

Title IV of the 2015 U.S. Commercial Space Launch Competitiveness Act

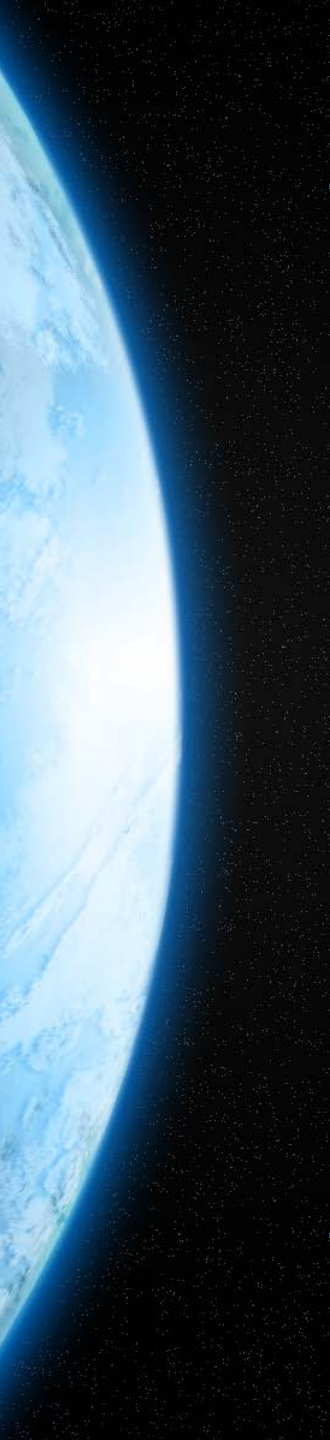
Prof. Joanne Irene Gabrynowicz, Emerita

IISL/ECSL Symposium

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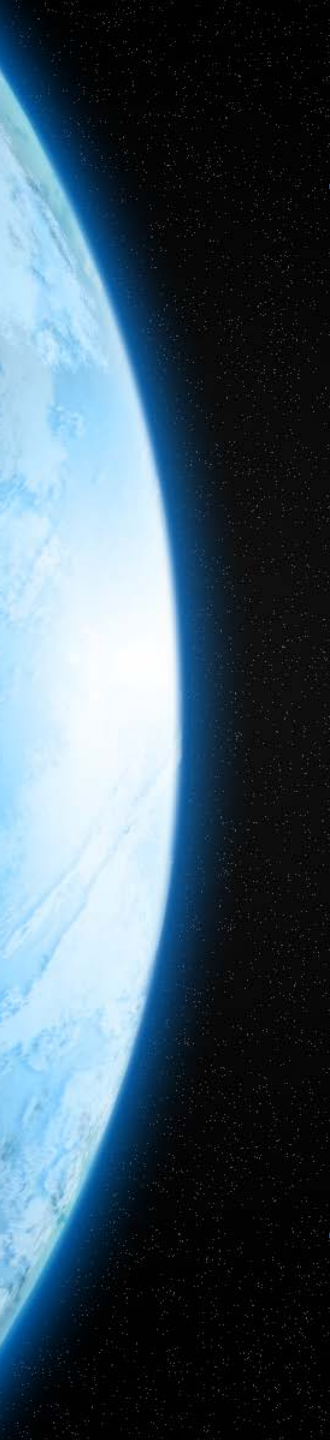
Vienna, Austria

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2014

- **H.R.5063 — 113th Congress**
 - **ASTEROIDS Act**
 - **American Space Technology for Exploring Resource Opportunities In Deep Space Act**
- **Failed in Committee hearing**
 - **September 10, 2014**



2015

2015

H.R. 2262

- **SPACE Act**
- **Included**
 - 4 bills previously adopted by Science, Space and Technology Subcommittee
- **Added**
 - HR 1508: asteroid mining
 - HR 2261: commercial remote sensing
 - HR 2263: change name & duties of DoC Office of Space Commercialization

S. 1297

- **Commercial Space Launch Competitiveness Act**
 - Cruz, TX-R
 - Gardner, CO-R
 - Nelson, FL-D
 - Peters, MI-D
 - Rubio, FL-R
 - Wicker, MS-R, amended
- **Adopted by voice vote**

**House Bill Number Prevails
but Senate Bill Name Prevails**



The Contents of the 2015 Law

Contents of 2015 Law

- **Title I:**
 - Launches
 - Orbital traffic management
 - Space surveillance and situational awareness data
 - Government astronauts
 - International Space Station
 - **Title II:**
 - Commercial Remote Sensing
 - **Title III:**
 - Office of Space Commerce
 - **Title IV:**
 - Space resource exploration and utilization
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Title IV: Space Resource Exploration and Utilization

Definitions

- **“Asteroid Resource”**:
 - “a space resource found on or within a single asteroid”
- **“Space Resource”**
 - “an abiotic resource in situ in outer space”
- **“Includes”**:
 - “water and minerals”
- **“U.S. Citizen”**
 - (A) individual who is a U.S. citizen;
 - (B) entity organized or existing under laws of U.S. or a State; or,
 - (C) entity organized or existing under the laws of a foreign country if the controlling interest (as defined by the Secretary of Transportation) is held by an individual or entity described in (A) or (B)



Title IV: Space Resource Exploration and Utilization

“The **President**, acting through appropriate Federal agencies **shall**”

1. **“Facilitate commercial exploration** for and commercial recovery of space resources **by U.S. citizens**;
1. **“discourage government barriers** to... development in the [US] of economically viable, safe, and stable industries for commercial exploration for and recovery of space resources in manners consistent with international obligations of the [US]; and
3. **Promote right of [US] citizens** to engage in **commercial exploration**...subject to authorization and continuing supervision of the Federal Government”



Title IV: Space Resource Exploration and Utilization

Asteroid resource and space resource rights:

“A [US] **citizen** engaged in commercial recovery of an asteroid resource or a space resource [...] **shall be entitled** to any asteroid resource or space resource obtained, including **to possess, own, transport, use and sell** [...] **in accordance with applicable law**, including the international obligations of the [US]“



Title IV: Space Resource Exploration and Utilization

Disclaimer of Extraterritorial Sovereignty:

“It is the sense of Congress that by the enactment of this Act, the [US] does not thereby assert sovereignty or sovereign or exclusive rights or jurisdiction over, or the ownership of, any celestial body.”



Title IV: Space Resource Exploration and Utilization

“A 'sense of' resolution is not legally binding because it is not presented to the President for his signature. Even if a 'sense of' provision is incorporated into a bill that becomes law, such provisions merely **express the opinion of Congress** or the relevant chamber. **They have no formal effect on public policy and have no force of law.**“

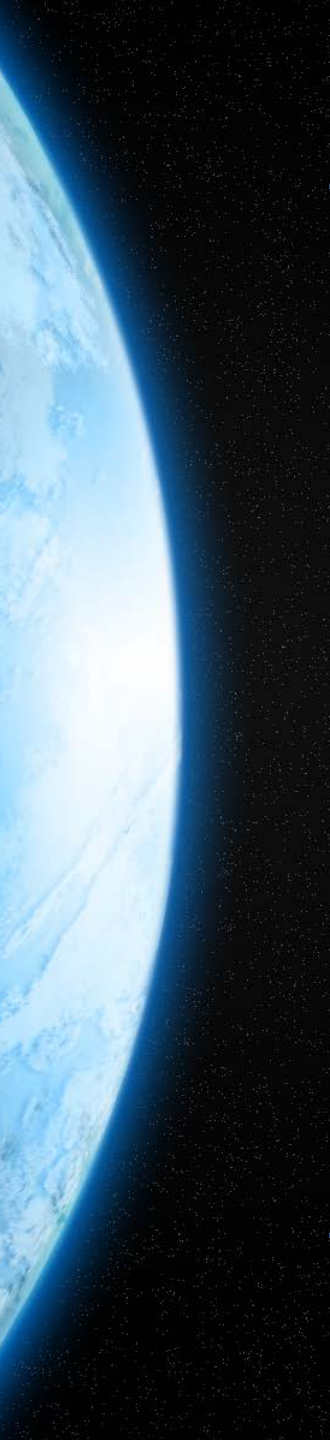
-- Congressional Research Service



Title IV: Space Resource Exploration and Utilization

President had to deliver to Congress by Nov. 25, 2015 a report that specified:

1. “authorities necessary to **meet international obligations** of [US] including authorization and continuing supervision; and
2. recommendations for allocation of **responsibilities among Federal agencies**“



2016



2016

The April 4, 2016 White House Office of Science and Technology Policy **Report on Authorizing Private On-Orbit Missions**

OSTP Report on Authorizing Private On-Orbit Missions

- **April 4, 2016 Report**
 - Required by 2015 CSLCA
 - Written by the White House OSTP
- **Proposes to Congress**
 - “Mission Authorization” framework
 - Department of Transportation
- **Rationale: too early for comprehensive regulatory framework like those for mature activities**
 - Establish process “no more burdensome than is necessary” to enable the USG to authorize in conformity with treaty obligations and core public interests

OSTP Report on Authorizing Private On-Orbit Missions

- **Modeled on FAA's Payload Review process**
 - Coordinate interagency process to review proposed mission in relation to specified government interests
 - Regulations to outline procedural aspects of obtaining Mission Authorization
- **Only conditions necessary to fulfill government interests**
 - E.g.: State Department responsible for consistency with the OST, and would recommend authorization conditions to ensure conformity with the provisions of this treaty
- **Case by case basis**
- **Congressional action still necessary**



Mission Authorization? Not Yet. Payload Review

“The FAA has determined that the launch of the payload does not jeopardize public health and safety, safety of property, U.S. national security or foreign policy interests, or international obligations of the [US].

For this particular mission and set of circumstances, the FAA concludes, in concurrence with the Department of State, that the enforcement of [representations made by company] constitutes compliance with Article VI of the Outer Space Treaty. This determination does not extend to future missions by Moon Express, Inc. or similar missions from other entities.

Any future requests for a payload determination from Moon Express, Inc. or another entity will be evaluated on a case-case-by-case basis.”



Mission Authorization? Not Yet. Payload Review

“not all non-traditional space missions may lend themselves to favorable payload determinations...Future missions may require additional authority. Suggested language for legislative relief and the relative merits and needs has been transmitted to Congress

In the absence of legislative relief, the FAA will continue to work with the commercial space industry to provide support for non-traditional missions on a case-by-case basis when the law permits.”

Mission Authorization? Not Yet.

A Payload Review does not authorize on-orbit operations

- No Federal entity has jurisdiction to license on-orbit activities
- FAA only has jurisdiction to license launches and returns
- Payload Review: *ad hoc* application
- Possible new legislation?

Mission Authorization? Not Yet.

- **Relevant Hearing on March 8, 2017**
 - **Space Subcommittee of the Committee on Science, Space and Technology**
 - **Addressed variety of on-orbit activities: satellite servicing, tourism, etc., including asteroid mining**
- **Main issue: what, if anything, must U.S. government do to comply with OST Art. VI?**
- **No consensus opinion**
 - **Ranges from do nothing to establish a minimum of some type of authorization and supervision**
- **Considering different regulatory models**



So...

It is not over yet.



Thank you.
