## Pic – US exempt

Plan: states except for the united states ought to ban the appropriation of outer space for mining activities by private entities

**US Space Exploration key to maintaining heg and preventing Chinese dominance**

**Fisher 21**, Richard. [Richard D. Fisher, Jr. is a senior fellow with the International Assessment and Strategy Center.] “In Space, China Seeks Galactic Hegemony - Center for Security Policy.” *Center for Security Policy*, 25 Mar. 2021, <https://centerforsecuritypolicy.org/in-space-china-seeks-galactic-hegemony/>. [GHS-AA]

For the leadership of the Chinese Communist Party (CCP) the main goal for its investments in outer space is as simple as it is portentous: victory. As the CCP has set the goal of having the dominant military power on Earth by 2049, it also wants to be the dominant terrestrial power in space. In the mid-1980s, former CCP leader Deng Xiaoping charged China’s technologists with devising a path to space. From its beginning, China’s space program has been controlled by the CCP’s People’s Liberation Army (PLA), yielding dual-use benefits from its unmanned and manned programs. In 1989, the CCP survived the only significant internal challenge to its rule — from a national upsurge of democracy and accountability protesters fueled by a growing knowledge of the West’s freedoms — culminating in the Tiananmen Massacre. In the aftermath, the CCP decided regime survival required reform for rapid growth at home, and the status gained from power projection abroad — not only domination of Eurasia, but a global capacity to match its main rival, the U.S. By 1992 or thereabouts, the CCP appears to have also decided that hegemony on Earth was insufficient; it had to achieve hegemony over the heavens as well. That year, the “921 Program” set out three major goals: devise working rocket transport to space; begin exploration of the Moon; and build a large space station. In 1999 China had launched its 3-passenger Shenzhou spaceship, a modified copy of the Russian Soyuz, and by 2020 it had tested its 6-passenger successor. China launched its first Moon fly-by Moon probe Chang’e-1 in 2007; its first Moon lander Chang’e-3 in 2013, and the Chang’e-5 Moon sample-return mission was completed in December 2020. In April 2021 China is expected to launch its first module of its Tiangong three-crew space station to be completed in 2022. By 2021, a little over three decades from its beginnings, China turned a space program intended to match that of Russia and the U.S., into a space strategy designed to ensure that the CCP dominates the coming age of the “Space Economy,” that in turn will determine political-economic preeminence on Earth. The CCP has decided that investments in space power will become a primary engine for scientific discovery and technological breakthroughs to sustain China’s dominant economic power on Earth. Like many other nations, the CCP realizes that for coming generations, leadership and dominance of the “Space Economy” will determine primacy on Earth. Numerous reports and statements by Chinese government space and space industry officials have revealed that in the 2020s and beyond China’s space program will grow exponentially, to occupy the Moon, then Mars, nearby asteroids, and to the moons of Jupiter by the mid-2030s. To achieve these goals China will build its Long March-9 super heavy-lift space launch vehicle (SLV) that can loft 140 tons to Low Earth Orbit (LEO) and perhaps over 200 tons with later versions. There will eventually be “reusable” versions of this SLV, providing competition to the Starship of the U.S. private sector SpaceX Corporation. By 2040 China plans to master space nuclear propulsion powerful enough to halve the time needed for Chinese to reach Mars and Jupiter. Chinese state media reports that 60 Long March-9 SLVs could be built between 2030 and 2035. About 40 of these could allow China to select the ten best locations to build Moon Bases with long-term habitats and equipment to mine water-ice and other minerals. This will allow China to begin the business of producing oxygen, rocket fuel, and to start building new space infrastructure such as massive solar power gathering satellites. With these, China might achieve energy independence, or become an energy exporter to client states supporting the CCP’s hegemonistic ambitions. To dominate the Moon, Chinese sources indicate the PLA-controlled space program will deploy a constellation of navigation and communication satellites around the Moon. Chinese sources also say the Moon will be used to observe the Earth, or more precisely, which they do not say, track all of the crucial satellite systems in between that contribute to America’s current margin of military superiority. China’s moon program will then extend to the Lagrangian Points –the five regions of balanced gravitational forces around the Earth and Moon which allow the more fuel-efficient placement of observation and communication satellites or manned outposts. These can help monitor and control the “Earth Moon System,” and control who benefits from the Space Economy. With its Tianwen-1 Mars probe expected to land this June, China will be the first country to simultaneously deploy a Mars orbiting satellite, a Mars lander, and a Mars rover to explore its landing site. In 2008 China may send its first Mars sample return mission, which could occur just after, or simultaneously with, a U.S. mission. By the mid-to-late 2030s China could be sending manned missions to Mars with the goal of finding choice sites for resource exploitation. In addition, China has ambitions to explore nearby and distant asteroids which also hold the potential for being vast sources of water and mineral resources, as well as possible locations for large manned settlements. In the same vein, in 2030 China plans to its first mission to Callisto, one of Jupiter’s more promising moons, with better safety margins and possible resources to help enable human habitation. These are grand ambitions on the part of the CCP, but as a dictatorship it will face no opposition or funding constraints, and can command needed inputs across the whole of society without interruption. Abroad, the CCP can subsidize participation in its space programs via its $1 trillion Belt & Road Initiative – a global commercial, diplomatic, military and intelligence infrastructure network across 70 countries, some of which have space programs. This helps ensure a large coalition of political support for the CCP’s hegemonic goals, on Earth and in space, including fellow UN Security Council member Russia. China intends to write the rules, not follow them, in Space just as in the South China Sea, Hong Kong, WHO, and financial markets. For the United States, it is clear that President Barack Obama’s 2010 decision to cancel George W. Bush’s Constellation program to return to the Moon was a strategic disaster that gifted the CCP with a decade to advance its plans for space hegemony. If the U.S. is to catch up, it is imperative that the U.S. return to the moon early, with as many space allies as possible, in order to secure choice positions and ensure China does not achieve monopoly control. **It is** also **crucial to build the U.S. space private sector into the main engine to develop the Space Economy and to ensure its benefits for America** and other democracies. Across the U.S. space enterprise, protection of critical technologies, legacy programs, key resources, and secrets needs to be prioritized and rigorously enforced, given the pervasive espionage efforts and serial successes of the PRC, and other enemies which have cost the U.S. trillions of dollars. The Trump Administration’s realization of the CCP’s space threat spurred its creation of the Space Force as a separate service, and the signing of the Artemis Accords as the basis of a coalition for a U.S.-led rules-based open-use approach to space. Much remains to be done to rapidly build upon these initiatives so critical to moving beyond exploration, to actual expansion and exploitation of both near and deep space, before the initiative is ceded to the PRC and it’s too late. The magnitude and consistency of the U.S. commitment to space will be vital not only technologically, but also diplomatically as countries face the decision of where to place their ‘space bets’, choosing to bandwagon with the U.S. or with China. What priority the Biden Administration will assign to the nation’s space enterprise is unclear, given its early dismissive attitude toward the Space Force, and the fact that most of its key national security team worked for Barack Obama — who when cancelling the moon program in 2010 proclaimed, “We are no longer racing against an adversary.” What is clear is that if China achieves military and commercial hegemony in space, the resulting wealth, power, and status will ensure that its dictatorship survives far longer, and becomes even more threatening to the U.S. military, economy, and alliances — and indeed to freedom, both on earth and in space. “Who lost Space?” is not a debate the nation can afford or deserves to have.

**Commercial space technology and satellite launches are key to US military power and primacy.**

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Perhaps the most important legacy application of outer space for Americans is national security. The United States relies heavily on satellites for capabilities that make its global power projections and deterrence structures work. Satellites provide valuable real-time intelligence information, connect platforms and bases around the world, and provide the basis for highly accurate navigational systems on land, at sea, and in the air. It is not just that this space infrastructure is useful for American warfighters, but that it is essential. Elbridge Colby, a senior fellow at the Center for a New American Security (CNAS), wrote in his examination of recent changes to the space environment that space capabilities are “the stuff of which American global military primacy is made.” Military capabilities that the United States has 24 come to rely on, from remotely piloted drones to precision weaponry, all rely on satellites. To 25 manage this, The United States Space Command has 38,000 airmen based around the world working to secure access to national security space assets.26 It is not just the military that relies on satellites—the intelligence community does too. While the unclassified military space budget is around $10 billion on outer space a year, total national security 27 space spending may be over $25 billion annually. This reliance on outer space is not going to end any 28 time soon. At an event at the Center for Strategic and International Studies (CSIS) on October 24, 2016, Deputy Assistant Secretary of Defense for Space Policy Doug Loverro, spoke to the importance of leveraging space capabilities. Mr. Loverro highlighted that space is fundamental to everything the 29 United States does in conventional war, as well as nuclear deterrence, and disabused the notion that the country should pursue ways of fighting and projecting power without relying on outer space. Such an argument, he contends, is “not an attractive notion.” Going to war without space capabilities would put American soldiers at risk. Even so, managing the space environment is becoming more complex for the defense community. There is a growing perception that heavy reliance on satellites creates a soft spot in American defenses. America’s rivals have highlighted U.S. space capabilities as a possible vulnerability to 30 exploit. For some capabilities—particularly situational awareness, nuclear command and control, 31 and coordination among America’s widespread military and intelligence assets—satellites have become an almost “single point of failure.” This means that any one accident or disruption could 32 degrade or shut down a key tool. Concerns over this reliance have led to warnings of a “space Pearl Harbor” as defense analysts see American outer space assets as potentially ripe targets for 33 exploitation by international rivals.34 The United States is moving to mitigate some of these concerns by making more resilient and adding redundancy to the system. That way, if one satellite is damaged or degraded, the system as a whole still functions. The success or failure of these efforts may ultimately depend on commercial outer space. Building up U.S. space capabilities solely through government initiative could have both fiscal and operational problems—such a strategy would likely be expensive and spread unforeseen vulnerabilities across the entire American satellite fleet. Working with commercial companies for capabilities can reduce costs while providing strength through variation. Commercial satellites, for example, currently provide the military with 80 percent 35 of its satellite communications needs. Commercial providers also provide the vital launch services 36 that get the satellites into orbit. Today, these providers are the United Launch Alliance (ULA) and 37 Space Exploration Technologies (SpaceX). Without these companies, the United States government 38 would have to rebuild national launch capabilities. In the future, other commercial launch companies, such as Orbital ATK and Blue Origin, could also provide launch services for the military and 39 40 intelligence community. In short, **a more robust commercial space market is key to ensuring the resilience of American national security by assuring access to space.**

**Military readiness and credible deterrence solves every threat---satellite and tech leadership sustain military overmatch, but decline emboldens rivals and causes miscalc and arms races that escalate.**

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Much contemporary commentary favors the first option—reducing commitments—and denounces the third as financially ruinous and perhaps impossible.5 Yet significantly **expanding American capabilities** would not be nearly as economically onerous as it may seem. Compared to the alternatives, in fact, this approach represents the best option for **sustaining American primacy** and preventing a slide into **strategic bankruptcy** that will eventually be punished. Since World War II, the United States has had a military **second to none**. Since the Cold War, America has committed to having **overwhelming military primacy**. The idea, as George W. Bush declared in 2002, that America must possess “strengths **beyond challenge**” has featured in every major U.S. strategy document for a quarter century; it has also been reflected in concrete terms.6 From the early 1990s, for example, the United States consistently accounted for around 35 to 45 percent of world defense spending and maintained peerless **global power-projection** capabilities.7 Perhaps more important, U.S. primacy was also **unrivaled** in key overseas strategic regions—**Europe**, **East Asia**, the **Middle East**. From thrashing Saddam Hussein’s million-man Iraqi military during Operation Desert Storm, to deploying—with impunity—two carrier strike groups off Taiwan during the China-Taiwan crisis of 1995– 96, Washington has been able to project military power **superior to** anything **a regional rival** could employ even on its own geopolitical doorstep. This military dominance has constituted the **hard-power backbone** of an ambitious global strategy. After the Cold War, U.S. policymakers committed to averting a return to the **unstable multipolarity** of earlier eras, and to perpetuating the more favorable unipolar order. They committed to building on the successes of the postwar era by further advancing liberal political values and an open international economy, and to suppressing international scourges such as **rogue states**, **nuclear proliferation**, and **catastrophic terrorism**. And because they recognized that military force remained the ultima ratio regum, they understood the **centrality of military preponderance**. Washington would need the military power necessary to **underwrite worldwide alliance commitments**. It would have to preserve **substantial overmatch** versus any potential great-power rival. It must be able to answer the sharpest challenges to the international system, such as Saddam’s invasion of Kuwait in 1990 or jihadist extremism after 9/11. Finally, because prevailing global norms generally **reflect hard-power realities**, America would need the superiority to assure that its own values remained **ascendant**. It was impolitic to say that U.S. strategy and the international order required “strengths beyond challenge,” but it was not at all inaccurate. American primacy, moreover, was eminently **affordable**. At the height of the Cold War, the United States spent over 12 percent of GDP on defense. Since the mid-1990s, the number has usually been between 3 and 4 percent.8 In a historically favorable international environment, Washington could enjoy primacy—and its geopolitical fruits—on the cheap. Yet U.S. strategy also heeded, at least until recently, the fact that there was a limit to how cheaply that primacy could be had. The American military did shrink significantly during the 1990s, but U.S. officials understood that if Washington cut back too far, its **primacy would erode** to a point where it ceased to deliver its geopolitical benefits. Alliances would **lose credibility**; the stability of key regions would be **eroded**; rivals would be **emboldened**; international **crises would go unaddressed**. American primacy was thus like a reasonably priced insurance policy. It required nontrivial expenditures, but protected against far costlier outcomes.9 Washington paid its insurance premiums for two decades after the Cold War. But more recently American primacy and strategic solvency have been imperiled. THE DARKENING HORIZON For most of the post–Cold War era, the international system was— by historical standards—remarkably benign. Dangers existed, and as the terrorist attacks of September 11, 2001, demonstrated, they could manifest with horrific effect. But for two decades after the Soviet collapse, the world was characterized by remarkably **low levels of great-power competition**, high levels of security in key theaters such as Europe and East Asia, and the **comparative weakness** of those “**rogue” actors**—**Iran, Iraq, North Korea, al-Qaeda**—who most aggressively challenged American power. During the 1990s, some observers even spoke of a “strategic pause,” the idea being that the end of the Cold War had afforded the United States a respite from normal levels of geopolitical danger and competition. Now, however, the **strategic horizon is darkening,** due to four factors. First, **great-power military competition** is back. The world’s two leading authoritarian powers—**China** and Russia—are seeking regional hegemony, **contesting global norms** such as nonaggression and freedom of navigation, and developing the military punch to underwrite these ambitions. Notwithstanding severe economic and demographic problems, Russia has conducted a major military modernization emphasizing nuclear weapons, high-end conventional capabilities, and rapid-deployment and special operations forces— and utilized many of these capabilities in conflicts in Ukraine and Syria.10 China, meanwhile, has carried out a **buildup of historic proportions**, with constant-dollar defense outlays rising from US$26 billion in 1995 to US$226 billion in 2016.11 Ominously, these expenditures have funded development of **power-projection** and antiaccess/area denial (A2/AD) tools necessary to threaten China’s neighbors and complicate U.S. intervention on their behalf. Washington has grown accustomed to having a generational military lead; Russian and Chinese modernization efforts are now creating a far **more competitive environment**. Second, the international outlaws are no longer so weak. **North Korea**’s conventional forces have atrophied, but it has amassed a **growing nuclear arsenal** and is developing an intercontinental delivery capability that will soon allow it to threaten not just America’s regional allies but also the continental United States.12 **Iran** remains a nuclear threshold state, one that continues to develop ballistic missiles and A2/AD capabilities while employing sectarian and **proxy forces** across the Middle East. The **Islamic State**, for its part, is headed for defeat, but has displayed military capabilities unprecedented for any terrorist group, and shown that counterterrorism will continue to place significant **operational demands** on U.S. forces whether in this context or in others. Rogue actors have long preoccupied American planners, but the rogues are now more capable than at any time in decades. Third, the **democratization of technology** has allowed more actors to contest American superiority in dangerous ways. The spread of antisatellite and cyberwarfare capabilities; the proliferation of man-portable air defense systems and ballistic missiles; the increasing availability of key elements of the precision-strike complex— these phenomena have had a military **leveling effect** by giving weaker actors capabilities which were formerly unique to technologically advanced states. As such technologies “proliferate worldwide,” Air Force Chief of Staff General David Goldfein commented in 2016, “the **technology and capability gaps** between America and our adversaries are **closing dangerously fast**.”13 Indeed, as these capabilities spread, fourth-generation systems (such as F-15s and F-16s) may provide decreasing utility against even non-great-power competitors, and far more **fifth-generation capabilities** may be needed to **perpetuate American overmatch**. Finally, the number of challenges has **multiplied**. During the 1990s and early 2000s, Washington faced rogue states and jihadist extremism—but not intense great-power rivalry. America faced conflicts in the Middle East—but East Asia and Europe were comparatively secure. Now, the old threats still exist—but the more permissive conditions have vanished. The United States confronts **rogue states**, lethal jihadist organizations, and **great-power competition**; there are **severe challenges** in all three Eurasian theaters. “I don’t recall a time when we have been confronted with a more **diverse array of threats**, whether it’s the nation state threats posed by Russia and China and particularly their substantial nuclear capabilities, or non-nation states of the likes of ISIL, Al Qaida, etc.,” Director of National Intelligence James Clapper commented in 2016. Trends in the strategic landscape constituted a veritable “**litany of doom**.”14 The United States thus faces not just more significant, but also more numerous, challenges to its military dominance than it has for at least a quarter century.

**China is biggest investor in African mining right now. That means even if the US pulls out, African mining is fine. solves the case**

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China appears to be more interested than any other big economy in investing in the African mining sector. According to China Mining 2018, in 2011, China investors controlled only about 10 mining operations on the continent and this figure rose to at least 24 in 2018. China's interest in mineral resources in the African continent is motivated, on the one hand, by its continued strong growth in power, construction and industrial manufacturing sectors, and on the other, by its declining internal mining production capacity year-on-year, due to declining ore grades, increasing labour costs and a more stringent regulatory environment. In return, China has one of the strongest infrastructure construction abilities in the world and is best placed to help Africa to address its vast infrastructure gap.