



April 2023

### **Description**

# Overcoming Existential Threats to Space Startups: A Roadmap for Success

Join former Director of Space Commerce, Kevin O'Connell, May 4th to discuss the issues facing startups in the industry, why they are crucial to innovation, and what ACSP is doing about it.

Join Here

# **Change** the ITAR!

If you're a space company, you must deal with export controls. The ITAR can be really cumbersome to deal with because it needs some serious updating. Great news! The State Department heard you. The official process by which you- the industry- can submit your requests for removing technology from the ITAR is on the way. Why this matters to you: This is an opportunity to advocate for critical equipment to be subject to less cumbersome and severe regulatory regimes. Any operator or manufacturer with ITAR-controlled components or equipment should evaluate whether a case can be made for them to be subject to the less intensive Export Administrative Regulations. For companies with novel technologies that are difficult to classify, this is an opportunity to find a permanent home in the regulations and avoid ambiguity. Tell us! Write out your issues below. You can tell us in lay terms, and we'll translate it into regulatory terms. Information that is helpful to us includes things like ITAR categories and export classifications. Also, give us a general idea of what the tech does, all the places it can be found in the commercial sector, and why you think it should be controlled differently. Also, tell us about situations in which technology was not clearly defined in the regulations and should have been. Link to more info and where to send comments!

## **U.S. Export Control**

DDTC Seeks Comments on Technology to Remove From U.S. Munitions List



The State Department's Directorate of Defense Trade Controls ("DDTC"), which implements the ITAR, is moving forward with publication of an advanced notice of proposed rulemaking. The request for public comments, once published in the Federal Register, will call for input on technologies that should be considered for removal from the U.S. Munitions List. Additionally, comments should address new technologies that are not currently contemplated in the USML or otherwise. In other words, this is an opportunity for the private sector to argue that certain technologies should no longer be subject to ITAR and to clearly classify items that previously called for a lengthy commodity jurisdiction process. Why this matters to you: This is an opportunity to advocate for critical equipment to be subject to less cumbersome and severe regulatory regimes. Any operator or manufacturer that has ITAR controlled components or equipment should evaluate whether a case can be made for them to be subject to the less intensive Export Administrative Regulations. For companies with novel technologies that are difficult to classify, this is an opportunity to find a permanent home for them in the regulations and avoid ambiguity.

#### Space Force works to Facilitate Space Technology Sales to Foreign Countries

The above referenced rulemaking is particularly interesting in light of the news that the Space Force is seeing a rise in demand to purchase equipment from foreign countries. The article notes that most of the equipment purchased is for communications or GPS. But there may be demand for more sophisticated equipment, including "counter-space" capabilities, if U.S. export rules for such equipment can be relaxed.

Why this matters to you: In conjunction with the above rulemaking, this suggests that the U.S. government wants to enable the export of more space-related equipment to its international partners. Manufacturers and other service providers that are looking towards international markets and customers should be active in representing their needs and markets to the U.S. Government and encouraging it to continue down the path of relaxing export regulations for space-related equipment.

## **Space Safety**

#### Space Safety Coalition Releases Sustainability Best Practices

A group of commercial space operators called the Space Safety Coalition have <u>released an updated</u> "Best Practices for the Sustainability of Space Operations." The biggest update is the inclusion of "Rules of the Road" in section 8, outlining some proposed space traffic management rules to guide all operators.

Why this Matters to You: As noted previously in this newsletter, the space powers of the world are likely to impose different space traffic rules and standards. However, if private operators can reach global consensus on some best practices, the commercial sector's best practices could help ensure that the different space traffic management regimes will have some common ground. Space operators should be aware of these proposed best practices for both operational planning and to anticipate which standards might transition from best practices to regulations.

#### Fuel Shortage for Satellite Propulsion Systems

Many satellite systems rely on chemical propulsion for orbit raising and collision maneuvers, but the fuel required for those systems appears to be in short supply. Hydrazine, xenon, and krypton are all viable fuel sources for chemical propulsion systems but increased demand, production costs, and



recent geopolitical events have further tightened the supply. Why this matters to you: As noted throughout the industry, the FCC has implemented new orbital debris mitigation rules for collision avoidance and post-mission disposal that incentivize operators to design and launch propulsive spacecraft. Fuel shortages could render certain design options inoperable or drive up costs unexpectedly. Operators should be mindful of these developments when sourcing propulsion options and ensure that they focus not only on the design specs but the practical ability to enable these propulsion systems to meet the applicable space safety requirements.

#### **Lunar News**

#### Nokia to land LTE network on moon

Nokia will be sending 4G LTE Network equipment to the lunar surface this November. The communications network is intended to be landed in the Shackleton Crater, where it can be used to support future manned-missions to the lunar service. If it works, then future astronauts will be able to use this network for local communications. If it doesn't, it will hopefully provide useful information as to how to design a viable lunar 4G network.

Why this matters to you: Other than it being very cool, it's notable that this attempt to establish some long term connectivity in space is not connected to a lunar satellite network or otherwise able to communicate beyond the localized area. It's also notable for the fact that if it works, there will be an operational radio on the moon using commercial frequency bands. Operators whose plans involve cislunar space or the lunar surface may want to start cataloging spectrum use in the lunar environment to ensure its systems won't experience harmful interference 250,000 miles away from earth.

## ispace Can't Quite Stick the Landing

Japanese company ispace tried to become the first private company to successfully land on the moon but was unable to complete a successful landing. The company has made it as far as any commercial operator but the end goal remains elusive. Intuitive Machines, the company supporting the above Nokia mission, will have the next chance to be the first commercial operator to successfully land on the moon later this year or in early 2024.

Why this matters to you: The cislunar economy isn't quite here yet, but it gets closer everyday. One of the most notable elements of ispace's final ascent was the quality of the video stream (before it cut out) of the spacecraft approaching the lunar surface. It's a valuable reminder that even if your system isn't going to land on the moon, there is still a need and an opportunity for the space infrastructure necessary to support missions like ispace and Intuitive Machines to make lunar history.

#### **FCC**

#### Space Bureau Officially Kicks Off

The FCC has officially launched the Space Bureau as of April 17. The FCC has demonstrated that it is serious about its role in facilitating space deployments by standing up the Space Bureau in a matter of months since announcing it. Its leadership org chart is available here.

Why this matters to you: The Space Bureau reorganization means that new staff have already been added to the previous Division staff, with more on the way. It also means that you may have to change your points of contact. The Space Bureau is now broken up into earth station licensing, space station licensing and satellite programing, which is presumably policy focused. Be mindful of the new division



of labor and your needs when reaching out to the new Bureau.

# **ACSP Partnerships**



<u>Bailey Reichelt</u> will be speaking at the @Export Compliance Training Institute (ECTI) ITAR, EAR, and OFAC Export Controls Seminar on *June 19-22, 2023*, in Washington, DC. For more details and registration information, visit: <a href="https://hubs.ly/Q01sRmPT0">https://hubs.ly/Q01sRmPT0</a> and use discount code **atI10** at checkout for ten percent off. We look forward to seeing you there!