



# OLD WINE IN A NEW BOTTLE: US SPACE FORCE



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“If by having a Space Force, US mean to equip space stations and satellites with remote control weapons, and if Donald Trump’s Space Force is Ronald Reagan’s Star Wars idea in a different garb, one should be worried”. These are some of the concerns expressed by space observers on hearing the US President’s address at the meeting of the National Space Council on June 18, 2018, where he gave directions to the Department of Defense for establishing an independent “Space Force” as the sixth branch of the armed forces to oversee missions and operations in the space domain.

The underlying thought as mentioned in the President’s address was to ‘establish American dominance in space’, which was waning out in recent years as China and Russia emerge as aggressive competitors. The justification being given for establishing a space force is the increased space tasks which go beyond monitoring space objects with the Space Surveillance Network (SSN) to defending space assets from likely interference from potential adversaries. The US Air Force has downplayed the event and has been trying to discourage talk of a separate military branch, maintaining that the Air Force has the means and the personnel to meet current requirements for space.<sup>1</sup>

In a series of policy initiatives on space security, the US has witnessed three space policy directives being issued in a matter of seven months by the National Space Council. The Space Policy Directive -3 issued on June 18, 2018 seeks to address the issues of Space Traffic Management. The two other major space policy initiatives being implemented by the National Space Council deal with returning of humans to the moon before eventual missions to Mars and another aimed at streamlining the federal space bureaucracy to reduce red tape and streamline licensing and oversight of commercial space activity.<sup>2</sup> These, along with the National Security Strategy prioritising an intent to deal with threats in and through space arising from potential adversaries, and the President’s bold and unambiguous statement to establish a space force, are seen as the American awakening to a

growing threat in space and emergence of competitors in a domain which was believed to be the hegemony of US after the cold war years.

But it didn't come as a surprise to the US as China was showing its presence in space since 2003 with manned space missions, orbital laboratories (2011) and a lunar probe (2007). China was testing its ASAT weapons since 2005 and was also reportedly firing lasers to dazzle US satellites in 2006, while Russia had been testing an airborne laser dazzling system in 2009 and had already achieved proficiency in co-orbital satellites. The US on the other hand harboured an offensive counter-space programme under its Department of Defense since the years of the Strategic Defence Initiative (SDI) in mid-1980's, which included an Air Launched Miniature Vehicle to target satellites in low earth orbit<sup>3</sup> and a fledgling ground based laser weapons programme called the MIRACL<sup>4</sup>. The AF Space Plan of 1983 introduced space control as maintaining freedom of action in space and denying such autonomy to an enemy. Successive DoD directives and AF manuals have thereafter represented a growing emphasis on integrating military space into AF and military operational doctrine. A notable addition was the Air Force Counter-space Doctrine of 2004 which stressed on threats like RF jamming, laser systems, EMP weapons, ASAT weapons and Information Operations against satellites and how to deal with them.<sup>5</sup> Though there was a lull in testing of ASATs and other counter-space technologies in the mid 1990's following the breakup of the erstwhile Soviet Union, the Demonstration of Automated Rendezvous Technology (DART) by the US in 2003 through their experimental satellite interception mission (XSS-10) had re-opened a gamut of possibilities. Today, the three leaders in space – the US, Russia and China – have a demonstrated capability in satellite interception, in-orbit inspection, soft kill and hard kill ASAT technologies.

While possessing these technologies and being able to employ them in conflict is one part of a counter-space programme, maintaining awareness in space or Space Situational Awareness (SSA) is another part which is equally critical. On the other hand, use of space applications for enhancing military performance has been the traditional military utilisation of space which has never been disputed. The US Air Force has traditionally been the lead agency in managing and controlling the space assets, while the US DoD has been undertaking the research and development of the space weapons programme. The US Air Force also has a predominant presence in the functioning of the space surveillance network and the Joint Space Operations Centre (JSpOC). Moreover, the Space Policy Directive-3 which was supposed to be the highlight of the National Space Council meeting of June 18, 2018, was to bring out a national policy on Space Traffic Management (STM). As it turns out, the directive gives the responsibility of collating and disseminating space data for Space Situational Awareness (SSA) and STM to the Secretaries of Defence, Commerce and Transportation along with

NASA administrator and Director National Intelligence<sup>6</sup>. Increase in commercial space traffic requiring better coordination may be cited as a reason. It is therefore difficult to fathom the role of a separate space force with the involvement of multiple departments - SSA & STM being the leading tasks of any space control agency. The question that now arises is - what additional tasks are envisaged for a new space force to be raised? Secondly, would a dedicated space force mean that the US is taking its counter-space programme a step further into implementation- which means weapons will extend into the realm of space?

It may be logical to conclude that the growing space traffic requiring round the clock accurate surveillance and space traffic management, the execution of deep space missions and moon missions, and the operational control of space weapons would require a dedicated team of combatants under a space force. However, most of these next generation space programmes are in the research and development phase. The operational deployment may take many more years. The space force if given congressional approval may eventually take shape in a few years. Skilled personnel have to be pooled from the other services, mostly from the USAF. The space force may also cut across the existing arms of the US defence forces due to overlapping functions. This may also entail unnecessary costs and bureaucratic hurdles where none existed. At a time when integration of space inputs is necessary in a networked operational environment, a space force may only make it complicated to integrate space operations with warfare which is an absolute necessity. Multi-domain operations which combine space applications and networks enable armed forces in each of the domains to combine their efforts to bring in synergy. A space force would only add another level which would require major doctrinal changes. Moreover, it is learnt that the Air Force is working to enhance space operations within the current structure, through reorganisation<sup>7</sup> to cater for enhanced SSA requirements and coordinating counter-space efforts.

Finally, this tweet from Mark Kelly, an ex-NASA astronaut and commander of the final launch of Space Shuttle Endeavour, says it all – *“This is a dumb idea. The Air Force does this already. That is their job. What’s next, we move submarines to the 7th branch and call it the “under-the-sea force?”*<sup>8</sup>

An ‘America First’ strategy may sound good for space dominance but it needs to be weighed in the backdrop of continuing efforts to weaponise outer space by the leading space powers in recent years. The existence of the US Space Force may amplify the genuine threats that arise out of suspicion more than adding to the security of outer space in general and United States in particular.

*(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])*

**Keywords:** Space Exploitation, Space force, Surveillance in space, Space dominance.

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<sup>1</sup> Oriana Pawlyk, "It's Official: Trump Announces Space Force as 6th Military Branch", at <https://www.military.com/daily-news/2018/06/18/its-official-trump-announces-space-force-6th-military-branch.html>, accessed on June 24, 2018.

<sup>2</sup> William Harwood, "Trump calls for establishment of U.S. 'space force'", June 18, 2018, at <https://spaceflightnow.com/2018/06/18/trump-calls-for-establishment-of-u-s-space-force/>, accessed on June 25, 2018.

<sup>3</sup> Laura Grego, "A History of Anti-Satellite Programs", January 2012, at [http://www.ucusa.org/sites/default/files/legacy/assets/documents/nwgs/a-history-of-ASAT-programs\\_lo-res.pdf](http://www.ucusa.org/sites/default/files/legacy/assets/documents/nwgs/a-history-of-ASAT-programs_lo-res.pdf), accessed on November 28, 2017.

<sup>4</sup> Bert Chapman, 'Space Warfare and Defense' (California, ABC-CLIO, 2008), p.32-52.

MIRACL – Mid Infra-Red Chemical laser.

<sup>5</sup> Ibid.

<sup>6</sup> "Space Policy Directive-3, National Space Traffic Management Policy", at <https://www.whitehouse.gov/presidential-actions/space-policy-directive-3-national-space-traffic-management-policy/>, accessed on June 26, 2018.

<sup>7</sup> Sydney J Freedberg Jr., "Space Corps, What Is It Good For? Not Much: Air Force Leaders", June 21, 2017, at <https://breakingdefense.com/2017/06/space-corps-what-is-it-good-for-not-much-air-force-leaders/>, accessed on June 26, 2018.

<sup>8</sup> Yaron Steinbuch, "Mark Kelly: Trump's 'Space Force' proposal is a 'dumb idea'", June 20, 2018, at [https://nypost.com/2018/06/20/mark-kelly-trumps-space-force-proposal-is-a-dumb-idea/?utm\\_campaign=iosapp&utm\\_source=facebook\\_app](https://nypost.com/2018/06/20/mark-kelly-trumps-space-force-proposal-is-a-dumb-idea/?utm_campaign=iosapp&utm_source=facebook_app), accessed on June 26, 2018.