

Statement of Michael D. Griffin

Nominee to be Administrator, National Aeronautics and Space Administration

Senate Commerce Committee
Confirmation Hearing

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Room 253

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Thank you, Mr. Chairman and Senators. I am honored to appear before you today as President Bush's nominee to be the next NASA Administrator. As you know, I have spent a long career in the aerospace business, and I believe that I will need all of that experience, and more, behind me if confirmed in this position. I look forward to the challenge.

If confirmed as Administrator, my priorities in executing the duties of that office, consistent with the President's Vision for Space Exploration, will be:

- Flying the Shuttle as safely as possible until its retirement, not later than 2010.
- Bringing a new Crew Exploration Vehicle into service as soon as possible after Shuttle retirement.
- Developing a balanced overall program of science, exploration, and aeronautics at NASA, consistent with the redirection of the human spaceflight program to focus on exploration.
- Completing the International Space Station in a manner consistent with our International partner commitments and the needs of human exploration.
- Encouraging the pursuit of appropriate partnerships with the emerging commercial space sector.
- Establishing a lunar return program having the maximum possible utility for later missions to Mars and other destinations.

The aftermath of the tragic loss of the Space Shuttle Columbia on February 1, 2003 brought us to a watershed moment in the American civil space program. Choices had to be made. The President has put forth a choice, a strategic vision for the space program. That vision has been enunciated with exceptional clarity, and has been subjected to considerable public debate for over a year. I think it may be said that, while differences of opinion exist, the President's proposal has attained broad strategic acceptance. It is now understood that the International Space Station, supported by the Space Shuttle, cannot be the centerpiece of the nation's human spaceflight program. The strategic vision for the U.S. manned space program is of exploration beyond low Earth orbit.

It is a daring move at any time for a national leader to call for the bold exploration of unknown worlds, a major effort at the very limit of the technical state of the art. And it was the same way back in 1492, when Queen Isabella overrode King Ferdinand's reluctance and backed Columbus' voyage to "the New World," the first step in the creation of Spain's colonial empire. But few recall that 1492 was a key year in the history of Western civilization, entirely apart from the European "discovery" of the New World. The big news that year was the re-conquest of Granada after a ten-year siege by Spanish forces, an event which essentially marked the conclusion of an eight-century struggle against the Moorish occupation of Spain. With the Spanish treasury depleted, many – including King Ferdinand – believed that it was not the time for the nation to be embarking on what was, in that era, an effort right at the edge of what was technologically possible.

But whether or not the story of Queen Isabella pledging her jewels to back the voyage is true, it is a matter of record that Isabella, Queen of Aragon in her own right, understood that several other nations were capable of sponsoring Columbus, and likely would if Spain did not. England, France, and Italy had arisen as European powers while Spain had struggled against the Moors, and Spain's tiny neighbor, Portugal, had prospered through the growth of her maritime prowess under Prince Henry the Navigator. The "discovery" of the New World had happened

before and would have happened again, whether or not Columbus had ever sailed from Palos. One way or another, European settlement of the New World was inevitable; however, it was Isabella's bold action that secured Spain's role in that future. If Columbus failed, she would be discredited, but if he succeeded, Spain would succeed, and would become preeminent among the nations of her time – and that was the way it happened.

And that is the way it is today. In the twenty-first century and beyond, for America to continue to be preeminent among nations, it is necessary for us also to be the preeminent spacefaring nation. Or are we willing to accept the world of a generation or two hence where other nations will be engaged in the development of the Solar System, and we are not? If not, then it is time to recognize that we have squandered a once-insurmountable lead in the arts and sciences of spaceflight. The best we can say for ourselves today is that our grounded Space Shuttle is much more sophisticated than the operational vehicles belonging to the two nations which have sent people into space since we have last done so.

None of this is to say that the United States should necessarily plan to “go it alone” in space exploration. Great nations must be prepared to do so when necessary, but it is equally true that great nations need allies and partners. There is room for these relationships in the President's Vision for Space Exploration, and certainly we have benefited from the Russian capability to support the International Space Station during the two years in which the Shuttle has been grounded. But in the future, the United States should avoid dependence upon other nations for critical spacefaring systems.

Many who share the President's strategic vision for space exploration are nonetheless lukewarm in their support, believing it to be unaffordable or unsustainable. This concern is understandable. Former Undersecretary of Defense for Acquisition, Technology, and Logistics, and Chair of the President's Commission on Implementation of United States Space Exploration Policy, Pete Aldridge, has pointed out that to be effective, the commitment to space exploration needs to be sustained over multiple Presidential Administrations and sessions of Congress.

The strategic vision for space must therefore be broadly inclusive, to enable a consistent and appropriate level of financial support without disruptive funding peaks and valleys. The decision to have a robust space program is like the decision to have a capable military force – it cannot be made in one year and un-made in the next. The nation does not debate, each year, whether or not it will have such forces. A similarly sustained bipartisan commitment to American leadership in space is required.

And, at least since the aftermath of the Challenger accident, nineteen years ago, we have had exactly that commitment. In constant dollars, NASA has received approximately the same allocation of funding from the taxpayers in the last sixteen years – the Space Station Era – as it received in its first sixteen years – the Apollo Era. If we are less attracted to the results of the Station Era than of the Apollo Era, then we need to reconsider our goals and our manner of pursuing them. But if funding levels continue in accordance with the President's plans, resources are sufficient to enable a U.S. return to the Moon, and, later, to go to Mars. The country has already demonstrated the consistent support that NASA must have over an extended period of time to execute a program of human exploration. We simply have been doing other things with that money.

The arts and sciences of spaceflight are not restricted to human spaceflight. Robotic spacecraft such as those of *Spirit* and *Opportunity* have taken us, by proxy, to the surface of Mars. *Galileo*, *Cassini* and *Voyager* have taken us to Jupiter, Saturn, and the outer reaches of the Solar System. *New Horizons* will shortly set sail for Pluto, the last remaining planet (so far as we know) not yet visited by any spacecraft from Earth. And, of course, the Great Observatories, including the *Hubble Space Telescope*, *Chandra*, *Spitzer*, and *Compton*, have allowed us to extend our gaze to the very edge of the Universe, and back in time almost to its beginning. The images and the knowledge returned to us by these, our surrogates, have shaped our culture, our view of the Universe, and our place in it almost as powerfully as if human explorers had been present. As we undertake to redirect our human spaceflight program, it is crucial that we do it without damaging NASA's outstanding science programs, which have been among the crown jewels of the nation's achievements.

Those who claim that NASA cannot afford robust programs in both robotic science and manned spaceflight are mistaken. NASA in the Apollo Era was hardly the “single mission agency” in the simplified view that is often heard today. In addition to the manned spaceflight development programs of the time, NASA executed dozens of

Explorer-class missions, a dozen Pioneer missions (including Pioneer 10 and 11 to Jupiter and Saturn), Ranger 1-9, Surveyor 1-7, Mariner 1-10, the Orbiting Solar Observatory, Orbiting Geophysical Observatory, and Orbiting Astronomical Observatory series, and paid for most of the Viking missions to Mars, which were launched in 1975. Communications satellite development was initiated with Telstar and Early Bird, while the TIROS, NIMBUS, and ESSA series did the same for weather satellites. In addition to these robotic science and technology development missions, NASA also executed 199 X-15 flights (which still hold the speed record for piloted flight within the atmosphere), and accomplished an otherwise vigorous program of aeronautics development, including the lifting-body research which enabled the development of the Space Shuttle. This hardly seems the record of a “single mission agency.”

My conclusion is that we as a nation can clearly afford well-executed, vigorous programs in both robotic and human space exploration as well as in aeronautics. We know this. We did it. NASA can do more than one thing at a time.

The nation is not going to abandon space exploration, human or robotic. Given this, the proper debate in a world of limited resources is over which goals to pursue. I believe that, if money is to be spent on space, there is little doubt that the huge majority of Americans would prefer to spend it on an exciting, outward-focused, destination-oriented program. And that is what the President’s Vision for Space Exploration is about.

With that, I thank you, and stand ready to answer any questions you may have.