June 2023

Description

Space Weather

Solar Cycle 25 Starting Sooner Than Expected

- Scientists have monitored increased activity as the new Solar Cycle, Solar Cycle 25, has kicked off sooner than expected and is as much as two years ahead of schedule. Despite the early activity, NASA is projecting that Solar Cycle 25 will be a roughly average solar cycle.
- *Why It Matters to You*: Solar weather has a meaningful impact on the ability of satellites to maintain orbit. During active periods, satellites in LEO may have to engage in 4-5 times as many station keeping maneuvers per year than when the solar cycle is quiet. This isn't necessarily a bad thing if you're having trouble figuring out how to meet the FCC's 5-Year Post-Mission Disposal requirement, but the new solar cycle should at a minimum be accounted for in short-term future operational planning.

Office of Space Commerce

[OSC to Further Engage Industry on Space Situational Awareness Initiative]

- The Office of Space Commerce (OSC) is continuing its effort to develop the fundamentals of its Traffic Coordination System for Space (TRaCSS) that will aim to replace the DoD's current space situational awareness system, per Congressional mandate. The OSC will hold conversations with industry representatives in July and will look for actionable information as to what the industry needs and who is going to pay for it.

- *Why It Matters to You*: To the extent possible, companies with a vested interest or perspective on space situational awareness policy should do their best to communicate priorities to OSC during its listening tour. There is also value in continuing to monitor the public statements made by OSC officials to understand how TRaCSS is developing.

NASA

NASA Awards Companies Under Small Business Innovation Research Program

- NASA's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs award money to small space companies that may be able to provide innovative space solutions. In 2023, the programs disbursed $45 million dollars to over 200 companies.

- *Why It Matters to You*: Most obviously, SBIR and STTR offer a potential funding option for small companies looking for budget solutions. However, as we noted in our original newsletter, SBIR and STTR programs are authorized by Congress and that authorization can expire. Both programs were renewed late last year, but stakeholders must consistently message the importance of SBIR and STTR to their Congressional representatives to ensure the programs remain in place.

On Earth as It Is in The Heavens

- As part of an ongoing strategy with FEMA, DoA, and EPA to mitigate future climate change risks, NASA has cut the ribbon on the Earth Information Center. The new addition to NASA's headquarters, making use of an underutilized lobby, is aimed at housing environmental data in a space that is easily accessible to all who seek it, regardless of industry affiliation or breadth of knowledge, and will be kept up-to-date through ongoing and future missions for the Earth System Observatory.

- *Why It Matters to You:* Making this kind of space-derived earth environmental data widely available bodes well for everyone, from farmers to engineers to business owners who can now use satellite information to inform their terrestrial decisions. The existence of the center is also pretty convenient for commercial space; it compiles all of a mission's data across government agencies in one place, saving us from a handful of headaches borne of its manual collection. Waxing poetic, having this valuable information available to those removed from the industry demonstrates the importance of space research and exploration to daily life and the global economy, and is a solid step toward reinvigorating society with our passion for it.

New Zealand

New Zealand Updates National Space Policy

- New Zealand recently updated its National Space Policy, marking another spacefaring nation that has recognized that innovations in space require new country-wide policies. As with many space policies, the document offers primarily high level language than specific proposals. But New Zealand already plays a significant role in the space industry a well-fibered Pacific Island with its own launch facility so there is reason to believe New Zealand will take further steps to enhanceits geopolitical position in space.

- *Why It Matters to You*: As noted above, New Zealand is already a structurally important country that can allow it to yield meaningful influence over global space policy. Its location and fiber-connectivity make it appealing for NGSO gateway earth stations. It has its own launch capability. So it is particularly notable when New Zealand commits to " actively participate in space policy and regulatory fora on responsible space behavior, removing international debris from space, global space traffic management and space situational awareness." Space sustainability, and particularly space traffic management, are increasingly of interest to governments around the world and New Zealand intends to contribute to the global conversation.

Space Force!

Space Force Opens "Cosmic" Collaboration Office

- The Space Force, in cooperation with the Air Force Research Laboratory's (AFRL) Air Force Office of Scientific Research, is looking for new ways to collaborate with the commercial space industry. The next step in that process is opening the Commercial Space Marketplace for Innovation and Collaboration (COSMIC) office to work with commercial space players to develop solutions for the Space Force's Mission.

- *Why It Matters to You*: The Cosmic Office will be located in Northern Virginia and the goal is to foster an environment of cooperation with private space actors. If you have a system, capability, or mission that may be of interest to the Space Force, the COSMIC office may be your first stop in understanding whether there are opportunities for collaboration or acquisition.

ESA

Europe Seeks to Stand Alone

- The ESA's Euclid, a space telescope comparable to NASA's Roman, is set to launch on July 1 on a SpaceX Falcon departing from Cape Canaveral, Florida. The telescope, weighing in at a hefty two tons, seeks to gather data on dark matter and dark energy, and will collaborate down theroad a few years in 2027 with the Roman telescope to this end.

- *Why It Matters to You:* This is another example of Europe creating its own stand-alone solutions for space. However, with launch options limited (and further exacerbated by Russia's invasion of Ukraine), they are still being forced to launch through SpaceX. This is a clear example of exactly why Europe continues to invest on a continental scale in space and launch systems.

ACSP Has A Blog!

Hungry for more space news? This month's blog is brought to you by esteemed resident blogger, Amanda Berman.
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