose.” The threats he envisions in the future are advanced fighters, IADS, submarines, and cruise and ballistic missiles. He suggested that the widespread availability of commercial imagery would make surprising the enemy difficult. The GSTF concept examines the feasibility of using long range air power and a small theater-deployed force to simultaneously delay, disrupt, and degrade enemy aggression while attacking “anti-access” threats to enable full deployment of the theater warfighting force. The concept proposes to take advantage of the existing, or easily acquired, military capabilities that can mass firepower from outside the range of lethality --before massing forces--to rapidly halt aggression and neutralize the anti-access threat.

6 April 2001: Air Force Maj. Gen. Franklin J. “Judd” Blaisdell, AF/XON, reveals at a Capitol Hill seminar that exploration of a new “Minuteman IV” intercontinental ballistic missile has begun. The program later becomes the Land Based Strategic Deterrent (LBSD) Minuteman III replacement.

April 2001: The Joint Task Force-Computer Network Operations (JTF-CNO) is formally established, born from the Joint Task Force for Computer Network Defense when it assumes responsibility for the evolving mission area of computer network attack (CNA).

22 March 2001: In a lengthy White Paper entitled “Pursuing a New Nuclear Weapons Policy for the 21st Century,” Paul Robinson, Director of Sandia National Laboratories and long-term member of STRATCOM’s Strategic Advisory Group states that “nuclear weapons must never be considered as war fighting tools.” He discusses the role of nuclear weapons against Russia and other potential opponents:

“...We should rely on the catastrophic nature of nuclear weapons to achieve war prevention, to prevent a conflict from escalating (e.g., to the use of weapons of mass destruction), or to help achieve war termination when it cannot be achieved by other means, e.g., if the enemy has already escalated the conflict through the use of weapons of mass destruction.

[Past war games have] brought new realizations as to the role and purpose of nuclear weapons, in particular, how essential it is that deterrence be tailored in a different way for each potential aggressor nation. It also seemed abundantly clear that any use of nuclear weapons is, and always will be, strategic.

...in the near term (say 10 years or so) our major plans and force decisions will continue to be based on hedging against Russia. The strategy and policy for continuing to deter Russia follows closely that which we developed during the Cold War. The current war-planning approach (the Single Integrated Operational Plan) and its configuration of forces have been transitioned somewhat in recent years, but are in surprisingly good shape....As long as there are large destructive forces in being, I believe that the deterrent policy and the force structure created during the Cold War cannot be abandoned entirely. [Other potential opponents could be dealt with a] second force capability simply [called] the ‘Non-Russian Force’ or Capability Two.

We have made pledges not to attack with nuclear weapons those nations who either do not possess, or are not allied to aggressor nations who do possess, nuclear weapons. We have formally maintained such declarations even in the face of very destructive other weapons (e.g., chemical, biological, or radiological) being stockpiled, and in several cases actually used, by some states, although the last Administration maintained a policy

of studied ambiguity about whether its so-called Negative Security Assurances applied to states armed with other forms of WMD. We have continued with these policies primarily to discourage the proliferation of nuclear, chemical, and biological weapons.

In spite of growing international pressure [in favor of legally binding negative security assurances under the NPT regime], we have attempted to prevent our hands from being tied by such a constraint – preferring to have the policy appear in Executive Orders and Declaratory Policies that could be changed, rather than allowing treaty provisions to govern this issue.

[Yet], the decision to seriously consider nuclear retaliation for use of less than nuclear weapons would carry a heavy burden of demonstrating ‘proportionality.’ I believe the fact that we have not thought through these complex issues sufficiently is the reason the last U.S. Administration chose not to publish its most recent deterrent strategy.

I believe we face an even greater difficulty if we look at how we have been going about planning for potential Theater Nuclear Options (or TNOs). There has been no clear policy in place – I can even say there has been a lack of clear thinking in place – regarding ‘limited nuclear attacks.’ We have been reduced to contemplating within each theater CINC’s Area of Responsibility (AOR) the particular targets that should be held at risk and then analyzing appropriate options for attacking them with various weapons systems – nuclear and nonnuclear. But, without a well-understood and well-justified policy in place, the development of TNOs are of limited value and might even appear to be ‘nuclear war fighting.’ **Any nuclear battle plans without solid policy bases are certain to prove unsatisfactory**, and the challenge for us today is to develop that sound policy foundation. I believe that our policy in these cases should emulate our Cold War policies; that is, it should focus first on deterrence of conflict, escalation control, and war prevention; and contemplate nuclear attacks only if deterrence should fail in these aims.

[But using nuclear weapons to also deter all forms of WMD is the right course of action, and] those who would advocate that we should not be allowed to consider deterring chemical and biological attacks with out nuclear arsenal must first show how such attacks might be deterred by other means.”

As for the nuclear capability that would be needed in order to deter “wide threats” (i.e., other than Russia and China), Robinson writes that the dual-capable nuclear strike aircraft that NATO maintains in Europe “could be an extremely important component of an Allied force to deter aggression in wider parts of the world; and thus I would suggest that the NATO nuclear forces could make important contributions in deterring wider threats.” In regional strike missions, however, overflight would be a major planning constraint. Because today’s ICBMs would have to overfly Russia and China to reach “rogue” states, “ICBMs may be of lesser utility,” he concludes. The patrol areas of SSBNs would “have to be altered from what is currently the

case,” and “we must contemplate placing some number of single reentry vehicles carrying low-yield weapons on submarine-launched missiles.” Along with cruise missiles launched from bombers and submarines, SLBMs are likely to be the most important capability in this mission “because they also allow us to have ‘forward-basing’ in a crisis, again without encountering major overflight difficulties.”

12 March 2001: Joint Staff issues a program directive that orders the consolidation of Doctrine for Joint Nuclear Operations (JP 3-12) and Doctrine for Joint Theater Nuclear Operations (JP 3-12.1) into a single document. STRATCOM is appointed as lead agent with the Joint Staff (J5) as the Joint Staff Doctrine Sponsor (JSDS).

1 March 2001: At a ribbon-cutting ceremony marking the start of operations at the Airborne Laser (ABL) test facility in Sunnyvale, California, Air Force Col. Ellen Pawlikowski, ABL System Program Director, states, “The Airborne Laser (ABL) is for real, and we are proceeding toward a shoot-down demonstration for late 2003.” The high-energy laser is designed to locate and track missiles in their boost phase and then accurately point and fire the laser to destroy the missiles over adversary territory.

March 2001: At the annual Air Armament Summit III, Air Combat Command commander Gen. John Jumper, further outlines his new Air Force concept for a Global Strike Task Force, which calls upon the B-2 and other long-range bombers, together with the F-22 to conduct strikes from the United States or bases abroad. **The enemy posited is Iran and the primary target is weapons of mass destruction.**

“The Global Strike Task Force (GSTF) will rapidly establish air dominance and subsequently guarantee that joint aerospace, land, and sea forces will enjoy freedom from attack and freedom to attack. ...”

“The F-22 is key to expanding the B-2’s stealth advantages beyond moonless-night-only operations; indeed, 24-hour stealth will be possible. F-22s will pave the way for the B-2 and other bomber’s “heavy lifting” from extended ranges by providing initial local air superiority through the traditional “sweep” role and through air-to-ground targeting of the enemy’s air defense network. The unparalleled combination of stealth with supercruise will reduce threat rings, allowing it to establish air dominance and deliver its near-precision weapons deep inside enemy territory. ... Implied within GSTF is the ability to command and control the rapid and dynamic operations as well as support a vigorous air refueling requirement. Advances in our Combined Air Operations Centers, and our ability to push decision quality information to the warfighter, are key components as is the leveraging of reachback and information technology advances.

“Thus, with F-22s and B-2s, the GSTF will be crucial to the joint team’s capability to overcome enemy attempts to deny access. Joined with other standoff and special-

operations capability, GSTF will provide a capacity to systematically destroy hundreds of targets, negate enemy anti-access systems, and clear the way for follow-on forces in the first days of the conflict.”

“... The GSTF operationalizes many of the lessons learned in combat in the 1990s providing the nation a new capability—one that maximizes current systems and technologies and leverages their potential through innovative CONOPS. In sum, GSTF is a rapid-reaction, leading edge, power-projection concept that delivers massive around-the-clock firepower. GSTF empowers us to overcome barriers while providing the means to rapidly roll back adversary threats. It will mass effects early with more precision, and fewer platforms, than our current capabilities and methods of employment; it will give adversaries pause to quit and will virtually guarantee air dominance for our CINCs.”

At the Air Armaments Summit, the common aero vehicle (CAV) space delivery system is also briefed. This is postulated to be a mini-space vehicle carrying a conventional unitary penetrator or a variety of other warheads that can be employed on top an air-launched or ground launched expendable missile. This CONUS based system will provide a global strike capability in about two hours.

15 February 2001: General John Jumper, commander of Air Combat Command (ACC), officially unveils a new joint operational concept entitled Global Strike Task Force (GSTF) at an Air Force Association Convention in Orlando. The “anti-access” concept is an evolution of a previous Air-Force-centric, access-enabling concept introduced in June 2000 called Global Reconnaissance Strike (GRS). Under the concept, U.S. aerospace forces (F-22/B-2) drawn from on-call Aerospace Expeditionary Forces would rapidly deploy to a theater contingency and provide a means to accurately and quickly slow or halt an aggressor while rolling back his air defense and surface anti-access capabilities to enable the flow of follow-on joint forces. The newer concept relies heavily on the stealth, super-cruise, and high altitude capabilities of the F-22; the stealthy, global reach of the B-2; the precision strike potential inherent in JDAM and follow-on Small Smart Bombs; a persistent, layered space and airborne unmanned sensor grid (satellites and high altitude UAVs); a rapidly deployable Common Wide Body (CWB) platform that incorporates the C2ISR capabilities of today’s ABCCC, Rivet Joint, Compass Call, JSTARS, and AWACS (today called the E-10); and finally, a very robust force of airborne tankers to support the deployment and employment of this overall network. General Jumper’s briefing also mentions the early employment of maritime power projection via TLAMs [Tomahawk] and is supportive of the Army’s Interim Brigade Combat Team concept.

According to a Marine Corps internal report (23 Feb 2001) on the presentation:

“GSTF represents a “marketable” joint operational concept, albeit in rough form, that supports technologically advanced, access-enhancing programs deemed critical by the Air Force – particularly the F-22 and B-2. The timing of the release of this concept

neatly precedes a widely anticipated review of current DoD TACAIR programs, which appears increasingly likely to include the F-22 program. From an Air Force perspective, GSTF conceptually validates the requirement for the F-22 in an access-enabling context. While presented as a joint concept, GSTF also emphasizes the strategic flow of aerospace forces as being a necessary prerequisite to the flow of other joint forces in an SSC or larger response. As such, GSTF represents the Air Force's desire to secure a definitive measure of USAF priority for strategic airlift early in a major crisis."

February 2001: Dr. Steven Cambone, principal deputy under secretary of defense for policy, establishes a core working group to formulate options for near-term decisions on nuclear issues in preparation for the upcoming Congressionally mandated Nuclear Posture Review.

January 2001: The "Capstone Requirements Document (CRD) for Hard and Deeply Buried Targets (HDBT)" calls for a family of systems to provide key operational capabilities and defines performance parameters and establishes a new paradigm for addressing "Strategic Targets." The requirement becomes the basis for justifying a new nuclear earth penetrating weapon.

2001: The B61-11 nuclear-earth penetrating bomb is certified to meet all requirements, resulting in its acceptance as a "standard stockpile item."

Chronology for 2000 and Earlier

5 December 2000: The Air Force FY03-07 Annual Planning and Programming Guidance (APPG):

ACC & AFSPC [Air Force Space Command] should work together to meet the requirements for a CONUS-based, **conventional**, prompt global strike. Both commands should work together in the exploration of next generation weapons, such as the Common Aero Vehicle (CAV). CAV concept needs to account for both delivery vehicle and any required infrastructure. A combined input will better identify a future concept benefiting both air and space operations.

30 November 2000: During a nuclear summit hosted by STRATCOM held right after the 2000 presidential elections, outgoing Under Secretary of Defense for Acquisition, Technology and Logistics Jacques S. Gansler states:

“After the end of the Cold War, many aspects of our nuclear posture were allowed to decline. We now recognize that we went too far and we are taking significant steps to restore our deterrent posture....DOE has completed a study of their requirements to recapitalize the nuclear weapons industrial base of laboratories and production facilities...[and a new Nuclear Mission Management Plan will outline] the plans for nuclear delivery systems, including plans for replacement systems....I am please to report to you that the Nuclear Weapons Council has been very active over the past two years. We went from meeting once a year to meeting nearly once a month, and in the process have addressed and resolved some difficult issues associated with life extension programs, **hard and deeply buried targets**, and our nation's tritium supply....

...Some may say that nuclear weapons are less important to our security than in the past forty years. But I would remind them that nuclear weapons and their stewards remain a key element of our future security. There is no question in my mind that nuclear weapons in the 21st century will play a much different, but still critical, role – not in the broad sense of ‘deterrence’ – that will be ‘central’ – but in terms of the likely scenarios and missions we anticipate. In fact, I think that evolving the role of nuclear weapons in the 21st century will be one of our greatest challenges.”

November 2000: Looking ahead to the upcoming Nuclear Posture Review, Adm. Richard Mies, STRATCOM commander, suggests that the national security concepts of “shape, respond, prepare” be changed to “shape, respond, adapt,” explaining his belief that the “ability to adapt to an uncertain future and changing environments will be far more important than our ability to prepare for what we can't predict.”

27 June 2000: In a paper entitled “Nuclear Weapons in the Twenty-First Century,” Los Alamos National Laboratory Associate Director for Nuclear Weapons Stephen M. Younger describes the current and potential future role of nuclear weapons:

“The principle role of nuclear weapons was and continues to be that of deterring any potential adversaries from an attack on America or our vital interests. This role is expected to continue for as long as nuclear weapons hold the appellation of ‘supreme’ instruments of military power. However, this does not mean that their role in military planning will not change at all....While there has been some discussion of ‘single weapon’ strikes against isolated targets, such as sites of weapons of mass destruction, most of the attention in nuclear strategy has been and is directed toward large-scale engagements. This may not be true in the future.”

June 2000: General Richard E. Hawley, Donald N. Frederickson, Michael B. Donley, and John R. Backschieles write in *Armed Forces Journal International* about a proposed concept called: “Global Reconnaissance Strike.” The Global Strike Task Force introduced in 2001 is derived from the GRS concept, which envisioned a different force structure— one that relied on a larger force of long-range bombers and F-22s than the planned USAF force structure. The original GRS concept postulated using a long-range ISR constellation to provide targeting information, B-2s to deliver firepower at long-ranges from rear area bases, and multi-role F-22s to protect the B-2s and the ISR force (and strike targets when needed). The concept’s advantage, according to its developers, was greatly reducing the forward theater footprint by only requiring a small number of F-22s operating forward. The rest of the F-22s would be based further back (occasionally touching down at forward bases to “gas and go”), while the larger B-2 force would deliver the lion’s share of the firepower. The Air Force would later claim that GSTF could do the same job without requiring substantial changes in planned force structure.

May 2000: Lt Col. Larry G. Sills, Lt Col, USAF, Prompt Global Strikes Through Space: What Military Value, Air War College Paper

“The Air Force and U.S. Space Command have long-range plans to demonstrate the technologies necessary to execute prompt global strikes with precision conventional weapons through space launched from the U.S. homeland to any point on the globe in 90 minutes or less. While the Space Operations Vehicle concept is the postulated delivery vehicle early in the 2010 decade, long-range conventional ballistic missiles could provide an initial capability as early as 2005. In light of the potentially aggressive use of weapons of mass destruction by rogue adversaries in future wars, this paper explores the potential benefits and drawbacks of a capability to conduct prompt global strikes through space with conventional ballistic missiles and the Space Operations Vehicle.”

the term “global strike” is defined as “the capability to conduct a precision strike with conventional weapons from U.S. soil to any point on the globe, including the recovery of

any reusable launch platform onto U.S. soil.”² While virtually any aircraft possessing an air refueling and ordnance delivery capability could theoretically be used for global strike, this is feasible only with long range bombers like the B-1, B-2, and B-52. The B-2 demonstrated its global strike prowess during the Kosovo conflict, flying numerous 30-hour round trip missions from Whiteman AFB, Missouri.³ For the future, the Air Force is exploring concepts for conducting global strikes through space, putting targets at risk anywhere on the globe within 90 minutes of launch.

A CBM launch targeted across the globe will look just like a nuclear ICBM launch. At the very least this could cause great consternation among countries able to detect the launch, and at worst cause one or more of those countries to increase their nuclear alert posture. The key concern is that nuclear weapons-capable states understand that a CBM mission is not directed at them and is not nuclear.

AFSPACE is studying a number of mitigating steps to make CBMs operations possible without arousing nuclear fears.

- Geographic separation of CBM sites from nuclear missile sites.
- CBM on-site inspection agreements
- Pre-launch consultations, notification
- CBM radar or infrared signature enhancement

Global strike from CONUS offers attractive deterrent options against CB weapons. ... the U.S. policy to respond to CB use by a regional niche competitor with “WMD in kind”—meaning potential retaliation with nuclear weapons—can lack credibility in certain situations. But the ability to strike a CB wielding adversary from CONUS with conventional precision weapons through space provides another means short of a nuclear response without exposing U.S. troops or equipment to the regional threat.

28 January 2000: The JCS publishes the Nuclear Supplement to the Joint Strategic Capabilities Plan (CJCSI 3110.04A), the Top Secret guidance to the military on employment of nuclear weapons.

11 December 1999: Captain Robert L. Ramsden, in Student Paper, USAF Weapons School, “The Conventional Ballistic Missile: A Near-Term Space Strike Capability,”

“the technology for global strike through space has existed in the ICBM for over 30 years. AFSPC in recent years has been exploring the conversion of that technology into a conventional weapon system to provide a near-term capability (5-7 years). This involves the mating and demonstration of existing technology. ... Once the technology has been integrated and proven, the CBM, launched from coastal bases, gives the CAF (through USCINCSpace) a global strike capability, fielded in the 2006 timeframe (in lieu of development and fielding decisions).”

December 1999: A second draft Mission Needs Statement (MNS) for “Prompt Global Strike Capability” is issued by Air Force Space Command.

November 1999: Maj. Dana Struckman, USAF. Air Force Space Command Global Strike Capabilities (U) Slide Program. Peterson AFB, CO: HQ AFSPC/DR. 11 Slides.

November 1999: United States Air Force Scientific Advisory Board, A Space Roadmap for the 21st Century Aerospace Force, Vol. 1, SAB-TR-98-01: A Space Operations Vehicle (SOV) is called by other names, like Military Space Plane (MSP) and Aerospace Operations Vehicle (AOV).

October 1999: The Global Engagement IV (GE IV) wargame simulating two major regional conflicts in the year 2010, sees the first use of global strike weapons through space capability with CAVs delivered by CBMs and SOVs. Global strikes through space are used as a “silver bullet” against enemy leadership command and control targets with some success. Retired Air Force General Joseph W. Ashy, former Commander of AFSPACE and USSPACECOM, plays the role of theater CINC for one of the cells. He employs CBMs even though he personally states he did not believe CBMs would, in reality, ever be politically acceptable. On the contrary, he believed the SOV had a realistic future as a military tool but only after some undetermined length of time when governmental authorities see the inevitability of warfare in and through space and invest appropriately to prepare for it. Retired Air Force General John Shaud, who plays the role of the NCA Panel Chief for GE IV, expresses similar reservations about political aspects of global strikes through space. Like General Ashy, General Shaud wanted to make sure all weapons allowed were exercised and therefore never disapproved use of CBMs or the SOV if a CINC requested them. Concerning the use of CBMs and the SOV in GE IV, General Shaud said he “never saw the use of them as compelling.” Overall, he characterizes the risks of conventional weapons coming from space onto another country as currently “unknown.” Both generals say that as time puts the Cold War further and further behind us it is inevitable that force application in and through space will become a reality.

February 1999: The Navy's FY2000 budget includes \$12.5 million for the Advanced Penetrator Definition Program to "develop an advanced conventional earth penetrator warhead for use on conventional ballistic missiles."

1999: The Defense Science Board reports:

“Those states preparing for potential conflict with the United States will seek to capitalize on the great distances U.S. forces must travel to engage them, and on U.S. forces' near-absolute reliance on unimpeded access to and use of ports, airfields, bases, and littoral waters in the theater of conflict...”

23 November 1998: U.S. Defense Secretary William S. Cohen rejects a proposal by Canada and Germany to review the policy of first-use of nuclear weapons:

"We think that the ambiguity involved in the issue of the use of nuclear weapons contributes to our own security, keeping any potential adversary who might use either chemical or biologicals [sic] unsure of what our response should be. So we think it's a sound doctrine. It was adopted certainly during the Cold War, but modified even following and reaffirmed following [sic] at the end of the Cold War. It is an integral part of our strategic concept and we think it should remain exactly as it."

22 May 1998: President Clinton signs the classified Presidential Decision Directive (PDD) 62, "Protection Against Unconventional Threats to the Homeland and Americans Overseas." A White House fact sheet explains that "America's unrivaled military superiority means that potential enemies -- whether nations or terrorist groups -- that choose to attack us will be more likely to resort to terror instead of conventional military assault [and use] ... weapons of mass destruction, to target our cities and disrupt the operations of our government." The White House says the president was "determined that in the coming century, we will be capable of deterring and preventing such terrorist attacks." One unidentified administration official tells *The Washington Post* in December 2002 that PDD 62 had classified language to the effect: "If you think terrorists will get access to WMD, there is an extremely low threshold that the United States should act" militarily.

May 1998: The Aerospace Future Capabilities Games (Futures Game), set in the year 2020 against a near-peer competitor, includes global strike weapons simulated for game play.

March 1998: U.S. Space Command, *Long Range Plan: Implementing USSPACECOM Vision for 2020*: SPACECOM sees potential global strike capability against fixed, mobile, and moving high-value targets "on-demand." A limited capability could be available in 2005 using conventional ballistic missiles, with a significant increase in capability by 2012 with the introduction of a military Space Operations Vehicle. And by the year 2020, global strike capability could be fully matured and its operational deployment complete.

5 January 1998: Following the publication of Presidential Decision Directive (PDD) 60 in November 1997, National Security Advisor Robert Bell states that Negative Security Assurances will not tie the hands of U.S. decision-makers faced with a chemical or biological attack. "It's not difficult to define a scenario," he says, "in which a rogue state would use chemical weapons or biological weapons and not be afforded protection under our negative security assurance."

7 November 1997: President Clinton signs Presidential Decision Directive (PDD) 60, ordering the military to stop planning for protracted nuclear war with Russia and removing some target categories from strategic nuclear war plans. The directive also calls for an increase in nuclear

targeting of China and directs preparation of adaptive contingencies covering weapons of mass destruction (WMD) facilities in “rogue states.” As a result of PDD-60, a Pentagon official later tells *The Washington Post* that up-to-date intelligence is kept on WMD facilities in Iran, Iraq, North Korea and other “rogue” nations, and updates are continuously passed to nuclear target planners at STRATCOM. “There were no immediate plans on the shelf for target packages [for those countries] to give to bombers or missile crews, but we could produce targeting information for those countries within hours,” the official said.

November 1997: The B61-11 nuclear-earth-penetrating bomb formally enters service with the 509th Bomb Wing at Whiteman Air Force Base in Missouri.

30 September 1997: AF, ASC/XR, Global Range Attack Vehicles Concept Group, Air-to-Surface Technical Planning Integrated Product Team

- *Unmanned Global Strike Aircraft*
 - *Description: Low observable strike aircraft to augment the B-2. Designed to carry 20,000 lb. internal weapons, range 6 -10,000 nm, delivers weapons autonomously or by JSTARS / B-2 direction.*
- *Global Quick Reaction Recce/Strike*
 - *Description: Manned or unmanned system, sub orbital / orbital rocket powered vehicle, ground or air launched, strike anywhere in 1 hour from launch, Mach >15*
- *Hypersonic Global Range Recce/Strike Aircraft*
 - *Description: Manned, air-breathing propulsion, payload 10,000 lb., Mach 8 to 12, altitude >100,000 ft.*
 - *Similiar concepts (archived)*
 - *Strike/Recce Military Spaceplane, Hypersoar*

9 June 1997: During a Carnegie panel discussion on eliminating or reducing nuclear weapons, White House National Security Council staffer Robert G. Bell states on negative security assurances:

“We, of course, have solemnly reaffirmed in many instances, including the NPT extension documents and United Nations Security Council resolutions, this so-called advanced doctrine on no first use. And we stand by that as the highest expression of U.S. policy with respect to the conditions under which we would use nuclear weapons first. That has nothing to do, per se, with whether a threat is manifest from a chemical weapons armed foe. It has to do with the nature of that state, in terms of its nuclear program, or its alliance with states that have nuclear programs.”

1 June 1997: Air Force FY98 Space and Missiles Technology Area Plan:

The situational awareness afforded throughout the battlespace -- on the surface of the earth, in the air and in space -- provides the means for aerospace supremacy, enabling the full range of options for other weapons systems employed in the theater. These investments provide the nation not only a precision, global strike capability with minimum casualties and collateral damage, but also the possibility of strategic deterrence, flexible responses, and the ability to influence events in real time, thereby providing the warfighter with a continuous range of response options, varying from lethal to non-lethal. This is Global Virtual Presence and this is the vision of the Space and Missiles Technology Area Plan. We have the opportunity to lead the Air Force into the Space Force of the 21st Century.

13 March 1997: STRATCOM Commander General Eugene Habiger is asked during a Congressional hearing what “sort of deterrence” he thinks U.S. nuclear weapons play in deterring rogue states from using WMD:

“In my view, sir, it plays a very large role. Not only was that message passed in 1990 by the President [to Iraq], that same message was passed to the North Koreans back in 1995, when the North Koreans were not coming off their reactor approach they were taking [sic].”

February 1997: The AFSPACE Directorate for Requirements signs out a draft Mission Needs Statement (MNS) for “Prompt Global Strike.” When the draft MNS is coordinated with other military services and Unified Commands, typical among the comments was that forward deployed forces—particularly Navy and Marine—provide sufficient deterrent and combat capability for the expected threats. AFSPACE kept the issue alive, attempting to answer the critiques with a new draft MNS. But even the USSPACECOM Director of Requirements was not convinced that the case for global strikes through space. Missing was a clearly articulated mission need to compete with other military requirements.

January 1997: The first B61-11 nuclear earth-penetrating bomb formally enters the stockpile.

December 1996: The first B61-11 nuclear earth-penetrating bombs are accepted as "limited stockpile item" pending further flight tests.

8 May 1996: Pentagon spokesperson Ken Bacon told the *Washington Post* that there is “no consideration to using nuclear weapons [against the Libyan underground facility at Tarhunah], and any implication that we would use nuclear weapons preemptively against this plant is just wrong.” He added, however, that the United States did not rule out using nuclear weapons in response to a nuclear, chemical and biological attack on the United States or its allies.

23 April 1996: The U.S. Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Programs, Harold P. Smith, Jr., told the Associated Press: "We could not take [Libyan

underground facility at Tarhunah] out of commission using strictly conventional weapons.” If a decision were made to destroy the plant, he subsequently added, the B61-11 earth-penetrating nuclear bomb "would be the nuclear weapon of choice."

11 April 1996: After signing Protocol I of the African Nuclear-Weapon Free Zone (ANFZ) Treaty promising not to use nuclear weapons against the countries in Africa, Special Assistant to the President and Senior Director for Defense Policy and Arms Control, Robert Bell, states that U.S. adherence to the Protocol does not prohibit the U.S. from using nuclear weapons against an African country that has signed the Treaty:

“Under Protocol I, which we signed, each party pledges not to use or threaten nuclear weapons against an ANFZ party. However, Protocol I will not limit options available to the United States in response to an attack by an ANFZ party using weapons of mass destruction.”

9 February 1996: The Joint Chiefs of Staff publishes *Doctrine for Joint Theater Nuclear Operations* (Joint Pub 3-12.1) to outline the principles and considerations for planning non-strategic nuclear forces against regional adversaries. Potential targets for nuclear strikes include:

- WMD and their delivery systems, as well as associated command and control, production, and logistical support units;
- Ground combat units and their associated command and control and support units;
- Air defense facilities and support installations;
- Naval installations, combat vessels, and associated support facilities and command and control capabilities;
- Non-state actors (facilities and operation centers) that possess WMD; and
- Underground facilities.

1996: The Air University study *Air Force 2025* envisions global strike with conventional ballistic missiles and space vehicles.

18 July 1995: Congress approves DOD/DOE request to begin developing the B61-11 nuclear earth-penetrating bomb.

Mid-1995: STRATCOM Commander Admiral Henry Chiles asks the Policy Subcommittee of the Strategic Advisory Group (SAG) to test its WMD deterrence template on a potential adversary: Iran. Because STRATCOM is unable to complete an in-depth study of Iran at the time, Admiral Chiles instead asks the Subcommittee to test the deterrence theory on North Korea.

5 April 1995: During the Review and Extension Conference for the Non-Proliferation Treaty, the Clinton administration reaffirms the U.S. Negative Security Assurances:

“The United States reaffirms that it will not use nuclear weapons against non-nuclear-weapon states parties to the Treaty on the Non-Proliferation of Nuclear Weapons except in the case of an invasion or any other attack on the United States, its territories, its armed forces or other troops, its allies, or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear-weapon State in association or alliance with a nuclear-weapon state.”

April 1995: The Policy Subcommittee of STRATCOM's Strategic Advisory Groups completes an in-depth review of deterrence against WMD proliferators. The review provides a Terms of Reference for use by the other subcommittees within SAG as a baseline “to expand the concept of Deterrence of the Use of WMD.”

6 February 1995: The Nuclear Weapons Council approves the concept for the B61-11 nuclear earth-penetrating bomb.

The review *Essentials of Post-Cold War Deterrence* criticizes the pledge given by President Clinton not to use nuclear weapons against non-nuclear weapon states parties to the NPT: It is “easy to see the difficulty we have caused ourselves by putting forward declaratory policies such as the ‘Negative Security Assurances’ which were put forward to encourage nations to sign up for the Nonproliferation Treaty.” The review warns that, “if we put no effort into deterring these [WMD] threats, they will be ‘undeterrable’ by definition.” As an example of the innovative thinking that ought to go into developing a deterrent posture against regional adversaries armed with WMD, the review provides the following anecdote:

“The story of the tactic applied by the Soviets during the earliest days of the Lebanon chaos is a case in point. When three of its citizens and their driver were kidnapped and killed, two days later the Soviets had delivered to the leader of the revolutionary activity a package containing a single testicle – that of his eldest son – with a message that said in no uncertain terms, ‘never bother our people again.’ It was successful throughout the period of the conflicts there. Such an insightful tailoring of what is valued within a culture, and its weaving into a deterrence message, along with a projection of the capability that be mustered, is the type of creative thinking that must go into deciding what to hold at risk in framing deterrent targeting for multilateral situations in the future.”

The Subcommittee laments that the story illustrates how more difficult it is for a country such as the United States to frame its deterrent messages. The fact “that our society would never condone the taking of such actions makes it more difficult for us to deter acts of terrorism.” In threatening nuclear destruction of regional adversaries, the Subcommittee advocated, the United States must not appear too rational and cool-headed. Instead, that “some elements [of the U.S. administration] may appear potentially ‘out of control’ can be beneficial” to creating and

reinforcing fears and doubts within the minds of an adversary's decision makers. This essential sense of fear, the Subcommittee reminds, is the working force of deterrence. "That the US may become irrational and vindictive if its vital interests are attacked should be part of the national persona we project to all adversaries."

14 January 1995: A military official familiar with the SILVER BOOKS concept tells *Jane's Defence Weekly* that a "Silver Book" would include "different options with regard to **countries or organizations or groups that would pose a significant proliferation threat.**" The concept involves STRATCOM compiling a target list and **a full range of weapons and platforms that could strike the particular target with nuclear or conventional weapons.**

4 December 1994: As Ukraine joins the Non-Proliferation Treaty, the United States, Britain, and Russia "reaffirm, in the case of Ukraine, their commitment not to use nuclear weapons against any non-nuclear weapon state party to the Treaty on the Non-Proliferation of Nuclear Weapons, except in the case of an attack on themselves, their territories or dependent territories, their armed forces, or their allies, by such a state in association or alliance with a nuclear weapon state."

November 1994: A draft SILVER BOOKS target list against WMD targets is complete for European Command, and a prototype is ready for Pacific Command. STRATCOM briefs Chairman of the Joint Chiefs of Staff, General John Shalikashvili. In an interview with *Inside the Navy*, STRATCOM officials argue for a strong STRATCOM role in counter-proliferation:

"We can kind of bring a global perspective to any counter-proliferation strategy, because the kind of targets you'd be looking at are the same kind of targets we already look at for our strategic purposes, and the same kind of interactions that you'd have with the National Command Authority for strategic weapons, would probably be very similar to the kind of interaction you'd have in some kind of counter-proliferation scenarios.

You ought to think about this kind of problem ahead of time, so you know what the potential targets are, and you know what kind of force would be the best to take that out, whether they are special operations forces or conventional weapons or some kind of nuclear weapon."

October 1994: STRATCOM conducts the Global Archer 94-4 nuclear exercise, the first of its kind since the stand-up of STRATCOM in June 1992. In addition to strategic nuclear warfare, the exercise practices the SILVER BOOKS concept and the Theater Nuclear Support Model in counterproliferation scenarios against regional adversaries armed with weapons of mass destruction.

22 September 1994: The Nuclear Posture Review recommends replacing the B53 nuclear bunker-buster bomb with the more advanced earth-penetrating B61-11 bomb.

September 1993: Presidential Decision Directive-30 orders the Department of Defense and Department of Energy to develop the B61-11 nuclear earth-penetrating bomb. The warhead will be a modified B61-7.

12 July 1994: The white paper Nuclear Forces: Post 1994, which was commissioned by STRATCOM commander Admiral Henry Chiles and played a central role in determining the outcome of the Nuclear Posture Review, stated:

“We should be far from sanguine, however, that we yet understand the dynamics of deterring serious regional threats posed by weapons of mass destruction to U.S. forces deployed abroad, to allies and friends that depend upon us for nuclear protection. Nor should we be quick to embrace the position that nuclear weapons exist only to deal with other nuclear weapons. Those who argue that biological and chemical threats can always be safely deterred without requiring the last resort of U.S. nuclear force must bear the burden of proof for their arguments. Until they make a compelling case that nuclear force is not necessary for successful deterrence, it is not in the nation’s interest to foreswear the uncertainty as to how we would respond to clear and dangerous threats from other weapons of mass destruction. ‘Measured ambiguity’ is still a powerful tool for the President trying to deter an intransigent despot.”

20 April 1994: STRATCOM commander Admiral Henry Chiles testifies before Congress that "Systems and procedures to [develop SILVER BOOKS target plans against WMD facilities] have been developed, and planning coordination with regional commanders has begun."

March 1994: Nuclear Posture Review Working Group 5 (Relationship Between U.S. Nuclear Posture and Counterproliferation Policy) reaches “group consensus that [the] full range of nuclear options is desirable to deter proliferant nations.” The majority of the Group want the “unique contribution of nuclear deterrence to counterproliferation” to be “stated more forcefully.”

February 1994: Nuclear Posture Review Working Group 5 (Relationship Between U.S. Nuclear Posture and Counterproliferation Policy) concludes that nuclear deterrence should only apply to state-sponsored terrorism because non-state actors would not be deterred by the U.S. nuclear posture.

February 1994: The Weapons Subcommittee of STRATCOM’s Strategic Advisory Group (SAG) begins analyzing target sets and weapons capabilities against representative SILVER BOOKS targets. The analysis centers on defeat mechanisms for chemical/biological and buried targets. A total of six facilities are analyzed using conventional, unconventional and nuclear weapons appropriate of the attack. Focus is on fixed installations.

22 November 1993: “Within the context of a regional single or few warhead detonation, classical deterrence already allows for adaptively planned missions to counter any use of WMD,” STRATCOM concludes in a formal answer to the Nuclear Posture Review Working Group 5 (Relationship Between U.S. Nuclear Posture and Counterproliferation Policy). Concerning a U.S. response to WMD use, STRATCOM states:

“The U.S. should preserve its options for responding to the situation by maintaining its current policy which does not preclude first use of nuclear weapons. While it would not be in our interest to unleash the destructive power of a nuclear weapon, the loss of even one American city, or the endangerment of vital American interests *overseas* is unacceptable. To counter this threat, the U.S. should not rule out the preemptive first use of nuclear weapons. In addition, following the use of WMD, the U.S. should again seek to preserve its options. The U.S. policy should not require retaliation with nuclear weapons, but it should leave that option open as one of a complete spectrum of possible options.”

19 November 1993: The USS Nebraska (SSBN-739) test launches a Trident II D5 sea-launched ballistic missile carrying at least two conventional warheads. The purpose of the test is to demonstrate that Trident submarines can launch conventionally armed missiles and that the SSBNs can expand their traditional mission of nuclear deterrence. Anonymous defense sources tell *Inside the Navy* that the conventional warheads are "intended to destroy deeply buried command centers and chemical weapon storage sites." One of the two warheads "carried several metal rods, intended to smash enemy bunkers buried deep underground." The USS Nebraska test is the first in a series of tests using simulated conventional warheads.

October 1993: STRATCOM publishes the Strategic Planning Study which begins a modernization of the Strategic War Planning System (SWPS) to increase the flexibility and scope of nuclear war planning. The modernized SWPS is scheduled to achieve Initial Operational Capability (IOC) in late 1998 and Full Operational Capability in 2003.

July 16 1993: Rear Admiral W. G. Ellis, Department of Energy Defense Programs, asks ATSD(AE) to retire and if necessary replace the B53 bunker-buster bomb "at the earliest possible date."

July 1993: A STRATCOM briefing Silver Book Concept: Providing Military Options to Counterproliferation outlines the SILVER BOOKS project as plans for military strikes against WMD facilities in a number of "rogue" nations, such as Iran, Iraq, Libya and North Korea. Silver was an abbreviation of Strategic Installation List of Vulnerability Effects and Results, and the project involved "the planning associated with a series of "silver bullet" missions aimed at counterproliferation." Targets included nuclear, chemical, biological and command, control and communications (C3) installations. Under the SILVER BOOKS project, target plans would be produced for each of the regional commands beginning with European Command.

22 May 1993: In an interview with Jane's Defence Weekly, STRATCOM Commander General George Lee Butler describes the creation of a new and more responsive strategic war planning precipitated by proliferation of weapons of mass destruction. In a precursor to the George W. Bush administration's announcement of a "New Triad" of nuclear and conventional weapons eight year later, Gen. Butler explains:

"Adaptive planning challenges the headquarters to **formulate plans very quickly in response to spontaneous threats** which are more likely to emerge in a new international environment unconstrained by the Super Power stand-off. [...] We can accomplish this task by using generic targets, rather than identifying specific scenarios and specific enemies, and then crafting a variety of response options to address these threats. To ensure their completeness, **these options consider the employment of both nuclear and conventional weapons**. Thus, by its very nature, adaptive planning offers unique solutions, tailored to generic regional dangers involving weapons of mass destruction."

April 1993: STRATCOM Commander General George Lee Butler tells the Senate Armed Services Committee that Joint Chiefs of Staff Chairman General Colin Powell has asked him to work "with selected regional Unified Commands to explore the transfer of planning responsibilities for employment of nuclear weapons in theater conflicts" to STRATCOM. This objective was to "save manpower and further centralize the planning and control" of U.S. nuclear forces.

January 1993: STRATCOM Commander General George Lee Butler tells the *New York Times* that, "Our focus now is not just the former Soviet Union but any potentially hostile country that has or is seeking weapons of mass destruction."

17 November 1992: Defense Secretary Richard Cheney signs NUWEP (Nuclear Weapons Employment Policy) 92, which formally tasks the military to plan for nuclear operations against nations capable of or developing WMD.

September 1992: During an Air Power History Symposium, the first Commander-in-Chief of U.S. Strategic Command (STRATCOM) states: "As early as October 1989, we abandoned global war with the Soviet Union as the principle planning and programming paradigm for the U.S. armed forces." The result was a "complete revisit of nuclear weapons policy and the SIOP target base."

February 1992: The Defense Department's annual report states: "The possibility that Third World nations may acquire nuclear capabilities has led the Department to make adjustments to nuclear and strategic defense forces and to the policies that guide them." U.S. nuclear strategy "must now also encompass potential instabilities that could arise when states or leaders perceive they have little to lose from employing weapons of mass destruction."

Methodology and Acknowledgments

This chronology is based on information collected from a wide range of sources over the last decade. Thanks to the Internet, government budget documents, congressional testimonies, and public speeches by military officials have become more readily available to the public, and the research relied heavily on such resources.

One of the dangers of the Internet, however, is that analysts begin to think that the information posted by government agencies is all they need to know and consequently stop going to the library or using the FOIA. Not surprisingly, most unclassified information about Global Strike is not readily available to the public but must be meticulously extracted from the Pentagon via the FOIA. Some of the most important and revealing information used in this document came from documents that were requested, declassified, and released under FOIA.

A special acknowledgement goes to William M. Arkin, a long-term mentor and colleague on this kind of work, who initially proposed to write this monograph and contributed information for the first draft. Arkin was the first to publicly disclose the nuclear option in CONPLAN 8022.

My boss at Federation of American Scientists, Ivan Oelrich, also contributed valuable comments and suggestions, as did Robert S. Norris at Natural Resources Defense Council.

None of the research that resulted in this report would have been possible without the generous financial support from the Ploughshares Fund and the John D. and Catherine T. MacArthur Foundation.

Appendixes

Three documents are included as supporting material to this report:

1. Briefing, Jim Creighton, Col/USAF, USSTRATCOM, "JFCC Space and Global Strike, Command Update to the Space & Missile Conference," August 2005. Partially declassified and released under FOIA.
2. U.S. Strategic Command, "Joint Functional Component Command Space and Global Strike," Concept of Operations, May 6, 2005. Declassified and released under FOIA.
3. STRATCOM, "Memorandum for the USSTRATCOM Joint Functional Component Commander for Space and Global Strike," SM# 014-05, January 18, 2005. Declassified and released under FOIA.

USSTRATCOM JCEC and Global Strike

Command Update

to the

Space & Missile Defense Conference

COL Jim Creighton, USA

Chief of Staff

Aug 2005

Obtained Under the
Freedom of Information Act
by Hans M. Kristensen

05-057



This Briefing is: UNCLASSIFIED



Agenda

Joint Functional Component Command Space and Global Strike:

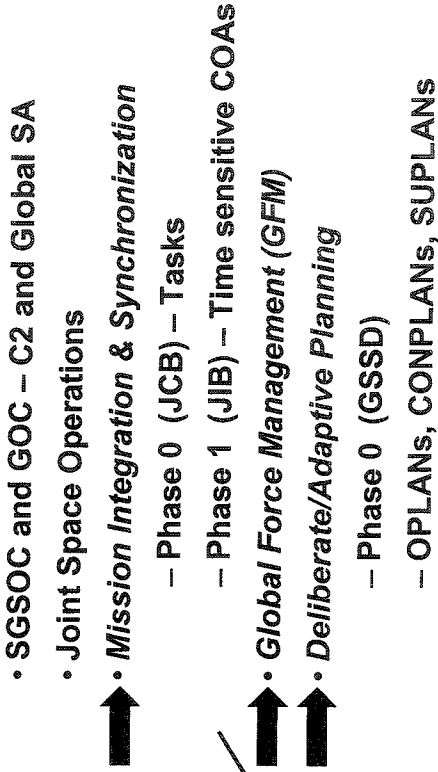
- Mission
- Tasks
- Operational Construct
- Assessment



JFCC SGS and the New Triad

- Assigned SGS Forces Operating Globally- Deterrence
- When directed – Global Strike Effects
 - Kinetic conventional
 - Kinetic nuclear
 - Non kinetic (e.g. IO and Space)

Strike



Defenses

- Assigned SGS Forces Operating Globally – Deterrence
- Space SA & warning / assessment of attack
- NORAD mission support
- Missile attack warning to COCOMs

Responsive Infrastructure

- Coord. w/ HQ STRAT in support of current/ future SGS capabilities



Mission Statement

The JFCC SGS will provide integrated Space and Global Strike capabilities to deter and dissuade aggressors and when directed, defeat adversaries through decisive joint global effects in support of USSTRATCOM global missions.



JFCC SGS Mission Tasks

- **Joint Space Operations**
 - Plan and execute day-to-day military space operations
 - Exercise OPCON of DoD manned spaceflight support functions
 - Provide missile warning and NORAD support
- **Mission Integration & Synchronization**
 - Create a framework to share information, integrate effects, and synchronize ongoing operations among mission partners
- **Global Strike Planning and Operations**
 - Deliver deliberate/adaptive planning for kinetic (nuclear and conventional) and non-kinetic capabilities
 - Provide rapid Course Of Action (COA) development capabilities
 - Execution capability only when directed

Mission-Ready, Improving Capabilities



Mission Integration and Synchronization

Capabilities / Effects (means)

Provide Integrated Space and Global Strike Capabilities

- Space Operations
- Global Strike
- Global Situational Awareness
- Command and Control
- Information Operations
- Inducement Operations
- Active and passive Defenses
- Nuclear Strike Capabilities
- Overseas Presence
- Allied / Coalition Military Cooperation and Integration
- Force Projection

Provide Cooperative Joint Global Effects in support of USSTRATCOM Global Missions

Process (ways)

Day to Day (Phase 0)

Day to Day Command and Control (SGSOC and GOC)

Operations Integration & Synchronization (0 hr - 2 wks) (JCB w/ JSWG)

Crisis Action / Time Sensitive Planning (GOC/SGSOC) (JIB w/JEWG)

Deliberate / Adaptive Planning Int & Synth (>2 wks) (JCB w/JPWG)

When Directed

Products (end)

Defeat and Degrade Aggressors

- Global SA
 - CDR STRATCOM via GOC
 - CDR SGS via SGSOC
- Operations
- SGS unit & Joint Training
- SGS effects, when directed
- Decision Superiority

- I&S near term SGS staff operational tasks / effects per HQ
- Ops tasks I&S matrix
- HQ PIRs, HQ mission priorities
- Battle Rhythm
- PLANORD / EXORD / FRAGO

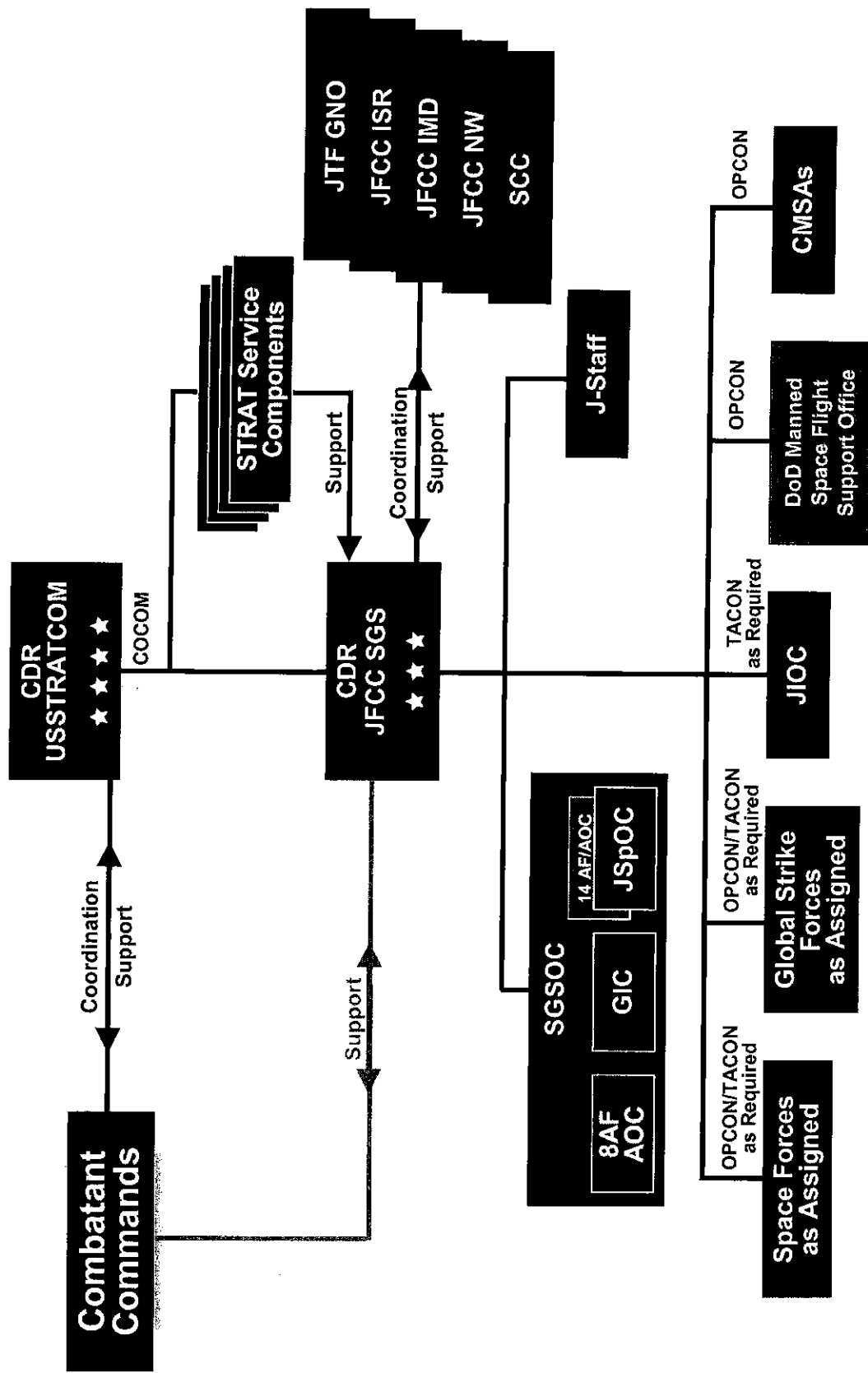
- COAs

- I&S long range planning efforts
- OPLANS, CONPLANS, SUPPLANS
- Phase 0 planning materials (eg. GSSDs)

Defeat aggressors (Swiftly, decisively)

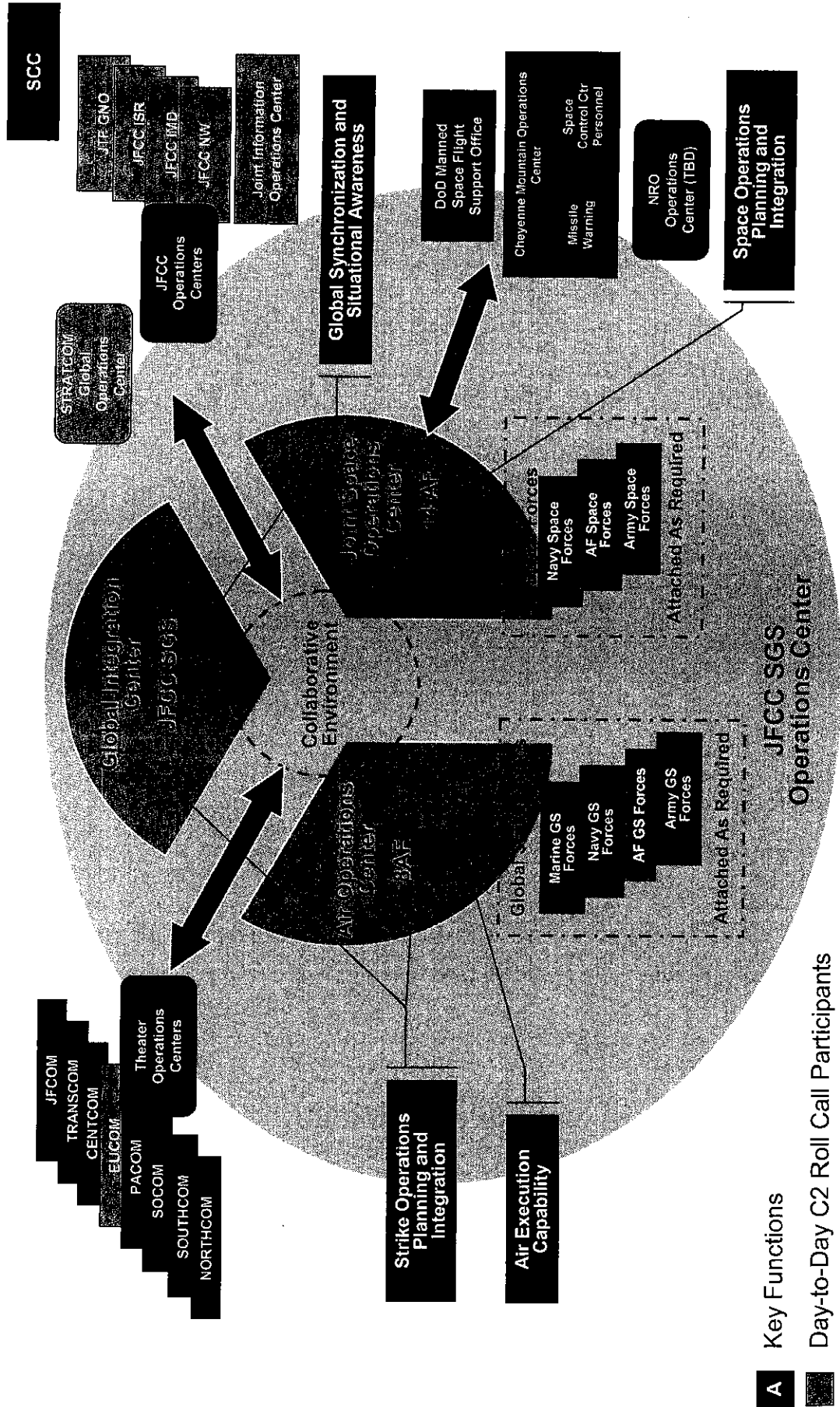


Command Relationships Operational Construct





Operational Construct



- A Key Functions
- Day-to-Day C2 Roll Call Participants

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JFCC SGS Mission Tasks Assessment

- **Joint Space Operations**
 - Plan and execute day-to-day military space operations
 - Exercise OPCON of DoD manned spaceflight support functions
 - Provide missile warning and NORAD support
- **Mission Integration & Synchronization**
 - Create a framework to share information, integrate effects, and synchronize ongoing operations among mission partners
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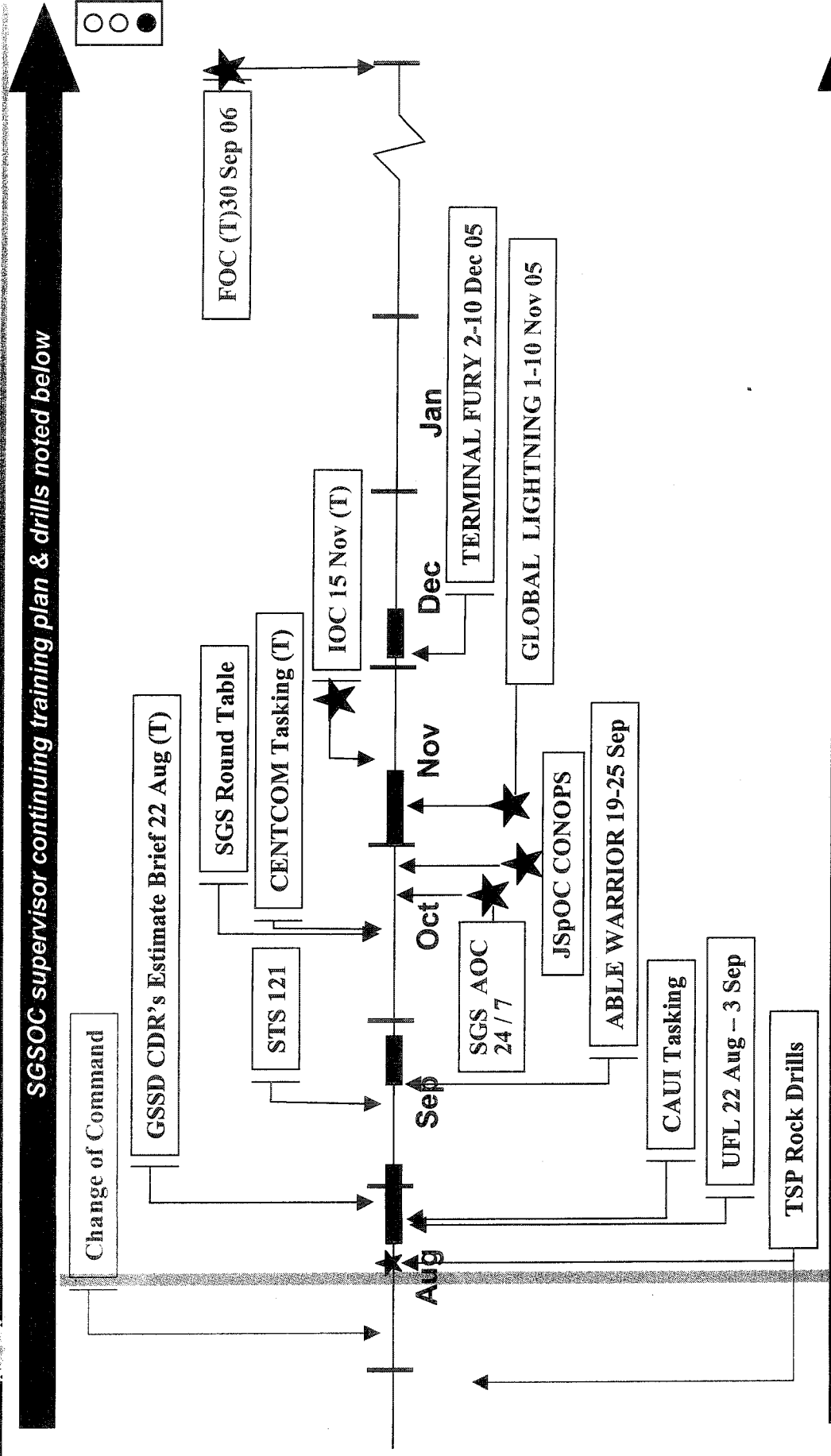


JFCC
SGS/CAG
b1 Comp

Mission-Ready, Improving Capabilities



JFCC SGS Path to IOC/FOC



Collaborative Architecture Evolution
 DCTS/DSIDE + T-BONE? Follow on Architecture?

JECC Space and Global Strike

QUESTIONS?



This Briefing is: UNCLASSIFIED

JOINT FUNCTIONAL COMPONENT COMMAND



SPACE and GLOBAL STRIKE

Obtained Under the
Freedom of Information Act
by Hans M. Kristensen

05-076

6 May 2005

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JFCC SGS CONCEPT OF OPERATIONS

TABLE OF CONTENTS

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JOINT FUNCTIONAL COMPONENT COMMAND - SPACE AND GLOBAL STRIKE

CONCEPT OF OPERATIONS

References: See Annex A

1. Situation:

a. Commander US Strategic Command (CDR USSTRATCOM) established the Joint Functional Component Command for Space and Global Strike (JFCC SGS) to optimize planning, execution, and force management of the assigned missions of deterring attacks against the United States, its territories, possessions and bases, employing appropriate forces should deterrence fail, and conducting global strike operations, space operations and activities of the Joint Information Operations Center (JIOC) that support those operations. JFCC SGS has been designated the lead integrating JFCC for USSTRATCOM. This responsibility spans Phase 0, day-to-day activities; including deliberate/adaptive planning, providing integrated situational awareness to crisis action/time sensitive planning (TSP) and integrated execution capability when USSTRATCOM is designated supported command for execution.

b. The following authorities were granted to CDR JFCC SGS:

- (1) Coordinating authority for planning and execution of space and global strike missions.
- (2) Operational Control (OPCON) or Tactical Control (TACON) of designated space, missile warning, and global strike forces as directed.
- (3) TACON of JIOC functions that enable space and global strike mission planning and execution when USSTRATCOM is conducting operations as a supported commander and when JIOC supporting functions must be integrated with other USSTRATCOM global capabilities.
- (4) Direct Liaison Authority (DIRLAUTH) between JFCC SGS and other joint functional and service components, combatant commanders and agencies, while keeping HQ USSTRATCOM informed.

c. The Unified Command Plan (UCP) defines conducting space operations and global strike missions as follows:

- (1) Conduct Space Operations: Encompasses “force enhancement, space control and space support, including spacelift and on-orbit operations, and force application.”
- (2) Global Strike: Defined as “providing integrated global strike planning and command and control support to deliver rapid, extended range, precision kinetic (nuclear and conventional) and non-kinetic (elements of space and information operations) effects in support of theater and national objectives.”

d. USSTRATCOM defines Phase 0 as day-to-day activities required to support its global missions. Phase 0 activities include providing global situational awareness, predictive analysis, and a continuous joint planning process that enables rapid response timelines.

e. This CONOPS describes baseline operational capabilities and requirements of the JFCC SGS. It also charts baseline organization for space and global strike planning and execution, defines how the JFCC SGS leads integration of USSTRATCOM operational capabilities, and supports Phase 0, day-to-day activities within USSTRATCOM. Finally, the CONOPS describes the expertise required for preparation of companion CONOPS, standard operating procedures, space and global strike annexes, implementation plans, and tactics, techniques and procedures.

2. JFCC SGS Mission Statement: The JFCC SGS will provide integrated Space and Global Strike capabilities to deter and dissuade aggressors and when directed, defeat adversaries through decisive joint global effects in support of USSTRATCOM global missions.

3. JFCC Commander's Intent:

a. Purpose: Gain and maintain both global and theater space superiority and deliver tailored, integrated, full-spectrum space support to the theater commander, while maintaining a robust defensive global counter-space posture. Lead day-to-day planning and integration efforts, and deliver joint global strike effects through deliberate, adaptive, and crisis planning, force integration, and robust command and control (C2) to support global deterrence, theater and national objectives. These capabilities are presented to the CDR USSTRATCOM or to other combatant commanders in support of national and theater objectives.

b. Method: I intend to establish a Joint Functional Component Command at Offutt AFB, NE supporting CDR USSTRATCOM UCP-assigned missions to conduct space operations, support global deterrence, and lead the integration of all USSTRATCOM military capabilities into executable global strike courses of action (COAs). I will create effects in support of CDR USSTRATCOM or other combatant commanders, and I will be prepared to act in a supporting role or as the Joint Force Commander executing approved COAs. Continuous operations will be accomplished through a Space and Global Strike Operations Center (SGSOC) that leverages Service component capabilities, directs DoD space operations, leads crisis planning integrating all JFCC and Service component capabilities for presentation to CDR USSTRATCOM, and supports execution of approved COAs.

(1) I will perform staff functions and operations functions by conducting two separate board processes. The Joint Coordination Board process will be used to formulate JFCC SGS response to higher HQ queries and staff tasks. A Joint Integration Board process will be used to respond to adaptive planning, crisis action/time sensitive planning (TSP), and other operational tasks.

(2) Through these Joint Coordination Board (JCB) and Joint Integration Board (JIB) processes, I will set the JFCC SGS battle rhythm. Using the Global Operations Center (GOC) as USSTRATCOM's situation awareness clearing house I will have daily interface with HQ USSTRATCOM, other JFCCs and service component elements to ensure a collaborative environment.

(3) Interim Steps: In order to ensure space and global strike capabilities are effectively delivered, CDR JFCC SGS will establish an SGSOC composed the of the 8AF Air Operations Center (AOC), the 14AF-led Joint Space Operations Center (JSpOC) and the JFCC SGS Global Integration Cell (GIC), which contains selected elements of the JFCC SGS and USSTRATCOM staffs. The efforts of these elements provide the core operational planning and execution expertise necessary for mission accomplishment.

(4) Key tasks for the SGSOC are:

- (a) Serve as the conduit for CDR SGS execution of Global Space Coordinating Authority through the JSpOC.
- (b) Provide day-to-day C2 of all assigned and attached space forces.
- (c) Provide worldwide Space Situational Awareness (SSA) including status of crews/operations.
- (d) Integrate operations and operational and tactical planning for all DoD space capabilities.
- (e) In collaboration with other JFCCs, other agencies as needed, and theater Operations Centers, provide planning expertise to develop fully integrated global strike COAs across the spectrum of joint operations crisis action/TSP situations.
- (f) Provide operational and tactical execution capability on short notice with the ability to operate 24/7 as defined in the Global Strike Interim Capability Operations Order and fulfill relevant execution responsibilities under USSTRATCOM OPLAN 8044.

c. End State: JFCC SGS conducts space operations, contributes to global deterrence and delivers integrated effects supporting national and theater objectives. JFCC SGS directs operations of DoD space systems, and supports fully integrated deliberate planning across the spectrum of USSTRATCOM-assigned mission areas. JFCC SGS leads integrated crisis action planning among USSTRATCOM components and executes approved COAs when directed, utilizing space and global strike assets as assigned or attached.

4. Specified Tasks: The following tasks are extracted from the JFCC implementing directives.

- a. Act as the lead integrating JFCC in direct support of the Commander, USSTRATCOM to develop crisis response COAs, provide integrated analysis of the Command's global mission capabilities, provide execution recommendations for supported and supporting mission tasks, and through a JFCC SGS managed GOC, integrate inputs of all components and Service task forces, in order to provide HQ USSTRATCOM situational awareness for all operational responsibilities. Other USSTRATCOM JFCCs and Service components will provide direct support to JFCC SGS for planning activities and COA development. Execute Global Strike missions when directed.
- b. Assume operational (OPCON) or tactical (TACON) control of space and missile warning forces for day-to-day and crisis space operations, as directed by HQ USSTRATCOM.
- c. Provide continuous space situational awareness and warning and assessment of space attack.
- d. Execute space campaign planning as the Global Space Coordinating Authority with direct support to other Combatant Commands through the JSpOC.
- e. Execute North American Aerospace Defense Command (NORAD) mission support responsibilities.
- f. Support USSTRATCOM mission of providing missile attack warning to other combatant commanders.
- g. Provide continuous situational awareness of assigned forces engaged in ongoing Space and Global Strike operations.

- h. Provide coordinated tasking from the HQ USSTRATCOM to other joint components and service task forces, as necessary, for the synchronization of all USSTRATCOM operational and tactical mission planning and execution needs.
 - i. Support the coordination of operational logistical requirements of USSTRATCOM supported plans, to include operational logistic support to nuclear forces.
 - j. Integrate capabilities, via the GOC, to support HQ USSTRATCOM responsibilities for nuclear force command and control and nuclear force execution.
 - k. Coordinate and maintain intelligence, as necessary, to support the operational needs of space and global strike components. Provide priority intelligence requirements (PIR), requests for intelligence (RFI), intelligence production requirements, and intelligence collection requirements to USSTRATCOM Joint Intelligence Center (STRATJIC) for tasking, deconfliction and accomplishment.
 - l. Establish a relationship with mission area experts in the applicable regional commanders' Standing Joint Force Headquarters (SJFHQ) to provide operational support for space and global strike capabilities. This relationship will include the training of space and global strike support in SJFHQs, as required.
 - m. Support USSTRATCOM-led efforts to create and maintain strategic-level OPLANs. Support development and coordination of OPLANs, CONPLANs, FUNCPLANs, and SUPPLANs as directed by HQ USSTRATCOM. Support other combatant commands with space and global strike operational planning and execution, as directed by HQ USSTRATCOM.
 - n. Assume OPCON or TACON of global strike forces (kinetic and non-kinetic), as directed. This includes monitoring the status and readiness of nuclear forces through existing Service task forces via the GOC.
 - o. Report operational readiness assessment of assigned mission areas, as required by HQ USSTRATCOM.
 - p. Maintain coordination with geographic and functional combatant commanders to support ongoing and future operational requirements for USSTRATCOM Space and Global Strike capabilities.
 - q. Provide support for HQ USSTRATCOM and other geographic and functional combatant commanders' exercise, wargame and experimentation requirements. Integrate and synchronize efforts with USSTRATCOM Joint Exercise and Training Division (J37).
 - r. Support HQ USSTRATCOM development of space and global strike mission research, and development and advocacy of capability needs for the Joint Capabilities Integration and Development System (JCIDS) process.
5. Assumptions:
- a. The rapid stand-up of JFCC SGS necessitated creation of a CONOPS that will require future updates to adequately capture the evolution of a new command charged to bring together and integrate diverse elements of our nation's military power.
 - b. All processes, procedures and reporting requirements that build situational awareness for USSTRATCOM and currently flow through the USSTRATCOM GOC will continue

unchanged and uninterrupted unless changed, rescinded, or superseded by JFCC SGS or higher headquarters.

c. All USSTRATCOM plans, EXORDs, OPORDs, etc. will remain in effect unless rescinded by the office of primary responsibility.

d. Approved and established processes in effect between mission partners, external organizations, offices/entities (boards, groups, etc) that effect SGS missions, authorities or operations, remain in effect until rescinded, changed, or superseded by the CDR JFCC SGS or higher headquarters. Existing policies, procedures, Letters of Agreement, and Memorandums of Agreement/Understanding (MOAs/MOUs) between organizations and units that form the JFCC SGS will remain in effect pending review. Mission partners may request a review of MOAs/MOUs with USSTRATCOM to update requirements and codify relationships with JFCC SGS.

6. Operational Overview:

a. Organizational Concept: The JFCC SGS will execute its assigned mission by providing USSTRATCOM a functional command headquarters element, situation awareness through the GOC, and operational planning and operations execution capability through the SGSOC. The focus of the JFCC SGS will be to provide operational to tactical level planning, produce fully integrated, approved COAs and plans, facilitate full spectrum operations integration, provide command and control for the space and global strike missions and when directed, other USSTRATCOM assigned missions. For operational and execution matters, the JFCC SGS will serve as the lead integrating JFCC for HQ USSTRATCOM. As lead integrator for adaptive planning and time sensitive planning, JFCC SGS acting through the SGSOC will harmonize and synchronize multiple JFCC and/or Service component inputs to conduct space operations, provide adaptive planning materials, and serve as the chief executing element for CDR USSTRATCOM. To support TSP requirements, the CDR JFCC SGS will establish a Joint Integration Board (JIB) consisting of, as a minimum, the Commander or Deputy Commander JFCC SGS, Commander Joint Space Operations, other JFCC commanders or their designated representative, the JIOC Commander and affected service component commanders. The CDR JFCC SGS will chair the JIB. The JIB will provide guidance and objectives to the SGSOC to establish JFCC SGS TSP priorities. A subordinate Joint Effects Working Group (JEWG) leads overall JFCC SGS operational, planning, and execution integration efforts and sets the battle rhythm for JFCC SGS planning efforts, cross-component integration, and operations.

b. Staffing Concept: The JFCC SGS staff will integrate staff inputs in response to Higher Headquarters staff tasks when integration is required. The JFCC SGS staff will harmonize and synchronize staff inputs by establishing a Joint Coordination Board (JCB) consisting of, as a minimum, the JFCC SGS Staff Directors, SGSOC, 14AF, 8AF, JIOC, CMSAs, DDMS and other staff elements as required. Representatives from the other JFCCs, Service Components, and other agencies will also be invited to attend as required. The CDR JFCC SGS or his designated representative will chair the JCB. The JCB will provide guidance and objectives to the staff to establish phase 0, day-to-day JFCC SGS priorities. A subordinate Joint Staff Working Group (JSWG) leads action officer level efforts when an integrated recommendation to the senior staff and leadership is required.

c. **Structure:** The JFCC SGS fulfills implementation directive tasks for Joint Space Operations, Mission Integration and Synchronization, and Global Strike planning and operations through the following organizational and process constructs:

(1) Day-to-day Command and Control: The SGSOC will monitor day-to-day situational awareness and will provide operational control of SGS assets and other USSTRATCOM assets as required, and execute SGS missions when directed.

(2) Operations Integration and Synchronization: The Joint Coordination Board (JCB) will focus on operationalizing SGS actions in support of, near term (0 hrs to 2 weeks), theater and global priorities through an effects based, systematic approach that integrates all elements of global power.

(3) Time Sensitive Planning: As the lead integrating JFCC, SGS will orchestrate development of fully integrated (across JFCCs and Service components) crisis response/TSP COAs through the SGSOC's JEWG/JIB process.

(4) Deliberate/Adaptive Planning: The JFCC SGS J5 will plan, coordinate, and synchronize long range planning efforts (planning requirements beyond 2 weeks) through a collaborative process integrating expertise from all JFCCs, Service component elements, and affected combatant commands.

d. **Organization:** To accomplish these ends, the JFCC SGS is comprised of a J-coded structure as illustrated in **Figure 1**, comprised of a joint SGSOC and assigned/attached space and global strike forces. In addition, JFCC SGS will staff and operate CDR USSTRATCOM's GOC.

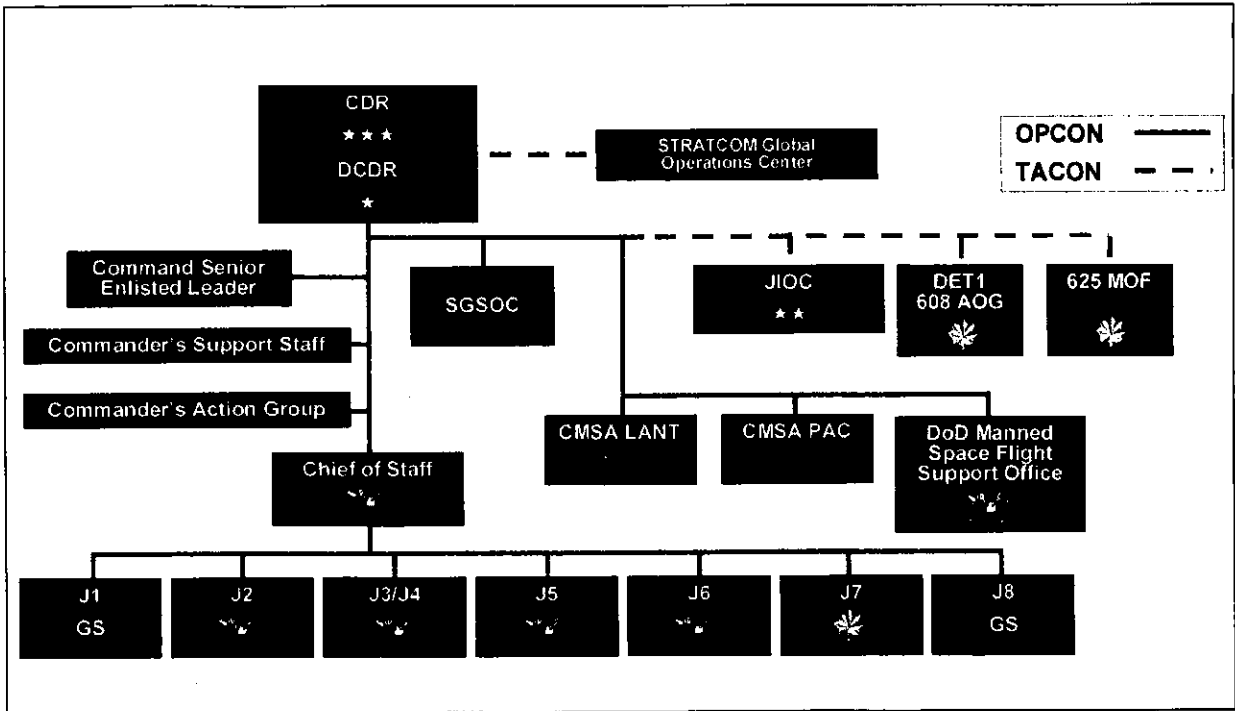


Figure 1 – JFCC SGS Organizational Structure

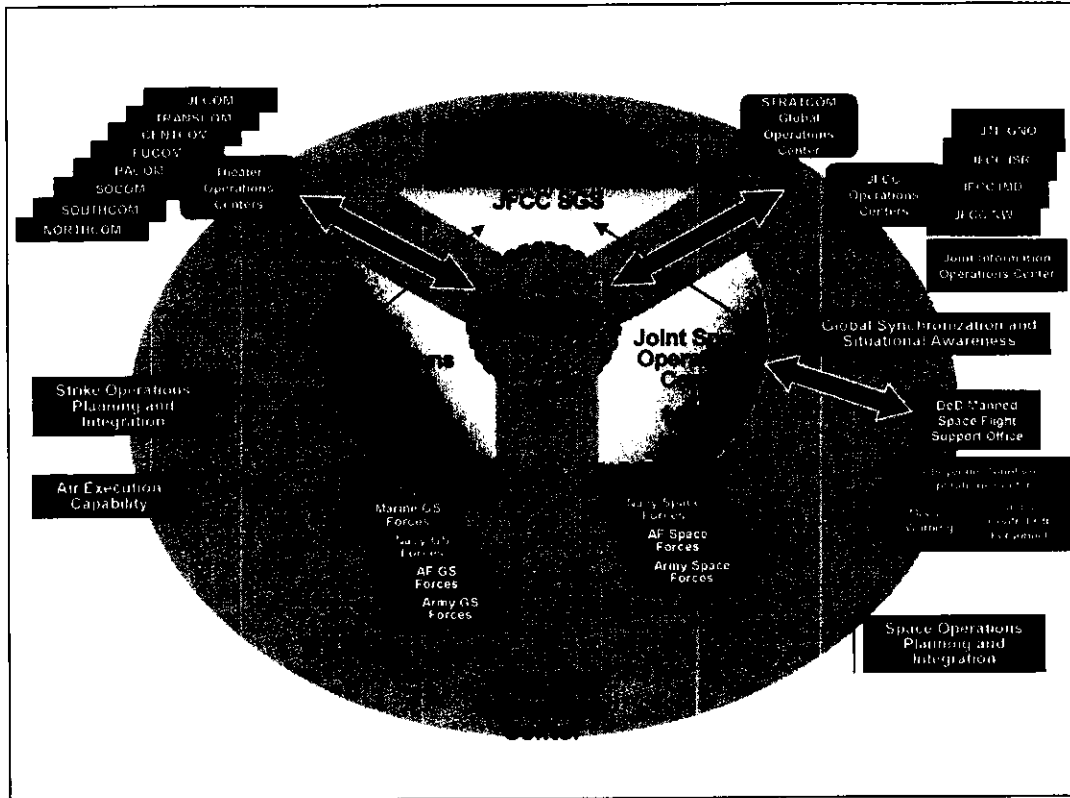


Figure 2 – JFCC SGS Distributed Operations

- (1) The JFCC SGS staff will:
 - (a) Interface with the USSTRATCOM staff and maintain working relationships with external organizations/agencies, as required.
 - (b) Conduct deliberate planning and provide mission/operations analysis.
 - (c) Conduct the JSWG/JCB process to establish day-to-day battle-rhythm, JFCC integration, and staff priorities.
 - (d) Augment the SGSOC as required.
- (2) The Space and Global Strike Operations Center (SGSOC), see **Figure 2**, will:
 - (a) Provide/conduct HQ USSTRATCOM's primary C2 with supported/supporting combatant commander and national agency operations centers.
 - (b) Lead adaptive/crisis/time sensitive planning and executable plans through the JEWG/JIB process, to include leading the USSTRATCOM battlestaff during crisis activities, as directed.
 - (c) Provide operational force tasking and execution.
 - (d) Provide operational assessments for space and global strike operations.
- (3) The JFCC SGS commander reports directly to CDR USSTRATCOM and exercises TACON/OPCON of forces and capabilities made available from USSTRATCOM and in collaboration with other mission partners through the SGSOC, as depicted in **Figure 3**. As a minimum, the JFCC SGS coordinates with the operations centers listed in Annex J, Appendix 1 when employing forces or planning operations.
- (4) When JFCC SGS is the supported command for execution, Commander, US Joint Forces Command (USJFCOM) and other combatant commands, as directed by the President or Secretary of Defense, will provide augmenting forces.
- (5) Mission Partners: Significant support from non-USSTRATCOM organizations is essential to accomplish assigned missions. In accordance with the establishing directive, DIRLAUTH between JFCC SGS and other joint functional and Service components, combatant commanders, and agencies, while keeping HQ USSTRATCOM informed, is authorized. A list of mission partners is available in Annex J, Appendix 2

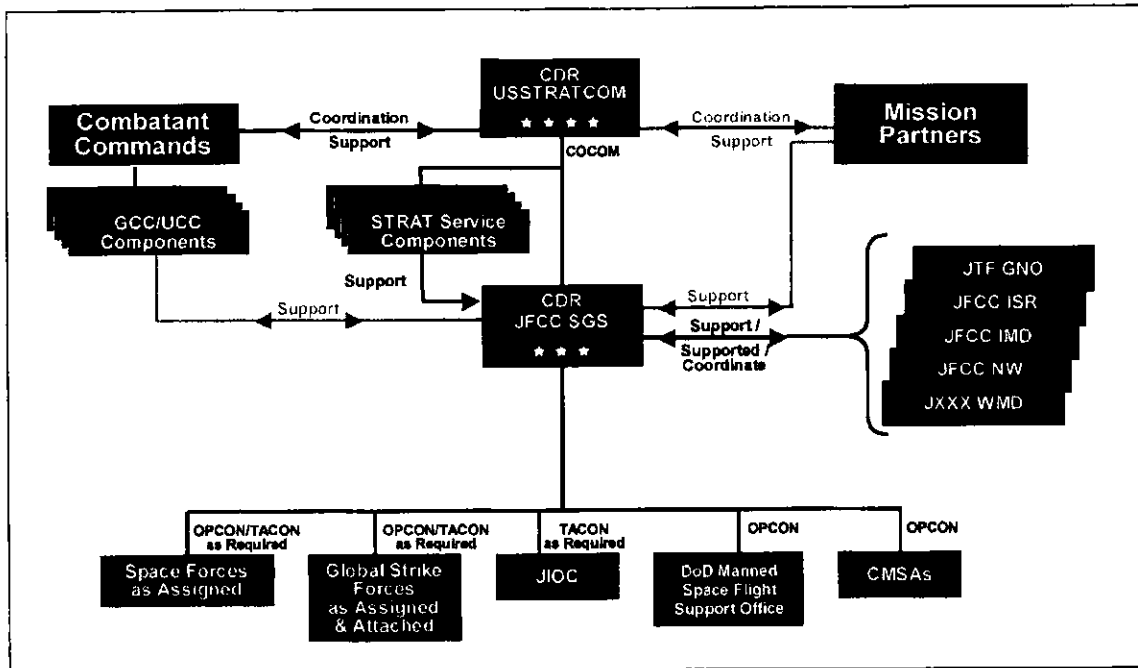


Figure 3 - JFCC SGS External Relationships

7. Execution Construct:

a. **General:** JFCC SGS executes USSTRATCOM assigned missions on a 24/7 basis through the SGSOC. JFCC SGS will integrate operations and plans for CDR USSTRATCOM via a collaborative process. The process will follow the Joint Effects Working Group/ Joint Integration Board construct (JEWG/JIB) process as currently outlined in Joint Doctrine.

b. **Integration Mission:** JFCC SGS is USSTRATCOM's lead integrating JFCC during adaptive and time sensitive planning and execution. When more than one JFCC, Service component, or the interagency is involved, JFCC SGS will coordinate with other JFCCs, Service components, combatant commands, and coalition partners' planning and execution elements to generate integrated courses of action for consideration/approval by the CDR USSTRATCOM. Mission partners must be prepared to support planning efforts across the spectrum of conflict and through a collaborative environment.

(1) For crisis planning, the SGSOC will lead integrated planning. This includes leading TSP efforts in support of the Global Strike mission. The JEWG/JIB process will support crisis action planning as required. The output of this effort will be integrated COAs for CDR USSTRATCOM approval.

(2) For deliberate/adaptive planning, JFCC SGS J5 will lead a fully integrated planning effort across the JFCCs, Service components, and combatant commanders. The output of this effort is fully integrated adaptive planning documents and annexes, and Phase 0 planning materials (ex. Global Strike Support Documents (GSSD)) for CDR USSTRATCOM approval.

(3) In the case of a USSTRATCOM-directed independent planning and execution effort by another JFCC, JFCC SGS requires the appropriate level of visibility into that effort and

will maintain cognizance of it via the GOC in order to provide the CDR, USSTRATCOM with full-spectrum situational awareness.

c. Space Missions: JFCC SGS provides space control, space force enhancement, space force support, and space force application planning and execution to include space and missile Integrated Tactical Warning Attack Assessment (ITWAA) as directed by USSTRATCOM. JFCC SGS will exercise Operational Control (OPCON) of designated space control, space support, space force enhancement, and space force application assets as directed. JFCC SGS will ensure direct support from missile warning assets to JFCC for Integrated Missile Defense (IMD) during increased readiness levels, in accordance with pre-planned missile engagement responses. Finally, JFCC SGS supports NORAD by providing missile warning and space surveillance necessary to fulfill the U.S. commitment to the NORAD agreement.

d. Global Strike Missions: JFCC SGS uses the JEWG/JIB process to establish command priorities and lead-turn, TSP activities through an effects based analysis of current events, Essential Elements of Information, Commander's Critical Information Requirements, Priority Intelligence Requirements, and other indicators. This enables development of comprehensive, integrated courses of action that span the full space, information operations, and global strike capability set (kinetic and non-kinetic) within desired response timelines. When required, COAs will be integrated with other JFCCs' inputs, and assigned or attached service elements' inputs into a coherent range of response options and submitted to CDR USSTRATCOM. Should USSTRATCOM be selected as supported command for execution, Commander, JFCC SGS will be designated the Joint Task Force Commander and execute the directed mission with assigned and attached forces. JFCC SGS will coordinate operational and tactical details with affected combatant commands' and task forces' operations centers.

e. Relationship with the Joint Information Operations Center (JIOC): JFCC SGS will exercise TACON of JIOC functions that enable the space and global strike mission planning and execution when USSTRATCOM is conducting operations as a supported commander and when JIOC supporting functions must be integrated with other USSTRATCOM global capabilities. The JIOC will provide specialized (Electronic Warfare (EW), Psychological Operations (PSYOP), Military Deception (MILDEC), and Operational Security (OPSEC)) planning and execution expertise that achieves or enhances desired mission objectives.

8. Organizational Duties and Responsibilities: JFCC SGS organizational duties and responsibilities are detailed below by J-Code.

9. SGS Operations Center (SGSOC): The SGSOC is an operational-level-of-war focused operations center supporting the CDR JFCC SGS. The SGSOC is made up of, as a minimum, three distributed facilities collaboratively and virtually linked: the round-the-clock SGS Global Integration Center at Offutt AFB; the SGS Air Operations Center (AOC) at Barksdale AFB; and the round-the-clock SGS Joint Space Operations Center (JSpOC) at Vandenberg AFB. The SGSOC Director is dual-hatted as the JFCC SGS Deputy Commander.

a. SGSOC Director and Global Integration Cell (GIC): The SGSOC Director leads TSP efforts within the SGSOC in collaboration with the AOC, JSpOC, other mission partners, and the GIC. The GIC consists of selected SGS staff members who are mission area experts and form the working level core of the SGS JEWG/JIB processes.

b. SGS Air Operations Center (AOC): This doctrinal Air Force C2 capability provided through 8AF is tailored and augmented by multi-service capabilities to provide planning

expertise to develop fully integrated Global Strike COAs across the spectrum of joint operations for Phase 0, day-to-day operations and TSP. Additionally, the AOC provides an operational and tactical execution capability on short notice with the ability to operate 24/7 as defined in the Global Strike Interim Capability Operations Order and fulfills relevant execution responsibilities under USSTRATCOM OPLAN 8044.

c. **Joint Space Operations Center (JSpOC):** Is established around core elements of 14AF and augmented by multi-service capabilities. It serves as the conduit for CDR SGS execution of Global Space Coordinating Authority, provides day-to-day C2 of all assigned and attached space forces, provides worldwide Space Situational Awareness, and integrates operations and operational and tactical planning for all DoD space capabilities.

10. JFCC SGS J1 Personnel:

a. **Purpose:** The JFCC SGS J1 is directly responsible to the CDR JFCC SGS for the administration and personnel support to those individuals assigned to the JFCC SGS staff. The JFCC SGS J1 also serves as the primary interface with HQ USSTRATCOM J1. Finally, JFCC SGS J1 develops and provides JFCC specific plans, policies, and services for joint manpower, personnel and administration in support of the mission including serving as personnel representative to the JCB.

b. Responsibilities:

(1) JFCC SGS J1 acts as the conduit for managing JFCC SGS specific manpower, organizational, and readiness issues in direct support of all joint military and civilian positions to HQ USSTRATCOM J1. Additionally, JFCC SGS J1 develops and defends manpower requirements to justify military and civilian manpower required to achieve the mission. JFCC SGS J1 ensures manning requirements are based on the mission, concept of operations, commander guidance, and the staff expertise needed to support planning and execution.

(2) JFCC SGS J1 formulates and staffs personnel program policies, advises JFCC SGS senior leadership on all personnel program issues, and provides the primary interface to HQ USSTRATCOM J1.

(3) Further information on JFCC SGS J1 organization, functions and tasks is in Annex E.

11. JFCC SGS J2 Intelligence:

a. **Purpose:** The primary function of the JFCC SGS J2 is to present a clear, accurate, predictive, and timely analysis of the situation to aid the Commander and staff in their planning and decision-making processes. The JFCC SGS J2 provides guidance and direction on all intelligence resources available to the staff.

b. **Responsibilities:** JFCC SGS J2 is responsible for planning, implementing and supervising mission related intelligence activities. As such, JFCC SGS J2 articulates JFCC SGS collection, processing and exploitation, production (including target materials), dissemination and intelligence integration requirements to the USSTRATCOM J2 and STRATJIC.

c. More detail on JFCC SGS J2 organization, functions and tasks is in Annex B.

12. JFCC SGS J3/4 Operations/Logistics:

a. Purpose: Provide policy and staffing activity supporting space and non-nuclear global strike assets in support of assigned missions. Coordinate external agency/mission partner support to operations. Support the coordination of operational logistics requirements for USSTRATCOM supported plans, to include operational logistic support to nuclear forces. Integrate capabilities, via the GOC, to support HQ USSTRATCOM responsibilities for nuclear force command and control and nuclear force execution. Provide selected members of the J3/J4 staff to the SGSOC during adaptive/crises action/time-sensitive planning events and exercises.

b. Responsibilities:

(1) JFCC SGS J3/4 is responsible for establishing and maintaining the operational environment through which CDR USSTRATCOM and CDR JFCC SGS exercises C2 of selected global strike missions when directed to do so by the President or the Secretary of Defense. The operational environment must be capable of employing assigned and attached forces, providing support to other combatant commanders and agencies, and supporting the DoD Manager for Manned Space Flight Support Operations.

(2) JFCC SGS J3/4 is responsible for the Phase 0, day-to-day operation of the Global Operations Center, providing global mission-area situational awareness to the CDR USSTRATCOM, and advising senior leadership on all operational issues. JFCC SGS J3/4 establishes the battle rhythm for using the JCB.

c. More detail on JFCC SGS J3/4 organization, functions/tasks is in Annex C, Appendix 3.

13. JFCC SGS J5 Plans and Integration:

a. Purpose: The JFCC SGS J5 provides planning products and planning support to USSTRATCOM deliberate/adaptive planning efforts and other component planning efforts for national and theater level objectives. USSTRATCOM Plans Division (J53) will, in collaboration with the JFCC SGS, provide the strategic guidance and strategic portions (to include CDR USSTRATCOM's guidance, intent and estimate) of the base plan to the CDR JFCC SGS, who will in-turn develop the appropriate operational/tactical inputs to the base plan and annexes, as directed.

b. Responsibilities: JFCC SGS J5 provides and organizes cross-functional staff expertise to develop, maintain and update deliberate and adaptive plans in collaboration with others as required. JFCC SGS J5 will develop, synchronize and integrate SUPPLANs, as directed by USSTRATCOM; integrating inputs from other JFCCs, Service components, and mission partners as required. JFCC SGS J5 also supports the JFCC SGS crisis action planning process by supplying appropriate SMEs to the SGSOC. At CDR USSTRATCOM direction, develops and maintains assigned portions of OPLAN/CONPLANs and provides specialized target planning and support for CDR USSTRATCOM and other combatant commanders in collaboration with USSTRATCOM J5. JFCC SGS J5 augments the SGSOC during adaptive/crisis planning to assist in planning space and global strike missions and perform operational and campaign planning for space operations. This may include synchronizing and coordinating events and actions of the component commands to achieve the desired operational effects.

c. More detail on JFCC SGS J5 organization, functions and tasks is in Annex C, Appendix 4.

14. JFCC SGS J6 Communications:

a. Purpose: The JFCC SGS J6 primary purpose is to be answerable to the SGS commander for function, maintenance, and sustainment of operational command and control systems to include near term improvements. The JFCC SGS J6 directs subordinate units to implement appropriate global command, control, communications and computer (C4) systems. JFCC SGS J6 ensures reliability of those C4 systems supporting assigned forces across the spectrum of conflict and participates in the USSTRATCOM led C4 requirements process to ensure battlefield interoperability with U.S., allied and coalition forces. The SGS J6 will provide SME support to the GIC.

b. Responsibilities: JFCC SGS J6 is responsible for ensuring the following USSTRATCOM actions listed in the Unified Command Plan are achievable through operational and tactical application and support of C4 systems as they pertain to assigned SGS missions.

- (1) Employ assigned and attached C4 forces as directed.
- (2) Establish requirements for and maintain situational awareness of global secure C2 capabilities in conjunction with USSTRATCOM J6.
- (3) Provide Space and Global Strike C4 support.
- (4) Support C4ISR tasking as it applies to JFCC SGS.
- (5) Coordinate and synchronize emerging C4 requirements with JTF GNO to ensure full and timely integration into the Global Information Grid (GIG) architecture.

c. More information on JFCC SGS J6 organization, functions and tasks is in Annex K.

15. JFCC SGS J7 Exercises:

a. Purpose: JFCC SGS J7 functions as the lead integrating organization for JFCC SGS exercises, wargaming support, readiness and training in direct support of the CDR JFCC SGS. JFCC SGS J7 ensures effective and efficient training integration, synchronization and capability requirements for missions of Space, Global Strike and Information Operations are captured. As the JFCC lead integrator, JFCC SGS J7 provides training requirements, objectives and Joint Mission Essential Task List (JMETL) support for Space, Global Strike and other assigned missions. JFCC SGS J7 supports HQ USSTRATCOM J37 for all USSTRATCOM directed joint exercises.

b. Responsibilities: JFCC SGS J7 is responsible for monitoring apportioned forces' preparedness and non-apportioned forces' readiness through the Service components' training and readiness processes. This includes visibility of forces that could be assigned to carry out assigned missions and other JFCCs as they integrate to conduct Space, Global Strike or Information Operations.

c. More information on JFCC SGS J7 organization, functions and tasks is in Annex T.

16. JFCC SGS J8 Resources:

a. Purpose: Principal resource and financial management (FM) advisor for JFCC SGS.

b. Responsibilities: JFCC SGS J8 is responsible for planning, programming, budgeting and executing the JFCC SGS annual budget. This requires close collaboration with

USSTRATCOM J8 for financial matters. Support to USSTRATCOM capabilities development will be provided through JFCC SGS subject matter experts, as required and available, to USSTRATCOM J8 led processes.

c. More information on JFCC SGS J8 organization, functions and tasks is in Annex G.

17. Special Staff: JFCC SGS Special Staff includes key staff support elements that leverage USSTRATCOM special staff functions enabled by collocating the command at Offutt AFB. JFCC SGS Special Staff includes Public Affairs, Protocol, and a Commander's Action Group. The Staff Judge Advocate will not be assigned to the JFCC; USSTRATCOM SJA will provide direct support. More information on Special Staff organization, functions and tasks is found in Annex F.

18. Functional Integration:

a. The following supporting tasks are common to all JFCCs:

(1) Identify and advise SGS leadership as to availability of supporting functions that will enhance space and global strike planning, COA development, and when directed, execution of SGS missions. Support COA development by providing specific functional area inputs and expertise for integration efforts required to meet mission objectives and planning requirements.

(2) Provide embedded mission area expertise to support JFCC SGS responsibilities to maintain common situational awareness for the CDR USSTRATCOM. Organizations not having a physical presence at HQ USSTRATCOM, will be supported through distributed/collaborative mechanisms and tools (e.g. DCTS and SKIWeb).

(3) Synchronize functional area capabilities with SGS operations as directed.

(4) To the extent possible, provide a functional area common operating picture to the GIC to enhance situational awareness.

(5) In coordination with the JFCC SGS, integrate functional capabilities into operational and tactical level plans to synchronize functional area support of strategic and global operations by USSTRATCOM and other combatant commanders.

b. Additional support from on-station organizational representatives, or through a distributed, collaborative environment will be needed to derive optimal/integrated COAs and appropriate execution capabilities. JFCC SGS will work with mission partners to define appropriate levels of representation (distributed or on-site). Coordination, integration and support will be required, as a minimum from the following organizations:

(1) The Joint Information Operations Center (JIOC) will:

(a) In coordination with the JFCC SGS, develop Information Operations campaign plan inputs (less CNO, which is provided by JFCC NW in collaboration with JTF GNO, NAVNETWARCOM and all other CNO planning elements) to support USSTRATCOM and other combatant commanders' mission objectives, to include integration recommendations for supporting operational and tactical level plans.

(b) Develop COA recommendations for Information Operations (less CNO, which is provided by JFCC NW in collaboration with JTF GNO, NAVNETWARCOM and all other CNO planning elements) in support of USSTRATCOM and national strategic

objectives. Support the JFCC SGS for the integration of Information Operations (less CNO, which is provided by JFCC NW in collaboration with JTF GNO, NAVNETWARCOM and all other CNO planning elements) into USSTRATCOM space and global strike COAs.

(c) Submit network warfare planning inputs through JFCC NW, as stated in the JFCC NW implementing directive, to ensure a fully synchronized network warfare solution for integration by JFCC SGS into appropriate plans and subsequent orders.

(d) Participate in comprehensive integration of Information Operations (including CNO, in coordination with JFCC NW) into all aspects of USSTRATCOM and national strategic plans.

(e) Participate in the JFCC SGS JSWG/JCB staffing process and the JFCC SGS JEWG/JIB operational planning process as required.

(2) The Cruise Missile Support Activities, Atlantic and Pacific (CMSA LANT and CMSA PAC) will:

(a) Support JFCC SGS with Tomahawk Land Attack Missile (TLAM) planning and coordination expertise for deliberate, adaptive and crisis action planning.

(b) If directed, CMSAs will support execution of JFCC SGS missions.

(3) The Detachment (Det) 1, 608th Air Operations Group (AOG) will:

(a) Support JFCC SGS with conventional missile planning and coordination expertise for deliberate, adaptive and crisis action planning.

(b) If directed, Det 1, 608th AOG will support execution of JFCC SGS missions.

(4) The STRATAF will:

(a) Provide the core SGSOC to support SGS operations. Provide supporting CONOPS for Space and Global Strike operations within 30 days of the publication of this document that addresses:

1) Providing planning expertise to develop fully integrated Global Strike COAs across the spectrum of joint operations for both Phase 0, day-to-day operations and under crisis action/TSP.

2) Providing operational and tactical execution capability on short notice with the ability to operate 24/7 as defined in the Global Strike Interim Capability Operations Order and fulfill relevant execution responsibilities under USSTRATCOM OPLAN 8044.

3) Providing planning expertise and pre-identified hardware, software and training for interaction with JFCC SGS TSP collaborative tools.

4) Defining a standing relationship with JFCC SGS mission area experts that permit day-to-day coordination for development of GS mission materials to ensure a responsive capability.

5) Providing planning expertise that is proficient in the TSP process.

6) Providing execution expertise within the SGSOC to coordinate with other required external agencies.

7) Ensuring the GOC has access to worldwide force bed-down, including status of crews/operations in order to provide situational awareness for the CDR STRATCOM. Matching global strike tasking to existing prepare-to-deploy orders as appropriate.

8) Providing planning and integration support for all COAs to the supported commander to enable effects on target within desired timelines.

9) Participation in USSTRATCOM-sponsored joint exercises as appropriate in order to refine the processes for rapid planning and execution of space and global strike missions.

(b) Integrated within the SGSOC, provide a JSpOC to support JFCC SGS Global Space Coordinating Authority. Provide supporting CONOPS for Space and Global Strike operations within 30 days of the publication of this document that addresses:

1) Serving as the conduit for CDR SGS execution of Global Space Coordinating Authority.

2) Providing day-to-day C2 of all assigned and attached space forces.

3) Providing worldwide SSA including status of crews/operations.

4) Integrating operations and operational and tactical planning for all DoD space capabilities.

5) During execution, serving as the single point of contact for joint space capabilities.

6) Providing planning expertise and pre-identified hardware, software and training for interaction with USSTRATCOM's TSP collaborative tools.

7) Providing planning expertise that is proficient in the TSP process.

8) Fostering a standing relationship with JFCC SGS mission area experts that permits day-to-day coordination for development of space mission materials to ensure a responsive capability.

9) Ensuring the GOC has access to worldwide SSA including status of crews/operations.

10) Matching space tasking to existing prepare-to-deploy orders as appropriate.

11) Participation in USSTRATCOM-sponsored joint exercises as appropriate in order to refine the processes for rapid planning and execution of GS missions.

(5) MARFORSTRAT will:

(a) As directed by USSTRATCOM, participate in JFCC SGS led planning and exercise activities.

(b) Provide planning expertise on the full range of Marine capabilities to the SGSOC, as appropriate.

(6) SMDC/ARSTRAT will:

- (a) As directed by USSTRATCOM, participate in JFCC SGS led planning and exercise activities.
- (b) Provide planning expertise on the full range of Army capabilities.
- (c) Participate in SGS operations by providing execution capabilities to the GOC/SGSOC, as appropriate.

(7) Navy Service Component to USSTRATCOM will:

- (a) As directed by USSTRATCOM, participate in JFCC SGS led planning and exercise activities.
- (b) Participate in meetings of the JCB.
- (c) Support development of OPLANS, CONPLANS, FUNCPLANS, and SUPPLANS for Space and Global Strike missions.

(8) NAVNETWARCOM will:

- (a) Participate in JFCC SGS led planning and exercise activities.
- (b) Provide execution planning and C2 for Navy Space and IO capabilities to the SGSOC, as appropriate.
- (c) Collaborate with JFCC NW, JIOC, JTF GNO and other Service component IO providers as necessary to support JFCC NW's requirement to provide an integrated CNO solution to the SGSOC for incorporation/integration into full spectrum COAs and plans.

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ANNEX A to JFCC SGS CONCEPT OF OPERATIONS

REFERENCES (U)

- a. Unified Command Plan 2004, 1 Mar 05 (S)
- b. Strategic Planning Guidance, March 04 (S)
- c. Defense Planning Guidance, May 02 (S)
- d. Terms of Reference (TOR) for Implementing Change 2 to UCP 02 (S)
- e. National Security Strategy of the United States of America, Sep 02 (U)
- f. National Military Strategy of the United States of America, 1997 (U)
- g. National Military Strategy – Draft (U)
- h. Overarching U.S. STRATCOM Operational Concept, 15 Apr 03 (FOUO)
- i. Nuclear Posture Review (NPR), 8 Jan 02 (S/FRD)
- j. National Security Space Plan, DoD Executive Agent for Space, April 04 (S/NF)
- k. Forces for Unified Commands FY2004, Current (S)
- l. SecDef, Transformation Planning Guidance, April 03 (U)
- m. Quadrennial Defense Review Report, 30 Sep 01 (U)
- n. Contingency Planning Guidance, 28 Jun 02 (S)
- o. Department of Defense Information Operations Road Map, 30 Oct 2003 (S)
- p. Joint Pub 1-02, 12 Apr 01, The DOD Dictionary of Military and Associated Terms (As amended through 9 Jan 03) (U)
- q. Joint Pub 3-0, 10 Sep 01, Doctrine for Joint Operations (U)
- r. Joint Pub 3-13, 9 Oct 98, Joint Doctrine for Information Operations (IO) (U)
- s. Joint Publication 3-14, 9 Aug 02, Joint Doctrine for Space Operations (U)
- t. Joint Pub 5-00.1 13 Jan 99, Joint Doctrine for Campaign Planning (U)
- u. CJCSI 3121.01A, 15 Jan 00, Standing Rules of Engagement for United States Forces (S)
- v. CJCSI 3170.01D, 12 Mar 04, Joint Capabilities Integration and Development System (U)
- w. CJCSI 6250.01B, 28 May 04, Satellite Communications (S)
- x. CJCSI 6510.01C, 1 May 01, Information Assurance and Computer Network Defense (U)
- y. CJCSM 3122.01 Joint Operation Planning and Execution System (JOPES), Volume 1, Planning Policies and Procedures, 14 Jul 00, Change 1, 25 May 01 (U)

- z. CJCSM 3122.03A Series, 31 Dec 99, Joint Operation Planning and Execution System, Vol. II (Planning and Execution Formats and Guidance) (U)
- aa. CJCSM 3500.04C-01, Classified Supplement to the Universal Joint Task List (UJTL) (S)
- bb. DODD S-3600.1, 9 Dec 96, Information Operations (S)
- cc. DODI S-3100.15, 19 Jan 01, Space Control (S)
- dd. DODD 3020.26, Defense Continuity Program, 9 Aug 2004 (S)
- ee. CDR USSTRATCOM JFCC/Space and Global Strike (SGS) Implementing Directive, 18 Jan 05 (U)
- ff. CDR USSTRATCOM JFCC/Network Warfare (NW) Implementing Directive, 20 Jan 05 (U)
- gg. CDR USSTRATCOM JFCC/Integrated Missile Defense (IMD) Implementing Directive, 20 Jan 05 (U)
- hh. Global Strike Interim Capability OPORD, 17 Aug 04 (S)
- ii. USSTRATCOM Directive 538-1, Ballistic Missile Defense System Description And Asset Management, 23 Aug 04 (S)

Annex B to JFCC SGS CONCEPT OF OPERATIONS

INTELLIGENCE

1. **Purpose:** The primary function of the JFCC SGS J2 Intelligence Directorate, is to present a clear, accurate, predictive, and timely analysis of the situation to aid the Commander and staff in their planning and decision-making processes. The JFCC SGS J2 provides guidance and direction on all intelligence resources available to the staff. A key tenet of JFCC SGS J2 operations is to leverage existing capabilities inherent in the USSTRATCOM J2 staff and USSTRATCOM Joint Intelligence Center (STRATJIC) to ensure SGS mission support requirements are met.

2. **Responsibilities:** JFCC SGS J2 plans, implements, and supervises JFCC SGS mission-related intelligence activities and collaborates with USSTRATCOM/J2, STRATJIC, assigned or attached SGS components and other JFCC intelligence elements to support SGS missions. JFCC SGS J2 identifies intelligence requirements, capabilities, and shortfalls specific to JFCC SGS missions and coordinates with USSTRATCOM J2 for resolution. Additional responsibilities are listed below:

- a. Submits JFCC SGS collection, processing and exploitation, production, dissemination and intelligence fusion requirements and priorities to USSTRATCOM/J2 and/or the STRATJIC.
- b. Coordinates with the USSTRATCOM J2, STRATJIC, and the SGS J3/J5 staff to support development of global situational awareness and predictive battlespace awareness for mission analysis and COA development.
- c. Ensures intelligence knowledge is shared and understood by participants and decision makers associated with JFCC SGS missions.
- d. Collaborates with USSTRATCOM/J2 and other JFCCs to support development of an integrated HQ USSTRATCOM ISR plan to reduce redundant intelligence efforts, ensure efficient utilization of high demand/low density national and theater intelligence assets, and assist in integrated intelligence planning at all levels.
- e. Provide selected staff to augment intelligence capabilities within the SGS OC for adaptive/crises action/time sensitive planning

3. **Organization:** The JFCC SGS J2 is designed to make maximum use of the collocated STRATJIC and associated Global Assessments Center, while providing CDR JFCC SGS effective organic intelligence support for planning and operations. **Figure B-1** represents the JFCC SGS J2 organization.

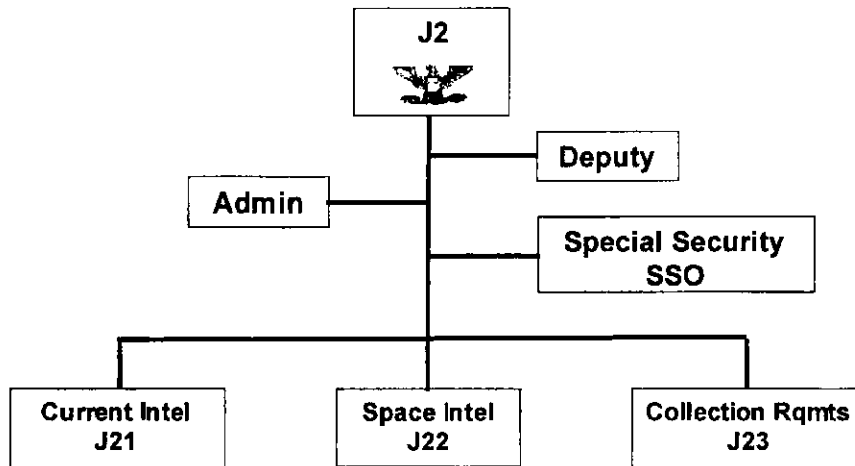


Figure B-1: JFCC SGS J2 Organizational Structure

a. **Special Security Office (SSO):** Provides full spectrum SSO services for JFCC SGS. Serves as the primary interface to SSO USSTRATCOM for all SCI-related administrative functions (e.g., travel-related SSO clearance information). Performs related SSO archives maintenance, SCI vault access certification and is the Program Manager for the JFCC SGS security program.

b. **Current Intel (JFCC SGS J21):** Develops and maintains the JFCC SGS threat assessment for battlespace situational awareness and predictive analysis support to the CDR JFCC SGS, SGS staff, and assigned/attached forces. Draws on the full intelligence and production capabilities of USSTRATCOM J2, the STRATJIC, and the Intelligence Community, tailoring finished products as required to meet mission needs or requesting STRATJIC support to meet specific/unique JFCC SGS mission requirements.

c. **Space Intel (JFCC SGS J22):** Engages the STRATJIC and through USSTRATCOM/J2, the Intelligence Community, to articulate SGS requirements for red/gray Space Order of Battle maintenance, Satellite Overflight Warning, Regional Space Products, Space Intelligence Preparation of the Environment, and Space Object/Event Identification. Tailors Space Intelligence Assessments and/or requests component intelligence elements or STRATJIC assistance to support the SGS Commander, SGS staff, and assigned forces. Serves as the primary intelligence point of contact for SGS space components.

d. **Collection Requirements (JFCC SGS J23):** Articulates and monitors the status of SGS collection requirements. Develops and coordinates synchronized collection plans in support of global kinetic and non-kinetic targeting and space intelligence. Serve as SGS Request For Information (RFI) manager, Production Manager, and Dissemination Manager.

4. **Tasks/Functions:** JFCC SGS J2 articulates requirements and advocates for appropriate application and tasking of intelligence resources to support assigned missions, to include indications and warning, all source analysis and fusion, support to operational planning and

integration and target materials production to support approved COAs for kinetic and non-kinetic strike. The JFCC SGS J2 tracks, monitors and assesses the current intelligence situation and ensures the appropriate information is passed to the JFCC SGS staff and supporting components including the Joint Information Operations Center (JIOC) and other combatant commands, as required. When intelligence resources are attached or assigned, the JFCC SGS J2 staff works with USSTRATCOM/J2 to integrate JFCC SGS capabilities into intelligence plans and operations to ensure full spectrum support including air breathing platforms and future space-based systems (e.g. Space Based Radar and Space Based Infrared Systems). JFCC SGS J2 staff coordinates mission related intelligence activities and participates in exercises as resources allow. Specific JFCC SGS tasks and functions include, but are not limited to:

- a. Represent JFCC SGS in all intelligence matters.
- b. Provide intelligence support to deliberate and TSP, including Annex B development. Coordinate with the USSTRATCOM J2 and STRATJIC for additional support as needed.
- c. Articulate JFCC SGS intelligence concept of operations, identify external support requirements to USSTRATCOM/J2 and identify intelligence capabilities required to support the SGS mission.
- d. Articulate and set priorities for intelligence production supporting the JFCC SGS mission and monitor intelligence production related to:
 - (1) Time sensitive targeting of relocatable targets and fixed targets.
 - (2) Space Order of Battle; Satellite Overflight Warning; Space Object/Event Identification.
 - (3) Regional Space Products and Space Intelligence Preparation of the Environment.
 - (4) Support of electronic warfare, psychological operations, military deception, and operations security.
- e. Prepare tailored assessments and briefings for CDR JFCC SGS and staff.
- f. Review and coordinate intelligence for mission plans and staff actions.
- g. Coordinate intelligence support for assigned/attached forces.
- h. Develop Essential Elements of Information (EEI), Priority Intelligence Requirements (PIR), the intelligence input to the Commanders Critical Information Requirements (CCIR), in collaboration with the JFCC SGS staff.
- i. Manage intelligence billets within JFCC SGS.
- j. Provide POC for facility SCIF areas and security programs.
- k. In collaboration with JFCC SGS J3/J5, identify measures for mission related combat assessment and ensure requirements are satisfied.
- l. Provide subject matter expertise to the USSTRATCOM/ J8 Mission Capability Teams as required and available.

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ANNEX C to JFCC SGS CONCEPT OF OPERATIONS
OPERATIONS

1. Purpose. The purpose of this annex is to provide details on operations procedures and staff organizations established to accomplish the planning, integrating, coordinating, and executing of JFCC SGS assigned missions.

2. General. Attached appendices provide a list of published plans and key resource documents that have immediate relevance to the SGS mission. The following two appendices present an in-depth overview of the JFCC SGS J3/4 Operations/Logistical directorate and the JFCC SGS J5, Plans and Integration directorates. The key documents presented in the first appendix are not deemed to be exclusive and may be supplemented as conditions warrant.

Appendices:

1. Authoritative Procedural Guidance
2. JFCC SGS Operations Center
3. JFCC SGS J3/4 Operations and Logistics Directorate
4. JFCC SGS J5 Plans and Integration Directorate

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Appendix 1 to Annex C to JFCC SGS CONCEPT OF OPERATIONS

AUTHORITATIVE PROCEDURAL GUIDANCE

1. The following are key resource documents that outline essential operations procedures and CONOPS for Space and Global Strike.

- a. OPLAN 8044-98 <https://www.stratcom.smil.mil/st/st14/CommandPlans.htm>.
- b. Global Strike Interim Capabilities (GS IC) OPORD, dated 17 Aug 04
- c. Joint Functional Component Command for Space and Global Strike (JFCC SGS) Implementing Directive, dated 18 Jan 05
- d. Joint Functional Component Command for Integrated Missile Defense (JFCC IMD) Implementing Directive, dated 21 Jan 05
- e. Joint Functional Component Command for Intelligence, Surveillance and Reconnaissance (JFCC ISR) Implementing Directive, dated 24 Jan 05
- f. Joint Functional Component Command for Network Warfare (JFCC NW) Implementing Directive, dated 24 Jan 05
- g. JFCC SGS Tasks and Functions (S/NF), dated 10 Jan 05
- h. CJCS Global Strike ALERTORD, dated 30 Jun 04

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Appendix 2 to Annex C to JFCC SGS CONCEPT OF OPERATIONS

JFCC SGS OPERATIONS CENTER (SGSOC)

1. **Purpose:** The SGSOC is an operational-level focused operations center supporting the CDR JFCC SGS. The SGSOC is made up of a minimum of three distributed facilities collaboratively and virtually linked; the round-the-clock SGS Global Integration Cell at Offutt AFB, the SGS Air Operations Center (AOC) at Barksdale AFB, and the round-the-clock SGS Joint Space Operations Center (JSpOC) at Vandenberg AFB.

2. **Responsibilities:** The SGSOC supports the CDR JFCC SGS by providing 24/7 operations watch and execution capability with the capacity to rapidly expand to meet crisis planning and execution requirements. The SGSOC informs CDR USSTRATCOM's Global Operations Center in order to assist maintenance of CDR USSTRATCOM's situational awareness (SA) and maintains links with all mission partners to facilitate collaborative planning and execution as directed.

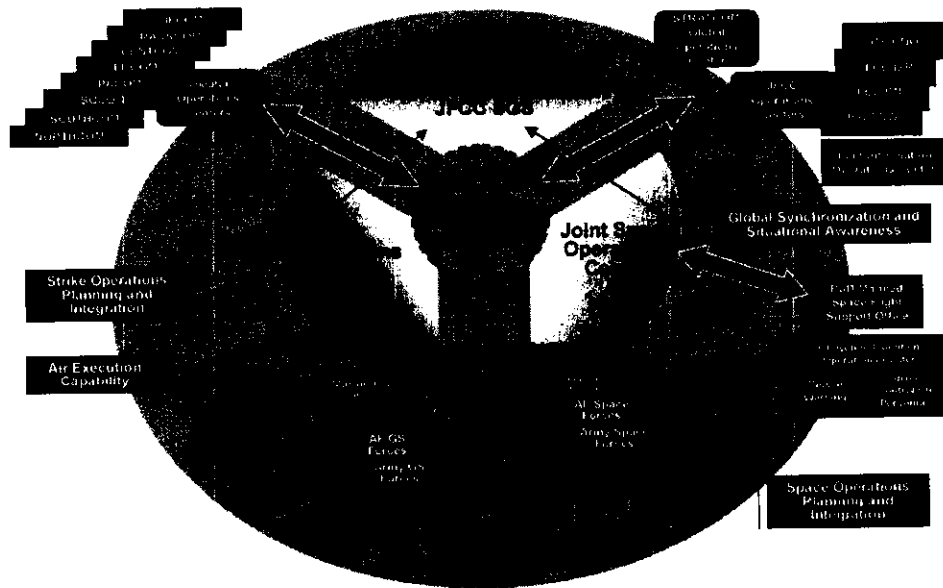


Figure C-2-1: SGSOC Relationships

3. **Organization:** The DCDR JFCC SGS serves as the Director, SGSOC. The SGS J3 is dual-hatted as the SGSOC Deputy Director. The SGSOC Director oversees, integrates, and directs the efforts of the AOC led by the AOC Director, the JSpOC led by the JSpOC Director, and the Global Integration Cell led by the GIC Director. The Director, SGSOC will designate lead and supporting relationships among the components of the SGSOC based upon mission requirements.

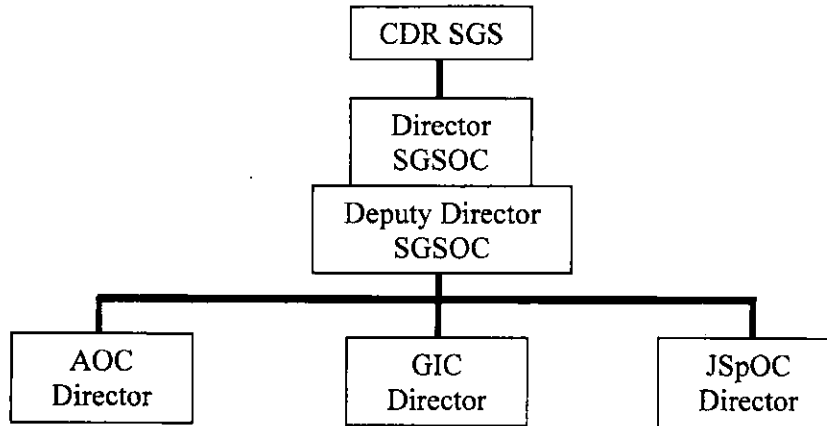


Figure C-2-2: SGSOC

a. The SGSOC will receive information operations (IO) support from JIOC, JTF-GNO, JFCC NW, and GIC IO, JSpOC, and AOC Information Warfare flights.

b. All three components of the SGSOC (SGS AOC, SGS GIC, JSpOC) are organized into divisions as appropriate to their tasks; Strategy, Combat Plans, Combat Operations, Space Forces, Intelligence, Surveillance, Reconnaissance (ISR), and Mobility. Specialty teams, as required, interface across the divisions providing weapons system, IO, legal, weather, Special Operations, and C4 expertise. Agile Combat Support across the divisions includes collaborative tools, administration and facility support.

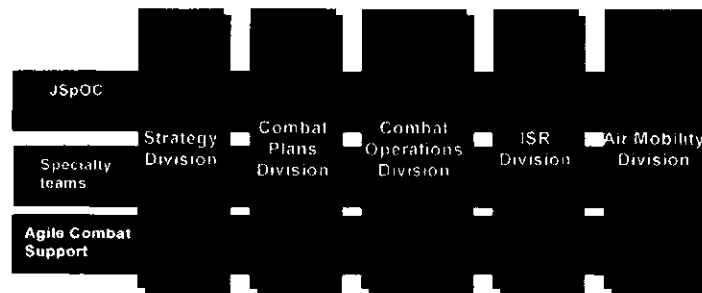


Figure C-2-3: SGSOC Divisions

c. Strategy Division develops, refines, disseminates, and assesses the progress of the JFCC’s operations strategy. It is comprised of the GIC Strategy Division, the AOC Strategy Division and the JSpOC Strategy Division.

d. Combat Plans Division is responsible for the near-term (inside 48-hour) planning function. It plans for the application of integrated kinetic and non-kinetic strike, space and information operations resources based on guidance received from the commander. It is comprised of the GIC Combat Plans Division, the AOC Combat Plans Division and the JSpOC Combat Plans Division.

e. Combat Operations Division executes an integrated tasking order. Combat Operations analyzes and prioritizes current operations and makes real-time recommendations to the CDR SGS to redirect assets. It is comprised of the GIC Combat Operations Division, the AOC Combat Operations Division and the JSpOC Combat Operations Division (Space Coordinating Authority).

f. Mobility Division plans, coordinates, tasks, and executes the mobility mission to provide for integration and support for all ground, sea and airlift, tanker and medical lift support. It is comprised of the GIC Mobility Division and the AOC Mobility Division.

g. Intelligence, Surveillance, and Reconnaissance Division (ISRD) provides predictive and actionable intelligence, ISR operations, and targeting integral to the operations tasking. The ISRD performs integration of intelligence preparation of the battlespace, target development, ISR strategy, planning and employment and assessment. The ISRD is made up of the GIC ISRD (link to JFCC ISR), the AOC ISRD and the JSpOC ISRD.

h. Space Forces support is provided by the JSpOC.

i. Specialty Teams:

- (1) Missile Defense support will be provided through the GIC (link to JFCC IMD) and the AOC Combat Operations Division Area Air Defense (Missile Defense) team.
- (2) Special Operations interface will be provided by Special Operations liaison as required.
- (3) The GIC METOC, AOC Weather team and JSpOC weather team will provide weather support to SGSOC with assistance from Air Force Weather Agency.
- (4) HQ USSTRATCOM and AOC legal team will provide Law of Armed Conflict and Rules of Engagement support for assigned missions.

j. Global Integration Cell (GIC): The GIC stands 24/7 operations watch and is made up of, and augmented as required by personnel drawn from the SGS and HQ USSTRATCOM staffs. The GIC is designed to rapidly expand to provide additional expertise round-the-clock during crisis operations. The GIC is the primary SGSOC link to the USSTRATCOM GOC providing support to the GOC watch mission and the point of entry for operational tasking to SGS. The GIC focuses on support for TSP. The GIC Director oversees and directs the efforts of the GIC and is dual-hatted as the USSTRATCOM GOC Battle Watch Commander.

k. 8 AF Air Operations Center (AOC): The AOC stands up as necessary to support the CDR SGS. The Air Operations Center will integrate its organization into the SGSOC and its organizational structure. The SGS AOC provides integral support to TSP, conventional OPLAN execution, and SA during operations.

l. Joint Space Operations Center (JSpOC): The JSpOC operates 24/7. The JSpOC will adapt existing processes and, where necessary develop new processes to accomplish those tasks defined in the base document of this CONOPS. JSpOC provides day-to-day space operations

support and space situational awareness. The JSpOC will develop strategy in support of global space missions and development of applicable portions of the Joint Space Operations Plan, develop detailed operational level plans in support of global and theater space missions, support global space support, space control and space force enhancement missions. They will maintain the Joint Single Integrated Space Picture (SISP) through joint situational awareness, monitoring of space forces/status and operational space intelligence monitoring to support global space missions. Additionally, the JSpOC will apply intelligence from USSTRATCOM and the intelligence community on near-real time ISR operations to provide direct input to Space Intelligence Preparation of the Environment (SIPE) in support of the space mission areas (space support, space control, space force enhancement).

Appendix 3 to Annex C to JFCC SGS CONCEPT OF OPERATIONS

OPERATIONS AND LOGISTICS

1. **Purpose:** The JFCC SGS J3/4 Operations and Logistics Directorate provides policy and planning for all space and non-nuclear global strike assets in support of assigned missions. Additionally, through the GOC, they will maintain continuous global situational awareness of space and global events and day-to-day management of nuclear forces. Supports the coordination of operational logistical requirements of USSTRATCOM supported plans, to include operational logistic support to nuclear forces. Integrates capabilities, via the GOC, to support HQ USSTRATCOM responsibilities for nuclear force C2 and CDR USSTRATCOM nuclear force execution.
2. **Responsibilities:** JFCC SGS J3/4 is responsible for establishing and maintaining the operational environment through which CDR USSTRATCOM and CDR JFCC SGS exercises C2 of selected global strike missions when directed to do so by the President or the Secretary of Defense. The operational environment must be capable of employing assigned and attached forces, providing support to other combatant commanders, agencies, and supporting the DoD Manager for Manned Space Flight Support Operations. Additionally, JFCC SGS J3/4 must develop and formalize relationships with various communities to accomplish stated space objectives and combine space data or information into a single repository or database to minimize stovepiped data streams that inhibit effective collaboration and integration.
 - a. JFCC SGS J3/4 is also responsible for the day-to-day operation of the Global Operations Center (GOC), providing global mission-area situational awareness to the commander.
 - b. JFCC SGS J3/4 establishes the SGS battle rhythm by using the Joint Integration Board (JIB) to analyze the daily global situation in order to prepare fully integrated space and global strike (to include both kinetic and non-kinetic) options for CDR USSTRATCOM and other combatant commanders.
3. **Organization:** JFCC SGS J3/4 is organized based on mission requirements, the Space and Global Strike concept of operations, Commander's guidance, and staff expertise as depicted in **Figure C-3-1**.
 - a. Current Ops Division (JFCC SGS J31): Consists of day-to-day GOC personnel responsible for maintaining situational awareness for the Commander and staff. JFCC SGS J31 ensures 24/7 flow of information, provides situational updates, and transmits HQ USSTRATCOM orders (e.g. DoD space mission FRAGOs) and taskings to components. The division also provides atmospheric, oceanic, and space environment planning and operational support for JFCC SGS and HQ USSTRATCOM fixed and mobile command center elements through the GOC. Additionally, this division is responsible for providing the ability to link the status of critical infrastructure and assets to USSTRATCOM operational capability; analyze the potential consequences of global events; and assess potential impacts to critical infrastructure/assets supporting USSTRATCOM missions; and report results IAW established procedures. Further detail on JFCC SGS J31 can be found in para 4. Tasks/Functions.

(1) Global Operations Center: Provides a 24/7 focal point for JFCC and HQ USSTRATCOM situational awareness and Nuclear command and control. The Battle Watch Commander, a battle watch certified O6, will be dual-hatted as the NC2 chief while on duty.

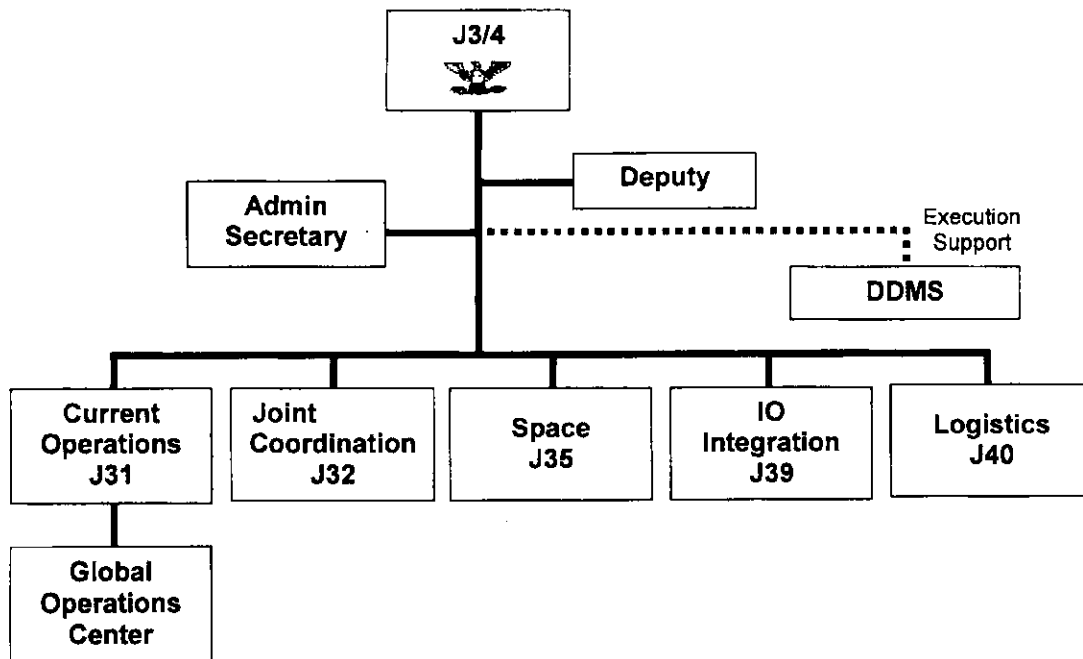


Figure C-3-1: JFCC SGS J3/4 Organizational Structure

b. Joint Coordination Division (JFCC SGS J32): Consists of a team of one officer, one warrant officer, two enlisted Effects Based Operations (EBO) MAEs, and one enlisted Administrative Specialist who are responsible for preparing documentation for, coordinating, and conducting the JSWG meeting and the JCB. Upon completion of the JCB, the JCD publishes the results and coordinates preparation and publication of FRAGOs and directives, as needed. J32 also supplies manpower to the JEWG under the SGSOC.

c. Space Division (JFCC SGS J35): Responsible for staffing policy, planning and operations issues on all aspects of assigned Joint Space Operations. Serves as the operations lead and subject matter experts for current space and warning systems (both terrestrial and space-based), with the exception of National Missile Defense, Information Operations, Communications Spacecraft, and manned space flight support. Coordinates with other divisions on satellite communications issues to ensure integrated application of space systems and support to the USSTRATCOM DDMS mission. DDMS provides direct support to JFCC SGS J3/4 for manned spaceflight support issues. Additionally, serves as a member of the JCB. Works in concert with the JSpOC.

d. IO Integration Division (JFCC SGS J39): Responsible for working issues resulting from the planning, coordinating and integrating of IO into space and global strike operations. Liaises with JIOC and Service components IO staff activities. Works with other combatant commanders, JFCCs and Service components to resolve issues when space control negotiation operations, IO planning, targeting, and STO capabilities are being provided by the SGSOC.

This division supports JFCC SGS J31 and JFCC SGS J32 for IO integration issues, JFCC SGS J5 for elements of deliberate planning, and JFCC SGS J7 for training and exercise requirements. Coordinates with combatant command staffs to resolve issues and facilitate collaborative environment when space control negation operations planning and targeting support is being provided by the SGSOC as directed.

e. Logistics Division (JFCC SGS J40): Monitors day-to-day logistics capability to support forces and provide logistics expertise during time-sensitive, adaptive, and deliberate planning efforts. JFCC SGS J40, working in close concert with HQ USSTRATCOM J4, will plan, coordinate, direct, and execute operational joint logistics functions for mobility, readiness and sustainment of forces in support of assigned missions. Serves as a member of the JCB.

(1) Provides near real-time status of weapons, aircraft and space sustainment for global situational awareness.

(2) Augments with HQ USSTRATCOM J4 staff to provide around the clock support of time sensitive or short notice planning support for weapons, aircraft and space sustainment issues through the logistics readiness center.

(3) As requested by HQ USSTRATCOM or JFCC SGS J5, provides logistics inputs to deliberate planning including Annex D development.

(4) Coordinates with HQ USSTRATCOM J4 on long-term weapons, aircraft, and space sustainment issues.

(5) Provides one logistics mission area expert (MAE), who will provide and maintain daily logistics sustainability of weapon systems assigned and apportioned for planning, and assigned space ground systems status.

(6) Works in concert with HQ USSTRATCOM J4 in the logistics readiness cell (LRC) during crisis and exercises.

4. Tasks/Functions: The JFCC SGS J3/4 provisions and staffs the USSTRATCOM Global Operations Center to:

a. Execute USSTRATCOM Nuclear Command and Control.

b. Provide current integrated global Common Operating Picture (COP) for full situational awareness and visibility of all currently assigned/attached and potential USSTRATCOM assets. Coordinates regularly with STRATCOM components, combatant commands, assigned and/or attached Service component elements, and other agencies as appropriate to ensure the COP is relevant and complete. This information will be provided to CDR USSTRATCOM via SKIweb or other designated tools.

c. Provides continuous coordination with other JFCC operation centers and other combatant commands.

d. Report indicators/information that meets criteria of CCIR, PIR, and EEs to the CDR STRATCOM.

e. Issues appropriate orders to support day-to-day and crisis activities and tasks associated with assigned missions in accordance with JOPES.

- f. Executes validated TPFDDs via HQ USSTRATCOM J4, in accordance with JOPES. Monitors force flow supporting STRATCOM OPLANs and STRATCOM support of other combatant command OPLANs.
- g. Reports maintenance and logistic status of operating forces including significant shortfalls to HQ USSTRATCOM.
- h. Determines facility physical, hardware, and software requirements to support operations center activities.
- i. Serves as liaison with the METOC elements of the Joint Staff, unified commands, service staffs and federal civil agencies.
- j. Provides Consequence of Execution (COE) analysis support for pre-OPLAN 8044 activities.
- k. Provides Consequence Management (CM) for trans- and post-OPLAN 8044 activities.
- l. When directed, leads an augmented GOC in direct support of the USSTRATCOM HQ Battlestaff.

Appendix 4 to Annex C to JFCC SGS CONCEPT OF OPERATIONS

PLANS AND INTEGRATION

1. **Purpose:** The JFCC SGS J5 Plans and Integration Directorate provides planning products and planning support to USSTRATCOM and other component planning efforts for national and theater level objectives. CDR USSTRATCOM has overall lead and approval authority for deliberate planning. USSTRATCOM Plans Division (J53) will, in collaboration with the JFCCs, provide the strategic guidance and strategic portions of the base plan to the CDR JFCC SGS, who will in-turn develop the appropriate operational/tactical inputs to the base plan and annexes. JFCC SGS J5 provides and organizes cross-functional staff expertise to develop, maintain and update deliberate plans in collaboration with others as required. JFCC SGS J5 integrates SGS, and other JFCCs plans and annexes, into other combatant command plans and supports as directed. JFCC SGS J5 also provides members to augment the SGSOC for adaptive planning/crisis action planning/time sensitive planning.

2. **Responsibilities:** At CDR USSTRATCOM direction, develops and maintains assigned portions of OPLANS/CONPLANS and provides specialized target planning and support for CDR USSTRATCOM and other combatant commanders. JFCC SGS J5 supports USSTRATCOM J8 advocacy requirements by providing Mission Area Experts, as required.

3. **Organization:** The JFCC SGS J5 is organized with a directorate structure consisting of a director and seven divisions. The divisions include: Plans, Target Selection, Weaponing, Applications, Metrics & Assessments, Plans Support, and Plans Integration. The CMSAs, 625 MOF, JIOC, and Det 1, 608 AOG also support the directorate. **Figure C-4-1** represents the JFCC SGS J5 organization.

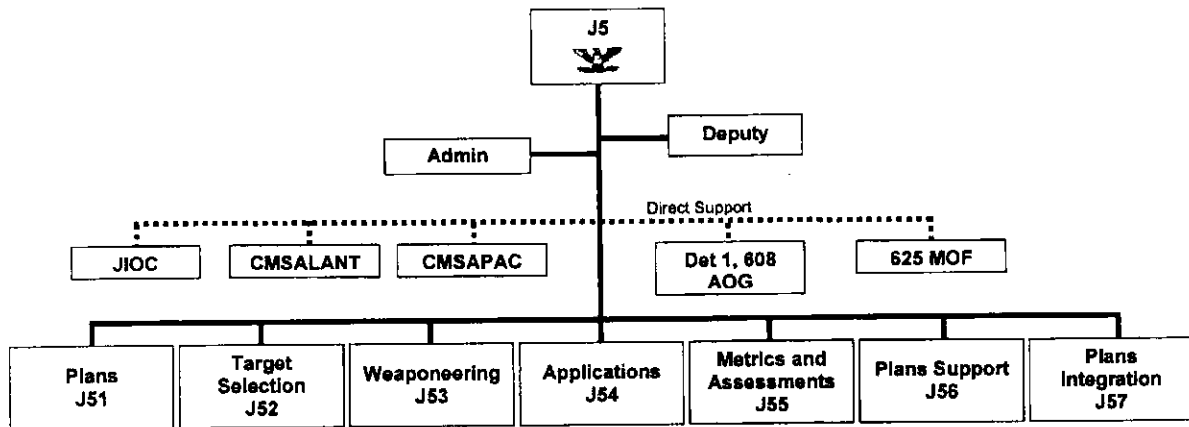


Figure C-4-1: JFCC SGS J5 Organizational Structure

a. Plans Division (JFCC SGS J51): Manages the Revision production and maintenance process ensuring selected targets are matched against USSTRATCOM guidance and are captured within the Enterprise Database. The division also manages the Division Crisis

Teams (fixed and mobile) and runs JFCC SGS J5 training efforts during exercises to include after action reviews. The division attends USSTRATCOM exercise and training conferences and liaises with JFCC SGS J7 for exercise support and development.

b. Target Selection Division (JFCC SGS J52): Develops operational and tactical targeting solutions for the OPLAN 8044 Revision process. Target nominations may be solicited from the STRATJIC, other JFCCs, Service components, and other combatant commanders as appropriate.

c. Weaponeeing Division (JFCC SGS J53): Produces and maintains Global Strike Support Documents (GSSDs) to the SGSOC in collaboration with other combatant commands, JFCCs, and service components. Produces full-spectrum target materials support to SGSOC and other STRATCOM JFCCs as required, including kinetic and non-kinetic target materials. Utilizes precision mensurated imagery, related graphics products, tailored Geo-spatial Information & Services (GI&S), and Hard and Deeply Buried Target (HDBT) analysis to support for weaponeeing solutions for GS. The division also coordinates target related activities for OPLANS, CONPLANS, FUNCPLANS, and SUPPLANS and ensures the targeting database satisfies targeting requirements within the targeting cycle for all space and global strike operations. Finally this division supports SGSOC to resolve targeting issues in coordination with STRATJIC and DIA/J2-T.

d. Applications Division (JFCC SGS J54): Conducts level 4 OPLAN 8044 Revision process and GS planning and integration, producing and maintaining the 8044 Revision and GS targeting.

e. Metrics and Assessments Division (JFCC SGS J55): Provides tactics and threat review for level 3 and 4 planning supporting kinetic and non-kinetic effects and analyzes OPLAN 8044. Supports SGSOC with assessments of crisis action COAs through the JEWG. Supports and maintains operational models (e.g., Extended Air Defense Simulations (EADSIM)) and provides consequence of execution support.

f. Plans Support Division (JFCC SGS J56): Provides and supports net-centric planning and analysis tools for the Command, other components and HQ USSTRATCOM. JFCC SGS J56 provides system management of Integrated Strategic Planning Analysis Network (ISPAN) including collection/management of needed capabilities and information technology problem management. JFCC SGS J56 provides ISPAN infrastructure management, new technology experimentation, and produces/maintains the ISPAN Enterprise Data Base (EDB). JFCC SGS J56 coordinates and collaborates with USSTRATCOM on ISPAN future capabilities advocacy. JFCC SGS J56 provides ISPAN tool testing, training, and implementation. Additionally, provides ISPAN production support in the loading and moving of critical data.

g. Plans Integration Division (JFCC SGS J57): Supports specialized Space, STO, GS deliberate/adaptive planning, and supports JFCC SGSOC adaptive, crisis action, and time sensitive planning. JFCC SGS J57 also coordinates and reviews Theater Annexes for Space (N) and STO (S) and supports JFCC SGS J3/4 crisis action planning in conjunction with other internal and external mission partners across the full spectrum of USSTRATCOM missions.

h. Direct supporting units (CMSAs, 625 MOF and Det 1, 608 AOG): Perform TLAM mission planning, ICBM target analysis, and CALCM targeting respectively. 625 MOF provides its support through a memorandum of understanding between USSTRATCOM and

AFSPC. These organizations also support adaptive/crisis planning when JFCC SGS J5 augments the SGSOC.

4. Tasks/Functions: The JFCC SGS J5 performs the following key tasks/functions:
- a. Conducts GS, Space, and STO deliberate planning in accordance with USSTRATCOM direction (e.g. OPLANS, CONPLANS, FUNCPLANS and SUPPLANS).
 - b. Assists USSTRATCOM with plan approval through the Chairman of the Joint Chiefs of Staff and the Secretary of Defense.
 - c. Provides targeting support to USSTRATCOM and other combatant commands as requested.
 - d. Assists the JSpOC in developing CONOPS for Space Operations/Space Support Activity and Missile Warning operations.
 - e. Supports JFCC SGS J39 in providing oversight and integration for development of Joint OPSEC & MILDEC CONPLANS and combatant commands EW planning through the JIOC.
 - f. Collaborates with SOCOM Joint PSYOP Support Team for PSYOP deliberate planning.
 - g. Integrates CNO deliberate planning in coordination with JFCC Network Warfare (NW). JFCC NW will integrate all CNO inputs from JTF GNO, Service components and JIOC for presentation to JFCC SGS and will provide support to SGSOC when required for integrated operations planning and execution.
 - h. Maintains current revision to the nation's strategic war plan; plan and implement future revisions.
 - i. Coordinates, manages, and conducts JFCC SGS J5 training efforts, exercise planning, and after action review with JFCC SGS J7.
 - j. Provides IT planning and analysis capabilities, collects/prioritizes IT requirements, and manages the ISPAN program.
 - k. Identifies to JFCC SGS J2 ISR requirements to support planning and mission analysis of OPLAN 8044.
 - l. Assists USSTRATCOM J5 in coordinating with combatant commanders for deliberate/adaptive planning requirements, to include targeting and execution support.
 - m. Provides Phase 0 planning products for assigned missions and integrated Phase 4 execution support through JFCC SGS J3/4. Products address the full range of Command capabilities and provide a path to return to Phase 0, day-to-day end state. This includes any support requested by the POLAD concerning Strategic Communications.
 - n. Sustains required manning to support USSTRATCOM's C2, execution, and planning elements (fixed and mobile).
 - o. Coordinates as required with other JFCCs, joint and Service components, combatant commanders, and DOD agencies; this includes MODUK, CTFs, and operational units.
 - p. Coordinates space operations efforts with national space stakeholders when required.

5. Deliverables:

- a. The 8044 Revision plan and required updates in coordination with the Joint Staff, OSD, and HQ USSTRATCOM.
- b. Data updates to the Chairman of the Joint Chiefs of Staff Nuclear Decision Handbook for the President, in coordination with HQ USSTRATCOM J38.
- c. GS target materials including Global Strike Support Documents (GSSDs), GS targeting databases, and target folders across full spectrum of options based on politico-military environment. Develops intelligence indicators in coordination with JFCC SGS J2 and JFCC SGS J3/4 to be monitored by the GOC to enhance crisis action responsibilities.
- d. The National Target Base, repository for all global strike targets.
- e. Recommended target lists for OPLAN 8044, to HQ USSTRATCOM Joint Targeting Coordination Board for approval as directed.
- f. JFCC SGS integrated input to USSTRATCOM's Strategic Support Plan.
- g. Integrated planning annexes and materials, as required.

ANNEX E to JFCC SGS CONCEPT OF OPERATIONS

MANPOWER AND PERSONNEL

1. Purpose: The JFCC SGS J1, Manpower and Personnel directorate is advises the CDR JFCC SGS on administration and personnel support to those individuals assigned to the JFCC SGS staff. The JFCC SGS J1 is the primary interface with HQ USSTRATCOM J1. Finally, JFCC SGS J1 develops and provides JFCC specific plans, policies, and services for joint manpower, personnel, and administration in support of the mission including serving as the personnel representative to the JCB.

2. Responsibilities:

a. JFCC SGS J1 acts as the conduit for managing JFCC SGS specific manpower, organizational, and readiness issues in direct support of all joint military and civilian positions to HQ USSTRATCOM J1. Additionally, JFCC SGS J1 develops and defends manpower requirements to justify military and civilian manpower required to achieve the mission. JFCC SGS J1 ensures manning requirements are based on the mission, concept of operations, commander guidance, and the staff expertise needed to support planning and execution.

b. JFCC SGS J1 formulates and staffs personnel program policies, advises JFCC SGS senior leadership on all personnel program issues, and provides the primary interface to HQ USSTRATCOM J1.

3. Organization: JFCC SGS J1 is organized based on mission requirements, the space and global strike concept of operations, JFCC SGS guidance, and staff expertise. JFCC SGS J1 will leverage existing HQ USSTRATCOM J1 centralized functions to include service element support, while providing personnel issue visibility to the commander.

4. Tasks/Functions: The personnel specialist will coordinate with USSTRATCOM J1 and JFCC directorates to ensure the following key tasks/functions are accomplished for all JFCC personnel:

- a. Administer personnel programs to include the Personnel Reliability Program.
- b. Participate in planning, mission analysis and COA development.
- c. Compile staff requirements for personnel augmentation required.
- d. Advise the Commander on personnel replacement and augmentation.
- e. Provide performance report, fitness report, awards, and decorations monitoring and coordinates with USSTRATCOM J1 for required processing.
- f. Provide leadership on all personnel program issues.
- g. Ensure components are kept informed of personnel actions.
- h. Advise JFCC and staff on the Joint Management Document and personnel replacements' status.
- i. Review/validate organizational and manpower requirements.

j. Ensure attached and assigned service capability manning requirements are appropriately addressed.

ANNEX F to JFCC SGS CONCEPT OF OPERATIONS

STAFF SUPPORT

1. Staff Support: JFCC SGS Special Staff includes key staff support elements that leverage USSTRATCOM special staff functions as outlined below and are enabled by collocating the command at Offutt. JFCC SGS Special Staff includes Public Affairs Office, Protocol, Command Action Group, and a Command Surgeon. The Staff Judge Advocate will not be assigned to the JFCC, but will provide support as described below.

2. Public Affairs Office (PAO):

a. Purpose: The JFCC SGS PAO is a member of the special staff and supports the JFCC SGS by providing the full spectrum of public affairs services. The office consists of two public affairs officers. The PAO will provide timely, accurate, and relevant information to internal and external publics, locally, nationally and globally through print and electronic media and supports contingency and wartime efforts by providing media advice and PA planning to the commander and senior staff.

b. Responsibilities: The commander, joint task force (CJTF) PA program includes responsibilities for conducting media relations, internal or command information, PA planning, and community relations. Each of these functions has a part to play in a joint operation, though their roles will vary with each mission. Additionally, serves on the JCB.

c. Tasks/Functions:

(1) Media relations: Identifies and analyzes key issues, develops messages, conducts media training, targets specific audiences, recommends methods of delivery, and measures and evaluates results. Works daily with local, national and international media to cover Command operations. Develops media strategies to keep publics apprised of vital policies and activities.

(2) Internal Information: Conducts an active internal information program to ensure the internal (JFCC SGS members, civilians and contractor) audiences are kept aware of Command mission areas and programs. Disseminates news items via internal DoD, USAF, Army and Navy publications.

(3) Coordinates PA's deliberate and crisis action planning and incorporates PA annexes into Command operational plans. Coordinates, synchronizes and integrates with IO planners for objectives, themes, and messages.

(4) Community Relations: Develops, plans, coordinates and implements community relations events that foster increased cooperation between JFCC SGS and civilian opinion leaders on local, national, and international levels.

3. Protocol:

a. Purpose: Provide protocol services and events management in support of the commander and JFCC SGS staff. Provide timely, useful guidance on protocol matters to JFCC directorates. Consists of two protocol officers and is designed to leverage HQ USSTRATCOM protocol office.

b. Responsibilities:

- (1) Interface with HQ USSTRATCOM protocol to ensure visits/events are appropriately coordinated.
- (2) Maintain visibility into HQ USSTRATCOM events requiring JFCC participation.
- (3) Provide full-spectrum protocol services to the commander.

c. Tasks/Functions:

- (1) Maintain command protocol calendar.
- (2) Support command visits.
- (3) Support command senior officer trips.

4. Commander's Action Group:

a. Purpose: Provide the commander a single source for briefing support, command staffing, and command positions.

b. Responsibilities:

- (1) Provide clearinghouse and standardization for all briefings leaving the command.
- (2) Maintain command standards for the staff process.
- (3) Builds and maintains the command brief.

c. Organization: Consists of three officers, one GS employee for continuity, and contract support staff.

d. Tasks/Functions:

- (1) Building briefings and speeches for the commander and deputy commander.
- (2) Oversee the command calendar and coordinate with protocol and commander's secretary as necessary.
- (3) Oversee special projects.
- (4) Manages suspenses and tasks for the COS.
- (5) GO/FO travel support--bring slides and expertise.
- (6) Special visitor support in coordination with USSTRATCOM Protocol.
- (7) Maintains and present Command Brief/library of "canned" briefs.
- (8) Keeper of the "staff" process--help JFCC directors and Action Officers (AOs).
- (9) Provide assistance to directorates on briefings/products going outside the JFCC (formatting, editing, vetting as necessary).

(10) Build and maintain AO training through JFCC SGS J7.

(11) JFCC conference leads--prepare books, etc.

(12) Oversee command website content.

5. Command Surgeon:

a. Purpose: The JFCC SGS Command Surgeon will provide health service and support planning and advice to all aspects of the Space and Global Strike missions. This individual will leverage expertise from the USSTRATCOM Command Surgeon and staff.

b. Responsibilities: Provide advice to CDR JFCC SGS on all issues affecting health and readiness (Force Health Protection) of assigned or attached forces. Additionally, serves on the JCB.

6. Staff Judge Advocate (SJA):

a. Purpose: The JFCC SGS will receive legal support from the USSTRATCOM SJA and his staff. The USSTRATCOM SJA will provide the full spectrum of legal services to the JFCC.

b. Responsibilities:

(1) Provide legal advice to the JFCC.

(2) Serve as a single point of contact, with component SJAs, for legal matters affecting forces under operational control of JFCC SGS.

(3) Ensure all plans, rules of engagement (ROE), policies, and directives are consistent with the Department of Defense (DOD) law of armed conflict (law of war) program and domestic and international law.

(4) Monitor foreign claims activities resulting from JFCC operations by coordinating with the relevant foreign claims commission.

(5) Monitor foreign criminal jurisdiction matters affecting JFCC personnel by coordinating with regional combatant command legal staffs.

(6) Advise the commander on military justice and disciplinary matters concerning JFCC personnel.

c. Tasks/Functions:

(1) Provide recurrent training on the Law of Armed Conflict.

(2) Provide a judge advocate to support the targeting cell and review all targeting lists and make recommendations for compliance with the Law of Armed Conflict and other applicable directives.

(3) Review ethics issues, such as giving and accepting gifts.

(4) Provide training to investigating officers and review reports for legal sufficiency.

(5) Assist operations planners in drafting Rules of Engagement (ROE) consistent with the Standing Rules of Engagement and other applicable guidance.

(6) Provide support during negotiation and conclusion of international agreements.

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ANNEX G to JFCC SGS CONCEPT OF OPERATIONS

RESOURCES

1. **Purpose:** The Resources Directorate serves as the principal resource and financial management (FM) advisor for JFCC SGS.
2. **Responsibilities:** JFCC SGS J8 is responsible for planning, programming, budgeting and executing the JFCC SGS annual budget. JFCC SGS J8 will consolidate JFCC SGS inputs to the USSTRATCOM led Planning Programming, Budgeting, and Execution (PPBE) and Program Objective Memorandum (POM) processes. This requires close collaboration with USSTRATCOM J8 for financial matters. Support to USSTRATCOM Capabilities Development will be provided through JFCC SGS subject matter experts (SME) as required and available to USSTRATCOM J8 led processes. Due to JFCC SGS J8 manning limitations, USSTRATCOM tasking for SME support to Capabilities Development will flow through the JFCC Chief of Staff for adjudication. JFCC SGS will catalogue and submit near term requirements through the appropriate USSTRATCOM J-Codes.
3. **Organization:** JFCC SGS J8 is organized to provide budgeting and financial management support to JFCC operations, planning, and execution missions and enables advocacy of financial shortfalls to HQ USSTRATCOM. The directorate consists of a chief, and a Financial Manager. It leverages HQ USSTRATCOM J8 functions to provide JFCC SGS required JFCC SGS J8 services. **Figure G-1** below represents the JFCC SGS J8 organization.

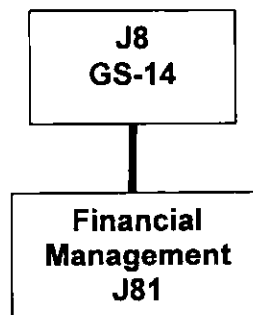


Figure G-1: JFCC SGS J8 Organizational Structure

4. **Tasks/Functions:** The Financial Management specialist performs the following key tasks/functions:
 - a. Serve as the FM consultant to JFCC SGS and perform day-to-day budget execution functions under the guidance of the Commander.

- b. Coordinates with JFCC SGS J4 on logistics contracting requirements and participates in JFCC SGS J4 planning groups and boards as required.
- c. Reviews and advises the CDR JFCC SGS on estimated and actual costs of operations (budgeting).
- d. Coordinates with resource sponsors and resource managers concerning their funding requirements, and provides guidance as required.
- e. Establishes Cost Center Managers (CCMs) in each of the divisions to relay financial requirements and financial issues to JFCC SGS J81.
- f. Determines sources of funding and obligation authority and reviews any applicable agreements that require FM support.
- g. Provide funds status to directorates and CCMs, as requested.
- h. Provide insight into funding overages and shortfalls identified within the command.
- i. Coordinates with contracting officials and appropriate USSTRATCOM program managers with regard to contractor support.
- j. Coordinates with USSTRATCOM J84 in FM oversight providing the following:
 - (1) Status of funds/availability of funds.
 - (2) Inputs to the USSTRATCOM Financial Plan, Budget Estimate Review, and unfunded requirements.
 - (3) Data for the Financial Working Group and Financial Management Board, as led by USSTRATCOM J84.
 - (4) Provides other financial reports as required.
- k. In coordination with USSTRATCOM J84, participates in the Command's Fiscal Year-end close out activities and FM processes.
- l. Coordinate financial management training through USSTRATCOM/J84 for JFCC SGS division CCMs.
- m. Ensure documents (Purchase Requests, travel orders, MIPR, MORDs, etc.) are processed in a timely manner.
- n. Liaison for establishing FM products for JFCC SGS.
- o. Establish Government Purchase Card holders and training for approving officials and cardholders.
- p. Track funds status for JFCC SGS.
- q. Assist in Command and USSTRATCOM/J84 Fiscal Year funding processes to include providing proper funding reports and inputs. This includes consolidation of the JFCC SGS inputs to the Program Objective Memorandum.
- r. Implement the necessary finance tools needed for FM execution via USSTRATCOM/J84 and 55 CPTS coordination.

s. Establish a Management Control Process to provide reasonable assurance that obligations and costs comply with applicable laws; funds and other assets are protected; and proper accounting is executed.

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ANNEX J to JFCC SGS CONCEPT OF OPERATIONS

COMMAND RELATIONSHIPS

1. Purpose. The purpose of this annex is to provide a listing of organizations and entities essential to achieving success as the JFCC SGS plans, integrates, coordinates, and executes its assigned missions.
2. General. Attached appendices provide a central listing of command operational centers, mission partners, and an outline of integration processes. These lists are not deemed to be exclusive and may require updates given mission requirements levied upon JFCC SGS.

Appendices:

1. Command Operational Centers
2. Mission Partners

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Appendix 1 to Annex J to JFCC SGS CONCEPT OF OPERATIONS

COMMAND OPERATIONAL CENTERS

1. As a minimum, the JFCC SGS coordinates with the operations centers listed below when employing forces or planning operations as applicable:

- a. 14th Air Force; Vandenberg Air Force Base, California
- b. 8th Air Force; Barksdale Air Force Base, Louisiana
- c. Joint Information Operations Center; San Antonio, Texas
- d. SMDC/ARSTRAT HQ Operations Center, Peterson AFB, Colorado
- e. NAVNETWARCOM, Norfolk, Virginia
- f. Cheyenne Mountain Operations Center (CMOC)
- g. Space Control Center (SCC); Cheyenne Mountain AFS
- h. Space Vault; Cheyenne Mountain AFS
- i. Missile Warning Center (MWC); Cheyenne Mountain AFS, Colorado
- j. DDMS Support Ops Center (SOC); Patrick AFB, Florida
- k. Global SATCOM Support Center (GSSC); Peterson AFB, Colorado
- l. GPS Operations Center (GPSOC)
- m. Global Analysis Center (GAC, part of the JIC)
- n. National Reconnaissance Operations Center
- o. Aerospace Fusion Center (AFC)
- p. 20th Air Force; F.E. Warren AFB, Wyoming
- q. Joint Navigation Warfare Center (JNWC)
- r. National Oceanic and Atmospheric Administration (NOAA)
- s. Joint Functional Component Command, Network Warfare (JFCC NW)
- t. Joint Functional Component Command, Integrated Missile Defense (JFCC IMD)
- u. Joint Functional Component Command, Intelligence Surveillance and Reconnaissance (JFCC ISR)

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Appendix 2 to Annex J to JFCC SGS CONCEPT OF OPERATIONS

MISSION PARTNERS

1. Purpose. The purpose of this appendix is to capture non-USSTRATCOM partners, who may be asked for significant and essential support to enable the JFCC SGS to accomplish assigned missions. In accordance with the establishing directive, Direct Liaison Authority (DIRLAUTH) between JFCC SGS and other joint functional and service components, combatant commanders, and agencies, while keeping HQ USSTRATCOM informed is authorized. As a minimum, JFCC SGS mission partners include:

- a. Other combatant commands
- b. National Security Agency (NSA)
- c. National Reconnaissance Office (NRO)
- d. Defense Threat Reduction Agency (DTRA)
- e. Joint Warfare Analysis Center (JWAC)
- f. National Geospatial Intelligence Agency (NGA)
- g. Missile Defense Agency (MDA)
- h. Defense Intelligence Agency (DIA)
- i. Central Intelligence Agency (CIA)
- j. Defense Information Systems Agency (DISA)
- k. US Department of State (through the USSTRATCOM POLAD)
- l. Defense Special Missile and Aerospace Center (DEFSMAC)
- m. National Air and Space Intelligence Center (NASIC)
- n. National Aeronautics and Space Administration (NASA)
- o. National Oceanic and Atmospheric Administration (NOAA)
- p. National Environmental Satellite Distribution System (NESDIS)
- q. National Ground Intelligence Center (NGIC)
- r. Office of Naval Intelligence (ONI)
- s. Defense Logistics Agency (DLA)

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Annex K to JFCC SGS CONCEPT OF OPERATIONS

COMMAND, CONTROL, COMMUNICATIONS AND COMPUTERS SYSTEMS

1. **Purpose:** The purpose of this annex is to illustrate how the J6, Command, Control, Communications and Computers (C4) Systems Directorate is answerable to the Commander, JFCC SGS for ensuring the availability of required C4 capabilities. The J6 analyzes requirements for and acquires command, control, communications and computer (C4) capabilities, and ensures reliability of those C4 systems supporting assigned forces across the spectrum of conflict. The J6 supports USSTRATCOM C4 acquisition efforts to maintain information superiority while ensuring battlefield interoperability with U.S., allied, and coalition forces.

2. **Responsibilities:** J6 is responsible for ensuring the following USSTRATCOM actions listed in the Unified Command Plan are achievable through operational and tactical application and support of C4 systems.

- a. Establish requirements for JFCC SGS C4 capabilities.
- b. Ensure JFCC SGS maintains critical C4 capabilities required to execute assigned missions.
- c. Integrate Space and Global Strike C4 support.
- d. Support C4 tasking.

3. **Organization:** J6 is organized with a directorate structure consisting of C4 Systems and C4 Operations. **Figure K-1** represents the J6 organization.

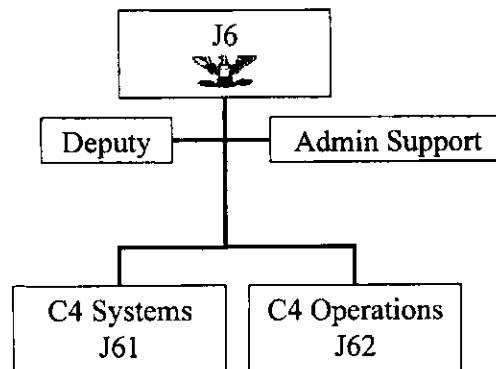


Figure K-1: J6 Organizational Structure

- a. C4 Systems Division (J61) is responsible for establishing command C4 and NetOps standards and policies, determining and prioritizing C4 capability requirements through USSTRATCOM J6, submitting C4 budget requirements, and advocating future C4

capabilities requirements through the USSTRATCOM J8 (except for systems specifically assigned (i.e. ISPAN)). This division will leverage the HQ USSTRATCOM J6 resources and capabilities to provide required C4 systems support for SGS mission accomplishment. This division is responsible for JFCC SGS GIG critical infrastructure protection and continuity of operations planning in coordination with USSTRATCOM J6.

b. C4 Operations Division (J62) provides an interface between communications and operations, and facilitates the operational integration of the C4 mission area through its C4 Mission Area Experts (MAE). This division monitors the status of global and SGS C4 capabilities provided by JTF-GNO, USSTRATCOM J6, and SGS subordinate commands; analyzes and reports their SGS mission impact; and directs remedial courses of action. This division supports C4 deliberate and time sensitive planning as part of the JEWG/JIB and GIC, and provides contingency and exercise augmentation to the GIC. The division also coordinates C4 exercise involvement with the USSTRATCOM J6 and SGS subordinate commands' C4 exercise planners.

4.Tasks/Functions. The SGS J6 supports the following tasks, which are derived or implied from the USSTRATCOM Joint Mission Essential Task List.

- a. Provide C4 services. Consolidate, validate, coordinate, document, and prioritize the Command's C4 requirements. Collaborate with SGS J5 on ISPAN issues.
- b. Establish requirements for Offutt-based classified and unclassified C4 capabilities through USSTRATCOM J6.
- c. Establish staff requirements for communications security (COMSEC) assets through USSTRATCOM J6.
- d. Coordinate frequency management and deconfliction to SGS planning and operations with JTF-GNO and USSTRATCOM J6.
- e. Monitor current C4 status, evaluate impact on SGS operational readiness, and report C4 events to USSTRATCOM J6.
- f. Support SGS C4 deliberate and time sensitive planning.
- g. Coordinate and deconflict scheduled SGS C4 outages that will degrade mission readiness.
- h. Augment the Global Integration Cell as required.
- i. Coordinate SGS C4 exercise planning with USSTRATCOM J6 exercise planners.
- j. Provide subject matter and mission area expertise to the USSTRATCOM/J8 Mission Capability Teams as required.

Annex T to JFCC SGS CONCEPT OF OPERATIONS

EXERCISES

1. **Purpose:** The purpose of this annex is to outline JFCC SGS J7 Exercise Directorate functions as it fulfills the lead integrating organization role for exercises, wargaming support, readiness, and training in direct support of the CDR JFCC SGS. JFCC SGS J7 ensures effective and efficient training integration, synchronization and advocacy for missions of Space, Global Strike and Information Operations. As the JFCC lead integrator, JFCC SGS J7 provides training requirements, objectives and JMETL support for Space, Global Strike, and other assigned missions. JFCC SGS J7 supports HQ USSTRATCOM J37 for all USSTRATCOM directed joint exercises as JFCC SGS leadership, time, and resources permit.

2. **Responsibilities:** JFCC SGS J7 is responsible for monitoring apportioned forces preparedness and non-apportioned forces' readiness through the service components' training and readiness processes. This includes visibility of forces that could be assigned to carry out assigned missions and other JFCCs as they integrate to conduct Space and Global Strike operations.

3. **Organization:** JFCC SGS J7 is organized to provide integrated exercise planning and support to HQ USSTRATCOM J37. **Figure T-1** represents the JFCC SGS J7 organization.

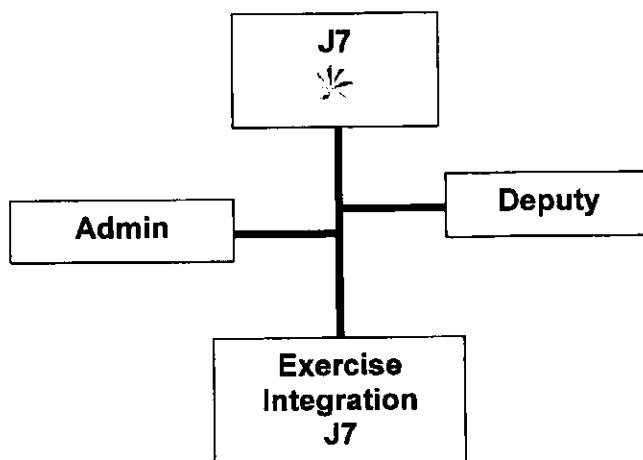


Figure T-1: JFCC SGS J7 Organizational Structure

a. **Exercise Integration (JFCC SGS J71):** Supports HQ USSTRATCOM J37 in the design, coordination, execution, and assessment of training for assigned forces and other components. Provides direct support to HQ USSTRATCOM J37 for Category I exercises and integrates the support of Category II & III Command Post Exercises (CPX), Battle Staff Exercise (BSX), and Field Training Exercises (FTX). Advocates to HQ USSTRATCOM, JFCC SGS and attached/assigned unit training and exercise requirements. Additionally, the division supports

space and global strike training objectives and exercise requirements development for both USSTRATCOM and other combatant command tasked exercises.

4. Tasks/Functions: In close coordination with the HQ USSTRATCOM J37, JFCC SGS J7 will support mission area operational level planning, integration and coordination of exercises with other USSTRATCOM joint and service components and, as directed, other combatant commanders to effect a fully interoperable and integrated exercise execution at the Category II & III level. This involves providing Blue Force Participants, Umpires and/or White Cell Mission Area Experts to represent higher authorities. JFCC SGS J7 will provide additional support to HQ USSTRATCOM J37 for planning conferences as directed by J37. JFCC SGS J7 will plan, organize, and direct JFCC SGS HQs training (i.e., watch standers, intelligence training, etc.).

a. At a minimum, JFCC SGS J71 will coordinate and support USSTRATCOM exercises by:

- (1) Supporting JFCC SGS and HQ USSTRATCOM for exercise space situational awareness assessments.
- (2) Supporting the development and coordination of Exercise OPLANS as directed by HQ USSTRATCOM.
- (3) Supporting CDR USSTRATCOM's Joint Training Plan by fully integrating all joint and Service components, Space and Global Strike forces and other mission partners to support USSTRATCOM directed Category I major exercises.
- (4) Providing White Cell, MAE and Blue Force Participants and Planners for HQ directed events.
- (5) Supporting other combatant commands with space and global strike exercise planning, as directed by HQ USSTRATCOM.
- (6) Providing support for JFCC SGS, other combatant command exercises and experimentation requirements as directed by USSTRATCOM headquarters.
- (7) Assisting USSTRATCOM J37 in the reporting of operational readiness assessment of assigned mission areas.
- (8) Supporting development of exercise OPLANS as directed by HQ USSTRATCOM.
- (9) Providing exercise space situational awareness assessments.
- (10) Attending selected exercise planning conferences to insure JFCC SGS training objectives are incorporated.
- (11) Conducting hotwash and/or associated post exercise feedback for SGS and participating in USSTRATCOM conducted hotwash and/or associated post exercise feedback sessions.
- (12) Collecting and maintaining SGS Joint Universal Lessons Learned (JULLs) and providing input to the JULL database.
- (13) Additional JFCC SGS J7 tasks include:
 - (a) Advocating for exercise and training support of assigned/attached units.
 - (b) Managing and directing the JFCC SGS after action program and supporting the Joint Staff Remedial Action Program.

(c) Reporting on training matters as required to CDR JFCC SGS and HQ USSTRATCOM as required.

(d) Providing expertise and support to the USSTRATCOM J8 Mission Capability Teams to ensure lessons learned are incorporated into required future mission capabilities efforts.

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Annex W to JFCC SGS CONCEPT OF OPERATIONS

Abbreviations and Acronyms

References: a. Joint Publication 1-02, Department of Defense Dictionary of Military and Related terms (U)

1. Purpose. The purpose of this annex is to provide a centralized listing of acronyms, abbreviations used in the development of the JFCC SGS Concept of Operations.
2. General. Attached appendix provides a central listing of acronyms and definitions. While an attempt was made to spell out acronyms and abbreviations in use within the document, some may have been overlooked. Acronyms not found in this annex may be available in reference (a).
3. Appendix 1: Abbreviations and Acronyms

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Appendix 1 to Annex W to JFCC SGS CONCEPT OF OPERATIONS

ABBREVIATIONS AND ACRONYMS

ADMIN.....	Administrative
AFB.....	Air Force Base
AOC.....	Air Operations Center
AOG.....	Air Operations Group
ARSTRAT.....	U.S. Army Strategic Command
AT.....	Antiterrorism
CALCM.....	Conventional Air Launched Cruise Missile
CCIR.....	Commander's Critical Information Requirements
CCM.....	Cost Center Manager
CDR JFCC SGS.....	Commander, Joint Functional Component Command Space and Global Strike
CDR USSTRATCOM.....	Commander, United States Strategic Command
CENTCOM.....	U. S. Central Command
CIA.....	Central Intelligence Agency
CJTF.....	Commander, Joint Task Force
CJCSI.....	Chairman of the Joint Chiefs of Staff Instruction
CM.....	Consequence Management
CMOC.....	Cheyenne Mountain Operations Center
CMSA.....	Cruise Missile Support Activities
CMSA LANT.....	Cruise Missile Support Activities, Atlantic
CMSA PAC.....	Cruise Missile Support Activities, Pacific
CNO.....	Computer Network Operations
COA.....	Course of Action
COCOM.....	Combatant Command
COE.....	Consequence of Execution
COMSEC.....	Communication Security
CONOPS.....	Concept of Operations

GIG.....Global Information Grid
 GI&S.....Geo-spatial Information & Services
 GNO.....Global Network Operations
 GOC.....Global Operations Center
 GS.....Global Strike
 GPSOC.....GPS Operations Center
 GSSC.....Global Satellite Communications Center
 GSSDs.....Global Strike Support Documents
 HDBT.....Hard and Deeply Buried Target
 IAW.....in accordance with
 ICBM.....Intercontinental Ballistic Missile
 IO.....Information Operations
 IM.....Information Management
 IMD.....Integrated Missile Defense
 ISR.....Intelligence, Surveillance and Reconnaissance
 ISPAN.....Integrated Strategic Planning Analysis Network
 ITW/AA.....Integrated Tactical Warning/Attack Assessment
 IWS.....Information Workspace
 JCIDS.....Joint Capabilities Integration and Development System
 JCB.....Joint Coordination Board
 JEWG.....Joint Effects Working Group
 JFC.....Joint Functional Component
 JFCC.....Joint Functional Component Command
 JFCC SGS.....Joint Functional Component Command Space and Global Strike
 JFCOM.....Joint Forces Command
 JIB.....Joint Integration Board
 JIOC.....Joint Information Operations Center
 JIPWG.....Joint Intelligence Priorities Working Group
 JMET.....Joint Mission Essential Task
 JMETL.....Joint Mission Essential Task List
 JNWC.....Joint Navigation Warfare Center
 JOPES.....Joint Operational Planning and Execution System
 JPG.....Joint Planning Group

JPIM.....Joint Planners Integration Meeting
 JSPOC.....Joint Space Operations Center
 JSWG.....Joint Staff Working Group
 JTF.....Joint Task Force
 JWAC.....Joint Warfare Analysis Center
 LRC.....Logistics Readiness Cell
 MAE.....Mission Area Expert
 MARFORSTRAT.....U.S. Marine Corp Forces, U.S Strategic Command
 MDA.....Missile Defense Agency
 MCT.....Mission Capability Team
 METOC.....Meteorological and Oceanographic
 MILDEC.....Military Deception
 MIPR.....Monetary Interagency Purchase Request
 MOF.....Missile Operations Flight
 MORDs.....Miscellaneous Obligation Reimbursement Document
 MWC.....Missile Warning Center
 NASIC.....National Air and Space Intelligence Center
 NASA.....National Aeronautics and Space Administration
 NAVSTRAT.....Naval Service Component to U.S. Strategic Command
 NAVNETWARCOM.....Naval Networks Warfare Command
 NESDIS.....National Environmental Satellite Distribution System
 NGA.....National Geo-spatial Agency
 NGIC.....National Ground Intelligence Center
 NLT.....No Later Than
 NOAA.....National Oceanic and Atmospheric Administration
 NORAD.....North American Aerospace Defense Command
 NORTHCOM.....U.S. Northern Command
 NPR.....Nuclear Posture Review
 NRO.....National Reconnaissance Office
 NSA.....National Security Agency
 NW.....Network Warfare
 OPCON.....Operational Control
 OPLAN.....Operational Plan

OPOARDS.....Operational Orders
 Ops.....Operations
 OPSEC.....Operational Security
 OSD.....Office of Secretary of Defense
 PA.....Public Affairs
 PACOM.....Pacific Command
 PAO.....Public Affairs Office
 PIR.....Priority Intelligence Requirement
 POC.....Point of Contact
 POLAD.....Political Advisor
 POM.....Program Objective Memorandum
 PPBE.....Planning Programming, Budgeting, and Execution
 PSYOP.....Psychological Operations
 RFI.....Request for intelligence or Request for information
 ROE.....Rules of Engagement
 SAR.....Satellite Access Request
 SATCOM.....Satellite Communications
 SBR.....Space Based Radar
 SBIRS.....Space Based Infrared System
 SCI.....Sensitive Compartmented Information
 SCIF.....Sensitive Compartmented Information Facility
 SDB.....SATCOM Database
 SECDEF.....Secretary of Defense
 SGSOC.....Space and Global Strike Operations Center
 SIOP.....Single Integrated Operational Plan
 SJA.....Staff Judge Advocate
 SKIweb.....Strategic Knowledge Integration Web
 SOCOM.....U.S. Special Operation Command
 SMDC.....U.S. Army Space and Missile Defense Command
 SME.....Subject Matter Expert
 SOC.....Support Ops Center
 SOF.....Special Operations Force
 SSA.....Space Situational Awareness

SSC.....Space Control Center
SSO.....Special Security Office
STO.....Special Technical Operations
STRATAF.....Strategic Air Forces
STRATJIC.....USSTRATCOM Joint Intelligence Center
SUPPLAN.....Supplemental Plan
TACON.....Tactical Control
TLAM.....Tomahawk Land Attack Missile
TOR.....Terms of Reference
TPFDD.....Time Phased Force Deployment Data
TSP.....Time Sensitive Planning
TRANSCOM.....U.S. Transportation Command
UCP.....Unified Command Plan
UK MOD.....United Kingdom, Ministry of Defense
UTL.....Universal Task List
USAF.....United States Air Force
USSTRATCOM.....U. S. Strategic Command



DEPARTMENT OF DEFENSE
UNITED STATES STRATEGIC COMMAND

Reply To:
USSTRATCOM/JOCC
901 SAC BLVD STE 2A1
Offutt AFB NE 68113

Obtained Under the
Freedom of Information Act
by Hans M. Kristensen

05-071

18 Jan 05
SM# 014-05

MEMORANDUM FOR THE USSTRATCOM JOINT FUNCTIONAL COMPONENT
COMMANDER FOR SPACE AND GLOBAL STRIKE

Subject: Joint Functional Component for Space and Global Strike - Implementation Directive

1. In order to further operationalize assigned missions, and focus Headquarters, United States Strategic Command (USSTRATCOM) on strategic-level integration and advocacy of Unified Command Plan assigned missions, I intend to delegate authority for operational and tactical level planning, force execution, and day-to-day management of forces to Joint Functional Component Commands (JFCC).

2. Accordingly, I have established a Joint Functional Component Command for Space and Global Strike (JFCC S&GS) to optimize planning, execution, and force management, as directed by Headquarters, USSTRATCOM, of the assigned missions of deterring attacks against the United States, its territories, possessions, and bases, and employing appropriate forces should deterrence fail, and coordinating global strike operations, space operations, and activities at the Joint Information Operations Center (JIOC) that support those operations.

3. **JFCC S&GS CONCEPT:** As directed by Commander, USSTRATCOM, the JFCC S&GS will integrate all elements of military power as it conducts, plans, and presents global strike effects. The JFCC S&GS will direct the continuous planning and execution of assigned space operation missions. When tasked, the JFCC S&GS will execute global strike operations in support of approved courses of action (COAs). In close coordination with the headquarters staff, JFCC S&GS will conduct mission area operational-level planning integration and coordination with other USSTRATCOM joint and service components and, as directed, other Combatant Commanders. Headquarters, USSTRATCOM will retain the responsibility for nuclear command and control, execution authority for supported and supporting missions, advocating the desired characteristics and capabilities for the S&GS missions, integrating S&GS into DoD strategic-level planning, and, via direct support from the USSTRATCOM Joint Intelligence Center (STRATJIC), providing intelligence support. At a minimum, the JFCC S&GS will be required to:

- a. Act as the lead integrating JFCC in direct support of the Commander, USSTRATCOM to develop crisis response COAs, provide integrated analysis of the Command's global

mission capabilities, provide execution recommendations for supported and supporting mission tasks, and, through a JFCC S&GS managed Global Operations Center (GOC) that integrates inputs of all components and service task forces, provide the headquarters with situational awareness for all operational responsibilities. Execute Global Strike missions when directed.

- b. Assume operational (OPCON) or tactical (TACON) control of space and missile warning forces for day-to-day and crisis space operations, as directed by headquarters.

Provide continuous space situational awareness and warning and assessment of space attack.

- d. Execute space campaign planning as the Joint Space Coordinating Authority with direct support to other Combatant Commands.

Execute North American Air Defense Command (NORAD) mission support responsibilities.

- f. Support USSTRATCOM mission of providing missile attack warning to other combatant commanders.

- g. Provide continuous situational awareness of assigned forces engaged in ongoing Space and Global Strike operations.

- h. Provide coordinated tasking from the headquarters to other joint components and service task forces, as necessary, for the synchronization of all USSTRATCOM operational and tactical mission planning and execution needs.

Support the coordination of operational logistical requirements of USSTRATCOM supported plans, to include operational logistic support to nuclear forces.

Integrate capabilities, via the GOC, to support the headquarters responsibilities for nuclear force command and control and nuclear force execution.

- k. Coordinate and maintain tactical level intelligence, as necessary, to support the operational needs of space and global strike components. Provide priority intelligence requirements (PIR), requests for intelligence (RFI), intelligence production requirements and intelligence collection requirements to STRATJIC for tasking, deconfliction, and accomplishment.

Establish a relationship with mission area experts in the applicable regional commander's Standing Joint Force Headquarters (SJFHQ) to provide operational support for space and global strike capabilities. This relationship will include the training of space and global strike support in SJFHQs, as required.

- m. Support USSTRATCOM-led efforts to create and maintain strategic-level OPLANs. Support development and coordination of OPLANs, CONPLANs, FUNCPLANs, and

SUPPLANs as directed by headquarters. Support other combatant commands with space and global strike operational planning and execution, as directed by headquarters.

- n. Assume operational control (OPCON) or tactical control (TACON) of global strike forces (kinetic and non-kinetic), as directed. This includes day-to-day management of nuclear forces through existing service task forces.
- o. Report operational readiness assessment of assigned mission areas, as required by headquarters.
- p. Maintain coordination with geographic and functional combatant commanders to support ongoing and future operational requirements for USSTRATCOM space and global strike capabilities.
- q. Provide support for Headquarters USSTRATCOM and other geographic and functional combatant commanders exercise, wargames and experimentation requirements. Integrate and synchronize efforts with USSTRATCOM Training and Exercise Division (J37).
- r. Support headquarters development of space and global strike mission research, and development and advocacy of capability needs for the Joint Capabilities Integration and Development System (JCIDS) process.

4. AUTHORITIES: Commander, USSTRATCOM will supervise the exercise of authorities delegated in this directive. The Commander, JFCC S&GS may further delegate authorities as necessary. The Commander JFCC S&GS is assigned the following authorities:

- a. Coordinating Authority for planning and execution of space and global strike missions.
- b. Operational Control (OPCON) or Tactical Control (TACON) of designated space, missile warning, and global strike forces, as directed.
- c. TACON of JIOC functions that enable the space and global strike mission planning and execution when USSTRATCOM is conducting operations as a supported commander and when JIOC supporting functions must be integrated with other USSTRATCOM global capabilities.
- d. Direct Liaison Authority (DIRLAUTH) between JFCC S&GS and other joint functional and service components, combatant commanders, and agencies, while keeping headquarters informed. JFCC Commanders are encouraged, consistent with DoD rules and regulations, to develop robust coordinating relationships, to include inter-agency and combined forces where required, to enhance operational mission effectiveness.

5. TASKS: Commander, JFCC S&GS will:

- a. Develop and obtain approval from the Commander, USSTRATCOM for a JFCC S&GS mission statement.

- b. Develop a detailed Concept of Operations (CONOPS) for the JFCC S&GS and, forward within 30 days of the date of this directive, for approval by the Commander, USSTRATCOM. The proposed CONOPS should include recommendations for management and execution of global strike forces, including nuclear, between headquarters, task forces and JFCC S&GS.
- c. Develop a task handover plan that will facilitate an efficient and effective transfer of functions, as approved in the CONOPS, from the headquarters to the JFCC S&GS.
- d. Organize a JFCC S&GS headquarters to facilitate a rapid and adaptive planning cycle for operational and tactical level execution of assigned missions. Execute command and control of assigned and/or attached forces.
- e. Provide an estimate for initial operating capability of the JFCC S&GS with a goal of NLT March 2005.

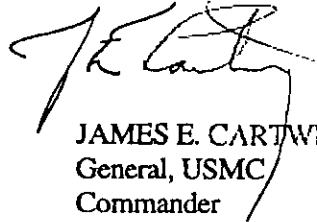
Provide an estimate for full operating capability of the JFCC S&GS with a goal of FOC by 30 September 2006.

6. MANNING GUIDANCE: USSTRATCOM will support the manning of the JFCC S&GS through a phased approach to billet migration. HQ USSTRATCOM will provide billets to support initial JFCC operations with a combination of billet transfer and assignment of personnel stationed at HQ USSTRATCOM. The goal will be to man approximately 30 percent of the unfilled billets at the JFCC HQ by September 2005, 60 percent by September 2006 and 90 percent by September 2007. The initial manning support from HQ USSTRATCOM will minimize permanent change of station moves with subsequent manning of the JFCC geographic location requirements being backfilled as personnel rotation permits.

7. RESOURCES: Funding to support JFCC establishment will come from USSTRATCOM budget authority or the appropriate service component. The headquarters will support USSTRATCOM military and government service personnel assigned to the JFCC until the JFCC can establish support for personnel assigned. USSTRATCOM funding, when provided, will be based upon command approved plans and funding priorities.

8. SCHEDULE: The Commander, JFCC S&GS will coordinate a CONOPS and task handover plan with the headquarters staff and submit to the Commander, USSTRATCOM for approval within 30 days of this directive. The Commander, JFCC S&GS will provide periodic progress reviews at 90-day intervals until full operating capability has been achieved.

9. My POC for this activity is MG Kevin Campbell, USA, Chief of Staff, USSTRATCOM,
COMM/DSN: (402) 294-2417/271-2417.

A handwritten signature in black ink, appearing to read 'J. E. Cartwright', is written over the typed name and title.

JAMES E. CARTWRIGHT
General, USMC
Commander

Copy To:

Department of the Air Force, Department of Army, Department of the Navy, 14TH AF/CC,
SMDC/ARSTRAT, AFSPC, 8AF, NAVNETWARCOM, COMLANTFLT, COMPACFLT,
CMOC/CC, MARFORSTRAT, USSTRATCOM JFCCS, JIOC, JTF-GNO, NRO, NASA, NGA,
NASIC, CIA, NSA, DIA, NSSO, NSSA