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NASA Budget Briefing

Panelists:

SHANA DALE, Deputy Administrator, NASA
RICK GILBRECH, Associate Administrator,
Exploration Systems Mission Directorate,
LYNN CLINE, Deputy Associate Administrator,
Space Operations Mission Directorate
ALAN STERN, Associate Administrator,
Science Mission Directorate
JAIWON SHIN, Associate Administrator,
Aeronautics Research Mission Directorate

[Moderated by David Mould, Assistant Administrator,
Office of Public Affairs, NASA Headquarters]

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P R O C E E D I N G S

MODERATOR: Good afternoon, and welcome to NASA Headquarters in Washington for today's announcement of NASA's Federal Budget Request for Fiscal Year 2009.

I am David Mould of NASA Public Affairs, and with us today is the Deputy Administrator of NASA, the Honorable Shana Dale, along with the Chiefs of NASA's four Mission Directorates: Rick Gilbrech, Associate Administrator for the Exploration Systems Mission Directorate; Lynn Cline, Deputy Associate Administrator for the Space Operations Mission Directorate; Alan Stern, Associate Administrator for the Science Mission Directorate; and Jaiwon Shin, Associate Administrator for the Aeronautics Research Mission Directorate.

In addition to this briefing, we will have separate briefings for the four Mission Directorates following this session today, the Space Operations, Exploration, and Science Mission Directorates this afternoon, and the Aeronautics Research Mission Directorate briefing will be held in the morning, all here at NASA Headquarters.

In addition, there will be separate briefings at

some of the NASA centers around the country for their parts of the budget as well.

We will begin this session with opening remarks by the Deputy Administrator, and then we will go to questions from the media. So let's begin by introducing the Deputy Administrator of NASA, the Honorable Shana Dale.

DEPUTY ADMINISTRATOR DALE: Thanks, David.

Good afternoon. I have some brief remarks to make, and then we will turn to Q&A.

This morning, the President announced the Fiscal Year 2009 budget for the entire Federal Government. Six-tenths of 1 percent of that budget is for NASA. The President's request for NASA is $17.6 billion, a 1.8-percent increase over the Fiscal Year 2008 enacted budget. Along with a steady five-year runout, that includes an increase each year of around 2.4 percent.

This increase demonstrates the President's commitment to funding the balance of priorities he set forth for the agency in space exploration, Earth and space science, and aeronautics. We are making steady progress in achieving these goals.

Last week, all of us in the NASA family took a

moment to reflect on the loss of the crew of Columbia five years ago and how this tragedy led to a reexamination of our space program. The result was a unifying vision that first honors our commitments with our partners to the International Space Station before we embark on brave new journeys beyond low-earth orbit to the Moon, Mars, and farther in the solar system.

We returned the Space Shuttle to flight, and we hope to launch again when we are ready, hopefully later this week. Mike Griffin is down at the Cape taking part in the Mission Management Team meetings in preparation for the next flight.

NASA flew three Shuttle missions last year, all successfully, and we plan to conduct five missions this year, installing the European and then the Japanese laboratory modules, and then later conducting the final servicing mission for the Hubble Space Telescope. We are committed to meeting the requirements of this new exploration agenda, as we are taking the steps necessary to retire the Space Shuttle in 2010 and transition our human space flight efforts to the Orion Crew Exploration Vehicle and Ares I Crew Launch Vehicle and starting development in

ernest of the Ares V and Altair Lunar Lander in 2011.

With full funding for Orion and Ares I provided by the Congress this year and the budget currently projected to be available for NASA, our best estimates still maintain an initial operational capability for the Orion and Ares I in March 2015. NASA will again need its full funding request for this year in order to maintain this schedule, though the Constellation team strives to bring the Orion and Ares I online sooner.

While it will require a great deal of sacrifice of time and effort from many thousands of people in NASA and industry across this great country to turn this unifying vision into reality, it also requires a sustained commitment from all of us to ensure that our nation is once again pushing the boundaries of our solar system through a robust exploration program and maintaining our strategic capabilities by being first in space.

NASA completed a Systems Definition Review for Constellation last year, and we are proceeding to Program Design Review, PDR, this summer. After the Hubble servicing mission, the Space Shuttle team will hand over Launch Pad 39B at Kennedy Space Center to the Constellation

team, so they can conduct a test launch of the Ares I next year. Significant progress has been made, but we have a long way yet to go. Again, we will need the funding resources and a lot of hard work on everyone's part to make this happen.

Thus, the Fiscal Year 2009 budget does not make any strategic changes in direction for our human space flight efforts to complete assembly of the International Space Station before embarking on new journeys to our Moon and worlds beyond with our international partners. We must simply keep our focus and carry out those ambitious endeavors as credibly, affordably, and effectively as possible. This is what the mantle of leadership in space exploration requires of us, and it is our greatest challenge.

Now is also the time to make provisions for the contributions of the commercial space sector to our nation's overall space enterprise. The development of space simply cannot be "all government, all the time."

NASA's budget for Fiscal Year 2009 provides $173 million for entrepreneurs, from big companies or small ones, to develop commercial transport capabilities to

support the International Space Station. With over $2.6 billion in NASA funds available over the next five years to purchase cargo and crew services to support ISS operations, we would much rather be using this money to purchase cargo and crew services from American commercial companies than foreign entities.

While I do not like the idea that the United States may have no option other than to purchase crew transport services from Russia between the retirement of the Shuttle and the beginning of Orion operations, I am glad that the Russians are our partners and have such capabilities because the consequences, if they were not available, are far worse.

If NASA astronauts were not on board the ISS, our national laboratory in space simply would not survive. If there is no ISS, there is no market for the commercial providers we are trying to help bring into existence, and our international partnership would simply fall apart. For this reason, NASA may need to purchase additional crew and cargo transport services from Russia and our international partners if U.S. commercial services are not yet demonstrated and available.

International partnerships are also key to our Earth and space science efforts. Over half of NASA's 55 science missions currently in space have some form of international collaboration, and we hope to work together even more closely on future space science and exploration missions.

The Science Mission Directorate has an exciting budget request that initiates seven new missions. Put in perspective, that is more than the previous three SMD budgets combined. The FY2009 budget also increases funding for research and analysis, or R&A, in order to better NASA's return on investment and our science missions.

In Earth Science, NASA's investment in measuring the forces and effects of global warming are allowing the policy-makers and the public to better understand its implications to our home planet. Based on NASA satellite data, we have seen the receding ice sheets of Greenland and Antarctica, we have observed the smallest Arctic sea ice coverage ever recorded, and using satellite altimetry, we have recorded rising global sea levels.

NASA's sensors also help document the doubling of nitrogen oxide emissions, one of the greenhouse gases that

forms smog over Asia, from 2000 to 2006.

Last year, NASA finally received the much anticipated, first-ever Decadal Survey for Earth Science. So we now know the mission priorities of the science community. Based on these results, NASA's Fiscal Year 2009 budget runout provides $910 million for the development of two Decadal Survey priorities, the SMAP Mission for soil moisture mapping and a second-generation ICEsat Mission, as well as formulation and early development work on three additional Decadal Survey missions.

Also included in this budget is increased funding for seven other Earth Science missions currently under development in order to keep them on schedule. In conjunction with NOAA's efforts to extend measurements of key climate change variables, we are stepping out smartly to implement and launch our Earth Science missions. This research and the application of our increased understanding of the Earth's system will benefit everyone.

The 2009 budget also increases funding for lunar science in order to better understand our Moon. NASA's Science and Exploration Mission Directorates are working together to develop two small lunar landers, and SMD is

initiating a series of new and exciting missions heading to the Moon over the next decade, like the LADEE Small Orbiter to characterize the atmosphere and lunar dust environment. This year, we are especially looking forward to the launch of India's Chandrayaan-1 spacecraft, which includes two NASA payloads, as well as the launch of NASA's Lunar Reconnaissance Orbiter and the LCROSS secondary payload.

For Mars, we are focusing much of our efforts after 2013 to carry out a sample return mission to launch by 2020. In Planetary Science, the Fiscal Year 2009 budget also initiates development of a flagship outer planets mission, which we hope will include significant international collaboration. In Astrophysics, we are initiating the Joint Dark Energy Mission, the highest priority among Astrophysicists, and in Heliophysics, we are initiating Solar Probe Plus, a high-priority Heliophysics mission starting in Fiscal Year 2009.

In order to maintain a healthy mix of large and small missions consistent with NRC recommendations, SMD is further applying funds to revitalize small explorers, missions of opportunity, and NASA's suborbital flight program.

In late 2006, NASA consolidated its deep-space, near-Earth, and space communications networks into a centrally managed, unified effort within the Space Operations Mission Directorate in order to better leverage the capabilities of each network.

With Fiscal Year 2009, we are now transferring the budget responsibility from the Science Mission Directorate to the Space Operations Mission Director, or Space Ops, in order to integrate both budget and management responsibilities. Space Ops will need to meet the communication and navigation requirements of all of their customers, including science.

Last December, the President approved the National Plan for Aeronautics Research and Development and Related Infrastructure as a follow-on to the policy approved one year earlier. This comprehensive plan provides high-priority research challenges, goals, and objectives for all Federal agencies, including NASA. We are addressing the fundamental research needs facing the Next Generation Air Transportation System while developing world-class aeronautics expertise and capabilities, and we are closely coordinating the use of our research and test

facilities with other Federal agencies.

NASA is also pursuing innovative partnerships with commercial companies that will better leverage such private investment work toward the President's strategic goals.

In conclusion, I want to thank the Mission Directorates' Associate Administrators, our center directors, and the Headquarters staff who worked tirelessly in putting together NASA's Fiscal Year 2009 budget request, with special recognition to David Schurr and also Cynthia Lodge.

With the congressional direction and the Fiscal Year 2008 appropriations on account structure, the staff needed to work weekends and many late hours over the past month to make sure that the budget numbers and program plans in our congressional justification that you should find online were accurate. We will need such dedication and attention to detail from everyone to tackle the challenges before us.

It is appropriate that at this time in which we are poised to realize the visions of a new era that we look back and reflect on the many achievements drawn from the

previous challenges of Apollo, for it is these challenges that push us to new heights, to new worlds, and indeed fulfill our vast potential as a nation and as a people.

This is not done in an instant. One budget cannot see it through. We must remain faithful to our dream and sustain our efforts, meeting our commitments, and achieving accomplishments over time. This is our vow, and it must be our nation's conviction if we are to see this challenge through to fruition.

Thank you.

Now I will turn it over to David.

MODERATOR: Thanks, Shana.

Now we have got time for some questions from the media. Please wait to be called on and wait for the microphone to come to you, and please identify yourself and your affiliation.

Let's start right down in front here, please.

MEDIA QUESTIONER: Hi. Dave O'Hern [ph] with Space and Missions Defense Report.

You have on Space Shuttle, Space Operations, 3.2 billion in FY08 and 2.9 billion in FY09, going down. Yet, you have more Shuttle missions planned this year, going

from three to five. How does that work?

And secondly, are you hoping that in addition to the funds you are requesting that the Mikulski $1 billion might be approved in Congress?

DEPUTY ADMINISTRATOR DALE: Well, in regards to the ramp-down that you are seeing in Space Shuttle, that is part of the regular process of actually ramping down Space Shuttle operations. So there's different facilities to be closed down.

We are gaining synergies right now between Space Shuttle and Constellation, and so that is just a normal part of the process that you are seeing.

MEDIA QUESTIONER: And Mikulski?

DEPUTY ADMINISTRATOR DALE: Oh. And Mikulski, we will see what happens this year in Congress. That is not part of our budget request. So we are on the sidelines waiting to see what happens.

MEDIA QUESTIONER: Hi. I am Mark Mathews with the Orlando Sentinel.

A quick question for the Deputy Administrator. I see right here that there is a package of legislative provisions to help in the transition. Could you talk a

little bit about that?

DEPUTY ADMINISTRATOR DALE: The legislative provisions I believe are still at OMB. Is that right? They haven't been cleared yet. So I don't think we are actually at the point where we are able to discuss them, and I am getting a lot of heads shaking in the affirmative. So, as soon as we are clear to discuss them, we would love to talk to you about them.

MEDIA QUESTIONER: Just before, you were also talking about ramping down of the Shuttle program. Right now, do you foresee any job losses at any of the centers, particularly Kennedy Space Center, in the next year?

DEPUTY ADMINISTRATOR DALE: In Fiscal Year 2009, actually what we are seeing in particular with the Constellation work that is going out and Space Shuttle ramping down, you have almost got a situation where it is a wash in terms of work force numbers. So you definitely have a situation in which Constellation work force is starting to ramp up, and we are continuing vigorously over this year and the years remaining in the future to look at issues of retirement and transition, and we are working those issues hard for the out years.

MODERATOR: Warren, please.

MEDIA QUESTIONER: Warren Leary, New York Times.

Two questions. First, on aeronautics, are there any new initiatives or anything in this aeronautics budget that is a little different from last year? Where are we going with that?

DEPUTY ADMINISTRATOR DALE: The content for aeronautics is the same as you saw in the budget runout last year, and for a lot of our programs, you will notice that the budget request that you see, the five-year runout for Fiscal Year 2009, is very similar in terms of what you saw in Fiscal Year 2008.

So we have the same types of initiatives within aeronautics; obviously, our dedication to Next Generation Air Transportation System. We also have vigorous efforts in terms of the NASA Research Announcements, and that has generated numerous -- Jai, correct me on this one, but in 2007, how many proposals did we have on NRAs?

MR. SHIN: For a year and a half, we had received over 1,300, and we have awarded about 300.

DEPUTY ADMINISTRATOR DALE: And we consider this to be a great success for the agency because it is an open

competition that brings in industry, non-profits, academia, and they are funding whatever the best research is that is out there.

MEDIA QUESTIONER: On the space science question, there are new missions here, and it seems to be with the same amount of money, and I am kind of wondering where that is coming from.

Let's take the lunar missions in particular, the three, two landers and one orbiter. Is that something that is also being done with Exploration, or is that all Science Directorate money?

DEPUTY ADMINISTRATOR DALE: The $344 million that we discussed for the lunar science missions, that is directly in science, but SMD and ESMD are working collaboratively together in terms of what is going to happen with the small landers and also the orbiter.

In regards to what you mentioned with a fairly fixed budget for science -- and there are increases in particular in Earth Science -- we are investing almost a half-billion dollars more over the five-year runout in Earth Science to accelerate Earth survey, Decadal missions, and also initiate new ones.

That comes from a variety of factors, including the fact that we have been launching a bunch of missions, and we are in the process of launching many for this year. That actually frees up money. As you are in the process of closing down development, you actually have a wedge of new money. That is part of it. Then there were also reductions in some of the other areas.

What was not affected was Research and Analysis, and R&A is actually an area that is for Heliophysics, Astrophysics, and Planetary experiencing increases over the five-year runout.

Did you want any more on that one, Warren?

MEDIA QUESTIONER: No. Thank you.

MODERATOR: Yes.

MEDIA QUESTIONER: [Inaudible] Congress Daily.

You talked about working for the Next Generation Air Traffic System, but the Aeronautics budget is down. That is something that Congress has been anxious. Both Congress and the airline industry and the aerospace industry have been looking for additional money. You are cutting that budget.

DEPUTY ADMINISTRATOR DALE: Well, what you are

seeing in the budget right now is a result of Congress increasing it in Fiscal Year 2008. So it is somewhat normalized for Fiscal Year 2009. It is the same content in terms of the budget runout that you saw in the Fiscal Year 2008 budget, what was identified for Fiscal Year 2009, the same content in this budget as what we had in Fiscal Year 2008.

The other thing that I would note is that we worked very hard last year to pull together funding, so that we could provide additional resources to Aeronautics, and it is $140 million from Fiscal Year 2009 over the next four years, and this is all in the context of aligning what we are doing with the national plan for research and development-related infrastructure, and it is within the context of NASA being one of many Federal partners that are working together on what we are doing in Aeronautics, and we are focusing obviously on cutting-edge, long-term research that benefits the entire country.

MODERATOR: Right here, please.

MEDIA QUESTIONER: Eric Hand at Nature.

This question might be best for Dr. Stern. The selection of JDEM, the Joint Dark Energy Mission, how much

money is going to that this coming year, and does this mean that CANEX and LISA go to the back of the line and have to wait their term for a decade or more?

DR. STERN: Okay. Great questions.

To begin, the mission is just in the early formulation stages. So the money is pretty small. It is millions of dollars, but the entire wedge to fly the entire mission is in our five-year budget. Leading and subsequent years, it will lead to a launch in the middle of the next decade, and we have provided for all of that.

As you know, the BPAC, the Beyond Einstein Committee that priorities the various Beyond Einstein missions, put JDEM at the top of the list. So we are executing on that community priority as the first priority.

So CANEX and LISA are continuing to receive funds for technology development, and we are going to wait to see what the Astrophysical Decadal Survey that is just spooling up this year to produce its report in early 2010 will tell us about the priorities for the next decade.

MODERATOR: Other questions? Yes.

MEDIA QUESTIONER: Taylor Dinerman, Space Review.

For Alan Stern, I see there is a cut in the

budget for Heliophysics. Is that some of the money from that went into Earth Sciences, and how does this effect the Sun-Earth connection missions?

MODERATOR: I will just start out with that one. One of the things you are seeing in Heliophysics is the transfer of Deep Space Network, $256 million from Heliophysics to Space Operations where we are consolidating all of our space communications activities.

DR. STERN: What Shana just said is important. There is sort of an optical illusion in that budget because we previously carried SMD's entire space communications budget in the Heliophysics Division. Over the last several years, it has been planned that a transition would take place this year over to Space Operations, and so that money is moving over, but it doesn't reduce the content of any of our scientific programs whatsoever.

However, it is true that Heliophysics, Astrophysics, and Planetary Science each contributed to the increase in our Earth Science budget. That is where the money came from. We are putting an increased emphasis on Earth sciences at NASA.

MODERATOR: Other questions?

[No response.]

MODERATOR: All right. Thank you very much for joining us.

The subsequent follow-up questions with the Mission Directorates, you can get the logistical information from the folks down front here. For those reporters who are listening in who would like to followed those, you can go to www.NASA.gov/NewsAudio.

With that, thank you very much, and have a great day.

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