

Activity Report for 2022 through July 2023



March Storm 2022

Our 2022 advocacy event was held entirely through virtual meetings. It was pulled together in the waning stages of the pandemic, and occurred over several weeks in May 2022. Our advocates met with about a dozen congressional offices, to advocate four priorities:

- Full funding of the NEO Surveyor asteroid hunting space telescope
- Full funding of Commercial LEO Destinations (CLD)
- A report on Space Solar Power (SSP)
- Initiating a Space Commodities Reserve fund

Results were mixed. Significant attention was given to NEO Surveyor and CLD in our meetings. SSP proved interesting to some delegations. However, we found there wasn't enough time to explain the commodities reserve—or sometimes even to get to that objective—in meetings, so this objective saw no success. In September 2022, Congress passed the CHIPS & SCIENCE Act that established NASA's planetary defense office in law, provided instruction to NASA to expedite work on NEO Surveyor, and doubled the Administration's budget request for the telescope. Congress provided nearly the full funding of CLD, and the program was viewed as largely "out of danger" by the end of 2022. Additionally, NASA initiated a report on space solar power, but it wasn't due to congressional action.

March Storm 2023

ASD returned to Capitol Hill 7-8 March for the first in-person advocacy event in several years. Over two days about 30 citizen advocates participated in nearly 60 meetings with staff and members of the House and Senate Science and Appropriations committees. This year there are many new faces on space committees, especially in the House, where the Republicans took the majority and committee rosters have seen major changes. In many cases we were the first space advocacy group to engage the offices this year. We presented three primary objectives, along with six secondary objectives. This construct was different from previous years, where we presented only 2-4 objectives. We did this because in 2022, four objectives proved too much for 30-minute meetings; there was rarely time to even mention the fourth objective. At the same time we wanted to call attention to existing programs that need continued support.

Our meetings focused on the three primary “asks,” and we provided information papers for each of these objectives. We’ve since provided these papers to others to explain these issues. Since CLD received full funding last year, we considered it “out of danger” and moved it to our secondary priorities. These secondary objectives provide a way to highlight important programs underway that support space development. We provided an information paper on each of these as well. Typically these were mentioned in the pitch, and the materials were left behind.

Primary Objectives Citizens’ Space Agenda



- **Extend the “learning period”** limitation on FAA rule-making for human space launch for another eight years. (\$0 FY24)
- Initiate a clean energy **technology demonstration of Space Solar Power** beamed to Earth from low Earth orbit, deployed within 3 years. (\$75M FY24)
- Protect Earth from hazardous asteroids: **increase funding for the NEO Surveyor space telescope**, to recover from major funding cuts and carry out Congressional direction. (\$210M FY24)

For the most part, all three primary objectives were received positively. Space solar power got traction from those interested in new energy sources and/or in national security aspects. Extending the learning period was well received by most, but in the Senate staff there was major skepticism. The President's Budget Request, released in the days following March Storm, provided \$210M for NEO Surveyor, as we requested.

Perhaps the most significant of the secondary objectives was funding for programs in the Space Technology Mission Directorate, especially ISRU. Congress has routinely underfunded STMD by up to 15%, compared to NASA’s request. These programs fund technologies that will be crucial to long-term human presence, not only on the Moon, but beyond. ISRU will need continued attention.

- Continue to fully fund **Commercial LEO Destinations (CLD)**; \$224.3M FY23 Enacted
- Continue support for the **Commercial Crew Program**. \$1,759.5M FY23
- Continue to fully fund both the **Human Landing System (HLS)** and the **Sustaining Lunar Development** contract. \$1.486B FY23 Enacted
- Continue to fully fund development of the **lunar orbiting Gateway**. \$799.2M FY23
- Fully fund **Commercial Lunar Payload Services (CLPS)** contracts. \$486M FY23
- Fully fund the **Science Technology Mission Directorate** research agenda. \$1,438M FY23 PBR; \$1,200M Enacted

The major challenge this year is the prospect for no agreement between the Republican controlled House and Democrat controlled Senate. If the two houses can come to an

agreement, we will likely see the learning period extended by perhaps 4 years and NEO Surveyor receive close to the full funding request.

The full objectives package and information papers can be viewed at allianceforspacedevelopment.org/blitzes.

Opposing Regulatory Overreach to Space Activities

Thanks to fast action initiated by the Space Frontier Foundation, NSS and the Beyond Earth Institute sent a joint letter to the House committee leaders opposing a bill that would have given broader authority to the FCC to regulate in-space activities. On July 25, [HR 1338](#), the Satellite and Telecommunications Streamlining Act [failed to pass on the floor of the House of Representatives](#). Although the act (from the Commerce and Energy Committee) would have positive effects in accelerating spectrum licenses, it would also have solidified FCC authority to regulate activity in space, beyond spectrum allocations. The day the bill was to be voted on the House floor, the letter was delivered to the Commerce and Energy Committee and Science Committee leadership. A motion to suspend the rules and pass the bill [failed by 250 to 163 votes](#), at about 6:35pm, so the bill was defeated. Most but not all Science, Space and Technology Committee members voted against the bill. This is a significant success that helps set the stage for the Office of Space Commerce to take a lead role in management of commercial space. The story was further described in [Space News](#) and [Space Policy Online](#).

Space Solar Power

In 2022 we advocated for a major government space solar power study. NASA began working on a SSP feasibility report sometime in 2022. In 2023 we began to advocate for a modest SSP demonstration project. Following March Storm we assessed that we could not press for a significant space solar power demonstration in Congress before the NASA report was released. This aligned with what we heard from the agency. Therefore, while a proposed draft SSP bill has been discussed by ASD Members, we have held off on trying to go forward with it. In the meantime, the NASA report has been delayed, delayed, and delayed again. Originally expected by the end of 2022, the report slipped to May 2023, early June, late June, and July. The latest rumors suggest release by the end of 2023.

One significant accomplishment was adding space solar power to H.R 2988, in June 2023. The bill provides for research and development cooperation between NASA and the Department of Energy. Thanks to Congressman Kevin Mullins of California's 15th

district, who introduced the amendment, NASA and DOE can fund R&D for “*ground- and space-based technology necessary for the transmission to the Earth’s surface of solar energy collected in space.*” The milestone was [covered by the space press](#). The bill cleared the House Science, Space, and Technology Committee and we are hopeful for its prospects in the full House and Senate.

Input to NASA Moon-to-Mars Architecture

ASD engaged with NASA on its *Moon-to-Mars (M2M) Architecture*, starting in June 2022. Joining the NSS-led team, we answered NASA’s call for assessments of their objectives driving Moon-Mars exploration, at a panel held at Johnson Space Center, Houston. A focus of our input was the importance of in-situ resource utilization (ISRU) technology development in allowing humans to stay on the Moon and develop a cislunar economy. Many of our points were incorporated into subsequent drafts of the M2M Objectives. That’s the good news. The less-than-good news is that none of this may change many minds at NASA.

We participated in another working group called the [M2M Architecture Review, held near Washington, DC](#), in the last week of June 2023. Although many objectives were written with economic development ideas in mind, they don’t seem to have changed NASA’s thinking much. They continue to see the main reason for going to the Moon is in preparation for going to Mars, with no long-term lunar stays envisioned. Nor, when we brought up the need to actually make a commitment to using ISRU, did NASA seem willing. And even where Objectives were written to allow consideration of any appropriate technology, such as for power generation, no trades were presented. For example, NASA automatically zeroed in on nuclear surface fission, without even considering space-based power beaming.

In short, return-to-the-Moon is being driven as a way-station before going to Mars, with no frequent visits or long-term stays. Capabilities are science-driven. Our arguments for a focus on sustained lunar development were not necessarily well received. This demonstrates again why ASD is needed: We’re the only ones pushing for these things.

Input to White House and National Space Council

ASD members provided both oral and written statements on a variety of topics during a series of listening sessions on “novel space activities.” The Biden Administration has operated differently from the previous Administration, which emphasized a lead role for the National Space Council. The current NSpC takes more of a facilitator role.

In 2022, the White House asked for input into several space strategy documents. ASD provided space-development friendly inputs to these documents, including the [In-Space Servicing, Assembly, and Manufacturing National Strategy](#) and the [National Cislunar Science & Technology Strategy](#).

In November 2022, the [National Space Council solicited stakeholder input](#) on space policy through a series of “listening sessions” to set the stage for regulatory proposals. The first topic covered the types of novel in-space activity companies and others envisioned to be undertaken. The second topic covered approaches to authorization and supervision, under the Outer Space Treaty, of future in-space activity. The virtual meetings provided an opportunity to provide stakeholder input. Several ASD members presented on both topics. Unfortunately, no administration action was taken on these topics, as of July 2023.