

National Space Society Policy Platform

(February 1995)

This document contains positions and guidelines on public policy matters affecting the goals of the National Space Society (NSS).

The vision of the National Space Society embraces the creation of a space-faring civilization and the establishment of communities beyond the Earth. The NSS mission is to promote change in social, technical, economic, and political conditions to advance the day when people will live and work in space. We believe that the technologies and industries created on the space frontier will be of benefit to all humanity in the coming century. We believe that opening the space frontier will create new opportunities for human life, liberty and the pursuit of happiness.

Our goals include educating the public on the benefits of space development and working with allied organizations to create a supportive cultural and political environment for the exploration and settlement of space. We believe that opening the space frontier requires supportive public policies as well as technical advances.

Goals for Space Development

Spacefaring nations and organizations should conduct activities to:

- (1) obtain scientific, technical, and economic benefits for humanity and to improve the quality of life on Earth through space-related activities;
- (2) encourage private sector investment in space and related activities;
- (3) maintain the freedom of space for all activities that enhance the security and welfare of humanity; and 4) expand human presence in space beyond Earth orbit and establish communities throughout the solar system.

Pursuit of these goals requires several actions:

- Lowering the cost of access to space.
- Learning how to work in space and use non-terrestrial resources.
- Ensuring supportive government space policies and practices.
- Fostering private space initiatives.

Lower the Cost of Access to Space

Drastically lowering the cost of access to space is the single most important action towards accelerating space development. New initiatives should be encouraged from the civil, commercial, and military communities which require space transportation in accordance with the following principles:

- As there are many promising technical approaches to improving current and future means of space transportation, research and development activities should be diversified with varying degrees of risk (e.g., including improvements to existing vehicles as well as next

generation technologies).

-- Emphasis should be given to developing and operating experimental flight test vehicles, such as proposed Single-Stage-to-Orbit concepts, in order to expedite decisions on the most promising approach to improving access to space.

-- The pressures of market-driven competition are likely to be the most effective tool to lowering the cost of access to space, therefore the private sector should be encouraged to take a leading role in the routine operation of space transportation systems.

-- Governments should be encouraged to support research and development of space transportation technologies, to be reliable customers of commercial transportation services, and to prevent unfair trade practices through international agreements. Minimize the burden of commercial launch licensing and ensure Federal regulations preempt State and local laws.

-- In order to encourage market efficiency, the U.S. Government should consider chartering private launch service brokers to consolidate purchases of space launch services and provide attractive markets for new launch systems. U.S. commercial launch firms should be allowed access to government financing (e.g., Ex-IM Bank) when competing against international suppliers with comparable supports.

-- The U.S. Government should encourage efforts by private organizations, State, and local governments to establish commercial spaceports, space launch ranges, and associated facilities on public lands that are compatible with existing uses (e.g., grazing, mining, and forestry).

-- Space debris may pose an increasing threat to the safe use of Earth orbit. New technologies, standards, operating practices, and incentives should be encouraged to minimize the creation of space debris without placing excessive burdens on public or private space activities.

Learn How to Work in Space And Use Non-Terrestrial Resources

Establishing communities beyond the Earth requires learning new skills and developing new technologies in order to attain self-sufficiency. Even with lower launch costs, space settlements will require using non-terrestrial materials.

-- An international Space Station should be completed in order to develop and demonstrate the means for people to routinely live and work in space on a permanent basis. Space construction, servicing, and repair tasks will require crewed, robotic, and teleoperated spacecraft. Evolutionary growth of Space Station operations should encourage the creation of multiple facilities in Earth orbit for public and private interests.

-- Humanity should permanently return to the Moon as soon as possible. The establishment of scientific and commercial facilities on the Moon should seek the greatest possible degree of self-sufficiency using local resources.

-- The Solar System should continue to be explored with both robotic and human missions. Priority should be given to missions with potential economic as well as scientific value. This would include, for example, missions to potential resource sites on the Moon, near-Earth asteroids, and the Martian moons.

-- Concepts for solar power stations on the Moon and in Earth orbit should be developed

for their potential to provide energy to space facilities and the Earth. Construction and operation of satellites and facilities should emphasize economic benefits, environmental acceptability, and the use of local resources.

-- The skills and technologies developed by permanent habitation of Earth orbit and the Moon should be the basis for human expeditions to Mars. The potential terraforming of Mars should be studied with the goal of sustaining large-scale permanent settlements.

Ensure Supportive Government Space Policies and Practices

Government space activities have a major impact on the technologies, systems, and resources available for space settlement. Human expansion into the solar system should be assisted but not controlled by governments. Ensuring supportive government policies and practices will require sustained attention by the space community. Near-term initiatives should include the following:

-- Create a high-level focus for space policy issues in the United States through the National Space Council. The Council should be strengthened to provide timely resolution of space policy and budgetary issues affecting the national security, civil, and commercial space communities.

-- Require NASA to provide reports on activities supportive of space settlements as required by Congress.

-- Provide support for key enabling technologies that have limited commercial markets at present, e.g., space nuclear power, life support systems, microgravity processing, non-terrestrial materials processing, and nanotechnology.

-- Create prizes for space achievements as an alternative to traditional government R&D programs. Consider privatizing portions of current NASA and Defense Department space operations.

-- Create voucher programs to allow government-supported researchers greater flexibility in their use of government or private aircraft, balloons, rockets, spacecraft, and related facilities.

-- Require the government to seek commercially available space goods, services, and data to the fullest extent feasible in meeting public needs. The government should avoid actions that may preclude or deter private sector space activities.

-- Provide greater protection for private sector intellectual property rights in government contracts and pay appropriate royalties and licensing fees in government procurements. These steps should lower the barriers between government and commercial industry sectors and encourage investment in entrepreneurial firms serving government markets.

-- Streamline and reduce U.S. and international export controls on space goods, such as commercial communication satellites.

Foster Private Space Initiatives

Human expansion into the Solar System can not be accomplished by governments alone, but requires encouraging space commerce through private sector initiatives. The commercial

space sector is currently driven by information technologies such as communication satellites, remote sensing, and satellite-based navigation. Fostering future initiatives requires a supportive legal and regulatory environment including reform such as the following:

- Reject the 1979 United Nations Moon Treaty and open discussions with signatories to the 1967 Outer Space Treaty and the 1972 Liability Convention on measures to speed the commercial development of space for all parties. These should include a legal regime recognizing private property rights and allowing "land grants" to reward space settlement. As a first step, create a U.S. Federal registry for private property claims on the Moon and other bodies in the Solar System.

- Provide tax exemptions for registered commercial space enterprise zones, space-manufactured products and space-based energy sources. Extend tax-exemptions for infrastructure bonds to include spaceports and space-based facilities. Allow investment tax credits for space research and development. Clarify tax regulations on intellectual property and intangible assets for major space investments.

- Encourage space exploration missions by private industry through government purchases of useful scientific data and non-terrestrial samples.

- Amend the Warsaw Convention on Passenger Liability to include human spaceflight and clarify the 1984 U.S. Commercial Space Launch Act's authority over such activities.

- Create a U.S. "space admiralty" court as part of a Federal district court to provide a specialized forum for the development of law and precedents for space commerce and communities beyond the Earth. Encourage reciprocal efforts by other spacefaring nations.

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