Trump executive order asserts US property rights in outer space

By Don Barrett
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President Donald Trump signed an executive order Monday, “Encouraging International Support for the Recovery and Use of Space Resources,” that asserts US property rights in outer space. Throwing aside decades of international negotiations, it declares that “the United States does not view it [space] as a global commons,” and that “[s]uccessful long-term exploration … will require partnership with commercial entities to recover and use resources,” and these will require “the right to commercial recovery.”

The Trump administration’s order follows its December creation of a new “Space Force” branch of the US military, but this is not uniquely a phenomenon of this administration. Last summer, France’s Macron administration announced its own space command, and programs to weaponize space were previously touted by both the US administrations of Reagan and George W. Bush. Bush’s report explicitly made a connection to the early days of empire, comparing the militarization of space with the early development of navies, and the necessity to achieve “full spectrum dominance” in space, land, sea and air.

From the time of the Age of Exploration, new achievements in technology and the productive forces have opened new frontiers to scientific discovery—and to the scramble for profitable returns. Outer space is now simply the latest of these frontiers in which US imperialism expects future advantage, and to attain it is prepared to assert and defend its strategic interests.

Both the assertion of commercial interests in and the militarization of space directly flout international agreements built up over the post-World War II period. The idea of international governance, as a means to suspend for a time the scrambling over frontiers not yet ripe for exploitation, was first applied in the Antarctic Treaty System, which entered force in 1961. Antarctica was declared a scientific preserve, with freedom of scientific exploration but with military activity banned.

The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the “Outer Space Treaty”) emulated the Antarctic agreement, forbidding weapons of mass destruction in space and reserving the use of celestial bodies to peaceful purposes.

Articles I and II of the treaty specifically state, “The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries … and shall be the province of all mankind,” and that “outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty.”

A further treaty, the “Agreement Governing the Activities of States on the Moon and Other Celestial Bodies” (the “Moon Treaty”) of 1979, extends this concept to declare, “Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or non-governmental organization, national organization or non-governmental entity or of any natural person.”

The 1979 treaty, negotiated at a period when international divisions were rapidly intensifying, failed to gain any spacefaring nations’ signatures, and among the great powers only France signed.

And even with these treaties, Earth orbit was rapidly filled with surveillance satellites, nuclear radio-isotope power supplies, and even several high-powered military satellites powered by full-blown nuclear reactors, subject to eventually reentering and polluting the Earth, as one already has.
By 2015, the grubbing for profit was asserted openly in the US “Commercial Space Launch Competitiveness Act of 2015,” which passed the US House by 281–133, with nearly all Republicans and 48 Democrats voting in favor. It was affirmed by unanimous consent in the Senate and signed into law by Democratic President Barack Obama. While the act claims it does not “assert sovereignty, or sovereign or exclusive rights,” it grants a commercial operator the right to be “entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell.”

The latest executive order goes further. Trump has directed the Secretary of State to object to any efforts to represent the 1979 Moon Treaty as customary international law. “This Agreement [the 1979 treaty] represents a failed attempt at constraining free enterprise…” Furthermore, the administration stated that it will “negotiate joint statements, bilateral and multi-lateral agreements … with like-minded states.” One can already see the “no trespassing” signs.

The Trump executive order was immediately criticized by the Russian space agency Roscosmos, which noted, “Attempts to expropriate outer space and aggressive plans to actually seize territories of other planets hardly set the countries [towards the goal of] fruitful cooperation.”

A driver for the division of space is the rapidly dropping cost to reach it. From the first US satellite launch in 1957, the price has dropped a hundredfold, from $1,000,000 to $10,000 per kilogram by 1970, where it remained for thirty years. But efficient and reusable new technologies now promise launch costs in the relatively near future under $2000 per kilogram, and within a few decades, under $200 per kilogram.

Something of a gold rush is underway to set down stakes and interests, years before expected returns. In fact, the last US landing of any spacecraft, manned or unmanned, on the moon was in 1972. Meanwhile, nation after nation is entering or reentering the race, with China having landed four unmanned probes on the moon, including the first on the “far” side, never directly visible from Earth because of the moon’s tidally-locked orbit.

One reality that will not change is that the surface of the Earth remains in a deep gravity well, which even with newly affordable launch costs will remain an expensive source of raw materials from which to develop facilities in space. Long-term, bulk supplies for building stations, fueling vehicles, and providing water and oxygen to inhabitants, are best provided from asteroids or potential resources on the lunar surface—including in particular the water ice that is thought to exist in the cold perpetually-shadowed regions of its polar craters.

In the language of rocketry, the “delta-v,” the fuel-consuming velocity shift which a rocket requires to accomplish a certain mission, is far smaller from the surface of the moon, and even smaller from certain asteroids, to Earth orbit than from the surface of the Earth. This is why the Apollo lunar lander was so much smaller to return astronauts from the lunar surface than the vast Saturn V launch vehicle necessary to set them on their way. And establishing priority, especially for potentially limited good mining locations for lunar ice, or for asteroids on a rare trajectory that permits Earth-orbit capture with minimal cost in resources, is driving the stake-building.

The potential benefits to humanity, as anticipated in the UN treaties, are vast. But under capitalism and its associated nation-state system, every advance is also simultaneously turned into a tool of class oppression and national advantage. With the partition of space comes its militarization, and the provisioning of resources to unlock new explorations also enables populating Earth orbit with new weapons and more complete surveillance directed below, and drawing the inevitable national boundaries on the moon.