

Twenty-One years of Conflict: What's Next?

In recent years, conflict between the United States and other nations has contained a common factor: warfare within the confines of earth. Currently, many tactics and technologies are being developed and implemented that pertain to cyber and autonomous warfare where more battles are being fought with less potential for human casualties. Although there is much promise within these strategies, unless the opposing force is entirely wiped out quickly, there is always the chance of the enemy attempting a nuclear bombing. The Air Force oversees an estimated ninety percent of the military's space operations. Therefore, more emphasis should be placed on protecting U.S. assets from space. President Trump is attempting to create a new military branch exclusively for space. Because the Space Force will be under the supervision of the Air Force, the priority should be to make it a capable and dominant power.

The Outer Space Treaty of 1967 clearly states that the domain of space is to be used peacefully and that anyone who violates it shall receive due punishment. But there are a few interesting points in the treaty that could be used to an enemy's advantage. One instance is a restriction against a Weapon of Mass Destruction (WMD) in space, either in orbit or on a celestial body such as the moon. However, WMDs are outlined as nuclear, biological, or chemical weapons, which still leaves a few possibilities for attack with kinetic weapons. Taking this into consideration, the only feasible option would be to use a loophole like the allowing of kinetic weapons, such as guns and kinetic orbital strikes.

Although standard guns in space would pose no physical threat to us on Earth, they could be used to disable satellites. The satellites the United States and the Air Force depend on and use are invaluable assets for communication, GPS, and GPS guided systems such as drones and accurate missiles. Without the capabilities of our so-called "eyes and ears," not only would

instrumental weapons that rely on GPS be useless, but economic issues would also quickly arise. The Stock Exchange relies on precise tracking of global currency values. If GPS went down, the precise tracking would be lost, and a second great depression could happen. It is an unlikely circumstance but entirely possible as our satellites are sitting ducks, with calculatable orbit and location.

Another concern relating to kinetic weapons in space is discharged projectiles. Since bullets from guns wouldn't survive reentry into Earth's atmosphere, and a WMD is not allowed, physical harm from space would seem implausible. However, there are kinetic orbital strikes that use an inert projectile such as a large tungsten rod released precisely from an orbiting station, which could withstand the high heat of reentry into the atmosphere. The destructive potential comes purely from the kinetic energy released upon impact. Although it seems like something from a sci-fi movie, the logic and possibility are sound.

As these weapons and weapon systems are complex, it would only make sense to have these systems closely monitored. The Space Force could have a station in which the crew plays vital roles in the maintenance and remote operation of these weapons. While a single station is necessary, many weaponized apparatuses could be deployed for a complete network of defense and operation. To protect our assets in space or to attack on earth, this station and crew would be imperative for national security.

Either for defensive or offensive positions, it is important to weaponize space in a sanctioned matter. As the United States has many powerful and competent adversaries that would take any advantage possible, we must overcome our enemies and assert and defend ourselves as the supreme superpower. This is one milestone the Air Force should accomplish because space-warfare tactics are an inevitability in the future.