Getting to the Fight:
Aerospace Forces and Anti-access Strategies

by

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The Problem of Asymmetrical Strategies:
The Access Challenge

For years the U.S. defense community has been receiving dire warnings from many quarters on the emerging problem of adversary asymmetrical strategies. The same basic themes are echoed in The President's *National Security Strategy*, *The National Military Strategy, Joint Vision 2010* and *2020*, Volume One of the Air Force's Strategic plan, as well as such private studies as "New World Coming" by the US Commission on National Security/21st Century. The central admonition is clearly stated in the president's *National Security Strategy*.

> . . . the United States must be prepared to fight and win under conditions where an adversary may use asymmetrical strategies against us—unconventional approaches that avoid or undermine our strengths while exploiting our vulnerabilities.[1]

Joint Vision 2020 addresses the asymmetrical strategies danger: "The potential of such asymmetrical approaches is perhaps the most serious danger the United States faces in the immediate future . . . ."[2]

The devastating aerial and follow-up ground assaults conducting during the 1991 Desert Storm campaign against Iraq clearly demonstrated to both friend and foe the folly of allowing a U.S.-led coalition time to deploy forces and prepare for combined arms operations. Their experiences in this war led to a singular lesson learned for those with aims contrary to America's: no nation on earth can win a toe-to-toe conflict with the United States if they give us time and access to their intended area of operations. Therefore, if they wish to oppose the U.S. they must use selected strengths against our perceived weaknesses—they must apply asymmetrical means to prevent us from gaining access to their operational area. These vulnerabilities include the global distances (and resulting extended supply lines) U.S. forces must travel to engage anyone—or as the Defense Science Board put it,

> 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 . . .[3]

There are several potential asymmetric strategies an adversary might use against the U.S. and its allies including fait accompli where objectives are achieved before the

opposition can respond, taking advantage of Western casualty aversion by causing indiscriminate casualties, information warfare where critical information systems and public perceptions are the target, and the one of most concern within the U.S. Air Force right now¾ the anti-access or keep out strategy. This strategy would use whatever tools were available to prevent the U.S. and its allies from gaining access to and operating in the enemy's region of influence.

National political, joint military, and service planning guidance all warn of the emerging capabilities of adversary states and non-state actors such as criminal cartels or religious and political factions. These groups will use increasingly available weapons and information technologies to affect our will and ability to conduct vital military operations from forward locations. These anti-access operations would include use of weapons of mass destruction (WMD—chemical, biological, and nuclear); short to medium range ballistic and cruise missiles; anti-ship mines and antiaircraft weapons to interdict deploying forces; terrorist and special forces attacks; and direct information system attacks through viruses and information alteration, as well as deception and psychological operations. The friction and uncertainty these activities would cause, as well as effects on public perceptions of the validity and cost of U.S. operations, would likely be the deciding factors in the United State's participation.

Addressing the Need for Global Access

Of particular concern to military leaders trying to plan for the myriad contingencies they might face is an adversary that might combine actions against any or all three of the weaknesses mentioned above in an anti-access strategy—one that prevents US and allied forces from engaging at all. Simply stated, an anti-access strategy would seek to prevent the United States from being able to operate within range of the enemy's crucial targets or make those operations so difficult or painful as to force America to abandon its attempts or prevent us from engaging at all. Unfortunately, there is bloody precedent from attacks on U.S. forces in Lebanon in 1983, and Saudi Arabia in 1995, and the USS *Cole* in October 2000 where adversaries used terrorist attacks to cause indiscriminate casualties among U.S. military personnel. In both two of these cases instances there was an immediate impact. The U.S. withdrew from Lebanon and was forced to build a more secure but very expensive and isolated new base in Saudi Arabia. Volume One of the Air Force Strategic Plan recognizes these issues and insists that access to forward bases will remain critical to U.S. operations but will "become increasingly risky."[4] Overseas forces with large supply and support requirements will become more inviting targets.

However, enforcing national interests is not a selective task. The interests of democracy, protecting vital resources, free commerce, and basic human rights cannot be limited to those areas where it is easiest to operate. And increasingly America's competent but cumbersome joint service military machinery, if not already in the conflict region, will be hard pressed to get there in sufficient time with sufficient force to make a real contribution.

In the current environment getting there fast is as important as what one does upon arrival. And getting there fast will often involve only a few select joint force elements—

the ones most able to demonstrate our determination and to have the greatest effect on the will of enemy leaders while exposing the smallest number of Americans to enemy fire. The degree to which this is accomplished will most likely determine the degree of public support these actions will receive. The degree to which the adversary is able to thwart those efforts is a likely measure of their success.

In the future an effective global U.S. military strategy will require:

- Immediate access to the conflict area to act before an adversary can consolidate gains or even complete preparations to act,
- The ability to act rapidly over global distances as forward bases are less available,
- The ability to accomplish tasks that will make a real difference in the situation as soon as we get there,
- Minimal casualties and collateral damage in order to preserve public support and freedom of action

The Aerospace Answer

In thinking about responses to potential anti-access strategies and ways to achieve the above requirements, we must keep in mind that the United States and its major allies have asymmetrical advantages of their own—capabilities that no other nation or alliance can come close to matching. One study sponsored by the Center for Strategic and International Studies determined that,

> . . . the unique properties of global attack and precision strike allow U.S. air and space forces to shape the battlespace from a distance—to significantly influence the adversary's area of operation from outside his reach—thereby minimizing the placement of friendly forces in harm's way.[5]

U.S. military aerospace power has the proven ability to reach over global distances in a matter of hours to conduct precise operations—from putting weapons on target to delivering disaster relief supplies to a "bare bones" third world airfield. The aerospace dominant military campaigns of the 1990s (Desert Storm with Iraq, Deliberate Force over Bosnia, and the Allied Force campaign against Serbia) have clearly proven the efficacy of modern aerospace systems as a leading or even sole component in a military campaign. Despite aerospace opponents' attempts to prove otherwise, three separate campaigns in which aerospace power was so dominant can not be considered "flash-in-the-pan" aberrations. In the case of Allied Force, respected historian (and former skeptic of aerospace power) John Keegan remarked,

> "There are certain dates in the history of warfare that mark real turning points . . . Now there is a new turning point to fix on the calendar: June 3, 1999 when the capitulation of President Milosevic proved a war can be won by airpower alone."[6]

It is now time to maximize the advantages hinted at by Keegan. There are two mutually reinforcing methods for avoiding an adversary's anti-access strategies—minimizing forward presence inside lethal range of enemy systems, and maximizing the effect of

personnel and equipment actually used. Both are tailor made for aerospace forces. But before we can expect to accomplish our missions while reducing the effects of an adversary's asymmetrical strategies, we need to take full advantage of the range, speed, and versatility of our aerospace forces. This requires we shed our traditional reliance on World War Two-style brute force attrition warfare, the type of conflict that demands a massive forward deployed force to conduct major theater wars.

. In dealing with errant nations, even in modern times, we still tend to want to "put as many young Americans as possible in range of enemy fire as fast as possible." Today, with the ability to do otherwise, this approach to conflict, if not obsolete, should be reserved for only the direst of circumstances. In a 1996 paper on aerospace power's contribution to security and stability, Western Europe's combined Air Force chiefs of service stated clearly that, "More directly than any other military means, Air Power can be employed in pursuance of the strategic and operational objective. Air Power need not necessarily be employed against the enemy armed forces in a lengthy battle of attrition. Indeed this should be avoided if at all possible."[7]

Speed, Range, and Stealth

While no one should suppose that the speed, range, stealth, and precision of modern aerospace forces have assumed universal utility, they did demonstrate during the 1990s campaigns that they can play a large if not dominating role in countering any adversary's anti-access strategies. The synergistic combination of operations in the air, space, and information environments will increasingly be central to *any* military operation.

However, there are practical problems with applying our own aerospace-based asymmetrical strategies to assuring global access. There is an increasing threat to deployed and deploying forces from terrorists and longer-range ballistic and cruise missiles supplied by such nations as North Korea and China. When combined with the growing menace of chemical, biological, and nuclear weapons, the threat will eventually force a massive investment in deployable missile defenses and anti-terrorist capabilities for forward bases. Alternatively, U.S. forces may be forced to operate at longer ranges from required targets.[8] The April 2000 *Final Report on Strategic Responsiveness* made a strong case for strengthening Air Force global responsiveness. It stated that because of the increasing availability of WMD and access denial tactics, "Even less in the early twenty-first century can the Air Force make the strategic assumption that forward basing will be available or accessible in future operations."[9]

Unfortunately, just operating at extended range will not be enough. Our adversaries' improving defenses will pose a greater threat on attacking forces regardless of where they come from. The USAF's initial report on Operation Allied Force reinforced this concern and suggested that, as difficult as it was, the campaign against Serbia was not a real test of modern defense systems. Better suppression of defenses and greater stealth and stand off attack capabilities will be needed in the future.[10]

As for the stealth component, the U.S. now has fewer than 75 manned stealth systems available, with only 21 of them (B-2s) having substantial range. Shorter-range systems¾ stealthy or not¾ will be subject to enemy keep out efforts and would have to be heavily defended. As air and surface forces are forced to locate farther from their objectives in order to avoid such tactics they become less effective. They also demand increasing levels of valuable air refueling support. For air forces, sortie rates and responsiveness fall off drastically with increasing range. As pointed out in Air Force doctrine, however, even then the advantage over surface forces is substantial. This becomes more pronounced as potential adversaries perfect their anti-access strategies and weapons. As Air Force Doctrine Document (AFDD) 1 says, "Generally, surface forces must mass combat power before launching an attack, whereas airpower is singularly able to launch an attack from widely dispursed locations and mass combat power at the objective."[11]

In other words, aerospace power, through recent improvements in speed, range, stealth, weapon accuracy, and intelligence, surveillance, and reconnaissance capabilities has the unique ability to concentrate effects on a particular objective or target without having to concentrate its forces. It must be emphasized that aerospace power as used in these kinds of discussions does not center on the systems of any one service. One group of writers led by a former commander of Air Combat Command suggested that aerospace power, from land and sea, was the clear answer to efforts to assure access and reduce reliance on attrition warfare. They wrote,

> By shifting the leading-edge firepower burden to extratheater-based global strike aircraft, sea-based long-range missile platforms and stealthy carrier air power, and a relatively small contingent of stealthy theater-based multirole fighters, the U.S. could dramatically reduce its strategic dependence on overseas base access and increase, by an equally significant measure, its global responsiveness.[12]

However, many of the same threats that hinder land-based operations will affect carrier systems. As missile, mine, submarine, and air defense threats mature, very expensive and manpower intensive naval systems will have to operate further from important targets, decreasing their overall sortie rates and effectiveness.

Stealthy global-strike aircraft are central to conducting such operations while avoiding significant losses. Aircraft such as the B-2 with its stealth, long-range, and heavy precision weapon payload capability showed during Allied Force that they were highly capable in any environment—and able to deliver precise attacks in any weather on as many as 16 separate targets per sortie. They were so successful during Operation Allied Force that Lt. Gen. Michael Short, the campaign's air commander, said the combination of the B-2 and satellite directed Joint Direct Attack Munitions (JDAM) "was the number one success story of the Balkan operation."[13] Despite the heavy commitment of all kinds of aerospace power to the conflict, it was reported that by week eight of the eleven week Allied Force air campaign, "six B-2 bombers flying from Whiteman AFB, Missouri alone were responsible for striking over a third of all the targets in Serbia."[14]

But (barring a major change in policy) the 21 existing B-2s is all we will get—the production line has been closed. Nevertheless, the value of long-range deep penetration

capability against powerful modern defenses cannot be overstated. According to the service's Chief of Staff, the Air Force has no plans to even begin work on a replacement/enhancement for at least 10 to 15 years.[15] This is not intended to discredit the valuable contributions of the B-1 fleet or the remaining 40-year old B-52s in stand off cruise missile attacks or operations in relatively benign defensive environments. But the fact remains that an enhanced fleet of intercontinental range, stealthy, manned or unmanned aircraft is necessary to assuring U.S. rapid global offensive capabilities. Addressing this requirement should be a high priority in the next QDR but such is not in the cards.

Space

The ability to observe enemy actions in real time and then strike from space would help remedy this situation since distances to theater targets would be reduced from up to several thousand miles to no more than a couple hundred—straight up. The speed of space-based systems, and their omnipresence, would make time-to-target issues almost irrelevant. The biggest challenge here is getting sufficient systems developed, tested, and incorporated into Joint concepts of operation (CONOPS) in the face of high costs and significant political restrictions on what can be done. Still, space systems may provide a long term solution to anti-access strategies. The U.S. Air Force should be supported in its efforts to aggressively test and field both air and space-based capabilities to counter anti-access strategies..

However, despite the fact that the only treaty prohibited space-based weapons are weapons of mass destruction, the issue of space-based weapons of any kind is so politically charged as to defy serious discussion. As evidence, the Air Force Chief says, it would take "substantial change in policy or cataclysmic event or some breakthrough in major technologies that would lead to the weaponization of space, … using space as a platform for offensive operations."[16]

The clear superiority of synergistically applied air and space systems in dealing with an adversary's attempts to prevent access is evident. For the near-term, we have the tools to avoid the anti-access strategies most adversaries may mount through the intelligent use of long-range and theater-based Air Force airpower as well as sea based cruise missile and air assets. This joint aerospace power capability can launch large-scale precision attacks against the enemy's ability and will to wage war from a variety of locations making the problem of interference a difficult one for the adversary. But, barring an unforeseen political renaissance and an infusion of funds and vision, the long-term ability to capitalize on long-range stealth aircraft and space systems to help address the access situation is limited.

For now it appears that as for improving our long-term ability to operate global range aircraft and space systems, abundant warnings on the serious nature of the asymmetrical threats will not fall on deaf as much as reluctant ears. It will be up to the upcoming Quadrennial Defense Review to make the kinds of critical recommendations to national leaders that will assure our ability to operate in any environment at any time.

Potential anti-access strategies and U.S. counters to them should be high on the list of topics for serious discussion.

Notes

1. *A National Security Strategy for a New Century,* The White House, January 2000, page 19.
2. *Joint Vision 2020,* The Chairman of the Joint Chiefs of Staff, U.S. Government Printing Office, June 2000, page 6
3. Defense Science Board, 1999
4. *US Air Force Strategic Plan, Volume One: The Future Security Environment,* Department of the Air Force, page 15
5. Daniel Goure and Stephen A. Cambone, "The Coming of Age of Air and Space Power," in Daniel Goure and Christopher M. Szara, eds., *Air and Space Power in the New Millennium,* Washington, D.C., The Center for Strategic and International Studies, 1997, page 14-15
6. John Keegan, *London Daily Telegraph,* June 6, 1999
7. *The EURAC Perspective on: Air Power's Contribution to Security and Stability,* a report prepared under the direction of the European Air Chiefs' Conference, September 1996, p 32.
8. One high level national panel came to this ominous conclusion: "States, terrorists, and other disaffected groups will acquire weapons of mass destruction and mass disruption, and some will use them. Americans will likely die on American soil, possibly in large numbers." The United States Commission on National Security/21st Century, *New World Coming: American Security in the 21st Century,* September 15, 1999, page 4
9. *Final Report on Strategic Responsiveness,* page 8.
10. Department of the Air Force, *The Air War over Serbia: Aerospace Power in Operation Allied Force,* the Initial Report, January 2000, pages 43 and 52.
11. Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine,* Department of the Air Force, September 1997, page 16.
12. General Richard E. Hawley, USAF, ret., Donald N. Frederickson, Michael B. Donley, and John R. Backschies, "Global Reconnaissance-Strike*," Armed Forces Journal International,* June 2000.
13. General Short was quoted in, John A. Tirpak, "Short's View of the Air Campaign" *Air Force Magazine,* September 1999.
14. "Global Reconnaissance-Strike,"
15. See USAF Chief of Staff, General Michael Ryan's comments quoted in, "The Needs of the Force," *Air Force Magazine,* September 2000, page 42-43.
16. Ibid, page 45.

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