If Congress actually cancels the SLS rocket, what happens next?



The extent of an Artemis lunar surface presence would be determined by several factors, including the cost and safety of this transportation program and whether there are meaningful things for astronauts to do on the Moon.

What about Mars?

The skinny budget contained some intriguing language about Mars exploration: “By allocating over $7 billion for lunar exploration and introducing $1 billion in new investments for Mars-focused programs, the Budget ensures that America’s human space exploration efforts remain unparalleled, innovative, and efficient.”

This was, in fact, the only budget increase proposed by the Trump White House. So what does it mean?

No one is saying for sure, but this funding would probably offer a starting point for a robust Mars COTS program. This would begin with cargo missions to Mars. But eventually it would expand to include crewed missions, thus fulfilling Trump’s promise to land humans on the red planet.

Is this a gift to Elon Musk? Critics will certainly cast it as such, and that is understandable. But the plan would be open to any interested companies, and there are several. Rocket Lab, for example, has already expressed its interest in sending cargo missions to Mars. Impulse Space, too, has said it is building a spacecraft to ferry cargo to Mars and land there.

The Trump budget proposal also kills a key element of NASA’s Mars exploration plans, the robotic Mars Sample Return mission to bring rocks and soil from the red planet to Earth in the 2030s. However, this program was already frozen by the Biden administration because of delays and cost overruns.

Sources said the goal of this budget cut, rather than having a single $8 billion Mars Sample Return mission, is to create an ecosystem in which such missions are frequent. The benefit of opening a pathway to Mars with commercial companies is that it would allow for not just a single Mars Sample Return mission, but multiple efforts at a lower cost.

“The fact is we want to land large things, including crew cabins, on the Moon and Mars and bring them back to Earth,” one Republican space policy consultant said. “Instead of building a series of expensive bespoke robotic landers to do science, let’s develop cost-effective reusable landers that can, with minimal changes, support both cargo and crew missions to the Moon and Mars.”

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