



July 2023

Description

JULY 2023 NEWSLETTER

acsp.space

ARTEMIS ACCORDS

A Planet in Accord

[Argentina](#) and [India](#) joined the U.S.-drafted Artemis Accords this month. There are now 28 signatories to the non-binding multi-lateral agreement, which affirms that the scientific exploration of space is a global endeavor and commits its signatories to sharing scientific discoveries made in space.

Why it Matters to You:

The addition of any spacefaring nation to the Accords is a significant win for U.S. diplomacy in space. However, the addition of India, a rising space power, is particularly meaningful in building a meaningful coalition for space policy. For commercial operators, perhaps the most significant commitments that signatories make in the Accords is to take steps to [mitigate orbital debris](#).



LUNAR EXPLORATION

It's a Mad, Mad, Mad, Mad... Moon

A number of lunar missions are underway, with India, Russia and Japan all taking aim for Earth's natural satellite. Japan is launching a [lunar lander that it hopes to touch down within a 100 meters of it's target landing spot](#). Russia's first lunar mission since 1976 is [set to launch on August 11](#). And India's [Chandrayaan-3 mission](#) will likewise seek to conduct scientific surveys of the moon's surface. India and Japan are vying to become the fourth country to complete a "soft" landing on the moon.

Why it Matters to You:

As the government footprint on the moon grows, the private footprint will follow. As noted in this newsletter, commercial operators are already taking aim at the moon and some are even trying to establish spectrum policy in order to facilitate further exploration. Each of these missions reflects a significant national investment in space capabilities and these types of missions can often help create the human capital and government demand that helps the commercial space industry grow.

ESA Enters a Mod Phase

The ESA continues to bet on In-Orbit Servicing (IOS) missions in order to combat the growth of orbital debris. ESA studies suggest that there is commercial [demand for IOS](#). And ESA is working with European manufacturers to develop new tools, [like robotic arms](#), to facilitate IOS. This is part of a multi-pronged approach to orbital debris mitigation. The EU is also exploring the possibility of a [robust space traffic management system](#) to help stem the growth of orbital debris.

Why it Matters to You:

First and foremost, the ESA has put its money where its mouth is and has recently given funding to at least 4 IOS operators. Operators with European ownership or subsidiaries should be prepared to engage the ESA as needed. But more wholistically, Europe is cutting its own path in the search for orbital debris solutions. People and companies with practical solutions will find the ESA appears to be an interested audience. How Europe grows its capabilities, and collaborates with other spacefaring nations, has the potential to make space safer and be a valuable diplomatic tool in the future.

POST-MISSION DISPOSAL

Aeolus Returns to Earth, with Help

The European Space Agency was able to successfully [de-orbit the UK's Aeolus satellite at the end of July](#). Initially, the satellite was not expected to require a controlled re-entry. However, up to 20% of the satellite's 1200 kg mass was expected to survive reentry and the ESA set out to ensure that Aeolus did not land in a populated area. Aeolus was tracked crashing down over Antarctica.

Why it Matters to You:

The unprecedented nature of the mission, to control a satellite's reentry outside of the scope of its original mission, poses interesting operational solutions for on-orbit satellites. Some components of space craft, [particularly fuel tanks](#), are designed to withstand high temperatures and therefore pose the risk of surviving re-entry and potentially causing property damage or human casualty. The ESA's effort here demonstrates that under the right circumstances, some otherwise risky re-entries could potentially be mitigated. It remains to be seen whether this type of semi-controlled re-entry can be applied to other missions, but it offers a potential solution should the need arise again.

SPACE SITUATIONAL AWARENESS

Korea

South Korea hosted a "[Space Domain Awareness Forum](#)" that was attended by members of the U.S. Space Force. The focus of the forum was to discuss new strategies for mitigating the growth in orbital debris and collaborating on future space security issues.

Why it Matters to You:

This is yet another example of the U.S. using its space situational awareness (SSA) capabilities to strengthen its alliances abroad. South Korea is adjacent to another [burgeoning space power](#) and has good reason to look for allies to buttress its position in space. Meanwhile, the U.S. continues to proliferate its SSA collaborations, one that could lay the ground-work for more widespread orbital debris policy.



SPACE FORCE!

Launch Market Shortage Impacts Space Force Acquisition Strategy

Space Force has announced an intent to incorporate a third vendor to the [national security space launch program](#). This decision is being driven by a growth in national security related space launches as well as a decline in availability capacity. [This shortage is driven by](#) an ever-increasing number of commercial launches and a plateau of available, reliable launch capacity.

Why it Matters to You:

If you're an operator, be aware that competition for launch slots may have just gotten a bit more competitive. Alternatively, in-development launch providers should recognize that there is still room in the launch industry for additional competitors. Even if government customers are difficult to land, the resulting overflow from increased government demand will create new commercial opportunities for burgeoning launchers.

ACSP HAS A NEW BOOTCAMP!

The Navigating Space Law and Policy Bootcamp is an intensive training event aiming to unveil the intricacies of space law and policy on Capitol Hill. While our previous endeavor illuminated the 'how' of space regulation, this Bootcamp illuminates the 'who' and the 'what' - elements just as pivotal. Targeted at attorneys, students, government affairs professionals, and business developers, this Bootcamp offers an unparalleled opportunity to learn directly from industry experts formerly of renowned entities such as [SpaceX](#), [NASA](#), and [FAA](#). Beyond just theory, attendees gain insights into the real players and processes crucial to success in this domain. [Get tickets now!](#)