

# Win Some . . .

## New ITAR rules retain tight leash on commercial human spacecraft

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**A** new generation of commercial vehicles designed to carry human passengers on suborbital spaceflight and beyond will continue to be evaluated as munitions under new U.S. export-control rules.

That means vehicles such as the Virgin Galactic SpaceShipTwo, Xcor Aerospace Lynx, Sierra Nevada Corp. Dream Chaser and human-rated SpaceX Dragon will be licensed for export by the U.S. State Department, instead of being shifted to the Commerce Department's less restrictive controls.

Developed after years of complaints from U.S. satellite manufacturers that the restrictive International Traffic in Arms Regulations (ITAR) licensing procedures have hampered their ability to compete in the international marketplace, the new regulations generally ease restrictions on purely commercial and dual-use space hardware, while retaining the tighter controls on military-space gear.

The complex new rule—actually an “interim final rule” that remains open to comment until it takes effect Nov. 10—drops specific reference to new human spaceflight vehicles. But it keeps on the U.S. munitions list for export-control pur-

### Integrated rocket motors appear to keep Virgin Galactic SpaceShipTwo and other commercial crew vehicles under ITAR restrictions.

poses vehicles that afford “suborbital, Earth orbital, cislunar, lunar, deep space and planetary spaceflight, or in-space human habitation, which have integrated propulsion other than that required for attitude control.”

The term “integrated propulsion”—rockets that theoretically could be used in military missiles—appears to cover such vehicles as the Lynx and SpaceShipTwo vehicles nearing flight test for suborbital tourist and researcher flights, as well as the Dream Chaser, Dragon and other vehicles competing to be the commercial crew vehicle NASA uses to take astronauts to the International Space Station (ISS).

“While the overall export-control reform effort is to be applauded, there is still much progress to be made on commercial spacecraft,” says former ISS Commander Michael Lopez-Alegria, president of the Commercial Spaceflight Federation. “Moving these vehicles to the [Commerce Department process] would give industry an opportunity to pursue global markets, enabling contributions to the U.S. economy and the growth of our space industrial base.”

The new rules probably will make it easier for satellite-component manufacturers to comply with ITAR, and they include clear definitions of such terms as “hosted payload” for the first time. The so-called “see-through” rule, which kept space components with a military application out of the more lenient Commerce Department licensing regime, is eliminated.

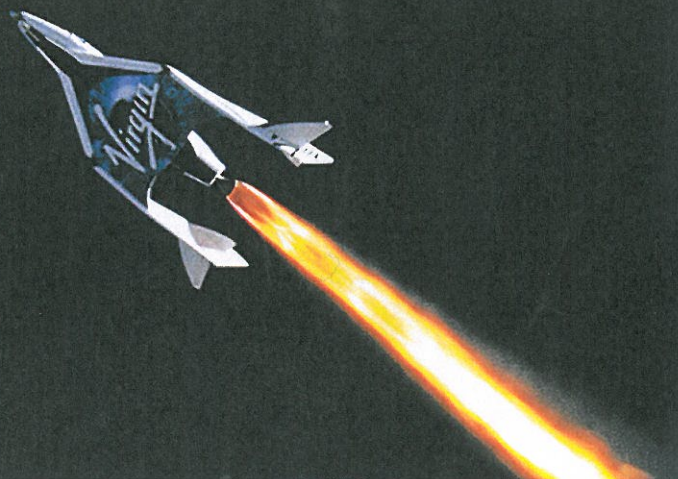
“The people who are going to benefit the most are the parts and component manufacturers,” says attorney John Ordway, an export-control specialist at Washington law firm Berliner, Corcoran & Rowe. “Boeing and Lockheed Martin employ 200-

300 people to keep track of licensing, and they probably have it down pat. It's the smaller companies that can't afford to get into all of this ITAR stuff.”

Ordway, whose legal practice involves helping clients stay in compliance with ITAR and other U.S. export-control laws, says language in the rule also may require State Department licensing for non-U.S. nationals who fly on the Lynx, SpaceShipTwo and other new commercial vehicles. The rule exempts “[a]ctivities and technology/technical data directly related to or required for the spaceflight,” including marketing and training, but does not mention the flight itself.

A spokesman for the Commercial Spaceflight Federation says that “every indication from the agencies involved indicates that it does cover the flight experience, so we do not believe this is a problem.”

Export-control rules for satellites and other space hardware became much more stringent in 1999, with military officers on assignment to the State Department responsible for licensing exports as munitions instead of commercial exports. The change grew out of concerns that the help some U.S. companies gave China in launch-failure reviews involving U.S. payloads could have aided Beijing's ballistic missile development efforts.



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An echo of that concern can be found in the new language, which adds “planning” for integration of a satellite onto a foreign launch vehicle, as well as helping to integrate the payload.

“That portion is a little more restrictive,” says Ordway, explaining that U.S. engineering services companies monitoring U.S. spacecraft fabrication for non-U.S. clients will need State Department licenses earlier in the process.

Overall, however, the revised regulations shift to Commerce Department control communications satellites built without classified components; some remote-sensing satellites; and a variety of spacecraft components, including all radiation-hardened microcircuits. The revisions also allow some satellites that contain parts included on the U.S. munitions list to move to Commerce licensing.

“For the many American businesses that compete in this key technology sector, it means a stronger United States defense industrial base, the ability to focus the government's limited resources on the technologies and destinations of greatest concern, an increase in the competitiveness of the U.S. satellite industry, and a reduction in the licensing burden on U.S. exporters,” says Commerce Under Secretary Eric L. Hirschhorn. ☐