



May 2023

Description

Space Situational Awareness

Growing International Collaboration on Space Situational Awareness and Other Space Matters

The U.S. took further steps to expand access to its space situational awareness (SSA) capabilities to strengthen ties with other spacefaring nations. On the heels of an announcement that the U.S. would strengthen cooperation with the Philippines on <u>SSA</u>, the U.S. Government made a similar <u>announcement</u> related to the other three countries (Japan, India, Australia) in the "Quad." The summary of the recent Quad summit details how the four countries will extend their collaboration into the realm of commercial space activity, including SSA.

Why It Matters to You: These recent developments reflect efforts to open lines of communication related to space safety and a recognition that awareness of the debris in space is an international issue. While there is plenty of reason to believe that much of space policy will not be aligned among many spacefaring nations, it is a positive development to see the foundation being laid for transparency and cooperation on a matter such as space situational awareness. This is undoubtedly an encouraging development for mitigating the risk of on-orbit collisions.

FCC

Space Wins over Terrestrial Industry in Battle for Bandwidth

The FCC recently decided to preserve the 12.2-12.7 GHz band for satellite uses rather than allocate the band for a ubiquitous mobile network. The FCC is now evaluating whether the adjacent 12.7-13.25 GHz band is better suited for a mobile network while determining if other, more limited terrestrial uses of the 12.2-12.7 GHz band are viable.



Why It Matters to You: It is not always possible for the satellite industry to protect spectrum from the terrestrial mobile industry. Here, however, the FCC noted that the deployment of companies like SpaceX and OneWeb weighed heavily on its decision. It's an always important reminder that the best way to protect spectrum access is to use it.

Space Force

Russian Inspector Satellite Follows U.S. Military Space System

In a story that sounds more like a story about submarines than satellites, a Russian satellite "inspector" is observing and monitoring a U.S. military satellite in space. In parallel, the Space Force is undertaking operation Victus Nox to quickly replace a damaged satellite on-orbit.

Why It Matters to You: As noted just above, the Space Force is looking to the commercial sector for fast and cost-effective solutions. The types of on-orbit capabilities raised here, satellite-on-satellite observation and satellite servicing, may shape the Space Force's commercial acquisition strategy.

Space Force Continues to Look to Private Sector for Solutions

MAXAR is courting military buyers for satellites capable of capturing high-resolution images of nonearth objects in low orbit. This comes at a time when the Space Force's Commercial Space Office is actively (and conveniently) looking to expand its efforts toward space domain awareness.

Why It Matters to You: During peacetime, Space Force's Commercial Space Office says, the development of reconnaissance capabilities and tech is imperative to properly prepare for any future conflict. It will be interesting to see whether more companies will shift focus in this direction for the development of satellites in the near future; government acquisition is a big time commercial opportunity, particularly if private funding starts to dry up.

ESA

European Space Agency Funds Mission to De-orbit a Piece of "Space Junk"

The European Space Agency has tapped Swiss startup ClearSpace to demonstrate the ability to actively remove space debris from orbit. ClearSpace is targeting a launch date of 2026 and hopes to capture and remove a single piece of space debris during its demonstration mission.

Why It Matters to You: While removing one piece of space junk out of the <u>literal millions in orbit</u> doesn't amount to much (<u>and is unlikely to be cost effective</u>), this project, funded by the European Space Agency, is evidence that Europe is invested in developing their own solutions to the global issue; while there are funding alternatives available through Japan and the U.S., this is Europe choosing to stand on their own capability. NASA is also looking into the viability and cost effectiveness of similar missions, but the data is insufficient to draw any conclusions.

India

New Indian Space Policy Creates Opportunity for Domestic Commercial Industry



India recently updated its national <u>Space Policy</u> with the intent to further develop its commercial space sector. The new policy creates a new Indian Government Entity, New Space India Ltd., that will aim to facilitate the commercialization of space technologies.

Why It Matters to You: India continues to take steps to develop and innovate and is now opening up further avenues for the world's largest population to expand their space capabilities. India's continued liberalization of its space policy may create new opportunities for existing operators and manufacturers, but it could also quickly yield more competition to provide those services in short order.

FAA

Environmental Groups Sue the FAA (and SpaceX Wants in On It)

On April 20th, 2023, several environmental groups filed a lawsuit in federal court against the FAA alleging that the agency violated a federal environmental law when it decided to skip an environmental impact study before issuing SpaceX a license to launch Starship. The lawsuit seeks to revoke Starship's launch license, and force the FAA to redo its entire environmental assessment from the beginning. SpaceX has filed a Motion to Intervene, asking the court to allow it to enter the suit as a codefendant.

Why It Matters to You: Should the plaintiffs succeed and get SpaceX's license revoked, Starship's timeline will be set back several months, much to the dismay of those eagerly awaiting the cheaper launch costs that will come with it.

Federal Agencies Looking into Safety Concerns Surrounding Liquid Oxygen/Methane Launches

The FAA, NASA, and the U.S. Space Force are conducting independent studies to look into the explosive yield of new propulsion technologies such as those used by Relativity's Terran 1 and SpaceX's Starship. These studies include real-life explosion tests and launch studies to understand mitigation needs for adjacent launch pads when these types of propulsion methods are being used.

Why It Matters to You: These tests will determine future U.S. Space Force requirements for its launch sites such as Cape Canaveral, as well as future FAA regulations more broadly.

U.S. Export Control

Department of Commerce Lays Down the Law

The US Commerce Department has introduced a new policy aimed at encouraging companies operating in the commercial space industry to voluntarily disclose any potential violations of export control regulations. Companies that proactively report violations may receive reduced penalties or other benefits for their disclosure, a policy which has existed for some time. New, however, is the implementation of penalties for failing to report potential violations.



Why It Matters to You: Incentivizing prompt reporting of regulatory violations is a plus for the larger space industry as it encourages safe practices, transparency, and accountability across entities (traits that benefit each of us in every corner of commercial space), even if the proverbial slap on the back of the hand stings a little.

ACSP Has a Blog!

Hungry for more space news? Grab a plate of piping hot, in-depth industry analysis from the mind of our resident blogger, John T. Gordon. <u>Click here</u>.

