



What War in Space Might Look Like Circa 2030-2040?

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This essay seeks to give the reader two distinct visions of space warfare circa 2030-2040. First, a conservative view presumes wars begin on Earth (over geo-strategic interests on Earth), and extend into space to maintain the advantages of continued overhead satellite sensing. The second view is expansionist. It presumes space wars begin in space over geo-strategic interests in space and proceed with relative independence of events and military activity on Earth. Actual conflict of course might very well see a mix of both, but they are presented as extremes, or idealtypes cases to help the reader to see the outlines of different causal logics driving each. At some point, circa 2030 (and perhaps even sooner), economic development activities in deep space will create a truly unprecedented situation: nation-states will have geo-strategic interests on other planetary bodies — the moon and asteroids. The degree to which the future resembles the expansionist view will depend on how much and at what speed activities are conducted in deep space and on the Moon in particular. Those who would dismiss the expansionist scenarios as 'too far out' should consider that already today a number of states are talking about Lunar mining, and that the United States, China, India, Russia, Japan, and Israel are already putting precursor missions on the Moon. A wholistic view of both has implications for military doctrine, concept design, force structure design, and international governance including arms control and the law of armed conflict, as well as for legislation and policy. This suggests that 1) military doctrine must anticipate that United States geo-strategic interests will likely encompass economic activities in deep space, and develop concepts for peacetime strategic offensives to maintain positions of advantage; 2) that design of a 2030-2040 force structure requires attention to the unique navigational, maneuver, logistics, and power projection needs for deep space vehicles; 3) consideration and anticipation of conflict may enable the community of nations to arrive at consensus on certain conflicts or types of conflict they mutually wish to avoid, and 4) a role for civilian leadership to ensure the U.S. DoD is prepared through legislation and policy to specify roles and missions to protect space commerce, to specify plans, and to specify the Area of Responsibility (AOR) as encompassing the entirety of the Cis-Lunar theater.

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