# Space Militarization Good/Bad

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# \*\*\*WEAPONIZATION BAD

## Weaponization Bad --- General War 1/2

### Weaponization bad --- causes planet-ending conflict that outweighs nuclear war

Mitchell et al., Associate Professor of Communication and Director of Debate at the University of Pittsburgh, Ayotte and Helwich, Teaching Fellows in the Department of Communication at the University of Pittsburgh, 2001 (Dr. Gordon R., Kevin J., David Cram, ISIS Briefing on Ballistic Missile Defence, "Missile Defence: Trans-Atlantic Diplomacy at a Crossroads", No. 6 July, http://www.isisuk.demon.co.uk/0811/isis/uk/bmd/no6.html)

A buildup of space weapons might begin with noble intentions of 'peace through strength' deterrence, but this rationale glosses over the tendency that '… the presence of space weapons…will result in the increased likelihood of their use'.33 This drift toward usage is strengthened by a strategic fact elucidated by Frank Barnaby: when it comes to arming the heavens, 'anti-ballistic missiles and anti-satellite warfare technologies go hand-in-hand'.34 The interlocking nature of offense and defense in military space technology stems from the inherent 'dual capability' of spaceborne weapon components. As Marc Vidricaire, Delegation of Canada to the UN Conference on Disarmament, explains: 'If you want to intercept something in space, you could use the same capability to target something on land'. 35 To the extent that ballistic missile interceptors based in space can knock out enemy missiles in mid-flight, such interceptors can also be used as orbiting 'Death Stars', capable of sending munitions hurtling through the Earth's atmosphere. The dizzying speed of space warfare would introduce intense 'use or lose' pressure into strategic calculations, with the spectre of split-second attacks creating incentives to rig orbiting Death Stars with automated 'hair trigger' devices. In theory, this automation would enhance survivability of vulnerable space weapon platforms. However, by taking the decision to commit violence out of human hands and endowing computers with authority to make war, military planners could sow insidious seeds of accidental conflict. Yale sociologist Charles Perrow has analyzed 'complexly interactive, tightly coupled' industrial systems such as space weapons, which have many sophisticated components that all depend on each other's flawless performance. According to Perrow, this interlocking complexity makes it impossible to foresee all the different ways such systems could fail. As Perrow explains, '[t]he odd term "normal accident" is meant to signal that, given the system characteristics, multiple and unexpected interactions of failures are inevitable'.36 Deployment of space weapons with pre-delegated authority to fire death rays or unleash killer projectiles would likely make war itself inevitable, given the susceptibility of such systems to 'normal accidents'. It is chilling to contemplate the possible effects of a space war. According to retired Lt. Col. Robert M. Bowman, 'even a tiny projectile reentering from space strikes the earth with such high velocity that it can do enormous damage — even more than would be done by a nuclear weapon of the same size!'. 37 In the same Star Wars technology touted as a quintessential tool of peace, defence analyst David Langford sees one of the most destabilizing offensive weapons ever conceived: 'One imagines dead cities of microwave-grilled people'.38 Given this unique potential for destruction, it is not hard to imagine that any nation subjected to space weapon attack would retaliate with maximum force, including use of nuclear, biological, and/or chemical weapons. An accidental war sparked by a computer glitch in space could plunge the world into the most destructive military conflict ever seen.

Weaponization Bad --- General War 2/2

### US MILITARIZATION OF SPACE CAUSES GLOBAL PROLIFERATION AND WORLD WAR THREE

Noam Chomsky, Institute Professor at the Massachusetts Institute of Technology, International Socialist Review, Issue 19, July-August 2001, <http://www.isreview.org/issues/19/NoamChomsky.shtml>, ACC: 8.20.05, p. online

The answer is, as I said, full-spectrum dominance, such total dominance of space that no adversary will even come close. Nobody really seriously thinks they can achieve that. But it doesn’t matter. It sets in motion a new age of warfare in which the U.S. happens to be technologically so far in the lead that no potential adversary is going to say, Fine, have a nuclear first strike if you like. They’re going to proceed, and they will proceed in predictable ways, namely by developing anti-satellite weapons, to which the U.S. will have to respond with even more massive militarization. Furthermore, it is pretty well understood that it’s going to lead to proliferation. China is going to respond. Russia is going to respond. If China develops its at the moment very minimal deterrent into one that’s capable of responding to this extended system, India is going to respond out of concern over China. Pakistan will react to India developments. Israel will react to Pakistan developments. Other countries will get into the game. It will pretty clearly have the effect of proliferating weapons of mass destruction. Nobody seriously believes that any potential adversary of the U.S. is going to be nutty enough to try to send a missile. So the missile defense system isn’t intended to do anything defensive. What it’s intended to be is a protection for U.S. forces on the ground or in the air. It’s supposed to give room for a first strike with relative confidence that there can’t be a reaction. This is known. The Canadian military advised the government of Canada in papers that were leaked that the purpose of the missile defense is not any kind of defense. It’s to create a cover for offensive military actions, including possibly a first strike. The Star Wars program, SDI, was understood in the same way. So it’s basically an offensive weapon. A lot of debate now is whether national missile defense is technically possible. Is it going to work? That’s kind of missing the point. If it looks like it’s not going to work, then it’s not a big problem. If there’s any hint that it might work, potential adversaries have to take that seriously. When you’re talking about weapons of total destruction–the likelihood and confidence of total destruction–minimal probability has to be assumed to be reality. You can’t take chances. The Space Command isn’t really concerned about the danger that we might blow up the world. That’s a small problem. What they’re interested in is something different. They’re interested in providing a basis for U.S. military action, including first strike if needed. But more important, they’re protecting U.S.-based investments and commercial interests. And they give an analogy. They say that the militarization of space is very much like the development of navies. The British navy ruled the seas in order to protect British investments and commercial interests. And then, of course, other navies responded, like the German navy. You go on and get into the First World War.

## Weaponization Bad --- Space Debris

### The debris generated from even one very small war in space cascades --- causes the entombment of the planet and cripples the environment --- destroys the use of space and guarantees extinction through blocking out the sun

Rebecca Johnson, Director of the Disarmament and Arms Control Programme at the Liu Institute for Global Issues, University of British Columbia, 2003, ("Missile defense and the weaponisation of space," ISIS Policy paper on missile defense, January, http://www.isisuk.demon.co.uk/0811/isis/uk/bmd/no11.html)

Space in low earth orbit is teeming with human generated debris, defined by NASA as “any man-made object in orbit about the Earth which no longer serves a useful purpose”. There are some 9,000 objects larger than 10 cm and over 100,000 smaller objects. As orbiting debris may be travelling at very high velocities, even tiny fragments can pose a significant risk to satellites or spacecraft, as experienced by US astronaut Sally Ride, when a tiny, orbiting fleck of paint gouged the window of the space shuttle during her first flight.25 If the fleck of paint had been metal, its impact might have had lethal consequences. As noted by Joel Primack, a physics professor at the University of California and expert on the problems of space debris, “the weaponisation of space would make the debris problem much worse, and even one war in space could encase the entire planet in a shell of whizzing debris that would thereafter make space near the Earth highly hazardous for peaceful as well as military purposes”.26 This would entomb the earth and jeopardise the possibility of further space exploration. In addition, Primack speculates that even a small number of “hits” in space could create sufficient debris to cause a cascade of further fragmentation (a kind of chain reaction). This, in turn, could potentially damage the Earth’s environment and, as the Sun’s rays reflect off the dust, cause permanent light pollution, condemning us to a “lingering twiligh**t”**.27

## Weaponization Bad --- China War 1/2

### US drive for weaponization forcing China into a space arms race, risking nuclear escalation

James Carroll, Bush's Battle to Dominate in Space, Boston Globe, October 28, 2003, http://www.commondreams.org/scriptfiles/views03/1028-03.htm

THE IRAQ war may not be the worst of what President Bush is doing. Last month the United Nations Conference on Disarmament in Geneva adjourned, completely deadlocked. This is the body that since 1959 has hammered out the great arms control and reduction treaties -- the regime of cooperation and "verified trust" that enabled the Cold War to end without nuclear holocaust. The last agreement to come out of Geneva was the Comprehensive Test Ban Treaty in 1996, and the incoming Bush administration's attitude toward the whole enterprise was signaled by its explicit approval of the Senate's rejection of that treaty. Now the issue is the grave question of weapons in space, and for several years, while China and other nations have pushed for an agreement aimed at preventing an arms race in outer space, the United States has insisted that no such treaty is necessary. Last August China offered a compromise in its demands, hoping for a US moderation of its refusal, but no progress was made.

As of now, the 1967 Outer Space Treaty governs the military uses of space, but China argues that strategic plans openly discussed in the Pentagon, including the Missile Defense Program, involve deployments that will violate that treaty. In the words of John Steinbruner and Jeffrey Lewis, writing in Daedalus, "The Chinese were particularly alarmed by a 1998 long-range planning document released by the then United States Space Command. That document outlined a concept called global engagement -- a combination of global surveillance, missile defense, and space-based strike capabilities that would enable the United States to undertake effective preemption anywhere in the world and would deny similar capability to any other country."

If the Chinese were alarmed in 1998 by such "full-spectrum dominance," as US planners call it, imagine how much more threatened they feel now that Pentagon fantasies of preemption and permanent global supremacy have become official Bush policies. For decades, "deterrence" and "balance" were the main notes of Pentagon planning, but now "prevention" and "dominance" define the US posture. Such assertions can be made in Washington with only good intentions, but they fall on foreign ears as expressions of aggression.

When it comes to space, the Chinese have good reason for thinking of themselves as the main object of such planning, which is why they are desperate for a set of rules governing military uses of space. (At the American Academy of Arts and Sciences, a study of such rules is underway codirected by Steinbruner and the academy's Martin Malin).

Two weeks ago China put a man in space, a signal of China's arrival -- and of the arrival of this grave question. Beijing has invested heavily in commercial development of space and will become a significant economic competitor in that sphere. But such peaceful competition presumes a framework of stability, and it is inconceivable that China can pursue a mainly nonmilitary space program while feeling vulnerable to American military dominance. China has constructed a minimal deterrent force with a few dozen nuclear-armed ICBMs, but US "global engagement" based on a missile defense, will quickly undercut the deterrence value of such a force. The Chinese nuclear arsenal will have to be hugely expanded.

Meanwhile, America's "high frontier" weapons capacity will put Chinese commercial space investments at risk. No nation with the ability to alter it would tolerate such imbalance, and over the coming decades there is no doubt that China will have that capacity. Washington's refusal to negotiate rules while seeking permanent dominance and asserting the right of preemption is forcing China into an arms race it does not want. Here, potentially, is the beginning of a next cold war, with a nightmare repeat of open-ended nuclear escalation.

Weaponization Bad --- China War 2/2

### US Space militarization makes war with China inevitable --- the status quo’s the only peaceful option

William C. Martel, Professor of National Security Affairs @ the Naval War College in Rhode Island and Toshi Yoshihara, Doctoral Candidate @ the Fletcher School of Law and Diplomacy @ Tufts University, Research Fellow @ the Institute for Foreign Policy Analysis in Massachusetts, “Averting a Sino-U.S. Space Race”, The Washington Quarterly, Autumn 2003, p. L/N

Strategists in the United States and in China are clearly monitoring the other's developments in space. How the United States judges Chinese intentions and capabilities will determine Washington's response; of course, the reverse is equally true. As each side eyes the other, the potential for mutual misperceptions can have serious and destabilizing consequences in the long term. In particular, both countries' exaggerated views of each other could lead unnecessarily to competitive action-reaction cycles. What exactly does such an action-reaction cycle mean? What would a bilateral space race look like? Hypothetically, in the next 10 years, some critical sectors of China's economy and military could become increasingly vulnerable to disruptions in space. During this same period, Sino-U.S. relations may not improve appreciably, and the Taiwan question could remain unresolved. If Washington and Beijing could increasingly hold each other's space infrastructure hostage by threatening to use military options in times of crisis, then potentially risky paths to preemption could emerge in the policy planning processes in both capitals. In preparing for a major contingency in the Taiwan Strait, both the United States and China might be compelled to plan for a disabling, blinding attack on the other's space systems before the onset of hostilities. The most troubling dimension to this scenario is that some elements of preemption (already evident in U.S. global doctrine) could become a permanent feature of U.S. and Chinese strategies in space. Indeed, Chinese strategic writings today suggest that the leadership in Beijing believes that preemption is the rational way to prevent future U.S. military intervention. If leaders in Beijing and Washington were to position themselves to preempt each other, then the two sides would enter an era of mutual hostility, one that might include destabilizing, hair-trigger defense postures in space where both sides stand ready to launch a first strike on a moment's notice. One scenario involves the use of weapons, such as lasers or jammers, which seek to blind sensors on imaging satellites or disable satellites that provide warning of missile launches. Imagine, for example, Washington's reaction if China disabled U.S. missile warning satellites or vice versa. In that case, Sino-U.S. relations would be highly vulnerable to the misinterpretations and miscalculations that could lead to a conflict in space. Although attacks against space assets would likely be a precursor or a complement to a broader crisis or conflict, and although conflicts in the space theater may not generate many casualties or massive physical destruction, the economic costs of conflict in space alone for both sides, and for the international community, would be extraordinary given that many states depend on satellites for their economic well-being.

### Space weaponization will be perceived as threatening --- causes arms racing

Lt Col Bruce M. DeBlois (BS, MS, Union College; PhD, Oxford University) is the division chief of Strategic Studies and Assessments at the National Reconnaissance Office, Chantilly, Virginia, Space Sanctuary: A Viable National Strategy, Aerospace Power Journal - Winter 1998, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj98/win98/deblois.html

11. One may make the case that world domination is not the reason for putting US weapons in space, but, true or not, other nations would perceive it as a US attempt at world domination. Weaker nations have a natural tendency to unite and oppose emerging hegemonies. This would pose a real threat to the United States and the ideals it represents.

## Weaponization Bad --- Hegemony

### Limitations on research and development of space weapons good – countries won't seek space weapons and we gain strategically by letting them make the first move

Karl Mueller, Analyst @ RAND, March 27, 2002 (Is Weaponization of Space Inevitable? http://www.isanet.org/noarchive/mueller.html)

2. Enlightened Self-Interest. The second scenario assumes that space weapons do in fact prove to be fairly useful and cost-effective. In this case, there is a good chance that U.S. security in particular would be best served by perpetuation of the space sanctuary for purely nationalist reasons: as the leading spacefaring state and the country most dependent upon satellites for its military power and economic wealth, the United States has the most to lose if those satellites become more vulnerable to attack. In addition, having invested vast resources in developing a preponderance of land, sea, air and unweaponized space power, a true space weapon revolution that wiped the clean the slate of military competition might well represent a net power loss for the United States relative to its rivals (as the steam, ironclad, and Dreadnought revolutions each did in turn for the Royal Navy).[40]

One approach to dealing with this problem would be for the United States to announce a policy of conditional unilateral restraint in space weaponization: that it will not be the first nation to weaponize space, although it will continue to develop the relevant technologies in order to be prepared to respond in kind should other states violate the sanctuary. In this scenario, such an approach would not be motivated by an idealistic belief that eschewing space weapons would inspire or shame other states to do the same. Instead, it would be based on a hard-nosed, realist calculation: U.S. space weaponization would not only encourage other states to follow suit, but would greatly assist them in doing so, since they would be able to exploit the advantages of backwardness after the United States had paid the costs of trailblazing the new technologies. With the United States not leading the way, yet threatening to lift its self-restraint in the absence of reciprocity from its rivals (thus denying them the hope of establishing hegemony in space), other states might well find insufficient value in initiating space weaponization to justify its costs.

## Weaponization Bad --- Hegemony --- AT: Key to War-fighting 1/2

### Space systems don’t do anything to improve US war-fighting --- they’re vulnerable to interference, orbits can easy be thrown off, and reliance will always rely on primarily terrestrial systems --- prefer our qualified evidence

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Sound military reasons exist for not weaponizing space. For example, 1. space-weaponization strategies lack the element of survivability. Space systems will not survive if they are targeted. Military systems in space, like all others, follow well-established, fixed orbits (orbital transfers are energy- and cost-prohibitive). This leaves space systems exposed and vulnerable. As predominantly unmanned systems, they also require data link to a controller, leaving them vulnerable to interference in the electromagnetic (EM) spectrum. For instance, a nuclear explosion in space—with force and radiation not attenuated by the atmosphere—could negate the use of vast numbers of orbits. Or direct-ascent ASATs, constructed from modified cold war ICBMs, could disperse something as simple as sand in LEO, leaving anything passing through it (17,000 MPH @ 200 km) severely damaged or destroyed. Many futuristic war games are conducted throughout DOD each year, and the play of space systems has increased. One conclusion persists: the fight for space is first and fast, and many space systems do not survive. As space access matures, the survivability issue will become obvious. Nations will not rely on space systems for crisis situations—they will rely on terrestrial systems (perhaps redundant with more efficient but more vulnerable space counterparts). Hence, the value of space weapons to deny those space systems will be moot.

### The tech will get hijacked through low tech low cost means by weaker states --- even if it works, it can get easily hacked

Rebecca Johnson, Director of the Disarmament and Arms Control Programme at the Liu Institute for Global Issues, University of British Columbia, 2003, ("Missile defense and the weaponisation of space," ISIS Policy paper on missile defense, January, http://www.isisuk.demon.co.uk/0811/isis/uk/bmd/no11.html)

7. Can Outer Space be Made Secure? As noted above, US advocates of space weaponisation rest their case on three assumptions: inevitability, vulnerability and control. The higher the level of reliance on space assets for military purposes, the greater the vulnerabilities. As first demonstrated in the strikes on Former Yugoslavia over Kosovo and then in Afghanistan, the US now depends on an array of ‘smart’ weaponry that needs very sophisticated data and guidance systems, telemetry, and electronic communications. This ‘revolution in military affairs’ (RMA), in turn, depends on satellites.28 But military and commercial systems in space are not just vulnerable to space-targeted attacks, since they depend on ground facilities (telemetry, tracking and control, communications, data reception etc.) and radio links (carrying commands, communications, telemetry and data), which provide much more accessible opportunities for interference, disablement or destruction. It is unlikely that adversaries would risk a pre-emptive direct attack when electronic hacking, jamming or “spoofing” provide a low tech, low cost means of disrupting space assets.

Weaponization Bad --- Hegemony --- AT: Key to War-fighting 2/2

### Space power fails --- encourages balancing from great powers and asymmetric threats from lesser powers

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Demonstrations of atomic weapons at the close of World War II and the prospect of nuclear weapons married to emerging ballistic missile technology ushered in a new era of international relations. Threatening to use military force had always been an instrument of diplomacy, but the potential for instantaneous, indefensible, and complete annihilation posed a new rubric in the games nations play. Thus, nuclear deterrence was born.

Initial thoughts that such a threat relegated warfare to the shelves of history due to the prospects of massive nuclear retaliation proved naïve—subsequent lower-order conflict did not force nuclear escalation. Symmetric nuclear capabilities among the principal powers weakened the credibility of their use, while asymmetric responses (guerrilla and terrorist tactics, aligning with nuclear-capable parties, conflict protraction, etc.) still allowed lesser powers to test the resolve of the principals—particularly over issues of peripheral interest to those nuclear powers. Examples include Vietnam and Afghanistan. Visions of massive space superiority and the touted huge, coercive power advantage they provide will likely prove as bankrupt a notion as that of massive nuclear retaliation. In their logical evolution, both give way to strategies that recognize an international context of reactive nations. Principal powers will simply not allow a space hegemon to emerge, and lesser powers may concede hegemony but will continue to seek asymmetric counters.4 The result will be a space strategy that better aligns with what evolved out of the nuclear dilemma: mutual assured destruction (MAD).

## Weaponization Bad --- Hegemony --- AT: Key to Deterrence

### Mutual Assured Destruction fails in space --- it’s impossible to defend all national interests, weapons instigate first strike, and become a self-fulfilling prophecy: they’ll only be used if they’re there

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From this experience, one can draw and apply lessons as the possibility of space weapons emerges. Clearly, these weapons offer the potential for instantaneous and indefensible attack. Although the Outer Space Treaty of 1967 (outlawing weapons of mass destruction [WMD] in space) prohibits complete annihilation, the threat of annihilation would still exist—it is difficult to distinguish space-based WMD from space-based non-WMD. In simple terms, space weaponization could bring a new round of MAD.

Although MAD successfully deterred a nuclear exchange over the past 40 years, it was a very costly means of overcoming the lack of trust between superpowers. The dissolution of that distrust and the corresponding reduction of nuclear arms lie at the very heart of the Strategic Arms Reduction Treaties (START). Comparing the emergence of nuclear-tipped ICBMs with the accession of space weapons does yield some stark differences, however. There is no single threat to focus diplomatic efforts aimed at building trust, and there does seem to be some international support for the idea of coalescing a strategy supporting space sanctuary and deterring third world space upstarts. Aside from these differences, though, one could assume the existence of proliferated space weapons and proceed with the thought experiment that a space-MAD strategy would emerge among the principal powers. Again, one would have to eliminate the notion of “winning” a space-weapons exchange, and on at least the first two counts, one could do so:

 1. It is logical to concede the offensive dominance of space-based weapons in low-earth orbit (LEO). Any point on earth could have a weapon pointed at it with clear line of sight; the potential of directed-energy weapons takes the notion of instantaneous to the extreme; and defense of every national asset from such an attack would prove next to impossible.

 2. The same argument against the logic of “tactical” nuclear weapons would also apply to the “tactical” use of space-based weapons. Once they were used, any conflict could automatically escalate to a higher level.

 3. The failing of a space-MAD strategy comes on the third count: early warning or survivable second-strike capability. Should space be weaponized and two space-capable foes emerge, there will be no 30-minute early warning window from which one actor could launch a counterattack prior to the impact of the preemptive first strike. Furthermore, space basing is equivalent to exposure—no strike capability can be reliably hidden or protected in space in order to allow a surviving, credible second strike.

Space-MAD weapons without early warning or reliable survivability logically instigate a first strike. This creates an incredibly unstable situation in which the viability of “winning” a space war exists and is predicated upon striking first (with plausible deniability exacerbating the problem), eliminating the “mutual” from MAD and only assuring the destruction of the less aggressive state. Obviously, this is not a good situation. Putting weapons in space could well be a self-fulfilling prophecy: we put them there because we anticipate we’ll need them, and because they’re there, we’ll be compelled to use them; hence, we needed them.

The conclusion, then, of a nuclear weapons–space weapons analogy can only be that while the threats from each type of weapon are similar, the most successful strategy (MAD) for dealing with the former cannot work for the latter. Unlike the strategy for nuclear weapons, there exists no obvious strategy for employing space weapons that will enhance global stability. If the precedent of evading destabilizing situations is to continue—and that is compatible with a long history of US foreign policy—one ought to avoid space-based weapons. Further, even if one could construct a workable space-MAD strategy, the nuclear-MAD approach teaches that this is an intensely expensive means of dealing with mutual distrust between nations.

## Weaponization Bad --- Hegemony --- Air Force Solves Their Offense

### Air power solves benefits of space – strategy of militarization causes escalatory retaliation and violent counterbalancing

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3. space-weaponization strategies are provocative. Space weapons are inherently offensive, and dominant offensive weapons encourage preemption against them.33 Hence, space weapons are militarily provocative and destabilizing.

4. space-weaponization strategies are escalatory. Space weapons, by their nature, are escalatory. Because they are remote, they offer plausible deniability; because they are typically unmanned, they are easier to use. As such, the use of space weapons blurs the distinction between peace and war. They are another ambiguous step on the slippery slope to escalation.

5. space-weaponization strategies are militarily self-defeating. A space arms race threatens to negate the overwhelming military advantages we now hold in space, as well as in the air, on land, or at sea. By proving the efficacy of space weapons, the United States may provide the international community with an asymmetric approach capable of offsetting current US global dominance.

6. space-weaponization strategies are politically self-defeating. Pursuing the military advantages of space weapons will inevitably incite military coalitions against the United States.

7. space-weaponization strategies are not a panacea. As mentioned, the anticipated advantages of massive space superiority will be neutralized by symmetric reactions of major powers and offset by asymmetric responses of lesser powers.

8. space-weaponization strategies are expensive. There are significant long-term-opportunity costs within the military, particularly in these times of diminishing DOD budgets. One can meet the same requirements with cheaper alternatives, such as combat unmanned ae-rial vehicles (UAV).34 Weaponizing space will necessarily come at the expense of satisfying documented military deficiencies (strategic-lift deficiencies and the C-17, air-superiority deficiencies and the F-22 or joint strike fighter, forward-basing deficiencies and carriers, ISR deficiencies and the next generation of ISR satellites,35 etc.).

9. space-weaponization strategies are a single-point solution. What can be done with space weapons can also be done from the air, without the political baggage of weaponizing space.

## AT: Space Mil = Inevitable 1/2

### Space militarization’s not inevitable – nations don't have the intentions or resources to threaten space assets – US action spurs retaliation and escalatory weaponization --- neutralizes the US space advantage

Rebecca Johnson, Director of the Disarmament and Arms Control Programme at the Liu Institute for Global Issues, University of British Columbia, 2003, ("Missile defense and the weaponisation of space," ISIS Policy paper on missile defense, January, http://www.isisuk.demon.co.uk/0811/isis/uk/bmd/no11.html)

Placing weapons in space is not the inevitable outcome of the use of space for commercial purposes. Many of the perceived vulnerabilities of space assets can be addressed in other ways. At present, nobody except the US has the capability, intention and resources to threaten space assets. No states with the technological potential to pose a future threat to US (or other) space assets (for example Russia, China, India) are prioritising financial or technical resources to developing weapons capable of threatening space assets. If US military developments in space continue their drive towards weaponisation, however, it is likely that others will decide that they need to devote political, financial and technological resources to counter or off-set US space-based superiority. The US already possesses the technology to impose its will on the world militarily, but there are growing indications that it lacks the intelligence and human infrastructures to manage such overwhelming military superiority in the interests of greater security. Such levels of dominance are not only potentially destabilising; they may also be self-defeating in security terms, provoking adversaries to direct their attacks at the “soft belly” i.e. undefended civilians, as happened in New York and Washington on 11th September 2001. A serious consequence of asymmetric warfare is that the drive for military invulnerability is matched by increasing civilian vulnerability. Notions of full spectrum dominance, as outlined by US SpaceCom, are perceived as a security threat by countries that have no political desire or intention to threaten the US, but which would be expected by their own citizens and militaries to develop countermeasures to deter the US nevertheless. A growing number of US officers and officials now view the Bush Administration’s drive to weaponise space to be militarily and politically self-defeating, increasing rather than decreasing vulnerabilities. They are concerned that the pursuit of space weaponisation would be expensive, provocative and escalatory. They fear that any initial advantage from being the first to put weapons in space would soon be neutralised as other major powers develop space weapons of their own, while lesser states and even non-state groups find ways to offset space superiority with asymmetric responses.29

### US failure to militarize space solves all inevitability claims

Rebecca Johnson, Director of the Disarmament and Arms Control Programme at the Liu Institute for Global Issues, University of British Columbia, 2003, ("Missile defense and the weaponisation of space," ISIS Policy paper on missile defense, January, http://www.isisuk.demon.co.uk/0811/isis/uk/bmd/no11.html)

3. Why put Weapons into Space? Three main motivations underlie the drive to weaponise space. First, the belief that it is inevitable, and therefore the US must get there first. Second, a growing fear of the vulnerability of space assets to a pre-emptive attack - the so-called “Space Pearl Harbour” scenario. Third, the desire to control and dominate, not only the military dimension, but also the commercial markets that increasingly depend on space assets. Early US Space Command publications readily focussed on this third ambition, but later discussions have tended to focus on the first two, more politically palatable, reasons. Those who argue that weaponising space is inevitable tend to evoke the “flag follows trade” analogy of sea and air power, relating military development to the safeguarding of commercial expansion. They also argue that whoever weaponises first will enjoy a significant advantage.10 These analogies are seductive, but flawed. Indeed, some analysts have come to the conclusion that the weaponisation of space is only inevitable if the US itself drives a race to do so. Moreover, history abounds with examples showing that the security advantage enjoyed by the leader in innovative military technology is soon narrowed. Nuclear weapons, for example, demonstrate how any benefit from being the first to deploy a new type of weapon is quickly eroded, leading to greater national and international insecurity in the longer run.

Alternative analogies, based on a military interpretation of the concept of sanctuary, show how co-operative international action can be successful in preventing military competition and deployments from threatening a potentially strategic area of international and scientific importance, as in the case of Antarctica.

## AT: Space Mil = Inevitable 2/2

### The only scenario for a race to weaponize space is if the US starts it --- other nations are committed to peace

Lt Col Bruce M. DeBlois (BS, MS, Union College; PhD, Oxford University) is the division chief of Strategic Studies and Assessments at the National Reconnaissance Office, Chantilly, Virginia, Space Sanctuary: A Viable National Strategy, Aerospace Power Journal - Winter 1998, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj98/win98/deblois.html

Furthermore, any move by the United States to weaponize space not only incites potential adversaries to follow suit but also is perceived as provocative by allies as well as adversaries. History is full of examples of the emergence of one military power instigating coalitions against it.16 Make no mistake, the world is acutely attuned to US moves toward space: The world space community is confused as to the need for the US to develop space weaponry now, and is dismayed that the US is planning to test a high-powered laser against a satellite target [F. Ongaro, Headquarters European Space Agency]. The policing of space is an international concern. . . . The international community will be very concerned if the US goes alone to solve problems that affect all space powers [Dr. H. Richarz and Dr. K. Schrogl, Headquarters Deutsche Agentur für Rahmfahrt Angelegenheiten (DARA—the German space agency)]. It is obvious to educated Russians that Americans are subject to self-persuasion. Americans say they intervene to uphold democracy and peace, but Russians see some other objective, oil, uranium or bananas. Therefore what America should not do in space at the present time is any sort of anti-satellite activity. The Duma (Russian Parliament) banned the use of anti-satellite weapons after a heated debate. The Russian military and their political allies wanted to keep an ASAT program. The proposed test of the US MIRACL laser against a US satellite is at the center of a Russian controversy. . . . ASAT development should not be a unilateral US action; it should be an international effort when required. Almost all of the Earth’s states have some space requirements, and will see any move by the US towards space superiority as threatening [Dr. M. Tarasenko, Russian Center for Arms Control, Energy, and Environmental Studies].17 Adversarial Potential What disturbs most foreign powers regarding US space development is the clear absence of motive: there is virtually no threat to US space-ISR dominance. No Current Major Threat Some foreign ISR threat has existed for many years. As mentioned above, the calculus was accomplished, and the historical pattern of US policy decisions has supported the conclusions that the gains from our own space– ISR/MCG/Comm capability outweigh what we stand to lose from others’ space–ISR/ MCG/Comm capability. The best way to secure that advantage has been to pursue space sanctuary. Arguments that support weaponization often cite the emergence of foreign space-ISR capabilities; yet, the proliferation of worldwide space-ISR capability is stabilizing. Only aggressive nations—with something to hide—would take exception to being monitored. Additionally, concealment, communications and operations security, and deception are all means by which the United States can counter foreign space-ISR, if and when we so choose. In the event of conflict, active measures also include ISR and communications jamming and/or attacks against ground stations (the true vulnerability of any space architecture). While foreign ISR capability is proliferating, one must perceive it as what it is, for the most part—a stabilizing global pattern of watchfulness. Besides, it is not simply a matter of what data one can access from space but, more importantly, what one can do with the data that is accessed. The United States is by no means surrendering its lead on data processing and exploitation. The fact that a third world actor has access to space reconnaissance data should not be alarming, since it must be weighed against the huge, coordinated intelligence infrastructure (tasking, collection, processing, exploitation, dissemination, and archives) possessed and being further developed by the United States. In short, one can use less provocative means than preemptive weaponization to deal with minor gains made on US access to space data. These minor gains on data access may simply be the price of peace. Further claims of adversarial space weapons are simply unfounded. Military futures studies often cite predictions of foreign space-based particle beams and other such technologies,18 but in reality they merely provide paranoid justification for US space programs. Reality speaks of a different future: 1. Russia is currently operating under its own unilateral ban on ASAT testing. In November of 1991, the Russians announced that their co-orbital ASAT was still operational. But 12 of 29 tests between 1968 and 1982 resulted in failure; the ASAT is limited to inclinations between 62 degrees and 66 degrees; and its maximum range is one thousand miles.19 Additionally, any current, open-source account of the Russian economy will find it in financial crisis (to the detriment of space funding). Earlier this year, Yuri Koptev, director of the Russian Space Agency, commented that of 20 nations active in space research and satellite launches, Russian spending ranked 19th.20 2. Europe’s combined space efforts are growing, but Europeans refuse even to consider collaborative efforts at theater ballistic missile defense because of the potential ASAT spinoff capabilities it might afford. Collectively, Europe is one of the strongest supporters of space sanctuary.21 3. Japan constitutionally prohibits offensive weapons. The Japanese also declined to participate in a cooperative agreement with the United States aimed at building theater missile defense.22 4. China is interested in space but has done nothing except persistently pursue collaboration with Europe and the United States.23 The overwhelming evidence suggests that, unprovoked, the rest of the world is simply not interested in space weaponization at this time.

## Space Weaponization Fails --- Tech Fails

### The tech won’t work --- revolutionary leaps in astrodynamics are required and visions of space dominances have historically failed

Lt Col Bruce M. DeBlois (BS, MS, Union College; PhD, Oxford University) is the division chief of Strategic Studies and Assessments at the National Reconnaissance Office, Chantilly, Virginia, Space Sanctuary: A Viable National Strategy, Aerospace Power Journal - Winter 1998, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj98/win98/deblois.html

Technological Limitations: An Overstated, Promised Capability Much of the space-weaponization argument hinges upon an assumed capability, given proper investment. Such “technological optimism” warrants a second look. As noted by a distinguished scientist, “Scientists and engineers now know how to build a station in space that would circle the Earth 1,075 miles up. . . . Within the next 10 or 15 years, the Earth will have a new companion in the skies, a man-made satellite that could be either the greatest force for peace ever devised, or one of the most terrible weapons of war—depending on who makes and controls it.”24 Surprisingly, the distinguished scientist is the father of the space rocket, Wernher von Braun, and the year he made this unrealized statement was 1952. More recently, space-shuttle design plans of the 1970s called for 160-hour turnaround times and a minimal-maintenance concept requiring three or four technicians.25 Obviously, we have not attained anything close to this vision either. Such optimistic projections on the future uses of space have been around since the beginning of the US space program, and that tradition continues today. We should remain cautious on several counts: 1. The energy differential between air flight and spaceflight is orders of magnitude,26 and requires not simply an evolutionary advance of current aerodynamics technology but revolutionary leaps in astrodynamics and rocket technology. 2. In the concept-design phase of many space systems, some aspects of the hostile space environment have underestimated effects. Micrometeorites, space debris, extreme temperatures, and excessive radiation all require shielding, insulation, and energy-dissipation mechanisms. 3. One of the biggest technical problems facing any spacecraft is generating and/or maintaining sufficient onboard energy. 4. Remote guidance and control of spacecraft have posed confounding problems since the advent of the rocket in the early 1940s.27

### Err neg --- their optimism in tech is misplaced

Lt Col Bruce M. DeBlois (BS, MS, Union College; PhD, Oxford University) is the division chief of Strategic Studies and Assessments at the National Reconnaissance Office, Chantilly, Virginia, Space Sanctuary: A Viable National Strategy, Aerospace Power Journal - Winter 1998, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj98/win98/deblois.html

All told, the story of proliferated space access and exploitation in the near future is grossly exaggerated. Since the beginning of the space age, we have readily assumed away the very many technical and political difficulties associated with access to and movement in space. It is a natural thing to do—the skies were readily conquered; why not space? Visions of Buck Rogers “flying” through space reinforce the natural, albeit false, analogy between the conquest of air and space—hence the misnomer spaceflight. This optimism is part of our American heritage. Although it is a positive motivator of our inevitable move into space, it must not cloud rational decisions.

# \*\*\*WEAPONIZATION GOOD

## Weaponization Good --- Global Peace

### Space weapons secure international peace

Dolman 06 [Everett, ‘U.S. Military Transformation and Weapons in Space’, SAIS Review: vol. 26, no. 1; http://muse.jhu.edu/journals/sais\_review/v026/26.1dolman.pdf]

There is another, perhaps far more compelling reason that weaponizing space would in time be less threatening to the international system than the failure to do so. The weaponization of space would decrease the likelihood of an arms race by shifting spending away from conventional weapons systems. One of the more cacophonous refrains against weapons procurement of any kind is that the money needed to purchase them is better spent elsewhere. It is a simple cliché but a powerful one. Space weapons in particular will be very, very expensive. Are there not a thousand better ways to spend the money? But funding for weapons does not come directly from education, housing or transportation budgets. It comes from military budgets. Thus the question should be directed not at particular weapons, but at all weapons. The immediate budget impact of significant funding increases for space weapons would be to decrease funding for combat aircraft, the surface battle fleet, and ground forces. This may well set the proponents of space weaponization at odds with both proponents and opponents of increased defense spending. Space advocates must sell their ideas to fellow pro-weapons groups by making the case that the advantages they provide outweigh the capabilities forgone. This is a mighty task. The tens or even hundreds of billions of dollars needed to develop, test and deploy a minimal space weapons system with the capacity to engage a few targets around the world could displace a half-dozen or more aircraft carrier battle groups, entire aircraft procurement programs such as the F-22, and several heavy armored divisions. This is a tough sell for supporters of a strong military. It is an even more difficult dilemma for those who oppose weapons in general, and space weapons in particular. Ramifications for the most critical current function of the Army, Navy, and Marines—pacification, occupation, and control of foreign territory—are profound. With the downsizing of traditional weapons to accommodate heightened space expenditures, the U.S. ability to do all three would wane significantly. At a time when many are calling for increased capability to pacify and police foreign lands, in light of the no-end-in-sight occupations of Iraq and Afghanistan, space weapons proponents must advocate reduction of these capabilities in favor of a system that will have no direct potential to do so. Hence, the argument that the unilateral deployment of space weapons will precipitate a disastrous arms race is further eroded. To be sure, space weapons are offensive by their very nature. They deter violence by the omnipresent threat of precise, measured, and unstoppable retaliation. But they offer no advantage in the mission of territorial occupation. As such, they are far less threatening to the international environment than any combination of conventional weapons employed in their stead. What would be more threatening to a state in opposition to American hegemony: a dozen lasers in space with pinpoint accuracy, or (for about the same price) 15 infantry divisions massed on the border? A state employing offensive deterrence through space weapons can punish a transgressor state, but it is in a poor position to challenge that state’s sovereignty. A transgressor state is less likely to succumb to the security dilemma if it perceives that its national survival is not at risk. Moreover, the tremendous expense of space weapons would inhibit their indiscriminate use. Over time, the world of sovereign states would recognize that the United States could not and would not use space weapons to threaten another country’s internal self-determination. The United States still would challenge any attempts to intervene militarily in the politics of others, and it would have severely restricted its own capacity to do the latter. Judicious and non-arbitrary use of a weaponized space eventually could be seen as a net positive, an effective global police force that punishes criminal acts but does not threaten to engage in aggressive behavior.

## Weaponization Good --- Hegemony/Power Projection 1/2

### Space weaponization’s good --- key to hegemony and won’t trigger balancing

Dolman 06 [Everett, ‘U.S. Military Transformation and Weapons in Space’, SAIS Review: vol. 26, no. 1; http://muse.jhu.edu/journals/sais\_review/v026/26.1dolman.pdf]

There is reasonable historic support for the notion that the most peaceful and prosperous periods in modern history coincide with the appearance of a strong, liberal hegemon. America has been essentially unchallenged in its naval dominance over the last 60 years, and in global air supremacy for the last 15 or more. Today, there is more international commerce on the oceans and in the air than ever. Ships and aircraft of all nations worry more about running into bad weather than about being commandeered by a military vessel or set upon by pirates. Search and rescue is a far more common task than forced embargo, and the transfer of humanitarian aid is a regular mission. Lest one think this era of cooperation is predicated on intentions rather than military stability, recall that the policy of open skies advocated by every president since Eisenhower did not take effect until after the fall of the Soviet Union and the singular rise of American power to the fore of international politics. The legacy of American military domination of the sea and air has been positive, and the same should be expected for space. To be sure, America will maintain the capacity to influence decisions and events beyond its borders, with military force if necessary. The operational deployment of space weapons would increase that capacity by providing for nearly instantaneous force projection worldwide. This force would be precise, unstoppable and deadly. At the same time, the United States would forgo some of its ability to intervene directly in other states because the necessary budget tradeoffs would diminish its capacity to do so. Space weapons offer no advantage if the opponent is not dispersed broadly around the globe. Against massed and regionally concentrated forces, conventional weaponry is far more efficient. As such, transformation of the American military assures that the intentions of current and future leaders will have but a minor role to play in international affairs. The need to limit collateral damage, the requirement for precision to allay the low volume of fire, and the tremendous cost of space weapons will guarantee they are used only for high-value, time-sensitive targets. An opposing state’s calculation of survival no longer would depend on interpreting whether or not the United States desires to be a good neighbor. Without sovereignty at risk, fear of a space- dominant American military will subside. The United States will maintain its position of hegemony as well as its security, and the world will not be threatened by the specter of a future American empire.

### Space weapons bolster the US deterrent --- solves conflict

McLaughlin, 2002 (Kevin, National Defense Fellow at CSIS, MISSILE DEFENSES: NOW WHAT? Vol. 25, No. 3; Pg. 177, “Would Space-Based Defenses Improve Security?” The Washington Quarterly, Summer, lexis)

How does this thinking affect the possible use of space to support U.S. missile defense activities? One barrier to using space to support missile defenses has been the belief that the United States should not use space to provide overwhelming U.S. advantage or in any way contribute to a strategic imbalance between the United States and other great powers. Nonetheless, the above paragraphs indicate that the United States quietly crossed this space threshold at the end of the last century in ways that did not pertain to missile defense. The United States now leverages satellites to fight battles in ways that overwhelm adversaries. Our satellites allow field commanders to see the entire battlefield, communicate globally and instantaneously, attack targets precisely, avoid threats, and warn of aggression in ways that no other nation in the world can match. Arguing that space already affords the United States an overwhelming military advantage is no overstatement.

Defense requirements that do not involve missiles may drive the development of the first weapons to operate from space. U.S. military planners have increasingly stressed requirements for engaging global targets with conventional weapons within a few minutes or a few hours of target identification. This requirement may drive the necessity for power projection through and from space, which U.S. forces could accomplish with almost no delay. Such a capability would arguably provide the United States with a much stronger deterrent and, in a conflict, an extraordinary military advantage. Effective nonnuclear deterrent concepts could also create a safer and more stable strategic environment by potentially reducing reliance on nuclear weapons. Finally, if the United States fields these capabilities in support of nonmissile defense requirements, the absence of a precedent in developing defenses that operate in, from, or through space will no longer constrain missile defense planners and policymakers.

### Space militarization locks-in hegemony and secures peace

Krepinevich 03 [Andrew F, director of the Center for Strategic and Budgetary Assessments. ‘The Unfinished Revolution in Military Affairs’, Issues in Science and Technology, http://www.issues.org/issues/19.4/krepinevich.html]

No state relies on space for its military and economic security more than the United States, a reliance that grows daily more precarious. The United States Air Force has been charged with protecting American and allied space assets in peace and in war, and, at the direction of civilian authority, denying access to space to adversaries in times of crisis and conflict. It is a stark reality of international politics that great power shapes the arena in which state interaction takes place, and yet the exercise of power should be neither capricious nor arbitrary. The United States should endeavor at once to establish military supremacy in space, as it has already done at sea and in the air, for the purpose of stabilizing peace and extending into the foreseeable future its ongoing period of liberal hegemony. No nation relies on space more than the United States—none is even close—and its reliance grows daily. A widespread loss of space capabilities would prove disastrous for American military security and civilian welfare. America’s economy would collapse, bringing the rest of the world down with it. Its military would be obliged to hunker down in a defensive crouch while it prepared to withdraw from dozens of then-untenable foreign deployments. To prevent such disasters from occurring, the United States military—in particular the United States Air Force—is charged with protect- ing space capabilities from harm and ensuring reliable space operations for the foreseeable future. As a martial organization, the Air Force naturally looks to military means to achieve these desired ends. And so it should.

Weaponization Good --- Hegemony/Power Projection 2/2

### Space weaponization’s key to hegemony

Dolman 06 [Everett, ‘U.S. Military Transformation and Weapons in Space’, SAIS Review: vol. 26, no. 1; http://muse.jhu.edu/journals/sais\_review/v026/26.1dolman.pdf]

This reasoning does not dispute the fact that U.S. deployment of weapons in outer space would represent the addition of a potent new military capacity, one that would assist in extending the current period of American hegemony well into the future. Clearly this would be threatening, and America must expect severe condemnation and increased competition in peripheral areas. But such an outcome is less threatening than any other state doing so. Placement of weapons in space by the United States would be perceived correctly as an attempt at continuing American hegemony. Although there is obvious opposition to the current international balance of power, the majority of states seem to regard it as at least tolerable. A continuation of the status quo is thus minimally acceptable, even to states working toward its demise. As long as the United States does not employ its power arbitrarily, the situation would be bearable initially and grudgingly accepted over time. On the other hand, an attempt by any other state to dominate space would be part of an effort to break the land-sea-air dominance of the United States in preparation for a new international order, with the weaponizing state at the top. Such an action would challenge the status quo, rather than seek to perpetuate it. This would be disconcerting to nations that accept the current international order—including the venerable institutions of trade, finance and law that operate within it—and intolerable to the United States. As leader of the current system, the United States could do no less than engage in a perhaps ruinous space arms race, save graciously decide to step aside.

## Weaponization Good --- Hegemony --- AT: Space Not Key to War-fighting

### Space tech is key to winning wars

Harter 06 (Mark E., USAF Lt. Colonel, The Air and Space Power Jounral Summer 2006, “The Dawn of a Space Force” http://www.airpower.maxwell.af.mil/airchronicles/apj/apj06/apj06.html)

1. Space is the ultimate high ground.

Take the high ground, and hold it!

—Sun Tzu, circa 500 BC

Great military leaders realize the strategic, operational, and tactical advantages of controlling the high ground. From Sun Tzu’s ancient Chinese warriors securing a hill, to US Civil War manned balloons, World War I aeroplane pioneers, World War II aviation heroes, and Cold War high-flying SR-71s and U-2s, the high ground provides the strategic advantages of security, situational awareness, reconnaissance, targeting, and offensive force to dominate the battlespace. The space medium is the ultimate high ground, with unparalleled speed, range, altitude, and stealth. High-ground space systems provide a conduit to channel instruments of national power (diplomatic, informational, military, and economic) to coerce an enemy to capitulate. The twenty-first-century information age, the global information grid, information technology, and network-centric warfare all depend on real- time global collection and dissemination of information, often only possible from space systems. The informational and military instruments of national power are closely linked. Information operations, information warfare, and information-in-war likewise depend on robust space platforms and illustrate that “bullets win battles; information wins wars.” Space systems are one of the main pipelines for network- centricity, powering digital networks to dis- tribute information instantly without borders. Satellite communications (SATCOM) provides real-time, secure, jam-resistant C2 to enable diplomatic actions among nations. Space systems support or disrupt a nation’s economy by moving large data streams at the speed of light around the world, reshaping national economies with global connectivity (SATCOM, weather, navigation, environmental, scientific, etc.). The White House’s national security strategy of 1998 benchmarked the importance of space.9

## Weaponization Good --- AT: Causes Arms Racing

### Domination of space would ensure hegemony and deter a global arms race

Dolman 2006 [Everett, ‘U.S. Military Transformation and Weapons in Space’, SAIS Review: vol. 26, no. 1; http://muse.jhu.edu/journals/sais\_review/v026/26.1dolman.pdf]

Seizing the initiative and securing low-Earth orbit now, while the United States is unchallenged in space, would do much to stabilize the international system and prevent an arms race in space. The enhanced ability to deny any attempt by another nation to place military assets in space and to readily engage and destroy terrestrial anti-satellite capacity would make the possibility of large-scale space war or military space races less likely, not more. Why would a state expend the effort to compete in space with a superpower that has the extraordinary advantage of holding securely the highest ground at the top of the gravity well? So long as the controlling state demonstrates a capacity and a will to use force to defend its position, in effect expending a small amount of violence as needed to prevent a greater conflagration in the future, the likelihood of a future war in space is remote. Moreover, if the United States were willing to deploy and use a military space force that maintained effective control of space, and did so in a way that was perceived as tough, non-arbitrary, and efficient, such an action would serve to discourage competing states from fielding opposing systems. Should the United States use its advantage to police the heavens and al- low unhindered peaceful use of space by any and all nations for economic and scientific development, over time its control of low-Earth orbit could be viewed as a global asset and a public good. In much the same way the British maintained control of the high seas, enforcing international norms of innocent passage and property rights, the United States could prepare outer space for a long-overdue burst of economic expansion.

### Space weaponization’s key to check global rivals who are building up systems --- solves conflict

Doggrell 06 (Les, Senior Project Engineer with Aerospace Corporation, Air and Space Power Journal, Summer, 2006, Operationally Responsive Space “A Vision for the Future of Military Space” http://www.airpower.maxwell.af.mil/airchronicles/apj/apj06/apj06.html)

IN FUTURE CONFLICTS, military space forces will likely face challenges ranging from defending against opposing systems to dealing with rapidly changing technology and support needs. The Air Force describes its vision for responding to these challenges as operationally responsive space (ORS). Operations Desert Storm and Iraqi Freedom clearly demonstrated the force-multiplication effect of space systems on US military capabilities. Precision-guided munitions; global, high-speed communications; and enhanced situational awareness all contributed to the rapid destruction of the Iraqi military (fig. 1).1 Unfortunately, future opponents observed the United States’ dependence on space systems. To win the next war, this nation must prepare to respond to opposing space and counterspace systems. Gen Lance Lord, USAF, retired, former commander of Air Force Space Command, points to ORS as one way of shaping this response.2 According to a draft study of ORS, it “will provide an affordable capability to promptly, accurately, and decisively position and operate national and military assets in and through space and near space. ORS will be fully integrated and interoperable with current and future architectures and provide space services and effects to war fighters and other users. ORS is a vision for transforming future space and near space operations, integration, and acquisition, all at a lower cost.”3 During Iraqi Freedom, described as the first counterspace war, both sides executed counterspace missions. Iraq, for example, attempted to jam GPS signals using Russian- made equipment, and US forces destroyed an enemy ground-transmitting facility, disabling Iraq’s ability to communicate with its forces and the outside world by using commercial satellite television.4 A more capable future opponent will find additional techniques for using space to counter the space capability of the United States. We can anticipate some responses to our space systems. Specifically, Russia, North Korea, Iran, India, and China may be capable of building a nuclear-armed antisatellite weapon system.5 Furthermore, “many countries are developing advanced satellites for remote sensing, communications, navigation, imagery, and missile warning,” and Russia, China, and the European Union have developed or are developing satellite-navigation systems.6 Improved antijam features can counter jamming defenses. However, the most effective countermeasures to our space capability will likely take the form of unanticipated actions by our adversaries. Secretary of Defense Donald Rumsfeld might call such actions the “unknown un-knowns” or, in the worst case, a “space Pearl Harbor.”7 Fortunately, we have military techniques for responding to the unknown. Speed, maneuverability, and agility have allowed mili- tary forces throughout history to deal with un- anticipated events. The ability to act and respond faster than the enemy is a well-known tenet of military operations.

## Weaponization Good --- AT: Causes Conflict

### Weaponization prevents global conflict

Lambakis, 1 – senior defense analyst at the National Institute for Public Policy (Steven, Policy Review, March/April, “Space Weapons: Refuting the Critics”, <http://www.hoover.org/publications/policyreview/3479337.html>)

The case against deploying weapons in space rests on a number of assumptions, often unstated. A careful look at the validity of these assumptions reveals serious problems — in many cases undermining the conclusions the critics draw.

One such assumption is that military developments over the past 50 years have created a security environment in which certain tactical events or localized crises run an unacceptably high risk of triggering a general, possibly even nuclear, war. We are therefore more secure when we do nothing to upset the global military balance, especially in space — where we station key stabilizing assets.

Yet we have little experience in reality to ground this freely wielded and rather academic assumption. By definition, anything that causes instability in armed relationships is to be avoided. But would "shots" in space, any more than shots on the ground, be that cause?

When we look at what incites war, history instructs us that what matter most are the character and motivation of the states involved, along with the general balance of power (i.e., are we in the world of 1914, 1945, or 2001?). Fluctuations in national arsenals, be they based on earth or in space, do not determine, but rather more accurately are a reflection of, the course of politics among nations. In other words, it matters not so much that there are nuclear weapons, but rather whether Saddam Hussein or Tony Blair controls them and in what security context. The same may be said for space weapons.

The sway of major powers historically has regulated world stability. It follows that influential countries that support the rule of law and the right of all states to use orbits for nonaggressive purposes would help ensure stability in the age of satellites. The world is not more stable, in other words, if countries like the United States, a standard-bearer for such ideas, "do nothing." Washington’s deterrence and engagement strategies would assume new dimensions with the added influence of space weapons, the presence of which could help bolster peacemaking diplomacy and prevent aggression on earth or in space.

### No conflict --- other countries will accept U.S. control of space

Dolman, 5—Professor of Comparative Military Studies at the US Air Force’s School of Advanced Air and Space Studies (Everett C., “U.S. Military Transformation and Weapons in Space,” 9-14-05, http://www.e-parl.net/pages/space\_hearing\_images/ConfPaper%20Dolman%20US%20Military%20Transform%20&%20Space.pdf)

This rationality does not dispute the fact that US deployment of weapons in outer space would represent the addition of a potent new military capacity, one that would assist in extending the current period of American hegemony well into the future. This would clearly be threatening, and America must expect severe condemnation and increased competition in peripheral areas. But such an outcome is less threatening than any other state doing so.

Placement of weapons in space by the United States would be perceived correctly as an attempt at continuing American hegemony. Although there is obvious opposition to the current international balance of power, the status quo, there is also a sense that it is at least tolerable to the majority of states. A continuation of it is thus minimally acceptable, even to states working towards its demise. So long as the US does not employ its power arbitrarily, the situation would be bearable initially and grudgingly accepted over time.

On the other hand, an attempt by any other state to dominate space would be part of an effort to break the land-sea-air dominance of the United States in preparation for a new international order, with the weaponizing state at the top. The action would be a challenge to the status quo, not a perpetuation of it. Such an event would be disconcerting to nations that accept the current international order (including the venerable institutions of trade, finance, and law that operate within it) and *intolerable* to the US. As leader of the current system, the US could do no less than engage in a perhaps ruinous space arms race, save graciously decide to step aside.

## Weaponization Good --- AT: Tech Fails

### The tech can successfully be developed --- the relevant question is political will

Dolman 06 [Everett, ‘U.S. Military Transformation and Weapons in Space’, SAIS Review: vol. 26, no. 1; http://muse.jhu.edu/journals/sais\_review/v026/26.1dolman.pdf]

We have learned much, it would seem, or else bluntly negative scientific opinion on space weapons has been weeded out over time. Less encompass- ing arguments are now the rule. As the debate moved completely away from the complete impossibility of weapons and wars in space to more subtle and scientifically sustainable arguments that a particular space weapon is not feasible, mountains of mathematical formulae have been piled high in an effort, one by one, simply to bury the concept. But these limitations on specific systems are less due to theoretical analysis than to assumptions about future funding and available technology.8 The real objection, too often hidden from view, is that a particular weapons system or capability cannot be developed and deployed within the planned budget, or within narrowly specified means. When one relaxes those assumptions, opposition on technical grounds generally falls away. The devil may very well be in the details. But when critics oppose an entire class of weapons based upon analyses that show particular weapons will not work, their arguments fail to consider the inevitable arrival of fresh concepts or new technologies that change all notions of current capabilities. Have we thought out the details enough we can say categorically that no technology will allow for a viable space weapons capability? If so, then the argument is pat; no counter is possible. But if there are technologies or conditions that could allow for the successful weaponization of space, then ought we not argue the policy details first, lest we be swept away by a course of action that merely chases the technology wherever it may go?

## Space Mil = Inevitable

### Space weapons will inevitably be deployed for defense

Oberg 1 [Jim, NBC News 'Space Consultant', previous space engineer for NASA, Space Power Theory. Maxwell AFB, AL: USAF Air University]

It is almost certain that sometime early in the 21st Century, the fielding of space-based weapons will occur under the auspices of defense, in much the same manner as the nuclear weapon buildup that occurred within the latter half of the 20th. And, like nuclear weapons, once fielded, there will be no reversing course. This too is an historical lesson of warfare. As the world now grapples with the proliferation of nuclear weapons that were once the province of superpowers, so too will it see the initial weaponization of space be followed by increasingly sophisticated armaments as proliferation occurs there as well. A sobering thought is the prospect that as launch costs go down per unit of mass, the opportunity for other actors to put weapons into orbit about the Earth will go up.

### Space mil inevitable- military doctrine

Deblois 3 [Bruce M, Director of Systems Integration at BAE SYSTEMS, “The Advent of Space Weapons”, Astropolitics, Vol 1, No 1, Summer]

Seizing the high ground is a military doctrinal precept as old as warfare itself. As technology opens the new high ground of space and offers the means to exploit it, sound doctrinal development would be grossly remiss to overlook it. Simply put, the coupling of advanced technologies with well-intended and effective military doctrine development will inevitably lead to the acquisition of space weapons. In addition to the power of top-down policy leadership, forces outside the control of high-level policy makers will also drive the acquisition of space weapons. In some circumstances, the institutions involved in the planning processes -- including scientific laboratories, administrative divisions and military consumers -- apply significant pressure outside their formal areas of expertise or responsibility. In explaining one motivation for countries to acquire nuclear weapons, Scott Sagan explains: 'bureaucratic actors are not passive recipients of top-down political decisions; instead, they create the conditions that favor weapons acquisition'. Today we find ourselves in a situation with an absence of clear top-down policy guidance on space weapons, and in such a case, military doctrine can build an inertia of its own, and impact -- or even become -- the default policy.