## **Donald Trump's Space Force**

By Dave Webb Chair, CND



US President Donald Trump's June announcement that he had directed the Pentagon to develop a 'Space Force' - a new branch of the US military, "separate but equal" to the US Air Force - to ensure the "American dominance in space" has proved to be highly controversial. Not that controversy is particularly unusual for Mr Trump's ideas, or for his defence and foreign policies but the possible consequences are extremely serious. The US defence budget for 2019 included funding for the development of space-based missile interceptors which could lead to a major increase in global arms spending and edge the world even closer to a nuclear war.

The idea of a sixth branch of the US armed forces to deal with space is not new. In June 2017 the House Armed Services Committee voted to create a US 'Space Corps' to incorporate the current space missions of the US Air Force (USAF). In fact, the USAF Space Command was established as long ago as 1985 to coordinate the space forces of the Army, Navy and Air Force. In June 2002 it was merged into US Strategic Command (STRATCOM) in Nebraska under a scheme to transform the military by then Secretary of Defense Donald Rumsfeld. Rumsfeld had previously chaired a "Space Commission" which released a report in January 2001 recognising the vulnerability of military space assets and warning of a "Space Pearl Harbor", a reminder of the dangers of a lack of preparation in 1941. The recommendation of the Commission's report was to weaponise space!

The US intention to dominate is clearly shown by the uniform badge of the Space Command which declares them as "Masters of Space". The same slogan is also proudly displayed above the entrance to their building at Schriever Air Force Base in Colorado and emphasised in their 1998 'Long Range Plan' (LRP) and their 'Vision for 2020' (the year that US Vice-President Mike Pence recently announced for the establishment of the new US Space Force). These documents spoke of "new military capabilities for operation to, from, in and through space" and "full spectrum dominance" of the US in the air, on land, at sea, in space and of information – as if Mr Trump had written them himself!

How did space become so important to the military? The first significant use of space technology for war fighting was probably during 'Operation Desert Storm' in Iraq in 1991, when satellites were used to target and guide so-called 'smart' weapons. This use was extended during the war in former Yugoslavia in 1999 and the aerial bombardment of Serbia has been described as the first "space-enabled" war. From the War on Afghanistan in 2001 through to 'Operation Iraqi Freedom' in 2003, space technology has been tested and used for battle management, intelligence gathering, reconnaissance, targeting and weapons guidance. The US has spent billions of dollars on militarising space – on satellites, ground based stations and new technologies such as armed drones, controlled through satellites. The US military (and that of other states) has become almost totally dependent on space technology.

It is perhaps surprising then that Donald Trump's Space Force announcement attracted so much media attention? It may have been the staged flamboyant and macho delivery that created the impact - in any case it has demonstrated the level of importance that is attached to military space activities. It also brought to light some major disagreements over the issue.

The idea of a new Space Force has been ridiculed in the US media and has not been widely welcomed in Washington or in some areas of the US military. There has been some support however, from advocates such as Republican Congressman Mike Rogers from Alabama, a state

that includes Huntsville (the US military space capital). Rogers has received hundreds of thousands of dollars in donations from aerospace contractors in his state and a former executive of Boeing, US Undersecretary of Defense Patrick Shanahan, is another supporter. Shanahan was responsible for Boeing's \$5 billion Airborne Laser project - a laser mounted on a Boeing 747 supposedly to intercept missiles in their boost phase (soon after launch) – which failed and was cancelled in 2012. A major push for a Space Force is coming from the corporations who will profit from increased spending on military aerospace projects irrespective of whether they are needed or will ever work.

Cost is one of the major issues cited by those arguing against the Space Force. The detailed plan for its implementation prepared by the USAF estimates that it would cost \$12.9 billion for the first 5 years. The Trump administration and Congress have already increased defence spending to \$716 billion and further increases would be difficult to justify to a population already suffering from severe public spending cuts. The USAF is also worried that Space Force funding would be found at its expense. So, while those with ties to military space contractors have been pushing for a Space Force, the Air Force has taken an opposite view. They want to retain control of space and the funding that goes with it. Some key players from the aerospace industry not involved in space technology, have also come out against the force, for similar reasons.

However, the most worrying development in all of this is that Congress has approved spending on the development of space-based missile interceptors and are expecting a working prototype by 2022. The past development of space weapons has proved expensive and has been plagued with failures. President Reagan's space-based laser project, part of his 'Strategic Defense Initiative' (and proposed by Edward Teller, the 'father' of the H-bomb), cost billions and was cancelled in 2002. In 1993 President George H.W. Bush cancelled "Brilliant Pebbles" – a space-based project to defend against an all-out ballistic missile attack from the Soviet Union. It proved to be too difficult to do and too expensive. Instead, a smaller space-based system called Global Protection Against Limited Strikes (GPALS) was undertaken to protect against limited ballistic missile threats from smaller powers like Iraq, Iran, and North Korea. The current US land and sea-based missile defence systems positioned in Europe, South Korea and Japan use space technology for missile detection and targeting but the interceptors are Earth bound.

It is not clear whether Congress will agree to creating a Space Force, but Donald Trump seems determined to push for it to please his supporters, his ego and parts of the military-industrial complex. The call on the Pentagon "to develop a space-based intercept layer" seems to ignore a 2012 study by the American Physical Society (APS). They estimated that 650 space-based missiles, at a cost of \$300 billion, would be needed to keep a particular launch site in range and intercept even a small number of missiles in their boost phase. Placing such weapons in space would also likely lead other powers to assume that their satellite and deterrent systems were at risk, resulting in the extension of anti-satellite systems and an increase in nuclear arsenals. Such an arms race would increase the chances of mistakes occurring in systems on hair-trigger alert and risk a disastrous nuclear exchange.

In addition, placing anti-satellite weapons and/or missiles in space undermines what is left of international arms-control agreements, increasing suspicion and increasing tension. If dealing with threats from space is an issue, then Congress should consider engaging with (not disengaging from) and strengthening international agreements. In 1967, just 5 years after the wake-up call of the Cuban Missile Crisis, the US and the Soviet Union signed the Outer Space Treaty that banned the siting of weapons of mass destruction in space and, together with 120 other nations, designated space a Global Commons - reserved for peaceful purposes. Since then there have been attempts in the UN to expand the Treaty further. In the 1980s Canada, Russia, and China pushed hard for a Treaty to Prevent an Arms Race in Outer Space (PAROS) and to ban all weapons from space. However, no US president has been willing to sign it. In 2008 China and Russia submitted an updated draft to the UN General Assembly which the US has continued to oppose.

If nuclear weapons are the problem, then the US should be encouraging (not discouraging) states to sign the Treaty on the Prohibition of Nuclear Weapons. In 1986, at the height of the Cold War, Presidents Raegan and Gorbachev met in Reykjavik and eventually agreed to scrap thousands of intermediate and short-range nuclear weapons. This meeting came about because of the wide-spread protests against the siting of Pershing and Cruise missiles in Europe. A similar outcry is needed now to bring world leaders together. To really increase security the Trump Administration must meet and work with other nations on a treaty to demilitarise space and redeploy the skills and knowledge of scientists and engineers to tackle the global threat of climate change.

Every year the 'Global Network Against Weapons and Nuclear Power in Space' calls for a particular week of action and education on these issues – "Keep Space for Peace Week" – this year it was 6<sup>th</sup> to 11<sup>th</sup> October and we were focussing attention on the problem and protests took place at the places in the UK that form a part of the US military space programme. The US interception, intelligence gathering and targeting base at Menwith Hill; the missile defence and space radar at Fylingdales (both in Yorkshire) and the communications, data gathering and analysis centre at Croughton near Oxford will be centres of attention.

See www.space4peace.org for more information on these and other protests around the world.

We need to continue to show the strongest opposition to the weaponisation of space!