

PATHFINDER



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WEAPONS IN SPACE?

In August 2004, the US Air Force released its doctrine document 2-2.1 - Counterspace Operations. In the foreword to the document the Chief of Staff of the USAF, General John P. Jumper, stated 'Counterspace operations have defensive and offensive elements, both of which depend on robust space situational awareness.'

Chapter five of the document very clearly enunciates Offensive Counterspace Operations, in which the use of direct methods to destroy space systems of the enemy is briefly enumerated. Does this mean that the only Super Power of the world will weaponise space in order to maintain the unassailable military advantage that it currently enjoys that mainly stem from the optimum use of space based assets?

The international community dealing with arms-control has already raised the alarm, since the document is the air force's blueprint for the use of space-based weapons systems to deny an adversary the use of space for any purpose. This has greater implications than the benign use of force, if there can be such a possibility, to thwart military intentions of a potential enemy. Since the threat perceptions have radically changed in the past five years, this assertion of the intent to deny the use of space could also mean that purely commercial satellites that provide communication capabilities to unconventional adversaries could also be targeted for neutralisation. The implications in terms of international freedom as well as sovereignty of the owner-nations would be very convulsive.

The US Air Force has gone to great lengths to explain the offensive counterspace activities as being almost completely reliant on terrestrial-based weapons that could create reversible, temporary effects, in a reiteration of effects-based operations. However, the official acceptance of this

new mission is itself indicative of the conceptual developmental process within the US military establishment of the need to place some kind of weapon in space, even if it is meant for use as a last resort. The fall-out is almost certain to be the crossing over of the rest of the space-capable nations to accepting the need for space combat capabilities. Is this the beginning of another arms race, this time in space?



The factor that worries arms-control experts is not so much the concept of taking human combat into space, but the dangers that such a move would have on the myriad of peaceful applications of space. The international economy, and through it almost all national security imperatives, has been increasingly globalised and is now almost completely reliant on secure communications for its robustness. This communications system is almost completely space-based. Any deterioration in the capacity, both quality and quantum, of communication would have disastrous consequences in a number of different fields—security issues being the most affected. Considering that space debris of even one centimetre diameter can cause catastrophic damage to a

satellite, the destruction of space systems with the attendant scattering of debris could well prove to be untenable in the larger global context.

This view of the absolute need to keep space as an arena of global peace and goodwill has already been negated by the use of satellites as integral parts of the warfighting machinery. Although the two thought processes are somewhat in dissonance, there is perhaps consensus within the debate for the need to protect these assets both in times of war as well as in peace. It is the means to achieve this central aim that makes it almost impossible to contain the placement of weapons in space.

Undoubtedly the United States is the leading nation in the exploitation of space. Combined with its inherent and basic doctrine of absolute and overwhelming dominance of the battle area it is almost certain that, irrespective of the international community's misgivings, the US would deploy weapons in space to ensure that a space attack is not perpetuated on it.

Currently there are no 'rules' or multilateral treaties that govern the conduct of military space activities. It is the fervent hope of arms-control advocates that space can be spared the spectre of human combat and war. The reality, however, seems to be less promising. The United States is the world's leading 'space-faring' nation and it would not want to lose this clear advantage. Therefore, it is certain that it would not wait for a disruptive attack on its systems before putting in place counterspace measures. The situation now is more likely to be of *when*, not *if*.

The United Nations may be the only agency that could effectively bring the space nations to a discussion, but unfortunately its powers of persuasion has been steadily declining in the past decade. The UN's Conference on Disarmament (CD) has been almost completely gridlocked since

1999, with the United States and China not willing to compromise on separate issues. There is a committee within the CD called the Prevention of an Armed Race in Outer Space (PAROS) that has not been able to even have a formal exchange of ideas between the space nations. All resolutions regarding space that have been passed at the UN have been non-binding and are therefore unlikely to be of any value other than academic.



Where does this leave the world community of nations? The answer is complex. It will certainly lead to a situation wherein the greatest military and economic power to straddle the world for the past half century will be forced to take unpalatable steps to ensure its ascendancy and place weapons in space. The complexity will emerge from the less predictable repercussions from other space-capable nations, which could be both covert and overt. There are clearly no direct answers, nor are there likely to be any clear winners.

Whereas those who have the capability to control the air, control the land and sea beneath it, so in the future it is likely that those who have the capability to control space will likewise control the earth's surface.

– General Thomas D. White
Chief of Staff, United States Air Force, 1957



Air Power Development Centre
Level 3, 205 Anketell Street
TUGGERANONG ACT 2900

Ph: 02 6266 1355 Fax: 02 6266 1041
Email: airpower@defence.gov.au
Web: www.raaf.gov.au/airpower

