

## WHO WE ARE

The members of **PRO<sup>▲</sup>SPACE** are private citizens from all walks of life and from all across the United States.

Each March for the past thirteen years we have come to Washington at our own expense to speak directly to the leaders of our nation.

We do so because of strong beliefs about the direction of our country's efforts in space – in the past, present and future.

### Our Mission:

- To expand human access to space;
- To facilitate the development of commercial space enterprise;
- To identify and eliminate barriers hindering that development;
- To promote space exploration that provides real, relevant and measurable benefit to the American people.



*March Storm 2007*

**THIS GOVERNMENT'S APPROACH TO SPACE MUST EVOLVE!**

**Above all, space is a place,  
not a government program.**

**We are *already* in a new space race:  
One that is about our competitive position  
in the global marketplace.**

**Our competition knows that space holds the promise of  
vast new opportunities and untapped resources.**

**Resources that include:**

- Space Solar Power;
- Helium 3;
- Platinum group metals;

**Opportunities that will create innovative industries  
and new avenues of commerce, including:**

- Private Human Space Flight;
- In-Space Manufacturing;
- Production of propellants on the moon.

**The government can unlock these opportunities  
and jumpstart economic development of space  
by the United States.**

**To do so, we must transform government space efforts from  
expenditures on a broad range of unrelated programs to  
investments in our nation's future.**

**(OVER)**

**By shifting focus to enable new commercial space enterprise,  
we will create countless new jobs  
in the manufacturing and technology sectors across the nation.**

**THE TIME HAS COME TO GENERATE  
REAL, RELEVANT AND MEASURABLE BENEFIT  
FOR THE AMERICAN PEOPLE IN OUR  
NATIONAL SPACE ENDEAVORS.**

**2007 ACTION ITEM SUMMARY:**

- ◆ **Support Introduction and Passage of The SPACE Act of 2007.**
- ◆ **Support, co-sponsor and pass the Spaceport Equality Act;**
- ◆ **Support formation of  
    The Space Infrastructure Interagency/Industry Task Force;**
- ◆ **Remove all programmatic deadlines from CEV development  
that are not directly related to returning to the moon no later  
than 2020;**
- ◆ **Expand funding for COTS to enable the earliest possible  
demonstration of commercial cargo delivery and crew transfer  
systems. Budget sufficient funds for FY2009 and beyond to  
provide ample cargo and crew transfer capacity to maximize  
use of ISS;**
- ◆ **Prevent NASA from diverting funds from science, aeronautics  
and education programs to CEV, ISS and the Space Shuttle.**

## ACCELERATE INNOVATION – REWARD ACCOMPLISHMENTS

### **PAY FOR RESULTS, NOT EFFORTS!**

Two unique prize programs,  
the Ansari X-Prize and the DARPA Grand Challenge,  
demonstrate the extraordinary value of  
stimulating technical innovation through entrepreneurial participation.

In its report to Congress summarizing the Grand Challenge competition,  
DARPA details the exceptional power of prizes  
to achieve specific goals more effectively and economically:

*“The prize authority enables DARPA to reach beyond the ranks of the existing...research community and energize a new generation of scientists and engineers working in the field... The competitive format enables the direct evaluation and comparison of a large number of competing technologies and provides valuable insight to technology planners and decision-makers.*

*The race...has concentrated the minds of researchers, blown open the technological envelope and trained a whole generation of roboticists.”*

*DARPA Prize Authority, Report to Congress  
March 2006*

To build on the unquestionable success of these prize programs,  
ProSpace seeks your support for a compelling new tool  
that will empower agencies across the federal government:

## **The SPACE Act of 2007**

**(Space Prizes for the Advancement of Commerce & Enterprise)**

This groundbreaking legislation will create

## **THE NATIONAL SPACE PRIZE BOARD**

**(OVER)**



*March Storm 2007*

## **THE PURPOSE:**

To use cash prizes as a means to accelerate the commercial expansion of economic, national security and scientific uses of space and spaceflight.

The SPACE Act provides the board with an annual budget of \$100 million and the authority to offer prizes up to \$400 million.

## **THE BOARD MEMBERS:**

The NSPB will be based at DARPA, but will be an interagency effort.

Members of the prize board will include:

- ◆ The Director of DARPA;
- ◆ The Secretary of Commerce;
- ◆ The Administrator of NASA;
- ◆ The Secretary of Transportation;
- ◆ Three other members to be nominated by the President and confirmed by the Senate.

## **THE PROCESS:**

Members of Congress and the Executive Branch have always acknowledged the power of prizes.

However, in terms of large prizes, there has been a reluctance in appropriating sizeable amounts for a prize that will not be won for several years.

The SPACE Act utilizes a unique formula to overcome that objection.

To fund the individual prizes, the Board will:

- 1) Determine the particulars of a competition;
- 2) Determine the amount of the prize;
- 3) Determine to the extent possible how long it might take to win the prize in terms of years;
- 4) Divide the amount of the prize by the number of years to determine the Annual Funding Requirement (AFR) for that particular prize;
- 5) Escrow that amount each year of the competition from their annual appropriation.

## **ACTION ITEM:**

**Support Introduction and Passage of  
The SPACE Act of 2007.**

# THE BUILDING BLOCKS: LOGISTICS & INFRASTRUCTURE

## **TO FULLY REALIZE THE BENEFITS OF SPACE HUMANS MUST LIVE AND WORK THERE ON A PERMANENT BASIS**

**TO ACCOMPLISH THAT, WE MUST LAY THE GROUNDWORK FIRST:  
THAT IS THE WAY WE BUILT THE AVIATION INDUSTRY.**

**In the 1920's & 30's, the Federal government fostered air commerce by establishing airways, creating navigation aids, devising regulatory regimens and contracting with private companies to carry airmail.**

**A similar process can and must be applied to space operations.**

## **FOR IMMEDIATE ACTION: PASS THE SPACEPORT EQUALITY ACT**

### **THE PURPOSE:**

**To provide tax-free bonding authority  
to state and local spaceport management entities.**

**This simple change to the tax code will put spaceports on an equal footing with seaports, airports and other transportation infrastructure, which currently enjoy this same authority.**

**This will spur non-federal investment in the development and modernization of the nation's launch facilities by allowing states and municipalities to issue tax-exempt bonds for their construction and renovation.**

**Currently, at least fourteen states have operational spaceports or active spaceport development efforts.**

## **THE NEXT STEP: A SUSTAINABLE IN-SPACE INFRASTRUCTURE**

**To be successful, any human endeavor requires an underlying infrastructure to support, sustain and advance that endeavor.**

**Our military has motor pools, airfields, barracks, supply dumps, communication networks and numerous other infrastructure elements.**

**The private sector has its own support structure, such as factories, warehouses, shipping containers, rail lines and information technology systems.**

**(OVER)**

**FOR CIVIL AND COMMERCIAL SPACE ENTERPRISES  
TO SUCCEED AND THRIVE,  
WE MUST BEGIN TO PUT SIMILAR SYSTEMS IN PLACE**

NASA has funded a study at MIT that details much of what needs to be done.

The reports and conclusions of this study are available at:  
[www.spacelogistics.mit.edu](http://www.spacelogistics.mit.edu)

**BUT A STUDY IS NOT ENOUGH!**

The time has come to identify what infrastructure is needed and how government and the private sector can come together to provide it.

To accomplish that,  
ProSpace recommends the formation of  
The Space Infrastructure Interagency/Industry Task Force  
to begin this important work.

The task force would be comprised of the following agencies:

- ◆ The Office of Space Commercialization at the Department of Commerce;
- ◆ The Office of Commercial Space Transportation at FAA;
- ◆ The Department of Defense;
- ◆ NASA;
- ◆ The Department of State;
- ◆ The Department of Energy.

It must also include members from private companies,  
industry associations and space policy organizations.

The task force would:

- ◆ Perform an initial assessment of what infrastructure is needed to aid in the development of space;
- ◆ Identify aspects that will benefit commercial space development, national security efforts and civil exploration, either separately or together;
- ◆ Provide a framework for interagency responsibilities and public-private partnerships to design, construct and operate infrastructure elements;
- ◆ Assess funding requirements and time frames for required elements.

**ACTION ITEMS:**

1. Support, co-sponsor and pass the Spaceport Equality Act;
2. Support formation of  
The Space Infrastructure Interagency/Industry Task Force

## FOCUS CEV ON THE MOON AND BEYOND

### **PROSPACE STRONGLY SUPPORTS RETURNING HUMANS TO THE MOON BY 2020 (OR SOONER!)**

**For This Undertaking To Succeed, We Must Focus Our Efforts  
And Avoid Costly and Unnecessary Detours.**

#### **ONE MAJOR DETOUR...**

**The plan to design the Crew Exploration Vehicle (CEV)  
to service ISS beginning in 2014.**

#### **THREE REASONS TO AVOID IT:**

- 1) Adding a low-earth-orbit destination to CEV's mission will result in a multi-purpose design that will be less effective at both jobs and considerably more expensive.**
- 2) Setting a programmatic deadline for 2014 adds significant pressures to the design and development process. Complex engineering projects rarely meet such deadlines, and putting CEV into the ISS critical path at that point invites large increase in funding demands to alleviate schedule slippage.**
- 3) From 2010 to 2014, NASA will use alternative means for cargo delivery and crew rotation for ISS.**

**Is it worth billions of taxpayer dollars in additional costs to use CEV  
to transport astronauts to ISS beginning in 2014?**

**Especially when the stated lifetime of the station ends in 2016?**

#### **More importantly:**

**Should NASA be allowed to divert funds from dozens of other  
Congressionally-endorsed programs to take this detour?**

**"We will find what we believe are the lowest priority half-billion dollars in content, and we'll extract it, across the agency... I will do everything I can to keep Orion and Ares I on schedule... That will be right behind keeping shuttle and station on track, and then after that we'll fill up the bucket with our other priorities."**

*Michael Griffin, NASA Administrator  
Aviation Week, January 11, 2007*

**ESPECIALLY WHEN A  
BETTER OPTION FOR ISS ALREADY EXISTS?**

**(OVER)**

To achieve the greatest benefit from ISS,  
we must enable affordable U.S. commercial solutions  
for ISS cargo delivery and crew transfer.

For that reason, ProSpace supports strengthening  
an existing NASA program intended to develop such services:

### **COMMERCIAL ORBITAL TRANSPORTATION SERVICES (COTS)**

For future space exploration to be affordable, sustainable and credible,  
we must fully engage the American system of free enterprise.

ProSpace has been making this case for thirteen years...  
But we are not the only ones making it:

**“The Commission recommends NASA recognize and implement a far larger presence of private industry in space operations with the specific goal of allowing private industry to assume the primary role of providing services to NASA, and most immediately in accessing low-Earth orbit.”**

*The President’s Commission on Implementation of  
United States Space Exploration Policy (June 2004)*

And the NASA Administrator agrees...

**“I believe that the ISS provides a tremendous opportunity to promote commercial space ventures that will help us meet our exploration objectives and at the same time create new jobs and new industry. The clearly identifiable market provided by the ISS is that for regular cargo delivery and return, and crew rotation.”**

*Michael Griffin, NASA Administrator  
November 15, 2005*

### **BUT COTS IS NOT JUST ABOUT SERVICING ISS: THIS OPPORTUNITY HAS FAR DEEPER IMPLICATIONS...**

This single program will form the basis for the  
logistics and infrastructure system needed  
to support human space exploration,  
making that exploration far more effective and much less expensive.

#### **ACTION ITEMS:**

- 1. Remove all programmatic deadlines from CEV development that are not directly related to returning to the moon no later than 2020;**
- 2. Expand funding for COTS to enable the earliest possible demonstration of commercial cargo delivery and crew transfer systems. Budget sufficient funds for FY2009 and beyond to provide ample cargo and crew transfer capacity to maximize use of ISS;**
- 3. Prevent NASA from diverting funds from science, aeronautics and education programs to CEV, ISS and the Space Shuttle.**