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NASA BUDGET BRIEFING

SPEAKERS:
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[Moderated by David Mould, NASA Public Affairs]

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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. I am David Mould with NASA Public Affairs.

Before I introduce the Deputy Administrator and the Administrator, just a few notes. We will start with questions from reporters here at Headquarters after opening remarks on our budget announcement, and then we will go to questions to the various NASA centers around the country.

I guess we will go ahead and start now by introducing the senior management of NASA, Administrator Mike Griffin and Deputy Administrator Shana Dale, and we will now turn it over to the Administrator.

ADMINISTRATOR GRIFFIN: Thanks, David.

Good afternoon to all of you and those looking at us on TV. I have got some brief remarks before opening the meeting up for questions, and let me say now that I did book some overflow time. We will stay to allow the press to get all their questions in. So let's not have a mad stampede for press time immediately after the speech.

This morning, the President announced his fiscal year 2008 budget request for the entire Federal Government.

This includes a $17.3-billion request for NASA, which is a 3.1-percent increase over the President's fiscal year '07 request for the agency. This increase demonstrates the President's commitment to NASA and to maintaining our Nation's leadership in space and aeronautics research.

Now, we all realize that the Congress has yet to determine the current year's actual appropriation for NASA and for many other Federal agencies, with Senate deliberations beginning soon after the funding resolution passed last week in the House.

The House resolution reduces overall funding for NASA by $545 million from the President's FY07 request. It further directs specific reductions to human space flight of about $677 million and $577 million of that to come from Exploration Systems.

The FY07 appropriations, if enacted as the House has resolved, will jeopardize our ability to transition safely and efficiently from the Shuttle to the Orion Crew Exploration Vehicle and the Aries I Crew Launch Vehicle. It will have serious effects on people, projects, and programs this year and for the longer term.

Now, budget cuts are a fact of life in public

service, but as I noted during last year's congressional hearings on NASA's FY07 budget request, we have a carefully balanced set of priorities to execute on behalf of our Nation, and it is part of my job to inform the White House and Congress as to the impact of such budget cuts and the funding redirection that we have received on the multi-year space and aeronautics projects and programs that we carry out.

As always, we are here to carry out our Nation's civil space and aeronautics programs with the resources made available by the Congress. Our programs do proceed in a go-as-we-pay manner. Thus, if we receive less funding than requested, we will adjust our pace.

Our stakeholders have my commitment to keep them informed as to the approach I think is in our Nation's best interest in carrying out NASA's space and aeronautics research missions with the resources provided. In this determination, I will be guided by the NASA Authorization Act, Presidential policy, and the Decadal Survey priorities of the National Academy of Sciences. If we are not able to meet any of the policy objectives set for the agency, I will so state.

Allow me now, however, to return to the matter of our fiscal '08 budget request. This is a carefully considered, balanced request formulated over many months with the White House, though, of course, it does not account for the as-yet-undetermined FY07 appropriation.

I will say again that I believe that the FY08 budget request for NASA demonstrates the President's commitment to our Nation's leadership in space and aeronautics, especially during a time when there are other competing demands for our Nation's resources.

You will not find major strategic changes in the FY08 request as compared to that for last year, but you will see some slight course corrections. Overall, I believe we are heading in the right direction, that we have made great strides this past year, and that we are on track and making progress in carrying out the tasks before us.

Beginning with Earth Science, we have recently received the first-ever Decadal Survey for Earth Science from the National Academy of Sciences which NOAA, NASA, and the USGS requested in '04. As the first of its kind, the survey has drawn considerable attention, and we will observe the programmatic priorities for Earth Science which

it advocates.

In addressing the survey's Earth Science priorities, we have incorporated the Global Precipitation Measurement into the FY08 request. As the follow-on to the highly successful Tropical Rainfall Monitoring Mission, our plan for GPM is to launch its first core satellite not later than 2013, followed by the second Constellation spacecraft the following year.

Like so many of NASA's science missions, GPM depends upon international cooperation, and we will be working closely with the Japanese Space Agency in the weeks and months ahead to solidify the partnership. In fact, I will be in Tokyo next month, and I hope to discuss our way forward with GPM at that time.

The FY08 request also augments funding for the Landsat follow-on and the Glory Mission in order to keep these projects on schedule.

In Planetary Sciences, we have identified a small funding line for Lunar Science starting in FY08 to allow us to leverage the many opportunities for payloads on NASA and other nations' lunar spacecraft, including India's Chandrayaan-1, as well as to analyze the science data from

these missions, including our own Lunar Reconnaissance Orbiter to be launched in a year and a half.

In heliophysics, we are on track for next week's launch of the five THEMIS micro satellites to study the earth's magnetosphere. In 2008, we will be launching a host of heliophysics missions, many with international and inter-agency partners, to analyze the effects of solar flares, coronal mass ejections, and galactic cosmic rays.

In astrophysics, the Hubble Servicing Mission is planned for a Space Shuttle flight in September of 2008, and as I advised the science community last summer, NASA is reinstating the SOFIA Mission. Though we know of no technical showstoppers in the air worthiness of the aircraft or the operation of the telescope, this program does have some remaining hurdles to overcome.

The SOFIA program baseline will be finalized this spring, following a review to be chaired by Associate Administrator Rex Geveden. The FY08 request increases the budget profile for aeronautics research over the President's FY07 request. It aligns our aeronautics activities with the President's recently issued aeronautics research and development policy and advances U.S. technical

leadership in aeronautics.

I am very proud of the significant progress we have made this year in reformulating our approach to aeronautics research by collaborating with the broad community in industry, academia, and other Government agencies, including the FAA and the DOD. We are on the right course. America leads the way in aeronautics research.

I will turn now to the greatest challenge we face, safely flying the Space Shuttle to assemble the International Space Station prior to retiring it in 2010 and at the same time bringing new human space flight capabilities online soon thereafter.

We must understand that given proper goals, human space flight is a strategic capability for this Nation, and we must not allow it to slip away.

Last week, we in the NASA family remembered those whom we've lost in the course of the exploration of space. In the aftermath of the Columbia tragedy, President Bush addressed the NASA work force saying, "In your grief, you are responding as your friends would have wished, with focus, professionalism, and unbroken faith in the mission

of this agency." We must commit ourselves to that focus, professionalism, and unbroken faith every day in order to carry out the tasks before us.

In analyzing not only the root causes, but also the systemic reasons behind the Columbia accident, the Columbia Accident Investigation Board, the CAIB, made some critical observations that guided the formulation of our present civil space policy. I fear that with the passage of time and the press of other concerns, we may be losing sight of some of these principles, and so I would like to reiterate some of them today.

First, the CAIB noted that, quoting, "The U.S. civilian space effort has moved forward for more than 30 years without a guiding vision."

Second, new quote, "Because the Shuttle is now an aging system, but still developmental in character, it is in the Nation's interest to replace the Shuttle as soon as possible as the primary means for transporting humans to and from earth orbit."

Quoting again, "The previous attempts to develop a replacement vehicle for the aging Shuttle represent a failure of national leadership."

And finally, the board noted, quoting, "This approach can only be successful if it is sustained over the decade; if by the time a decision to develop a new vehicle is made, there is a clearer idea of how the new transportation system fits into the Nation's overall plans for space; and" -- their emphasis -- "if the United States Government is willing, at the time a development decision is made, to commit the substantial resources required to implement it."

Now, the Vision for Space Exploration was a landmark change in U.S. civil space policy that addressed all of these points, and the President's FY08 budget reaffirms the commitment with the necessary funds for the Space Shuttle and the International Space Station. We will continue at the best possible pace with the development of the Orion and Aries I Crew Vehicles, but due to the cumulative effect of higher cost for Space Shuttle return to flight and operations than were previously assumed, other budget cuts to Exploration Systems over the past few years, and the effect of the FY07 appropriation, I am concerned about our ability to bring these new capabilities online by 2014.

If we do not quickly come to grips with this issue, we may have a prolonged gap between the end of the Shuttle program and the beginning of operational capability in our new systems, like that which occurred between 1975 and 1981 when we transitioned from Apollo to Space Shuttle.

We have a lot of hard work ahead of us and many major milestones this year and next. The transition from Shuttle to Orion CEV and Aries Launch Vehicles over the next several years must be carefully managed, and we must be focused, professional, and have an unbroken faith in our mission. This is NASA's greatest challenge, and I ask for everyone's help in carrying it out.

Beyond our budget request, we are preparing a package of legislative and administrative tools for the Congress to consider in helping us with this transition of the work force infrastructure and equipment from the Space Shuttle era to new exploration systems. I plan to discuss these legislative requests with Members of Congress in the weeks and months ahead.

I would like now to turn to the commercial crew and cargo service capabilities I hope to see successfully demonstrated in the next few years. One item of

significance in the FY08 budget run-out, especially in the out-years, is that it allows for increases to our previously estimated cost for purchasing commercial crew and cargo services to support the International Space Station, assuming that these commercial services are successfully demonstrated and are cost effective.

Should the cost for those services be greater than what is presently budgeted, we have accepted a management challenge to scale back on other space ops costs and will curtail some of our lunar robotic exploration plans in the out-years. That said, I hope in any case to collaborate with international partners on future robotic lunar missions.

Needless to say, these are busy times for all of us at NASA. A little over a year ago, nearly 3,000 of NASA's 19,000 employees were designated as uncovered of capacity, meaning that they were not directly assigned specific programs and projects.

Today, with the work defined in the Constellation program, we have greatly reduced that problem, and more importantly, many of our best engineers are working diligently on the challenges before us.

One of the first rules in flying is to focus on runway ahead, not runway behind. We have a lot of runway in front of us. Every NASA center is now vested in our Exploration Mission, and we have revectored funds to support additional aeronautics research in this budget request. We are committed to getting the job done, while rebuilding NASA as an institution with 10 healthy centers, known for its technical excellence.

In the effort to reduce uncovered capacity over the past year, it became clear that NASA's implementation of full-cost accounting procedures over the last few years had created numerous problems for our research centers. Our full-cost accounting practices created a complex allocation of overhead cost which disproportionately inflated the operating cost for our research centers.

So, beginning in FY07, we are simplifying our full-cost accounting practices. We are managing all of our Federal centers at a single overhead rate while JPL's overhead is, as before, directly included in its contract. All changes are revenue-neutral to projects and programs. None of NASA's missions gains or loses money as a result of this accounting change.

I fully realize that many people who look at the budget without understanding the overhead structure and the adjustments we have made in the process of simplifying our accounting structure will find it difficult to make apples-to-apples comparisons.

At first glance, for example, this change appears to reduce the aeronautics research budget because previously so much of that work was done at our smaller research centers, with higher overhead costs. This is incorrect.

In direct spending, aeronautics research has actually increased in the FY08 budget as compared to the '07 request. If this is all not clear, I will be more than happy to spend time explaining it, and if you really want more detail, I will refer you to Comptroller David Schurr who will bring tears to your eyes with trace charts and budget tables.

I don't want our new accounting procedures to confuse anyone when the net result is that it is now much easier to manage the agency equitably across all of our centers.

People are truly our most important resource, and

I am blessed with a great team. I asked Shana and our Mission Directorate AA's to join me here this afternoon ostensibly to answer your questions about NASA's '08 budget request, but really just to brag about them. We have accomplished a great deal this past year, due in large part to their leadership and to their friendship. I have never been privileged to work with a better team.

I would also like to take a moment especially to recognize Mary Cleave who plans to retire from NASA next month after spending nearly 27 years in the agency. I know that she will hear many accolades in the weeks ahead, but on this public occasion, I really want to thank her for being my friend for so long, for always telling me what she really thought, and for stepping up to being the Associate Administrator for Science when, at the time that I came on board, she had originally told me that she wanted to retire.

Mary, we will miss you, and I will miss you. Thank you.

We have many challenges ahead of us. We are on track making progress in tackling them. The FY08 budget request demonstrates commitment to our Nation's leadership

in space and aeronautics research, and while we may be taking a hit with the FY07 appropriation, we will carry on, though not at the pace we had hoped.

So, with that, let me now turn the podium over to David Mould and open up the dialogue for your questions.

Thank you.

MODERATOR: Thank you, Mike and Shana.

In addition to Mary Cleave and David Schurr, who Mike has already introduced, we have joining us today our director of Strategic Investments, Chris Shank, who did a lot of work on the budget, along with Associate Administrator for Aeronautics Research, Lisa Porter; Associate Administrator for Space Operations, Bill Gerstenmaier; and Deputy Associate Administrator for Exploration Systems, Doug Cooke, who will all be assisting with questions here and also in separate briefings for the press after we finish this session here.

So we will begin with some questions here at the Headquarters and go around to the field centers. As the questions come in, hopefully our technology will work smoothly for that.

Please wait until the microphone comes to you,

and identify yourself and your affiliation before your questions, please. With that, we can go ahead and get started.

Keith.

QUESTIONER: Keith Cowing, NASAWatch.com.

About 10 seconds after the President announced the Vision right where you're standing, everybody thought what's Congress going to do. Eventually, Congress seemed to be behind it. At first, they just said they were and eventually voted with the NASA Authorization Act.

Well, the Republicans couldn't get a budget last year. When the Democrats walked in, of course, it wasn't just NASA, but they seemed to have been taking it out on NASA very clearly. The Democrats have taken a big chunk out of the '07 budget.

Now your '08 budget comes by, which is even bigger. What certainty do you have and confidence level do you have that that budget isn't going to be similarly eviscerated?

I guess a follow-on question embedded in that, does it look like the Congress is starting to turn its back on the Vision for Space Exploration?

ADMINISTRATOR GRIFFIN: There is an awfully strong pejorative tone in that question, and even though I am as an agency head and we at NASA are on the receiving end of a budget cut we don't like, to term our budget by a few percent just doesn't qualify as evisceration.

It is certainly a pause, and we would rather not have that, but we haven't been eviscerated, and no one has, to my knowledge, repudiated the strategic direction that we were given in the FY05 authorization bill, 14 months ago, a bill which, by the way, was heavily supported by both sides of the aisle.

I would like more money. What agency head would not? But I don't think that we can put -- I just can't put quite so dark a tone on it.

If I were on the other side, frankly, I would tell the executive agencies, NASA among them, to absorb the few percent cut we have and get over it. That's what I am paid to do. Again, I don't like it, but I think we need to use less strong words.

There is no guarantee, of course, as to how Congress will respond to the '08 budget or any budget beyond. The President has made an excellent request on

behalf of NASA at a time when domestic discretionary agencies, generally non-defense discretionary agencies, are growing at 1 percent. NASA has been given 3.1 percent. I am, frankly, thrilled with that.

I hope to convince the Congress, as I should have to do. I hope to convince the Congress that that request is worth honoring and that NASA is a good place for them to spend their money, but this is a Democratic representative government, and we have absolutely no guarantee from year to year that any request of any type will be honored.

DEPUTY ADMINISTRATOR DALE: I will comment briefly. In a context of FY07, obviously as we continue to analyze the impacts of the reduction, particularly in exploration, a reduction from the FY07 anticipated level, we will need to have an ongoing dialogue with Congress on the impact that that may have, and we are concerned about the 2014 date and bringing the CEV and CLV online and in operational status. So those conversations will definitely need to take place, but we are in the process of analyzing those impacts right now.

ADMINISTRATOR GRIFFIN: Absolutely. We just don't have the final answers yet. In fact, as I said

earlier, we are paid to figure these things out, and we will be doing it.

MODERATOR: In the front, please.

QUESTIONER: Nell Boyce with National Public Radio.

Looking at the President's overall Climate Change Science Program, across Federal agencies, it looks like there is a 7-percent reduction under last year's request. The bulk of that comes from NASA with $110-million reduction from the Climate Change Science Program. Could someone tell me what that reduction represents, what is being done?

ADMINISTRATOR GRIFFIN: Well, maybe someone can, but I can't. So I will let you address that with --

Mary, do you want to take a microphone and comment on that?

DR. CLEAVE: You are talking about the Climate Change roll-up budget that comes out. Right?

Actually, within Earth Science here at NASA, we have re-balanced and put money back in since the President's '05 budget.

We do have a reduction in the overall program as

we came off of the big EOS platforms that are reflected in the overall budget, but from the President's '05 budget to the '08 budget, we actually have increased by, I think, 5 or 6 percent in the re-balancing.

ADMINISTRATOR GRIFFIN: I would say that within NASA, which is what we control, currently Earth Science is slightly more than 25 percent of our space science portfolio, which includes four separate missionaries, Heliophysics, Planetary Science, Astrophysics, and Earth Science. So I have a hard time thinking that Earth Science doesn't have a fair share of what we are doing.

DR. CLEAVE: Chris, help me.

NPP and LDCM are not in that roll-up, the CCSP climate change roll-up. So it is different. Some missions are not in there. So it is hard to compare the two.

DEPUTY ADMINISTRATOR DALE: I would just tee off real quick on what Mary mentioned. My understanding was that when Mike came into the agency and Mary Cleave became the AA for Science that there was this re-balancing that Mary just mentioned, and they actually gave me the numbers before I came into this press conference. The FY05 run-out had Earth Science as a percentage of the overall science

budget in NASA for the FY07 to FY09 time frame at about 20, 21 percent, and now in the FY08 budget run-out, those numbers are about 27 to 28 percent. So there was definitely a re-balancing in terms of a percentage of the take within Science.

ADMINISTRATOR GRIFFIN: Well, our Earth Science program is our portion of what NASA does for climate change research in the Government. That is the only part that we control.

If you want more detail, you are going to have to get off line and talk to folks.

Next question.

MODERATOR: Let's stay in the front with Tracy, please.

QUESTIONER: Hi. Tracy Watson, USAToday, for the Administrator.

You said you thought that there had been some forgetting of some of the principles cited in the CAIB report, and I am wondering who do you think is doing that forgetting, what makes you say that, and why do you think it's happened.

ADMINISTRATOR GRIFFIN: Well, I think the numbers

make it clear that in order to pursue a continuing resolution which, again, NASA is not being singled out -- that is done across all agencies -- our '06 to '07 continuing resolution means that relative to the requested level, we lose $545 million. So $700 million of that $545 million is being taken out of human space flight, and of that, nearly 600 is coming out of Exploration Systems.

So let me remind everybody again that in these early years of the Exploration Program, we are not talking about returning to the moon. We won't be doing that for a decade.

What we are talking about is replacing the capability that we have today with the Space Shuttle to get people and cargo into low earth orbit. So we are replacing our human space flight capability in these early years of the Exploration Program.

Now, the CAIB made the point, as I indicated by reading from some of those passages, that, first of all, this is a strategic capability for the United States and, second, that the Nation had lacked strategic goals for space.

Those have now been supplied, but that once

undertaken, a new program must be assured of the sustenance of resources or it to will founder like previous efforts have foundered, and the CAIB pointed out that the failure to replace the Shuttle in a timely and effective manner was a mistake of national proportions. So I surfaced those quotes from the CAIB because I thought they should be placed before us again.

Several years ago, we were all as a Nation or those of us who were involved in space policy in this Nation were extremely disturbed by the loss of the Shuttle and the loss of seven lives and the posture in which it placed our Nation, and I think it is entirely appropriate that we remember how disturbed we were at that time and that we resolved at that time to fix it.

QUESTIONER: Larry Wheeler with Gannett News Service.

You mentioned that you were going to ask Congress and the administration for specific legislative tools and policies to assist you in the transition from the Shuttle era to the new Orion/Aries. That seems to indicate that you may actually have some specific plans in mind. Could you elaborate?

ADMINISTRATOR GRIFFIN: Can you? Because I didn't memorize that list.

DEPUTY ADMINISTRATOR DALE: I didn't memorize the list either.

I don't know, Chris, if you want a go --

ADMINISTRATOR GRIFFIN: I would prefer to have you take that off line. Being the boss, I mercifully decreed that I did not have to memorize that list. We will let you guys take that off line.

MODERATOR: We are going to go right now to the Johnson Space Center for a question or two. Then we will come back to Headquarters.

Johnson Space Center, please.

QUESTIONER: It is Mark Carreau from the Houston Chronicle.

Given the continuing resolution and the current budget request, can you try to give us a best and worst case for meeting the 2014 date with Orion and Aries I and give us a kind of corresponding best and worst for the work force transition plan that you have?

ADMINISTRATOR GRIFFIN: No.

I think we said earlier we were working on that,

and I am pretty sure we said when we had it, we would give it to you. We don't yet, and when we have it, we will.

MODERATOR: We have one more from Johnson.

QUESTIONER: Does this budget proposal on the out-years for Shuttle and Station contain enough money to finish the assembly of the Space Station as you have outlined it with the international partners?

ADMINISTRATOR GRIFFIN: Yes, it does. It does because we have prioritized the completion of the Shuttle and Station. While flying the Shuttle safely, completing the assembly of the Station is our first priority.

MODERATOR: We have a question now from the Glenn Research Center in Ohio, please.

QUESTIONER: This is Karen Schaefer with NPR affiliate, WKSU.

Administrator Griffin, the '07 budget, which, of course, as you point out is full of shortfalls this year, is projected by Ohio's two Senators to be $190 million less than '06. That is a 21-percent drop. It may not be evisceration, but it is a considerable amount.

Can you tell us how you anticipate, if Congress does not approve a larger budget for '07, how this drop

will affect other programs at NASA, especially at the research centers?

ADMINISTRATOR GRIFFIN: I am not sure I understand your question. The '07 level is the same as the '06 overall level, and there are no 21-percent drops of which I am aware.

David Schurr, our Comptroller, has a response. I am obviously confused.

MR. SCHURR: The only exception to that would be the '06 budget had a couple of emergency supplementals for the hurricane response which are not included in the '07 enacted, as well as a transfer from NOA which was fairly small. So this is the base budget carried forward, the same.

ADMINISTRATOR GRIFFIN: Right. Base budget carried forward, the same. We never included supplementals for things like disaster relief in our budget computations.

MODERATOR: Let's take one more question from Glenn, please.

QUESTIONER: John Mangels from the Cleveland Plain Dealer for Dr. Griffin.

Dr. Griffin, last year there was a considerable

amount of consternation in the space science community about decisions that were made, I guess, to shift more toward the exploration budget and away from science particularly. Can you describe what the status of that particular part of the budget is this year and what you are hearing from members of the space science community now?

ADMINISTRATOR GRIFFIN: That is a broad question. Let me try to put that in perspective for you.

Yes, I hear those same things, and as I continually state, apparently to very little effect, those claims are incorrect.

The situation that Shana and I found ourselves in when we came on board with the agency was that out-years planning for Shuttle and Station had not been correctly done.

As I have often said, we may deplore what it costs us to operate the Shuttle, but after 25 years of doing so, we can't claim that we don't know what that is, and that amount had not been put into the budget. We had placeholder estimates confronting us that were incorrect.

So, within the context of a fixed top line in the agency, we had to find money to finish flying out Shuttle

through 2010 and finish assembling the Station.

I won't bore you with all the puts and takes, but when we got done trying to figure that out, the number that we needed was right around $3.8 billion.

We took $1.6 billion, as best I can recall, out of Exploration, we took the remainder out of Science, and we applied it toward the completion of the Space Station and the fly-out of the Space Shuttle.

In my comments, therefore, you can see that Exploration was also a bill payer. So, when you say that there has been a move afoot to pull money out of Science and use it to pay for Exploration, the Exploration guys would say "would that it were so." In fact, the money is being used over these years to finish out our legacy obligations on Station and Shuttle.

Now, going forward, I have pointed out, again, several times that when we came into this agency, we had a situation where forecasted or promised growth in Science was 5, 6, or 7 percent, depending on what year you are talking about, but it was in that range. Whereas, the agency top line was growing at inflation or a little more, 3 percent. So, having a component of the agency growing at

double the top line growth of the agency is not a sustainable thing to do, and we cut it back.

Science is being restricted now to a 1-percent growth until we can finish the Station, and then after that, it will be put back on pace with inflationary growth with the rest of the agency.

You asked what I hear from the science community. I hear many things about that. From some of the more mature, more experienced members of the community, I hear, well, of course, they regret it as I do, but they also understand that the United States is not going to back away from a multi-lateral commitment to the Space Station that has been sustained now over two decades. So the Station will be finished as efficiently as possible, we all hope, but it will be finished.

These more mature scientists also understand that it is simply not possible, either politically or even fiscally, to sustain 6-percent growth in one component of the agency when the overall top line is in the 3-percent range, and so the task before them is to allocate the science money being spent according to the highest priorities in the community in the different areas that we

have.

No matter how many times I have put forth this argument, which I believe is both verifiable and completely true on the face of it, there are people who seem not to want to believe it. They want to say that money has been removed from Science to pay for Exploration. It is just not the case.

MODERATOR: We have got a question from Marshall, and then we are going to go for one more at Johnson before coming back to Headquarters.

So Marshall Space Flight Center.

QUESTIONER: This is Shelby Spires with the Huntsville Times for the Administrator.

Given the proposed and possible budget shortfalls and the possibility of delays in the Aries vehicles, does NASA have a contingency plan to look at the possible use of other commercial space flight launch vehicles?

ADMINISTRATOR GRIFFIN: Well, I think you know that we have put a half-a-billion dollars into two Space Act Agreements with two companies who emerged on top of a competition we held for the award of such agreements, and that these two companies are in the business of trying to

develop commercial cargo and hopefully crew transportation to the Station.

In fact, the budget estimates that we have for their cost of service represent our nominal plan. So, when you say are we doing anything about it, I hope you are aware of those plans and that, in fact, such commercial service after 2010 and beyond to the Station is part of our baseline. Other parts of our baseline are, of course, continuing to procure Soyuz and Progress services, at least while our congressional authorization to do so exists, and that is through 2011. So we would continue to procure Soyuz and Progress as long as allowed, and then we have other international partners, the Japanese HTV and European ATV systems.

If other commercial players step forward, we are certainly in a listening mode. I think we are doing all that we reasonably can do to support that front.

MODERATOR: A question from Johnson.

QUESTIONER: Gina Sunceri, ABC News, for the Administrator.

Mr. Griffin, would you consider extending the Shuttle's life span past 2010 if you hit a real budget

crunch?

ADMINISTRATOR GRIFFIN: No.

MODERATOR: Okay. Let's come back to Headquarters now. Frank?

QUESTIONER: Frank Morring with Aviation Week.

Just a follow-up on Shelby's question. You mentioned that if the COTS or the commercial access exceeds what you have budgeted for it that you would be taking a management challenge and also you are thinking about cutting back on some lunar robotics. Is the figure you are talking about, the $500 million, and what is behind that? Do you have reason to believe that that will happen, that it will go over that $500 million?

ADMINISTRATOR GRIFFIN: No. I think there is some confusion there. I'm sorry. I wasn't specifically referring to COTS or to any specific thing.

We have, as I just outlined, Frank, a number of different channels that we are intending to exploit to get cargo and crew to Station in the post-2010 time frame. If any or all of those go over the budgeted amount, then all I am really saying is we will try to look for economies elsewhere in space ops, of course, although Gerst is

running a pretty tight ship, and we don't really think he has gotten any money squirreled away. He is pretty good at what he does.

So, if we are simply not able to find the money elsewhere within the context of a fixed top line, I have made the point that the next most expendable thing we have available is lunar robotics, and that would be the only bill payer that I can find in the context of our present suite of programs.

The $500 million for COTS is developmental money. It is not to be confused with operational money to procure services once those capabilities are developed.

The commercial services through 2012 were kept at what? $924 million?

You can get it to him? Okay. Sorry. I was just wondering how good my memory was. From your look, it doesn't appear that it was very good.

[Laughter.]

ADMINISTRATOR GRIFFIN: Frank, it is online. Chris will get you the number that we have book kept, but, again, the development money for COTS is not the same as and should not be confused with the operational money for

Station logistics in the post-2010 time frame.

MODERATOR: Let's go to Brian and then to Mark, please.

QUESTIONER: SpaceNews and Space.com.

Mike, I wanted to ask you why is it a $577-million shortfall, putting Aries and Orion schedules in jeopardy, given that we are 5 months into fiscal year 2007 and your budget projections actually show a slight dip in Exploration spending in 2008. So why is that shortfall this year causing so much heartburn?

ADMINISTRATOR GRIFFIN: Well, because it is part of an overall profile.

If you are strictly talking about the timing of the spending, you make a good point, but we look not at the timing of the spending, but the overall quantity of spending, and to lose $577 million this year of Exploration Systems content, most of which is going for Orion and Aries, to not acknowledge that that reduction in content makes things move out to the right, I think it somehow misses that point that seems pretty obvious to me.

Is there something there I am missing, Brian?

QUESTIONER: As you go from design and to

development activity, and it doesn't look like you are going in a steady ramp-up because there is a slight drop in 2008. There's 7 months left in this fiscal year. I'm just not sure why that is putting the whole schedule in jeopardy. Are there contracts you won't be able to do this year? How does it really manifest itself into a schedule slip?

ADMINISTRATOR GRIFFIN: Well, again, it manifests itself into a schedule slip because over any fixed period of time in the next few years, we will be able to obligate less money than planned to Lockheed for Orion and to whoever the winner is of the Aries competition.

So I don't know how else to say it. If I am able to give contractors less money than previously planned, work will show up on the loading dock later than previously planned.

Now, it is our job to ask the question how much later, and we absolutely will tell you that when we have it.

DEPUTY ADMINISTRATOR DALE: Brian, I would just follow on. You know our 5-year budget profile, even in the FY2007 run-out, had specific numbers for Exploration that

the program was looking at and counting on, to the extent that you can count on a 5-year profile, to actually fund what we need to do to hit the 2014 date.

The other thing that I would add in terms of the short dip in Exploration funding, there's a couple of different things, and I know that Chris can get into more detail about that, but it has to do with transfer of crew cargo from ESMD to SOMD. There was also some overhead issues and also payment at ESMD into SOMD for the Station and Shuttle shortfalls.

So, actually, I was concerned, as you are, in looking at the optics of FY07 and to FY08, and there is actually an explanation for why that is. When you take those into account, the run-out is actually very similar to the FY07 run-out.

Is that right, Chris?

MR. SHANK: [Inaudible.]

QUESTIONER: You had said that -- the Administrator, rather -- that if Aries and Constellation are not available at 2014, that that would be a problem for the Nation, where you saw it as being a problematic thing. If you could walk us through the reasons why you think

that would be a problem.

There have been these intervals before, and things worked out okay, I guess, in the end. You had suggested that that was a significant issue, so please tell us why.

Also, an unrelated thing, especially after that main camera at Hubble went down last week or the week before, is there any thought being given to scrubbing that mission?

ADMINISTRATOR GRIFFIN: Let me answer the second question first. No, we are not giving any thought to scrubbing the Hubble servicing mission, one of the reasons for which is that we are getting a new Wide Field Planetary Camera on board anyway.

I don't want to throw this figure around loosely, but my scientists friends tell me that WFPC3, we will accomplish about 90 percent of what the Advanced Camera for Surveys was trying to do anyway because, of course, it is a newer technology.

Also, we are not giving up on the thought that we can repair the ACS, and teams at Goddard and elsewhere are, in fact, looking at whether or not that is a feasible thing

to do. No guarantees at this point, but we didn't just take that lying down. So we are looking at it, but, no, the Hubble servicing mission is still on.

Now, let me address your first question about a prolonged gap in human space flight and why I think that is bad. Let me be clear. It is not that a shift from sometime in 2014 to some other time per se -- there is no specific cliff out there that you fall off of. I can't pinpoint a time when it becomes overwhelmingly difficult.

From the first, from my confirmation hearings onward, indeed when I was talking or testifying as a private citizen before being named as Administrator, I have pointed out that a continuity of human space flight capability for the United States is, I believe, important and strategic for the Nation. Not everyone believes that. If one is not a supporter of human space flight, then fine, I get that. People are entitled to their differences of opinion, but if you believe that it is important for the Nation, then maintaining and supporting that capability in a manner that can be budgeted for and depended upon, I think is logically important.

Let me give you some specifics. When you say

that there have been such gaps before and that we got through them, well, the only one of those gaps that was of this nature was between '75 to '81 where we transitioned from Shuttle to Apollo, and we got through it only because the United States is the richest of nations, but it wasn't pretty.

Our facilities at NASA and our industrial, frankly, partners, because 85 percent of our money goes to them, were devastated during that period. People were walking away from houses at our space centers, particularly Kennedy Space Center, and leaving them there. There was a brain drain from the program that we never recovered. Many people stayed through that 6-year period, and then very senior people in many cases retired after the first Shuttle flight or two, taking a tremendous amount of experience with them. Some people went into other fields completely and never came back.

In the early years, even after we did get the Shuttle going, we did not budget the programs that were done at a rate that allowed a complete fleet of vehicles to fly. Written down in black and white for anyone who cares to read it after 20-some years is the report of the

Challenger Commission noting that we were cannibalizing spare parts from one orbiter to another orbiter, so that a given vehicle on the pad can fly, but we had nothing approaching a ready fleet. We lost a ton of experience in those years.

If you don't care about the U.S. Human Space Flight Program, then obviously those things are viewed as not being a problem. I care about it very deeply. Two-thirds of our budget -- well, not two-thirds. About 60 percent or so of our budget is spent on it. I think it is very important for the Nation. We have been doing it now for nearly -- well, we are approaching 50 years. It is one of the things that sets this Nation apart from all other societies on earth. It addresses the pioneering side of our culture, which I believe we would be less if we lost, and so when I see a threat to it, I will speak out.

Now, if you ask me does that threat materialize on a particular day and time, no. Let's not be silly. It is a gradual erosion and a gradual degradation of our capability to conduct the enterprise, and a shorter gap is better than a longer one.

QUESTIONER: This is for the Administrator.

Taylor Dinerman --

ADMINISTRATOR GRIFFIN: Of course.

QUESTIONER: -- Space Review.

Yeah. A question about the NASA prizes. Can you give us an idea about how they fared in the '07 budget and in the '08 budget?

ADMINISTRATOR GRIFFIN: I can't, but I might have someone here who can. Do you know, Shana?

DEPUTY ADMINISTRATOR DALE: The Centennial Challenges is about $4 million, FY08 request.

ADMINISTRATOR GRIFFIN: Thanks.

MODERATOR: Okay. Keith again.

QUESTIONER: Listening to you just a moment ago -- well, actually very eloquently about the human space flight, our Nation, and the value thereof, even if the gap is exactly what you think it is, 2014, in 4 or 5 years, you can plan for that, but there is an aging work force that was here. It is just an inevitable thing whether the gap is shorter or longer.

Yet, you hear some comments that are attributed to you, like out in Utah last year where it seemed -- maybe it just seemed -- that you didn't seem to think that NASA

should be overtly creating the crop of future workers at NASA, much as the agency did back in the '60s.

ADMINISTRATOR GRIFFIN: That I didn't seem to be what?

QUESTIONER: You had said something, and I have to get the exact quote, but you didn't feel it was your responsibility to train students in these --

ADMINISTRATOR GRIFFIN: You are mixing apples and oranges.

QUESTIONER: Here is a chance perhaps just to speak to that because it's sort of -- it's out there. How do you deal with the fact that inevitably this agency is graying and moving to the right and eventually people are going to probably do the same thing? Wait until 2014. The CEV flies. They'll say -- I saw it with my own eyes, and I worked at Rockwell. Exactly, people walked out the door April 15th or 16th in 1981. They saw the Shuttle go. That's what they wanted to live for.

How do you build a bowshock or such that when that happens, your successors aren't left without the people to actually use these things?

ADMINISTRATOR GRIFFIN: Okay. You asked a good

question.

Of course, the presence or absence of a gap doesn't affect the rate at which our work force ages. The average age of the NASA work force is right around 50, which means that within the next -- actually, we have done the demographics on that. Within the next 5 years, about a quarter of our work force can retire, and, of course, we expect to be able to hire to replace them.

The question is what do younger people who are coming along work on if they are not trained in human space flight systems by those who have the experience, but are retiring without being able to pass on the art and the lure and the pieces of the knowledge that are not written down or capable of being written down. That we will, of course continue to hire new people, but the necessary transfer of learning, I won't say that it won't take place. It is more difficult for it to take place, and it is not my goal to make it more difficult. It is my goal to make it easier.

Now, with regard to my comments at Utah State, I think you are mixing some apples with some oranges on that one. I was asked why we weren't funding student demonstration programs. This had nothing to do with hiring

and appropriately training younger workers, and I pointed out that the external community had foisted upon NASA the assumption that it was a NASA obligation to provide rides for payloads that students had built. I said we, in fact, have no such obligation.

If we had plenty of money, it might be a good thing to do, but it should be evaluated against many other good things to do before decisions are made, and in fact, right now we don't have any money for that kind of thing which makes the point rather moot.

MODERATOR: Any more questions from the press here at Headquarters? Yes.

QUESTIONER: I have a question on ULA, the United Launch Alliance. Is the merger between the Boeing side and the Lockheed Martin side going to affect the way you choose between the Deltas and the Atlases?

ADMINISTRATOR GRIFFIN: I will give a top-level answer, and then I will let Gerst who owns our Launch Services Program comment if he wishes, but the Government has approved the merger between Lockheed and Boeing to create ULA. How we choose a vehicle will be really in part up to that consortium.

We will have payload requirements for things we wish to launch, just as we do now, and they will negotiate with us on price and performance for a particular vehicle, and whether it is an Atlas or a Delta will not be our first concern.

Gerst, do you want to amplify on that?

MR. GERSTENMAIER: You have answered it.

ADMINISTRATOR GRIFFIN: All right. So, at the top level, that is incorrect, and if you want to go to Gerst's press conference, you can get as much detail as you would like. I assure you, he can beat you in submission with facts.

MODERATOR: Any more media questions here at Headquarters or at any other centers?

[No response.]

MODERATOR: All right. Probably, beginning about 2:30, we will have the Mission Directorate Associate Administrators. It is part of a series of media teleconferences to continue our discussion of the FY08 budget. That will be in our fifth floor conference area here at Headquarters.

The reporters here at Headquarters are certainly

invited to attend those sessions. You can also listen in on the Internet by going to www.NASA.gov/newsaudio.

For more information about today's budget announcement, please visit our website at www.NASA.gov/budget.

Thank you very much for joining us today, and have a great afternoon.

[End of NASA Budget Briefing.]

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