Not a Replay, A Stepping Stone

The Moon is the next world for humanity to explore and turn into a new home—even as we push out into the deeper ocean of space. Forty-five years ago, a few of us wondered her surface, yet we turned away, not realizing the importance of what we had done—or what could be done. Now it is clearly time to return and, by learning how to live there, to prepare ourselves to plant the seeds of humanity on the red sands of Mars.

Unfortunately, current national space policy, while calling for missions to asteroids and Mars, leaves the Moon out completely—an approach the National Research Council says is unlikely to work. The International Space Station (ISS) has helped train us to operate continuously in low Earth orbit, to build large structures and even carry on commercial activities in a community of international partners.

Space policy debates are rarely about policy. Instead, we debate destinations, details and designs.

An asteroid-redirect mission or an Apollo 8-like flyby of Mars are potentially useful, but they lack a larger context for explaining their value. The same challenge exists for government-developed launchers, engines and spacecraft. Add to this the end of the space shuttle and many believe we are adrift. Yet at the same time, as a result of Russian actions and growing Chinese space capabilities, there is a renewed urgency to think about the geopolitical importance of space.

The rise of a commercial New Space industry with its own agenda and motivations separate from the government creates an opportunity to have a new conversation about U.S. space policy. Unfortunately, space policy debates are rarely about policy. Instead, we debate the destinations, details and designs of space systems rather than the overarching rationales such as “Why do we send people into space?” and “How can the U.S. use human space activities to advance its interests and values?”

There is an international consensus that Mars is and should be the long-term objective for human spaceflight. Most of us agree on lunar space—including the Moon’s surface—should be the next destination for human missions beyond low Earth orbit. We need to learn how to “live off the land” if we are to do more on Mars than leave behind the next set of “flags and footprints.” Creating an Earth-Moon infrastructure will enable that. Asteroids promise great wealth on the one hand and threaten our existence on the other. But missions to them should be part of a larger plan, with the government focused on science and exploration, while entrepreneurs develop new services and potential oases along the way.

Commercial contracts could be created to deliver cargo to the lunar surface, similar to commercial cargo delivery to the ISS. The development of space resources could be rewarded with contracts to locate, mine and use material on the Moon and asteroids. This would create an attractive post-ISS market for U.S. industry that could drive reform of government procurement processes to leverage private-sector investment and promote cost reductions through expanding demand for commercially provided space transportation.

If we are to have an effective American space strategy, we need to determine what future humanity might have beyond the Earth, and what values will be part of that future. As we know from historical experience with other regions lying beyond national sovereignty—such as the high seas, international airspace and Antarctica—those who show up create the rules, not those who stay behind. To that end, we need to chart a course that serves us all—friends, allies and industry—and blaze a trail that all can follow to open this frontier.

A U.S.-led drive to develop and settle space, manifested in a program that starts with the Moon and works its way to Mars would be a means of creating broader international space cooperation. The Moon then becomes not just a physical destination, but a technical and organizational training ground for a much more complex and rich future in space for all. It is the next logical step for current and potential international partners to move beyond low Earth orbit. The Moon is the obvious place for the next giant leap to begin.

BY SCOTT PACE AND RICK TUMLINSON

Pace (left) is a professor of the practice of international affairs at George Washington University and director of its Space Policy Institute. Tumlinson is co-founder of the Space Frontier Foundation, Orbital Outfitters and Deep Space Industries, and the founder of the New Worlds Institute.