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Remarks by Director Kratsios at the Endless Frontiers Retreat

The White House

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THE GOLDEN AGE OF AMERICAN INNOVATION

AS PREPARED FOR DELIVERY

Endless Frontiers Retreat, Austin, Texas

April 14, 2025

THE DIRECTOR: Thank you for the kind introduction. It is a pleasure to speak to you all this evening, here in the early light of the new Golden Age of America.

President Trump has given all of us who serve in his administration a monumental task—the renewal of our nation.

I know, and I think you know, too, that such a renewal will require the reinvigoration of American science and industry. Over the last few decades, America has become complacent, forgetting old dreams of building a wondrous future.

But we know the American pioneer spirit still seeks the exploration of endless frontiers. Our technologies, and what we do with them, will be the tools with which we will make the destiny of our country manifest in this century.

Yet this American hope in the possibility of progress and the power of science and technology does not allow builders and innovators to retreat from politics. Indeed, quite the opposite, which is what brings me here today. A Golden Age is only possible if we *choose* it.

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There is nothing predestined about technological progress and scientific discovery. They require the efforts and energies of men and women, the collective choice for order and truth over disorder and opinion.

The last century was called the American Century, as—despite wars and domestic conflict—the United States stood at the forefront of science and technology, building the

future. With the strength of our industry and ingenuity, we created the largest middle class the world has ever seen. As President Trump said to me in his letter laying out the science and technology agenda of this administration, “The triumphs of the last century did not happen by chance.”

Ours was the Atomic Age. Ours the victory in the Space Race. And ours the invention of the Internet, collecting and connecting the multiplicity of human knowledge.

Today we fight to restore that inheritance. As the failure of the Biden administration’s “small yard, high fence” approach makes clear, it is not enough to seek to *protect* America’s technological lead. We also have a duty to *promote* American technological leadership.

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A gap lies between our moment and the speed of transformation America experienced midcentury. Progress has slowed. Yes, large language models astonish us, rockets still turn our eyes upward, and satellites envelop the globe. But as we look forward to America’s 250th birthday celebration next year, our progress today pales in comparison to the huge leaps of the 20th century. Consider the country of fifty years ago.

As the nation approached its bicentennial, Americans looked forward to electricity too cheap to meter. By the end of 1972, 30 nuclear plants were operational, 55 were under construction, and more than 80 were planned or ordered. That same year, the Apollo 17 astronauts became the 11th and 12th men to walk on the moon. Five years before, the X-15 rocket plane had set a speed record for a crewed aircraft of Mach 6.7. America was flying higher, faster, and farther than ever before…

Today, however, energy prices still burden producers and consumers alike, and the grid remains precarious. Over the past 30 years only three commercial nuclear reactors have been built and 10 have been closed. Despite spending almost twice as much on healthcare as peer nations, we have the lowest life expectancy. Apollo 17’s steps on the lunar surface have proved mankind’s last. The X-15’s record still stands, and the Concorde was decommissioned more than two decades ago. Our passenger planes are slower than they used to be. Our trains crawl compared to those in other parts of the world. Our cars do not fly

Advances have not stopped, but something has gone wrong.

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Stagnation was a choice. We have weighed down our builders and innovators. The well-intentioned regulatory regime of the 1970s became an ever-tightening ratchet, first hampering America's ability to become a net-energy exporter and then making it harder and harder to build. We seem to have lost focus and vision, to have lowered our sights and let systems and structures and bureaucracies muddle us along.

But we are capable of so much more.

Our technologies permit us to manipulate time and space. They leave distance annihilated, cause things to grow, and improve productivity.

As Vice President Vance said in a recent speech, the tradition of American innovation has been one of increasing the capacities of America's workers, of extending human ability so that more people can do more, and, more meaningful work. But unrestricted immigration, and reliance on cheap labor both domestically and offshore, has been a substitute for improving productivity with technology.

We can build in new ways that let us do more with less, or we can borrow from the future. We have chosen to borrow from the future again and again. Our choice as a civilization is technology or debt. And we have chosen debt.

Today we choose a better way.

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Our first assignment is to secure America's preeminence in critical and emerging technologies. This administration will ensure that our nation remains the leader in the industries of the future with a strategy of *both* promotion *and* protection—protecting our greatest assets and promoting our greatest innovators.

To the degree it even tried to accomplish this, the Biden administration failed on its own terms, led by a spirit of fear rather than promise. The old regime sought to protect its managerial power from the disruptions of technology, while promoting social division and redistribution in the name of equity. They secured American technology poorly, and failed to strengthen our leadership at all.

Promoting America's technological leadership requires three things of government. First, we have to make the *smart* choices of creatively allocating our public research and development dollars. Second, we have to make the *right* choices in constructing a

choice to adopt the incredible products and tools made by American builders and to enable their export abroad.

In a moment of strategic significance, we must be more creative in our use of public research and development money, and shape a funding environment that makes clear what our national priorities are. Whether in AI, quantum, biotech, or next-generation semiconductors, in partnership with the private sector and academia, it is the duty of government to enable scientists to create new theories and empower engineers to put them into practice. Prizes, advance market commitments, and other novel funding mechanisms, like fast and flexible grants, can multiply the impact of government-funded research.

At a time defined by the desire to build in America again, we have to throw off the burden of bad regulations that weigh down our innovators, and use federal resources to test, to deploy, and to mature emerging technologies. We know, for example, the greatest obstacle to limitless energy in this country has been a regulatory regime opposed to innovation and development. This, too, has been the chief barrier to pushing the envelope again in transportation, whether supersonic aircraft or high-speed rail and flying cars. The time has come to review the rules on the books and to ask whom they really protect and what they really cost.

For a future stamped with the American character, the federal government must become an early adopter and avid promoter of American technology. Our innovators make incredible breakthroughs, but consumers, government included, require products that meet their needs, not just the wide-open country of frontier technology. Our industrial might, unleashed at home, and our technical achievements from AI to aerospace, successfully commercialized, can also be powerful instruments of diplomacy abroad and key components of our international alliances. American progress in critical technologies will make us the global partner of choice and the standards setter to follow if we enable and encourage American companies to distribute the American tech stack around the world.

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This approach to promoting America's technological leadership goes hand in hand with a threefold strategy for protecting that position from foreign rivals. First, we must safeguard U.S. intellectual property and take seriously American research security. Second, we must prevent rival nations from infiltrating our infrastructure and supply chains, as well as from embedding themselves in the infrastructure of our allies. And third, we must enforce export controls and other measures that keep American frontier technologies out of competitors' hands.

We face many dangers as a nation, but thanks to decades of feckless American leaders, China in particular has grown into both a geopolitical rival and technological competitor. This threat requires us to protect our science and technology resources with heightened vigilance, and defend the vital work American researchers do in public and corporate contexts alike from misuse, theft, and disruption. To safeguard our intellectual capital, we must restrict foreign access to sensitive data and strengthen oversight of international collaborators.

Our infrastructure, supply chains, and those of our allies must be secured, too. We cannot afford to remain dependent, as we are in too many essential industries, on Chinese inputs and products, nor can we allow our closest partners to become points of insecurity by relying on Chinese-controlled critical infrastructure, whether in telecom, the grid, or AI. We must establish and secure trusted supply chains, implement public-private partnerships to enhance supply-chain resilience, and create investment incentives to reshore more critical manufacturing.

Finally, after thirty years of subsidizing Chinese growth, it is time for us to stop helping a rival catch up with us in this race. Strict and simple export controls and know your customer rules, with an unapologetic America-first attitude about enforcing them, are central to stopping China from continuing to build itself up at our expense. We want peace between our countries, and that peace depends on keeping America's bleeding-edge technology out of our competitor's hands.

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The Golden Age of American innovation is on our horizon, if we choose it.

In a changing technological environment, the task ahead of us is to adapt to new realities without destroying the American way of life or dis-inheriting the American worker. We seek, in the most basic terms, to secure our economy, restore our middle class, and uphold America as the planet's best home for innovators.

For many years now the temptation for the kinds of people represented in this room—builders and discoverers—has been to withdraw from politics. In the face of burdensome regulation and inefficient government and the circus of election cycles, many of you have chosen retreat of various kinds.

But there is no substitute for victory. You and your fellow Americans cannot afford to give up on the nation. In a world so shaped by politics as well as technology, we must take action in both of these domains. We need all Americans to continue to rise to the occasion, to make full use of their talents, and to build.

All of us must labor to preserve the inheritance of the American Century to share with posterity, and to ensure that the technologies that give shape to our world help the American people secure the blessings of liberty we received from our forebearers. I bear that responsibility in my role as the President's Science and Technology Advisor. You bear it, too, in exercising whatever powers and responsibilities you have, whether in business, education, or the laboratory—as Americans.

It is the choices of individuals that will make the new American Golden Age possible: the choice of individuals to master the sclerosis of the state, and the choice of individuals to craft new technologies and give themselves to scientific discoveries that will bend time and space, make more with less, and drive us further into the endless frontier.

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