

Statement of Michael D. Griffin

NASA Administrator

Review of President's FY2006 Budget

House Science Committee

June 28, 2005

Thank you, Chairman Boehlert, Ranking Member Gordon and members of the Committee for inviting me to appear before you for today's hearing. You have invited me to appear before your Committee as a private citizen on several past occasions to discuss our nation's space program. Today, I'm testifying before you in a much different capacity -- as NASA Administrator. When I previously appeared before you, I would use phrases such "they (meaning NASA) should do X or Y." I now need another choice of pronouns. We at NASA have a lot of work to do. We have many challenges to overcome. We need to work closely with this Committee and the entire Congress in carrying out the

many challenges before us, and we will need your help in this great endeavor.

In your invitation, you asked me to address my guiding philosophy and plans for setting priorities for NASA's programs in human spaceflight, space science, earth science, and aeronautics, as well as its workforce and infrastructure. That's a tall order for a five minute summary, so this might take a little longer.

The Science Committee has already received testimony this year from NASA's Deputy Administrator, Fred Gregory, concerning NASA's FY 2006 budget request, you've held focused hearings on NASA's aeronautics R&D and Earth science programs, and a few weeks ago your Committee held the first-ever Congressional hearing with a live feed from astronaut John Phillips onboard the International Space Station. I will try to focus my testimony today on my guiding philosophy and priorities, and will update the Committee on where we are and where we are going. It has been a busy time for me personally as well as for the entire NASA team. We have a lot of work ahead of us.

In presenting the Vision for Space Exploration last year, the President defined a focus for our nation's space program in a journey of exploration that will be carried out over the next several decades. In heading down this path, the first steps we take are critically important, and decisions need to be made in a timely manner.

The first step is to return the Space Shuttle to flight, and to fly each mission thereafter as safely as possible. This is my top priority as NASA Administrator. Last week I participated in an engineering review of the risk to the Shuttle due to foam and ice debris, which we believe to have been greatly mitigated since the loss of Columbia.

This morning, I met with the Stafford-Covey Return To Flight Task Group to discuss their findings regarding Return to Flight. Let me say, that I appreciate the input from the panel members. They have provided a valuable service to NASA.

The members of the panel that I met with were very emphatic in their view that the shuttle is **NOT unsafe to fly**. We will use their findings in discussions over the next two days as part of our Flight

Readiness Review. We need these complex issues to be discussed openly and accurately – and they will be.

Tonight, I leave for Kennedy Space Center for the Flight Readiness Review of the STS-114 mission with the Space Shuttle Discovery commanded by USAF Colonel Eileen Collins. At this review, the NASA team will determine if we're ready to fly when the next launch window opens in mid-July. I look forward to a healthy, open dialogue about Space Shuttle safety issues and NASA's ability to return the Space Shuttle to flight. Members of the Science Committee are invited to Kennedy Space Center for this launch, but let me caution everyone involved that the entire NASA Space Shuttle team has a lot of hard work to do, and many things can happen between now and the date of launch.

Following a safe return to flight, we will turn our sights to the construction of the International Space Station and, after its completion, the retirement of the Space Shuttle by 2010. To this end, a team of experts within NASA are investigating a range of realistic ISS configuration and Shuttle manifest options before we retire the Shuttle in

2010. I met again with the team earlier this morning, and I hope to present NASA's proposed plan for the ISS configuration and Shuttle manifest to you and our international partners later this summer. Let me emphasize to everyone that this is a proposal that requires further discussion. I visited with many of our partners a few weeks ago during the Paris Air Show. We shared with each other our thoughts on the International Space Station and other areas of cooperation in space exploration. I look forward to continuing an open dialogue with our international partners on how best to use the Space Station as a testbed for future space exploration activities, and how to realize tangible benefits from the fruits of this research.

Even as a testbed, the Space Station will not answer all of the questions that need to be answered before we begin to explore the Moon and Mars. However, if a problem occurs on the Space Station, the crew is only a few hours away from a safe return to Earth, while they will be three days away when on the Moon, and many months away from home during the long journey to Mars.

The loss of the Space Shuttle Columbia has made us acutely aware that one of the major impediments in fully utilizing the Space Station's capabilities is that we need a more robust logistics capability for crew and cargo than the United States or our international partners have readily available or on the drawing board. For this reason, we plan to leverage our nation's commercial space industry to meet NASA's needs for ISS cargo logistics and possibly crew support. I spoke in some depth on this topic at last week's Space Transportation Association breakfast about my guiding philosophy in dealing constructively with the emerging commercial space industry. I want to thank Congressmen Hall and Calvert for taking part in that event.

To meet the need for crew rescue support for the Space Station, NASA will require the help of this Committee in helping to resolve certain restrictions placed on cooperation with Russia in the Iran Nonproliferation Act of 2000. This Administration recognizes the value of effective cooperation with our international partners on the Space Station. At the same time, we must appropriately respect and maintain our nation's nonproliferation objectives. Over the last several months,

NASA has participated in an interagency coordination process and is proposing a legislative solution in the form of an amendment to the Iran Nonproliferation Act of 2000 that would provide NASA with the necessary flexibility while maintaining our nation's nonproliferation objectives.

If a solution is not found, we believe that U.S. astronauts will need to cease maintaining permanent presence aboard the Space Station in April 2006, in accordance with previous agreements between NASA and Russia concerning crew rescue support for the ISS using the Russian Soyuz vehicle. We do not believe this situation was the intent of Congress back in 2000, but this is the consequence we are facing today. I also should note that NASA did not plan to rely so extensively on the Russian Space Agency in carrying out the Space Station program, but this is the situation in which we find ourselves today. The Administration expects to deliver this proposed legislative solution to the Congress in the very near future. We will need this Committee's help in dealing with these restrictions.

In the future, I believe that we need to ensure that the United States does not find our space program so heavily reliant on others. Toward this end, NASA must accelerate the development of the Crew Exploration Vehicle, which will be capable of ferrying our astronauts to and from the Space Station, and of conducting voyages to the Moon and Mars. We have a team of some of the best engineers and managers drawn from across the agency looking at ways to accelerate the development of the Crew Exploration Vehicle, and we hope to soon share with the Congress our plans for the overall space exploration architecture, the CEV, and the transportation system needed to launch it.

Another major initiative underway concerns how we as an Agency consisting of ten field centers plan to organize our workforce and facilities to carry out our exploration, aeronautics, and science missions. Having visited all of the NASA centers within the past few weeks, I firmly believe that more authority should be delegated to program managers at these centers, while NASA headquarters should focus on policy, budget, and program executive functions. Frankly, NASA headquarters staffing has grown too large over the last several years.

Another of the things I realized during my tour of NASA's field centers is that some outdated facilities need to be modernized, closed, or mothballed. We will conduct a study, across the Agency, to determine which facilities belong in which category. This analysis of our assets will require close coordination with our DoD, FAA, and industry stakeholders.

NASA is facing difficult choices in balancing the needs of the agency's civil servant workforce with the missions the agency conducts on behalf of the nation along with the budget available. We have not yet decided whether any involuntary layoffs of NASA's civil servants will be needed in the future, beyond those already announced at Langley Research Center due to an A-76 competition. Thus, we are conducting an assessment of the agency in organizing the work to be done and workforce needs. I plan to have interim answers in the coming weeks, but this will be a difficult problem for the next several years. As a team, we are trying to be sensitive in balancing the needs of the workforce, NASA's mission requirements, and our budget constraints. I hope to

keep NASA's workforce and the Congress informed as much as humanly possible.

However, I need to be straightforward with all concerned. NASA cannot afford everything on its plate today. We must set clear priorities and remain within the budget NASA has been allocated. We are taking a "go-as-you-can-afford-to-pay" approach toward space exploration, but at several field centers, NASA has a gross mismatch between the work to be done, the size of the civil service workforce, and the budget available. We are working through these issues and trying to consult everyone as much as possible, but difficult decisions will be required, and these decisions must be made in a timely manner.

Another set of major, upcoming decisions that we at NASA need to address concern how best to manage several space astronomy missions under development. Congress has been clear in its priorities for the agency. NASA is making plans for a servicing mission to the Hubble Space Telescope, but we need to complete two successful Shuttle test flights before we can assess the relative risks of another Shuttle mission to the Hubble. This assessment should be completed

this fall. At the same time, we are conducting an assessment of significant cost growth purported for the James Webb Space Telescope, a high priority mission under development within NASA's astronomy portfolio. I have called for a special review of the program to report back in late July. In the meantime, we have decided that NASA will accept the European Space Agency's offer to launch the Webb Space Telescope spacecraft on an Ariane V rocket as their contribution to the overall mission.

However, the problems facing both of these space telescopes jeopardize the budgets for other advanced astronomy and space physics missions currently under formulation. Again, NASA simply cannot afford everything on its plate.

Another priority is the acceleration of the Crew Exploration Vehicle. In order to accelerate development of the CEV and its associated launch vehicle, while keeping within NASA's budget guidelines, NASA will need to defer the development of some other space exploration-related technologies, ISS research, and space nuclear

systems that are only needed after the CEV comes on-line in the post-2010 timeframe.

Within the Science Mission Directorate, NASA is seeking a better balance in how priorities are set between Earth and space science missions. NASA has a robust science agenda—with 55 missions in orbit, 26 in development— including the Lunar Reconnaissance Orbiter to map the Moon’s surface in great detail—and 34 missions in the design phase. However, due to cost growth and the extended life on several missions, NASA will need to defer some of them.

One of those missions which we hope to extend is the Tropical Rainfall Measuring Mission (or TRMM), a research satellite which has exceeded our expectations in being used operationally with hurricane forecasts. NASA is working closely with NOAA, the Japanese government, and others in the interagency process to determine the legal liabilities and safety measures necessary in extending this mission. NASA and NOAA need to continue to work closely together, especially in transitioning NASA-developed sensors, research, and other

capabilities to operations. Likewise, NASA also needs NOAA's operational sensors to enable further Earth Science research.

In aeronautics research, NASA needs to focus its technical expertise and facilities on results-oriented programs for our nation. The Administration supports the call for the development of a national aeronautics policy in H.R. 2862, the FY2006 appropriation bill for NASA that recently passed the House of Representatives. NASA must work closely with a broad range of stakeholders and customers, including the Congress, Defense Department, and FAA in developing this national aeronautics policy. But again, I need to be straightforward with you. This policy needs to set clear, realistic priorities to focus NASA's limited resources, and not simply be a laundry list of unrelated projects.

To conclude, I would like to note that next week our nation will celebrate our Independence Day, a day of fireworks and celebration. That same day, NASA satellite operators working on the Deep Impact mission will be hard at work trying to create their own fireworks display, 80 million miles from Earth, by smashing a small spacecraft into the

comet Temple 1 at 23,000 miles per hour to discover what's inside. It's a difficult mission...even for rocket scientists.

The men and women of NASA appreciate the risks our nation is willing to make for the noble purpose of exploration and science.

Meriwether Lewis observed in his journal two hundred years ago on July 4th, 1805: "We all believe that we are now about to enter on the most perilous and difficult part of our voyage, yet I see no one repining; all appear ready to meet those difficulties which wait us with resolution and becoming fortitude."

That's the attitude for a lot of us at NASA. We have a lot of work to do, and difficult decisions need to be made. We will need the help of this Committee and the Congress in carrying out the difficult part of the voyage before us.

Thank you once again for asking me to testify before you this morning.