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NASA News Update with  
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Moderated by **DAVID MOULD**,  
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## P R O C E E D I N G S

MODERATOR: Good morning from NASA Headquarters in Washington, and welcome to another in our brilliant series of NASA Updates with Administrator Mike Griffin. I am David Mould, Assistant Administrator for Public Affairs, and as you know, this is a busy time for NASA and the entire Federal Government.

There is a transition that culminates Tuesday with the inauguration of our new President, but the important work of our agency here goes on. The Mars Rovers just celebrated five years on the Red Planet after only being expected to run for just a few weeks, so amazing achievement there.

Just yesterday, as you saw in the papers today, our scientists talked about the discovery of methane and what that could mean in the search for life on Mars and elsewhere in the universe.

This year, we rolled the Shuttle to the pad for STS-119, coming up on the 12th of February under current schedules. So, in the middle of the transition of government, the work continues.

I am sure a lot of us across the agency have got

some questions for Mike, and we will go around to the centers and here in D.C.

So, without any further from me, NASA Administrator Mike Griffin.

[Applause.]

ADMINISTRATOR GRIFFIN: Thanks, David, and thanks to all of you who are here or listening.

I am officially on duty until noon, Eastern Time, on the 20th, but the government is closed down on Monday and Tuesday for all the obvious reasons. So today is my last chance to visit with everybody, and I thought I would finish up my term in the way that I started, talking to the NASA employees in an All Hands.

I have several things I want to cover, but the first of them is we have a late-breaking Culture Survey result that I am going to capture here in about two slides, given my penchant for the bumper sticker versions of things, but it is something that I think everybody at NASA ought to be real proud of, especially Toni Dawsey for helping to elicit all this information and measure where we are.

If I can have the first slide. Oh, that's

convenient.

[Laughter.]

ADMINISTRATOR GRIFFIN: Oh, thank you. It wasn't up there, the last time I looked.

Since '02, we have been participated in government-wide surveys to gage attitudes and impressions of employees in critical areas like leadership and learning and results-oriented performance, culture, and talent management, and we have always done well, but in the last three to four years, we have been increasing.

This is the latest result. I think it is really pretty good. If you look at where we are and at the trends, you can't be anything but pleased. We want to see those trends continue, but it is a good place to be.

I would like to see if we could put these on the website, so that people can look at them at their leisure, and, Toni, I know you can arrange for that. So I think that would be a good thing to do.

If we can have the next slide.

I think particularly significant on this slide is the trends are good, as they were on the previous slide, but in some cases lesser numbers for the trends. But look

at where we start: 91 percent of the people that I work with cooperate to get the job done.

How would you rate the overall quality of work done by your work group? Ninety percent.

I know how my work relates to the agency's goals and priorities: 87 percent.

I have to tell you, most places I have worked, if 87 percent of the people knew what we were trying to do, we could just stop right there.

[Laughter.]

ADMINISTRATOR GRIFFIN: I am following the old thought about in any organization, there is always 10 percent who are absolutely full bore ready to go, 80 percent who can be moved in the direction you want them to go, and 10 percent who haven't got a clue. So, right off the first crack of the bat, we are approaching my rule for about how well you can do.

These results are a credit to the supervisors and managers throughout our organization; in HR, of course, for working hard to baseline where we are and understand where we are. Measuring where we are is hard, but it is a credit to the leadership at all levels throughout the agency that

we have been able to generate results like this.

So, Toni, thanks for your part in this, but for everybody who has got some kind of a management job in their title, thanks to all of you.

So that is great. I am done with slides. As part of that culture, though, I would like to show you something that Bryan O'Connor offered to me the other day; that is, if I can get it out of its box.

It is a NASA coin, similar to what the DoD uses on many programs and institutions, and on the front, it has the NASA meatball, and on the back, it says "Yes, If."

Now, I am honored that Bryan gave me the first of these coins. What Bryan did was he picked up on something I had said sometime back. I am not sure what it was in connection with. It could have been Hubble servicing mission, but I made the point that we wanted to find a way to get to yes, and Bryan trumped those words down into something a little bit briefer and more memorable and said, we need to be a "Yes, If" kind of a culture We can do it, and here is what we have to do to do it, instead of "No because."

My father was an accountant, and he raised me

this, that there were two kinds of accountants, one who knew all the rules and could find a way to do what you needed to do and another who knew all the rules and could find a way to tell you know.

We need, of course, to be the kind of organization that can find a way to say how we do things, and so I love this coin. Thank you for giving me the first of them, Bryan. I will treasure it.

I would like to see in NASA, this become something like the Silver Snoopy, the most coveted award in NASA that the astronauts give to people who have really helped in some way ensure mission success and mission safety.

I think your organization can serve as a place to identify people who deserve to get a "Yes, If" coin. It should become a mark of honor.

These things work. They can work positively and negatively. There was one program, I remember, that I worked on the DoD side many years ago where we had a rather infamous lead brick, and the lead brick would find itself on the desk whoever was the current tent pole in the program on the way to the pad. This was a program for

which schedule really mattered, and the lead brick was desired to be avoided by all parties.

[Laughter.]

ADMINISTRATOR GRIFFIN: But I think we all know that carrots work much better than sticks. So this is a carrot, and I would like to see it become a prized medallion on somebody's desk, on anybody's desk at NASA that has it. I think it was a great idea, one of many thoughtful ideas that Bryan has offered in my time here.

I have another little thing. Is Rebecca Spyke lurking somewhere in the audience? You probably think you don't lurk. Right?

This is a NASA Office of Exploration sign which hung on my door when I was an Associate Administrator here back in the early '90s. When President Clinton got elected, one of their first public statements was, from our point of view regrettably, that space was not a priority for that administration. That was uttered by Jack Gibbons, the Presidential Science Advisor in their first testimony, and shortly after that, this office ceased to exist, and the sign came off the door.

But Doug Cook rescued it and stored it away for,

at that point, 10 years, I guess, and when I came back to the agency, he brought it in and said, "Here. I've been saving this for you."

So, as I say goodbye and thanks, I want to offer this to the Office of Exploration for future custody.

Rebecca, thank you. Take good care of it.

MS. SPYKE: Thank you.

ADMINISTRATOR GRIFFIN: See that no harm comes to it.

MS. SPYKE: We will keep it safe.

ADMINISTRATOR GRIFFIN: Keep it safe. Thank you.

[Applause.]

ADMINISTRATOR GRIFFIN: In one form or another, Exploration is what NASA is about. There is, in my view, no legitimate function in government for an agency like NASA that isn't leading the way.

If we, NASA, are behind you 95 percent, then we are in the wrong place. So that sign says, I think, what we are all about.

I made a few notes because I didn't want to forget any more people than I have to forget, which will inevitably be some, and so, if I forget you as I say

thanks, all I can ask is forgiveness.

I want to start with Shana who has been an extraordinary Deputy. I wouldn't be my Deputy for anything.

[Laughter.]

ADMINISTRATOR GRIFFIN: I mean, if there is a job in the world you don't want to have, it is being my deputy because you are constantly having to explain, "Well, he is really not that bad, once you get to know him," and "What he really meant to say was" and, you know, "Well, Mike should have used inside voice on that one, but" --

[Laughter.]

ADMINISTRATOR GRIFFIN: But Shana took care of running a lot of the parts of the agency that I am not best suited to do and which are difficult. She ran the Operations Management Council and took a lot of spears that would have otherwise come to me and made great decisions and was always willing to change her mind in the face of new data. I don't think a better job could have been done by any of the people who did aspire to the job when I was working through selections for Deputy, and so I thank you.

Many others on the list. I need to be briefer,

but Chris Shank, who I enticed to come over here from the Hill and to whom we gave the Outstanding Leadership Medal yesterday, deserves that medal. Chris has fulfilled several different roles in our four years here, none of them a role that anybody in their right mind would want to do.

[Laughter.]

ADMINISTRATOR GRIFFIN: "That's for sure," he says.

Helping to create and then run a budgeting process in a more formalized and inclusive way than I think NASA had ever have, running Strategic Communications, and in fact, helping to honcho the ESAS Study in our earliest months, and then spreading the results of that study, communicating those to the Hill and to industry.

Everything Chris did came with lots of complaints, no question. I wouldn't say it was without complaint, but everything he did was done with the utmost in loyalty and a total commitment for all of his waking hours. You couldn't ask for better, so thank you.

Bill Bruner in Leg Affairs. I think Bill is actually in transit today to his new job. Brian Chase,

before him. Both did a great job in carrying our message to the Hill. When the current management team walked into office, it is no secret to anyone who follows Washington politics at all that NASA was not their favorite child, and for the last couple of years, the Congress has been trying to give us more money than the President would accept.

That is a stunning turnaround, and it is largely due to the unremitting support in Legislative Affairs, both by the heads of those activities and by key folks like Mary D. Kerwin, Margaret Hemenway, Margaret Kieffer, Kurt Stamer, and many others, just unremitting support for our programs and our efforts, and I would say when I talk about that, much tougher for the career folks who have to adapt themselves to, every time there is a change of administration, at least some change in the plan and then still carry the message forward, and you all have done it admirably.

Paul Morrell, I met shortly after I was offered the job and before it was yet public, and I knew immediately upon meeting Paul that he would be a perfect Chief of Staff, and so he has been. He has known how to do that from working on the Hill on both the Senate side and

House side and in the White House in the Executive Office of the President, at the National Security Council, Department of Energy.

Nobody put more of himself into the job and yet, at the same time, left any personal agenda out of the job than did Paul, and I could really say the same about David Mould, standing up here.

You know, you can sit down. You don't have to stand there for 40 minutes.

[Laughter.]

ADMINISTRATOR GRIFFIN: Unless you have been sitting too much lately and need some exercise.

David has faithfully conveyed messages, acted with honor and integrity in every press interaction we have had and every media interaction, and we have had some tough ones, as you all know who stood with us when we were dealing with accusations of malfeasance on air traffic surveys and inebriated astronauts and other bizarre events.

David has stood firm, and I think you.

Ron Spoehel, another of our political appointees, but really, you should just ought to be a career person because you are really knowledgeable.

[Laughter.]

ADMINISTRATOR GRIFFIN: A bit of an inside joke there.

Ron is the best CFO NASA has had since the CFO Act was passed requiring a chief financial officer to be a political appointee. I rested easy once we got him on board, and the outside auditors' opinions have said the same. We need you at NASA. Thank you for your efforts.

I need to thank some people who aren't here anymore. In that category is Scott Pace. I once said Scott's brain is a national treasure, and it is. He is now safely ensconced over at George Washington University where I hope he continues to annoy people with interesting ideas.

[Laughter.]

ADMINISTRATOR GRIFFIN: Rex Geveden. Before I get to Chris Scolese, I will comment that Rex may not have been a better Associate Administrator for the agency than Chris. They are different people, and both have filled the job admirably, but I have never worked with anyone whose mind worked more like mine than did Rex's, who was more inside my head. It was possible for me to finish a thought for Rex, or he for me, without a discontinuity, and that is

rare in a colleague, and I valued him greatly and miss him still.

Doc Horowitz. Doc is one of the greatest engineers I ever had the chance to work with. I haven't had a chance to fly with him yet. I am sure he is an equally great pilot, somebody as completely possessed of integrity as anyone I have ever known. The agency is, I think, a poorer place in his absence as well. Doc could have done 10 different jobs here and would have done them all great.

Lisa Porter, another person that was invited to leave NASA to head up her own new agency, as fine a mind as she possesses, as fine a mind as anyone I ever worked with and somebody also who she could speak for me anytime because she was inside my head, knew what I was thinking, understood, and could communicate that message. She really helped turn around Aeronautics, and Jai Shin continues that, but Lisa made seminal changes.

I mentioned Chris Scolese. You would have to work hard to find a better human being anywhere, and you could work a long time and not be successful. I have long thought that the structure used at NASA in the first 15

years of our existence, wherein we had, effectively, a chief operating officer -- we would call them an "industry" at NASA; and government, we call it an "associate administrator," not for anything, just associate administrator -- that that function which ties together the missions and the centers was vital. I reinstalled it on my first day back. I hope it continues.

I certainly didn't think it up. Keith Glennan, NASA's first Administrator, thought it up. Bob Seamans filled that role for many years, and since then, other people did. It went into a long period of disuse.

I think the structure in this case does matter. No one could be doing a better job at that than Chris has done. He will be your Acting Administrator in between and during this time of political transition. You could not ask for better. You could not ask for better. NASA couldn't be in better hands. So thank you, Chris, for just everything.

Going down to some of our Associate Administrators, Doug Cook, I have known Doug for 20 years.

I worked with him as a professional colleague in many different roles, again, another of the many people in NASA

about whom it can be said that there are no better people.

Doug is a great engineer. He doesn't always say enough to let you know that he is a great engineer, but the more you get to know him, the more you realize that that is true, and he is another of the people who have no agenda, but NASA's best in mind.

You can take those remarks about Doug and clone them for Bill Gerstenmaier, another person who I don't know whether I was inside his head or he is inside mine, but it seemed almost impossible for us to have any sort of professional disagreement about how things should go. If you had to bet your life on somebody, Gerst would be a great choice. There are a lot of people in the Astronaut Office who do have to bet their life on somebody, and there is not a better choice than Gerst.

Jai Shin, I mentioned. Jai has continued a program that Lisa established in Aeronautics and added some great efforts of his own. He comes from the centers, which means he knows something, and we are glad to have him here at Headquarters.

Ed Weiler. Ed, I think, is somebody that I knew in a different role, in my last incarnation at NASA. Ed

was involved with Space Telescope for most of his career, came to Headquarters, has been a Headquarters guy for a long time. I think he is now a richer and wiser Associate Administrator for the time spent running a center for several years. There just is no substitute in terms of management expertise for having been in the field, for having been at Headquarters, and for having had institutional responsibility, as well as center responsibility.

Most of our senior managers now fill that bill, and I think it is crucial. It is possible for a really gifted individual to skip a step or two, but it is not easy, and Ed hasn't skipped any of the steps and is as fine an Associate Administrator for Space Science as we have had or will have, and science is in good hands.

Mike Hawes. When Scott Pace left as the guy who created Program Analysis and Evaluation for me, I knew that Mike Hawes was really the only person who could do it. Again, I have known Mike since Space Station days, you know, redesign days 20 years ago -- well, not quite that long, but close. I have known Mike forever, since we both had a lot more hair and it had a different color, and

again, somebody possessed of complete integrity, quickness of mind, breadth of experience, breadth of skill.

NASA needs a PA&E. We need to have our own independent look at what we are doing. It needs to be done. It needs to be done with love and concern for the agency, not with the goal of finding the warts and playing "gotcha" games, and Mike does it in the right way.

There are no organizations, certainly not in NASA, that don't have problems every moment of every day, and there are no organizations about which something couldn't be done to fix them. We need to be looking at that ourselves, and it is very hard to self-assess. We can't do that from a center or from a mission directorate or from a program. We need a, quote, "outside evaluation," and yet we need to police our own camp. That is the function of PA&E, and nobody could do that better than Mike.

I can't leave Mike without comment on Trish Pengra, Scott Pace's Deputy, Mike's Deputy. I don't know where I would have been the last four years without Trish's assistance.

To the centers, Pete Worden, again, somebody I

have known for 20 years, you can't put Pete in a box.

[Laughter.]

ADMINISTRATOR GRIFFIN: You can't even describe Pete really, but we are better off at NASA for having him, and Ames is better off for having him. If we can paint the white lines wide enough, we can get Pete somewhere in between them, but the heart is always in the right place, and if you start with that, then you are good.

Kevin Petersen, an able steward of Aeronautics at Dryden, none better, an engineer's engineer. I regret that I didn't get out to Dryden more because every time I would ever go to Dryden and get a chance to see real hardware and touch my roots, I felt better for it.

Woodrow Whitlow. Despite the fact that he doesn't say much, anything he says is well worth listening to and continues to be convincing proof that they don't hand out MIT Ph.D.'s to people who aren't pretty worthy of doing it, and you don't find them on the backs of cereal boxes. Woodrow has been a huge asset at Glenn, just as he was a huge asset at KSC and at Langley before that. He has really helped turn things around at Glenn, again, another person that you just trust completely.

Which takes me to Rob Strain, somebody I have worked with in three different incarnations. We are enormously fortunate to have Rob now running the Goddard Center. Rob is a guy that you could ask to run anything -- anything -- and you would be doing well for yourself. I don't know many people like that. Rob's degree is actually in business administration, and I don't know very many people in business administration who have fulfilled so many roles in our industry, in government, in the laboratories, and in industry and done it so ably by the judgment of all who serve with him. There are very, very few people who can cross the kinds of boundaries that Rob has crossed and do it well, and I salute him. I am thrilled that we have had some months to work with him.

It has often been said that since Rob and I were and are friends that I brought him here to NASA. The funniest part of that is I never even thought about it because I am not usually in the mode of appointing friends.

It was Chris Scolese's idea to ask Rob to come and run Goddard when we moved Ed back to Headquarters.

So, for Chris, another source of thanks for a real good idea that I should have thought of and just did

not.

Charles Elachi, no better technical mind in the agency, no better steward of JPL, a difficult position. JPL has to be NASA, and yet we have to remember that there are some aspects in which we simply cannot treat an FFRDC as if they are a government badge-wearing entity, not that we wouldn't want to, but that Federal procurement regulations don't allow us to. Charles understands both sides of that line as well as anybody and manages JPL to be NASA where he can, so thank you.

Mike Coats, Bob Cabana, two refugees from the Astronaut Office.

You're welcome, guys.

[Laughter.]

ADMINISTRATOR GRIFFIN: If you had an entry in the dictionary for "center director," it would have a picture beside it of these two guys. We haven't had better folks running Johnson, and of course, Bob was formerly the Johnson Deputy and the Stennis Center director. We have had many great directors at Kennedy Space Center, going right back to Kurt Debus who was on the original von Braun team. We have had many great center directors at KSC, many

great center directors at Johnson, going right back to Bob Gilruth whom I remember as the first Johnson Center director, but we haven't had better than we have today, and we won't.

Lisa Roe, another person whose picture would be in the dictionary if you had a definition for "center director," Lisa just gets the job done. It happens without you even noticing it. She nurtures her programs, nurtures her people, works for NASA, the collective NASA, every day, never just for Langley, and you can talk to Lisa for five minutes and pick up that fact.

Ralph Roe is in the position I was in before I took this job. As I said, this is the first time I ever had a job where more people in the business knew me than my wife, but Ralph Roe as the head of the NASC has done a wonderful job, and the only reason we can't move Ralph and promote him is we would have to move Lisa, and we can't afford to have Lisa leave Langley. So there is a great team down there.

Dave King. I didn't know Dave in previous incarnations, had a chance to get to know Dave well in this incarnation. I am delighted that he chose to remain at

NASA and give me a try as Administrator because he didn't have to do that. With Dave, you can always count on a thoughtful analysis of any topic on the table and a willingness to say, you know, "Hey, Mike, I'm not sure that's right" or "Have you thought about this, or have you thought about that?" And that is invaluable.

There is nobody in the management team who is a cigar store dummy, and least of all, Dave King, and any comment that comes from Dave is going to be a thoughtful one that you really need to listen to. And you listen to it, you can make a decision, and when the decision is done, Dave will support it, whatever it is. You can't ask for better.

Gene Goldman. Living down at Stennis in the wake of Katrina even three years later is still a sacrifice. Gene has made that sacrifice first as Deputy under two center directors and now as the center director of Stennis, a wealth of rocket engine expertise, and guess what, Stennis is where we test rocket engines, one of the last two places in the United States where we can do that.

When we moved Bob Cabana over to KSC, I am delighted that Gene was willing to stay with Stennis

because that center needs the continuity. It is crucial to our future plans. We are not going anywhere without an upgraded RS-68. We are not going anywhere without an upgraded J-2 engine. We need places to test engines and expertise to do it, and we need Gene Goldman.

At Headquarters, Mike Ryschkewitsch is somebody I first met actually on the Advisory Board at the University of Maryland's Aerospace Engineering Department, and you can't know Mike Ryschkewitsch without knowing that he is about the best engineer you ever saw, and again, somebody who has no agenda but getting the job done. We are fortunate today to have Mike as the agency's Chief Engineer. He is the best one we have ever had, and I am a former NASA Chief Engineer, and so is Chris over there. I am proud to say that I appointed the best Chief Engineer we have ever had at NASA. Thanks. The agency is well served when Mike speaks about a technical matter to listen to him.

Bryan O'Connor, same thing can be said about safety. Along with me at an earlier time, Bryan is one of those people who left the agency when things were not going in a fashion that we thought they had to go for the safety and proper stewardship of our enterprise. It takes a lot

to do that, and Bryan did it and then came back when the nation called.

Bryan O'Connor is a person running the safety organization that no one who meets him can fail to trust, and if you are going to have quality at running safety that has to be there, that is the quality. He has put his own life on the line in service to the country as a military pilot, astronaut -- and we all know that -- a long-time Marine officer, and puts his career on the line with every Shuttle launch. It would be hard to be better served. I am honored to have worked with you twice.

Mike O'Brien runs International, External Affairs really or outreach internally and internationally. I have worked with an awful lot of people in different roles in government who handled external relations, whatever you want to call it, an awful lot of such people because I have had those level of jobs. Nobody could do it with the flair that O.B. does it. It just can't be done better, and I am privileged to have served with you as well, O.B.

Mike Wholley. I can't imagine a better General Counsel, another former Marine. I have done awfully well in my career associating myself with former Marines. God

knows why, but I have.

[Laughter.]

ADMINISTRATOR GRIFFIN: And Mike is another of those.

Always there to explain to me why what I wanted to do wasn't quite legal, but if I would stick with him for a moment, we could find a way to make it legal, and one of the people who laughed when I said one time, you know, sometimes you just have to rise above principle.

[Laughter.]

ADMINISTRATOR GRIFFIN: When I was a boy living in the South, that was actually a fairly common saying, but I have now gotten so old, nobody remembers it. But Mike understood. So maybe we better think again about that General Counsel position. It is a pleasure to serve with you, Mike.

There are so many other people I could thank. One of them is sitting there, staring at me, Bill McNally who runs NASA Procurement. I served with Bill in the Defense Department and thought of him then as the best procurement officer with whom I had ever worked. I am pleased that he was willing to, once again, accept a

government salary and come to work for us. If you know what you want to buy and you know what you are trying to do, Bill can find a way within the FARs to buy it for you, and he will do it in as nearly bulletproof a manner as it can be done. So thank you, Bill, for coming back.

There are too many others, and I don't have enough time. I could be sitting here thanking people until hell froze over, and I wouldn't get to the end of the list for all the people who have offered support for our program and for me while I was here at NASA in this incarnation.

I am, despite what you read on the blogs, not actually an idiot.

[Laughter.]

ADMINISTRATOR GRIFFIN: I am aware that there are, of course, quite a number of people out working for our agency or in our industry who didn't think the things that I was doing were the right things or who did question motivations or the logic of the path that I took in making decisions. That is always going to be true. It can't be helped.

As I often say, I have a difficult user interface, and it is possible, it is quite possible that

somebody who was a little bit more able to connect with people would have had fewer folks in the camp of those who just don't agree with what you are doing and where you are going, and if I have one regret -- I am often asked do you have any regrets for your time at NASA -- the one I would say that I honestly would have is that I could not have managed to persuade an even higher percentage of people to the view that the things we were doing were the right things, given our policy guidelines and our governing constraints.

In top management jobs, the single most valuable skill really is always an ability to connect with people, because I don't really do anything except hire people, put them in certain jobs, and then trying to communicate to them where we are trying to go and why, so that they can do their work. I really do nothing, and so the ability to connect with people is crucial, and if I have a regret, it is that I couldn't connect with more of you.

I know that your disagreements with me and the many who expressed them were not out of evil intent. They are out of honest disagreement, and yet, of course, I always felt like any decision I made was based on logic.

So, if we were not able to connect, it is because we are just talking past one another, and I regret that, but I do want to thank all the others who thought we were on the right path and threw your shoulder to the wheel to make it happen. I want to thank you for that, wherever you sit, because it was an enormous pleasure to work with you, every single person.

Every time I could go into a Design Review or a Flight Readiness Review or a procurement discussion or a legal issue that we had to settle or something where we had to deal with strategy for external communications or relating to Capitol Hill or institutional management concerns, personnel, it didn't matter where it was, there was always so much support, and I am truly grateful for it.

I am well aware that as a political appointee -- this is not my first time in government by a long sight. I am well aware that as a political appointee, it is very, very easy for the career staff to adopt what I call the belief in the hereafter, "I'll be here after he's gone."

[Laughter.]

ADMINISTRATOR GRIFFIN: And when that happens, the agency can't get anything done because you are at odds,

and that, by and large, didn't happen in my four years here, and I am grateful to you.

Which takes me to the close of my remarks and the things I wanted to say. Thirty-five years ago when I was in grad school, I had just transitioned from being a part-time grad student to a full-time grad student, so I could actually finish my Ph.D. before the Earth cooled. It is a hard job doing it part time. We were actually still flying Apollo Sky Lab missions and Apollo-Soyuz was yet to do, and we had just come off of Apollo. I was in aerospace engineering at University of Maryland, and I was in the company of a number of international students, along with a number of folks who, of course, were domestic students, and sometimes we would sit around, as grad students do, with bull sessions.

Many of the international folks, who were some of the sharpest people you would ever want to meet, we would ask them, "Well, why did you come here?" They would say, well, in many cases, their opinion was that up, certainly, through high school and maybe even through undergraduate school, in many cases the educations they were able to get abroad in that era were as good or better than that which

we could offer in the United States, but when it came to grad school, the United States was, from their point of view, heaven, and they wanted to graduate from a U.S. institution. I hope that is still true. We want that to be true.

We would get into talking about reasons for the success of the United States at that and many other enterprises like Apollo, which we were still flying. One guy, who is a friend yet today and was particularly thoughtful, commented to me that the reason NASA and the United States was so successful was that despite the fact that we all had individual differences about how to do things, that for the most part, the center of mass of the country could find a way to leave their differences aside and cooperate and collaborate toward a common goal, and he thought that was really the secret of American success, not that we were smarter or better or harder working than anybody else, but that we would, by and large, row in the same direction.

And I remembered that because over the years, over the decades since, I had many, many opportunities to work internationally, and I could observe the difference.

I could observe the difference, and I realized what a great strength that was of our country, and certainly, it is a great strength of our agency when we can do that.

Now, in the 35 years since then, I mean, Watergate was still going on when that statement was made.

In the 35 years since then and more, we may have lost in this nation, some of that national comity that is necessary to conduct great enterprises. I hope we can get it back, and I certainly hope we can have it at NASA because most of what we do falls under the category of great enterprises.

If you want to land a Phoenix Rover at the Martian North Pole or near the Martian North Pole, that is kind of hard to do. You can't buy one of them in the store. It definitely comes with some assembly required.

You want to put people into space, and that is not so hard. Getting them back alive is tough. That is a great enterprise. Even after 50 years of doing it, that is a great enterprise.

So we need that common spirit of being willing to put aside differences and collaborate toward a common goal.

If we don't have it, the agency won't function.

So, as we come to a time of transition, what I

want to ask of everybody who supported me and those who didn't is try to find common ground with the new leadership, whatever that is, whoever that is, and whatever it is we are asked to do as an agency.

I remind everybody again, Federal executive agencies in a democracy do not make policy. In fact, it would be a dangerous lapse in government if we did. It is nice when we are asked for our opinions on what policy ought to be, but we don't make policy. We carry it out. Policy is determined by elected and appointed officials in the executive branch and elected officials in the legislative branch. Those two groups have to work together to hammer out some kind of a common set of direction to the executive branch agencies, and then we strive, should strive to do our best to carry it out, whatever it is.

NASA will look great, whether we are asked to return to the Moon and establish permanent presence there and go to Mars, as I think we ought to be asked to do, or whether we are asked to carry out some other task. We as an agency will look great if we put our efforts behind carrying out that task, whatever the task is that we are asked to do, with all of the spirit and the technical

acumen that I know we as an agency can bring to that task.

So, in a time of transition, it is important to remember that job one at an executive branch agency and especially at NASA where we do carry out great enterprises, job one is to collaborate, to cooperate in carrying them out, and support whoever is next appointed to be the leader of the enterprise. If you can do that, that person will look good, and the agency will look good, and it is a win-win.

If you can't support the agenda, then the proper thing to do is to leave. There are many different things that you could do with a \$17.5 billion NASA civil space program. You could do a lot of different things, and they would probably all be good, but what we can't do is squabble and fight, you know, and in the famous phrase, "circle the wagons and shoot inward." We can't do that and produce a result, any result.

Our job is to produce the result that our legislators and elected officials ask us to produce. So I ask you to do that for the next head of the agency, as well as you have done that for me, and not for me, but in following our enabling legislation while I have been here.

Thank you again for doing it.

I think we have maybe 10 minutes, if anybody has got any questions. I can probably head off at least one by saying I have no idea what I am doing next.

[Laughter.]

ADMINISTRATOR GRIFFIN: It is really hard to hunt for a job while you are running NASA. So I have no idea what I am doing next. So that takes care of that question.

David, if there are any, I am happy to answer them.

MODERATOR: All right. We have got microphones coming around. We have also got folks standing by at centers. I got a ton of questions people e-mailed in, which I am sure we won't get to even a fraction of them.

So wait until you get the microphone, and let's get going.

ATTENDEE: Mike, if I go back to the first slide you showed on the Culture Survey, I was looking particularly at the marks on communications and integrity.

Good trends, not bad scores, ways to improve, but it is a little bit at odds with everything we read in the popular press this day on Blogosphere about stifling internal

dissent and discouraging our contractor community from bringing up alternatives and issues.

Would you care to comment?

ADMINISTRATOR GRIFFIN: Yeah. Actually, I should have just answered that without a question because that is my second most asked question. Thanks.

Yes, those two things are at odds. I think anybody who has a chance to sit in on a NASA management council meeting these days would realize that if I am trying to stifle dissent, then I must be the world's worst dissent stifler in the history of man because we have plenty of argument. I mean, that is what we do. We argue, and we come to a decision, and I think everybody internal to NASA knows that.

Outside NASA, I guess I would say two things. First of all, I would remind everybody that with regard to advocating NASA's agenda in the world, my job is to marshal a limited set of resources toward accomplishing goals set forward by the President and the Congress. I mean, that is what I am supposed to do. I try.

Now, in terms of what contractors and others are allowed to say or can say, every piece of written or verbal

communication I have ever offered has been to the point of you can say what you want. You have a First Amendment right to petition the Congress. I wouldn't want anybody not to have that right.

My job is to communicate what our plans are and to make sure that I understand if people are willing to tell me what it is that their view is. If I can persuade them to my view, I will, but in every single communication I have ever offered, I have made it quite clear that heads of companies, private citizens are utterly free to communicate whatever view they want. I don't think there is a counter example on record.

There may be some disconnect in that it is pretty easy to envision a scenario where I am communicating, as I should, with the heads of corporations or their immediate direct reports. I don't pick up the phone and call somebody in the middle of the chain of command at Lockheed or Boeing or Northrop Grumman. I mean, I don't do that. That would be inappropriate. I talk to the head of the chain of command as the head of NASA, and if I am hearing things that are at variance with what the head of that company has told me, then absolutely, I will bring it to

that person's attention that, you know, hey, so and so, I was on the Hill the other day, and I was apprised that your guy or gal is saying X, whereas you have been saying Y, either one is okay, but what is your position. That can happen, and then as it happens to me, I frequently get calls from industry saying your guy down at, you know, Stennis is saying such and such a thing and is that true because it is at variance with what you have been saying.

So there absolutely is a lot of communication back and forth in an attempt to make sure that we understand what each other's messages are, but I have just never tried nor have I ever allowed anyone to try to shape some corporation's or individual's message for them. It just hasn't happen, and if somebody thinks it has, I would like them to bring forward the counter example.

The engineering community can't survive -- any engineering community -- without free and open dissent and discussion, willingness to argue. We also can't survive without when the argument is done, let's get busy on implementing the decision.

Other questions?

MODERATOR: Anyone here?

[No response.]

MODERATOR: Okay. We have got some folks standing by elsewhere. So let's go to Goddard then.

MR. STRAIN [via telephone]: This is Rob Strain at Goddard.

Representing the colleagues here of mine, I wanted to wish you, Mike, godspeed, good luck, and a special thanks for your support to the center and our scientific endeavors here. Thanks for your support and your leadership. Good luck, Mike.

ADMINISTRATOR GRIFFIN: Thanks. It didn't sound like a question, but thank you.

[Laughter.]

MODERATOR: We have folks standing by at Marshall also with, I guess, their questions, but anyway, on to Marshall.

ATTENDEE [via telephone]: Yes. As your time as the Administrator, which of the agency's accomplishments are you most proud of?

ADMINISTRATOR GRIFFIN: Well, I think the way that we have managed to pick ourselves up after Columbia and find technically solid ways to return to the Shuttle to

flight -- and that sure was hard -- and to get on with finishing up the Space Station, keeping our commitments to do that. We have picked ourselves up by our bootstraps, put first class managers in place at centers and in the mission directorships and moved forward, and nothing, nothing in the world is harder than picking yourself up after a cataclysm like that and moving forward, and we have done it. I am proud of us all for having done so, without losing and without breaking some of the things that were going well.

I mean, space science was going well and continues to go well. We managed not to break the good stuff while we were trying to fix things that were hurting.

So I am very proud of us for that.

MODERATOR: Okay. Further questions here?

[No response.]

MODERATOR: Okay. Then I have got a couple on my e-mail list. We have got time for one or two more.

ADMINISTRATOR GRIFFIN: Sure.

MODERATOR: This one is an e-mail in from Marshall. Has the incoming administration given you any hints to the future of the vision of the Exploration

Program or other projects approved by the current Congress and President?

ADMINISTRATOR GRIFFIN: No.

[Laughter.]

MODERATOR: All right. That gives us time for another one.

[Laughter.]

ADMINISTRATOR GRIFFIN: Maybe two more.

[Laughter.]

MODERATOR: Okay. I got so many of these things. Let's see.

ADMINISTRATOR GRIFFIN: Don't ask the one about "have you stopped beating your wife" type questions. Those are always tough to answer.

[Laughter.]

MODERATOR: All right. Well, that eliminates a lot of them.

[Laughter.]

MODERATOR: Let's see. Okay. Here is one that says do you have a prediction on when China will circumnavigate the Moon. Will it take something that dramatic to get the resources and support we need to

further human exploration by the U.S. to a level greater than we are now at?

ADMINISTRATOR GRIFFIN: Well, I have no idea about the second part of that question, you know, quote, what would it take to generate more resources for NASA. That is not -- I just can't figure that one out.

I believe that China will have the technical capability to circumnavigate the Moon, could have it in 2015, 2016. The Shenzhou, with a little bit more heat shielding, is intrinsically capable of an atmospheric entry from lunar return, and once China has the Long March 5 deployed -- and they are working vigorously on it, and they have previously demonstrated dual launch processing capability -- a circumnavigation of the Moon could be done with two Long March 5's, one carrying a Shenzhou and one carrying an upper stage. So, technically, they will be able to do that in '15 or '16, in my opinion, and I don't even think that is a hard stretch.

Whether they will choose to do it or not, of course, depends upon the goals of their political leadership, but if the question is technically able, middle of the next decade, my opinion.

MODERATOR: Okay. Here is one that came in an e-mail from JPL. With yesterday's discussion of methane on Mars fresh on everyone's mind, I am curious to your thoughts about life in the universe. We see tiny bits of evidence here and there. Do you believe we will ever find definitive proof, and do you believe there is intelligent life out there?

ADMINISTRATOR GRIFFIN: I have no idea about intelligent life because I haven't established that there is any here.

[Laughter.]

ADMINISTRATOR GRIFFIN: My personal assessment based on what I know scientifically, which is not as much as some of our experts in the field, I would be very surprised if we didn't find life elsewhere, and frankly, I expect to live to see it.

I would not be surprised to find -- in fact, to be honest with you, I would be surprised to find that life never originated on Mars, and I wouldn't be terribly surprised to find evidence of dormant or quiescent life underground. I would not be terribly surprised to find that.

I certainly think at some point, as we develop better ways of looking at planets around other stars -- and those are just around the corner -- as we are seeing and being able to measure actual spectra of planetary atmospheres around other stars, we are going to find signatures of life. I believe that we will. I will be scientifically shocked if that is not the case.

MODERATOR: Here is an e-mail question from Dryden, assuming there is no hands going up still here. Because all of us at NASA are a little bit grayer and we have got sort of an older than average workforce than the rest of the world, this question is: What do you tell young people who are interested in an aerospace career?

ADMINISTRATOR GRIFFIN: Well, I tell them that the fact that the average age in aerospace is around 50 these days -- and I don't know exactly what it is, but it is very close to that -- that is an opportunity, not a threat.

[Laughter.]

ADMINISTRATOR GRIFFIN: Older folks are going to be retiring in droves. If you are a tail-end baby boomer, you are getting to mid career and beyond. I am a

leading-edge boomer, born in '49. So an awful lot of people are going to be retiring, and I think if I were a young person today and were interested in aerospace, I would consider it a great potential career, and I would use the opportunity to learn from those who are older while they are still around because as young folks today mature in the aerospace profession, any piece of it, there will be opportunities. By the time they are in their mid to late thirties or early forties, there are going to be so many opportunities just created by the demographics of retirement of my cohort, that they will have great careers in front of them.

MODERATOR: One final question here. I am going to pick this one from the e-mail list, just because as the Public Affairs guy, I just love this question. It is from Johnson. It says 89 years ago this week in 1920, The New York Times editorial board ridiculed scientist, Robert Goddard, for his assertion that rockets could fly in space, something the Times believed could never happen, arguing that "space travel was impossible since without atmosphere to push against, a rocket could not move so much as an inch."

So, given our experience with The New York Times and other people --

[Laughter.]

MODERATOR: -- as you think about the future of exploration and space flight, are there things you believe will one day be possible that seem impossible today? That is the question, and if you care to comment on the engineering expertise of The New York Times, we will let you do that too.

ADMINISTRATOR GRIFFIN: No. The New York Times is a great newspaper, and it was then and it always will be.

You know, people make mistakes. It is not surprising to find that those who make journalism and various aspects of communications disciplines their profession are not spending their time in college studying engineering subjects. So that is not surprising, and most of what we know about science and mathematics, frankly science, mathematics, and engineering, most of what we know about those things is very hard won. It is counter-intuitive. If it was intuitive, we wouldn't have only had those disciplines in the last couple of hundred

years of human civilization after 10,000 years since the last Ice Age. So it is counter-intuitive, it is difficult, and it is not reasonable to expect that those who have not been trained in it are going to figure it out. What we need to do as technical people is figure out how to communicate better.

As to whether or not we are going to be surprised, of course, we are, but I don't know what the surprises are because that is the definition of a surprise.

We will be surprised about technical things that we never imagined were possible that turn out to be possible, and I look forward to being around to see a few more of them.

Thanks again, everybody. Thanks for coming today.

[Standing ovation.]

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