Chairmen and members of the Commission, thank you for the opportunity to appear before you today. Although I am now a partner in the international trade group at Akin Gump Strauss Hauer & Feld LLP, the views I express today are my own. I am not advocating for or against any potential changes to legislation or regulations on behalf of another. Rather, given my background, I have been asked to testify about and to describe U.S. controls and prohibitions regarding the export and re-export of space-related items to China. My professional life has focused on the law and policy of military and dual-use export and related investment controls for more than 25 years. This includes my service as the Assistant Secretary of Commerce for Export Administration during the Obama Administration.

Export Controls and the Primary Agencies That Administer Them

To level set for everyone, and to reduce my entire career down to one sentence, export controls are the rules that govern

(i) the export, reexport, and (in-country) transfer
(ii) by U.S. and foreign persons
(iii) of commodities, technology, software, and, in some cases, services
(iv) to destinations, end users, and end uses
(v) to accomplish various national security and foreign policy objectives, including human rights objectives.

The primary U.S. government agencies that implement these controls are the State Department’s Directorate of Defense Trade Controls (DDTC), which administers the International Traffic in Arms Regulations (ITAR), and the Commerce Department’s Bureau of Industry and Security (BIS), which administers the Export Administration Regulations (EAR). Applicable statutes, Executive Orders, and regulations require significant interagency cooperation, primarily with the Defense Department, on what should be controlled and when approvals and denials are warranted. I described the U.S. export control system in more detail to the House Foreign Affairs Committee during its consideration of what became the Export Control Reform Act of 2018 (ECRA), the new authority for the EAR. I incorporate those comments by reference. This effort was part of a broader effort to reform and expand the jurisdictional authority of the
Committee on Foreign Investment in the United States (CFIUS), largely in response to national security concerns pertaining to investments in the United States from China.

The Export Control Reform Effort

As you may know, the Obama Administration largely completed a substantial (and non-partisan) reform of the U.S. export control system, including with respect to the laws and regulations governing space-related items. A key element of the effort involved transferring the jurisdictional control of less-sensitive military items and commercial and dual-use space-related items from the “one size fits all” controls of the ITAR to the EAR, which allow for more tailored controls depending upon the item’s sensitivity and ultimate destination. From all indications, these reforms successfully accomplished their national security, foreign policy, and economic security objectives. The Trump Administration has kept the rules in effect and, to its credit, is moving forward with planned updates to account for new technologies and issues, particularly with respect to commercial space-related items. In addition, Congress essentially ratified and codified core elements and policies of the Export Control Reform effort when it passed ECRA last August.

China-Specific Controls in the Export Control Laws and Regulations

With respect to China, the export control prohibitions and presumptions of denial pertaining to military, dual-use, and commercial space-related commodities, software, technology, and services have remained unchanged for decades. There is effectively a complete embargo. For example, as the Commerce Department reported to Congress in response to a requirement imposed by section 1263(a) of the FY13 NDAA, we adopted into the EAR during the reform effort the same presumptive denial licensing policies the State Department had and still has on exports of space-related items under its jurisdiction. In addition, with respect to military- and space-related items, we also adopted into the EAR a zero de minimis rule identical to that of the ITAR. This means, for example, that the export to China and other countries subject to arms embargoes from outside the United States of a foreign-made satellite or any other military or space-related item containing any specially designed U.S.-origin component is prohibited by U.S. law unless a license is granted, which will be presumptively denied.

We also carried forward into the EAR a China-specific aspect of the ITAR's novel definition of “export” and “reexport” with respect to spacecraft. The traditional definition of “export” is that there must be an actual shipment or transmission out of the United States of a commodity, software, or technology. A reexport is such a shipment or transmission, but from one third country to another. The definition in the EAR is, however, broader for any type of spacecraft subject to the EAR in that even transferring the registration, control, or ownership of a spacecraft subject to the EAR to a person in, or a national of, China or other countries subject to an arms embargo constitutes a controlled export or reexport. 15 C.F.R. §§ 734.13(a)(3)(ii) and 734.14(a)(3)(ii).
Such changes in combination with the creation of conditional license exceptions for close allies were a reflection of one of the motives behind the Obama Administration’s reform of the commercial space-related and less sensitive military controls – i.e., to allow for more resources to be devoted to administering and enforcing the prohibitions on the export and reexport of military and space-related items to China and other countries of concern rather than reviewing and rubber-stamping applications for exports and reexports of commercial and less-sensitive military items to NATO and other close allies. Given other controls in place and the nature of the countries, there was a low risk such items would be diverted for inappropriate end uses or end users. Moreover, it was and remains in our national security interests to reduce barriers to military interoperability with our NATO and other close allies. It also was and remains in our national and economic security interest to enhance the U.S. space industrial base by reducing incentives for companies in allied countries to design out or avoid U.S.-origin content or services for end uses and end users not involving countries of concern.

My views on why the China-specific export controls were and remain required are the same as those described in Appendix 4 to the report the departments of State and Defense submitted to Congress pursuant to section 1248 of the FY10 NDAA. Regardless of my personal views, the China-specific export control prohibitions and presumptions of denials are statutory. In particular, section 1261(c)(1) of the FY13 NDAA states that, except for waivers that are issued by the President, “no satellites or related items that are made subject to [the EAR pursuant to the law] may be exported, re-exported, or transferred, directly or indirectly, to [China, North Korea, or a country that is a state sponsor of terrorism] or any entity or person in or acting for or on behalf of such government, entity or person. . . .” Section 1261(d) states that “[a]ny license or other authorization to export satellites and related items to a country with respect to which the United States maintains a comprehensive arms embargo [such as China] shall be subject to a presumption of denial.” These prohibitions reinforce those Congress imposed in Title IX of the Foreign Relations Authorization Act for FY90 and FY91 in response to the Chinese government’s 1989 crackdown against pro-democracy protesters in and around Tiananmen Square. They also carry forward those imposed in Title XV, Subtitle B of the NDAA for FY99.

The licensing policies I signed into the EAR with respect to satellite and other space-related items track these statutory standards. See, e.g., 15 C.F.R. §§ 742.4(b)(iii) (“When destined to the People’s Republic of China or a country [subject to embargo] of the EAR, items classified under any 9x515 ECCN [i.e., space-related commodities, software, and technologies] will be subject to a policy of denial”) and 742.6(b)(1)(i) (“When destined to the People’s Republic of China or a country [subject to embargo], items classified under any 9x515 ECCN will be subject to a policy of denial”).

**Recommendation 1 – More Resources for the Export Control Agencies**

Given that the statutory and regulatory China-specific export controls pertaining to space-related items are quite robust and restrictive, I do not have any suggestions for changes to the laws or regulations. Statutory prohibitions are statutory prohibitions and
I have not heard of anyone in industry or government argue that their relaxation would be in the national security interests of the United States. The key to their effectiveness is essentially a matter of enforcement and training resources, and will of the political leadership. Thus, my first recommendation is that Congress and the Administration should devote substantially more resources and personnel to the export control agencies, namely the Bureau of Industry and Security (BIS), the Defense Technology Security Administration (DTSA), the Bureau of International Security and Nonproliferation (ISN), the Directorate of Defense Trade Controls (DDTC), and the National Nuclear Security Administration (NNSA). (Eventually, the export control agencies should be combined into a single licensing agency and the rules should be combined into a single set of export control regulations with one list of controlled items, but that is a subject for another day.) The issues and technologies are more complex than ever and the need for multilateral cooperation, which is time intensive, continues to remain extremely important to the controls’ effectiveness. My personal view, that I can describe in more detail separately, is that each agency is understaffed when compared to its mission. Among other things, this leads to increased burdens and delays for industry, reduced time needed for internal training, and the inability to keep the regulations current. Failure to keep the regulations current to novel threats does not advance our national security interests and harms our economic security. A renewed attention to supporting these organizations should include efforts to educate the next generation of export control professionals and to motivate them to join the federal government. Decades of wisdom and collective memory will walk out the door when current senior career staff retire or otherwise leave the government.

Similarly, I would encourage more resources be devoted to export-control-focused enforcement, particularly by the subject matter experts and special agents at BIS’s Office of Export Enforcement (OEE). This will not only advance the national security and foreign policy objectives of the controls, but also help keep the playing field level for those companies that do the hard work necessary to comply with the regulations. In addition, there should be more resources dedicated to enhanced DDTC/BIS compliance coordination. This would help with investigations involving items subject to both the ITAR and the EAR.

**Recommendation 2 – Continue Working with the Allies to Make Unilateral Space-Related Controls Multilateral**

The second recommendation I would make is that the Administration should commit to continue working with our export control regime allies to make the remaining unilateral controls over space-related items multilateral, particularly those in US Munitions List Category XV and Export Control Classification Numbers (ECCNs) 9x515. Most of the items exported in this category, i.e., basic parts and components specially designed for commercial satellites and other space items (ECCN 9A515.x), are not controlled by any of our allies. That is, our allies do not require licenses to export from their countries to China and other countries most commercial space-related parts and components, but the U.S. does. I realize this is a heavy lift because different countries have different views about the issue, but explaining, with evidence, why such common controls would
be in our common national security interest will be key to the effort’s success. This is important because the history of space-related export controls is the prime example of the general point that unilaterally controlling widely available dual-use items ends up harming the very industry and items to be protected because it motivates development and production to be done outside the United States. This result eventually leads to less control over the proliferation of the items of concern to the countries of concern, such as China. Congress reflected the lessons learned from this and similar experiences when it wrote into ECRA sections 4811(5) and (6) that multilateral controls are far more effective than unilateral controls and that unilateral controls are discouraged. In addition, ECRA section 4812(b)(3) requires the Administration to work to make its controls multilateral, to the extent possible.

Recommendation 3 – Implement in EAR Section 744.6 ECRA Section 4812(a)(2)(F)

My third recommendation is not per se related to China or space-related items, but would address issues that have been expressed in the lead-up to this hearing with respect to whether there are gaps that should be addressed. Specifically, ECRA section 4812(a)(2)(F) requires the President to “control the activities of United States persons, wherever located, relating to specific . . . foreign military intelligence services.” Thus, this is not really a personal recommendation given that it is a statutory requirement. I am only connecting the dots for this committee between an obscure statutory subparagraph and a current issue.

As referenced in that ECRA paragraph and as implemented in EAR section 744.6, the EAR already control a range of services performed by U.S. persons if with respect to missiles, nuclear explosive devices, or chemical/biological weapons – regardless of whether the commodities, software, or technology involved in the service are subject to the jurisdiction of the EAR. This is a novel control in the EAR because their jurisdiction normally attaches when there is a commodity, technology, or software subject to the EAR, which includes all U.S.-origin items and some types of foreign-origin items with U.S.-origin content or that are the direct product of U.S.-origin technology. Congress added this requirement to close a gap between the ITAR’s controls on defense services and services that do not involve defense articles but still warrant control for national security reasons. BIS has not yet implemented this control. It is one that I wanted to implement when I was the Assistant Secretary, but we were unable to develop a clear and enforceable definition of “foreign intelligence service” that would not have unnecessary collateral consequences. Once this and related issues are worked out, the EAR would prohibit, for example, a U.S. person from providing assistance to a Chinese military intelligence agency with respect to the operation of a commercial satellite even if there were no transfers of controlled commodities, software, or technology involved.

Hong Kong

The United States-Hong Kong Policy Act of 1992 effectively requires the U.S. government to treat Hong Kong and mainland China as two separate destinations for export control purposes. In addition, section 103(8) of the Act states that the “United
States should continue to support access by Hong Kong to sensitive technologies controlled under [the then existing multilateral export control regime that is the predecessor to the Wassenaar Arrangement] for so long as the United States is satisfied that such technologies are protected from improper use or export. Because the United States has not made a determination to the contrary, the statutory and regulatory prohibitions pertaining to the export and reexport of space-related (and other controlled) items subject to U.S. jurisdiction that are applicable to mainland China do not apply if the destination is Hong Kong. The export control regulations, however, still require licenses to export and reexport space-related items to Hong Kong. Applications for such exports and reexports are reviewed by U.S. government export control authorities to determine, for example, whether Hong Kong is indeed the ultimate destination and whether the export or reexport otherwise presents any national security or foreign policy concerns.

I was asked to comment on whether items, particularly space-related items, subject to U.S. export controls are being illegally exported out of Hong Kong to China or other countries of concern. I left the government on January 20, 2017 and thus no longer have access to such information, whether positive or negative. I can, however, say that on January 19, 2017, a rule that I signed expressing concerns about the issue remains in effect. The rule imposes additional support document requirements on exports and reexports to Hong Kong. In essence, the rule leveraged the EAR to effectively compel compliance with Hong Kong export and import permit requirements by requiring proof of compliance with Hong Kong law as a support document necessary for shipping under an EAR license or license exception. As stated in the preamble, BIS took “this action to provide greater assurance that U.S.-origin items that are subject to multilateral control regimes . . . will be properly authorized by the United States to the final destination [such as Mainland China], even when those items first pass through Hong Kong.” My thought at the time was that if Hong Kong officials could provide regular, robust assurances that diversions of U.S.-origin items were not occurring, then the additional requirements would remain in effect as is or be removed. If not, then the stricter licensing policies, including policies of presumptive denials, would need to be imposed. I would encourage you to ask this question of current BIS officials.

**Impact of China-Specific Export Controls on International Collaboration in Space-Related Development and Production Efforts**

I was also asked to comment on how foreign space companies and institutions adapt to China-specific U.S. export controls pertaining to space-related items and whether they are adequate to prevent China from acquiring sensitive space technologies through collaboration. Unlike the previous topic, this is something I have current knowledge about given that I am an attorney who advises companies and others on how to comply with the export control rules. In short, the answer is binary – if they are working with Chinese nationals or China, or plan to export their products to China, then they exclude from the effort controlled space-related commodities, software, and technology subject to U.S. jurisdiction. If not, then they generally don’t.
As discussed above, the law and the regulations are as strict as they can reasonably get. In addition, U.S. export control rules are, unlike those of most other countries, extraterritorial, meaning that they apply outside the United States. Thus, the answer to the question about how to prevent China from illegally acquiring sensitive space technologies subject to U.S. jurisdiction during collaborative efforts is (i) well-funded enforcement efforts in and outside the United States, (ii) regular efforts to get our allies to cooperate with such efforts and controls, and (iii) massive amounts of well-funded outreach and training efforts for institutions, large and small, in the U.S. and abroad so that they know the rules and know that if they do not create robust compliance programs to avoid violations they run the serious risk of significant and adverse enforcement actions by the U.S. government. This last point is particularly important. It is impossible for any government to monitor every exchange of a controlled item. Thus, those on the front lines, the companies, institutions, and people in and out of the United States working with the controlled items, need to do the hard work to prevent illegal releases through well-resourced, thoughtful compliance programs with management commitment, whether out of patriotism or out of fear of being subject to significant enforcement actions if they do not.

**Conclusion**

Thank you again for asking me to testify on the law and policy pertaining to China-specific U.S. export controls over space-related items. I am happy to answer your questions on the subject.