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Description

AUGUST 2023 ACSP NEWSLETTER

acsp.space

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The ACSP Team will be in Washington, D.C. next week for the Navigating Space Law and Policy Bootcamp. We recommend this event for anyone interested in commercial space working with or within the United States. We'll cover who you need to talk to, how you need to talk to them, and what information you need to know before you start. There are five in-person spots left in addition to our virtual attendance option. We hope to see you there.

[GET TICKETS NOW](#)

SPACE SITUATIONAL AWARENESS

[Office of Space Commerce Provides an Update on TRACCS While Europe Looks to Private Sector](#)

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The Office of Space Commerce provided a video update on its progress in developing the Traffic Coordination System for Space (TRACCS) that will enable it's future role as the civilian agency responsible for space situational awareness and space traffic management. Meanwhile, the first European commercial space situational awareness mission launched. The spacecraft is equipped with telescopes and aims to provide real-time data of the local space environment.

- **Why it Matters to You:** If you have operational space craft in LEO, any developments in space situational awareness can only help ensure that your assets are safe and that you are informed if any looming threats arise. This news also highlights the need for public and private as well as domestic and foreign investment into mapping our local space environment. Finally, it's important to be aware that, for maybe the first time ever, someone else may be watching your spacecraft move around in orbit.

Intelligence Agencies Starting to Monitor Space Debris

- Speaking of being watched, U.S. intelligence agencies are taking a new interest in the potential national security implications of space debris. As space continues to integrate itself into everyday life and geopolitical adversaries develop space weapons and countermeasures, it is not surprising that intelligence agencies are paying attention to the potential consequences of space debris.
- **Why it Matters to You:** As always, U.S. Government interest in space can lead to business opportunities. But this is more relevant to most stakeholders because it reflects the growing interest in space from the wider defense community. If space debris becomes a national security priority, the current rules and regulations could get stricter and more invasive. It is something that any operator, particularly those in LEO, should keep an eye on.

ECONOMICS OF SPACE

U.S. Government Releases Economic Data Domestic Space Economy

- The U.S. Bureau of Economic Analysis released [updated statistics for the domestic space industry from 2012-2021](#). This government overview takes a sober look at the industry and breaks out in detail what it is analyzing, giving you an opportunity to understand why this assessment may not be in line with more optimistic, commercial analyses of the industry.

- **Why it Matters to You:** The U.S. space industry has had a staggeringly successful decade, going from an afterthought to front page news with the development of new NGSO earth observation and broadband satellites, along with a slew of other innovations and new business models. However, there is value in reviewing economic figures from a source that has no incentive to encourage its audience to spend and discerning readers will note that the picture painted here is less rosy than others. Making money in space is hard, sustaining a business in space is hard. And when you set out to start a space business, or grow an existing one, it is important to have a clear understanding of the industry's economic environment.

FCC

FCC Regulatory Fees Order Published

- The FCC published its [Order](#) for regulatory fees in the Fiscal Year of 2023. Any satellite or earth station licensee who held a license prior to December, 2022 will owe fees under the Order.
- **Why it Matters to You:** Regulatory fees for certain space station licenses or market access grants can be an outsized cost for all but the biggest space operators. The annual fees must be properly budgeted for existing licensees. Potential licensees should understand those costs before filing any applications. This Order adopts the fees proposed in the NPRM but notes that further evaluation of space station fees for certain NGSO and ISAM systems may be called for in the future.

CYBERSECURITY

U.S. Government Raises Concerns About Hackers Taking Over Satellites

- A number of intelligence agencies recently released a [2-page advisory](#) warning space companies that they are increasingly the target of cyberattacks ordered by foreign governments. The warning is non-specific, and focuses on best practices. However, a parallel effort to allow friendly [hackers to try and penetrate a U.S. government satellite's systems](#) gives a sense of what the U.S. government is concerned about.

- **Why it Matters to You:** The Ukrainian conflict has demonstrated that satellite networks can be vulnerable to [certain kinds of cyber-attacks](#). However, these recent developments show the U.S. government is concerned about hackers taking full control of an on-orbit satellite. This newsletter lacks the sophistication to evaluate whether this threat is serious but spacecraft operators must be aware that the U.S. government believes this threat is real. It may only be a matter of time before these concerns turn into requirements for securing government contracts.

SOLAR WEATHER

[Solar Flares Continue to Disrupt Satellite Operations in LEO](#)

- At least one commercial operator with a satellite in LEO had [its satellites de-orbit earlier than anticipated due to the recent solar weather](#). It seems likely that another experimental satellite was [pushed into the atmosphere ahead of schedule](#) due to the sun's activity. As previously noted by this [newsletter](#), this solar cycle has the potential to be far more disruptive than anticipated.
- **Why it Matters to You:** Any operator in LEO should be mindful of the potential environmental impacts of solar activity. There is a push from earthly bound bodies, primarily the FCC, to keep LEO satellites in a relatively low orbit to ensure timely post-mission disposal. However, those lower orbits leave satellites susceptible to the sun's environmental influence, potentially accelerating de-orbit timelines before the end of a satellite's operational lifetime. The solution is not yet clear, perhaps solar activity can be incorporated into post-mission disposal showings, but LEO operators must be prepared for the possibility that the sun will move their spacecraft around or even [disrupt its power](#).

ITAR

[Department of Justice Files Lawsuit of Refugee Hiring Practices](#)

- The Department of Justice recently filed a lawsuit against one of the biggest space companies in the world, SpaceX, for its hiring practices related to refugees and asylees. This is the result of a years-long investigation and centers on a dispute regarding whether ITAR permits space companies to hire refugees and asylees. Rather than wade into legal issues this newsletter is only passingly familiar with, we will defer to the [experts on this issue](#).
- **Why it Matters to You:** Every space company lists job postings and every space company would prefer that those postings not invite the scrutiny of the Department of Justice. It seems that there are practical ways to avoid litigation from the U.S. Government and it is well worth the upfront cost to make sure your hiring practices are in line with applicable U.S. law. Otherwise, the consequences could be severe.

LUNAR MISSIONS, LOST AND LANDED

[Race to the Moon Ends in Heartbreak for Russia, Jubilation for India](#)

- As likely everyone reading this particular newsletter knows, both Russia and India sought to become the fourth country to successfully land on the moon in the last month (the first three being the U.S., the USSR, and China). While Russia's lander met the same fate as ispace's crashed lander, India accomplished what few had done before and landed smoothly.
- **Why it Matters to You:** India is an ascending space power and its moon landing is only ISRO's latest accomplishment. Without a doubt, India will have a major role in the economic development and scientific exploration in space in the 21st century. This will give it significant sway in the international space arena. Whether it chooses to align itself with the U.S. or chart a more independent path will have meaningful implications for space policy in Earth's orbit and beyond.
A smaller consideration is simply that there is now another administration using spectrum on the moon to transmit data. For companies seeking to operate in cislunar or lunar space, that means there will be another country to coordinate with and operations that you may have to protect. Be mindful of this as you develop your communications architecture.

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