NASA'S "NEW SPACE" FACILITATION OF COMMERCIAL SPACEFLIGHT

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NASA's Governing Statute

- The National Aeronautics and Space Administration Authorization Act of 1985 amended NASA's governing statute (the "Space Act) with the following provision:
 - The Congress declares that the general welfare of the United States requires that the National Aeronautics and Space Administration (as established by title II of this Act) seek and encourage, to the maximum extent possible, the fullest commercial use of space.
 - Later legislation provided NASA with further responsibilities and authorities to cooperate with private US companies.

NASA Programs to Enhance Commercial Space Flight

• Commercial Orbital Transportation Services (COTS)

- Competitive process for initial partnerships were done using "agreements" authorized under a provision of the Space Act (often referred to as "other transactions" authority).
- Under these agreements, NASA provided some funding to our commercial partners and the commercial partners were required to make significant investments of their own financial resources.

• Commercial Re-supply Services (CRS) contracts

- NASA now uses commercial providers, selected competitively, for NASA to obtain cargo transportation services to the Space Station through procurement contracts.
- Commercial providers are licensed by the FAA.
- NASA used the same model to foster the development of commercial crew transportation services.
 - Competitive process for initial partnerships with systems developers and potential service providers using "other transactions" agreements.
 - NASA is now using competitively-awarded **procurement contracts** to develop Commercial Crew Transportation Capability (CCtCap).
 - These contracts will allow NASA to meet our needs for transporting both NASA and other agency astronauts to and from the ISS within the next several years.
 - The USG's expectation is that NASA facilitating the development of a robust commercial spaceflight industry in order to provide transportation to low earth orbit will encourage the development of private sector needs for human transportation to and from Low Earth Orbit (LEO).

Space Station: "Government Astronaut"

- International Space Station Agreements:
 - Provide that NASA will transport CSA, ESA and JAXA astronauts to and from the Space Station (ISS)
- Recent legislation supports the transportation of NASA and other space agency on commercial vehicles by including a definition of "Government Astronaut" in the statute applicable to the Federal Aviation Administration (FAA).
 - This definition ensures that NASA and other space agency astronauts flying to the ISS on commercial vehicles licensed by the FAA are provided the full protections that the United States is required to provide under the ISS agreements.
 - This ensures that NASA's use of FAA-licensed commercial space capabilities for crew transportation will enable:
 - the continuation of important scientific and exploration research on the ISS &
 - ensure stability for the continued development and growth of the US commercial space sector.

Use of Private Industry to Develop "New Space" throughout the world

- International cooperation has been a component of the Space Act since its enactment in 1958.
 - One of the initial objectives of the Space Act "[c]ooperation by the United States with other nations and groups of nations in work done pursuant to [the Space Act] and in the peaceful application of the results thereof."
- NASA bilateral agreements with other space agencies, foreign industry and foreign universities and institutes over the past 50+ years will serve as precedent (models) for facilitating international participation in the USG's support for development of commercial space. We anticipate that other governments will also support the development of commercial space.
- US companies are already working with foreign commercial partners in the development of "New Space."

Conclusion

• NASA is facilitating international cooperation in developing "commercial space."

 Contact NASA's Office of International and Interagency Relations (OIIR) or NASA's Office of General Counsel for further information.

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