NASA OFFICE OF PUBLIC AFFAIRS WASHINGTON, D.C.

Fiscal Year 2010 Budget Rollout

"NASA Agency Budget Briefing"

Speakers:

CHRISTOPHER SCOLESE, Acting Administrator DAVID SCHURR, NASA Comptroller

> Moderated by **BOB JACOBS**, Office of Public Affairs, NASA

> > 2:30 p.m., EDT Thursday May 7, 2009

NASA Headquarters

## PROCEEDINGS

MODERATOR: Good afternoon, and welcome to NASA Headquarters here in Washington.

My name is Bob Jacobs. I am with the NASA Office of Public Affairs, and welcome to the rollout of 2010 fiscal year budget.

Joining us this afternoon is our Acting Administrator, Christopher Scolese, and to his left, David Schurr, the NASA Comptroller.

I will have some additional guidelines later, but, first, our opening remarks with Mr. Scolese.

Chris.

ACTING ADMINISTRATOR SCOLESE: Thanks, Bob.

Good afternoon, everybody. Today I am pleased to share with you some of the highlights of NASA's fiscal year 2010 budget request.

Before I get into specifics about the budget, let me tell you a little bit about what we accomplished in the last year because I think it is important to see where we were and to see the excitement that we have coming up in the future and that this budget portends for the future.

Most of you already know this. We put the final

solar array on the Space Station. We are getting ready to support a six-person crew. We landed on Mars, our first power descent in close to 30 years with the Phoenix Lander, and we, for the first time, had a machine manufactured on the Earth touch water on a distant planet.

We have about 80 science and Earth science missions that are in development or in flight as we speak.

We are getting ready to launch the final servicing mission to the Hubble Space Telescope to prepare it for its next extension as it moves along.

The reason I mention some of those is that I don't know how many of you had the opportunity to watch on television or see some of the activities, but we have a very strong supporter of this program in the President and in the Science Advisor.

During the flight of STS-119, while it was docked to the Space Station, there was a call by the President to the combined crews of astronauts and cosmonauts from many nations, truly an international mission.

I was sitting there, and the President was as excited as you can imagine and demonstrated not only there his enthusiasm for the space program, but, subsequently, in

his remarks at the National Academy, where he used NASA repeatedly as a model of what can be accomplished and also with his recognition of the STS-119 crew. He met with them just last Friday.

I regularly meet with the Science Advisor. In fact, just before I got here -- some of you were already there with me -- we were having a combined press conference to discuss the combined science budget, and I want to point out from that budget, you are going to see a profile, when David shows it, and it is very similar to the nation's investments in science, technology, and research.

The budget goes up considerably in 2009 because of the American Recovery and Reinvestment Act. That money actually covers '09 and '10. There is an increase in the budget in '10, as well. And then recognizing the fiscal realties in developing a fiscally response budget, it doesn't grow, it doesn't grow as fast as any of us would like, but those are the realities that we live with.

However, when you look at that budget, when you look at the NASA budget, in particular, you will see when you add the numbers up, that it is about \$2 billion higher through 2011 than it was in the previous budget, and if you

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go out a little further, you will see through 2013, it is about a billion dollars more. That is critical for what we want to accomplish as an agency.

In particular, you will see some -- and David, again, will cover the detail, but just to highlight a couple of things, you will see increases in the science budget, you will see increases in aeronautics budget, and you will see a critical increase in the early years for exploration where we need the resources to work towards the 2015 initial operational capability.

I also want to mention here -- and I will take questions later -- that one of the aspects of this budget is we were requested to conduct a more detailed study of the human space flight capabilities. Recognizing that we have some decisions that need to come up, we want to fully utilize the International Space Station. That is a decision that needs to be factored into this review.

We need to consider the workforce and the transition requirements as we retire the Shuttle and move on to the next system, and we need to look at what the gap means and how to best utilize the commercial and international capabilities that are out there.

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So the President's Science Advisor has asked us, and we have jointly are forming a review team, a blueribbon team that will be headed by Norm Augustine, to go off and lead that review, which we anticipate being done in the next 60 to 90 days, so that by August we are prepared to make any budget adjustments that may need to be made.

On the NASA end, because it is going to be a quick review, a detailed review, and a thorough review of human space flight, we have asked Dr. Mike Hawes, who heads up our Program Analysis and Evaluation, to lead that team and be the principal interface with Norm Augustine and his team. More details below that on who the team members are aren't available yet. We are still working those.

So I wanted to mention that up front, but, overall, I think you are going to find that this budget is a very good budget for NASA. It allows us to accomplish a lot of our goals and our activities, and with that, David, I will leave it to you to run through the details.

MR. SCHURR: Thanks, Chris.

The NASA budget derives from a series of key governance documents, legislative policy, executive policy, which you will see here -- our authorization bill is the

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Space Act itself -- U.S. National Space Policy, and the Aeronautics R&D Policy, as well as we rely heavily on the science priorities identified by the National Academy of Sciences' reports currently using the 2006 strategic plan, and what you are seeing before you is the 2010 budget estimates, our request that is going to Congress today.

Going to page 3. The top line request has not changed since the President released his budget in February. You will see the name numbers.

The request for 2010 is \$18.7 billion, and it is a 5.1-percent increase above the appropriated levels for 2009, approximately \$904 million.

As Chris noted, with the addition of the billion dollars that was appropriated as a part of the Recovery Act, NASA's budget from 2009 to 2011 is \$2 billion above our plan from a year ago, the 2009 budget request. So that is a significant investment in the additional programs of the agency.

The 2010 budget does complete assembly of the International Space Station. In 2010, we will be flying six Shuttle flights, including the delivery of the Alpha Magnetic Spectrometer.

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We retire the Space Shuttle following the completion of the nine remaining Shuttle flights that are on the manifest. That is currently scheduled for the end of fiscal year 2010.

We continue to stimulate the private sector developments, demonstration of vehicles that may support NASA's cargo and crew requirements.

We support the administration's commitment to deploy a global climate change research and monitoring system by increasing the Earth science budget by \$1.3 billion -- that is 19 percent, including the Recovery Act funds -- over last year's, the 2009 budget plan. That is a five-year run-out comparison.

That will allow us to complete the foundational issues and accelerate the first four missions in the venture class mission line that are recommended in the 2007 Decadal Survey.

This budget increases NASA's investment in aeronautics research by \$450 million -- that is a 20-percent increase over the five-year plan from a year ago -- establishing a new green aviation initiative that will research technologies to simultaneously reduce fuel burn,

noise, and emissions.

As Chris pointed out, we are also in this budget increasing exploration by \$630 million in the critical two years, 2009, 2010 -- that is including our Recovery Act funds -- to continue working towards a March 2015 initial operational capability, and, as Chris noted, we are initiating a review of the human space flight activities for the post-Shuttle time frame.

Page 4 will show you the details of the budget. We have broken out the Recovery Act as a separate line item, and I believe copies of these have been made available to you. So I am not going to try to read all the numbers to you.

The 2010 request is a 5.1-percent increase over the 2009 appropriated.

You will note asterisks on the exploration numbers from 2010 through '14. As a result of the review, we might see a re-mix of the priorities with an exploration so that the splits between Constellation Systems and Advanced Capabilities may be updated based upon the results of the review, come the August time frame.

Going to the Science, page 5, science request is

about \$4.5 billion. As noted across the five-year plan for Science, it is a \$1.3-billion increase for Earth Science. That allows to complete the foundational missions. That is Glory and the NPOESS Preparatory Project, a global participation mission in the Landsat Data Continuity Mission plus Aquarius, as well as accelerate the development of the four new missions identified in the Earth Science Decadal Survey, SMAP, ICESat-II, Destiny and CLARIO, and to begin a series of venture class mission opportunities. Those will be joining the existing 15 missions that are currently in orbit providing global observations.

We in 2010 are establishing the Lunar Quest Program. This is combing the existing lunar science research and the lunar robotics missions, some of which are coming the Exploration program, the Lunar Reconnaissance Orbiter, once it has finished its primary mission.

We are continuing the ground mission for launch in 2011 to map the Moon's gravity field in LADEE, which will be studying the Moon's dust environment, as well at the International Lunar Network.

We will be completing the Mars Science Laboratory

for a launch in 2011, following a highly successful Rover Spirit opportunity, and the MAVEN, which is a Mars Scout for launch in 2013.

Work continues on Juno for a launch to Jupiter in 2011, and we have announced a new NASA/ESA Joint Flagship Mission to Europa and the Jupiter system.

In 2010, we will be operating some new key observatories, the recently launched Kepler, a soon-to-berefurbished Hubble Space Telescope, Herschel and Planck, which launched this month, and WISE, which launches late this fall.

Work continues on SOFIA, which will begin early science flights in 2010, New Star to launch in 2011, and the James Webb Space Telescope to launch in 2014.

We are looking forward to the next Astrophysics Decadal Survey, which will be completed in 2010, identifying the priorities for the science community for our missions going forward.

In heliophysics, we will be launching the Solar Dynamics Observatory, continuing the development of the radiation belt storm probes for launch in 2012, and the magnetospheric multi-scale satellites for launch in 2014.

We are also are continuing our preformulation activities for the Solar Probe Plus mission for launch in 2018.

Page 6, I won't try to read all of these to you, but we currently have 82 missions that are in various stages of development and operations, 56 operating missions. Plus, there are three that are listed on here that are in preformulation that are identified in the budget, specifically CLARIO, Destiny, and the Solar Probe Plus mission.

Of the ones in development, there are three that are worth noting, GRAIL, Juno, and James Webb Space Telescope all went through the confirmation review last year and have been graduated to development in the full budget, as shown in this request.

Page 7, our Aeronautics budget, the request is \$507 million. As I noted, it is about a 20-percent increase for Aeronautics across the five-year budget plan.

We will be continuing our innovative fundamental research in capabilities in all regimes of flight, air-breathing access to space, entering the planetary atmospheres, our cutting-edge air traffic management to

enable Next-Gen, safety-related concepts, tools and technologies to help ensure the safety of the U.S. air transportation system, and we are maintaining the capability of our Aeronautics test facilities to meet the needs of aeronautic, the agency, as well as the nation.

In Aeronautics, we are creating a new program, the Integrated Systems Research Program. Its first project will be environmentally responsible aviation project to conduct research and integrated system-level approaches to reduce the environmental impact of aviation looking at noise level, local and global emissions, and local air quality.

The research within our Aeronautics portfolio is aligned with the high-priority challenges, goals, and objectives of the national plan for Aeronautics R&D, the continued focus on developing a world-class aeronautics workforce, and in 2010, we will have \$74 million in our NASA research announcements.

Exploration Systems is just under a \$4-billion request. Orion and Ares I will continue working towards the goal of initial operational capability by March of 2015 -- and we move to page 8 -- as well as working towards the

human lunar return by 2020.

We have some major tests coming up in 2010, the Ares 1-X test from Pad B, the launch pad abort test from White Sands, and in 2010, we will conduct the Constellation Systems Level Preliminary Design Review.

Lunar Reconnaissance Orbiter, which will be launching in 2009, we will be conducting primary operations for 2010, as well.

As Chris noted, we are initiating an independent review of human space flight activities for the post-Shuttle retirement to assess our current plans, as well as potential alternatives, examine the capabilities of these architectures to support the Station and exploration missions, and to ensure that NASA pursues the best solution for future human space flight.

As part of this review, we will consider options to extend the ISS beyond 2016. If required, an updated budget request will be submitted to the Congress at the end of this review. Right now, we think that is about the August time frame.

Page 9, our Space Operations request is \$6.2 billion. We have nine Shuttle flights remaining through the end of fiscal year 2010, eight Station assembly flights, plus a Hubble servicing mission which is scheduled for next week, including the delivery of the Alpha Magnetic Spectrometer.

Our plan retires the Shuttle following the completion of the nine remaining flights. That is currently scheduled for the end of fiscal year 2010.

We also for the first time have incorporated the transitional retirement cost beyond Shuttle retirement through the 2012 time frame.

In the beginning of fiscal year '10, we will be turning over Pad B for the Constellation program to begin their modifications to support Ares I.

The International Space Station is essentially complete. We have a planned expansion of the crew this month to six astronauts and cosmonauts to allow us to fully use the Station as both a national laboratory for scientific research and a test bed for future human exploration.

2010 request funds the contracts with the Russian Space Agency to provide crew transportation to the station, as well as two commercial resupply services contracts for delivering cargo.

Space operations will be developing a demonstration project to demonstrate high-rate optical communications using the LADEE spacecraft in 2012, plus ground systems that are designed to demonstrate these new systems, and as I noted in the review that will be conducted this summer, we will be looking at options for extending the ISS beyond 2016 where those will be evaluated.

Go to page 10, and I will turn this back over to Chris.

ACTING ADMINISTRATOR SCOLESE: As you always know, we always have challenges in any activity as exciting and as difficult as what NASA normally does, and top among those is safely flying the Shuttle, protecting our crews, so that we can accomplish our missions. And as we mentioned earlier, that is flying out the manifest that we anticipate being completed by the end of fiscal year 2010.

Also, in the process of developing a new human and cargo space flight capabilities, they present interesting challenges, and we intend to work through those. This review will help us in doing that, but we are

going to continue to move ahead. We are not stopping anything. We are progressing with the plans that we have in place.

Clearly, transitioning a workforce as you ramp down a major program that has been around for 30 years, that has built up a strong, loyal, capable workforce and has facilities, transferring that and transitioning that to the next-generation system always presents challenges, and we are working very hard to minimize the impacts associated with that and to maximize the utility of systems for the next generation of systems.

Of course, as many of you have heard and seen, one of the things that NASA does working at the cutting edge, as we do, trying to send new capabilities into space, whether they are looking at the Earth or they are going out to the planets or they are looking out to the stars or carrying people, they are all typically new systems that are pushing the frontiers somewhere in that range, so developing a good, strong, solid estimates that demonstrate that we can do those missions and do those within the technical limits that we identify, meet the requirements, meet the costs and meet the schedule.

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Over the years and, in particular, in the last year, we have put in a lot of means of going off to assure that we do that with better cost-estimating procedures, more frequent and more thorough and more complete status reviews, so that we can identify and address issues as they come up earlier and, therefore, prevent them from becoming more significant problems. So we have done a lot of things to go off and make that work. The challenge is for us to go off and prove that those systems do, indeed, work.

So if we can go to the next chart, please.

So, in summary, what does this budget represent? As I said, I think, at least I was surprised that, you know, that in the last month, I have seen the President three times, and I think that is an indication that NASA is something that this administration really cares about.

The fact that we were highlighted in the budget discussions today with the Science Advisor, I think is another indication of that.

And I think you see it in this first bullet here, when you look at it, \$630-million increase to Exploration, a \$456-million increase to Science, and a \$263-million increase to Aeronautics. Those are significant increases,

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and they allow us to accomplish a lot of the goals that David mentioned to work more completely and to have more confidence in our initial operating capability, to allow us to reinvigorate and extend the climate research on the Earth science that we are doing, to go off and do some more in Aeronautics with green aviation, as we go off and look at environmentally responsible aviation initiatives that address not only aircraft design but the air system, allow us to work more effectively with our partners nationally and internationally.

The Human Space Flight Review, we mentioned earlier, is going to go on, and it is going to address the current plan, how we are progressing, where it is going, and potential alternatives that we will need to address as we are moving along.

While we are doing that, of course, we are going to keep on moving with the plan that we have. We are going to keep on moving on with the assembly of the Space Station, as we mentioned, to continue flying the Shuttle, to continue the development of Ares I, Orion, and associated Constellation Systems. We have some exciting launches coming up in the science side that we mentioned a

little bit earlier.

We also have the test flights of the Ares 1-X that is coming up later this year and the pad abort test that is coming up later this year as well.

I mentioned the environmentally responsible aviation. We are also relying on and funding the service to deliver cargo to the Space Station commercially. That is something that is new, that hadn't been heard of before. We are also stimulating the commercial crew access to the Space Station with this budget.

But some of the others, to just close off on it, I mentioned the Earth Science missions. We are also initiating a new line of Earth Science missions to go off and do emerging sciences as they come up, called the Venture Class missions. It is analogous to what we do with explore and discovery, but it is focusing on Earth.

So, with that, I think we have demonstrated that we have a fairly robust budget, that we have the confidence and the support of the administration, and I will turn it over to you, Bob, to manage questions.

MODERATOR: A couple of reminders. Wait for the microphone before asking your question, and don't forget to

give us your and affiliation.

Let's begin here with Frank.

MEDIA QUESTIONER: Thank you, Frank Morring with Aviation Week, for you, Chris.

With this Augustine panel taking another look at the Exploration and at the same time Exploration getting \$630 million, at least in the request, are there any changes anticipated in how you are going to carry on the program while the panel reviews it, I guess?

ASSISTANT ADMINISTRATOR SCOLESE: No. I mean, we are going to continue to move ahead. As you know, these years, the next several years, we were focusing on IOC, initial operational capability for the system, and that is going to continue to be the focus until or if there are changes identified that would move us off that path, so no changes in the immediate future. No.

MEDIA QUESTIONER: Can you elaborate a little bit how the IOC is defined at this point, the March 15th IOC?

ASSISTANT ADMINISTRATOR SCOLESE: I think it has been defined as what it was it before. It is the operational capability where you can carry crew up to the Station and bring them back. That is the initial

operational capability.

MODERATOR: How about in front of Frank there?

MEDIA QUESTIONER: Hi. Eric Hand with Nature Magazine with a question for you, Chris.

Can you say, is this review panel going to be looking more at alternatives to the goals of space exploration, i.e., finish the Space Station and on to the Moon, or are you going to be looking more at alternatives to the architecture in reaching those goals, or both?

And I have a follow-up, depending on the answer.

ASSISTANT ADMINISTRATOR SCOLESE: Well, David laid out the objectives in broad terms.

The purpose of the review is go off and assess the progress that we have made so far and that we are making and where we are going with that, and then to assess alternatives, where and if they see those as being prudent.

So the review team, led by Norm Augustine, has the opportunity to look at all the things that you mentioned, but, first, I anticipate they are going to off and assess the status of where we are at and the progress that we are making.

MEDIA QUESTIONER: If it is a potential review

and assessment of alternatives for the architecture, isn't this what was done in the period of time from 2004 to the time that initial contracts were awarded in 2006? I mean, you have been spending, it looked like, about \$6 billion in the last two years on Constellation. How would that be anything other than wasted money if you were to change the architecture now?

ASSISTANT ADMINISTRATOR SCOLESE: Well, I think, you know, as anything, reviews come in and look at the progress that you are making and try and determine if you have got issues or, in some cases, if there is a better of doing it. That is the purpose of the review. We conduct those routinely in this agency.

If you look at it, we have them at specific design points, our preliminary design reviews, our critical design reviews. We are approaching a preliminary design review here. We also want to review our programs about every two years to see where we are at.

When I sat down with John Holdren and we discussed where were going, you can expect that a new administration coming in will have to understand where we are at and is this the best way to go forward. That is the

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purpose of the review, to understand that.

Clearly, if we are on the wrong path, we should change. If you are asking me do I think we are on the wrong path, no, I don't, and we need to go off and demonstrate that, and the review team needs to look at it and understand what we are doing and offer suggestions on how we can do it better, but, however, we have to allow the review team to have the opportunity to look at all the alternatives that are out there and look at all the options that may be out there.

So that is the sense that this is looking. It is a new administration. They want to understand where we are at, where we are going, what the commitment is going to be for the next several years with this system. We are making a commitment for this nation for human space flight for many years to come, and they need to understand that, and, at the same time, we need to have a check on ourselves.

MODERATOR: How about on the other side? Anyone on this side? All right. Let's go over to Mark.

MEDIA QUESTIONER: Mark Mathews with the Sentinel. The question is for Chris, I guess a couple.

The first, how much per month does NASA spend on

the Constellation program on average?

ASSISTANT ADMINISTRATOR SCOLESE: David, do you have that off the top of your head?

MR. SCHURR: I could do a division by 12 for you.

ASSISTANT ADMINISTRATOR SCOLESE: We will get that number to you.

MEDIA QUESTIONER: By my own math, it is something along he lines of 250- to \$300 million, something like that.

MR. SCHURR: Based upon the budget, that's about right.

ASSISTANT ADMINISTRATOR SCOLESE: That's about right.

MEDIA QUESTIONER: So, if there is a three-month study going on looking at Constellation, which may or may not come back and say, this is the right way to go, then why not save taxpayers something along the lines of \$900 million by cutting off Constellation? Why continue with the program and not shut it down?

ASSISTANT ADMINISTRATOR SCOLESE: Well, you are presuming that they are going to shut it down. We are not presuming that they are going to shut it down, and we have

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a national imperative to go off and minimize the gap. So what you are proposing would, by definition, likely increase the gap.

So we are working to preserve the capabilities that we have got, to allow us to have as minimal of a gap as we can possibly have, and to preserve the workforce that is working not only on Shuttle and Station and all the other activities, but, also, frankly, supporting the Constellation program. So that would be, I think, a bigger mistake to stop, rather than to continue.

MODERATOR: Any additional questions? Go ahead.

MEDIA QUESTIONER: So also reading into some of the budget notes for today, it talks about finishing all the Shuttle flights, which are scheduled for an end by 2010. What happens if there are delays, as there often are on all the Shuttle flights, and we can't get all six flights in 2010? Are they going to move into 2011? Because previous budget documents say 2010 is the end. Does this mean that they are going to go on?

ASSISTANT ADMINISTRATOR SCOLESE: They could. I mean, the commitment is to complete those nine flights.

Today, with the manifest as we understand it, we

are confident that we can complete those by the end of fiscal year '10. If we run into difficulties, of course, we will have to go off and address that, and that could mean that we spill over beyond the end of fiscal year '10, but the commitment is go off and fly those nine flights. And I will repeat again, all of our analysis indicates that we can complete that by the end of the fiscal year.

MEDIA QUESTIONER: Where is the money to pay for these extra flights going to come from if they do go into fiscal year 2011?

ASSISTANT ADMINISTRATOR SCOLESE: We will have to address that, as we understand.

You know, we are going to know well before the end of the fiscal year whether or not we are going to make the end of fiscal year '10 or not. We assess the manifest regularly, and if we see that we are running into difficulties, we will start addressing those issues, but it would require additional budget if we went beyond the end of fiscal year '10. But we will know well before we get there, what the issues are, and we will be able to start working those.

MODERATOR: I believe we have a question in the

back. Please.

MEDIA QUESTIONER: Dave Ahearn with Space & Missile Report and Defense Daily.

If the team comes in and reviews, for example, whether we should continue with ARIES I or we should move to, let's say, another lift or a military, would a requisite be that whatever lifter is chosen, whatever you move to, would have to be able to perform fully all the functions that ARIES I would on a full lunar mission?

ASSISTANT ADMINISTRATOR SCOLESE: Well, yeah, I mean, assuming -- yes, I mean, think the answer has to be yes to that question. So, yes.

[Laughter.]

ASSISTANT ADMINISTRATOR SCOLESE: I don't know what else I can add to that one.

MODERATOR: Frank, a follow-up?

MEDIA QUESTIONER: Frank Morring with Aviation Week.

Your predecessor in that chair recently complained mightily that a career civil servant at OMB requested a \$3-billion-plus cut in Exploration funding, and you just mentioned that you have seen the President three

times. Did the President reject that suggestion from OMB? Could you describe what happened to that cut?

ASSISTANT ADMINISTRATOR SCOLESE: I didn't ask the President. So, no.

I mean, Mike was speaking as a private citizen, and I would rather not comment on that. He is allowed to make his comments.

Clearly, when you look at the budget, it is less than 14, than last year's budget, and that is not a surprise. It is just the numbers. You compare the two.

We have to go off and deal with that. There is a fiscal reality that we are all dealing with in this country, and as I mentioned earlier and ask you saw, Frank, when John showed the charts earlier today, that Federal R&D is flat out in those years.

I think the more important aspect of this whole thing is the commitment that was shown by the increase of the Recovery Act funds and the increase in the '10 budget that are really in the years that we needed it.

If you recall in Exploration, in all the discussions, we have said that it is the early years where we really need to go off and have the funding so that we

can get the tests in that we need them, get them in the right order, get the materials we need, go off and work the designs. So having the funding in these early years is very critical for the program and really for any program if you can get it at the right phasing.

So I think that is the message, that we have a significant increase in the first couple of years.

MODERATOR: One more follow-up with Mark.

MEDIA QUESTIONER: Well, to go back to some of the questions about this study coming up, recently John Shannon wrote that hope is not an effective management tool when talking about continuing Shuttle operations. They spend about \$89 million doing that, and because there is no real sense of continuing, they shut it down.

In that same vein, if hope is not an effective management tool, then why continue Constellation if there is a chance that it may not be the selected program? Again, how is this prudent use of taxpayer money? Or delay it at least.

ASSISTANT ADMINISTRATOR SCOLESE: Well, you are presuming an outcome, and if you presume an outcome, you can get any answer you want.

We are not presuming an outcome. We are doing what the President asked us to do, and the President asked us to keep on going in this budget, and we are. It is as simple as that.

MODERATOR: Yes, over here to the left.

MEDIA QUESTIONER: Jackie Grom, Science Magazine.

I was wondering exactly what are the potential alternatives that you see being assessed under the review process?

ASSISTANT ADMINISTRATOR SCOLESE: It probably wouldn't be good for me to speculate on that. The review team still has to be formed and has to come in.

I mean, clearly, as I said, they are going to look at what we are doing, and I haven't even had the opportunity to have a discussion with Norm Augustine, John Holdren, and Mike Hawes about this as a group. So I think it would be presumptuous of me to go off and speculate there.

MODERATOR: Here in the front.

MEDIA QUESTIONER: Eun Kim with Gannett News Service.

Congress recently committed to giving NASA an

additional \$2.5 billion, but that figure is not anywhere in the budget. Are you using that as a cushion or as a fallback once this study is completed? How are you going to incorporate that?

ASSISTANT ADMINISTRATOR SCOLESE: Well, if it gets enacted. It hasn't been yet. If it gets enacted, then, of course, we will incorporate it, but that hasn't happened yet. They have to put it in the budget. We can't do anything until it is in the budget.

MODERATOR: Frank?

MEDIA QUESTIONER: If I can ask you a science question. Does the plus-up in Earth Science money mean that you might be able to advance LDCM a little bit?

MR. SCHURR: Working towards 2012.

ASSISTANT ADMINISTRATOR SCOLESE: We are working towards the 2012 date. I don't think that is in advance of the time now. So we are still working on the same, and it provides a little bit more security to do that.

Also, talking about LDCM, it allows us to start development of the Thermal Infrared Sensor that was taken off earlier. So that is now added back into the mix.

MEDIA QUESTIONER: And that is fully funded in

this budget?

ASSISTANT ADMINISTRATOR SCOLESE: And that is fully funded in this budget, yes.

MODERATOR: Over here to the left.

MEDIA QUESTIONER: Space News.

I'm looking at the Ares 1-X test. Has that been moved out of this summer?

ASSISTANT ADMINISTRATOR SCOLESE: No. I mean, it has slipped because we have the two Shuttles on the pad. So we couldn't turn the pad over. We are still planning to do Ares 1-X and the pad abort test this year.

MEDIA QUESTIONER: Okay. Thank you.

MODERATOR: We have time for one final question.

Mark, we will give it to you.

MEDIA QUESTIONER: NASA is getting a billion dollars in stimulus money. How many jobs is that going to create?

ASSISTANT ADMINISTRATOR SCOLESE: We have those numbers on the Web page. I don't know off the top of my head.

MODERATOR: www.nasa.gov/recovery.

ASSISTANT ADMINISTRATOR SCOLESE: There you go.

MODERATOR: If there are no follow-up questions, thank you for joining us for today's presentation.

A reminder, there will be a series of follow-on media teleconference with the individual mission directorates, and later this afternoon, we will an advisory about media availability on Friday with Mr. Augustine.

For complete details and additional information about the budget, please visit our website, www.nasa.gov/budget, and, again, thank you for joining us for this afternoon's presentation. Good afternoon.

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