

NASA OFFICE OF PUBLIC AFFAIRS
303 E STREET, S.W.
WASHINGTON, D.C. 20546
(202) 358-1600

STS-116 Post-Landing Press Conference

SPEAKERS:

MICHAEL GRIFFIN, Administrator, NASA
BILL GERSTENMAIER,
Associate Administrator, Space Operations
MIKE LEINBACH, Shuttle Launch Director
SIGMAR WITTIG, Chairman,
German Aerospace Centre Executive Board (DLR),
and Chairman European Space Agency Council
MICHEL TOGNINI, Head of European Astronaut Center,
European Space Agency
PER TEGNER, Director General, Swedish Space Agency

[Moderated by **DAVID MOULD**, NASA Public Affairs]

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NASA Kennedy Space Center

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1 P R O C E E D I N G S

2 MODERATOR: Good evening from the Kennedy Space
3 Center, and welcome to our post-landing press conference
4 for the successful completion of STS-116, Space Shuttle
5 mission to continue assembly at the International Space
6 Station.

7 With us this evening is the Administrator of
8 NASA, Michael Griffin; the Associate Administrator for
9 Space Operations, Bill Gerstenmaier; NASA Launch Director,
10 Mike Leinbach; Professor Sigmar Wittig, Head of the
11 European Space Agency Council and head of the DLR; Michel
12 Tognini, head of the European Astronaut Center,
13 representing the head of the European Space Agency; and Per
14 Tegner, head of the Swedish Space Agency.

15 We will begin with brief opening remarks, and
16 then we will go to your questions. We will begin with the
17 Administrator of NASA, Mike Griffin.

18 ADMINISTRATOR GRIFFIN: Good evening. Thanks for
19 being here with us. It is a very good day.

20 If I were an English major and given to a
21 literary turn of phrase, I might say somewhat
22 onomatopoeically that the Shuttle burst out of the clouds

1 and swished down onto the runway, but being an engineer and
2 a pilot, I would say that Roman and Billy O. steered it
3 into a perfect landing. It was a great landing and a great
4 day.

5 Of course, the flight teams were working the call
6 on whether we would go to KSC or whether we would go to
7 Edwards or White Sands right up until the last moment and,
8 in fact, until the last moment. The call was made for KSC,
9 and it turned out to be a great one.

10 The crew on orbit and the crew on the ground
11 could not have done better. I think when you look back at
12 this mission, they just could not have done better.

13 They did four EVAs instead of three planned EVAs,
14 accomplishing some additional tasks to get past a stuck
15 solar array. That teaches us, once again, that we have a
16 lot to learn about space flight and how our hardware
17 performs in space flight, but we did learn. In the
18 learning, we made it better than if we hadn't had the
19 problems.

20 So it was a wonderful day. It was a wonderful
21 end to a great mission, and I am proud to be here.

22 MR. GERSTENMAIER: Thanks.

1 Again, it is great to be here. If you would have
2 asked me before the flight what I wanted for Christmas,
3 what I wanted was a safe and successful Shuttle flight, and
4 we really got that.

5 This has just been a phenomenal mission. The
6 things that we wanted to get done that we talked about
7 before, get the new power system, a new thermal system up
8 on the Space Station, and get it operating, we did that.

9 We have got lots of other things that don't
10 necessarily make the headlines that are just as important
11 to the Space Station. We got some oxygen transfer to Space
12 Station, about 69 pounds. We got 47 pounds of nitrogen
13 transferred. We carried across 4,800 pounds of hardware,
14 and just as importantly, we returned 4,900 pounds of
15 hardware to the ground to help with the clutter on board
16 Station. We got a new external camera on the outside. We
17 got MMOD shields that will be installed in February on the
18 Russian service module to help give us MMOD protection. We
19 got a new pump-to-pump oxygen to the Space Station. We got
20 a new carbon dioxide removal system, redesigned, operating,
21 functional on board Space Station. We got a new gyro on
22 our treadmill, so the crews can continue to exercise. That

1 has been replaced. We got a new charcoal bed to scrub the
2 atmosphere and remove contaminants from the Space Station,
3 just a tremendous amount of things.

4 The other things that we did that were amazing,
5 we have sent 17,900 commands to the Space Station. That is
6 about 5,000 more commands than we have ever sent, and all
7 of those commands worked and were executed perfectly.

8 As Mike talked about the EVA, it was really a
9 testimony to the teamwork. Typically, the amount of time
10 required to get ready to do that complex of RMS activity
11 would have taken several months of analysis. That was done
12 in essentially one day. We had to prepare to make sure we
13 had the right tools to go out and do that EVA, and again,
14 that was done just as effectively, one day to get prepared
15 for that.

16 The teams executed flawlessly. They learned a
17 tremendous amount how to operate in space, how to work
18 together, how to use the tools they have, and all of those
19 things will pay huge dividends in the future.

20 As we stop and take a look at what is coming next
21 year, there are lots of things planned next year. We have
22 a Progress launch in January. We will have three EVAs in

1 February, and we just have a very exciting year in front of
2 us.

3 So, again, this is a tremendous way to end this
4 year. I think it is great to be back here in Florida. It
5 is great to see the teams work and operate together as a
6 team. They are phenomenal in what they do. You see the
7 world's best space team operate as a team, both on the
8 Station Shuttle and the ground folks. It was just a great,
9 great day. So, again, thank you.

10 MR. LEINBACH: Thanks, Gerst.

11 Well, on behalf of the Kennedy Space Center,
12 Christmas came 3 days early for us. We are in a great mood
13 to have Discovery out on our runway. The team out there
14 was just jubilant that we brought Discovery home here.

15 As you know, we did deploy some folks out to the
16 White Sands Space Harbor for a potential landing out there
17 because, at certain points late in the mission, it looked
18 like we might have to land out there. So we were fully
19 prepared to do that had that come to pass, and obviously,
20 it didn't.

21 We sent 50-some folks, 52 folks, out there along
22 with some special equipment, backup equipment that we have

1 here at the Kennedy Space Center in case we had to land out
2 there, and we always have a backup crew out at Dryden in
3 case we have to go out to California, but all of that
4 didn't have to happen.

5 We came here today. It was a great call by Norm
6 Knight and the flight team. So it was great to have
7 Discovery home.

8 Meanwhile, over in the OPF, the Atlantis
9 processing is going great. We are going to take the whole
10 Christmas break off with Atlantis and also Endeavour.
11 Discovery, once we get her back in the OPF about 3 or 4
12 hours from now, will go through about 2 days of safeing,
13 and we will be able to give the whole team the Christmas
14 break off of Discovery as well.

15 So it was great timing for us, a great Christmas
16 present, and it feels good to be in this program.

17 Thanks.

18 PROFESSOR WITTIG: Well, first of all, let me
19 take the opportunity to congratulate our American
20 colleagues for a perfect job done. I think we are
21 extremely impressed and also quite proud of being part of
22 the missions, and we also feel like an early Christmas. So

1 it is quite important from a European aspect.

2 There are primarily three aspects which are, from
3 our point of view, of importance. First, the major step
4 towards the completion of the Station, also from a European
5 point of view, there is the feeling and experience of
6 really close cooperation, which we really appreciate. For
7 us, it also was some training, gaining some experience, and
8 there were two European astronauts on a long-term mission.

9 Mr. Fuglesang - sorry -- "Fuglesang," we say in Germany -
10 was on the Shuttle mission, and both I think did their
11 part. It was quite important for us.

12 In addition, the third aspect was that there were
13 quite a few scientific experiments, and those showed us and
14 gave us some impressions of what in the future can and will
15 be done.

16 In summary, I think this is a big step forward,
17 and we are looking forward to the future cooperation in the
18 upcoming years.

19 Thank you.

20 MR. TOGNINI: Good evening to all.

21 We are quite satisfied to see Thomas Reiter and
22 Christer Fuglesang are on the ground. We became doubtful

1 at one point where we heard the orbiter will land in
2 Edwards. So we came with my delegation of head of agency
3 of Germany, of DLR, and Sweden at the Cape, and we really
4 wanted to see the orbiter at the Cape.

5 Thomas has done a flight of 6 months, which was
6 the first time that there was a crew of three people on the
7 Space Station after the accident of Columbia. So it was
8 quite an important step made.

9 We learned a lot not only by the science made by
10 Thomas Reiter, but also by all that we learned about the
11 Space Station and about operation of the Space Station
12 because next year ESA will launch Columbus and ATV, and all
13 the preparations and the walk made by Thomas Reiter and the
14 people on the ground following Thomas is very important for
15 the launch of Columbus and the preparation of operation on
16 ATV.

17 Christer Fuglesang had three EVAs, and the last
18 one was really important for the safety of the Space
19 Station. So we are proud to be associated for the real
20 operation of the Space Station and also to show that ESA is
21 a real partner of ISS.

22 We are looking forward next year with Columbus

1 and ATV to the flight of three or more astronauts from ESA,
2 always associated to important part of the Space Station,
3 and I would like to thank NASA for all the good partnership
4 they had with us.

5 MR. TEGNER: Good evening. Since this is my
6 first time to see a landing, I must say I am extremely
7 impressed. This is a marvelous experience, and I am very
8 thankful to NASA that we can experience this. I am surely
9 very impressed with all of the NASA activities. Their
10 proficiency, everything is done the right way, and people
11 are working together so much and in such close cooperation.
12 They know exactly what to do.

13 Since I am coming from the outside, I am very
14 impressed. Thank you very much for this.

15 Coming from the Swedish side, I must say I am
16 also very impressed by Mr. Fuglesang -- which his name is
17 "bird song" actually -- and he performed extremely well,
18 together with Beamer, and they made a great team, which I
19 think this unrehearsed EVA, which meant that they could do
20 it together with Houston people, and they performed
21 wonderfully. I think that is a great example of the
22 proficiency of the organization.

1 Thank you.

2 ADMINISTRATOR GRIFFIN: Let me just close off our
3 opening remarks by saying, first of all, actually, thanks
4 to our internal NASA media for accommodating three
5 additional folks at the last moment for this press
6 conference. I decided that it would be most appropriate if
7 we could have our international partners with us on the
8 dais today.

9 I would also like to call attention to Professor
10 Wittig's long service as head of DLR and his service to the
11 European Space Agency. Professor Wittig is retiring
12 shortly from his post and presumably will return to the
13 academic life or something.

14 He is almost an honorary American, having served
15 for many years as a professor at Purdue University and, in
16 fact, a professor for our own Jerry Ross who is, as many of
17 you know, a NASA astronaut, currently occupied with a
18 flight crew at the moment.

19 So, Professor Wittig, I have had the opportunity
20 to meet some extraordinary people in my 35 years in this
21 business, and I have enjoyed none of them more than the
22 opportunity to make the acquaintance and the friendship

1 with Professor Wittig and his wife, Elizabeth. So thank
2 you.

3 PROFESSOR WITTIG: Thank you very much, Mr.
4 Griffin.

5 ADMINISTRATOR GRIFFIN: It is a pleasure to have
6 you here.

7 Now questions and answers then, I guess, and we
8 will take questions until you are done. So we don't need
9 to rush.

10 MODERATOR: Please wait for the microphone to
11 come around. Give your name and affiliation and who you
12 are directing your questions to.

13 Let's begin with Mr. Cabbage.

14 QUESTIONER: Mike Cabbage with the Orlando
15 Sentinel for Dr. Griffin.

16 Looking back at 2006, going into July, we have
17 flown one Shuttle mission I think in the previous 3-1/2
18 years. Then in the second half of 2006, there were three
19 successful missions, and next year, you have got five more,
20 I believe, scheduled.

21 ADMINISTRATOR GRIFFIN: I said four or five in
22 the past. It is on the cusp, but, yes, about that.

1 QUESTIONER: Again, looking back at 2006, do you
2 think NASA has reached a point in the Shuttle program where
3 you have the momentum and operations are back to where they
4 need to be to press ahead through construction of the Space
5 Station? Are you guys back to where you need to finish the
6 Space Station, coming on the heels of what happened
7 previously?

8 And for Mr. Gerstenmaier, 2007 also, as I
9 understand it, is supposed to be a really big year for the
10 International Space Station. It is going to look a lot
11 different, hopefully, at the end of 2007 or early 2008 than
12 it does now. Can you talk about some of the changes that
13 are planned for the Space Station and highlight some of the
14 big points?

15 ADMINISTRATOR GRIFFIN: I guess I will start.

16 Yes, this was a big year, and yes, it was tough
17 to get to July. I have consistently said that if we could
18 take the time necessary to get things going and to get
19 things going properly that we could get back to our
20 operational tempo, and that if we could restore our
21 historic operational tempo of four and a half flights per
22 year on the average, that we would easily finish the

1 Station by the time it was necessary to retire the Shuttle.

2 I think we are now demonstrating that. We have
3 tried to demonstrate that with our deeds rather than our
4 words and let people see what we could do.

5 I think we are, in fact, better than before
6 because I think we have a new understanding in this country
7 and in the space community that each and every time we do
8 this, it is a minor miracle. It is the hardest thing that
9 human beings have yet learned how to do.

10 It is extraordinarily difficult to do it and to
11 get it right. We have learned, again, in a very sad
12 fashion. We have learned, again, that it is a difficult
13 and dangerous activity and that we have to stay hungry all
14 the time for new data and new lessons.

15 I think the flight team did an extraordinary time
16 today bringing Discovery home. The flight and ground teams
17 did an extraordinary job for the whole mission, but when we
18 get done, we will be critiquing this mission to see what we
19 can learn from what wasn't perfect, and that is how we have
20 to stay for an enterprise that is right on the cutting edge
21 of what is possible for human beings to do at all.

22 I really am extraordinarily proud of this team.

1 MR. GERSTENMAIER: In terms of next year, I think
2 I have a picture, if somebody can put it up on the screen
3 for me.

4 This is the current configuration of Space
5 Station today that was taken by the crew as they departed,
6 and you will see the solar array out there on the left-hand
7 side of the screen. There will be another solar array
8 added on the next flight. That is the S3/S4 solar array
9 that we talk about. We will get the fun of retracting
10 another 120 feet of solar array back into the canister,
11 just like we did on this flight. So that one array that
12 sticks out there up on the top, we will get a chance to
13 learn firsthand what we did on this flight, perfect it,
14 figure out a way to do it better, and get that array
15 retracted on that P6 that sits up there.

16 The next flight, next year, will be a flight very
17 much like this, a Spacehab flight with a little truss
18 spacer that sits out there on the starboard side, called
19 "S5." Then the flight after that will be Node 2, and that
20 is kind of the connection module that gets installed on
21 board Space Station. Then that will allow the European
22 module, the Columbus module, to be installed in the fall.

1 So, if I take a look at those four upcoming
2 flights, that is what takes us from where we are today. We
3 complete the power system, put the node up to get ready to
4 attach to international partner modules, and then begin
5 starting to add the international partner modules.

6 So it is a pretty exciting series of flights as
7 we look forward to them, with plenty of challenges along
8 the way, lots of configuration changes, lots of software
9 stuff, but, again, the teams have been prepared. We have
10 learned a lot from this flight, and as Mike said, we are
11 going to continue to keep looking, look for new ways to
12 stay ahead of the problems that are coming, learn from what
13 we saw here, and be prepared to execute.

14 MODERATOR: Let's continue down the wall with
15 Tariq, please.

16 QUESTIONER: Thank you. Tariq Malik with
17 Space.com and Space News for Mr. Gerstenmaier.

18 I am just curious. You have had two pretty
19 successful construction flights for the Station in
20 relatively close proximity. How does that push ahead or
21 give you confidence for the pace that you have set through
22 2010?

1 MR. GERSTENMAIER: Again, I think we have a
2 pretty reasonable pace.

3 Again, like I talked about kind of at the press
4 conference before this flight, we are really prepared for
5 almost any eventuality. You know, we have worked many
6 contingency scenarios, many things that have to occur.

7 One thing that is going to occur in February is
8 we are going to do three EVAs on board Space Station
9 without the Shuttle being here, and we are going to do
10 those in about a week's time frame. What that will do is
11 that will take the cooling that is now provided to the U.S.
12 laboratories provided by the temporary system up on P6, and
13 that will then now get plumbed into the permanent cooling
14 system that is up and running. So that will be done in one
15 of those EVAs.

16 So, again, those three EVAs kind of prepare us
17 and move forward. There are tremendous challenges in front
18 of us. I think we need to not be disappointed if things
19 don't go exactly the way we planned. We need to be
20 prepared and have contingency things in place and learn
21 from what we have.

22 So, again, I think we have a good, sound plan.

1 It may not go exactly the way we have laid out, but we are
2 prepared to continue working through it. Again, we will
3 learn from it, and we will be better for it, and these are
4 skills that the team needs to know and we need to know to
5 do bigger things as far as the Moon and Mars and other
6 activities.

7 MODERATOR: Let's keep going down the wall,
8 please.

9 QUESTIONER: Hi. Holly Hickman, Fox News Radio,
10 for Dr. Griffin.

11 Do you have any anticipation of perhaps equipping
12 White Sands so that a future landing there would not be
13 detrimental to the program?

14 Also, to the professor, for you, as you are
15 leaving, what are your hopes for the Columbus module as it
16 goes up?

17 ADMINISTRATOR GRIFFIN: Well, with regard to
18 White Sands, I don't think that we are in a position where
19 a landing there would be detrimental to the program.

20 We flew some equipment out on a C-17. We were
21 prepared to take care of Discovery if she landed there,
22 just as we have done at Edwards -- and many times and would

1 be prepared to do again.

2 Budgets are very tight, and as long as we can get
3 by without building a more permanent installation at White
4 Sands or any other of our 200 contingency runways around
5 the world, I think we will stay the course on where we are.

6 PROFESSOR WITTIG: As Mr. Gerstenmaier mentioned,
7 we are hopeful that next fall, Columbus will be able to
8 combine and connect with the ISS, and that is actually what
9 we have been waiting for, for quite some time. This will
10 be giving us the opportunity for real European science in a
11 European scale. There are hundreds of experiments, which
12 are waiting, and we are looking forward to really activate
13 Columbus. That is certainly my hope that real science can
14 be done and will be done for the upcoming years.

15 MODERATOR: Let's come along the front row here
16 to Irene, please.

17 QUESTIONER: Thanks very much.

18 This question is for both Dr. Griffin and Mr.
19 Gerstenmaier. I don't know how you can share it, but it
20 kind of relates to both of your perspectives.

21 Once it was decided that the final heat shield
22 inspection was not going to come off the table for this

1 flight, can you talk a little bit about how you ranked the
2 decision to spend a fourth day, a fourth EVA and an extra
3 day in orbit, with the prospective of a 2- or 3-month
4 schedule hit -- I'm sorry -- 1- or 2-month schedule hit
5 down the road if you did have to land at Northrop?

6 As you meet these calculated program risks -- and
7 I understand they are not crew, Dr. Griffin -- can you talk
8 a little bit about any concerns you might have as the
9 months and years go by that you may come up short if you
10 have a gamble like what happened today? It did pay off
11 today, but it may not in the future.

12 ADMINISTRATOR GRIFFIN: Well, first of all, these
13 decisions are not decisions that I made myself or that
14 Gerst makes himself. We thrash these through pretty well
15 as a team.

16 We wanted that fourth day, that fourth EVA and
17 the extra day in orbit, in order to make sure we had gotten
18 everything done that we needed to do on the solar arrays,
19 and if we hadn't been able to work it, we knew that we were
20 in good shape.

21 We did not have to finish retracting that solar
22 array in order to be in good shape, but at some point, we

1 were going to have to learn how to do it, and since
2 obviously there was something that didn't turn out quite
3 right, that meant that we had some things that we needed to
4 learn. And learning it sooner rather than later was very
5 helpful, and it was worth some amount of risk to do that.

6 You are right. In this case, it turned out well.

7 Sometimes it may not. We do have a good bit of
8 contingency built into our flight rate to allow us to
9 finish the Station in time, but it is these kinds of -- I
10 will just have to say "calculated risks." It is these
11 kinds of calculated risks that give us the best chance to
12 complete the Space Station to the satisfaction of ourselves
13 and our partners in the time frame that we want to do it.

14 MR. GERSTENMAIER: Again, the only thing I would
15 add is that I think the discussion was really great. We
16 had ground ops folks discussing it with us. We had the
17 Shuttle folks and the Station folks all in the same meeting
18 trying to decide what the right thing to do was, and we all
19 collectively determined that because we had to retract that
20 other array, as I showed you in the picture, on the next
21 flight, we really needed to learn how to get that array
22 retracted.

1 So, even if we didn't get it retracted, that
2 wasn't as important as to learn and develop the technique
3 for that next mission because, again, that would be a big
4 show stopper to us potentially in the future or it would
5 slow things down and make us go down a different path.

6 So we weighed all of those things together. We
7 also knew we were going to give up, potentially, one of our
8 chances to land. We talked about that openly. We knew it
9 increased, potentially, the probability of landing at
10 Northrop or White Sands Space Harbor. We all looked at
11 that and we looked at each other, and we said if that's
12 where we end up, that's where we end up, and that was okay.

13 So, again, it was great because everybody got to
14 talk about it. We got to discuss it. We got to see what
15 the trades were back and forth, and we collectively
16 understood each other's position, and we kind of all went
17 forward with a good decision. That is exactly the way a
18 high-performance team works, is they are willing to talk
19 openly, discuss things that may not represent their
20 position, and then you come to a good decision overall and
21 everybody understands why you did it.

22 So, again, this is a great learning experience

1 for the team.

2 ADMINISTRATOR GRIFFIN: I want to add back onto
3 that. A few years ago, we were criticized as an agency
4 because we didn't talk enough, because we weren't hearing
5 all points of view, and since the day I walked in the door,
6 the posture I have taken is that we -- you know, anytime we
7 disagree, of course, that excites you folks in the media,
8 and you like to see some disagreements, but we will
9 tolerate that in exchange for the openness and the sharing
10 of views and the engineering and scientific discussions
11 that need to take place in order to get to the right
12 answer, and that is what you saw.

13 MODERATOR: Okay. Let's stay on the front row
14 with John, please.

15 QUESTIONER: I am going to ask a parochial
16 question here. I just wondered if you had anything that
17 you would like to say, Dr. Griffin, about Jim Kennedy who
18 is retiring next week and has taken the center through the
19 recovery from the accident into this new era that we are in
20 now.

21 ADMINISTRATOR GRIFFIN: Yes. Thanks for giving
22 me that opportunity.

1 I will be here for Jim's retirement dinner, and
2 so I won't preface now the remarks that I might make at
3 that time, but Jim and I have been friends in this business
4 for well over a decade, long preceding Jim's assignment as
5 center director here at KSC and preceding my return to
6 NASA.

7 Jim was exactly the right person to come in and
8 begin the healing process after Columbia. Jim's skills as
9 a leader and as, what we call colloquially, a "people
10 person" are obvious to everyone who knows him.

11 We are going to be sorry to lose him from NASA,
12 but we won't lose him from the NASA family. He is taking
13 advantage of the fact that he is here in his hometown. He
14 has a beautiful wife that he enjoys spending time with and
15 a condo on the beach that he enjoys spending that time at,
16 and he is still young enough to enjoy all of that. So he I
17 think just decided that he could retire, that basically his
18 work here really was done, that we had healed.

19 We will never as an agency and frankly as a space
20 profession -- those of us who are in the space business
21 will never get over having lost Columbia and her crew, but
22 Jim did as well as anybody could possibly have done to get

1 the Kennedy Space Center past that and moving again, and he
2 will be greatly missed.

3 MODERATOR: Next on the front row, please.

4 QUESTIONER: Travis Reed with Associated Press.

5 This is for Mike Leinbach.

6 You guys really caught a couple of breaks with
7 the weather this time, first on the launch and then coming
8 back down. How fortunate do you feel to get those two? We
9 all know it doesn't ever happen sometimes, but in one
10 mission to get to breaks like that.

11 MR. LEINBACH: Well, we work the weather very
12 hard for both launch and landing, as you well know, and
13 every now and then, it doesn't hurt to be a little lucky.

14 I think we were a little lucky on launch day. We
15 started tanking very late in the process, and the weather
16 turned out better than we had anticipated that morning.

17 Today, coming into work, frankly, it didn't look
18 too good for a landing here, but I showed up at the Control
19 Center and Norm Knight and his Flight Control Team worked
20 the weather very hard. We have rules in place to guard
21 against doing unsafe things, and he followed the rules to a
22 tee today, and it worked out extremely well.

1 So it doesn't hurt to be a little lucky every now
2 and then. It feels good to get lucky, and it is good to
3 have Discovery home.

4 MODERATOR: Next in the middle here, please.

5 QUESTIONER: Thomas Nordegren, Swedish
6 Broadcasting.

7 Dr. Griffin, I noticed that you were talking to
8 Christer Fuglesang after the landing, and I just wanted to
9 know what you were talking about. And then I wonder, it is
10 very interesting to listen to you, but we all, of course,
11 would like to talk with the crew. When will the crew press
12 conference -- because I heard rumors that there will be no
13 crew press conference, and I am not happy that we all are
14 going to play paparazzi during Christmas Eve. So I just
15 wanted to know what your plans are for us.

16 ADMINISTRATOR GRIFFIN: Well, I don't make plans
17 for the crew press conference, and happiness is not a
18 requirement. The crew will do a press conference when they
19 all feel well enough to do it.

20 When I saw Christer on the runway, I
21 congratulated him on a superb performance with three EVAs
22 and other work on orbit, and I asked him how he felt. He

1 said he was feeling great, maybe just a little bit wobbly
2 getting his land legs back, but that he felt great. I told
3 him how very proud I was of the performance that he turned
4 in on behalf of the European Space Agency, the Space
5 Station Program, and of NASA.

6 MODERATOR: Right over here, please.

7 QUESTIONER: Jacqui Goddard for the Times of
8 London and the Scotsman.

9 Could somebody just elaborate on the status of
10 Nick Patrick who didn't appear on the tarmac afterwards? I
11 wasn't clear if he just stayed behind to keep Thomas Reiter
12 company or if he has got the wobbles too.

13 ADMINISTRATOR GRIFFIN: I asked about that, and
14 Nick was feeling slightly -- just a bit woozy as well. He
15 is doing just fine. I don't know how you feel after you
16 get off of a roller-coaster ride, but I myself, when I get
17 off of a roller-coaster ride, I am not immediately ready to
18 do a press conference. So Nick will be doing just fine.

19 MODERATOR: All right. Anyone else?

20 QUESTIONER: Eric [inaudible], Swedish media.

21 Mr. Fuglesang is very committed to do another
22 space mission. How likely is that to happen? I don't know

1 who to address this question to.

2 ADMINISTRATOR GRIFFIN: It is a little early for
3 us to be picking crew assignments. Most of our
4 international astronauts have, in fact, flown more than one
5 mission. Most of our astronauts do, but it is too early to
6 be thinking about specifics.

7 MODERATOR: Okay. Let's go back around to the
8 side here with Tariq once more, please.

9 QUESTIONER: Thank you. Tariq Malik with Space
10 News and Space.com.

11 I think I just have one small one for Mr.
12 Tognini.

13 Thomas Reiter said yesterday that he had trained
14 real hard on the Station, hopefully to try to cut down the
15 time recovering from his long space flight. I am kind of
16 curious to know, if you have had a moment to speak with
17 him, how he is feeling, I guess, based on those remarks.

18 PROFESSOR WITTIG: Unfortunately, I did not have
19 the present time to speak to him, but the same applies to
20 him as it does to Mr. Patrick. In general, he feels fine,
21 and he will be up tomorrow, I guess.

22 I don't know, Michel, whether you want to

1 comment.

2 MR. TOGNINI: Thomas did a flight of 6 months,
3 and after 6 months, you don't have the capability to be
4 really good on your feet after landing. When you look at
5 the way the orbiter is made and the way you have to go
6 down. You have to walk downstairs, and this is not safe
7 for a person that flew 6 months to do right after a flight.

8 So I think the decision made by NASA was really safe.

9 MODERATOR: Anyone who hasn't asked a question
10 yet?

11 [No response.]

12 MODERATOR: All right. Then back to Irene,
13 please.

14 QUESTIONER: Dr. Griffin, if you don't mind
15 answering a non-Space Shuttle-related question, I have one
16 for you.

17 Aside from the Human Space Program, of course,
18 one of the topics that has been very hot on NASA's agenda
19 this year and for next year is Mars. I am just wondering
20 if you might be able to talk a little bit about how the
21 recent announcement of the possibility of water in the not
22 too distant past on the surface of Mars might affect any

1 plans for future missions.

2 I realize it is too late to do anything with
3 Phoenix, which is launching next year, but I don't know if
4 anybody has had an opportunity to really kind of look down
5 the road a little bit and see if there is anything that
6 might be tweaked.

7 Thanks.

8 ADMINISTRATOR GRIFFIN: Well, I actually had that
9 same question in another press conference, and it is a good
10 one. I will give the same answer.

11 I really think I need to leave it to the science
12 community to determine what the science community
13 priorities are and how missions can be crafted.

14 I share with you the incredible excitement at
15 photographic evidence that, I would say, makes it almost
16 completely obvious that we have seen examples of flowing
17 water on Mars because we imaged the same site in -- well, I
18 think it was 2000 or 1999, just a few years ago, and then
19 again just a couple of years ago, and the images were
20 vastly different, and they were vastly different in a way
21 that almost can only be made by running water.

22 That is tremendously exciting. It validates a

1 longstanding scientific hypothesis about Mars that
2 underneath the surface that might be extensive areas of
3 permafrost which occasionally, through one mechanism or
4 another, turn briefly into flowing liquid water, and we
5 have now seen evidence of that. It is very exciting.

6 QUESTIONER: I have got a question about the
7 tank, and I am not really sure who to direct it to. So I
8 will just throw it out to whoever wants it.

9 Given the way that it has performed the last
10 three launches, is there any chance you guys would stay
11 with the current design, or do you think the final redesign
12 will still be implemented?

13 MR. GERSTENMAIER: We are looking at it pretty
14 close, but I think we are going to make some changes. We
15 would really like to get some foam off the tank because
16 then you don't have to worry about it.

17 Foam is a very difficult material to control. So
18 the way you apply it and the way you spray it on the tank
19 is very dependent upon how it gets sprayed, what conditions
20 it gets sprayed on, et cetera.

21 So we would really like to get rid of some foam.
22 So we are looking at making another change to the

1 ice/frost ramps, which you are aware of, that will really
2 remove a large amount of the foam. I think about 17 pounds
3 or so of foam will get removed from that area, and we think
4 that is significant enough, we want to continue with that
5 redesign.

6 Our goal is to have that in place on the external
7 tank, I believe 128, which is one tank in front of the HST
8 mission. So we will get a chance to see that design
9 perform before we go then take that same tank to the HST
10 mission later.

11 So, again, I think we still think that is the
12 right thing to go do. We have kind of refocused our
13 efforts to get back on track to do that, and we will get
14 the foam off the tank. We think that is the right overall
15 design decision.

16 Again, we will kind of let the data drive us. We
17 will continue to look, and if something changes, we may
18 change our minds, but right now that is the path that we
19 are on.

20 MODERATOR: Further questions?

21 [No response.]

22 MODERATOR: All right. A couple of quick notes.

1 In a few hours on NASA Television, we will have a B-roll of
2 Thomas Reiter and some other aspects of the landing this
3 evening.

4 As was mentioned earlier, we will have a crew
5 news conference, but we will not have it tonight, given the
6 lateness of the hour and some of the other factors that we
7 have discussed, but we will put one together as quickly as
8 we can.

9 For further information on NASA and the mission,
10 please go on the Internet to www.nasa.gov, and thank you
11 very much. Have a good evening.

12 [End of STS-116 Post-Landing Press Conference.]